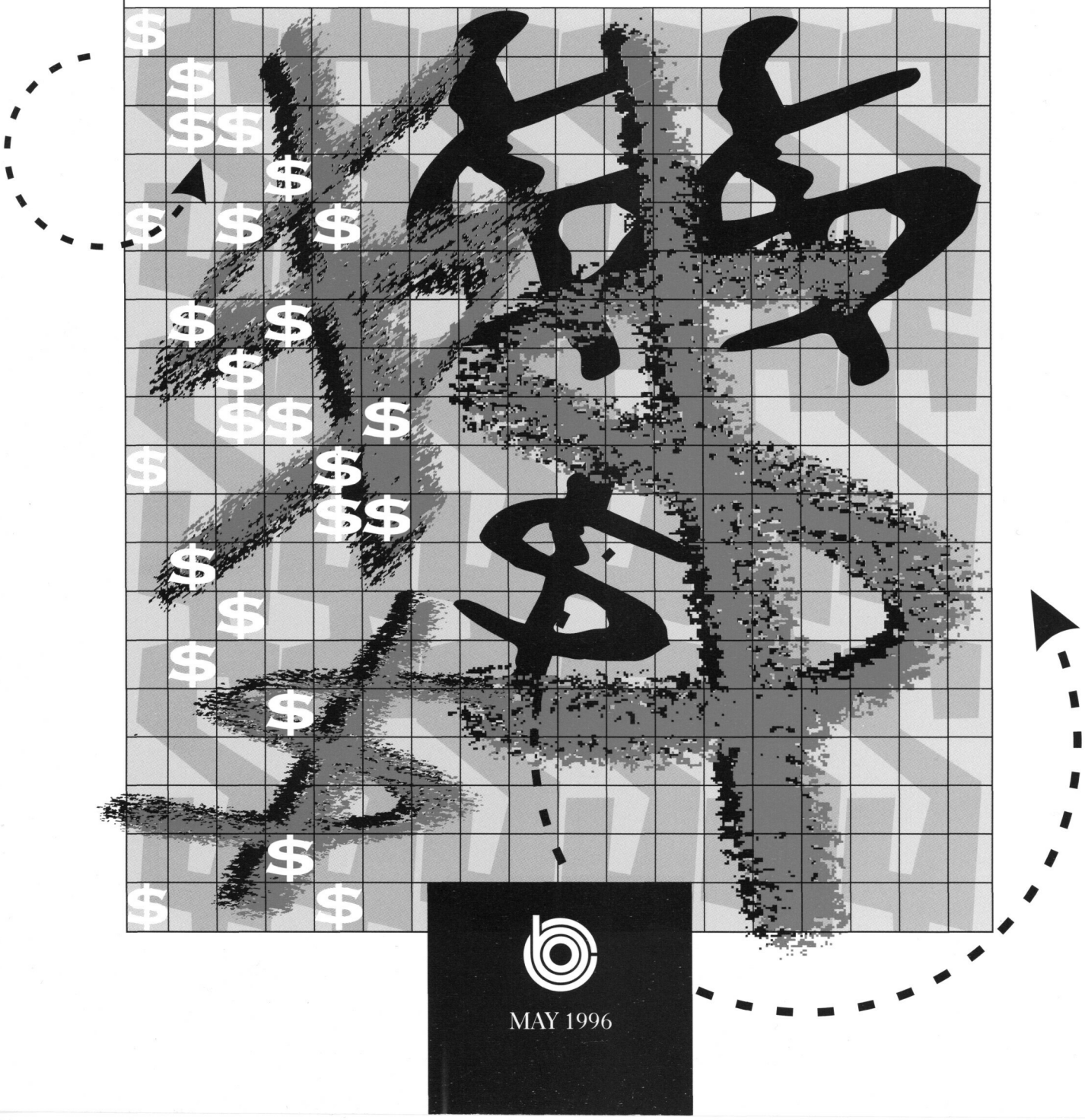
CONGRESS OF THE UNITED STATES
CONGRESSIONAL BUDGET OFFICE

The Economic and Budget Outlook: Fiscal Years 1997-2006

A Report to the Senate and House Committees on the Budget

As required by Public Law 93-344



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THE ECONOMIC AND BUDGET OUTLOOK: FISCAL YEARS 1997-2006

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NOTES

Unless otherwise indicated, all years referred to in Chapters 1 and 4 are calendar years and all years in Chapters 2 and 3 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.

National income and product account data shown in the tables do not incorporate the revised data for the fourth quarter of 1995 that were released on April 2, 1996.

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 and to provide five-year baseline projections of the federal budget. In accordance with CBO's mandate to provide objective and impartial analysis, the report contains no recommendations.

The analysis of the economic outlook presented in Chapter 1 was prepared by the Macroeconomic Analysis Division under the direction of Robert Dennis and John F. Peterson. Benjamin Page wrote the chapter with contributions from Robert Arnold and Frank Russek. Matthew Salomon carried out the economic forecast and projections. Robert Arnold, Laurie Brown, Douglas Hamilton, Kim Kowalewski, Joyce Manchester, Angelo Mascaro, Frank Russek, Matthew Salomon, Kent Smetters, John Sturrock, and Christopher Williams provided background analysis and comments. Derek Briggs and John Romley provided research assistance.

The baseline outlay projections were prepared by the staff of the Budget Analysis Division under the supervision of Paul N. Van de Water, Robert Sunshine, Paul Cullinan, Peter Fontaine, James Horney, Michael Miller, and Murray Ross. The revenue estimates were prepared by the staff of the Tax Analysis Division under the supervision of Rosemary D. Marcuss and Richard Kasten. Daniel Kowalski wrote Chapter 2, and James Horney wrote the summary of the report.

The analysis of the President's budgetary proposals for fiscal year 1997 contained in Chapter 3 was prepared by the staffs of the Budget Analysis and Tax Analysis Divisions at the request of the Senate Committee on Appropriations. The estimates of the President's revenue proposals were prepared by the Joint Committee on Taxation. Jeffrey Holland wrote the chapter.

The analysis of the long-term implications of current fiscal policy presented in Chapter 4 was requested by the Chairman of the Senate Budget Committee and was carried out by Douglas Hamilton, Benjamin Page, and John Sturrock of the Macroeconomic Analysis Division under the direction of Robert Dennis. Douglas Hamilton wrote the chapter, and John Romley and Laurie Brown provided expert research assistance. The appendixes were written by Frank Russek (Appendix A), Susan Strandberg (Appendix B), and Michael Simpson (Appendixes C, D, and E).

An early version of Chapter 4 was discussed at a meeting of CBO's Panel of Economic Advisers. Members of that panel are Michael Boskin, Barry Bosworth, Robert Dederick, Martin Feldstein, Benjamin Friedman, Lyle E. Gramley, Robert E. Hall, Marvin Kosters, Anne Kreuger, Burton Malkiel, Gregory Mankiw, Allan Meltzer, Rudolph Penner, James Poterba, William Poole, Robert Reischauer, Sherwin Rosen, Robert Solow, John Taylor, and James Tobin. Henry Aaron, Alan Auerbach, Stanley Fischer, Laurence Kotlikoff, Edward McKelvey, and Laurence Meyer attended as guests. In addition, Herbert Stein provided comments on an early draft of Chapter 4. Despite the considerable assistance afforded by those outside advisers, the analysis in this report does not necessarily reflect their views, nor are they responsible for any errors.

Paul L. Houts supervised the editing and production of the report. Major portions were edited by Paul L. Houts, Sherwood D. Kohn, Leah Mazade, and Sherry Snyder. Christian Spoor provided editorial and production assistance. The authors owe thanks to Derek Briggs, Marion Curry, Janice Johnson, Dorothy Kornegay, Linda Lewis, John Romley, and Wanda Sivak, who assisted in the preparation of the report. Kathryn Quattrone and Jill Sands prepared the report for final publication.

June E. O'Neill
Director

May 1996

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Summary

According to Congressional Budget Office (CBO) projections, the deficit will decline for the fourth straight year in fiscal year 1996 and the economy will continue to expand at a moderate rate. But if current policies for revenues and entitlements are not changed, and if discretionary appropriations keep pace with inflation, the deficit will begin to grow steadily in 1997. If discretionary spending is not adjusted for inflation, the deficit will level off in nominal terms at about $180 billion and shrink in relation to the size of the economy. Both the Congress and the President, however, have proposed changes in policies that would balance the budget by 2002.

In the budget that the President submitted in March, he presented a set of policy changes intended to eliminate the deficit by 2002. Under CBO's more cautious economic and technical assumptions, the basic policies outlined in the President's budget would bring the deficit down to about $80 billion by 2002 instead of producing the budget surplus that the Administration estimates. CBO estimates, however, that additional, contingent policies proposed in the budget, which are to be carried out if deficits are higher than those the Administration projects, would produce a small surplus in 2002.

Because CBO's detailed current-policy projections extend only through 2006, they do not reflect the aging of the baby-boom generation, which will first begin to affect deficits about 2010. The expected increase in the number of beneficiaries of federal programs for the elderly and a slowing in the rate of growth of the labor force--combined with the anticipated growth in the per-person cost of Medicare--will put enormous pressure on the budget. If those pressures are not dealt with by reducing spending or increasing taxes, the mounting deficits could seriously erode future economic growth. Balancing the budget by 2002 will help alleviate the pressures, particularly if the deficit reduction package that is enacted includes measures that would slow the growth of entitlement spending. But the size of the future problem is so great that simply eliminating the deficit by 2002 without making additional changes in spending and taxes would not ensure that future deficits will remain at an acceptable level.

The Budget Outlook Under Current Policies

CBO projects that the deficit will fall to $144 billion in 1996, or 1.9 percent of gross domestic product (GDP). That figure is $28 billion lower than the deficit that CBO predicted last winter in its report *The Economic and Budget Outlook: December 1995 Update.* The reduction in the estimated deficit is largely the result of enacted appropriations. Those appropriations are expected to reduce discretionary spending by almost $20 billion from the statutory limit on discretionary outlays that CBO used as the basis for its December baseline projections.

CBO's current outlook for the deficit after 1996 is not very different from the one it reported in December. On average, the deficits projected for 1997

through 2005 in the comparable current baseline are lower than CBO's December projections by about 0.2 percent of GDP.

Estimates of the size of the deficit in 1997 and its course after that depend heavily on assumptions about economic conditions and the level of discretionary spending that annual appropriation legislation will provide. For this report, CBO has produced four different baseline projections of spending and revenues, which vary according to assumptions made about the course of the economy and the growth of discretionary spending. For all four of the baseline projections, CBO assumes that current laws governing mandatory spending programs and revenues will not change.

Economic Assumptions

CBO has produced two sets of economic projections. The first set is the traditional one for the annual report, which assumes no change in current budgetary policies. Therefore, those economic projections are consistent with projections of the levels of spending, revenues, and deficits that will occur if budgetary policies do not in fact change.

A second set of projections incorporates the economic effects anticipated if the deficit is eliminated by 2002--a goal that both the Congress and the President have endorsed. CBO assumes that balancing the budget would lower interest rates and slightly increase economic growth. Consequently, federal interest payments would decrease and revenues would increase. As with CBO's economic forecast of last December, this set of projections was developed as an aid to policymakers considering plans to balance the budget by 2002. It does not represent an alternative projection of the course of the economy if no such plan is carried out.

The economic outlook has not changed significantly since December 1995. CBO continues to believe that the U.S. economy is fundamentally sound and estimates that the chances of a major downturn in the next two years are not high. CBO does not attempt to forecast cyclical economic patterns beyond two years. Hence, economic projections for 1997 through 2006 represent CBO's estimates of the average economic performance over the period, based on an assessment of the fundamental factors affecting the economy.

Under the current-policy economic assumptions, CBO projects that the economy, as measured by real (inflation-adjusted) GDP, will increase at slightly below its noninflationary potential rate of growth over the next three years. After that, CBO assumes that the economy will, on average, grow at the potential rate--estimated by CBO to be 2.1 percent a year (see Summary Table 1). The unemployment rate is expected to average 6 percent over the 1997-2006 period, 0.4 percentage points above the rate for the first quarter of 1996. The projected rate is also slightly above CBO's estimate of the rate of unemployment that is consistent with stable inflation (the nonaccelerating inflation rate of unemployment, or NAIRU) because the unemployment rate has, on average, been slightly higher than the NAIRU since 1960. Inflation, as measured by the consumer price index, will climb slightly over the next two years but will average a moderate rate of about 3 percent a year during the 1997-2006 period. CBO forecasts little change in long-term and short-term interest rates over the next two years. Similarly, it projects that the average level of interest rates for 1998 through 2006 will be close to current levels.

If, instead of assuming that current budgetary policies continue, CBO assumed that the budget will be balanced by 2002, projected interest rates would be 110 basis points (1.1 percentage points) lower by 2002, and real growth would be 0.1 percentage point a year higher (see Summary Table 2). The economic projections that assume a balanced budget are quite similar to CBO's December 1995 projections, which also assumed a balanced budget by 2002.

Assumptions About Discretionary Spending

As with the economic variables, CBO has made two different assumptions about the path of discretionary spending. Such spending is uncertain under current law because it is governed by annual appropriations instead of permanent law. The starting point for both

Summary Table 1.
Economic Projections Assuming Current Policy for Calendar Years 1996 Through 2006

	Preliminary[a]	Forecast		Projected								
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Nominal GDP (Billions of dollars)	7,248	7,584	7,943	8,324	8,730	9,156	9,603	10,071	10,563	11,078	11,619	12,185
Nominal GDP (Percentage change)	4.6	4.6	4.7	4.8	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
Real GDP[b] (Percentage change)	2.1	2.0	1.9	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Chain-Type GDP Price Index (Percentage change)	2.5	2.6	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
CPI-U[c] (Percentage change)	2.8	2.8	3.1	3.0	2.9	2.9	2.9	3.0	3.0	3.0	3.0	3.0
Unemployment Rate (Percent)	5.6	5.8	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Three-Month Treasury Bill Rate (Percent)	5.5	4.9	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Ten-Year Treasury Note Rate (Percent)	6.6	6.1	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Tax Bases (Billions of dollars)												
Corporate profits	579	599	612	618	620	629	648	672	703	741	780	822
Other taxable income	1,529	1,595	1,662	1,757	1,859	1,958	2,058	2,157	2,259	2,367	2,482	2,604
Wage and salary disbursements	3,420	3,592	3,760	3,935	4,124	4,322	4,528	4,743	4,969	5,205	5,452	5,711
Total	5,528	5,786	6,035	6,309	6,603	6,909	7,233	7,572	7,931	8,313	8,714	9,137
Tax Bases (Percentage of GDP)												
Corporate profits	8.0	7.9	7.7	7.4	7.1	6.9	6.7	6.7	6.7	6.7	6.7	6.7
Other taxable income	21.1	21.0	20.9	21.1	21.3	21.4	21.4	21.4	21.4	21.4	21.4	21.4
Wage and salary disbursements	47.2	47.4	47.3	47.3	47.2	47.2	47.2	47.1	47.0	47.0	46.9	46.9
Total	76.3	76.3	76.0	75.8	75.6	75.5	75.3	75.2	75.1	75.0	75.0	75.0

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

a. Consistent with the first official estimate for 1995 published on March 4, 1996.

b. Based on chained (1992) dollars.

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

Summary Table 2.
Economic Projections Assuming Balanced Budget Policy for Calendar Years 1996 Through 2006

	Preliminary[a]	Forecast		Projected								
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Nominal GDP (Billions of dollars)	7,248	7,584	7,946	8,333	8,745	9,177	9,631	10,108	10,608	11,133	11,684	12,261
Nominal GDP (Percentage change)	4.6	4.6	4.8	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
Real GDP[b] (Percentage change)	2.1	2.0	2.0	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Chain-Type GDP Price Index (Percentage change)	2.5	2.6	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
CPI-U[c] (Percentage change)	2.8	2.8	3.1	3.0	2.9	2.9	2.9	3.0	3.0	3.0	3.0	3.0
Unemployment Rate (Percent)	5.6	5.8	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Three-Month Treasury Bill Rate (Percent)	5.5	4.9	4.8	4.3	3.9	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Ten-Year Treasury Note Rate (Percent)	6.6	5.7	5.5	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Tax Bases (Billions of dollars)												
Corporate profits	579	602	637	668	691	716	741	778	817	857	899	944
Other taxable income	1,529	1,590	1,635	1,700	1,779	1,860	1,946	2,032	2,127	2,227	2,334	2,448
Wage and salary disbursements	3,420	3,592	3,762	3,939	4,131	4,332	4,541	4,761	4,990	5,230	5,482	5,746
Total	5,528	5,784	6,034	6,307	6,601	6,907	7,228	7,570	7,933	8,315	8,716	9,138
Tax Bases (Percentage of GDP)												
Corporate profits	8.0	7.9	8.0	8.0	7.9	7.8	7.7	7.7	7.7	7.7	7.7	7.7
Other taxable income	21.1	21.0	20.6	20.4	20.3	20.3	20.2	20.1	20.0	20.0	20.0	20.0
Wage and salary disbursements	47.2	47.4	47.3	47.3	47.2	47.2	47.2	47.1	47.0	47.0	46.9	46.9
Total	76.3	76.3	75.9	75.7	75.5	75.3	75.0	74.9	74.8	74.7	74.6	74.5

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

a. Consistent with the first official estimate for 1995 published on March 4, 1996.

b. Based on chained (1992) dollars.

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

sets of projections is the level of appropriations enacted for fiscal year 1996 as of April 25, 1996. For departments and other agencies funded by the continuing resolution that was in effect through April 25, the projections assume 1996 appropriations at the level CBO estimated would have resulted from extending the continuing resolution for a full year. Appropriations enacted after April 25 are not reflected in these projections (see Summary Box 1).

In the first set of projections, discretionary spending is assumed to grow at the rate of inflation up to the statutory caps imposed on it through 1998.

Summary Box 1.
Recent Budgetary Events

Two events that significantly affect the budget occurred after the Congressional Budget Office (CBO) had completed the projections detailed in this report and are therefore not reflected in it. First, the Congress passed and the President signed into law on April 26 the Omnibus Consolidated Rescissions and Appropriations Act of 1996 (P.L. 104-34). That law provided full-year appropriations for a number of agencies that had previously been funded on a temporary basis by a series of continuing resolutions. In addition, the law included supplemental appropriations and rescissions of previously appropriated funds for other agencies. CBO estimates that the bill will increase outlays by about $1 billion in 1996, $2 billion in 1997, and less than $1 billion in 1998, compared with CBO's baseline estimates.

Second, the Department of the Treasury reported April tax receipts that significantly exceeded the level that CBO expected under its baseline assumptions. Based on this new information, CBO expects that 1996 revenues could be about $15 billion higher than the baseline projections in this report. Because little information is available on the factors behind this unexpected increase in revenues (detailed information on 1995 tax year returns will not be available for at least a year), CBO is not yet able to assess how the higher 1996 revenues could affect projections of future receipts.

The cap that applies to appropriations from the Violent Crime Reduction Trust Fund (VCRTF) does not constrain the projections because CBO estimates that 1996 VCRTF spending adjusted for inflation will be below the limits in both 1997 and 1998. But the cap that applies to general-purpose discretionary spending (all discretionary spending other than VCRTF spending) does affect CBO's projections. Although 1996 general-purpose appropriations adjusted for inflation will fall below the cap in 1997, they will exceed the cap in 1998. Therefore, CBO assumes that general-purpose discretionary spending will be limited to the level of the cap in 1998 and will grow from that level at the rate of inflation in 1999 through 2006.

In the second set of projections, discretionary funding remains frozen at the dollar level that is provided in the 1996 appropriation bills for all years through 2006. In that case, the caps never become constraining.

Baseline Budget Projections

The combination of two alternative assumptions about the economy and two assumptions about discretionary spending produces four different sets of deficit projections (see Summary Table 3).

Under current-policy economic assumptions, the projected deficit will grow steadily, both in nominal terms and as a percentage of GDP, if discretionary spending is at the cap level adjusted for inflation. If discretionary spending policy is to freeze appropriations at the 1996 dollar amount, deficits will level off at around $180 billion a year and decrease as a percentage of GDP. Even at the relatively low levels of inflation that the Congressional Budget Office assumes over the next 10 years, such a freeze would cut the purchasing power of discretionary appropriations by more than 25 percent by 2006.

Under the balanced budget economic assumptions, the deficit will grow in both nominal terms and as a percentage of GDP if discretionary spending equals the cap in 1998 and keeps up with inflation after that. However, it will climb more slowly than under the current-policy economic assumptions. The

deficit is held down by the so-called fiscal dividend--reductions in payments for interest on the debt and increases in revenues that flow from the lower interest rates and slightly faster economic growth under the economic assumptions that assume a balanced budget. If debt-service savings that stem from the lower deficits are included, the fiscal dividend would lower the deficit by $75 billion in 2002.

If discretionary spending is frozen, the deficit will rise in 1997 and 1998 but then begin to decline. Although the freeze would not produce a balanced

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

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
					In Billions of Dollars							
Baseline Total Deficit with Current-Policy Economic Assumptions												
Cap discretionary spending (with inflation after 1998)	164	144	171	194	219	244	259	285	311	342	376	403
Freeze discretionary spending at 1996 dollar level	164	144	159	176	182	187	174	178	178	181	187	179
Baseline Total Deficit with Balanced Budget Economic Assumptions												
Cap discretionary spending (with inflation after 1998)	164	144	165	175	182	191	194	210	225	244	265	278
Freeze discretionary spending at 1996 dollar level	164	144	154	157	145	136	111	106	96	88	84	64
					As a Percentage of GDP							
Baseline Total Deficit with Current-Policy Economic Assumptions												
Cap discretionary spending (with inflation after 1998)	2.3	1.9	2.2	2.4	2.5	2.7	2.7	2.9	3.0	3.1	3.3	3.3
Freeze discretionary spending at 1996 dollar level	2.3	1.9	2.0	2.1	2.1	2.1	1.8	1.8	1.7	1.6	1.6	1.5
Baseline Total Deficit with Balanced Budget Economic Assumptions												
Cap discretionary spending (with inflation after 1998)	2.3	1.9	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.2	2.3	2.3
Freeze discretionary spending at 1996 dollar level	2.3	1.9	2.0	1.9	1.7	1.5	1.2	1.1	0.9	0.8	0.7	0.5

SOURCE: Congressional Budget Office.

budget by 2002 (the deficit would be $106 billion), it would go a long way toward achieving the policy savings that are needed to reach budgetary balance and produce the economic benefits that this baseline assumes. That outcome is not surprising. Freezing discretionary appropriations at the 1996 level produces discretionary outlays in 2002 close to the level assumed by the Congress in the budget resolution for 1996. Under its December economic assumptions, CBO estimated that, given the level of discretionary spending assumed in the budget resolution, the approximately $100 billion in net deficit reduction in 2002 resulting from changes in entitlement and revenue policies proposed in H.R. 2491, the Balanced Budget Act, would eliminate the deficit in 2002.

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

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
December Baseline Deficit	172	182	183	195	204	211	228	244	266	294
Legislative Changes										
Revenues	a	a	a	a	a	a	a	a	a	a
Discretionary outlays	-19	-8	0	0	0	0	0	0	0	0
Mandatory outlays	3	2	-1	-2	-2	-2	-2	-1	-1	-1
Deficit	-15	-6	-1	-2	-2	-2	-2	-1	-1	-1
Economic Changes										
Revenues	-2	1	1	2	5	6	8	11	13	15
Outlays	-4	-8	-8	-10	-11	-12	-17	-20	-25	-31
Deficit	-6	-7	-8	-7	-6	-6	-9	-9	-12	-17
Technical Changes										
Revenues	1	5	7	7	8	9	10	11	12	14
Discretionary outlays	0	0	-10	-9	-10	-10	-10	-10	-11	-11
Mandatory outlays	-8	-8	4	-1	-2	-6	-7	-8	-8	-12
Deficit	-7	-3	1	-3	-4	-7	-7	-7	-7	-9
Debt Service	a	-1	-1	-1	-1	-1	-1	-1	-2	-2
Total Changes	-28	-16	-8	-13	-12	-16	-18	-19	-22	-29
April Baseline Deficit with Balanced Budget Economic Assumptions	144	165	175	182	191	194	210	225	244	265
Changes from Adopting Current-Policy Economic Assumptions	a	5	19	37	53	64	75	86	98	111
April Baseline Deficit with Current-Policy Economic Assumptions	144	171	194	219	244	259	285	311	342	376

SOURCE: Congressional Budget Office.

NOTE: Reductions in revenues are shown with a positive sign because they increase the deficit.

a. Less than $500 million.

Of course, the full amount of the savings from the fiscal dividend would result only if the budget was in fact balanced. Therefore, a baseline that reflects the economic improvements from balancing the budget but predicts large deficits resulting from projections of revenues and spending under current policies is internally inconsistent. Such a baseline, however, is a useful tool because it indicates the amount of direct savings from policy changes that is needed to balance the budget.

Changes Since December

CBO's current baseline budget projections using balanced budget economic assumptions and capped discretionary spending (with inflation after 1998) do not differ much from its December baseline projections, which used the same concepts. The currently projected deficit for 1996 is $28 billion lower than the December projection. However, about two-thirds of that change results from actions on 1996 appropriation bills that the December baseline did not reflect (see Summary Table 4 on page xvii). The reductions in the deficit in the years after 1996 are smaller, except for a $29 billion change in 2005. Aside from the effects of the enacted 1996 appropriations on the 1996 and 1997 deficits, relatively little change comes from enacted legislation, since few bills affecting direct spending or revenues have been signed into law since December.

Much of the change in estimated deficits for 1998 through 2005 stems from reductions in projected discretionary spending. The reductions largely reflect an adjustment to the cap that the Office of Management and Budget (OMB) made under the provisions of the Balanced Budget and Emergency Deficit Control Act of 1985 to reflect the Administration's estimate of the measure of inflation used in the cap adjustments. That estimate was lower than a year earlier. Projected spending for a number of mandatory programs (particularly Medicare and Medicaid) is also down, as are interest costs.

Lower projected revenues, however, partially offset those reductions. The drop in revenues results in part from the expiration at the end of calendar year 1995 of the airline ticket tax, which CBO estimates will cost the government $5 billion in 1996 and $10 billion by 2005. Under baseline rules, excise taxes dedicated to a trust fund that are scheduled to expire during the projection period are extended in the baseline; however, those taxes are excluded from the baseline if they have already expired before the baseline is released. Thus, such taxes were included in the December baseline but are excluded from the current revenue projections.

The 1997 deficit is affected by a substantial increase in the estimate of the proceeds from ongoing auctions by the Federal Communications Commission of licenses to use parts of the electromagnetic spectrum. The reestimate reflects both a revised estimate of the likely bids in the auctions and a decision by OMB and CBO to record installment payments for the licenses under credit reform procedures on a net present-value basis when a license is issued.

One source of significant change in both mandatory spending and revenue projections--though not shown in Summary Table 4 because it has no net effect on the deficit--is the Telecommunications Act of 1996, which calls for expanding a fund to provide universal telephone service. Although the receipts and expenditures of the fund do not pass through the government, they clearly would not exist except for action taken by the federal government and thus are ultimately under its control. OMB and CBO therefore concluded that the transactions of the fund should be recorded as revenues and outlays in the budget. Those transactions include both ones provided for by law before the Telecommunications Act was passed and new transactions resulting from the act. Because the projected revenues equal the projected outlays in every year, including those transactions in the budget does not affect the deficit.

Budget Projections Under the President's Policies

The President submitted a budget in March that is intended to eliminate the deficit by 2002. To help ensure that the goal is achieved, the budget included two sets of policies: one set that the Administration estimates will balance the budget if its economic and technical assumptions are borne out, and a set of con-

tingent policies that will have to be carried out if the Administration's assumptions prove too optimistic and additional deficit reduction is required to balance the budget.

Using economic projections that assume a balanced budget, CBO estimates that the basic policies proposed in the President's budget would lower the deficit substantially below CBO's baseline projections but that the deficit would still total $81 billion in 2002 (see Summary Table 5). The proposed budget would reduce the deficit by holding the growth of discretionary appropriations below the rate of inflation, cutting the growth of Medicare and Medicaid

Summary Table 5.
CBO Reestimate of the President's Budget (By fiscal year, in billions of dollars)

	1996	1997	1998	1999	2000	2001	2002	Total, 1996-2002
CBO Baseline Deficit[a]	144	165	175	182	191	194	210	n.a.
President's Basic Budgetary Proposals								
Revenues[b]								
Tax relief	0	18	16	18	23	26	28	129
Extend expired excise taxes	0	-4	-6	-6	-6	-7	-7	-36
Other revenue provisions	1	-6	-8	-10	-10	-10	-12	-54
Subtotal	1	8	2	3	7	9	9	38
Outlays								
Medicare	c	-5	-8	-14	-20	-26	-31	-103
Medicaid	0	2	-2	-6	-10	-16	-22	-54
Welfare reform	0	-4	-6	-6	-7	-7	-8	-38
Other mandatory policy	-1	-6	-1	-4	-7	-10	-24	-52
Discretionary appropriations	2	-4	-6	-26	-42	-46	-38	-161
Debt service	c	c	-1	-3	-6	-11	-16	-35
Subtotal	1	-17	-23	-59	-91	-116	-138	-444
Total Changes	2	-9	-21	-57	-84	-107	-129	-405
Deficit Under the President's Basic Budgetary Proposals as Estimated by CBO	146	156	153	125	108	87	81	n.a.
President's Contingent Budgetary Proposals	0	-1	-2	-2	-2	-33	-84	-124
Total Changes from Baseline	2	-11	-23	-59	-86	-140	-213	-530
Deficit Under the President's Budgetary Proposals as Estimated by CBO	146	155	152	123	105	54	-3	n.a.

SOURCE: Congressional Budget Office.

NOTES: n.a. = not applicable.

a. This baseline is based on economic projections that assume the budget will be balanced by 2002. It assumes that discretionary spending is equal to 1996 appropriations adjusted for inflation up to the caps that are in effect through 1998. General-purpose discretionary spending is equal to the cap in 1998 and grows from that level at the rate of inflation after that.

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

c. Less than $500 million.

below current-law projections, reducing projected spending for welfare programs, and limiting other mandatory spending. It would also shrink the deficit through sales of government assets and auctions of additional portions of the electromagnetic spectrum. The savings would be partially offset by a net reduction in revenues resulting from a combination of tax cuts and increases.

CBO's estimates of the deficits under the President's basic policies are higher than those of the Administration, largely because CBO's baseline projections of the deficit are higher than the Administration's. The Administration's economic assumptions are not strikingly different from CBO's economic projections under a balanced budget. The Administration assumes a slightly higher rate of real growth, slower growth in the consumer price index in relation to the overall price inflation in the economy, and greater profits and wages (which constitute the major tax bases). Although apparently slight, such differences do produce noticeably different deficit projections. The largest difference is in the estimates of revenues: CBO projects current-policy revenues that are $73 billion lower under its balanced budget economic assumptions than under the Administration's economic forecast. CBO also assumes that Medicaid and some other mandatory programs will grow more rapidly under current policy than does the Administration. In addition, CBO estimates that a number of the President's proposed policy changes would reduce the deficit less than the Administration assumes. For instance, the Administration assumes that the proposed changes in the Medicaid program would cut spending by $27 billion in 2002. CBO estimates that the proposal would save $22 billion.

The package of contingent policies outlined in the President's budget would further reduce deficits, producing a surplus of $3 billion in 2002. Those policies call for the expiration of proposed tax-relief provisions after 2000, additional savings from further restraining Medicare costs, deeper cuts in discretionary spending, and new fees levied on television broadcasters to offset any shortfall in anticipated receipts from the proposed auction of the right to use the electromagnetic spectrum.

Impacts of an Aging Population on the Budget

The aging of Americans born between 1946 and 1964 will dramatically affect the federal budget in the coming century. Because the first members of that baby-boom generation will turn 62 in 2008, those effects are not reflected in CBO's projections of spending and revenues through 2006. In the decades after 2010, however, the demographic shift will push up the deficit rapidly if no changes are made in entitlement benefits for the elderly or in taxes on the working population. Because escalating deficits would reduce investment, increase interest rates, and eventually choke off economic growth, such a path is not sustainable. The problem must ultimately be dealt with, and it will be less painful to deal with it sooner rather than later.

Demographic Changes

The trustees of the Social Security Old-Age and Survivors and Disability Insurance (OASDI) Trust Funds estimate that the number of citizens 65 or older in 2030 will be more than double the number in 1990, while the number of working-age Americans (20 to 64 years old) will increase by only about 25 percent. As a result, the number of retirees to be supported per worker will jump sharply.

The increase in the number of elderly people after 2010 will drive up the costs of Social Security. It will also put pressure on Medicare, which provides basic health care coverage for most people 65 and over, and Medicaid, which provides long-term care and other medical assistance for the poor elderly. At the same time, revenues will grow more slowly because the growth in the number of workers will slow.

Budgetary and Economic Assumptions

The concept of a current-policy baseline is somewhat ambiguous even for the 10-year projections of spend-

ing and outlays described earlier. Over a much longer period, the approach used in those projections would produce misleading results. For instance, freezing discretionary spending at the 1996 dollar level over the next 10 years is one possible interpretation of current policy in CBO's 10-year projections, even though that level of spending would purchase only about three-fourths as much in 2006 as it did in 1996. But if such a freeze were continued for another 40 years, even at the relatively low inflation rate of 3 percent, discretionary appropriations would cover less than one-fourth of the cost of the armed forces, law enforcement officials, highway construction, and other goods and services that are being provided in 1996 although the population would be significantly larger.

Therefore, CBO did not attempt to extend its regular budgetary projections beyond 2006. For Social Security, Medicare, and federal retirement programs, CBO simply adopted the long-term projections made by trustees of those programs (or the Office of Personnel Management and the Department of Defense in the case of federal retirement) and adjusted for any differences between CBO's economic assumptions and those of the trustees. Various broad categories of other spending in the national income and product accounts (NIPAs) were assumed to grow according to simple rules applied to each category. For instance, transfer payments (other than those included in the trustees' projections) were assumed to grow with demographic changes, labor productivity, and inflation. In the case of discretionary spending, CBO used two alternative assumptions. In one scenario, expenditures grow at the same rate as the economy (real growth plus inflation). In the other, they increase only at the rate of inflation. CBO assumes that most revenues will remain stable as a share of GDP. The exceptions are taxes collected on income from interest on the federal debt and premiums for Medicare's Supplementary Medical Insurance, which are treated as revenues in NIPA accounting.

Similarly, in order to assess the effect of long-run budget policies, CBO had to make assumptions about fundamental forces in the economy over the coming decades. Reflecting the anticipated slowing in the growth of the labor force, CBO's base scenario assumes that annual growth in the total hours of work will drop virtually to zero by 2020. Assuming further that total factor productivity continues to grow at the average rate experienced from 1952 to 1989 (two years in which the economy was operating at full capacity), annual growth of real GDP is projected to slip from 2.1 percent in 2005 to 1.3 percent in 2030 before factoring in any effects that increasing deficits will have on growth.

Long-Term Budget Projections

Because of the great uncertainty about both the budgetary and economic assumptions, CBO looked at several different scenarios and tested the sensitivity of its results to changes in the assumptions. Under an array of plausible scenarios that assume no change in budget policies, the deficit would grow significantly as a percentage of GDP after about 2010. The level of the deficit in relation to the size of the economy would depend on the specific assumptions about growth in spending and revenues and on assumptions about population growth, increases in productivity, and the effects of mounting deficits on the economy.

Even without assuming any economic feedback effects from increasing deficits, one seemingly plausible path of revenues and spending (with discretionary spending growing at the rate of the economy after 2006) would produce a deficit equal to 15 percent of GDP by 2030 and debt held by the public equal to 180 percent of GDP. The deficit has reached levels that high only during World War I and World War II, and the debt has never been that large. The path of spending and revenues in this scenario clearly cannot be sustained because the debt-to-GDP ratio spirals out of control after 2030. Interest payments would consume an ever larger share of federal spending.

For a path of spending and revenues to be sustainable, the resulting debt must eventually grow no faster than the economy. One measure of the size of the problem presented by burgeoning deficits is the increase in revenues (or reduction in spending) needed to keep the debt as a percentage of GDP from

exceeding its current level for the foreseeable future. Assuming that discretionary spending grows at the rate of the economy, CBO estimates that increasing revenues by an amount equal to 5 percent of GDP would achieve that goal. Since revenues in the scenario equal 20 percent of GDP, that amount would represent a hike in revenues of about 25 percent. If discretionary spending is assumed to grow only at the rate of inflation after 2006, a revenue increase equal to about 3 percent of GDP (or 15 percent of revenues) would keep the debt as a percentage of GDP at or below its current level.

Other assumptions about the growth of spending produce lower projected deficits and debt. However, taking economic feedbacks into account will produce projected deficits that are significantly higher, reaching about 37 percent of GDP by 2030, assuming that discretionary spending grows with the economy. Those projections are much worse because they assume that burgeoning deficits will crowd out capital, which pushes up interest rates and slows the growth of the economy. As a result, the federal tax base is weaker and federal interest costs are higher. Although the precise path of deficits and debt as a percentage of GDP depends on particular assumptions about demographics, productivity, and the growth of discretionary spending, the projected deficits and debt in all of the scenarios that incorporate the economic feedbacks and assume no change in policy eventually soar to levels that are clearly not sustainable.

Those results reinforce the conclusions of other analysts that the aging of the baby-boom population will eventually force policymakers to make difficult decisions about paring entitlement benefits or other spending or increasing taxes. CBO's analysis also shows that making those changes now will yield significant benefits. For example, cutting deficits now trims future debt and interest payments on the debt, thereby reducing the programmatic cuts that would be needed later to cut deficits to the desired levels. In addition, if policies involving retirement age or benefit levels are changed, workers should have a chance to plan for their retirement with those changes in mind. Regardless of what policy changes are made, the economic benefits of achieving a long-term, sustainable budget policy would be great. For example, permanently balancing the budget could raise real incomes in the United States by 10 percent to 15 percent by 2025 and by larger percentages in years thereafter.

Effect of Proposed Policy Changes

Both the Congress and the President have proposed policies that CBO estimates would balance the budget by 2002. Because of the lack of details about the policies after 2002 and the imprecision of long-term budget projections, it is impossible to determine precisely the long-term effects of adopting the proposals. Even if the rates of growth of spending and revenues after 2002 did not change compared with CBO's assumptions based on no change in policy, the long-term picture would be brighter if those proposals were adopted because of the reduction in accumulated debt in 2002. Achieving a fiscal policy that is sustainable in the very long run, however, would require further increases in revenues or reductions in the growth of spending after 2002.

The Administration asserts that, in addition to balancing the budget by 2002, the President's proposed policies would hold the growth of spending for Medicaid to the rate of growth of the economy for the foreseeable future. Using that assumption, and the Administration's assumption that discretionary spending will increase at the rate of inflation, CBO projects that the budget would remain nearly balanced for another 20 years and the ratio of debt to GDP would gradually shrink over that period. But CBO also projects that the pressure of the baby-boom retirees would eventually push the budget out of balance if no further changes in spending or revenues were adopted. Clearly, some set of policies would hold deficits and debt in check despite the demographic pressures on the budget, but those policies would not be painless. CBO will examine the pros and cons of several alternative policies for addressing the long-term budget problem in a chapter of its forthcoming report *Reducing the Deficit: Spending and Revenue Options*.

Conclusion

The relatively moderate deficits that CBO projects through 2006 under current policies are not particularly alarming. In relation to the size of the economy, the deficit either rises modestly or decreases slightly, depending on the assumed level of discretionary spending. In the longer run, however, the retirement of the baby-boom population starting about 2010 will put severe pressure on the budget. CBO projects that, if spending and revenue policies are not changed, deficits and debt will soar to unprecedented levels in the following 20 years.

Eliminating the deficits projected for the next 10 years will provide noticeable economic benefits during that time period and will ameliorate the longer-term budget problem. But the real payoff will come from taking steps to prevent the impending demographic pressures from pushing the deficit up dramatically in the next century. Because the deficits and debt that would result if there are no changes in policy are not sustainable, such changes are inevitable. But the changes will be less painful, and the benefits greater, if the problem is dealt with sooner rather than later.

Chapter One

The Economic Outlook

The U.S. economy has settled over the past year to a moderate, sustainable rate of growth. Real output grew by about 2 percent from 1994 to 1995, down from 3.5 percent the previous year, as the effects of tight monetary policy spread through the economy and a two-year boom in business investment began to fade. Despite the slower growth, economic activity was sufficient to keep unemployment at a relatively low average rate of 5.6 percent for the year. Interest rates fell in the wake of the slowdown as fears of higher inflation eased. The fall in rates, together with continued healthy corporate profits, fueled a year-long stock market rally.

This year, the Congressional Budget Office (CBO) is presenting two economic forecasts. One assumes that taxes and mandatory spending follow current law, while discretionary spending grows with inflation after the caps expire in 1998: that forecast implies rising deficits over the next decade. The second forecast assumes that the budget will be balanced by 2002 and held in balance thereafter. Those two forecasts are referred to as the current-policy forecast and the balanced budget forecast, respectively. Both the Congress and the President have voiced their intent to eliminate the deficit by the year 2002. The two sides have not agreed on a plan, however, so the CBO forecast that assumes a balanced budget by 2002 is based on a hypothetical path to budgetary balance. Lacking specifics, moreover, the forecast cannot include any economic effects beyond those of deficit reduction in general. It does not, therefore, incorporate the effects of specific policies, such as a cut in the capital gains tax or reductions in government investment.

In both forecasts, CBO predicts that the economy will grow slightly below its noninflationary potential rate of growth of 2.1 percent over 1996 and 1997. Using current-policy assumptions, CBO forecasts real gross domestic product (GDP) to grow at a rate of 2 percent in 1996 and 1.9 percent in 1997 (see Table 1-1 and Figure 1-1). The current-policy forecast also calls for only slight upswings in the unemployment and inflation rates.

Balancing the budget would add to the potential growth of the economy over the next decade. For the next two years, however, the economic outlook is similar under both the current-policy and balanced budget forecasts. CBO assumes that any policies adopted in the remainder of 1996 would not affect the potential growth of the economy this year. Even in 1997, the impact on potential growth would be small, since the long-term benefits of deficit reduction tend to accrue slowly. Growth in real (inflation-adjusted) GDP would be only slightly affected in 1997 under balanced budget assumptions, and inflation and unemployment would be unchanged. Those calculations assume that, as the budget was being balanced, financial markets and the Federal Reserve would lower interest rates sufficiently to avoid any short-run weakening in the economy.

Readers making comparisons between this forecast and previous CBO forecasts should take their different policy assumptions into account. CBO's

Table 1-1.
The CBO Current-Policy and Balanced Budget Policy Forecasts for 1996 and 1997

	Preliminary[a] 1995	Forecast 1996	Forecast 1997
	Fourth Quarter to Fourth Quarter (Percentage change)		
Nominal GDP			
Current policy	3.8	5.0	4.7
Balanced budget policy	3.8	5.0	4.7
Real GDP[b]			
Current policy	1.4	2.1	1.9
Balanced budget policy	1.4	2.1	1.9
Chain-Type GDP Price Index			
Current policy	2.6	2.8	2.7
Balanced budget policy	2.6	2.8	2.7
CPI-U[c]			
Current policy	2.7	3.1	3.1
Balanced budget policy	2.7	3.1	3.1
	Calendar Year Average (Percent)		
Real GDP Growth[b]			
Current policy	2.1	2.0	1.9
Balanced budget policy	2.1	2.0	2.0
Unemployment Rate			
Current policy	5.6	5.8	6.0
Balanced budget policy	5.6	5.8	6.0
Three-Month Treasury Bill Rate			
Current policy	5.5	4.9	4.8
Balanced budget policy	5.5	4.9	4.8
Ten-Year Treasury Note Rate			
Current policy	6.6	6.1	6.4
Balanced budget policy	6.6	5.7	5.5

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

a. Consistent with the first official estimate for 1995 published on March 4, 1996.

b. Based on chained (1992) dollars.

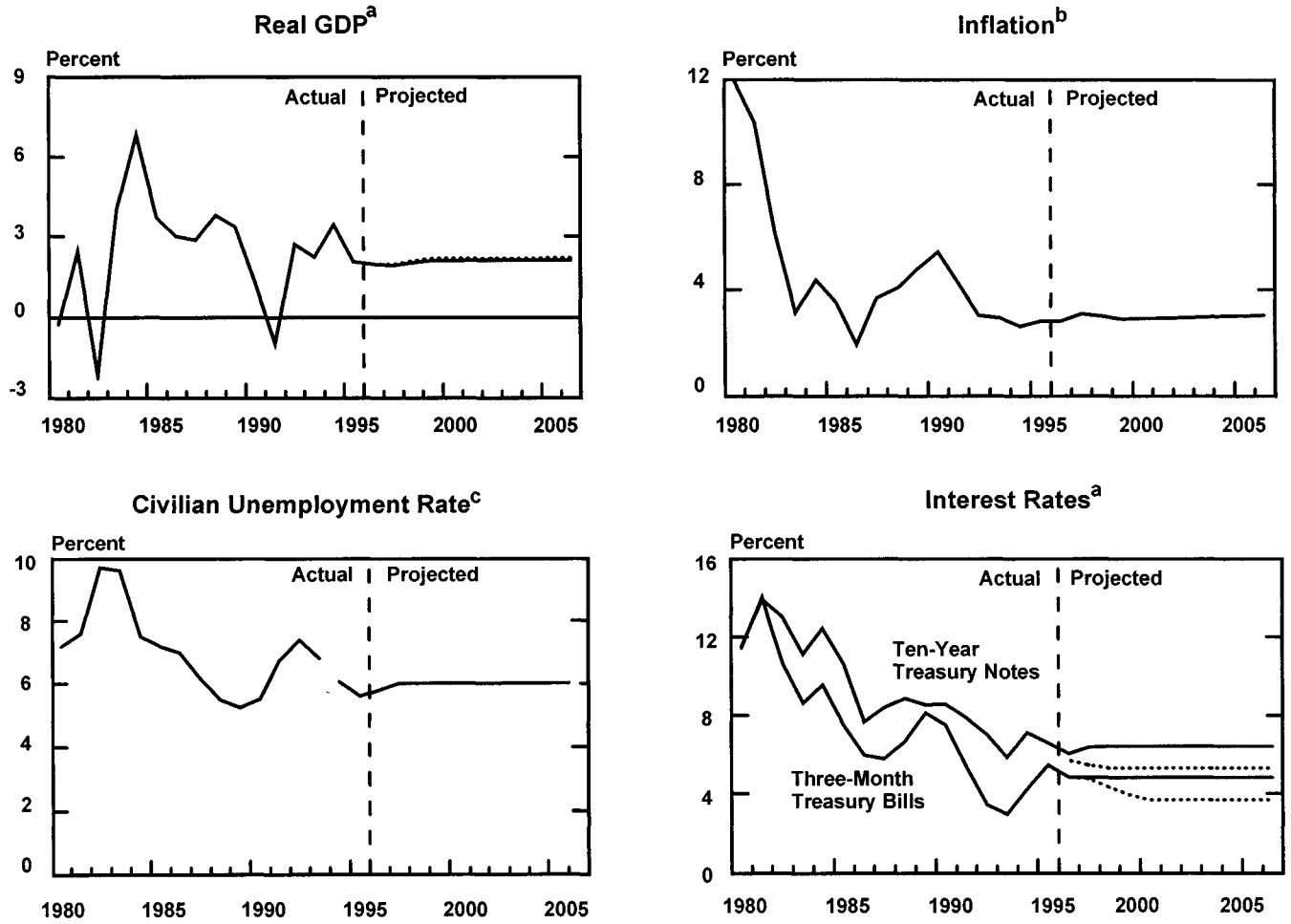
c. CPI-U is the consumer price index for all urban consumers.

August 1995 *Update* gave a current-policy forecast; CBO's December 1995 *Update* presented a forecast assuming a balanced budget. Both updates also included separate calculations of the benefits of balancing the budget. CBO's January 1995 *Economic and Budget Outlook* presented only a current-policy forecast.

The State of the Economy

Growth slowed to a modest 2 percent on a year-to-year basis in 1995, following a robust rate of 3.5 percent in 1994 that had raised concern about inflation.

Figure 1-1.
The Economic Forecast and Projections



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. A dotted line in the projection period assumes a balanced budget policy.

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

c. From 1994 on, the unemployment rate reported by the Bureau of Labor Statistics is not comparable with previous data. The discontinuity reflects an extensive revision of the survey's methodology. The CBO forecast is based on the new methods.

(Those growth measures are based on the new chain-type measure of real GDP; see Box 1). A tightening of monetary policy in 1994 played an important role in bringing down growth during 1995 by raising interest rates and eventually reducing interest-sensitive spending. In addition, a boom in investment spending on equipment and structures dwindled in the last part of 1995, and firms reduced the buildup of their inventories. Consumption spending slackened somewhat, as is typical at this point in an expansion. Though net exports improved over the year, the collapse of the peso and a serious recession in Mexico dampened exports in early 1995. Planned cuts in government spending and two unplanned partial shutdowns of the federal government also slowed the economy slightly in 1995. In addition, two major strikes and severe weather across much of the country lowered output in late 1995 and early 1996.

Labor Markets and Inflation

Despite relatively low unemployment, the underlying rate of inflation held steady in 1995 and early 1996. Through the first quarter of 1996, the unemployment rate hovered around 5.6 percent--a level generally thought to be mildly inflationary. Nevertheless, wage and price growth did not accelerate. Wages grew at about the same rate as in 1994, and the growth of total labor costs (which include both wages and benefits) actually subsided (see Figure 1-2).

Box 1-1.
The Change in the Measure of Real Gross Domestic Product

The national income and product accounts (NIPAs), which are the basis of the forecasts prepared by the Congressional Budget Office (CBO) and other forecasters, were revamped earlier this year to change the way that the accounts measure real economic activity. In January, the Department of Commerce's Bureau of Economic Analysis (BEA) released the first version of the NIPAs that featured the "chain-type" measure of real gross domestic product (GDP) and its components. That change to the accounts will better reflect economic activity, but it will not affect nominal GDP, nor should it directly affect the budget outlook. (Other revisions to the accounts raised the level of nominal GDP while only slightly altering its growth rate). CBO used the chain-type version of the NIPA data in preparing its current projections and its December projections (the December projections were based on preliminary chain-weighted data obtained from the BEA).

Nominal GDP is quite straightforward to calculate: it is the sum of spending on all goods and services in the economy during a given year. Computing real, or inflation-adjusted, GDP is more difficult. One must remove the increase in nominal GDP that results solely from higher prices. Several methods are available to perform that task, each with advantages and disadvantages. Until January, the BEA used a fixed-weighted, or constant-dollar, quantity index as its featured measure of real GDP. A fixed-weighted quantity index is computed by valuing each component of GDP at the prices of a base year, such as 1987. The fixed-weighted measure of GDP is easily interpreted: it is the total spending that would have resulted in a given year if every purchase in that year had taken place at 1987 prices.

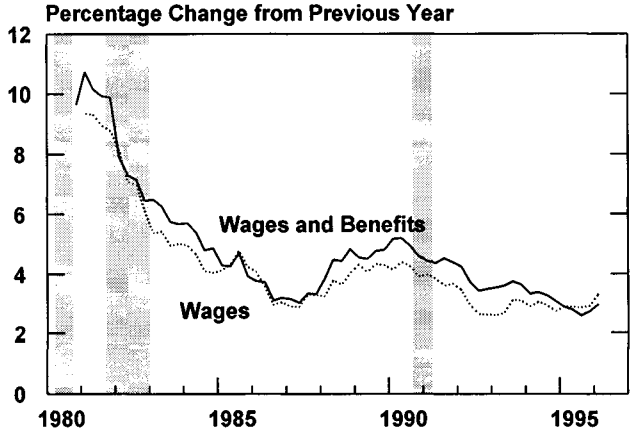
Fixed-weighted GDP provides a satisfactory measure of real economic activity in years close to the base year. However, the series will become increasingly biased if the pattern of prices in the economy drifts away from the pattern in the base year. In particular, a quantity index with fixed weights will overstate the importance of goods with prices that are growing more slowly than average during the period after the base year, thereby biasing the growth of the index upward. That is precisely what happened to the BEA's traditional measure of real GDP as a result of the steep drop in the price of computers. The old fixed-weighted measures of real growth valued spending on computers at 1987's relatively high prices, thus grossly overstating the magnitude of spending for computers in today's economy.

The revised NIPAs have replaced 1987-dollar GDP with a chain-type measure as the featured measure of output. The new chain-type measure does not use any specific base year; instead it calculates each year's real growth using as weights the prices of that year and the preceding year. The chain-type measure substantially reduces reported real rates of growth in the years since 1987 and raises real growth in years before 1987. Between 1990 and 1994, for example, growth measured on the old fixed-weighted basis averaged 2.2 percent; the chain-type measure puts growth during the same period at 1.9 percent.

Labor costs were held down in part by below-trend growth in spending for benefits. Much of that weakening seemed to stem from health insurance, reflecting a switch from traditional fee-for-service plans to some form of managed care. The low growth of labor costs, together with low interest rates, contributed to high profits in 1995.

Even without the falloff in the cost of benefits, the low levels of unemployment in 1995 would not have boosted inflation significantly. Based on historical patterns of unemployment and inflation, CBO estimates that the rate of unemployment below which inflationary pressures start to build (the nonaccelerating inflation rate of unemployment or NAIRU) was 5.8 percent in 1995. One year at 5.6 percent unemployment, which was the average rate for 1995, would raise the rate of inflation by only 0.1 percentage point, an amount difficult to separate from month-to-month fluctuations in prices. Moreover, the effects of low unemployment on inflation are often delayed. For example, in the late 1980s, the last time the country experienced an episode of rising inflation, the unemployment rate had been below the estimated NAIRU for over two years before the underlying rate of inflation picked up noticeably. The small inflationary effects of the low unemployment rate may thus yet appear in 1996 and 1997.

Figure 1-2.
Growth of Labor Compensation



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

Some controversy exists, however, over the precise level of the NAIRU. Based partly on last year's experience, some researchers argue that the true value of the NAIRU is now below 5.8 percent. Analysis by CBO does not, however, indicate a shift in the relationship between unemployment and inflation in the 1990s. CBO therefore believes that although any estimate of the NAIRU should be regarded with a great deal of caution, not enough evidence exists for CBO to revise its own estimate.

Financial Markets

Swings in expectations of the strength of economic activity, inflation, and the future path of fiscal policy played a pivotal role in shaping movements in interest rates over the past year. The strong economy of 1994 sparked both fears of inflation and tight monetary policy and left short- and long-term interest rates at a relatively high level at the beginning of 1995. But in the first half of 1995, growth ebbed, quieting fears of inflation and contributing to a drop in long-term interest rates. Short-term rates also fell, though more slowly, as the Federal Reserve backed off cautiously from its tightening of 1994. (Monetary policy influences short-term interest rates most directly; long-term rates, though affected by policy, depend to a greater degree on expectations of future interest rates and inflation.)

The prospect of a move toward a balanced budget may also have promoted expectations of lower future short-term interest rates, thereby trimming long-term interest rates and raising stock prices in anticipation. CBO estimates that expectations of deficit reduction accounted for around 30 basis points of the 200 basis-point (2 percentage-point) drop in long-term interest rates during 1995. Lower interest rates, together with high levels of profits, drove up the stock market steeply during the past year. The Standard & Poor's 500 index of stock prices surged by 35 percent in 1995, the largest increase since 1983.

In early 1996, long-term interest rates rebounded sharply, reflecting both economic events and dwindling hopes for achieving a balanced budget. Strong growth in employment in the first quarter of 1996 heightened expectations of growth and inflation. On

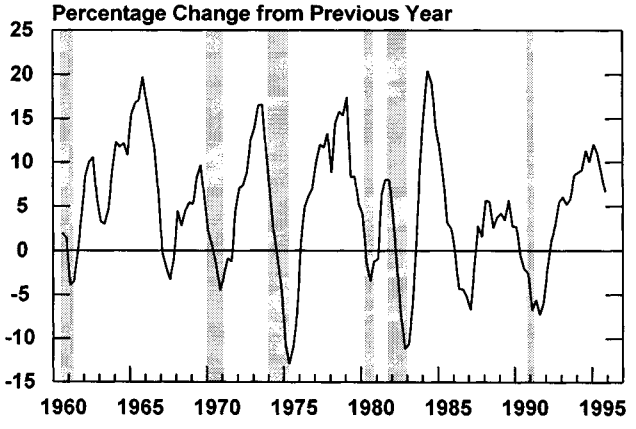
the budget side, negotiations that had seemed hopeful at the end of 1995 broke down in early 1996.

Investment

Investment spending on plant and equipment, which had been a major source of momentum for the economy, slipped markedly in 1995. Real investment in equipment burgeoned at double-digit rates in 1993 and 1994, and investment in structures also grew much faster than the economy. That investment boom was driven partly by a major wave of restructuring by U.S. businesses and supported by relatively high levels of profits. During the last half of 1995, investment in equipment fell to a 4.3 percent rate of growth, while investment in business structures eased slightly. Residential investment contracted slightly during 1995.

Business investment tends to plummet during a recession and accelerate rapidly in periods of expansion (see Figure 1-3). Following a recession, businesses must make up for the low investment during the downturn and expand capacity to meet rising demand. Investment has adhered to that general pattern

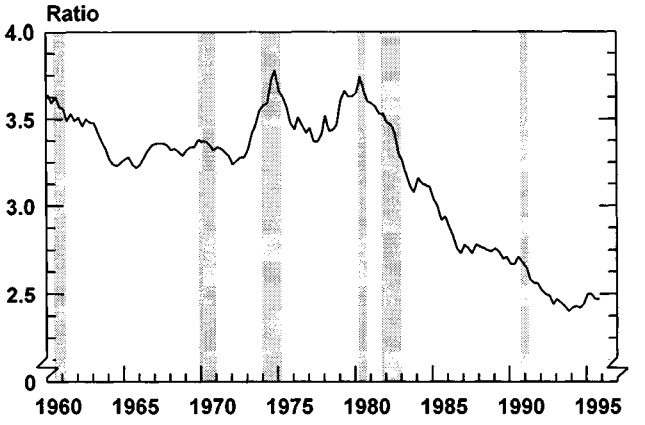
Figure 1-3.
Investment over the Business Cycle



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

NOTE: Business investment in plant and equipment in chained (1992) dollars.

Figure 1-4.
Stock of Inventories Compared with Sales



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

NOTE: Ratio of inventories to sales in current dollars.

during the most recent expansion, increasing at an average rate of 10 percent a year from mid-1993 to mid-1995. At some point, however, firms will have made up for the shortfall in investment during the recession, and investment will return to more moderate growth rates. That point seems to have been reached: the capacity use of firms now suggests decreased demand for investment. In manufacturing, capacity use dropped from 84.7 percent in late 1994 to about 82 percent early this year.

The pattern of inventory investment by firms also played a role in the slow growth during 1995. The unexpected decline in demand in early 1995 left unsold goods on the shelves. Firms responded by cutting back on inventory investment to pare back unwanted stocks. Despite the lower rate of accumulation in inventories, however, the inventory-to-sales ratio remains above its levels of two years ago, reversing a long-term downward trend (see Figure 1-4).

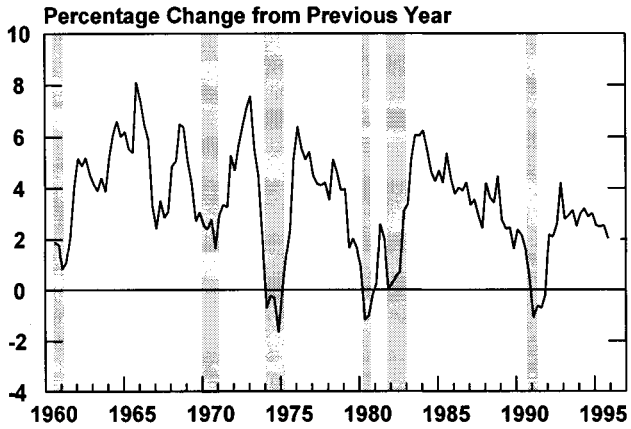
The rise in mortgage interest rates during 1994 hit residential investment hard in the first half of 1995. As interest rates flagged during 1995, the picture brightened somewhat and housing starts rebounded. The upturn in interest rates in the past few months, however, is likely to depress residential investment in the near future.

Consumption

The growth of consumption, like that of investment, slowed slightly in 1995 (see Figure 1-5). That slowdown was in part prompted by the rise in interest rates during 1994, which put a damper on the consumption of durable goods--particularly motor vehicle sales--in early 1995. Moreover, consumers may have largely rebuilt their stocks of durable goods since the last recession. Consumers often put off purchasing such goods during the hard times of a recession, leaving a backlog of demand when the economy recovers. During the subsequent expansion, however, the pent-up demand is reduced, and the growth rate of consumption slowly eases off. That pattern held over the past year: while income growth remained steady, the personal saving rate edged up as consumption subsided.

Although the saving rate increased, household debt burdens grew heavier over the year. Delinquencies on consumer debt climbed, and debt-service payments accelerated relative to income (see Figure 1-6). However, the financial situation of households does not seem bad enough to signal an imminent contraction in spending. Debt service as a share of income is no higher than it was in the mid-1980s, and consumption did not weaken at that time. Moreover, the value of assets held by consumers has surged along with the stock market, leaving them on average with higher net wealth. With greater wealth, consumers may see less need for saving and consume a greater portion of their incomes. Nevertheless, high levels of debt could make consumers vulnerable to a slowdown in income growth or a drop in asset values, especially if interest rates continue to rise.

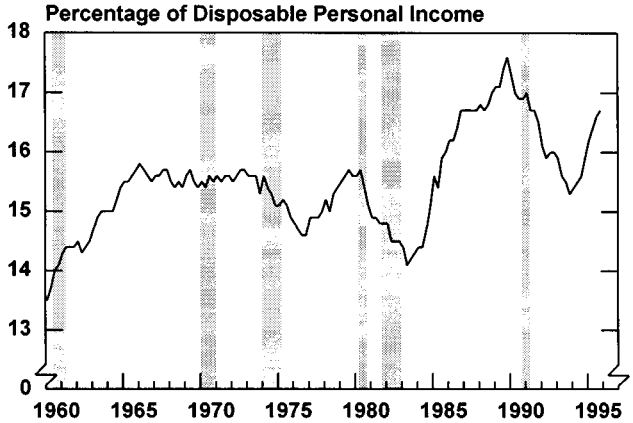
Figure 1-5.
Expenditures for Personal Consumption



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

NOTE: Personal consumption expenditures in chained (1992) dollars.

Figure 1-6.
Household Payments on Debt

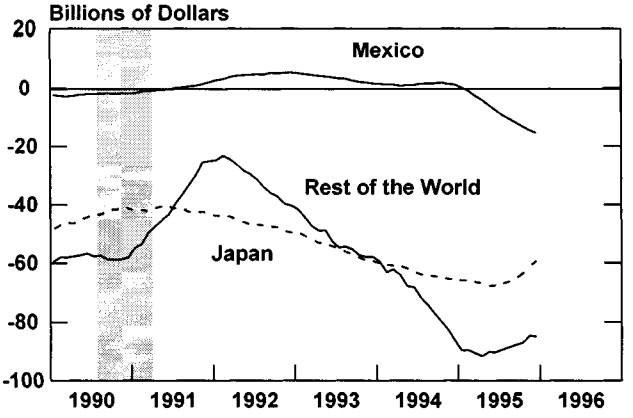


SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Federal Reserve Board.

International Trade

The real trade deficit increased early in 1995 and fell during the second half, but the recent improvement does not promise continued gains in the near future. The trade deficit deteriorated rapidly from an annual rate of $110 billion in the second half of 1994 to an annual rate of $123 billion in the first half of 1995. The deterioriation reflected both high demand for imports in the United States and the economic crisis in Mexico, which sent the bilateral balance of trade sharply into deficit (see Figure 1-7 on page 8). The overall trade deficit improved over the second half of the year, however, narrowing to $105 billion at an annual rate. Exports continued their strong growth, led by sales to rapidly growing Asian developing countries and--somewhat surprisingly--by increased sales to a sluggish Japanese economy. By contrast, growth of imports slowed, absorbing a substantial part of the slowdown in domestic final sales and of the lackluster pace of inventory growth.

Figure 1-7.
Net Exports of Goods from the United States



SOURCES: Congressional Budget Office; Department of Commerce, Bureau of the Census.

NOTE: Net exports equal exports minus imports of goods, based on Bureau of the Census data.

The deteriorating bilateral trade balance with Mexico was a significant feature of U.S. trade developments during 1995. Net exports to Mexico plummeted in the aftermath of the peso devaluation of December 1994, which lowered the cost of Mexican goods to U.S. purchasers and raised the cost of domestic goods to Mexicans. Mexico's crisis plunged it into a deep recession, further eroding Mexican buying power. The dollar value of exports of goods to Mexico dipped some 10 percent, while the dollar value of imports of goods from Mexico shot up by 25 percent.

Transitory Factors

Recent economic activity was dampened by factors whose effects on growth are largely temporary. The federal government went through two partial shutdowns that directly reduced hours worked and measured output in late 1995 and early 1996. Other federal purchases were delayed because of the budget impasse, and workers affected by the shutdowns may have postponed some of their purchases. In addition, major strikes cut production at Boeing in the last quarter of 1995 and at General Motors in March 1996. Finally, in early 1996, much of the United States was hit by a spate of harsh weather, which tends to reduce spending and output.

Fiscal Policy

Fiscal year 1996 began with no appropriation bills signed (appropriation bills provide funding for the federal government's discretionary spending--that is, spending other than for entitlement programs and interest payments on the federal debt). In its budget resolution, the Congress had proposed an ambitious path of budget balancing combined with reforms of the fast-growing Medicare and Medicaid entitlement programs and various tax cuts. The President disagreed with many of those proposals. The resulting impasse in the budget talks produced considerable uncertainty about both short- and long-run fiscal policy. Presidential vetoes of Congressional budget plans led to two government shutdowns of unprecedented duration and extent.

The first government shutdown, in mid-November, followed disagreements between the President and the Congress over three bills: a bill to raise the limit on the government's authority to issue debt; the Congress's reconciliation bill that would have provided a long-term budget plan; and the Congress's proposal for a second continuing resolution that would have provided temporary funding for the current year for those parts of the government without an appropriation for fiscal year 1996. The President refused to sign the debt-limit bill because it also contained a provision requiring budgetary balance in seven years using CBO's assumptions--an agreement that the President was not at the time ready to make. The reconciliation bill was the vehicle for the Congress's overhaul of Medicare and Medicaid, changes in farm programs and student loans, and $245 billion of tax cuts. The President also disagreed with that plan, particularly with the size and distribution of its tax cuts. Finally, the veto of the second continuing resolution reflected disagreement over its provisions increasing Medicare premiums for doctors' visits and its targeting of some programs for immediate cuts. At that time, only four of the appropriation bills for fiscal year 1996 had been signed, so the agencies without appropriations largely shut down. Excep-

tions were made for limited "emergency" personnel, including those preparing Social Security checks. A total of 800,000 government employees were sent home for six days.

The first shutdown ended on November 19 with the signing of the second continuing resolution, which reopened the government for one day while negotiations between the Administration and the Congress continued. The third continuing resolution, signed on November 20, incorporated an agreement that budget proposals would aim to produce a balanced budget by 2002 based on CBO estimates. Despite some temporary disagreement over the assumptions that would be used in meeting that test, the agreement in principle to balance the budget has held up over the succeeding months and is not currently a source of contention.

Shortly after the agreement was signed, however, it became clear that there was no meeting of minds about how budgetary balance was to be achieved. Fundamental differences remained over Medicaid, which the Congress wished to turn over to the states in the form of block grants, and over proposals for the earned income tax credit, Medicare, and tax cuts. The Congress and the Administration were unable to reconcile their differences. That impasse led to a second and longer shutdown from December 16 to January 6.

As time passed, it became obvious that the Administration and the Congress were not going to reach agreement on tax cuts or major reforms of entitlement programs, and the budget deliberations turned to focus on discretionary spending. Even within that more limited area of debate, disagreements about expenditures for education, job training, and environmental protection stalled the passage of a budget. Agencies for which appropriation bills had not been passed were kept open with a succession of continuing resolutions. Finally, after the 13th continuing resolution, an agreement on the 1996 budget was signed on April 26.

Fiscal Policy in 1995 and 1996

After all is said and done, fiscal policy for 1996 has been restrictive. CBO now estimates that the budget deficit for fiscal year 1996 will total $144 billion, down from $164 billion in 1995, despite the fact that no major changes were made to entitlement programs or taxes (see Table 1-2). Fiscal restraint this year amounts to 0.7 percent of potential GDP, as measured by the decline in the standardized-employment deficit, which is the deficit adjusted to eliminate the effects of the business cycle (see Appendix A). That measure of the deficit has dropped from 3.5 percent of potential GDP in 1993 to an estimated 2 percent in 1996.

The appropriations enacted through regular bills and continuing resolutions reduced discretionary spending for 1996 to levels in line with the targets of the budget resolution passed last summer. The budget impasse and government shutdowns temporarily magnified that reduction in the first part of the fiscal year. The closing of the government temporarily delayed outlays for wages and salaries (although workers were later paid for the time they did not work), while the shutdowns and associated uncertainties also caused some contracts and other purchases to be postponed. Most of that delayed discretionary spending for 1996 will be undertaken before the end of the fiscal year.

Alternative Assumptions About Future Fiscal Policy

Considerable uncertainty surrounds the outlook for fiscal policy beyond this year. The stated policy goal of both the Congress and the Administration is to balance the budget by 2002. However, because of disagreements over how to cut spending and reduce taxes, legislation to carry out that policy goal--called for in the third continuing resolution--has not yet been enacted. Thus, current policy does not reflect intended policy changes to balance the budget, although it incorporates the lower levels of discretionary spending consistent with enacted appropriations for 1996.

Usually, CBO's economic outlook has assumed the fiscal policy implied by the budget baseline--that is, current policy. If proposed but not yet enacted changes in fiscal policy are small, that procedure risks making only minor errors. But the changes in fiscal policy now proposed--balancing the budget by

2002--would have a large and beneficial impact on the economy in the long run. To recognize fully the economic changes that balancing the budget would produce, CBO has constructed two economic forecasts: the first one (the current-policy forecast) assumes the baseline or current-policy fiscal policy; the other (the balanced budget forecast) assumes that the budget is brought into balance over the 1996-2002 period and stays balanced thereafter.

Gauging the likely path of the economy under any given fiscal policy requires some assumptions about how individuals and markets regard the credibility of that policy. The extensive legislative and negotiating efforts to bring about a balanced budget probably led consumers and financial markets to believe that a balanced budget plan might be enacted. CBO now assumes, however, that despite the agreement in principle to balance the budget, financial

Table 1-2.
Measures of Fiscal Policy Under Current-Policy Assumptions (By fiscal year)

	1992[a]	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
							In Billions of Dollars								
Standardized-Employment Deficit[a]	224	233	192	192	154	177	183	205	230	243	267	291	321	354	380
Primary standardized deficit[a]	24	34	-11	-41	-86	-69	-74	-66	-53	-54	-45	-37	-25	-11	-6
Net interest payments	199	199	203	232	240	246	257	271	283	296	311	328	346	365	385
Cyclical Deficit	69	50	19	-2	5	10	15	16	17	18	19	21	22	23	24
Deposit Insurance	3	-28	-8	-18	-10	-5	-2	-2	-2	-2	-1	-1	-1	-1	-1
Spectrum Auctions	0	0	0	-8	-5	-12	-3	0	0	0	0	0	0	0	0
Total Budget Deficit[a]	290	255	203	164	144	171	194	219	244	259	285	311	342	376	403
Debt Held by the Public	2,999	3,247	3,432	3,603	3,770	3,967	4,181	4,422	4,687	4,966	5,268	5,593	5,947	6,333	6,746
							As a Percentage of Potential GDP								
Standarized-Employment Deficit[a]	3.5	3.5	2.8	2.7	2.0	2.2	2.2	2.4	2.5	2.5	2.7	2.8	2.9	3.1	3.1
Primary standardized deficit[a]	0.4	0.5	-0.2	-0.6	-1.1	-0.9	-0.9	-0.8	-0.6	-0.6	-0.4	-0.3	-0.2	-0.1	0
Net interest payments	3.1	3.0	3.0	3.2	3.2	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.2	3.2
Cyclical Deficit	1.1	0.8	0.3	0	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Deposit Insurance	0	-0.4	-0.1	-0.2	-0.1	-0.1	0	0	0	0	0	0	0	0	0
Spectrum Auctions	0	0	0	-0.1	-0.1	-0.1	0	0	0	0	0	0	0	0	0
Total Budget Deficit[a]	4.6	3.9	3.0	2.3	1.9	2.2	2.3	2.5	2.7	2.7	2.9	3.0	3.1	3.3	3.3
Debt Held by the Public	47.3	49.2	49.9	50.2	50.2	50.3	50.6	51.0	51.5	52.1	52.7	53.3	54.0	54.9	55.7
Memorandum:															
Potential GDP (Billions of dollars)	6,341	6,604	6,872	7,182	7,514	7,880	8,266	8,670	9,094	9,538	10,004	10,493	11,005	11,543	12,106

SOURCE: Congressional Budget Office.

NOTE: See Chapter 2 for details of current-policy budget assumptions.

a. These numbers exclude outlays for deposit insurance, offsetting receipts from spectrum auctions, and--in 1992--$4.9 billion of allied contributions for Operation Desert Storm.

markets are currently focusing on the fundamental policy disagreements that would have to be resolved in order to put a plan into place. As a result, the 30 basis-point decline in rates has been reversed, accounting for part of the much larger increase in long-term rates during the last few months. In the balanced budget forecast, CBO assumes that a balanced budget plan, once passed, would gradually become fully credible. In other words, as plans firm up, markets will come to believe that budgetary balance will occur on schedule and that the plan will not be abandoned in midcourse.

Fiscal Policy Under Current-Policy Assumptions. The current-policy fiscal path implies that the standardized-employment deficit as a percentage of GDP would climb significantly by 2006, partially reversing substantial reductions over the past three years. In the long run, that increase would curb economic growth. Moreover, it would provide little short-run stimulus to the economy because the increase would be very gradual.

Between 1996 and 2006, the standardized-employment deficit would rise from 2 percent to 3.1 percent of potential GDP under current-policy assumptions. Because the higher deficits soak up savings that would otherwise flow to productive investments, they would result in a lower level of economic activity in the long run.

Table 1-3.
Measures of Fiscal Policy Under Alternative Budget Assumptions (By fiscal year)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
					In Billions of Dollars						
Standardized-Employment Deficit[a]											
Current policy[b]	154	177	183	205	230	243	267	291	321	354	380
Balanced budget	154	166	116	83	58	18	-21	-19	-21	-22	-23
					As a Percentage of Potential GDP						
Standardized-Employment Deficit[a]											
Current policy[b]	2.0	2.2	2.2	2.4	2.5	2.5	2.7	2.8	2.9	3.1	3.1
Balanced budget	2.0	2.1	1.4	1.0	0.6	0.2	-0.2	-0.2	-0.2	-0.2	-0.2
Memorandum:											
Potential GDP (Billions of dollars)											
Current policy[b]	7,514	7,880	8,266	8,670	9,094	9,538	10,004	10,493	11,005	11,543	12,106
Balanced budget	7,514	7,882	8,274	8,684	9,114	9,565	10,039	10,536	11,058	11,605	12,180

SOURCE: Congressional Budget Office.

a. These numbers exclude outlays for deposit insurance and offsetting receipts from spectrum auctions.

b. Current policy assuming discretionary spending is adjusted for inflation up to the statutory caps that are in effect through 1998. All discretionary spending other than spending from the Violent Crime Reduction Trust Fund is assumed to equal the caps in 1998 and to grow from that level at the rate of inflation in later years. See Chapter 2 for details.

Fiscal Policy Under Balanced Budget Assumptions. The balanced budget economic forecast assumes a fiscal policy that would eliminate the deficit by 2002 via an illustrative path, which would imply a small surplus in the standardized-employment budget from 2002 onward (see Table 1-3 on page 11). Between 1996 and 2002, the illustrative path in broad terms is similar to the one that the Congress proposed in the Balanced Budget Act of 1995. That policy path exerts significant restraint on short-term growth in some years, which CBO assumes would be roughly offset by changes in monetary policy and in financial markets that would lower interest rates. The balanced budget path also slims the federal debt relative to GDP, and that, too, would lower interest rates as well as raise the level of potential output.

Without an agreement between the Congress and the Administration on how to balance the budget, the details of the budget between now and 2002 remain elusive. But because of the beneficial economic effects of balancing the budget, policy actions alone would not have to do all of the work. The higher growth and lower interest rates resulting from the move to a balanced budget would help considerably in achieving that goal by raising revenue and reducing debt service.[1]

The Outlook Under Current-Policy Assumptions

Business cycles dominate short-term fluctuations in economic growth, whereas productivity, growth in the labor force, and average levels of investment govern long-term trends. CBO incorporates business-cycle influences only over the first two years of its forecast. Because of the uncertainty of economic estimates, that process involves weighing different possible outcomes (weaker or stronger growth, for example) by their estimated probabilities.

1. For more about the economic and indirect budgetary effects of balancing the budget, see Congressional Budget Office, *The Economic and Budget Outlook: December 1995 Update*, CBO Memorandum (December 1995), and the updated estimates presented later in this report.

By contrast, CBO's medium-term projections for 1998 through 2006 do not reflect any attempt to estimate either cyclical movements of the economy or the effects of fiscal policy on the year-to-year changes in economic activity. Instead, the projections are designed to approximate the level of economic activity on average, including the possibility of above- or below-average rates of growth, inflation, and interest. CBO uses historical relationships to identify trends in fundamental factors underlying the economy, including growth of the labor force, the rate of national saving, and growth of productivity. The projections of variables such as real GDP, inflation, and real interest rates are then based on their historical norms.

CBO's Current-Policy Forecast for 1996 and 1997

The economy appears poised for moderate growth in 1996 and 1997. Although some areas of concern exist, the economy appears to be well balanced overall. Inflation and interest rates are relatively low, inventories are at a manageable level, and the stock market is high. On the gloomier side, capital spending is slowing, consumer debt is relatively high, and fiscal policy is contractionary for this year. Those factors reduce the chances of robust growth over the next two years.

CBO forecasts that the underlying rate of inflation will creep up slightly from current levels in 1996 and 1997 because of the delayed effects of the low unemployment rate of the past year and a half. Inflation will be aggravated as labor compensation, driven by increased benefit or wage growth, revives from last year's subpar growth rates. Recent jumps in oil prices are likely to prove ephemeral. A rise in grain prices, resulting from low levels of stocks combined with anticipation of a poor wheat harvest, may put some upward pressure on food prices, but that trend is also not likely to persist. The anticipated slight slowing of real economic activity is expected to lead to modest increases in the unemployment rate, thus moderating the expected increase in compensation and quelling any fears of a major bout of inflation.

A statistical adjustment will lower the measured rate of inflation, though recent official statements of the timing and effects of the adjustment differ slightly from the assumptions CBO used for the forecast. The Bureau of Labor Statistics (BLS), which gathers data on the prices that underlie the consumer price index (CPI) and many categories of the national income and product accounts (NIPAs), had announced late last year that it would change the manner in which new stores are brought into its calculation of the CPI. It felt that the old method imparted an upward bias to the growth of its price indexes. CBO's forecast therefore incorporated estimated effects of the change in the current forecast.

In early April, however, after CBO's forecast was completed, the BLS announced that the change would occur sooner than the date assumed by CBO, and it also indicated that the change would probably have a slightly smaller effect on the price index than CBO assumed. The differences, however, are minor. The change will begin in June 1996, instead of January 1997 as assumed by CBO, and the current best estimate of the effect is a reduction in the growth of the CPI by 0.1 percentage point, instead of CBO's assumed effect of a 0.16 percentage-point reduction.

The statistical change not only lowers the projected growth of the CPI from what would have otherwise been forecast, but it also raises the forecast of the real growth rate of the economy. Because the CPI price data are also used in calculating the chain-type GDP price index, the CBO forecast of that price measure was lowered by 0.1 percentage point a year starting in 1997 (the magnitude of the effect is smaller than the 0.16 that CBO assumed for the CPI because the GDP price index includes many prices that are unaffected by the change in the CPI). The change in the statistical methods for the CPI does not affect the forecast of nominal GDP. As a result, CBO raised the projection of real GDP growth by a corresponding 0.1 percentage point a year from 1997 onward.

Monetary policy has already eased off somewhat from its restrictive stance of 1994 and 1995. With growth moderate and few signs of impending inflation, CBO assumes that the Federal Reserve will adhere to its current target for the federal funds rate throughout the remainder of the year.

The hot pace of business investment set during 1993 and 1994 cooled during the last half of 1995 and may continue to flag in 1996. Lower rates of capacity use, the accumulation of capital stocks over the past three years, continuing moderate economic growth, and a lower profit rate (as growth in labor compensation rebounds) will combine to trim new spending on plant and equipment. Still, firms will need to continue to upgrade their capital stock, especially in computers and information technology, if they are to remain competitive in the world marketplace. Low interest rates and the high level of the stock market will lower the cost of funds to businesses, which will also help to avert a strong downturn in investment.

Consumers are expected to increase their spending in line with income growth over the next two years despite carrying a somewhat troubling level of debt. Although unemployment is forecast to inch up, incomes should also continue to rise, thereby boosting consumption.

The real trade deficit is projected to remain essentially unchanged over the next two years. Exports should continue to grow at a solid--but slightly slower--pace in 1996. Swifter growth during 1996 in Asia and Latin America (including a return to growth in both Japan and Mexico) should more than offset the impact of an economic slowdown in Europe on the overall growth of world income. Nevertheless, the rebound of the dollar against the yen--and to a lesser extent against the deutsche mark--that occurred in the second half of 1995 and early 1996 is expected to depress the growth of exports somewhat. A dip in the growth of orders for U.S. exports alsopoints to a slower pace than the high growth rate of 1995.

Imports are expected to rebound from the sharp slowdown that occurred in the second half of 1995. The bulk of inventory adjustment is over, and imports will strengthen as inventories are rebuilt. The delayed effects of the rebound in the dollar should also boost imports during 1996.

The share of national income going to profits is expected to decline over the next two years: growth in labor compensation is forecast to escalate, and long-term interest rates have increased. Growth in labor compensation may pick up because the cost of

Table 1-4.
Economic Projections Assuming Current Policy for Calendar Years 1996 Through 2006

	Preliminary[a]	Forecast		Projected								
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Nominal GDP (Billions of dollars)	7,248	7,584	7,943	8,324	8,730	9,156	9,603	10,071	10,563	11,078	11,619	12,185
Nominal GDP (Percentage change)	4.6	4.6	4.7	4.8	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
Real GDP[b] (Percentage change)	2.1	2.0	1.9	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Chain-Type GDP Price Index (Percentage change)	2.5	2.6	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
CPI-U[c] (Percentage change)	2.8	2.8	3.1	3.0	2.9	2.9	2.9	3.0	3.0	3.0	3.0	3.0
Unemployment Rate (Percent)	5.6	5.8	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Three-Month Treasury Bill Rate (Percent)	5.5	4.9	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Ten-Year Treasury Note Rate (Percent)	6.6	6.1	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Tax Bases (Billions of dollars)												
Corporate profits	579	599	612	618	620	629	648	672	703	741	780	822
Other taxable income	1,529	1,595	1,662	1,757	1,859	1,958	2,058	2,157	2,259	2,367	2,482	2,604
Wage and salary disbursements	3,420	3,592	3,760	3,935	4,124	4,322	4,528	4,743	4,969	5,205	5,452	5,711
Total	5,528	5,786	6,035	6,309	6,603	6,909	7,233	7,572	7,931	8,313	8,714	9,137
Tax Bases (Percentage of GDP)												
Corporate profits	8.0	7.9	7.7	7.4	7.1	6.9	6.7	6.7	6.7	6.7	6.7	6.7
Other taxable income	21.1	21.0	20.9	21.1	21.3	21.4	21.4	21.4	21.4	21.4	21.4	21.4
Wage and salary disbursements	47.2	47.4	47.3	47.3	47.2	47.2	47.2	47.1	47.0	47.0	46.9	46.9
Total	76.3	76.3	76.0	75.8	75.6	75.5	75.3	75.2	75.1	75.0	75.0	75.0

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

a. Consistent with the first official estimate for 1995 published on March 4, 1996.

b. Based on chained (1992) dollars.

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

Table 1-5.
Economic Projections Assuming Current Policy for Fiscal Years 1996 Through 2006

	Actual	Forecast		Projected								
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Nominal GDP (Billions of dollars)	7,181	7,491	7,853	8,225	8,627	9,047	9,489	9,952	10,438	10,947	11,481	12,041
Nominal GDP (Percentage change)	5.1	4.3	4.8	4.7	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
Real GDP[a] (Percentage change)	2.6	1.8	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Chain-Type GDP Price Index (Percentage change)	2.5	2.6	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
CPI-U[b] (Percentage change)	2.8	2.7	3.1	3.1	2.9	2.9	2.9	3.0	3.0	3.0	3.0	3.0
Unemployment Rate (Percent)	5.6	5.7	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Three-Month Treasury Bill Rate (Percent)	5.5	5.0	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Ten-Year Treasury Note Rate (Percent)	7.1	6.0	6.3	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Tax Bases (Billions of dollars)												
Corporate profits	576	595	609	618	618	626	643	665	694	731	770	811
Other taxable income	1,509	1,578	1,643	1,731	1,834	1,933	2,033	2,132	2,233	2,340	2,453	2,573
Wage and salary disbursements	3,379	3,548	3,719	3,889	4,076	4,272	4,475	4,688	4,911	5,145	5,389	5,645
Total	5,464	5,721	5,972	6,237	6,529	6,831	7,151	7,485	7,839	8,215	8,612	9,029
Tax Bases (Percentage of GDP)												
Corporate profits	8.0	7.9	7.8	7.5	7.2	6.9	6.8	6.7	6.6	6.7	6.7	6.7
Other taxable income	21.0	21.1	20.9	21.0	21.3	21.4	21.4	21.4	21.4	21.4	21.4	21.4
Wage and salary disbursements	47.1	47.4	47.4	47.3	47.3	47.2	47.2	47.1	47.1	47.0	46.9	46.9
Total	76.1	76.4	76.0	75.8	75.7	75.5	75.4	75.2	75.1	75.0	75.0	75.0

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

a. Based on chained (1992) dollars.

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

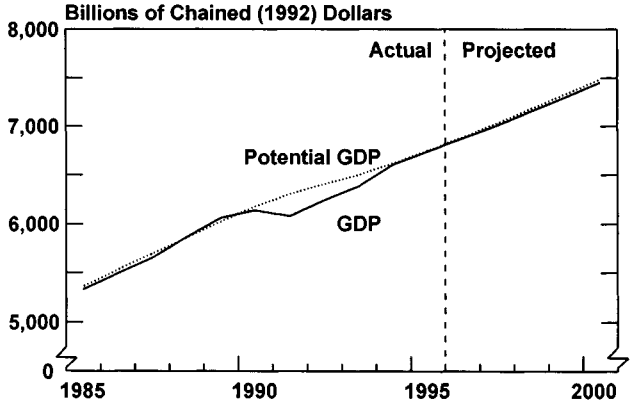
fringe benefits may head toward its traditional higher rate of growth in the coming years. If benefit costs continue their recent slow growth, wages--the major component of labor compensation--should pick up, keeping growth in labor compensation in line with productivity growth. Substantial evidence suggests that workers normally pay fully for their fringe benefits in the form of lower wages--so compression of fringe benefits ought to allow somewhat faster wage growth. Higher interest rates should also lead to lower profits because they increase the amount businesses must pay to service their debts.

Projections Assuming Current Policy for 1998 Through 2006

Growth in real GDP will average 2.1 percent between 1998 and 2006, according to CBO's projections (see Tables 1-4 and 1-5 on pages 14 and 15). That rate of growth, which matches the growth in potential output, would result in an average unemployment rate of 6 percent. Similarly, inflation is projected to average about 3 percent, and short- and long-term interest rates will average 4.8 percent and 6.4 percent, respectively.

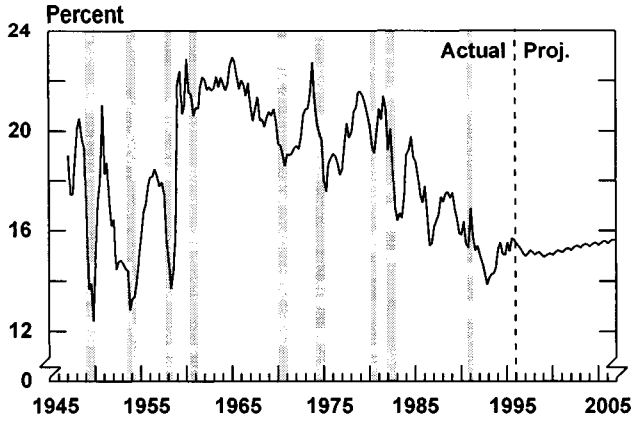
The Projection for Growth. CBO projects real GDP by assuming that it will reach its average historical relationship with potential GDP during the medium term. Output is forecast to grow slightly below trend during the next two years, which would leave the gap between actual and potential GDP at the end of 1997 equal to its historical average. Therefore, CBO projects that real GDP will grow at the same rate as potential output--about 2.1 percent--during the 1998-2006 period. That rate of growth would hold the GDP gap constant throughout the projection period (see Figure 1-8).

Figure 1-8.
GDP and Potential GDP



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

Figure 1-9.
The National Saving Rate



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

The projected 2.1 percent growth rate for potential output is about 0.2 percentage points slower than CBO assumed in its December projection. The revised outlook stems from three sources: the shift from a path toward a balanced federal budget (as assumed in December) to one that includes substantial deficits through 2006; a revised view of the labor market; and revisions to historical data series. The change from balanced budget to current-policy assumptions lops off about 0.1 percentage point a year from the growth of potential output, or roughly half of the total revision. The other two sources account for the remainder of the revision in roughly equal amounts.

A reexamination of labor market trends since 1990 has led CBO to reduce its projection for the growth in average weekly hours. Slower growth in the projection of total hours worked implies slightly lower growth in output over the projection period.

Projections of growth in the nation's capital stock have also been revised downward since December. Revisions to the NIPAs published in January revealed that investment in plant and equipment was lower during recent years than was thought previously. Those revisions lower CBO's estimate of the size of the effective capital stock, which in turn lowers the estimate of potential growth during recent history and during the projection period. The rate of national saving averages 15 percent during the 1996-2006 period, just above its average since 1990, but well below its postwar average of 18 percent (see Figure 1-9). That rate of saving supports a net rate of capital accumulation of 3.2 percent during the same period, slightly lower than the 3.3 percent rate assumed in December.

An upward revision in total factor productivity (TFP) partially offsets the revision to the capital input. CBO estimates that the trend rate of growth of TFP will equal 0.5 percent annually, a shade higher than the 0.4 percent rate assumed in December. Growth in TFP has been faster than trend during the first half of the 1990s, leading some analysts to suggest that a new era of faster growth in productivity has dawned. However, the growth of TFP in recent years is consistent with its normal cyclical behavior, and most analysts who have studied the issue have concluded that it is too soon to proclaim a new trend in the growth of productivity.

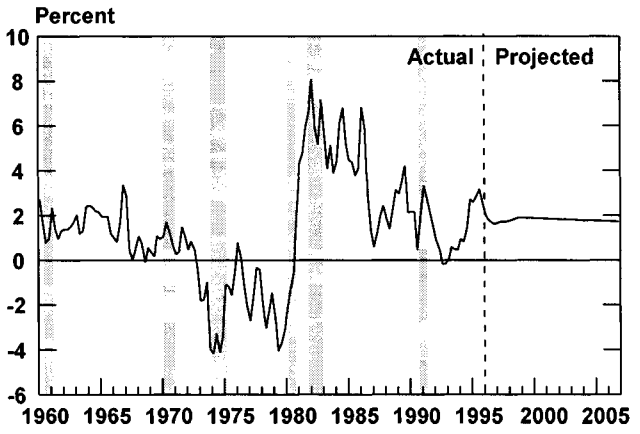
The Projection for Inflation. CBO projects that inflation, measured using the consumer price index for all urban consumers (CPI-U), will average about 3 percent between 1998 and 2006, about 0.3 percentage points faster than the projected rate of growth of the GDP price index. The gap between GDP and potential GDP is forecast to reach its average historical value by the end of 1997 (as is the gap between the unemployment rate and the NAIRU). With so small a gap, there is little pressure upward or downward on the rate of inflation. Indeed, CBO's current projection for inflation is virtually identical to its December projection.

Year-to-year rates of inflation vary between 1996 and 2006 as a result of statistical changes and measurement issues. The projection for inflation falls by 0.2 percentage points over the course of 1998 to account for the planned rebenchmarking of the CPI-U that will come on top of the 1996 revision to the CPI-U described earlier. The Bureau of Labor Statistics has announced that it will update the weights used to calculate the CPI-U in 1998, which will put more emphasis on goods and services with lower increases in price, thereby lowering the growth of the overall index.

Note, however, that CBO has assumed a slight upward drift in the growth of the CPI to account for an effect called the substitution bias. Any fixed-weighted price index such as the CPI will tend to overstate the true rate of inflation because it ignores the ability of consumers to substitute cheaper goods for more expensive ones over time. Studies have indicated that this effect, taken alone, causes the CPI to overstate the inflation rate by about 0.2 percentage points over 10 years, or 0.02 percentage points per year on average. CBO has built that upward drift into its projections of the rate of inflation. Therefore, over the 10-year horizon that the projections cover, the rebenchmarking in 1998 and the drift cancel each other out.

The Projection for Interest Rates. CBO projects interest rates by combining its projection of inflation

Figure 1-10.
The Short-Term Interest Rate Adjusted for Inflation



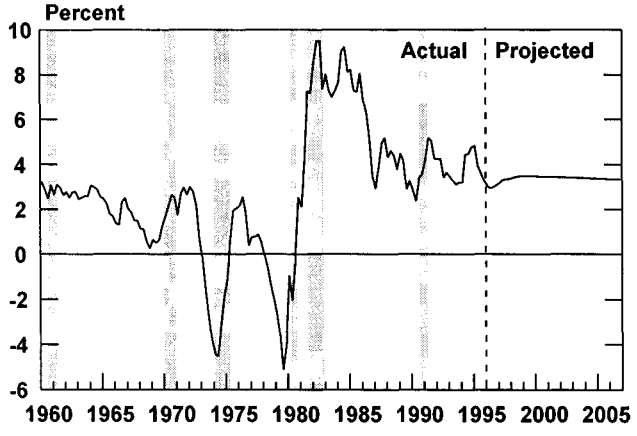
SOURCES: Congressional Budget Office; Federal Reserve Board; Department of Labor, Bureau of Labor Statistics.

NOTE: The inflation-adjusted rate is the nominal three-month Treasury bill rate less the growth of the three-quarter centered moving average of the consumer price index.

with a projection of real interest rates that is based on a comparison with the 1950s and 1960s, when inflation rates were similar to those today. Real rates are projected to be somewhat higher than their levels in the late 1950s and 1960s because deficits are now higher both in the United States and abroad. For example, the real rate on three-month Treasury bills averages 1.8 percent during the 1998-2006 period, about 0.5 percentage points higher than its average during the late 1950s and 1960s (see Figure 1-10 on page 17). The real rate on 10-year Treasury notes averages 3.4 percent, exceeding its average over the same period by 1.3 pecentage points (see Figure 1-11). Combined with a 3 percent projection for inflation, those real rates imply that the three-month bill rate will average 4.8 percent during the 1998-2006 period and the 10-year note rate will average 6.4 percent during the same period.

CBO has lowered the current-policy estimates of interest rates by 30 basis points since December. The revision reflects in part a recognition that foreign governments will have to address their own budget deficits: in fact, the Maastricht agreement mandates considerable fiscal retrenchment for a number of European countries.

Figure 1-11.
The Long-Term Interest Rate Adjusted for Inflation



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

NOTE: The inflation-adjusted rate is the nominal 10-year Treasury note rate less the growth of the five-quarter centered moving average of the consumer price index.

Because the current-policy projection excludes the effects of deficit reduction, interest rates are higher than CBO projected in December, using a balanced budget projection. CBO now estimates that reducing the deficit to zero would lower interest rates by about 110 basis points relative to the levels under current policy. By the later years of the projection period, the levels of both short- and long-term interest rates are about 90 basis points higher than CBO assumed in December.

The Projection for Unemployment. CBO bases its projection for unemployment, like other variables, on historical averages. The average rate of unemployment since 1960 has been 0.2 percentage points above CBO's estimate of the nonaccelerating inflation rate of unemployment. Though the unemployment rate has on average exceeded the NAIRU, that excess has not led to reductions in the rate of inflation on average because the economy has been hit by many positive price shocks, such as increases in the price of oil, that tend to accelerate the rate of inflation. CBO assumes that this historical pattern will continue. Therefore, it projects that the unemployment rate will average 6 percent throughout the projection period without affecting the average rate of inflation. Using that historical excess of unemployment over the NAIRU allows for the possibility of either recessions or booms over the projection period.

The Outlook Assuming a Balanced Budget by 2002

If the government adopted fiscal policies that balanced the federal budget by 2002 and kept it balanced thereafter, the economic outlook would differ from CBO's current-policy projections. CBO's analysis indicates that real economic growth would probably be slightly higher during the projection period on average, interest rates would be significantly lower, and a larger percentage of total income would fall in categories that tend to generate greater federal tax revenues (see Tables 1-6, 1-7, and 1-8).

Those macroeconomic effects would enhance efforts to reduce the deficit. More rapid growth,

Table 1-6.
Economic Projections Assuming Balanced Budget Policy for Calendar Years 1996 Through 2006

	Preliminary[a]	Forecast		Projected								
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Nominal GDP (Billions of dollars)	7,248	7,584	7,946	8,333	8,745	9,177	9,631	10,108	10,608	11,133	11,684	12,261
Nominal GDP (Percentage change)	4.6	4.6	4.8	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
Real GDP[b] (Percentage change)	2.1	2.0	2.0	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Chain-Type GDP Price Index (Percentage change)	2.5	2.6	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
CPI-U[c] (Percentage change)	2.8	2.8	3.1	3.0	2.9	2.9	2.9	3.0	3.0	3.0	3.0	3.0
Unemployment Rate (Percent)	5.6	5.8	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Three-Month Treasury Bill Rate (Percent)	5.5	4.9	4.8	4.3	3.9	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Ten-Year Treasury Note Rate (Percent)	6.6	5.7	5.5	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Tax Bases (Billions of dollars)												
Corporate profits	579	602	637	668	691	716	741	778	817	857	899	944
Other taxable income	1,529	1,590	1,635	1,700	1,779	1,860	1,946	2,032	2,127	2,227	2,334	2,448
Wage and salary disbursements	3,420	3,592	3,762	3,939	4,131	4,332	4,541	4,761	4,990	5,230	5,482	5,746
Total	5,528	5,784	6,034	6,307	6,601	6,907	7,228	7,570	7,933	8,315	8,716	9,138
Tax Bases (Percentage of GDP)												
Corporate profits	8.0	7.9	8.0	8.0	7.9	7.8	7.7	7.7	7.7	7.7	7.7	7.7
Other taxable income	21.1	21.0	20.6	20.4	20.3	20.3	20.2	20.1	20.0	20.0	20.0	20.0
Wage and salary disbursements	47.2	47.4	47.3	47.3	47.2	47.2	47.2	47.1	47.0	47.0	46.9	46.9
Total	76.3	76.3	75.9	75.7	75.5	75.3	75.0	74.9	74.8	74.7	74.6	74.5

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

a. Consistent with the first official estimate for 1995 published on March 4, 1996.

b. Based on chained (1992) dollars.

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

Table 1-7.
Economic Projections Assuming Balanced Budget Policy for Fiscal Years 1996 Through 2006

	Actual	Forecast		Projected								
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Nominal GDP (Billions of dollars)	7,181	7,491	7,855	8,233	8,640	9,067	9,516	9,987	10,481	10,999	11,543	12,114
Nominal GDP (Percentage change)	5.1	4.3	4.9	4.8	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
Real GDP[a] (Percentage change)	2.6	1.8	2.0	2.0	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Chain-Type GDP Price Index (Percentage change)	2.5	2.6	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
CPI-U[b] (Percentage change)	2.8	2.7	3.1	3.1	2.9	2.9	2.9	3.0	3.0	3.0	3.0	3.0
Unemployment Rate (Percent)	5.6	5.7	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Three-Month Treasury Bill Rate (Percent)	5.6	5.0	4.8	4.4	4.0	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Ten-Year Treasury Note Rate (Percent)	7.1	5.8	5.5	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Tax Bases (Billions of dollars)												
Corporate profits	576	596	627	662	686	709	735	768	806	847	888	932
Other taxable income	1,509	1,576	1,623	1,681	1,759	1,840	1,923	2,010	2,103	2,201	2,307	2,419
Wage and salary disbursements	3,379	3,548	3,720	3,893	4,082	4,281	4,488	4,705	4,932	5,169	5,418	5,679
Total	5,464	5,720	5,970	6,236	6,527	6,830	7,146	7,483	7,840	8,217	8,613	9,031
Tax Bases (Percentage of GDP)												
Corporate profits	8.0	8.0	8.0	8.0	7.9	7.8	7.7	7.7	7.7	7.7	7.7	7.7
Other taxable income	21.0	21.0	20.7	20.4	20.4	20.3	20.2	20.1	20.1	20.0	20.0	20.0
Wage and salary disbursements	47.1	47.4	47.4	47.3	47.3	47.2	47.2	47.1	47.1	47.0	46.9	46.9
Total	76.1	76.4	76.0	75.8	75.5	75.3	75.1	74.9	74.8	74.7	74.6	74.5

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

a. Based on chained (1992) dollars.

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

lower interest rates, and a shift in income toward higher revenue-generating categories would result in higher revenues than CBO projects under its current-policy baseline. In effect, policies to reduce the deficit would gain an extra boost from the effects that deficit reduction induces in the economy.

Real Growth

By freeing up savings for use in productive investment, balancing the budget by 2002 could allow the economy to grow modestly faster--by less than 0.1 percentage point a year on average. By 2006, the annual level of gross national product (GNP) might be about 1 percent higher than it would be if deficits averaged 2.8 percent of GDP over the next 10 years. The level of GDP might be about 0.6 percent higher. GNP is affected more than GDP because the net flow of returns from foreign investment, which is included in GNP but not in GDP, is likely to be greater under a policy of balancing the budget. All of those beneficial effects on growth would continue after 2006. (See Chapter 4 for a discussion of the long-run deficit

Table 1-8.
Estimated Economic Effects of Balancing the Budget by 2002 (By calendar year)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Real Gross National Product											
Percentage change in level from base	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
Change in growth rate (Percentage points)	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Real Gross Domestic Product											
Percentage change in level from base	0	0	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.6	0.6
Change in growth rate (Percentage points)	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Interest Rates (Percentage points)											
Three-month Treasury bills	0	0	-0.5	-0.9	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1
Ten-year Treasury notes	-0.3	-0.9	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1
Income Shares (Percentage of GDP)											
Corporate profits[a]	0	0.3	0.6	0.8	0.9	0.9	0.9	1.0	1.0	1.0	1.0
Other taxable income	-0.1	-0.3	-0.7	-0.9	-1.1	-1.2	-1.3	-1.3	-1.3	-1.4	-1.4
Wage and salary disbursements	0	0	0	0	0	0	0	0	0	0	0
Memorandum: (Percentage of GDP)											
Federal Net Interest	0	-0.1	-0.2	-0.4	-0.5	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7
Business Interest	0	-0.3	-0.6	-0.8	-0.8	-0.8	-0.9	-0.9	-0.9	-0.9	-0.9
Dividends	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
Depreciation	0	0	0	0	0.1	0.1	0.1	0.2	0.2	0.2	0.2

SOURCE: Congressional Budget Office.

a. Corporate profits are calculated using economic rather than tax depreciation.

outlook and how balancing the budget affects the economy over a 30-year period.)

Moving gradually to a balanced budget would cause productive resources to be redirected away from public and private consumption and toward investment. Investment is largely financed by national saving, which is composed of private saving plus government saving. When the deficit is reduced, government saving increases. The private saving rate is likely to decrease somewhat, however, as higher taxes or lower government services take a bite out of people's income, and the need diminishes to save for future taxes required to redeem or service federal debt. Still, private saving is unlikely to decrease as much as federal saving increases. In short, total national saving will probably increase.

How much private saving will respond to deficit reduction is uncertain; it will depend on the particular policies used to reduce the deficit and how they affect incentives to save. Without changes in saving incentives, a reasonable estimate of the fall in private saving in response to deficit reduction would lie between 20 percent and 50 percent of the reduction in the deficit. National saving would thus rise by between 50 percent and 80 percent of the reduction in the deficit.

The higher national saving rate would permit both a higher level of capital stock (increasing productive capacity in the United States) and a lower level of borrowing from foreigners (reducing the share of national output that is used to service foreign debt). Little consensus exists on how much each of those factors would change, but the range of possible increases in productive capacity over the next seven years is limited. CBO estimates that private investment would increase by about 20 percent of the reduction in the deficit, causing the capital stock to be about 4 percent higher in 2002.

The shift in resources from consumption to investment may not go smoothly. Fiscal restraint might have a contractionary effect in some years, even though GDP is likely to be higher at the end of the period than if no deficit reduction took place. Balancing the budget by 2002 implies an average restraint of 0.4 percent of GDP per year. On average, the Federal Reserve and financial markets could offset that modest restraint with lower interest rates, but the restraint could slow growth in some years.

CBO's balanced budget projection for inflation is the same as its current-policy projection. Some analysts maintain that deficit reduction would lower inflation in the long term because it would reduce the risk of a boom and the Federal Reserve would find it easier to reduce the underlying inflation rate. Conversely, inflation could climb temporarily if lower interest rates in the United States reduced the value of the dollar and raised the price of imports. Assuming no differences in inflation between the current-policy and balanced budget forecasts appears reasonable.

Interest Rates

CBO assumes deficit reduction would lower interest rates. Economists disagree about the effect of the deficit on interest rates: some argue that the openness of U.S. capital markets severely weakens the effect, whereas others maintain that substantial effects are still likely. Therefore, the range of estimates of the effect is wide. A few analysts estimate that reducing future deficits from the projected level under current policy of about 3 percent of GDP to zero in the early 21st century would not affect interest rates at all, whereas others argue that interest rates would be 200 basis points or more lower than they would otherwise have been.

CBO uses a midrange assumption--namely, that deficit reduction of that magnitude would reduce interest rates by 110 basis points by 2002. With inflation unchanged in the balanced budget forecast, real interest rates would also drop by 110 basis points--to 2.3 percent for long-term rates and 0.7 percent for three-month Treasury bill rates. Such a drop would put rates near their level in the late 1950s and early 1960s, when deficits were small relative to the economy and expectations of inflation were low.

How quickly rates would fall is also uncertain, but the drop in long-term rates could anticipate actual deficit reduction by a year or so. Long-term interest rates might respond to plans for future reductions in the deficit if those plans seemed credible. Clearly, as

the Congress proceeds along the path of deficit reduction, credibility is likely to increase.

Income Shares

Projections of the federal tax base are affected not only by the total level of nominal GDP but also by how total GDP is allocated among various categories of income. For example, wage and salary income is taxed, but income in the form of benefits such as company payments for health insurance premiums is not taxed either at the corporate or individual level. Therefore, projections that differ only in how GDP is allocated among those two income shares can have quite different implications for deficit projections.

The balanced budget forecast includes a different projection of income shares than does the current-policy forecast. The drop in interest rates and the decrease in the national debt that would accompany a policy of deficit reduction suggest a higher share of corporate profits in GDP and a lower share of interest income. In all likelihood, corporate costs for debt service would be smaller with lower interest rates. Hence profits, and thus corporate income taxes, would be higher. Dividends would also increase somewhat. Yet federal net interest payments would decline, reducing taxable interest income. Moreover, because deficit reduction would increase investment, corporate depreciation would also be higher.

On balance, the changes in income shares that are expected to accompany a policy of deficit reduction would work to increase revenues. Taxable corporate profits would make up a larger share of GDP. Interest income would be smaller, but a hefty portion of interest income accrues to organizations or pension funds that are not subject to tax. Therefore, the shift from interest income to profits would tend to increase revenues.

Unemployment

The balanced budget projections for unemployment are the same as the current-policy projections. In both cases, unemployment is forecast based on historical averages. The additional growth in output in the balanced budget projections stems solely from the higher level of investment and capital stock made possible by deficit reduction. Projections of labor-market variables are unchanged.

Changes in Estimates of the Economic Effects of Balancing the Budget

CBO's December 1995 projections estimated a larger economic effect of balancing the budget by 2002 than do the current projections. One reason the estimates differ is that there is one less year between now and 2002 for deficit reduction to affect the economy. Furthermore, the current-policy baseline incorporates the progress achieved this year in reducing the deficit. The effect of any further deficit reduction agreed on this year would not start to affect investment and real growth until 1997, though long-term interest rates may change this year.

CBO has also reevaluated how quickly interest payments by businesses would change in response to a drop in interest rates. As deficit reduction lowers interest rates, interest payments on new debt for firms drops and taxable profits rise. Long-term debt, however, will continue to carry the same interest rate until it matures or is called. CBO now estimates that the long-term debt structure of firms will delay the response of debt service to changes in interest rates more than CBO estimated last December.

In addition, the current-policy baseline projection of the ratio of the deficit to GDP for the early 21st century is lower than what CBO projected last year. The baseline deficit is now projected to be about 2.9 percent of GDP in 2002 compared with the 3.2 percent projection incorporated in CBO's January 1995 forecast. Therefore, the economic benefit to be gained by reducing the deficit to zero is proportionately smaller.

Alternative Outlooks

CBO's forecast is broadly similar in most respects to other widely cited economic forecasts. The future,

Table 1-9.
Comparison of Forecasts Assuming Balanced Budget Policy for 1995 Through 2006

	Preliminary[a]	Forecast		Projected								
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
					Year over Year (Percentage Change)							
Nominal GDP												
Current CBO	4.6	4.6	4.8	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
December 1995 CBO	5.1	4.8	5.0	5.0	4.9	5.0	4.9	5.0	5.0	5.0	5.0	5.0
Administration	4.7	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
Blue Chip[b]	4.6	4.2	4.5	4.4	4.5	4.9	4.7	4.8	4.8	4.8	4.8	4.8
Real GDP[c]												
Current CBO	2.1	2.0	2.0	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
December 1995 CBO	2.5	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Administration	2.1	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Blue Chip[b]	2.1	1.9	2.1	1.9	2.0	2.4	2.3	2.3	2.3	2.3	2.3	2.3
Chain-Type GDP Price Index												
Current CBO	2.5	2.6	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
December 1995 CBO	2.7	2.6	2.7	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
Administration	2.5	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Blue Chip[b]	2.5	2.3	2.4	2.4	2.5	2.5	2.4	2.5	2.5	2.5	2.5	2.5
CPI-U[d]												
Current CBO	2.8	2.8	3.1	3.0	2.9	2.9	2.9	3.0	3.0	3.0	3.0	3.0
December 1995 CBO	2.9	3.0	3.1	3.0	2.9	2.9	2.9	3.0	3.0	3.0	3.0	3.0
Administration	2.8	2.8	3.0	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Blue Chip[b]	2.8	2.7	2.9	2.9	2.8	2.9	2.8	2.8	2.9	2.9	2.9	2.9
					Calendar Year Average (Percent)							
Civilian Unemployment Rate												
Current CBO	5.6	5.8	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
December 1995 CBO	5.6	5.9	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Administration	5.6	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
Blue Chip[b]	5.6	5.8	5.9	6.3	6.3	6.1	6.1	6.0	5.9	5.9	5.9	5.9
Three-Month Treasury Bill Rate												
Current CBO	5.5	4.9	4.8	4.3	3.9	3.7	3.7	3.7	3.7	3.7	3.7	3.7
December 1995 CBO	5.5	5.3	5.0	4.7	4.2	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Administration	5.5	4.9	4.5	4.3	4.2	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Blue Chip[b]	5.5	4.8	4.8	5.2	5.1	5.0	4.9	4.9	5.0	5.0	5.0	5.0

SOURCES: Congressional Budget Office; Eggert Economic Enterprises, Inc., *Blue Chip Economic Indicators* (March 10, 1996); Office of Management and Budget; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

Table 1-9.
Continued

	Preliminary[a] 1995	Forecast 1996	Forecast 1997	Projected 1998	Projected 1999	Projected 2000	Projected 2001	Projected 2002	Projected 2003	Projected 2004	Projected 2005	Projected 2006
					Calendar Year Average (Percent)							
Ten-Year Treasury Note Rate												
Current CBO	6.6	5.7	5.5	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
December 1995 CBO	6.6	5.8	5.6	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Administration	6.6	5.6	5.3	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Blue Chip[b]	6.6	5.8	5.9	6.4	6.3	6.3	6.2	6.2	6.2	6.2	6.2	6.2
					Income Shares (Percentage of GDP)							
Current CBO												
Corporate profits[e]	8.2	7.9	8.0	7.9	7.7	7.5	7.5	7.4	7.4	7.4	7.4	7.4
Personal income	84.2	84.4	84.1	84.0	84.0	83.9	83.7	83.7	83.7	83.7	83.7	83.8
Wage and salary disbursements	47.2	47.4	47.3	47.3	47.2	47.2	47.2	47.1	47.0	47.0	46.9	46.9
December 1995 CBO[f]												
Corporate profits[e]	8.1	8.4	8.5	8.4	8.3	8.3	8.2	8.1	8.1	8.0	7.9	7.9
Personal income	85.5	84.9	84.4	84.4	84.3	84.2	84.3	84.3	84.4	84.5	84.6	84.7
Wage and salary disbursements	48.7	48.6	48.6	48.6	48.6	48.5	48.5	48.5	48.5	48.5	48.5	48.5
Administration												
Corporate profits[e]	8.3	8.5	8.8	8.9	9.0	9.1	9.0	8.9	8.9	8.8	8.8	8.7
Personal income	84.1	84.2	83.9	83.5	82.9	82.5	82.2	82.1	82.1	82.0	81.9	81.9
Wage and salary disbursements	47.2	47.3	47.5	47.5	47.4	47.4	47.4	47.4	47.3	47.3	47.2	47.1

a. Consistent with the first official estimate for 1995 published on March 4, 1996.

b. The *Blue Chip* forecasts are based on a survey of 50 private forecasters. Not all of the forecasts that make up the *Blue Chip* necessarily reflect a balanced budget policy.

c. Based on chained (1992) dollars.

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

e. Corporate profits before tax.

f. The level of GDP was revised upward significantly in January 1996 because of a definitional change as part of the comprehensive revision of the national income and product accounts. Therefore, income shares in CBO's December projection are not strictly comparable with those in the current CBO and Administration projections.

however, is inherently uncertain. The CBO forecast should be viewed as a weighted average of different possibilities, encompassing both more positive and more negative economic outcomes.

Comparing Forecasts

One way to assess the range of different outcomes is to review other economic forecasts making similar fiscal policy assumptions. The CBO balanced budget forecast can be compared with the *Blue Chip* consensus forecast and the Administration's forecast, which also assumes a path to a balanced budget.

The *Blue Chip* forecast is based on a survey of about 50 private-sector economists; each one uses a personal estimate of future fiscal policy in making a forecast. Consequently, the consensus forecast is neither a purely balanced budget nor a purely current-policy forecast. The *Blue Chip* consensus forecast is generally more pessimistic than both the CBO and the Administration forecasts (see Table 1-9 on pages 24-25). Between 1996 and 2000, the *Blue Chip* consensus expects lower inflation and higher interest rates; average growth in real GDP is about the same as CBO's but less than the Administration's forecast. After 2000, the *Blue Chip* consensus projections for the growth of real GDP and the CPI are the same as the Administration's, whereas CBO projects slightly slower growth in real GDP and a bit faster growth in the CPI. Moreover, interest rates in the *Blue Chip* consensus remain above those in the CBO and Administration projections after 2000. The higher interest rates projected by the *Blue Chip* consensus suggest that few members of the *Blue Chip* group expect significant actions to cut the federal budget deficit over this 11-year period.

The projection of the relative growth of the two major price measures--the CPI and the GDP price index--is important for budget projections. The lower the CPI growth rate is relative to the GDP price index growth rate, the more optimistic the deficit projection. The personal income tax brackets and a large part of federal outlays are indexed to the CPI. Thus, lower CPI growth means higher revenues and lower outlays. The projection of the GDP price index, however, affects the projected levels of the tax base. Therefore, a higher GDP price index means a higher revenue projection and a lower deficit projection.

The Administration projects a relationship between the CPI and GDP price index that is optimistic relative to the *Blue Chip* and CBO forecasts. The Administration projects the CPI to grow only 0.1 percentage point faster than the CPI, whereas the *Blue Chip* projects a difference in growth rates of 0.4 percentage points and CBO projects a difference of 0.3 percentage points. Between 1978 and 1995, the CPI grew faster than the GDP price index by an average of 0.4 percentage points per year.

CBO's estimate of the sum of profits and wages, the major tax bases, is less than the Administration's, and the difference between the two forecasts widens over time. In 1996, CBO projects that sum to be 55.3 percent of GDP, whereas the Administration's projection is 0.5 percentage points higher at 55.8 percent. By 2002, the difference rises to 1.8 percentage points, with CBO projecting 54.5 percent and the Administration 56.3 percent.

Risks to the Forecast

As is the case for any forecast, the risk exists that CBO's estimates will not be borne out in reality. The CBO forecast, although it incorporates the possibility of sharply slower or faster growth, shows the economy growing smoothly over the next two years. History has shown, however, that the economy is rarely so well behaved for any long period of time.

Although CBO judges that the economy is fundamentally sound, there is some risk that the economy may be weaker than anticipated. Investment in new equipment was quite strong during 1994 and early 1995, providing much of the horsepower that kept the economy moving. Firms that built up excess capacity during that time might now cut investment spending sharply, leading to layoffs in the investment goods sector and lower incomes. Consumers, burdened by a relatively high level of debt, might respond by limiting their spending. Exports could also weaken if the recent upturn in Japan's growth proves ephemeral. If those events occurred, inventories

could pile up, production could be slashed, and a serious downturn might ensue.

However, the current forecast also may underestimate the strength of the economy and inflationary pressures. Firms are undergoing major restructuring to remain competitive in a computer-age world economy. That influence, together with relatively low interest rates, could lead to a renewed investment boom that would bring the economy roaring back in 1996 and 1997. Recovery in Mexico and other major trading partners could boost net exports, further fueling growth. Lower unemployment, higher wage demands, and production bottlenecks could result in renewed inflation. The recent run-up in the price of petroleum and other commodities could exacerbate inflationary pressures in the short run. Elevated rates of inflation would force the Federal Reserve to respond with higher interest rates, which could choke off growth by late 1997 or beyond.

CBO may also have overestimated the level of the NAIRU. If the NAIRU is below CBO's estimate of 5.8 percent, the economy could grow faster in the short run without raising inflation. That faster growth could probably only occur, however, if the Federal Reserve was convinced that it was not inflationary. Moreover, once the unemployment rate reached the NAIRU, growth would revert to the same underlying potential rate. If the true NAIRU was 5.5 percent, the addition to employment could raise real output by 0.3 percentage points in 2002 under either current-law or balanced budget assumptions. A lower NAIRU would also imply less inflation in the short run. In addition, if the Federal Reserve recognized it, a NAIRU below CBO's estimate would mean lower interest rates until unemployment fell to its long-run level.

Chapter Two

The Budget Outlook

The Congressional Budget Office projects that the deficit will decline in 1996 for the fourth straight year. CBO expects, however, that this trend will not continue under current budgetary policies and that changes in policy will be required to achieve a balanced budget by 2002.

Under current taxing and spending policies and CBO's assumptions about the economy, the deficit will rise from $144 billion this year to $171 billion in 1997 and $403 billion in 2006, the last year of the projection period. Those projections assume that discretionary spending grows with inflation, up to the level of the statutory caps imposed on it. Under the alternative assumption that discretionary spending is frozen at 1996 dollar levels through 2006, the deficit will continue to increase, but at a slow pace—from $159 billion in 1997 to $179 billion in 2006.

If the deficit rises to $403 billion in 2006 (under the assumption that discretionary spending increases at the rate of inflation), it will grow only modestly in relation to the size of the economy—from 1.9 percent of gross domestic product in 1996 to 3.3 percent of GDP in 2006. If the deficit increases to only $179 billion in 2006 (under the assumption that discretionary spending is frozen), its share of GDP will fall slightly, to 1.5 percent, in 2006.

Budget projections are highly uncertain, of course, and the extended projections are particularly sensitive to the performance of the economy and unexpected changes in the growth of entitlement spending. Although CBO believes that its assumptions are reasonable, minor changes can have a significant effect on deficit estimates. For example, an increase of 1 percentage point in interest rates throughout the projection period would boost the deficit by $85 billion in 2006.

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 it is useful for sketching the consequences of today's policies and serves as a benchmark for weighing proposed changes.

The chapter also provides CBO's estimates of the deficits that would result under current policies and an economic forecast that assumes a balanced budget in 2002. Rather than representing potential budgetary outcomes, those estimates show how much taxing and spending policies must be changed in order to achieve budgetary balance. They are intended to help policymakers determine a path to the balanced budget goal that is the basis for proposals by both the Congress and the President.

Although the deficit projections presented in this chapter are relatively benign through 2006—the deficit as a percentage of GDP either rises slowly or decreases slightly depending on the assumption about the path of discretionary spending—the budgetary picture is much darker in the longer run. Unless changes are made in spending or revenue policies, the impending retirement of the postwar baby-boom

generation will cause the deficit to grow rapidly as a share of the economy. To assess the effect of that expected graying of the population, CBO has developed long-term projections of federal spending and revenues that are less detailed than the projections through 2006. A further discussion of those projections is found in Chapter 4.

The Deficit Outlook

The simplest and most widely used measure of the deficit is the gap between total federal revenues and outlays. CBO projects that measure of the deficit under two alternative economic forecasts—one that assumes current budgetary policy, and another that assumes a balanced budget in 2002. Unlike mandatory spending and revenues, which are governed by permanent laws, discretionary spending is subject to annual appropriations and is thus uncertain. Under each economic scenario, therefore, CBO further assumes two alternative paths for discretionary spending: one that adjusts for inflation but is subject to the existing caps on discretionary spending, and one that is frozen at nominal 1996 levels throughout the next 10 years.

The caps, which expire in 1998, were established by the Budget Enforcement Act of 1990. They cover total levels of discretionary budget authority and outlays. Since 1991, caps have applied to spending from the 13 regular appropriation bills and any supplemental appropriations. Since 1995, separate caps have applied to general-purpose spending and to spending from the Violent Crime Reduction Trust Fund (VCRTF). (General-purpose spending is all discretionary spending other than that from the VCRTF.) Roughly speaking, the caps have imposed a near-freeze on total nominal discretionary outlays for the 1991-1995 period.

Total Deficit Under Current-Policy Economic Assumptions

Under today's budgetary policies, the total deficit will reach a low this year and then resume rising (see Table 2-1). The deficit peaked at $290 billion in 1992 but is expected to dip to less than half of that level—$144 billion—in 1996. If discretionary spending keeps pace with inflation (up to the level of the statutory caps), the deficit will nearly double by 2002. If discretionary spending is held constant in nominal dollars, the rise in the deficit will be much more modest.

Adjusting the 1996 appropriations for inflation puts general-purpose discretionary spending below its cap in 1997 but above it in 1998. The first baseline projection therefore assumes that general-purpose spending will be held to the level of the cap in 1998 and will grow thereafter at the rate of inflation. Projected spending from the VCRTF is below its cap in both 1997 and 1998 and so is unaffected by the cap. Under these assumptions, the total deficit will reach $285 billion in 2002 and $403 billion in 2006.

If discretionary spending stays frozen throughout the projection period, the deficit will rise only modestly from its estimated 1996 level and will fall as a share of GDP. The deficit for 1997 under that projection will be $159 billion, increasing to as much as $187 billion in 2000 and 2005, but generally hovering around $180 billion. The deficit rises despite the freeze on discretionary spending because increases in outlays for spending authorized through permanent law (such as Medicare benefits and interest payments on the debt) rather than through annual funding decisions exceed projected increases in revenues.

Total Deficit Under Balanced Budget Economic Assumptions

CBO has also estimated the deficits that would result under current budgetary policies using the economic forecast that would be expected if the federal budget was balanced in 2002 and remained in balance thereafter. Such projections are inherently inconsistent since they result in an estimated deficit in 2002 even though the economic forecast assumes a balanced budget in 2002. They do, however, offer a useful analytic construct by providing an estimate of the changes in spending and revenue policies required to achieve the economic benefits embodied in the forecast. When used in that way, the projections are consistent because the end point is a balanced budget.

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

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
					In Billions of Dollars							
Baseline Total Deficit with Current-Policy Economic Assumptions												
Cap discretionary spending (with inflation after 1998)	164	144	171	194	219	244	259	285	311	342	376	403
Freeze discretionary spending at the1996 dollar level	164	144	159	176	182	187	174	178	178	181	187	179
Baseline Total Deficit with Balanced Budget Economic Assumptions												
Cap discretionary spending (with inflation after 1998)	164	144	165	175	182	191	194	210	225	244	265	278
Freeze discretionary spending at the1996 dollar level	164	144	154	157	145	136	111	106	96	88	84	64
Alternative Measures of the Deficit[a]												
Standardized-employment deficit[b]	192	154	177	183	205	230	243	267	291	321	354	380
On-budget deficit	226	209	242	268	305	337	354	389	421	459	503	541
					As a Percentage of GDP							
Baseline Total Deficit with Current-Policy Economic Assumptions												
Cap discretionary spending (with inflation after 1998)	2.3	1.9	2.2	2.4	2.5	2.7	2.7	2.9	3.0	3.1	3.3	3.3
Freeze discretionary spending at the 1996 dollar level	2.3	1.9	2.0	2.1	2.1	2.1	1.8	1.8	1.7	1.6	1.6	1.5
Baseline Total Deficit with Balanced Budget Economic Assumptions												
Cap discretionary spending (with inflation after 1998)	2.3	1.9	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.2	2.3	2.3
Freeze discretionary spending at the 1996 dollar level	2.3	1.9	2.0	1.9	1.7	1.5	1.2	1.1	0.9	0.8	0.7	0.5
Alternative Measures of the Deficit[a]												
Standardized-employment deficit[b]	2.7	2.1	2.3	2.2	2.4	2.5	2.6	2.7	2.8	2.9	3.1	3.2
On-budget deficit	3.2	2.8	3.1	3.3	3.5	3.7	3.7	3.9	4.0	4.2	4.4	4.5

SOURCE: Congressional Budget Office.

a. Estimates assume current-policy economic projections and that discretionary spending is adjusted for inflation up to the statutory caps that are in effect through 1998. All discretionary spending other than spending from the Violent Crime Reduction Trust Fund is assumed to equal the caps in 1998 and to grow from that level at the rate of inflation in later years.

b. The standardized-employment deficit is larger than the baseline deficits for 1995 and 1996 for two reasons: deposit insurance and receipts from spectrum auctions are not included in the standardized-employment deficit but are included in the baseline; and the economy was operating slightly above its long-term potential in 1995.

The projections therefore represent a starting point for the Congress in crafting a budget resolution to balance the budget in 2002. They are also useful for evaluating alternative plans to balance the budget, such as the President's budget submission.

If discretionary spending is adjusted for inflation (subject to the caps), the projected baseline deficit under balanced budget economic assumptions will be $165 billion in 1997 and $210 billion in 2002. In every year, those deficits are significantly lower than projections that assume current-policy economic projections and capped discretionary spending with inflation after 1998 (see Table 2-1). The difference, which amounts to $75 billion in 2002 and $254 billion over the 1996-2002 period, is a measure of the fiscal dividend that can be expected to result from balancing the budget. (A further discussion of CBO's current estimate of the fiscal dividend is provided in Box 2-1.)

If discretionary spending is not adjusted for inflation, the projected deficits using balanced budget economic assumptions will be $154 billion in 1997 and $106 billion in 2002. Thus, even if discretionary spending is frozen for another six years, balancing the budget by 2002 will require further reductions in spending or increases in taxes totaling about $100 billion in that year. Maintaining a freeze in discretionary spending will not be easy, however, because it will require a reduction in purchasing power of 18 percent over six years—even at the low levels of inflation CBO anticipates.

Alternative Measures of the Deficit

Although the total deficit is the most common measure of the deficit, analysts often cite two other measures of the amount by which the government's spending exceeds its revenues. One measure removes cyclical factors from the deficit calculation, and the other removes spending and receipts designated by law as off-budget.

Cyclical economic factors can obscure fundamental trends in the budget. For example, high unemployment automatically worsens the deficit—principally because of lower revenues accompanied by higher outlays for unemployment compensation and other programs. The standardized-employment deficit removes such factors from the budget to determine the extent to which the deficit reflects a structural imbalance (a deficit that would exist in an economy operating at its potential). The current projections show only a small difference between the deficit estimated under current-policy economic projections with discretionary inflation and the standardized-employment deficit (see Table 2-1). That outcome is not surprising since CBO's economic forecast assumes that the economy will continue to operate near its potential throughout the projection period.

The on-budget deficit is rooted in legislation that granted special, off-budget status to particular government programs. The two Social Security trust funds—Old-Age and Survivors Insurance and Disability Insurance—were granted off-budget status in the Balanced Budget and Emergency Deficit Control Act of 1985. Legislation enacted in 1989 excluded the much smaller net outlays of the Postal Service from on-budget totals. Because the income of the Social Security trust funds currently exceeds expenditures, removing Social Security (and the Postal Service) from the on-budget totals makes the remaining deficit substantially larger (see Table 2-1).

Changes in the Budget Outlook Since December

The budget outlook under balanced-budget economic assumptions has improved slightly since CBO published its projections last December. Projected deficits are down in every year—by $28 billion in 1996, $16 billion in 1997, and $18 billion in 2002 (see Table 2-2). Much of that downward revision stems from changes in the projected level of discretionary spending, which in 1996 is $19 billion below the amount anticipated in December. Reductions in 1996 appropriation bills have a continuing effect in 1997; for 1998, the Administration's lower projections of inflation required the Office of Management and Budget (OMB) to reduce the cap on discretionary outlays by $10 billion. CBO has projected that re-

Box 2-1.
CBO Estimate of the Fiscal Dividend

The fiscal dividend is the portion of the total amount of deficit reduction needed to balance the budget that can be attributed to the macroeconomic improvements expected as a result of balancing the budget. That deficit reduction is automatic, giving policies that reduce the deficit an extra boost from its effects on the economy. The Congressional Budget Office estimates that balancing the budget in 2002 (and maintaining a balanced budget thereafter) will reduce interest rates 110 basis points (1.1 percentage points) by 2000 and increase the rate of growth of real GDP by about 0.1 percent a year. Those macroeconomic effects are discussed in more detail in Chapter 1.

The budgetary effects of those factors will both reduce outlays and increase revenues. Spending will decline because of the sensitivity of the government's net interest expense to interest rates (CBO also calculates a slight effect on spending for student loans). Revenues will increase because national output is higher and because more income is received from corporate profits and less from interest income, much of which accrues to tax-exempt entities.

CBO's current estimates of the fiscal dividend are given in the table below. Approximately 60 percent of the cumulative fiscal dividend of $254 billion results from reduced outlays on government expenditures that are sensitive to interest rates, principally net interest. Another 30 percent comes from increased revenues. The final tenth of the dividend reflects lower interest expenses but is caused indirectly by the reduction in government debt that will result from the savings just described rather than directly by lower interest rates.

Changes in the Deficit Resulting from the Economic Effects of Balancing the Budget (By fiscal year, in billions of dollars)

	1996	1997	1998	1999	2000	2001	2002	Total, 1996-2002
Change Resulting from Lower Interest Rates								
Outlays								
Net interest	a	-3	-11	-22	-32	-38	-43	-150
Student loans	a	a	a	a	-1	-1	-1	-2
Revenues								
Federal Reserve earnings[b]	a	a	1	2	4	5	5	17
Shift in income shares	a	-2	-7	-12	-16	-18	-19	-74
Total	a	-5	-17	-32	-45	-52	-58	-209
Change in Revenues Resulting from Higher Gross Domestic Product	a	a	-1	-3	-4	-5	-7	-21
Debt Service	a	a	-1	-2	-4	-7	-10	-24
Total Effect on the Deficit	a	-5	-19	-37	-53	-64	-75	-254

SOURCE: Congressional Budget Office.

a. Less than $500 million.

b. Revenue reductions are shown as positive because they increase the deficit.

Table 2-2.
Changes in CBO Deficit Projections Since December (By fiscal year, in billions of dollars)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
December Baseline Deficit	172	182	183	195	204	211	228	244	266	294
Legislative Changes										
Revenues	a	a	a	a	a	a	a	a	a	a
Discretionary outlays	-19	-8	0	0	0	0	0	0	0	0
Mandatory outlays	3	2	-1	-2	-2	-2	-2	-1	-1	-1
Deficit	-15	-6	-1	-2	-2	-2	-2	-1	-1	-1
Economic Changes										
Revenues	-2	1	1	2	5	6	8	11	13	15
Outlays										
Net interest	-2	-6	-6	-7	-8	-10	-14	-18	-22	-29
Other mandatory outlays	-1	-2	-2	-2	-2	-2	-2	-2	-2	-2
Subtotal	-4	-8	-8	-10	-11	-12	-17	-20	-25	-31
Deficit	-6	-7	-8	-7	-6	-6	-9	-9	-12	-17
Technical Changes										
Revenues										
Expiring excise taxes	5	7	8	8	8	9	9	10	10	11
Other revenues	-4	-2	-1	-1	a	a	1	1	2	3
Subtotal	1	5	7	7	8	9	10	11	12	14
Discretionary outlays	0	0	-10	-9	-10	-10	-10	-10	-11	-11
Mandatory outlays										
Medicare and Medicaid	-2	-3	-2	-4	-5	-7	-9	-11	-14	-19
Social Security	-1	-1	-1	-1	-2	-2	-3	-3	-4	-5
Supplemental Security Income	a	-1	-1	-1	-2	-2	-3	-3	-4	-5
Broadcast spectrum auctions	-3	-10	-2	a	a	0	0	0	0	0
Net interest	-1	a	a	1	1	1	3	4	6	9
Other mandatory outlays	a	6	10	4	6	5	5	5	7	7
Subtotal	-8	-8	4	-1	-2	-6	-7	-8	-8	-12
Deficit	-7	-3	1	-3	-4	-7	-7	-7	-7	-9
Debt Service	a	-1	-1	-1	-1	-1	-1	-1	-2	-2
Total Changes	-28	-16	-8	-13	-12	-16	-18	-19	-22	-29
March Baseline Deficit with Balanced Budget Economic Assumptions	144	165	175	182	191	194	210	225	244	265
Changes from Adopting Current-Policy Economic Assumptions	a	5	19	37	53	64	75	86	98	111
March Baseline Deficit with Current-Policy Economic Assumptions	144	171	194	219	244	259	285	311	342	376

SOURCE: Congressional Budget Office.

NOTE: Reductions in revenues are shown with a positive sign because they increase the deficit.

a. Less than $500 million.

duction through 2006. Other revisions include slower growth in outlays for Medicare, Medicaid, and Social Security, which is partially offset by the expiration of certain taxes and other technical adjustments. The budget outlook for 1996 has also improved significantly compared with CBO's projections of January 1995 (see Box 2-2).

A Quick Review of 1995

Last August, CBO projected a 1995 deficit of $161 billion. Two months later, the Treasury Department reported that the actual deficit totaled $164 billion. CBO overestimated revenues by about $2 billion and underestimated outlays by $1 billion. Individual income taxes came in slightly lower than projected, and other taxes came in higher; mandatory spending was slightly greater than anticipated. Using earlier projections, the Congressional budget resolution for 1995, adopted in May 1994, anticipated a deficit of $175 billion. Higher outlays of $6 billion and higher revenues of $17 billion account for the difference of $11 billion between the budget resolution total and the actual deficit (see Appendix B).

Revisions to the 1996-2006 Projections

CBO traces its revisions to the budget outlook since December to three sources: newly enacted legislation, changes in the economic outlook, and other, so-called technical factors. Both now and in December, the budget outlook assumes that discretionary spending grows with inflation up to the level of the caps.

Recent Legislation. Relative to the levels of the caps assumed in CBO's December baseline, appropriations enacted in 1996 are expected to reduce outlays by $19 billion in 1996 and $8 billion in 1997. (Those figures do not reflect the Omnibus Consolidated Rescissions and Appropriations Act of 1996, which be-

Box 2-2.
Changes in CBO Deficit Projections

In January 1995, the Congressional Budget Office projected that the deficit for fiscal year 1996 would total $207 billion. In the past 15 months, that estimate has fallen by $63 billion—to $144 billion (see the table below). The projected deficits for 1997 through 2000 have also declined but by smaller amounts.

Much of the drop in the projected deficits stems from changes in economic conditions, primarily lower interest rates. For 1996, interest rates are now projected to be between 0.9 and 1.2 percentage points lower than CBO projected in January 1995. Interest rates for future years also are projected to be lower, but by a smaller amount. Almost all of the drop in projected deficits for the years after 1997 is attributable to that reduction in interest rates.

For 1996, two other factors also contribute. First, appropriations for 1996 are well below the maximum levels allowed by the Budget Enforcement Act. Second, CBO has reduced its estimates of outlays for Medicare and Medicaid, the refundable portion of the earned income credit, mortgage insurance provided by the Federal Housing Administration, and a few other programs. The effects of those reductions are also felt in 1997.

Changes in CBO Deficit Projections Since January 1995 (By fiscal year, in billions of dollars)

	1996	1997	1998	1999	2000
January 1995 Baseline Deficit	207	224	222	253	284
Changes					
Economic	-27	-34	-29	-29	-32
Legislative	-17	-6	-1	-2	-2
Technical	-19	-13	1	-3	-6
Total	-63	-53	-29	-34	-39
April 1996 Baseline Deficit	144	171	194	219	244

SOURCE: Congressional Budget Office.

came law on April 26.) Discretionary outlays are therefore expected to be $13 billion below the 1995 nominal level in 1996 and equal to it in 1997. If 1996 spending equals expectations, it will mark only the second time in 30 years that discretionary outlays have declined from the level of the previous year.

Enacted legislation affecting direct (mandatory) spending or revenues has a relatively small effect on the projections. The Federal Agricultural Improvement and Reform Act of 1996 will increase outlays modestly in the near term but reduce them in later years as transition payments for commodity price support programs are eliminated. The Contract with America Advancement Act of 1996 will reduce outlays by eliminating Social Security and Supplemental Security Income benefits for certain substance abusers and dependent stepchildren, but that amount will be largely offset by increased spending on Social Security beneficiaries who continue to work in retirement. Such legislation increases the deficit by $3 billion in 1996 but lowers it by at least $1 billion a year after 1997 (see Table 2-2). In addition, the Telecommunications Act of 1996 will require a significant increase in both mandatory spending and revenues but will have a net effect of zero on the deficit because the bill expands payments for universal telephone service but also provides additional receipts to support those expenditures.

Economic Changes. Apart from the current year, revisions that stem from changes in the economic outlook explain roughly half of the improvement in the deficit projections since December. A modest downward revision in revenues is more than offset by lowered outlays. Projected revenues from the corporate income tax have been scaled back in every year as a result of lower expectations for taxable profits. Projected revenues from the individual income tax and social insurance taxes have been raised in the earlier years of the forecast but reduced for years after 2001. Those revisions, however, are more than offset by the reduction in the government's interest expense that stems from a drop of 30 basis points (0.3 percentage points) in CBO's forecast of short-term interest rates and 90 basis points in its forecast of rates on 10-year Treasury notes. The net effect of economic changes is under $10 billion annually for most of the projection period (see Table 2-2).

Technical Reestimates. Technical revisions are any changes that are not ascribed to legislation or to changes in the macroeconomic forecast. Such revisions account for the balance of the post-1998 improvement in CBO's deficit outlook.

A revision to the discretionary spending caps required by the Balanced Budget Act, which CBO characterizes as technical, accounts for a sizable portion of the change in deficits for 1998 through 2006. In its *Budget Enforcement Act Preview Report*, which was published with the President's budget submission, OMB made a downward adjustment to the caps to reflect a corresponding downward adjustment in the Administration's forecast of the GDP price index compared with its forecast of February 1995, when the caps were last adjusted. Although the adjustment covers only the period ending in 1998, its effect on 1998 spending ripples throughout the projection period in CBO's estimates of the capped baseline with adjustments for inflation.

Lower projected spending for Social Security, Medicare, and Medicaid benefits also reduces projected deficits. In the Social Security program, the revision reflects a reduction in the assumed average benefits of new beneficiaries. In the Medicare program, CBO has lowered its estimate of increases in the volume and intensity of services provided to recipients, because actual growth from those sources has been less than expected for the past few years. In Medicaid, the revision reflects the zero growth in outlays in the first four months of 1996, which was incorporated into the projections as a change in the level of benefits throughout the projection period.

These favorable revisions are substantially offset by others that increase the estimated deficit (see Table 2-2). Expiration of the excise taxes for the Airport and Airway and Leaking Underground Storage Tank Trust Funds and the Hazardous Substance Superfund will reduce revenues by $5 billion in 1996 and $11 billion by 2005. As required by the Balanced Budget Act, CBO assumes that excise taxes dedicated to trust funds and scheduled to expire during the budget projection period are extended. Those excise taxes have now expired, however, and have therefore been excluded from the baseline.

The Revenue Outlook

Federal revenues are expected to be $1,428 billion, or 19.1 percent of GDP, in 1996. They are projected to grow less rapidly than the economy in the next five years, slipping to 18.5 percent of GDP by 2001, and then to keep pace with GDP (see Table 2-3).

In relation to GDP, revenues will be higher than the levels typical of the past three decades. In 1960 through 1995, revenues averaged 18.1 percent of GDP. (Those percentages are lower than in previous reports and in the 1997 budget because GDP was redefined earlier this year.) In only five years did revenues reach or top 19 percent, and those years were unusual for one reason or another. In 1969 and 1970, taxes were hiked to help finance the Vietnam War, and in 1980 through 1982—before the Reagan Administration's tax cut and the subsequent indexing of tax brackets to the price level—high inflation pushed up revenues.

Underneath the overall relative stability of the revenue-to-GDP ratio are some striking shifts in

Table 2-3.
CBO Projections for Revenues Under Current-Policy Economic Assumptions (By fiscal year)

	Actual 1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
					In Billions of Dollars							
Individual Income Taxes	590	636	661	694	730	769	811	853	898	946	997	1,051
Corporate Income Taxes	157	169	171	172	171	171	174	179	185	194	204	214
Social Insurance Taxes	484	504	531	553	580	609	636	666	696	727	762	800
Excise Taxes	57	52	51	52	53	53	54	55	56	56	57	58
Estate and Gift Taxes	15	16	17	18	19	20	21	22	23	24	25	27
Customs Duties	19	20	20	21	21	22	23	25	27	29	31	33
Miscellaneous	32	30	32	34	35	37	39	41	46	47	48	50
Total	1,355	1,428	1,483	1,544	1,609	1,681	1,758	1,840	1,931	2,023	2,124	2,232
On-budget	1,004	1,063	1,098	1,142	1,186	1,236	1,294	1,354	1,423	1,493	1,568	1,649
Off-budget[a]	351	365	385	402	423	444	464	486	508	530	556	584
					As a Percentage of GDP							
Individual Income Taxes	8.2	8.5	8.4	8.4	8.5	8.5	8.5	8.6	8.6	8.6	8.7	8.7
Corporate Income Taxes	2.2	2.3	2.2	2.1	2.0	1.9	1.8	1.8	1.8	1.8	1.8	1.8
Social Insurance Taxes	6.7	6.7	6.8	6.7	6.7	6.7	6.7	6.7	6.7	6.6	6.6	6.6
Excise Taxes	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5
Estate and Gift Taxes	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Customs Duties	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
Miscellaneous	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Total	18.9	19.1	18.9	18.8	18.7	18.6	18.5	18.5	18.5	18.5	18.5	18.5
On-budget	14.0	14.2	14.0	13.9	13.8	13.7	13.6	13.6	13.6	13.6	13.7	13.7
Off-budget[a]	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.8	4.8	4.8

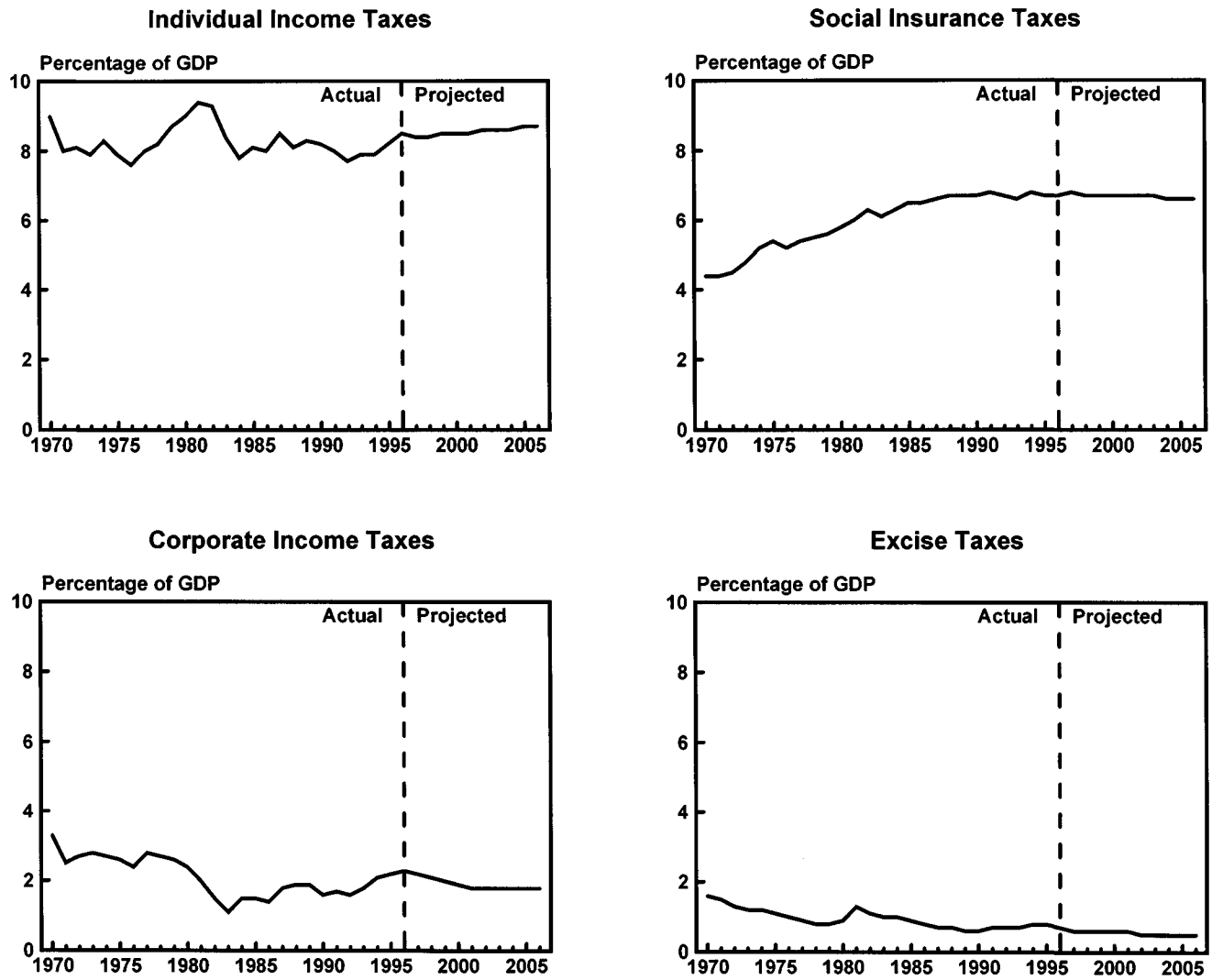
SOURCE: Congressional Budget Office.

a. Social Security.

composition (see Figure 2-1). The most visible is the government's increasing reliance on revenues from social insurance taxes, chiefly those for Social Security and Medicare's Hospital Insurance (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 fluctuated in the range of 8 percent to 9 percent of GDP for three decades. Social insurance taxes are expected to hold steady as a share of GDP during the projection period. Individual income taxes are expected to increase, and corporate and excise taxes are expected to decrease.

This shift in the composition of revenues is also apparent when each source of revenue is viewed as a share of total revenues. Social insurance taxes contribute 35 percent of total revenues, up from 25 percent a quarter-century ago. The share of corporate income and excise taxes, in contrast, has declined from 25 percent in 1970 to 15 percent today. For

Figure 2-1.
Revenues by Source as a Share of GDP Under Current-Policy Economic Assumptions



SOURCE: Congressional Budget Office.

more than three decades, the share contributed by the individual income tax has remained steady at close to 45 percent. Other taxes have maintained a fairly constant share of about 5 percent for two decades. More detailed historical data are contained in Appendix E, which lists annual revenues for each of those sources and spending by outlay category.

Baseline Projections

In the baseline, individual income taxes are the only source of revenue that will grow even modestly as a share of GDP, from 8.5 percent in 1996 to 8.7 percent in 2006. The GDP share creeps up over time as rising real incomes cause a larger fraction of income to be taxed in higher tax brackets.

Social insurance taxes essentially maintain their share of GDP—just under 7 percent. The slight decline in the later years of the projection period results principally from the taxes that finance unemployment benefits. Those taxes do not keep pace with increased GDP for three reasons. First, states are able to reduce their tax rates as the unemployment trust fund is replenished. Second, the Federal Unemployment Tax Act (FUTA) applies only to the first $7,000 of each covered worker's salary, a figure that remains unchanged despite economic growth. Third, a FUTA surtax of 0.2 percentage points expires at the end of 1998.

The corporate income tax is projected to fall from 2.3 percent of GDP in 1996 to 1.8 percent by 2001, mirroring a decline in corporate profits as a share of GDP. Similarly, excise taxes (which grew in the early 1990s when some tax rates were increased) will fall marginally as a share of GDP, both because some taxes have expired and because excise taxes fail to grow with the economy since most are levied per unit of good or per transaction rather than as a percentage of value.

Expiring Provisions

CBO's baseline projections for revenues assume that current tax law remains unchanged and that scheduled changes and expirations occur on time. One category of taxes—excise taxes dedicated to trust funds—constitutes the sole exception to that approach. Under the baseline rules, those taxes are included in the projections even if they are scheduled to expire. The only trust fund excise taxes slated to expire over the projection period are those for the Highway Trust Fund. By 2006, extending those taxes at today's rates would contribute $30 billion to baseline revenues, or more than half of the total excise taxes.

Nine provisions that reduce taxes have expired recently—four at the end of 1994 and five during 1995 (see Table 2-4). The baseline assumes that those provisions will not be extended. If the Congress extended all nine preferences (items that reduce revenues) at least through the projection period, baseline revenues would be smaller by about $5 billion in 2002 and $7 billion in 2006. Extending the four taxes that expired at the end of 1995 would boost net baseline revenues by almost $8 billion in 2002 and $9 billion in 2006.

Another 10 tax provisions are slated to expire between 1996 and 2004. Extending the four that lose revenue—including the nonconventional fuels credit that expires at the end of this year—would have a small effect on the baseline in 2006. Extending the six that increase revenue would raise about $2 billion in 2006.

The Spending Outlook

CBO expects that federal spending will total almost $1.6 trillion in 1996. That spending has been divided into several convenient clusters for more than a decade. Those categories were formalized in the Budget Enforcement Act of 1990.

Discretionary spending denotes programs controlled by annual appropriation bills. For those programs policymakers can decide afresh each year how many dollars will be devoted to continuing existing activities and funding new ones. The baseline projections depict the path of discretionary spending as a

whole, using as a starting point the appropriations for 1996 (assuming an annualized rate of spending for programs covered by a continuing resolution).

CBO makes two projections with different assumptions regarding the future path of appropriated spending. In the first projection, discretionary spending is assumed to grow from the 1996 level at the rate of inflation, subject to the limits or caps that are in effect through 1998. Because the cap on general-purpose discretionary spending is constraining in 1998, CBO assumes that general-purpose spending grows

Table 2-4.
Effect of Extending Tax Provisions That Have Recently Expired or Will Expire in 1996 Through 2006 (By fiscal year, in billions of dollars)

Tax Provision	Expiration Date	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
				Expired Provisions[a]							
Deduction for Contributions to Private Foundations	12/31/94	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Targeted Jobs Tax Credit	12/31/94	-0.1	-0.2	-0.3	-0.4	-0.4	-0.4	-0.5	-0.5	-0.5	-0.5
Exclusion for Employer-Provided Education Assistance	12/31/94	-1.1	-0.6	-0.7	-0.7	-0.7	-0.8	-0.8	-0.9	-0.9	-0.9
Orphan Drug Tax Credit	12/31/94	-0.1	b	b	b	b	b	b	b	b	b
Special Rule for Certain Group Health Plans	5/12/95	b	b	b	b	b	b	b	b	b	b
Credit for Research and Experimentation	6/30/95	-2.4	-1.6	-1.9	-2.2	-2.4	-2.6	-2.9	-3.1	-3.4	-3.7
Rules for Allocation of Expenses for Research and Experimentation	7/31/95	-1.2	-0.5	-0.6	-0.6	-0.6	-0.6	-0.7	-0.7	-0.7	-0.8
Extension of Generalized System of Preferences[c]	7/31/95	-0.9	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
Commercial Aviation Exemption for the 4.3 Cent per Gallon Tax on Transportation Fuels[c]	9/30/95	-0.9	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.6	-0.6	-0.6
Airport and Airway Trust Fund Taxes[c]	12/31/95	4.0	4.9	5.1	5.4	5.8	6.1	6.4	6.8	7.2	7.6
LUST Trust Fund Taxes[c]	12/31/95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Hazardous Substance Superfund Excise Taxes[c]	12/31/95	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8
Corporate Tax Dedicated to Superfund	12/31/95	0.9	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
				Provisions Expiring in 1996							
Nonconventional Fuels Credit for Fuel from Biomass and Coal	12/31/96	b	b	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2

with inflation from that 1998 cap level in subsequent years. In the second projection, all discretionary funding remains frozen at the dollar level provided in the 1996 appropriation bills in all years through 2006. In that projection, the caps are never constraining.

Discretionary spending is expected to decrease slightly as a percentage of GDP under both projections. In the first projection, that share will drop from its current 7 percent to slightly under 6 percent in 2006 (see Table 2-5). In the second, such spending will drop to just over 4 percent of GDP.

Table 2-4.
Continued

Tax Provision	Expiration Date	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
			Provisions Expiring in 1998								
FUTA Surtax of 0.2 Percentage Points[c]	12/31/98	n.a.	n.a.	0.1	1.2	1.2	1.2	1.3	1.3	1.3	1.3
			Provisions Expiring in 1999								
Railroad Uses of Diesel Fuel, 1.25 Cents per Gallon[c]	9/30/99	n.a.	n.a.	n.a.	d	d	d	d	d	d	d
Luxury Tax on Passenger Vehicles[c]	12/31/99	n.a.	n.a.	d	0.3	0.4	0.5	0.5	0.5	0.5	0.5
Noncommercial Motorboat Diesel Fuel, 20.1 Cents per Gallon[c]	12/31/99	n.a.	n.a.	n.a.	b	d	d	d	d	d	d
Credits for Electricity Production from Wind and Biomass	5/31/99-wind 6/30/99-biomass	n.a.	n.a.	n.a.	b	b	b	b	b	-0.1	-0.1
			Provisions Expiring in 2001								
Andean Trade Preference Initiative[c]	12/04/01	n.a.	n.a.	n.a.	n.a.	b	b	b	b	b	b
			Provisions Expiring in 2003								
IRS User Fees[c]	09/30/03	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	d	d	d
			Provisions Expiring in 2004								
Abandoned Mine Reclamation Fund	09/30/04	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	d	d
Deductions and Credits for Clean-Fuel Vehicles and Refueling Properties	12/31/04	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	b	b

SOURCE: Joint Committee on Taxation.

NOTES: LUST = Leaking Underground Storage Tank; FUTA = Federal Unemployment Tax Act; IRS = Internal Revenue Service; n.a. = not applicable.

a. Assumes an enactment date for the expired provisions of October 1, 1996.

b. Loss of less than $50 million.

c. Net of income and payroll tax offsets.

d. Increase of less than $50 million.

Table 2-5.
CBO Projections for Outlays Under Current-Policy Economic Assumptions with Discretionary Inflation (By fiscal year)

	Actual 1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
					In Billions of Dollars							
Discretionary[a]												
Defense	274	265	272	278	286	297	299	311	320	330	344	351
Domestic and international	272	267	272	278	286	293	301	310	320	330	340	351
Violent Crime Reduction Trust Fund	b	1	2	3	4	3	3	4	4	4	4	4
Unspecified reductions	0	0	0	-12	-12	-14	-8	-11	-12	-13	-17	-15
Subtotal	546	533	546	546	563	579	596	614	632	651	671	691
Mandatory Spending	822	875	946	1,011	1,070	1,141	1,205	1,285	1,369	1,457	1,557	1,655
Offsetting Receipts	-80	-75	-84	-77	-76	-79	-81	-85	-88	-90	-93	-96
Net Interest	232	240	246	257	271	283	296	311	328	346	365	385
Total	1,519	1,572	1,654	1,737	1,828	1,925	2,016	2,125	2,242	2,365	2,500	2,636
On-budget	1,230	1,272	1,340	1,410	1,491	1,573	1,648	1,743	1,844	1,952	2,071	2,190
Off-budget[c]	289	300	314	327	337	352	368	382	398	413	429	446
					As a Percentage of GDP							
Discretionary[a]												
Defense	3.8	3.5	3.5	3.4	3.3	3.3	3.2	3.1	3.1	3.0	3.0	2.9
Domestic and international	3.8	3.6	3.5	3.4	3.3	3.2	3.2	3.1	3.1	3.0	3.0	2.9
Violent Crime Reduction Trust Fund	d	d	d	d	d	d	d	d	d	d	d	d
Unspecified reductions	0	0	0	-0.1	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1	-0.2	-0.1
Subtotal	7.6	7.1	7.0	6.6	6.5	6.4	6.3	6.2	6.1	5.9	5.8	5.7
Mandatory Spending	11.4	11.7	12.0	12.3	12.4	12.6	12.7	12.9	13.1	13.3	13.6	13.7
Offsetting Receipts	-1.1	-1.0	-1.1	-0.9	-0.9	-0.9	-0.9	-0.9	-0.8	-0.8	-0.8	-0.8
Net Interest	3.2	3.2	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.2	3.2	3.2
Total	21.2	21.0	21.1	21.1	21.2	21.3	21.3	21.4	21.5	21.6	21.8	21.9
On-budget	17.1	17.0	17.1	17.1	17.3	17.4	17.4	17.5	17.7	17.8	18.0	18.2
Off-budget[c]	4.0	4.0	4.0	4.0	3.9	3.9	3.9	3.8	3.8	3.8	3.7	3.7

SOURCE: Congressional Budget Office.

a. Projections assume that discretionary spending is adjusted for inflation up to the statutory caps that are in effect through 1998. All discretionary spending other than spending from the Violent Crime Reduction Trust Fund is assumed to equal the caps in 1998 and to grow from that level at the rate of inflation in later years. Unspecified reductions show the cuts that would be needed to satisfy the caps.

b. Less than $500 million.

c. Social Security and the Postal Service.

d. Less than 0.05 percent of gross domestic product.

All other spending is controlled by existing laws, and the baseline presents CBO's estimate of spending if those laws and policies remain unchanged. Under the baseline rules, CBO must assume that spending programs whose current-year outlays exceed $50 million will be extended. *Entitlements and other mandatory spending* consist overwhelmingly of benefit programs such as Social Security, Medicare, and Medicaid. Spending for those 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. And growth in *net interest* spending is almost wholly driven by the government's deficits and by market interest rates.

Mandatory spending's share of GDP is expected to increase from its current 12 percent to almost 14 percent by 2006. Offsetting receipts and net interest spending will remain almost constant as a share of output at roughly 1 percent and slightly over 3 percent, respectively, throughout the projection period.

In total, federal spending now represents 21 percent of gross domestic product and will increase modestly to about 22 percent by 2006, assuming current-policy economic projections and that discretionary spending grows with inflation (see Table 2-5). That percentage does not vary dramatically under alternative assumptions. Assuming current-policy economic projections and a freeze on discretionary spending, total federal spending will fall slightly, to 20 percent of GDP in 2006. Under balanced budget policies, total federal spending will hold constant at 21 percent of GDP if discretionary spending grows at the rate of inflation, but will decline to 19 percent under a freeze.

Although federal spending has hovered around 21 percent of GDP for the past quarter-century, a pronounced shift has taken place in the composition of federal spending during that period. The government today spends more on entitlement programs and net interest, and less on discretionary activities, than in the past. According to CBO's projections, net interest spending will remain fairly constant, and mandatory spending will continue to rise faster than discretionary spending (see Figure 2-2).

Discretionary Spending

Each year, the Congress starts with a clean slate in the appropriation process. It votes on budget authority—the authority to commit money—for discretionary budget activities, and that authority translates into outlays when the money is actually paid out. In 1996, discretionary outlays are expected to total $533 billion. (Those figures do not reflect the Omnibus Consolidated Rescissions and Appropriations Act of 1996, which was signed into law on April 26.) Assuming growth at the inflation rate constrained by the caps, that figure increases 30 percent by 2006, to $691 billion (see Table 2-5). Those figures include unspecified reductions in discretionary spending that would be required to comply with the cap. CBO makes no assumptions in its projections about where the required reductions would be made.

Defense Discretionary Spending. The share of GDP that is devoted to defense has gradually shrunk in the past three decades, with only 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 about 3.5 percent of GDP and are expected to fall to 2.9 percent of GDP assuming that they increase at the rate of inflation. Approximately 40 percent of the dollars devoted to defense provide compensation for members of the armed services and civilian employees of the Department of Defense.

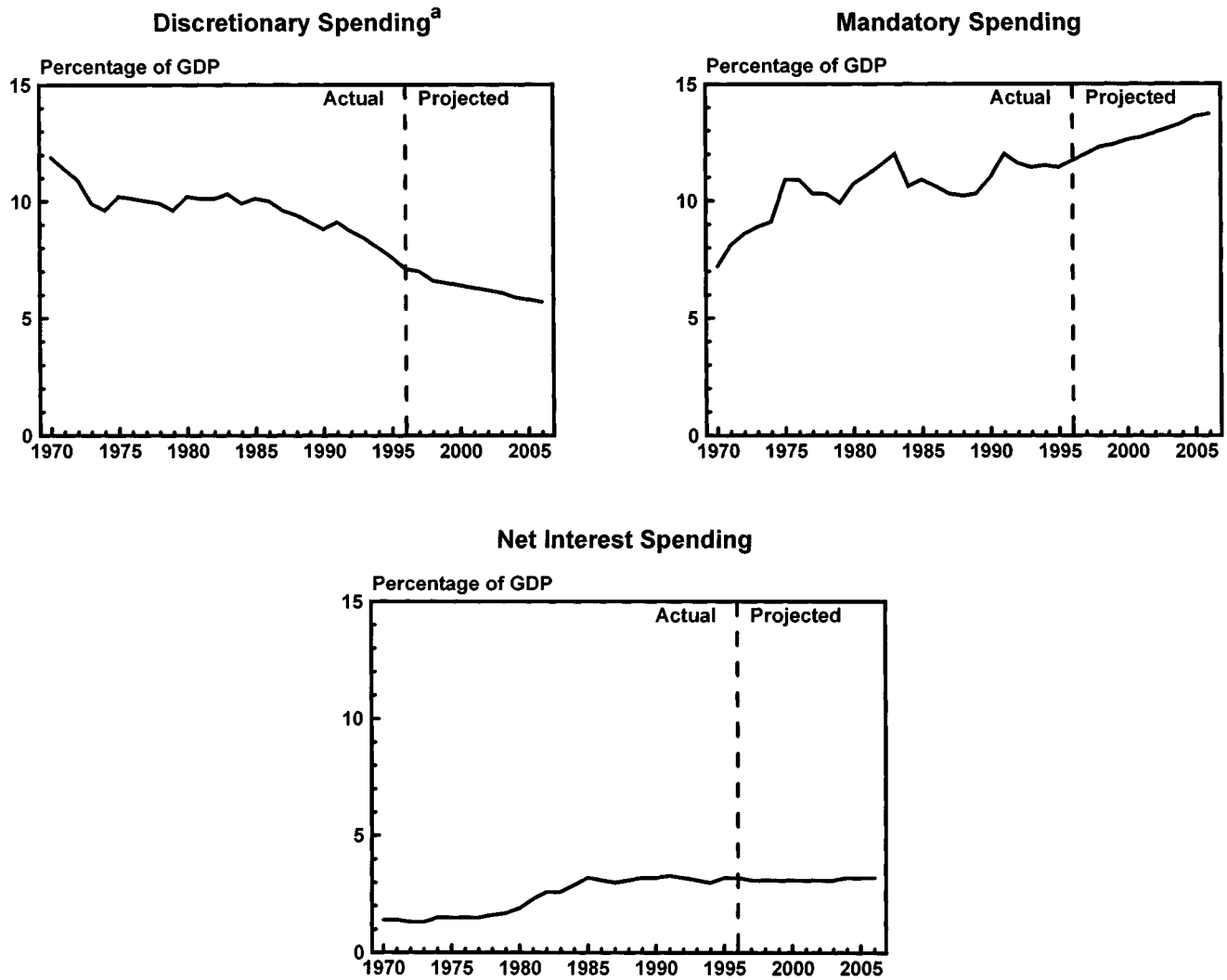
In dollar terms, defense outlays peaked at about $300 billion annually in 1989 through 1992 (not counting the estimated spending on Desert Storm in 1991). At $265 billion in 1996, defense outlays are down by about 12 percent from the 1989-1992 levels in 1996 dollars and by more than 30 percent when measured in 1989 dollars. Growth at the rate of inflation throughout the projection period would increase defense outlays to $351 billion in 2006.

Under the assumption that discretionary spending is frozen, the value of defense spending would be reduced by more than 25 percent when measured in 1996 dollars. If such a freeze occurred, real defense spending would be almost halved from its 1989 peak.

Nondefense Discretionary Spending. Even as defense spending generally drifted down as a share of GDP in the 1960s and 1970s, other discretionary spending climbed slowly, peaking at 5.2 percent of GDP in 1980 before its rise was reversed. Today, nondefense discretionary spending totals about 3.6 percent of GDP, not quite three-fourths of its peak level. Approximately 30 percent of that spending pays the compensation of federal employees at nondefense agencies.

Nondefense discretionary spending encompasses an array of federal activities. Leading claimants of the $267 billion in expected general-purpose outlays for 1996 are education, training, and social services ($38 billion); income security, chiefly housing subsi-

Figure 2-2.
Outlays by Category as a Share of GDP Under Current-Policy Economic Assumptions



SOURCE: Congressional Budget Office.

a. Projections assume that discretionary spending is adjusted for inflation up to the statutory caps that are in effect through 1998. All discretionary spending other than spending from the Violent Crime Reduction Trust Fund is assumed to equal the caps in 1998 and to grow from that level at the rate of inflation in later years.

dies and the administrative costs of running benefit programs ($38 billion); transportation ($36 billion); the administration of justice and such general government activities as running the Internal Revenue Service (together, $27 billion); health research and public health ($23 billion); natural resources and environment ($21 billion); international programs ($20 billion); veterans' benefits other than direct cash payments, chiefly medical care ($19 billion); and space and science ($16 billion). Spending from the Violent Crime Reduction Trust Fund is expected to total an additional $1 billion.

If nondefense discretionary spending grows with inflation, it will continue to shrink as a percentage of GDP, from 3.6 percent in the current year to 2.9 percent in 2006. If spending is subject to a freeze, the share of the economy devoted to providing those varied government services will be further reduced, to 2.1 percent of GDP in 2006.

Entitlements and Mandatory Programs

More than half of the $1.6 trillion of federal spending is for entitlements and mandatory programs (other than net interest). Such programs make payments to recipients—usually people, but sometimes businesses, not-for-profit institutions, 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. In its baseline, CBO depicts the likely path of entitlement and mandatory spending if current laws remain unchanged. Such spending is expected to top $1 trillion in 1998—almost twice as much as discretionary spending in that year, the last one governed by the caps (see Table 2-5).

The Balanced Budget Act lumps mandatory programs (other than Social Security) together with receipts and subjects them to pay-as-you-go discipline; that is, liberalizations in those 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 tax increases or by reductions in mandatory spending.) Violation of the pay-as-you-go rules will trigger a sequestration—an across-the-board reduction in spending authority—to ensure that the deficit is not increased. Social Security has its own set of procedural safeguards, which the Congress established to prevent policy actions that would worsen the long-run condition of the trust funds.

About one-fourth of entitlements and mandatory spending, or one-eighth of all federal 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). The remainder, led by the government's big retirement-related programs, have no such requirements and are labeled non-means-tested.

Means-Tested Programs. Medicaid, the joint federal and state program providing medical care to many of the poor, makes up about half of means-tested entitlements. CBO projects that federal outlays for Medicaid will reach $243 billion in 2006, with growth averaging slightly under 10 percent a year in the 1996-2006 period (see Table 2-6).

The growth in Medicaid has subsided from the sky-high rates of the early 1990s. Spending for the Medicaid program jumped between 20 percent and 30 percent a year from 1990 through 1992, but its growth has decelerated to an average of 10 percent for the past three years. The program's surge was fueled by population pressures, inflation in the medical care sector, liberalizations in Medicaid eligibility contained in legislation (especially coverage of poor children), the recession of 1990-1991, court decisions that made the federal government raise its payments to institutions, and the fiscal pressures facing state and local governments that drove many of them to maximize funds from the federal government. CBO assumes that growth in spending for this program after 1996 will remain strong but that it will not return to the extraordinary levels experienced earlier in this decade.

With the exception of the family support program, which grows at about the inflation rate, all other means-tested programs are projected to rise more quickly than inflation during the next decade. The Supplemental Security Income program for the aged, blind, and disabled is expected to grow rapidly because of a continued steep rise in its caseload of disabled participants, especially children, and of el-

Table 2-6.
CBO Projections for Mandatory Spending Under Current-Policy Economic Assumptions (By fiscal year, in billions of dollars)

	Actual 1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Means-Tested Programs												
Medicaid	89	96	105	115	126	138	152	166	183	201	221	243
Food Stamps[a]	26	26	28	30	31	32	34	35	37	38	40	41
Supplemental Security Income	25	24	28	30	33	38	35	40	43	46	54	53
Family Support	18	18	19	19	20	21	21	22	23	23	24	25
Veterans' Pensions	3	3	3	3	3	4	3	4	4	4	4	4
Child Nutrition	7	8	8	9	10	10	11	11	12	13	13	14
Earned Income Credit	15	18	20	21	22	23	23	24	25	26	27	28
Student Loans	4	2	2	2	3	3	3	3	3	3	4	4
Other	3	4	4	4	5	5	6	6	7	7	8	8
Total	191	199	217	234	252	274	287	312	336	362	394	420
Non-Means-Tested Programs												
Social Security	333	348	365	383	402	422	444	467	490	515	540	567
Medicare[b]	177	196	216	236	257	279	303	329	357	389	424	463
Subtotal	510	544	581	620	660	702	747	795	847	904	964	1,030
Other Retirement and Disability												
Federal civilian[c]	43	44	46	49	51	54	57	60	63	67	71	75
Military	28	29	30	31	32	33	34	35	36	38	39	40
Other	5	5	5	5	5	5	5	5	5	5	5	5
Subtotal	75	77	81	84	88	92	96	100	105	110	115	121
Unemployment Compensation	21	24	26	27	28	29	30	31	32	34	35	36
Deposit Insurance	-18	-10	-5	-2	-2	-2	-2	-1	-1	-1	-1	-1
Other Programs												
Veterans' benefits[d]	18	17	19	19	20	21	19	20	21	21	22	21
Farm price and income supports	6	7	7	7	7	7	6	5	5	5	5	5
Social services	6	5	6	6	6	6	6	6	6	6	6	6
Credit reform liquidating accounts	-2	-7	-7	-6	-6	-6	-6	-6	-6	-6	-7	-7
Other	15	19	20	21	18	20	22	21	23	23	23	23
Subtotal	42	41	45	48	45	47	47	47	49	49	50	49
Total	631	676	728	777	818	868	918	972	1,033	1,096	1,163	1,235
Total												
All Mandatory Spending	822	875	946	1,011	1,070	1,141	1,205	1,285	1,369	1,457	1,557	1,655
Memorandum:												
Medicare Spending Net of Premiums	157	176	195	214	233	254	277	301	328	359	393	431

SOURCE: Congressional Budget Office.
NOTE: Spending for benefit programs shown above generally excludes administrative costs, which are discretionary.
a. Includes nutrition assistance to Puerto Rico.
b. Spending for Medicare excludes premiums, which are considered offsetting receipts.
c. Includes Civil Service, Foreign Service, Coast Guard, other retirement programs, and annuitants' health benefits.
d. Includes veterans' compensation, readjustment benefits, life insurance, housing programs, and the Universal Service Fund created in the Telecommunications Act of 1996.

derly immigrants. Outlays for the Food Stamp program go up both because benefits are indexed and because an increasing share of the U.S. population is eligible for food stamps. Near-term growth in the refundable portion of the earned income credit (EIC) is influenced by the final phase-in of benefit increases stemming from 1993 legislation; over the longer term, the indexing of certain guidelines for program eligibility and the increase in the population of eligible workers accounts for growth that is slightly faster than inflation. Although the EIC is a provision of the tax code, direct payments to recipients who otherwise owe no taxes are treated as outlays since they are equivalent to benefit payments. Those direct payments account for more than 80 percent of the provision's total cost.

Non-Means-Tested Programs. Social Security, Medicare, and other retirement and disability programs dominate non-means-tested entitlements. In fact, Social Security surpassed defense in 1993 to become the biggest federal program. Most Social Security beneficiaries, who currently number nearly 44 million and are expected to number 50 million in 2006, also participate in Medicare.

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 compared with Social Security's 6 percent; for the next decade, Medicare is projected to grow by an average of 9 percent a year and Social Security by 5 percent. The share of the economy devoted to Social Security will remain fairly constant over that period, at 4.7 percent of GDP; Medicare's share will increase by almost 50 percent, from 2.6 percent to 3.8 percent of GDP.

Other retirement and disability programs, at $77 billion in 1996, are less than one-fourth the size of Social Security (see Table 2-6). They are dominated by benefits for the federal government's civilian and military retirees and Railroad Retirement and are expected to grow slightly faster than inflation.

Spending for both unemployment compensation and deposit insurance has declined from the top levels reached in the early 1990s. Outlays for unemployment compensation peaked at $37 billion in 1992 and are now less than two-thirds as large. They are expected to grow modestly in future years. Outlays for deposit insurance peaked at $66 billion in 1991 and are expected to return to more traditional levels as the Resolution Trust Corporation completes its work.

Other non-means-tested entitlements encompass a diverse set of programs, mainly veterans' benefits, farm price supports, certain social service grants to the states, and the Universal Service Fund created by telecommunications reform. This category totals $41 billion in 1996 and grows slightly slower than inflation throughout the projection period.

Why Does Mandatory Spending Increase? Spending for entitlements and mandatory programs has nearly doubled over the past decade, rising faster than both nominal growth in the economy and the rate of inflation. Why does such spending grow as fast as it does in the baseline? One convenient way of analyzing such growth is to break it down by its major cause. That analysis shows that rising caseloads, automatic increases in benefits, and greater use of medical services account for 90 percent of the growth in entitlements and other mandatory programs between 1996 and 2006.

Mounting caseloads account for about one-fifth of the growth in entitlement programs. Compared with this year's outlays, spending will increase as a result of higher caseloads by $14 billion in 1997 and $137 billion in 2006 (see Table 2-7). More than half of that growth is concentrated in the Social Security, Medicare, and Supplemental Security Income programs and is largely traceable to continued growth in the population of elderly and disabled people. Much of the rest is in Medicaid. Among the "big three" programs, growth in caseloads alone boosts outlays by 15 percent in Medicare and 16 percent in both Social Security and Medicaid over the 1997-2006 period.

Automatic increases in benefits account for about one-third of the growth in entitlement programs. All of the major retirement programs grant automatic cost-of-living adjustments (COLAs) to their beneficiaries. Those adjustments, which are pegged to the overall consumer price index, are expected to average about 3 percent a year through 2006. In 1996,

outlays for programs with COLAs are already more than $460 billion, and COLAs are expected to add an extra $10 billion in 1997 and $160 billion in 2006.

Several other programs—chiefly the earned income credit, Food Stamps, and Medicare—are also automatically indexed to inflation. The income thresholds above which the EIC begins to be phased out are automatically adjusted for inflation using the consumer price index. The Food Stamp program makes annual adjustments to its benefit payments according to changes in the Department of Agriculture's Thrifty Food Plan index. Medicare's payments to providers are based in part on special price indexes for the medical sector. (The link between inflation and Medicare spending is complicated, however, because indexing provided for under current law would actually reduce fees for some providers. In those cases, CBO assumed that no reduction would take place.) The combined effect of indexing for these

Table 2-7.
Sources of Growth in Mandatory Spending (By fiscal year, in billions of dollars)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Estimated Spending for Base Year 1996	875	875	875	875	875	875	875	875	875	875
Sources of Growth										
Increases in caseload	14	25	38	50	63	76	90	105	120	137
Automatic increases in benefits										
Cost-of-living adjustments	10	25	40	56	71	88	105	122	142	160
Other[a]	10	18	26	32	37	41	45	49	56	66
Other increases in benefits										
Increases in Medicare and Medicaid[b]	16	35	57	80	108	140	177	217	259	304
Growth in Social Security[c]	5	9	11	15	22	28	34	41	47	56
Irregular number of benefit payments[d]	4	4	4	9	0	5	5	5	11	6
Change in outlays for deposit insurance	5	8	8	7	8	9	9	9	9	9
Other sources of growth	7	12	12	17	22	24	30	34	37	42
Total	71	136	196	267	330	410	494	583	682	780
Projected Spending	946	1,011	1,070	1,141	1,205	1,285	1,369	1,457	1,557	1,655

SOURCE: Congressional Budget Office.

a. Automatic increases in Food Stamp and child nutrition benefits, certain Medicare reimbursement rates, and the earned income credit under formulas specified by law.

b. All growth not attributed to caseloads and automatic increases in reimbursement rates.

c. All growth not attributed to caseloads and cost-of-living adjustments.

d. Represents baseline differences attributable to assumptions about the number of benefit checks that will be issued in a fiscal year. Supplemental Security Income and veterans' compensation and pensions will pay 11 months of benefits in 1996 and 2001, 13 in 2000 and 2005, and 12 in other years.

programs contributes an extra $10 billion in outlays in 1997 and $66 billion in 2006 (see Table 2-7).

Medicaid is the only major entitlement program that is not automatically indexed for inflation at the federal level. Medicaid payments to providers are determined by the states, with the federal government matching those payments. If states increase payments, federal payments will rise. Higher payments to states are treated as other increases in Table 2-7.

Another third of the growth in entitlement spending stems from increases that cannot be attributed to growth in caseloads or automatic adjustments in reimbursements. Those sources of growth are expected to become more important over time. First, Medicaid grows with inflation even though it is not formally indexed (as discussed above). Second, the health programs have faced steadily rising costs per participant; that trend, which is known in Medicare jargon as "use" or "intensity," reflects a combination of more services per participant, more technological sophistication, and so forth. The residual growth in Medicare and Medicaid amounts to $16 billion in 1997 and $304 billion in 2006.

In most retirement programs, the average benefit grows faster than the COLA alone would explain. Social Security is a prime example. Because new retirees have more recent earnings that have benefited from real wage growth, their benefits generally exceed the monthly check of a long-time retiree whose last earnings may have been a decade or two ago and who has been receiving only cost-of-living adjustments since then. And because more women are working now, more new retirees receive benefits based on their own earnings rather than a smaller, spouse's benefit. In Social Security alone, such phenomena are estimated to add $5 billion in 1997 and $56 billion in 2006.

Depending on calendar flukes, three programs—Supplemental Security Income and veterans' compensation and pensions—may pay 11, 12, or 13 monthly checks in a fiscal year. Since only 11 checks will be mailed in the current fiscal year, spending in those programs is much higher relative to the 1996 base in all years except 2001, which is also an 11-check year (see Table 2-7).

Most of the remaining growth in benefit programs stems from rising benefits for new retirees in the Civil Service, Military, and Railroad Retirement programs (fundamentally the same phenomenon as in Social Security); larger average benefits in unemployment compensation, a program that lacks an explicit COLA provision but pays amounts that are automatically linked to the recent earnings of its beneficiaries; increases in family support costs, largely at the discretion of state governments; and other sources. All of those factors together, however, contribute just $42 billion of the total $780 billion rise in mandatory spending in 2006 (relative to 1996).

Offsetting Receipts

Offsetting receipts are income that the government records as negative spending. Those receipts are either intragovernmental (reflecting payments from one part of the federal government to another) or proprietary (reflecting voluntary payments from the public in exchange for goods or services).

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 are therefore also subject to the pay-as-you-go discipline.

Intrabudgetary transfers that represent agencies' contributions for their employees' retirement plan account for about 40 percent of offsetting receipts, a share that is expected to grow to 50 percent by 2006 (see Table 2-8). Those contributions are paid primarily to the trust funds for Social Security, Hospital Insurance, Military Retirement, and Civil Service Retirement. Some contribution rates are set by statute; others are determined by boards of actuaries. Agencies are required to pay for the retirement contributions of their employees because future retirement benefits are an important part of current compensation for the government's 4.4 million military, civilian, and postal employees. The budget treats those retirement contributions as part of agency budgets, and the deposits in retirement funds as offsetting receipts. Those transfers thus wash out in the budgetary totals, leaving only the funds' disburse-

ments—for retirement benefits and administrative costs—reflected in total outlays.

The biggest proprietary receipt the government collects is premiums from the roughly 36 million people who enroll in Supplementary Medical Insurance (SMI, or Part B of Medicare), which primarily covers physician and outpatient charges. Premium collections from the elderly and disabled grow from an estimated $20 billion in 1996 to $32 billion in 2006, as the monthly charge climbs from $42.50 to an estimated $61.50 in 2006. Premiums are set to cover one-quarter of the costs of SMI through 1998. After 1998, premiums will increase at the same rate as the cost-of-living adjustment provided to Social Security beneficiaries, and the share of costs paid by beneficiaries will fall.

Other proprietary receipts come mostly from charges for energy, minerals, and timber and from various fees levied on users of government property or services. A relatively new entry—receipts from the Federal Communications Commission's auction of portions of the electromagnetic spectrum for use by telecommunications companies—is expected to bring in $5 billion in 1996 and $12 billion in 1997.

Table 2-8.
CBO Projections for Offsetting Receipts Under Current-Policy Economic Assumptions
(By fiscal year, in billions of dollars)

	Actual 1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Employer Share of Employee Retirement												
Social Security	-6	-6	-7	-7	-8	-8	-9	-9	-10	-11	-12	-13
Military Retirement	-12	-11	-11	-11	-11	-11	-12	-12	-12	-12	-13	-13
Other[a]	-16	-16	-16	-17	-17	-18	-18	-19	-20	-21	-22	-23
Subtotal	-34	-33	-34	-35	-36	-37	-39	-40	-42	-44	-46	-48
Medicare Premiums	-20	-20	-21	-23	-24	-25	-26	-27	-29	-30	-31	-32
Energy-Related Receipts[b]	-4	-4	-5	-4	-4	-4	-4	-5	-4	-4	-4	-4
Natural Resource-Related Receipts[c]	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3
Electromagnetic Spectrum Auctions	-8	-5	-12	-3	d	0	0	0	0	0	0	0
Other	-31	-30	-30	-32	-33	-34	-35	-37	-38	-38	-39	-40
Total	-80	-75	-84	-77	-76	-79	-81	-85	-88	-90	-93	-96

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.

Those receipts, which can be paid over time, are recorded on a net present-value basis pursuant to the Credit Reform Act of 1990.

Net Interest

For the four years between 1991 and 1994, net interest costs were remarkably flat at about $200 billion a year, even as the government added $1 trillion in debt. The government saved a lot of money during that period by issuing debt at interest rates that were the lowest in three decades. That stability is now past: interest costs shot up by $30 billion in 1995, increase modestly in 1996, and are expected to increase steadily through 2006 to $385 billion as debt held by the public increases from $3.6 trillion to $6.7 trillion (see Table 2-9). As a percentage of GDP, however, interest costs will hold steady at 3 percent.

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

Interest rates have a powerful effect on budget projections, as illustrated in Appendix C. If interest rates are 1 percentage point higher in 1996 through 2006 than CBO assumes, net interest costs will be greater by about $3 billion in 1996 and $85 billion in 2006. The extra costs stem from the huge volume of new financing and the rollover of existing debt by the Treasury.

Net or Gross? Net interest is the most useful measure of the government's current debt-service costs. Some budget-watchers stress gross interest (and its counterpart, the gross federal debt) instead of net interest (and its counterpart, debt held by the public). But that 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 more than $3.6 trillion of securities to finance deficits over the years. But it has also issued $1.3 trillion of securities to its own trust funds (mainly Social Security and the other retirement funds). Those securities represent the past surpluses of the trust funds, and their total amount grows roughly in step with projected trust fund surpluses. The funds can redeem the securities to pay benefits; in the meantime, the government both pays and collects the interest on those securities. It also receives interest income from loans and cash balances. Broadly speaking, gross interest encompasses all interest paid by government (even to its own funds) and ignores all interest income. Net interest, in contrast, is the net flow to people and organizations outside government.

Net interest is only about two-thirds as big as gross interest. CBO estimates that the government will pay $344 billion in gross interest costs this year. Of that amount, however, $98 billion is simply credited to trust funds and does not leave the government or add to the total deficit. The government also collects $6 billion in other interest income. Net interest costs therefore total $240 billion.

Debt Subject to Limit. The Congress sets a limit on the Treasury's authority to issue debt. That ceiling applies to securities issued to federal trust funds as well as those sold to the public. Debt subject to limit is practically identical to the gross federal debt and is widely cited as the measure of the government's indebtedness. (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, that are exempt from the debt limit.) The net debt, which is debt held by the public, is about $1.3 trillion smaller than either gross federal debt or debt subject to limit.

The Congress recently raised the debt ceiling to $5.5 trillion, which will probably be adequate for about the next year and a half. For further details on the events leading to this year's increase in the debt limit, see Box 2-3.

Table 2-9.
CBO Projections for Interest Costs and Federal Debt Under Current-Policy Economic Assumptions (By fiscal year)

	Actual 1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Net Interest Outlays (Billions of dollars)												
Interest on Public Debt (Gross interest)[a]	332	344	353	368	386	402	421	441	462	485	507	532
Interest Received by Trust Funds												
Social Security	-33	-37	-41	-45	-50	-55	-61	-67	-73	-80	-88	-96
Other trust funds[b]	-60	-61	-61	-60	-59	-58	-56	-54	-51	-47	-43	-37
Subtotal	-93	-98	-101	-105	-109	-112	-117	-120	-124	-128	-131	-133
Other Interest[c]	-7	-6	-6	-6	-6	-7	-8	-9	-10	-11	-12	-13
Total	232	240	246	257	271	283	296	311	328	346	365	385
Federal Debt, End of Year (Billions of dollars)												
Gross Federal Debt	4,921	5,191	5,483	5,789	6,120	6,478	6,845	7,233	7,640	8,071	8,529	9,008
Debt Held by Government Accounts												
Social Security	483	547	619	695	779	871	967	1,071	1,181	1,298	1,425	1,562
Other government accounts[b]	834	874	897	912	920	920	912	894	866	826	771	700
Total	1,318	1,421	1,516	1,607	1,699	1,791	1,879	1,965	2,047	2,124	2,196	2,262
Debt Held by the Public	3,603	3,770	3,967	4,181	4,422	4,687	4,966	5,268	5,593	5,947	6,333	6,746
Debt Subject to Limit[d]	4,885	5,154	5,446	5,751	6,083	6,440	6,808	7,195	7,603	8,034	8,491	8,971
Federal Debt as a Percentage of GDP												
Debt Held by the Public	50.2	50.3	50.5	50.8	51.3	51.8	52.3	52.9	53.6	54.3	55.2	56.0

SOURCE: Congressional Budget Office.

NOTE: Projections of interest and debt assume that discretionary spending is adjusted for inflation up to the statutory caps that are in effect through 1998. All discretionary spending other than spending from the Violent Crime Reduction Trust Fund is assumed to equal the caps in 1998 and to grow from that level at the rate of inflation in later years.

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.

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

Box 2-3.
Raising the Debt Limit

Since 1917, the Congress by statute has set an overall dollar ceiling on the amount of debt that the Treasury can issue. That ceiling is increased periodically, with each change typically giving the Treasury unfettered authority to issue debt for a couple of years before another increase is necessary. As fiscal year 1996 began, the Treasury's authority to issue debt, last raised in August 1993 to $4.9 trillion, was once again becoming inadequate.

Legislation increasing the debt limit has historically been viewed by the Congress as "must pass" legislation and has been used as a vehicle for enacting other measures important to the Congress. For example, the Balanced Budget and Emergency Deficit Control Act of 1985 was passed as part of legislation raising the debt ceiling. In 1995 and 1996, the Congress also attempted to use such legislation to achieve deficit reduction. The resulting deadlock over measures to reduce the deficit led to perhaps the longest impasse ever regarding the debt limit, stretching from November 1995 through March 1996.

Because the debt limit covers both debt sold to the public and government account series securities assigned to trust funds and other government accounts, the Treasury can disinvest (convert to uninvested balances) holdings of government account securities to create room under the debt limit to raise cash from the public. As negotiations on achieving a balanced budget continued past the start of the fiscal year, Treasury Secretary Robert E. Rubin authorized the use of that technique to ensure that the government would be able to make its November 15 quarterly interest payment to holders of public debt securities. The Secretary disinvested holdings of the Government Securities Investment Fund of the Thrift Savings Fund (a tax-deferred savings plan for federal employees) and the Civil Service Retirement and Disability Fund because statute permits it and provides that the funds be replenished in full with interest.

The continued inability of the President and the Congress to agree on legislation to balance the budget required the use of other techniques to allow the government to avoid the debt ceiling and continue borrowing. The Secretary withheld the semiannual interest payment to the Civil Service Retirement and Disability Fund, which is normally made in December, to prevent the debt ceiling from being reached (interest payments are invested in government account securities). Then, in order to make the February 15 quarterly interest payment to holders of public debt securities, the Secretary extended disinvestment of that fund, authorized withdrawals from the Exchange Stabilization Fund, and swapped agency securities of the Postal Service and the Tennessee Valley Authority held by the Federal Financing Bank with government account series securities held by the Civil Service Retirement and Disability Fund.

As the Treasury Secretary warned that the continued impasse over the debt limit threatened the timely payment of Social Security benefits for the month of March, the Congress passed legislation enabling the Treasury to borrow about $29 billion (the size of the March Social Security benefits) that would not be counted against the debt limit until March 15. That legislative technique was new; in prior impasses, the Congress had generally enacted temporary increases in the debt ceiling. As March 15 approached, the temporary exemption was extended through March 30 and amended to exclude inflows to government accounts from the debt ceiling.

Finally, on March 28, the Congress passed an increase in the debt limit to $5.5 billion. The bill also terminated Supplemental Security Income benefits for drug addicts and alcoholics and included an increase in the exempt earnings amount for Social Security beneficiaries who continue to work; it did not include significant deficit reduction. Under the Congressional Budget Office's baseline projections, the new ceiling will be sufficient through the beginning of fiscal year 1998.

Federal Funds and Trust Funds

Spending from federal funds excludes all spending that comes from federal trust funds. The government has more than 150 trust funds, though fewer than a dozen account for the vast share of trust fund holdings. The four largest are the Old-Age and Survivors Insurance, Civil Service Retirement, Hospital Insurance, and Military Retirement Trust Funds. Revenues for most trust funds exceed outgo.

The trust fund technique involves earmarking specific taxes or other revenues for financing certain

Table 2-10.
CBO Projections for Trust Fund Surpluses Under Current-Policy Economic Assumptions
(By fiscal year, in billions of dollars)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Social Security	64	72	76	84	92	97	104	110	117	127	137
Medicare											
Hospital Insurance	-7	-13	-22	-30	-38	-48	-57	-68	-82	-96	-112
Supplementary Medical Insurance	2	-1	2	2	2	2	2	3	3	3	4
Subtotal	-5	-14	-21	-28	-36	-46	-55	-66	-79	-93	-109
Military Retirement	3	2	2	1	1	1	a	a	a	-1	-1
Civilian Retirement[b]	28	28	28	28	29	30	31	31	31	31	31
Unemployment	6	5	4	3	3	4	4	5	5	6	7
Highway and Airport	-2	-4	-3	-3	-3	-3	-4	-4	-4	-5	-5
Other[c]	3	3	3	3	4	4	4	4	4	4	4
Total Trust Fund Surplus[d]	97	92	89	89	89	86	84	80	74	70	64
Federal Funds Deficit[d]	-241	-263	-283	-308	-334	-345	-369	-391	-417	-446	-468
Total Deficit	-144	-171	-194	-219	-244	-259	-285	-311	-342	-376	-403
Memorandum:											
Net Transfers from Federal Funds to Trust Funds	229	239	255	269	286	304	325	348	375	405	438

SOURCE: Congressional Budget Office.

NOTE: The numbers reflect the surplus or deficit (-) for the trust funds on a cash flow basis.

a. Less than $500 million.

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

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

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

programs. That procedure helps to weigh the costs and benefits of the programs and gives beneficiaries some assurance that their benefits will be protected. For some programs, such as federal military and civilian retirement, the trust fund approach also allows agency spending to reflect accrued costs, even though the budget totals record spending on a cash basis. The two Social Security trust funds have been designated as off-budget by law.

Assuring the financial soundness of the trust funds requires that their receipts and expenditures be tracked separately from those of other programs. Thus, the principal significance of trust funds lies in an analysis of receipts and expenditures of the individual funds rather than in the totals for all trust funds combined, or the totals for federal funds excluding trust funds. The trust funds must be included in the budget totals with other programs when considering the effect of federal activities on national income and employment and on the Treasury's cash borrowing needs. The Congressional Budget Office, the Office of Management and Budget, and other fiscal analysts therefore focus on a comprehensive measure of the federal budget, including the trust funds.

Trust funds run surpluses because their earmarked annual income (chiefly from social insurance and excise taxes and from transfers within the budget, as explained below) exceeds annual spending for benefits, administration, and other costs. In CBO's projections, the total trust fund surplus is virtually flat through 2000 at about $90 billion a year. After 2000, that surplus declines steadily to $64 billion in 2006 as the deficit of the Hospital Insurance (HI) Trust Fund grows in the later years of the projection period (see Table 2-10). CBO also projects that the balance of the HI trust fund will be negative in 2001, concomitant with the fund's increased annual deficit. The Social Security and Medicare trust funds currently run a combined surplus of about $60 billion a year. All other trust funds run a combined surplus of about $40 billion a year, primarily in the trust funds for federal employee retirement and unemployment insurance.

Nearly all public attention focuses on the Social Security and Medicare trust funds. The Social Security trust funds enjoy a large and growing surplus; Medicare's HI trust fund, in contrast, is being depleted. The Social Security surplus currently accounts for approximately two-thirds of the total trust fund surplus. Both Social Security and the HI trust fund collect taxes from workers and pay benefits to or on behalf of elderly and disabled recipients. Medicare's SMI trust fund runs a small surplus or deficit in every year by design. SMI receives roughly one-fourth of its income from enrollee premiums and taps the general fund of the government for the rest of its $70 billion-plus outlays, generally permitting a small "surplus."

The total deficit of $144 billion in 1996 reflects the federal funds deficit of $241 billion offset by the trust fund surplus of $97 billion. The line between federal funds and trust funds is not so neat, however, because trust funds receive a large portion of their income from transfers within the budget. Such transfers shift money from the federal funds to trust funds, thereby boosting the federal funds deficit (the deficit excluding trust funds) and swelling the trust fund surplus. Those intragovernmental transfers total more than $229 billion a year (see Table 2-10).

Prominent among those intragovernmental transfers are interest paid to trust funds (about $98 billion in 1996), the government's contributions to retirement funds on behalf of its present and past employees ($65 billion), and contributions by the general fund to Medicare, principally SMI ($55 billion). Without those intragovernmental transfers, the trust funds would have an overall deficit in every year, ranging from $132 billion in 1996 to over $370 billion in 2006.

Chapter Three

CBO's Estimates of the President's Budgetary Proposals

In March, the President submitted a budget that intends to eliminate the deficit by 2002. To help ensure that the goal is achieved, the budget includes two sets of policies: one that the Administration estimates will balance the budget if the Administration's economic and technical assumptions prove close to the mark, and a second set that includes contingent policies that would have to be carried out if the Administration's assumptions prove too optimistic and additional deficit reduction is required to balance the budget. To evaluate the President's budget, the Congressional Budget Office compares its estimates of the President's policies with its own baseline as well as with the Administration's projections.

The Administration's Proposals

Since the President's budget is intended to balance by 2002, CBO has used economic assumptions consistent with such a plan to evaluate the Administration's policies. CBO's baseline deficit projections, using economic projections that assume the budget will be balanced by 2002 and projecting discretionary spending to grow with inflation, show a deficit in 2002 of $210 billion. Under the President's basic policies, the deficit would be reduced substantially but would still total $81 billion in 2002 as estimated by CBO. With the contingent policies, the President's budget would generate a surplus of $3 billion in 2002 (see Table 3-1).

The basic policies in the President's budget include holding the growth of discretionary appropriations below the rate of inflation, cutting the growth of Medicare and Medicaid below current-law projections, reducing projected spending for welfare programs, and limiting other mandatory spending. The budget also aims to shrink the deficit by selling government assets and auctioning additional portions of the electromagnetic spectrum. The savings would be partially offset by a net reduction in revenues resulting from a combination of tax cuts and increases.

The package of contingencies calls for the sunset of proposed tax-relief provisions after 2000, additional savings from further restraining Medicare costs, deeper cuts in discretionary spending, and new fees on television broadcasters to offset any shortfall in anticipated receipts from the proposed auction of the right to use the electromagnetic spectrum. Two types of contingencies exist. The first type would be invoked if the deficit in the year 2000 is not at least $20 billion below CBO's current estimate of the President's policies for that year. If the actual deficit is more than $85 billion (CBO's estimate of the deficit under the Administration's plan in 2000, $105 billion, minus $20 billion), then the tax cut will be reduced or rescinded and further discretionary spending cuts may be enacted. The second type of contingency--

Table 3-1.
CBO Estimate of the President's Budget (By fiscal year, in billions of dollars)

	1996	1997	1998	1999	2000	2001	2002	1996-2002
CBO Baseline Deficit[a]	144	165	175	182	191	194	210	n.a.
President's Basic Budgetary Proposals								
Revenues[b]								
Tax relief								
Child tax credit	0	10	8	9	13	13	13	64
Higher education deduction	0	7	6	7	7	7	8	41
Individual retirement account	0	1	1	1	2	4	5	14
Other tax relief	0	1	1	2	2	2	2	9
Subtotal, tax relief	0	18	16	18	23	26	28	129
Extend expired excise taxes	0	-4	-6	-6	-6	-7	-7	-36
Other revenue provisions	1	-6	-8	-10	-10	-10	-12	-54
Subtotal, revenues	1	8	2	3	7	9	9	38
Outlays								
Medicare	c	-5	-8	-14	-20	-26	-31	-103
Medicaid	0	2	-2	-6	-10	-16	-22	-54
Welfare reform	0	-4	-6	-6	-7	-7	-8	-38
FCC spectrum auction	0	c	-2	-3	-4	-5	-16	-31
Proceeds from asset sales	c	-1	c	c	c	c	-2	-4
Discretionary appropriations	2	-4	-6	-26	-42	-46	-38	-161
Other policy changes	-1	-4	1	-1	-2	-5	-6	-18
Debt service	c	c	-1	-3	-6	-11	-16	-35
Subtotal, outlays	1	-17	-23	-59	-91	-116	-138	-444
Total Changes	2	-9	-21	-57	-84	-107	-129	-405
Deficit Under the President's Basic Budgetary Proposals as Estimated by CBO	146	156	153	125	108	87	81	n. a.
President's Contingent Budgetary Proposals								
Sunset tax relief[b]	0	0	c	c	c	-7	-25	-32
Medicare	0	-1	-1	-2	-2	-3	-3	-13
FCC spectrum auction failsafe	0	0	0	0	0	0	-6	-6
Discretionary appropriations	0	0	0	0	0	-22	-46	-67
Debt service	0	c	c	c	c	-1	-4	-6
Total Changes	0	-1	-2	-2	-2	-33	-84	-124
Deficit Under the President's Budgetary Proposals as Estimated by CBO	146	155	152	123	105	54	-3	n.a.

SOURCE: Congressional Budget Office.

NOTE: FCC = Federal Communications Commission; n.a. = not applicable.

a. This baseline is based on economic projections that assume the budget will be balanced by 2002. It assumes that discretionary spending is equal to 1996 appropriations adjusted for inflation up to the caps that are in effect through 1998. General-purpose discretionary spending is equal to the cap in 1998 and grows from that level at the rate of inflation.

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

c. Less than $500 million.

relating to Medicare and spectrum auctions by the Federal Communications Commission (FCC)--would apply if actual savings or revenues from the basic policy changes do not meet some specified amounts.

Revenues

The President's budget contains a number of initiatives intended to cut taxes for the middle class and to target tax relief for small businesses and others. Partially offsetting the cost of those tax cuts are increases in corporate taxes and an extension of the airline ticket tax and other excise taxes that expired at the end of 1995.

The Joint Committee on Taxation (JCT) estimates that the proposed tax relief for the middle class and other targeted tax breaks would cost $129 billion over the 1996-2002 period if the cuts continue past 2000. Among the proposals, the tax credit for dependent children would be the most costly component of the plan. Under that proposal, families would receive an income tax credit for each dependent child under age 13. The credit would start at $300 per child in tax years 1996 through 1998, and rise to $500 per child in 1999 and beyond. It would be phased out for taxpayers with adjusted gross incomes (AGI) between $60,000 and $75,000. Beginning in 2000, the credit and phaseout range would be indexed for inflation. Over the seven-year period, the tax credit for dependent children would cost $64 billion.

The tax deduction for education and job training would cost the government $41 billion during the projection period by granting a $5,000 a year deduction for qualifying education and training expenses. Tuition and fees paid to postsecondary educational or vocational institutions would qualify for the credit if the institution is allowed to participate in the student loan program. Starting in 1999, the deduction would rise to $10,000. The deduction would be phased out for single taxpayers with modified AGI between $70,000 and $90,000 ($100,000 and $120,000 for joint returns). The ranges of the phaseout--but not the maximum deduction--would be indexed for inflation beginning in 2000.

Expanding the eligibility for deductible contributions to individual retirement accounts (IRAs) and adding a new, special IRA would reduce revenues by $14 billion over seven years. Under current law, a participant in an employer-sponsored retirement plan cannot deduct IRA contributions if his or her income is above $35,000 ($50,000, if married). The proposal would raise the income limit to $70,000 ($100,000, if married) by 1999 and would then index the limit for inflation. The limit on contributions of $2,000 would be indexed for inflation in $500 increments after 1996. Taxpayers eligible for a deductible IRA could invest in a special IRA instead. Contributions to special IRAs would not be deductible, but distributions would be tax-free.

Offsetting around two-thirds of the cost of the President's proposed tax cuts would be the reimposition of the airline ticket tax and other expired excise taxes ($36 billion in revenue over seven years) and other tax provisions, mostly corporate tax increases ($54 billion in revenue over seven years). Among those other tax proposals are provisions to deny the interest deduction for loans taken against company-owned life insurance policies, modifying carryback and carryforward rules for losses, extending the Federal Unemployment Tax Act surcharge that expires at the end of 1998, and reinstating the Superfund corporate environmental tax, which has already expired.

Under CBO's assumptions, the tax contingency would force tax cuts for the middle class and other adjustments to expire after 2000. In that case, revenues would increase by $7 billion in 2001 and $25 billion in 2002 relative to keeping the tax cuts in place.

Outlays

The Administration has proposed major reductions in outlays, totaling $444 billion between 1996 and 2002. The largest set of entitlement proposals in the budget can be found in Medicare, but sizable savings are suggested in Medicaid and welfare programs as well. Large cuts are also assumed from restricting discretionary appropriations.

Medicare. The President's budget contains a wide range of proposals to slow the growth in Medicare spending and improve the financial status of the Hospital Insurance (HI) trust fund. CBO estimates that those proposals, including a contingent one, would save $116 billion over the 1997-2002 period.

The bulk of the savings in the President's plan would stem from curtailing payments to providers of health care services. The budget would limit increases in payment rates for hospitals and physicians, reduce payments for the indirect costs of medical education, put in place interim payment reforms for home health care and skilled nursing facilities, and freeze or reduce payments for durable medical equipment and ambulatory surgical centers.

Premiums paid by beneficiaries for Supplementary Medical Insurance (SMI) would be larger compared with current law beginning in 1999--increasing receipts to the government by $6 billion from 1999 through 2002. Under current law, SMI premiums are set at 25 percent of program costs through calendar year 1998 and will increase thereafter at the rate of the Social Security cost-of-living adjustment (approximately 3 percent a year). Under the President's proposal, premiums would remain linked to program costs after 1998, thereby rising at about 9 percent a year. In 2002, the projected SMI premium would be $54.70 under current law and $63.60 under the President's proposal.

The President proposes to expand the types of managed care plans available to Medicare beneficiaries to include preferred provider organizations, provider-sponsored networks, and other organizational forms. Beneficiaries would be given comparative information about the managed care and fee-for-service choices available to them, and they would be able to select one of those options during an annual open-enrollment period. As under current law, Medicare's payments to managed care plans would remain linked to the average annual per capita cost in Medicare's fee-for-service sector.

The budget would also shift payments for certain home health services from the Hospital Insurance program to Supplementary Medical Insurance (SMI). The additional home health spending, however, would be excluded from the calculation of SMI premiums paid by beneficiaries. Over the 1997-2002 period, that shift would reduce HI spending by $55 billion, increase SMI spending by the same amount, and have no effect on the budget totals. Under current law, the HI trust fund is projected to become insolvent in 2001. CBO estimates that the Administration's proposals would postpone this date to 2005.

The contingent policy identified for Medicare is included because the Administration expected that CBO would estimate less savings from the President's proposals than the Administration itself. Therefore, to close the gap between the two estimates, the Administration added one further measure to reduce Medicare outlays. The proposal, which would eliminate the formula-driven overpayment for certain outpatient hospital services, is not triggered as is the revenue contingency, but would automatically become effective in 1997. Under current law, the formula used to reimburse hospitals for some outpatient services does not take into account copayments made by beneficiaries. The provisional policy would reduce Medicare spending by requiring that such copayments be deducted later in the reimbursement calculation. Overall, the Medicare contingency would save $13 billion.

Medicaid. The President's budget would achieve savings by establishing per beneficiary (also known as per capita) caps on federal payments to states and limiting the growth of those caps. The budget also proposes to reduce payments to hospitals that serve a large proportion of Medicaid and uninsured patients (known as disproportionate share payments), while retargeting those payments to the hospitals with the highest proportion of such patients. CBO estimates that all of the Medicaid initiatives together would save $54 billion through 2002.

Welfare Reform. The Administration's welfare reform proposals encompass a myriad of programs. The largest savings are proposed in Food Stamps and Supplemental Security Income (SSI). Lowering maximum benefits and reducing the standard deduction (the amount each household can deduct from its income before benefits are calculated), along with other changes in the Food Stamp program, would save nearly $4 billion in 2002. Tightened eligibility standards for disabled children receiving SSI, stiffer deeming provisions (under which agencies weigh the

income and assets of a sponsor--usually a relative--who signed a promise of support when an immigrant entered the country), and other program modifications would save another $3 billion in SSI in 2002. Along with the abovementioned Food Stamp and SSI proposals, various changes to child nutrition programs, earned income credit (EIC), Aid to Families with Dependent Children, and other welfare programs would save $38 billion over seven years.

Auctions. The President proposes to extend and broaden the FCC's authority to auction licenses to use the electromagnetic spectrum for communication purposes. The Administration also proposes to reallocate and auction bands of spectrum that are commercially attractive and to accelerate the FCC's plan to introduce digital technology for television broadcasting, thereby making additional frequencies available for auction during 2002. In addition, the President's budgetary proposal would grant the FCC authority to assign by auction or charge a fee for toll-free "888" telephone numbers, and directs the commission to begin that assignment procedure in 1997. In total, those actions are expected to bring in $31 billion in offsetting receipts over the projection period.

Another contingent policy builds a failsafe mechanism into expected receipts from the FCC's auctions of spectrum that will be available for licensing as a result of the President's proposal to accelerate the transition of television broadcasting to digital transmission. If auction receipts turn out to be less than $17 billion in total, the FCC would place a fee on the broadcasters that originally received a digital slot for free. Fees would be assessed as necessary in 2002, and broadcasters that failed to pay would not have their licenses extended beyond 2003. CBO calculates the value of the safeguard at about $6 billion.

Asset Sales. One-time sales of government assets such as the U.S. Enrichment Corporation and the Elk Hills Naval Petroleum Reserve are expected to raise $4 billion through 2002.

Discretionary Appropriations. The President's budget proposes to hold discretionary spending below the cap levels in 1997 and 1998 and then extend the caps, which currently expire in 1998, through 2002. Savings generated by restricting discretionary spending for another four years would total $161 billion relative to CBO's baseline adjusted for inflation.

Focusing on 1997, the President's budget proposes an increase of only $2 billion in budget authority above the 1996 level, which would be $4 billion less than the amount estimated by CBO to be needed to keep pace with inflation. The $2 billion increase, however, masks a proposed increase of $12 billion in nondefense discretionary authority offset by a decrease of nearly $10 billion in defense appropriations (see Table 3-2). Education programs would receive $5 billion more than appropriated in 1996 while income-security programs, such as housing and welfare assistance, as well as justice programs would also benefit from the reallocation away from defense.

Further reductions in discretionary spending would occur by invoking the contingent policy directing discretionary spending to be cut further to ensure balance in 2002, according to CBO's calculations. An additional $67 billion in cuts would be necessary (on top of the $161 billion already specified) to reach the President's target.

Other Policy Changes and Net Interest. Other policy changes, as shown in Table 3-1, including reductions in spending for education and veterans' benefits, would save $18 billion over seven years. Interest savings on all policy changes would reduce outlays by another $35 billion throughout the projection period. The contingent policies in the Administration's budget would save an additional $4 billion in net interest in 2002.

Differences Between CBO and Administration Estimates

Using its economic projections that assume a balanced budget, CBO estimates that the basic policies proposed in the President's budget would lower the deficit from its current levels but would not be sufficient to balance the budget in 2002. Under those assumptions, invoking the President's contingent budgetary proposals would be necessary to achieve a balanced budget six years from now.

As shown in Table 3-3, the Administration estimates that its budgetary proposals would change the federal government's fiscal situation from a $146 billion deficit in 1996 to a $44 billion surplus in 2002. In contrast, CBO estimates that, under the President's basic policies, the deficit would decrease to $81 billion in 2002. Most of CBO's reestimate of the deficits reflects differing views of the revenues and outlays that would occur under current laws and policies. CBO separates its reestimates of the Administration's budget into two categories: those reestimates that result from differences in economic assumptions and those that result from technical estimating differences. In 2002, economic differences account for around two-thirds of the $125 billion difference between CBO's estimate of the deficit under

Table 3-2.
The Administration's Proposals for Discretionary Spending in Fiscal Year 1997 (In billions of dollars)

	CBO Baseline with Discretionary Spending Frozen at 1996 Level[a]		President's Budget as Estimated by CBO		President's Budget Minus Freeze Level	
Category	Budget Authority	Outlays	Budget Authority	Outlays	Budget Authority	Outlays
Defense	265	266	255	262	-10	-4
International	18	20	19	20	1	b
Domestic						
General science, space, and technology	17	17	18	17	1	b
Energy	5	5	5	5	b	b
Natural resources and environment	21	21	21	22	1	b
Agriculture	4	4	4	4	b	b
Commerce and housing credit	3	3	3	3	b	b
Transportation	14	37	13	37	-1	b
Community and regional development	10	11	9	11	-2	-1
Education, training, employment, and social services	37	39	42	40	5	2
Health	23	23	24	24	1	1
Medicare	3	3	3	3	b	b
Income security	28	39	30	40	2	1
Social Security	b	3	b	3	b	b
Veterans' benefits	18	19	19	19	1	b
Administration of justice	21	19	23	21	3	2
General government	12	11	13	12	1	1
Subtotal	216	255	227	260	11	5
Total Discretionary Spending	499	541	502	542	2	1

SOURCE: Congressional Budget Office.

a. Incorporates the effect of the Omnibus Consolidated Rescissions and Appropriations Act of 1996 .

b. Less than $500 million.

the President's policies and the Administration's estimate.

Economic Reestimates

Although the Administration's economic assumptions and CBO's projections assuming a balanced budget appear to be quite similar, the differences are sufficient to produce a noticeable variation in budget projections (see Table 1-9 on page 25). Most of those economic reestimates are on the revenue side of the budget. Revenue projections depend highly on the presumed level of gross domestic product. CBO's estimates of GDP growth are about 0.2 percentage points lower each year over the estimating period

Table 3-3.
CBO Reestimate of the President's Budgetary Proposals (By fiscal year, in billions of dollars)

	1996	1997	1998	1999	2000	2001	2002
Deficit Under the President's Budgetary Proposals as Estimated by the Administration	146	140	98	64	28	-8	-44
Economic Reestimates							
Revenues[a]	9	24	35	44	54	65	73
Outlays							
Discretionary	b	b	0	b	b	b	b
Mandatory	b	2	3	4	5	6	6
Net interest	b	1	4	3	2	3	4
Subtotal, outlays	b	3	7	7	8	9	11
Subtotal, economic reestimates	9	27	42	51	62	74	84
Technical Reestimates							
Revenues[a]	-10	-6	-5	-10	-10	-12	-13
Outlays							
Discretionary	-7	b	1	1	1	1	3
Mandatory							
Medicare	2	3	4	4	6	5	6
Medicaid	1	1	2	4	7	7	13
Other	8	-11	7	4	6	8	16
Subtotal, mandatory	10	-7	14	12	18	21	35
Net interest	-1	2	2	2	1	b	-1
Subtotal, outlays	1	-6	17	15	20	22	37
Subtotal, technical reestimates	-9	-12	11	5	10	10	24
Debt Service	b	b	2	5	8	12	17
Total Reestimates	b	16	55	61	80	95	125
Deficits Under the President's Basic Budgetary Proposals as Estimated by CBO	146	156	153	125	108	87	81

SOURCES: Congressional Budget Office; Joint Committee on Taxation.

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

b. Less than $500 million.

than the Administration's. Those small differences cumulate over time into relatively large budgetary differences--accounting for almost half of the economic reestimates for revenues. Differences in income shares account for most of the remainder. CBO projects that less income will be earned in the form of profits and wages, while more will be interest income, thereby lowering estimates of income and payroll tax receipts. The effect of lower incomes, reinforced by CBO's projection that a smaller share of GDP will be received as profits and wages, leads to a $73 billion revenue reestimate in 2002.

CBO's economic assumptions also increase its projection of spending compared with that of the Administration, though by far less than the reduction in revenues. Much of the economic difference on the outlay side is the result of different projections for interest rates. CBO's short-term rates over the long run are lower than the Administration's--3.7 percent versus 4.0 percent for 91-day Treasury bills. However, CBO's long-term rates for most of the period are higher by an equal amount (5.3 percent versus 5.0 percent for 10-year Treasury notes). Since nearly three-quarters of debt is held in medium- to long-term securities, the effect of that interest rate difference causes CBO's projections to be more than $4 billion higher than the Administration's in 2002.

Further differences in outlays stem from assumptions about the unemployment rate and growth in the consumer price index. CBO's projections of the unemployment rate are 0.3 points above the Administration's from 1997 onward. That difference pushes up CBO's estimate of unemployment benefit payments by $1 billion per year over the same time period. Because it projects a more rapid increase in the consumer price index, CBO estimates that the cost of indexed benefit programs--for example, Social Security, SSI, and EIC--will also be higher.

Technical Reestimates

Estimating differences unrelated to economic assumptions add to CBO's estimates of the deficits under the President's budgetary policies from 1998 through 2002, while reducing them in 1996 and 1997.

Technical reestimates increase CBO's projections of revenues in most years between 1996 and 2002. Differences in projected spending, however, overshadow revenue effects, pushing the projected deficit $37 billion higher in 2002 than under the Administration's assumptions. Much of the difference in projected spending can be found in the Medicare and Medicaid programs. Although CBO believes that the growth in those programs has slowed from the extremely high rates of recent years, it is not quite as optimistic as the Administration about the slowdown.

Various other discrepancies lead to technical differences between CBO and the Administration. Different assumed participation in programs such as SSI, Food Stamps, and EIC lead to an increase in outlays of up to $4 billion by 2002. Differences in assumed dates of enactment of legislation proposed by the Administration affect estimates of spending by the Savings Association Insurance Fund. Similarly, different assumed dates for rate hikes cause CBO's estimates of postal service outlays to differ from the Administration's by between -$2 billion and $3 billion a year.

CBO's estimates of interest on the debt are higher than the Administration's partly because CBO projects higher deficits. By 2002, debt-service costs from the abovementioned economic and technical differences add $17 billion to CBO's reestimates of the President's budget.

Baseline Differences Between CBO and the Administration

Overall, most of the differences between the Administration's deficit estimates and those of CBO stem from differences in the two baselines, apart from any policy proposals to be evaluated. Assuming current services are maintained, differences in projections between the Administration and CBO become quite large (see Table 3-4). By 2002, CBO's revenue projections are $55 billion lower than the President's, notwithstanding any policy proposals.

On the outlay side of the budget, CBO's baseline for mandatory spending exceeds the Administration's by $26 billion in 2002. Chief among those baseline

Table 3-4.
Major Baseline Estimating Differences Between the Administration and CBO
(By fiscal year, in billions of dollars)

	1996	1997	1998	1999	2000	2001	2002
			Revenues				
Administration Baseline	1,428	1,501	1,579	1,654	1,738	1,825	1,916
Differences							
Economic	-9	-24	-35	-44	-54	-65	-73
Technical	10	8	7	11	12	16	19
Total	b	-16	-28	-33	-42	-49	-55
CBO Baseline	1,428	1,485	1,551	1,622	1,697	1,776	1,861
			Mandatory Outlays				
Administration Baseline[a]	800	863	918	981	1,045	1,102	1,175
Differences							
Social Security	b	b	b	1	1	2	2
Medicare	1	2	2	2	2	1	1
Medicaid	1	3	4	5	5	6	7
Supplemental Security Income	b	1	1	2	3	3	5
Unemployment compensation	b	1	1	2	2	2	2
Agriculture programs	b	2	3	3	3	4	4
Spectrum auctions	-1	-10	-1	b	0	0	0
Other	-5	-1	6	1	3	6	5
Total	-2	-2	16	15	19	24	26
CBO Baseline[a]	797	861	935	995	1,064	1,125	1,201
			Net Interest Outlays				
Administration Baseline	241	239	239	241	241	245	248
Differences							
Economic	b	1	4	3	3	4	5
Technical	-1	2	1	b	-1	-4	-5
Debt service	b	b	1	3	5	7	11
Total	-2	3	7	6	6	7	10
CBO Baseline	240	242	245	247	247	251	258

SOURCE: Congressional Budget Office.

a. Includes offsetting receipts

b. Less than $500 million.

Table 3-5.
CBO Estimate of the President's Budget Without Contingencies (By fiscal year)

	1996	1997	1998	1999	2000	2001	2002
	In Billions of Dollars						
Revenues	1,428	1,477	1,549	1,619	1,690	1,767	1,852
Outlays							
Discretionary							
Defense	264	262	257	259	264	267	279
Domestic and international	269	278	278	273	267	276	293
Violent Crime Reduction Trust Fund	1	3	5	6	6	6	5
Subtotal, discretionary	534	542	540	537	537	550	576
Mandatory							
Social Security	348	365	383	402	422	444	467
Medicare	197	210	228	243	260	279	301
Medicaid	96	107	114	121	128	135	145
Other	235	252	271	278	294	297	311
Subtotal, mandatory	875	935	996	1,044	1,105	1,155	1,224
Offsetting receipts[a]	-75	-85	-79	-81	-87	-92	-111
Net interest	240	242	245	244	242	242	244
Total Outlays	1,574	1,633	1,702	1,744	1,797	1,855	1,934
Deficit	146	156	153	125	108	87	81
	As a Percentage of GDP						
Revenues	19.1	18.8	18.8	18.7	18.6	18.6	18.5
Outlays							
Discretionary							
Defense	3.5	3.3	3.1	3.0	2.9	2.8	2.8
Domestic and international	3.6	3.5	3.4	3.2	2.9	2.9	2.9
Violent Crime Reduction Trust Fund	b	b	0.1	0.1	0.1	0.1	b
Subtotal, discretionary	7.1	6.9	6.6	6.2	5.9	5.8	5.8
Mandatory							
Social Security	4.6	4.7	4.7	4.7	4.7	4.7	4.7
Medicare	2.6	2.7	2.8	2.8	2.9	2.9	3.0
Medicaid	1.3	1.4	1.4	1.4	1.4	1.4	1.4
Other	3.1	3.2	3.3	3.2	3.2	3.1	3.1
Subtotal, mandatory	11.7	11.9	12.1	12.1	12.2	12.1	12.3
Offsetting receipts[a]	-1.0	-1.1	-1.0	-0.9	-1.0	-1.0	-1.1
Net interest	3.2	3.1	3.0	2.8	2.7	2.5	2.4
Total Outlays	21.0	20.8	20.7	20.2	19.8	19.5	19.4
Deficit	2.0	2.0	1.9	1.4	1.2	0.9	0.8

SOURCE: Congressional Budget Office.

a. Includes asset sales.

b. Less than 0.05 percent.

Table 3-6.
CBO Estimate of the President's Budget with Contingencies (By fiscal year)

	1996	1997	1998	1999	2000	2001	2002
	In Billions of Dollars						
Revenues	1,428	1,477	1,549	1,619	1,690	1,775	1,877
Outlays							
Discretionary							
Defense	264	262	257	259	264	267	279
Domestic and international	269	278	278	273	267	276	293
Violent Crime Reduction Trust Fund	1	3	5	6	6	6	5
Unspecified reductions	0	0	0	0	0	-22	-46
Subtotal, discretionary	534	542	540	537	537	528	530
Mandatory							
Social Security	348	365	383	402	422	444	467
Medicare	197	209	227	241	258	276	297
Medicaid	96	107	114	121	128	135	145
Other	235	252	271	278	294	297	311
Subtotal, mandatory	875	933	995	1,042	1,103	1,152	1,220
Offsetting receipts[a]	-75	-85	-79	-81	-87	-92	-117
Net interest	240	242	244	244	242	241	240
Total Outlays	1,574	1,632	1,700	1,742	1,795	1,829	1,874
Deficit	146	155	152	123	105	54	-3
	As a Percentage of GDP						
Revenues	19.1	18.8	18.8	18.7	18.6	18.6	18.8
Outlays							
Discretionary							
Defense	3.5	3.3	3.1	3.0	2.9	2.8	2.8
Domestic and international	3.6	3.5	3.4	3.2	2.9	2.9	2.9
Violent Crime Reduction Trust Fund	b	b	0.1	0.1	0.1	0.1	b
Unspecified reductions	0	0	0	0	0	-0.2	-0.5
Subtotal, discretionary	7.1	6.9	6.6	6.2	5.9	5.5	5.3
Mandatory							
Social Security	4.6	4.7	4.7	4.7	4.7	4.7	4.7
Medicare	2.6	2.7	2.8	2.8	2.8	2.9	3.0
Medicaid	1.3	1.4	1.4	1.4	1.4	1.4	1.4
Other	3.1	3.2	3.3	3.2	3.2	3.1	3.1
Subtotal, mandatory	11.7	11.9	12.1	12.1	12.2	12.1	12.2
Offsetting receipts[a]	-1.0	-1.1	-1.0	-0.9	-1.0	-1.0	-1.1
Net interest	3.2	3.1	3.0	2.8	2.7	2.5	2.4
Total Outlays	21.0	20.8	20.7	20.2	19.8	19.2	18.8
Deficit	2.0	2.0	1.8	1.4	1.2	0.6	b

SOURCE: Congressional Budget Office.

a. Includes asset sales.

b. Less than 0.05 percent.

differences are projections in Medicaid spending. Although CBO and the Administration are basically in agreement over projections for current services for Medicare, CBO projects that greater participation rates in Medicaid, among other factors, will cost an additional $7 billion over the President's estimate in 2002. CBO also projects that agriculture programs will cost more than the Administration projects. By 2002, lower export demand and lower prices for agricultural commodities are projected to boost spending on farm price supports by $4 billion more than assumed by the President. The largest single difference between the two baselines occurs in 1997 as updated estimates based on recent trends in spectrum auctions pushes CBO's projections on auction receipts $10 billion above the Administration's.

Baseline differences in net interest, mainly resulting from debt-service costs because of different deficit projections, cause CBO's estimate of net interest to be $10 billion greater than the Administration's in 2002.

Estimates of the Budget Aggregates

Under the President's budget, revenues increase from $1.4 trillion to $1.9 trillion, while outlays rise from $1.6 trillion to $1.9 trillion from 1996 through 2002 (see Table 3-5 on page 66). As a percentage of GDP, however, both revenues and outlays decline throughout the projection period. Revenues as a share of GDP drop around half of a percentage point to 18.5 percent of GDP, while outlays decline a point and a half to 19.4 percent of GDP. If the contingent policies are included, both revenues and outlays would account for 18.8 percent of GDP in 2002 (see Table 3-6 on page 67).

Discretionary spending bears the brunt of the President's cuts, maintaining a relatively constant level of outlays through 2000, before rising to $576 billion in 2002. If the contingencies are invoked, however, discretionary spending would drop to $530 billion in 2002--a 23 percent cut in real terms from its 1995 level.

Relative to a freeze at the 1996 levels of appropriations, discretionary spending would be higher under the President's budget. However, the gap between the two would be small if the contingencies were invoked. Under the President's policies (including the contingencies), discretionary outlays would only be $9 billion above the freeze level in 2002.

The growth in mandatory spending would be relatively tame over the seven- year period. It creeps up from 11.7 percent of GDP in 1996 to 12.3 percent in 2002 (12.2 percent with contingencies included). The combination of declining deficits and lower interest rates as a result of balancing the budget would keep net interest outlays steady at around $240 billion each year through 2002.

The Administration's basic set of policies would reduce the deficit from 2 percent of GDP in 1996 to less than 1 percent in 2002. If the contingent policies are included, a small surplus would result.

Chapter Four

The Long-Term Budget Outlook

The outlook for the deficit appears relatively benign over the next decade. After declining for the past four years, the deficit is expected to creep up as a share of gross domestic product from 1996 to 2006 under current laws and policies. Although the increase is fairly modest, it is by no means the end of the story, because a deeper and more fundamental problem is coming over the budgetary horizon.

Around 2010, members of the huge baby-boom generation will start to retire. They will also increasingly begin to draw benefits from the government's three biggest entitlement programs--Social Security, Medicare, and Medicaid. At the same time, the growth of revenues will be squeezed because the proportion of people working and paying taxes will shrink. As a result, deficits will start to mount rapidly.

Financing the growth in entitlements through ever-increasing deficits is not a viable option. Indeed, the shortfalls projected for future years are so large that they could put an end to the upward trend in living standards that the nation has long enjoyed. Thus, current U.S. budget policies cannot be sustained indefinitely without risking substantial economic damage. At some point, taxes will have to be raised or the growth of spending curbed.

The conclusions reached here are derived from a model that the Congressional Budget Office has developed for projecting the budget outlook over several decades and for examining the effects of the deficit on interest rates and economic growth. Obviously, projections of future events are subject to considerable uncertainty. To get a sense of the likely range of outcomes, CBO developed its projections by using a broad spectrum of possible assumptions and conditions. Although the exact outcomes are sensitive to changes in demographics, economic factors, and the interpretation of policy, the basic conclusion holds: the nation's current budget policies are unsustainable even under optimistic assumptions, including favorable demographic trends and historically high rates of productivity growth. The chances are small that the long-term budgetary problem will resolve itself without action by policymakers.

The Aging of the U.S. Population

The proportion of elderly people in the U.S. population will increase substantially in coming decades (see Table 4-1). According to the Social Security Administration, the number of people age 65 and older will more than double between 1990 and 2030, whereas the number of working-age people, 20 to 64 years old, will increase by only 25 percent. Consequently, over the next several decades, each worker's taxes will support a growing number of retirees.

Table 4-1.
Population of the United States by Age, Calendar Years 1950-2050

Age Groups	1950	1970	1990	Projected 2010	2030	2050
			In Millions			
Less than 20 Years Old	54	81	75	82	83	84
20 to 64 Years Old	93	113	153	186	192	202
65 Years and Older	13	21	32	40	68	75
Total	159	215	260	307	343	360
			As a Percentage of Total Population			
Less than 20 Years Old	34	38	29	27	24	23
20 to 64 Years Old	58	53	59	60	56	56
65 Years and Older	8	10	12	13	20	21
Total	100	100	100	100	100	100
Memorandum:						
Number of People Ages 20 to 64 for Each Person Age 65 or Older	7.3	5.4	4.8	4.7	2.8	2.7

SOURCE: Congressional Budget Office using data from the Social Security Administration.

Why Will the Number of Retirees Increase?

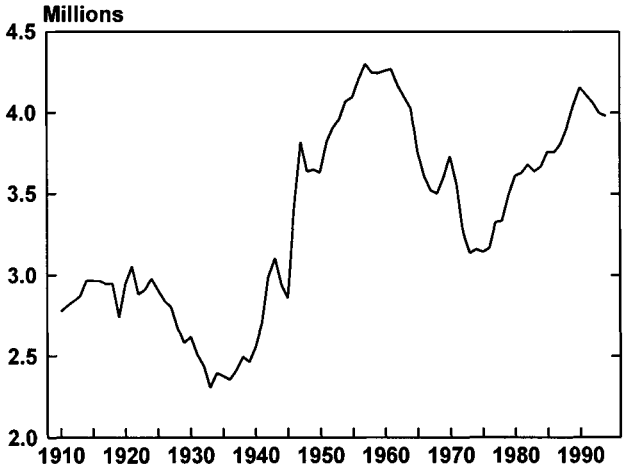
The expected increase in the number of elderly people stems from two factors: the baby-boom generation is aging, and people are living longer. Before World War II, the number of births in the United States slid to a low point (see Figure 4-1). Babies born during the Depression and during the war constitute the population reaching retirement age within the next decade. Their small numbers provide a respite in the pressure on the budget for the next 10 years.

After World War II, the number of births soared, which substantially changed the demographic picture. Between 1956 and 1961, births jumped to more than 4.2 million each year and did not drop below 4 million until 1965. Babies born between 1946 and 1964 have been labeled the baby-boom generation, and they will begin to draw Social Security benefits in 2008, when the oldest of them first reach age 62.[1] After the mid-1960s, the number of births dropped even more and did not reach 4 million again until 1989. Because the baby boom was followed by a baby bust, the retirement of the baby boomers will significantly reverse the currently favorable impact of demographics on the budget.

The second reason for the projected increase in the number of retirees is that elderly people are expected to live longer than they did in the past. In 1970, demographers expected the average person at birth to live about 71 years. By 1990, the average life span had increased to 75 years; by 2010, it will increase to 78 years. Those gains in longevity reflect such factors as increased education, healthier living, and improvements in the quality of medical care for older people. Of particular relevance for entitlement

1. The normal retirement age for receiving Social Security benefits is now 65, but it is scheduled under current law to start increasing in 2000, eventually reaching age 67.

Figure 4-1.
Number of Births in the United States, 1910-1994



SOURCE: Congressional Budget Office using data from the National Center for Health Statistics.

spending is that a larger proportion of the adult population is reaching the age of 65, and life expectancy at that age has increased by two years since 1970--a 14 percent increase.

Slowing Labor Force Growth

The growth of the labor force will slow significantly when the baby boomers retire because it will have to rely on the smaller birth cohorts that followed the boomers. In addition, the rate of participation of women in the labor force, which escalated sharply in the 1970s and 1980s, is likely to grow less rapidly in the future as their participation rate approaches that of men. The Social Security Administration projects that the average rate of growth of the labor force will slow from the 1.9 percent per year it achieved from 1960 to 1989 to 0.9 percent annually for the 1989-2010 period and 0.2 percent between 2010 and 2050.

Like all long-range projections, those for the labor force are highly uncertain. Nevertheless, the relatively high rate of growth of the labor force in the past 35 years is unlikely to continue. Higher rates of immigration could prevent some of the expected deceleration, but for the labor force to continue to grow through 2030 at even 1 percent a year, its average annual rate since 1990, rates of immigration would have to greatly exceed those seen early in this century.

Despite those uncertainties, the overall message is clear: with more retirees and little growth in the number of workers, the ratio of workers to retirees will plummet in coming decades. In 1950, for each person age 65 or older, there were 7.3 people in the working years from 20 to 64. By 1990, that ratio had dropped to 4.8 to 1; by 2030, there may be only 2.8 people of working age for every person over 65. The United States is not alone in facing these problems: populations are graying in other industrialized countries, too (see Box 4-1).

How Will Demographics Affect the Budget?

Both the outlay and revenue sides of the federal ledger will be strained as the ratio of workers to retirees deteriorates. Outlays for government programs that provide retirement and health benefits to the elderly will rise substantially as the number of people eligible to receive those benefits shoots up. At the same time, revenues will be pinched because the number of people working and paying taxes will grow more slowly. Moreover, as the growth of the labor force slows, economic growth will taper off, causing the growth of taxable nonlabor income, such as interest and dividends, to slow as well. Of particular concern are Social Security and Medicare's Hospital Insurance program. (Because those entitlements are now structured to rely on payroll taxes, the growth of labor earnings is one of the keys to their financial health.) In addition, the slowdown in growth of GDP will affect general revenues, which finance Medicaid and Medicare's Supplementary Medical Insurance program, among others.

The projected mismatch between spending and revenues will be a serious one. For example, outlays for Social Security and Medicare's Hospital Insurance program are projected to grow from 6.4 percent of GDP in 1995 to 10.7 percent in 2050. At the same time, the inflows of funds (excluding interest) for those two programs are projected to fall from 6.7 percent of GDP in 1995 to 6.5 percent in 2050. So al-

Box 4-1.
Aging of Populations and Its Effect on Government Budgets in Other Countries

Most developed countries will find their populations rapidly aging in the near future (see the table below). In 1990, elderly dependency ratios--people age 65 and over as a percentage of the population ages 20 to 64--for most industrialized countries clustered around 20 percent. But by 2030, those ratios are projected to more than double in Japan, Germany, France, Italy, and Canada. The aging of the population in the United Kingdom, where the elderly dependency ratio started in 1990 at a relatively high level, is projected to be less pronounced; nonetheless, the ratio reaches over 40 percent by 2030. Beyond 2030, projections call for elderly dependency ratios to stabilize in all countries except Japan and Italy, where further increases of more than 10 percentage points are expected. Compared with other countries, the United States is in a relatively favorable position.

Aging will have a major impact on the budgets of most of the major industrialized countries, although the consequences differ depending on the starting position of each nation's public debt, its policies for the elderly, and the nature of the demographic changes. In particular, the liabilities that a government has incurred through public pension systems and spending for public health dictate the effects that an aging population will have on its budget. For example, Japan is likely to see a steep rise in its overall budget deficit and a rapid accumulation of net debt from 2005 onwards, whereas net debt in Italy will begin to increase sharply after 2015. In contrast, both the United Kingdom and Canada are likely to experience falling ratios of net debt to output, reflecting relatively favorable pension policies.[1]

1. For further information, see Willi Leibfritz and others, *Ageing Populations, Pension Systems, and Government Budgets: How Do They Affect Saving?* OECD Economics Department Working Paper No. 156 (Paris: Organization for Economic Cooperation and Development, 1995).

Elderly Dependency Ratios
(In percent)

	1990	2010	2030	2050
Japan	19.3	35.8	48.7	60.1
Germany	23.6	32.9	53.8	57.5
France	23.4	27.2	43.1	48.4
Italy	24.3	33.8	52.4	66.7
United Kingdom	26.7	28.6	42.8	45.8
Canada	18.6	22.9	43.6	46.5
United States	20.8	21.3	35.7	37.0

SOURCE: Congressional Budget Office using data from E. Bos and others, *World Population Projections, 1994-1995* (Washington, D.C.: International Bank for Reconstruction and Development/The World Bank, 1994), and from the Social Security Administration.

though inflows exceed spending for those programs now, that surplus will disappear, and a large gap between spending and inflows will open up. By 2050, outlays are projected to exceed inflows by about 70 percent.[2]

2. All numbers are taken from Board of Trustees, Federal Old-Age and Survivors and Disability Insurance Trust Funds, *1995 Annual Report* (April 3, 1995).

The Continued Rapid Growth of Federal Health Expenditures

Rapidly rising expenditures per beneficiary in the Medicare and Medicaid programs will present a par-

ticularly serious challenge to the budget in coming years unless significant steps are taken to reduce their rate of growth. Federal spending for health care has been growing at a fast pace for many years. Over the past decade, expenditures for Medicare have increased at an annual rate of about 10 percent; Medicaid spending has risen at a rate of about 15 percent (see Table 4-2). Despite the apparent recent success of private insurers in controlling their mounting costs, the federal government thus far has been unable to apply the brakes to its health spending. CBO projects that outlays for Medicare and Medicaid will continue to rise by almost 10 percent a year over the next decade. With such growth, Medicare and Medicaid spending is taking up an increasing share of national income: from 1.3 percent of GDP in fiscal year 1975 to 3.7 percent in 1995. CBO projects that the share will rise to 5.9 percent in fiscal year 2006.

Although some of that growth comes from an expansion in the number of beneficiaries, most of it is attributable to continuing increases in expenditures per beneficiary at rates well in excess of inflation. Unlike Social Security, whose real (inflation-adjusted) spending for each beneficiary is set legislatively by a formula that depends on a person's wage history, traditional Medicare and Medicaid are open-ended entitlements in the sense that they place no dollar limit on the benefits they provide to each participant. CBO projects that over the next decade, federal spending per enrollee in Medicare and Medicaid will increase at more than twice the rate of

Table 4-2.
Average Annual Rates of Growth in Payments by Medicare and Medicaid (By fiscal years, in percent)

	1970-1975	1975-1980[a]	1980-1985	1985-1990	1990-1995	1995-2006[b]
			Medicare			
Growth in Payments by the Federal Government[c]	16	18	15	9	11	9
Growth in the Number of Enrollees[d]	4	3	2	2	2	1
Growth in Federal Payments per Enrollee	12	15	13	7	8	8
			Medicaid			
Growth in Payments by the Federal Government[e]	22	15	9	13	17	10
Growth in the Number of Beneficiaries	9	0	0	3	7	2
Growth in Federal Payments per Beneficiary	12	15	9	9	9	7
Memorandum:						
Growth in the CPI-U	7	9	6	4	3	3
Growth in Nominal GDP	9	11	9	7	5	5

SOURCE: Congressional Budget Office based on data from the Health Care Financing Administration; Department of Commerce, Bureau of Economic Analysis; and Department of Labor, Bureau of Labor Statistics.

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

a. Growth rates account for the change in the fiscal year that occurred in 1976.

b. Projected.

c. Excludes Medicare premium collections.

d. Based on enrollees in Medicare's Hospital Insurance program.

e. Includes administrative costs and payments to disproportionate share hospitals.

inflation, as measured by the consumer price index for all urban consumers.

The growth in expenditures per beneficiary in those programs stems from increases in the number and quality of services provided for a spell of illness and such factors as the expanded use of expensive medical technology. Those factors will continue to increase the burden of health costs in the years ahead. The trustees of Medicare's Hospital Insurance Trust Fund assume that Medicare costs per beneficiary will slow significantly over the next two decades and that after 2020, those costs will grow no faster than the economy. That slowdown would require the growth of costs per beneficiary to drop substantially. Whether that decline would occur without an explicit change in law is unclear. Even so, the trustees project that total Medicare spending will continue to climb sharply, rising from 2.6 percent of GDP in 1995 to 8.1 percent in 2050.

The Long-Term Effects of an Aging Population

What would happen if no changes were made to U.S. budget policy in the face of the impending retirement of the baby boomers? CBO addressed that hypothetical question by projecting future budget revenues and expenditures under various economic and demographic conditions and examining their impact on the federal deficit and the economy over the next several decades. The approach used by CBO is broadly similar to that taken by the General Accounting Office and the Office of Management and Budget in considering the same question.[3]

Developing computer models of the long-term implications of existing laws and policies requires making assumptions about the basic nature of policy in the absence of change. For the period from 1996 to 2006, CBO assumed in its baseline projections that taxes and mandatory spending would follow current law and that discretionary outlays would grow with inflation, subject to their statutory caps (see Chapter 2).

But extending such detailed assumptions over the long run is hard to justify. For one thing, techniques that are suitable for preparing 10-year budget projections are not appropriate for the very long run. Moreover, for the annually appropriated discretionary programs, future levels of spending are not specified in statute. For example, does current defense policy call for constant nominal levels, for expenditures to grow with inflation, or for expenditures to grow by more than inflation over the next 50 years? Obviously, the answer to that question depends on such factors as the goals of U.S. foreign policy and changing defense technology, which cannot be known today.

To allow for the different possibilities, CBO prepared two sets of projections. One assumes that discretionary programs after 2006 will grow at the rate of inflation, which holds their real value constant in today's dollars. The other assumes that discretionary programs will keep pace with the growth of the economy, which allows the amount spent on the discretionary accounts to rise with both inflation and real economic growth. Holding the growth of discretionary programs to the rate of inflation--rather than letting them grow with the economy--implies that spending for those programs as a share of GDP would decline over the projection period.

Budget Assumptions

The assumptions underlying CBO's projections of spending and revenues for the most important budget categories are briefly described below. Those assumptions formed a base scenario; varying them produced alternative scenarios. For 1996 to 2006, spending and revenues followed the medium-term projections presented in Chapter 2. For the years after 2006, CBO combined the official long-term projections (with some adjustments) for the Social Security, Medicare, and federal retirement programs prepared by other government organizations with some relatively neutral assumptions about spending

3. General Accounting Office, *Budget Policy: Prompt Action Necessary to Avert Long-Term Damage to the Economy* (June 1992), and *The Deficit and the Economy: An Update of Long-Term Simulations* (April 1995); Office of Management and Budget, *Budget of the United States Government, Fiscal Year 1997: Analytical Perspectives* (March 1996), pp. 20-25.

and revenues in the other categories of the budget. Because CBO's analysis focuses on macroeconomic relationships, its long-term projections use the budget categories defined by the national income and product accounts (see Appendix D for details).

Retirement Programs. CBO based its projections for Social Security on the long-term projections prepared by the trustees of the Old-Age and Survivors and Disability Insurance (OASDI) Trust Funds. However, CBO adjusted those projections for differences between its economic assumptions and those of the trustees.[4] Because CBO projected much lower rates of inflation than did the trustees, the level of Social Security outlays in its projections is much lower than that in the trustees' projections. But when outlays are expressed as a share of GDP, the differences between CBO's numbers and those of the trustees are hardly noticeable because low inflation also reduces nominal GDP. Spending for federal civilian and military retirement was based on the projections prepared by the Office of Personnel Management and the Department of Defense, after adjusting for differences in assumptions about the growth of real wages.

Health Programs. CBO based its projections of Medicare outlays on the forecasts prepared by the trustees of the Hospital Insurance Trust Fund. Those forecasts were also adjusted for differences in economic assumptions. (Again, those differences are small when spending is expressed as a share of gross domestic product.)

CBO assumed that Medicaid spending would grow with the demands for Medicaid by its client population and with federal health care expenditures per beneficiary. Growth in spending per enrollee of a given age was assumed to decline gradually to the rate of growth of hourly wages over the 2006-2020 period and then to grow with them after 2020. That assumption is roughly consistent with the trustees' assumptions about Medicare.

Other Transfers, Grants, and Subsidies. CBO assumed that spending for other domestic transfers and grants would grow with demographic demands, inflation, and labor productivity. Domestic transfers in this case include food stamps, Supplemental Security Income, unemployment insurance, the earned income credit, and veterans' benefits, among other things; grants include Aid to Families with Dependent Children and other federal programs that transfer funds to state and local governments. Transfer payments to foreigners and other subsidies were assumed to grow with the economy.

Federal Expenditures for Defense and Nondefense Goods and Services. These expenditures are largely discretionary, and funds for them are appropriated annually. As noted, no one quite knows how to specify those spending levels for a period as long as half a century. To deal with that uncertainty, CBO used two alternative assumptions about discretionary spending: it would grow either at the same rate as inflation or at a rate that reflected both inflation and real growth of the economy.

Receipts. CBO assumed that federal taxes would grow at roughly the same rate as the economy, except for taxes collected on income from interest on Treasury securities (which is part of the income tax base, not GDP). As a technical matter, revenue growth also reflects growth in Supplementary Medical Insurance (Part B of the Medicare program), some of which enrollees finance through premiums that are treated as receipts in the NIPAs. Absent an increase in the share of income devoted to interest or Medicare premiums, tax revenues were assumed to remain a stable share of the economy. That assumption is not an exact extrapolation of current law, but it is not much different from CBO's 10-year baseline revenue projections, which show little change in the share of GDP claimed by revenues after 2000. Moreover, because the revenue share has been relatively stable over many years, CBO's assumption is consistent with long-term historical trends.

Economic Assumptions in the Base Scenario

CBO developed its projections of the economy using a standard model of economic growth. In that model, the production of goods and services in the economy, as measured by GDP, depends on hours of labor, capital, and total factor productivity. The key interest

4. In the base scenario, CBO used the same demographic assumptions as did the trustees.

rate in the model is the overall rate of return from capital after adjusting for inflation and depreciation, and it is determined by the amount of capital relative to labor in the economy. (Everything else being equal, the higher the level of capital, the lower is the rate of return.) In all of its projections, CBO assumed that inflation after 2006 would remain steady at 2.7 percent, the rate of growth of the chain-type GDP price index expected early in the next decade (see Chapter 1).

CBO's model also makes provision for the way the nation's debt (the total amount that the government explicitly owes) interacts with the economy. Federal deficits crowd out capital investment, which slows economic growth and raises interest rates. As a result, tax revenues decline, and the cost of servicing the debt goes up. Those economic feedbacks between the deficit and the economy can significantly increase the size of the deficit--in essence, impose a fiscal penalty rather than a dividend. To identify the contribution of those feedback effects, CBO presents its long-term analysis in two parts: the first assumes that the deficit has no effect on the economy; the second includes the feedbacks between the two.

Economic Growth. From 1996 to 2006, the base scenario follows the medium-term projections presented in Chapter 1. For the years after 2006, CBO used the following assumptions:

- The annual growth in hours of work slows to a crawl as the baby boomers leave the workforce or otherwise reduce their average hours of work. As a result, the annual growth of total hours in the nonfarm economy drops from its average rate of 1.6 percent from 1979 to 1989 to only 0.1 percent between 2020 and 2030.[5]

- Growth of capital depends on whether the projection includes economic feedbacks. In projections without economic feedbacks, capital grows at the same rate as the overall economy after 2006, and rising deficits have no effect on the formation of capital or economic growth. By contrast, in projections with economic feedbacks, burgeoning deficits crowd out capital investment and slow the growth of the capital stock. The effect of the deficit on capital investment in those projections, however, is assumed to be partially offset by increased private saving and by borrowing from abroad.

- An adjusted measure of total factor productivity (TFP), which is the growth in output that is not attributable to growth in either capital or labor, rises 0.7 percent each year--its average pace from 1952 to 1989 (two years in which the economy was operating at full capacity).[6]

Those assumptions, taken together, determine the underlying, or potential, growth of the economy. GDP also varies for cyclical reasons, but that variation averages out over time and is not considered further in this chapter.

Using those assumptions, CBO projected the economy's long-term growth. If economic feedbacks are not included, the annual growth of real GDP (neglecting cyclical factors) would drop from 2.1 percent in 2005 to 1.3 percent in 2030. That decline reflects the slowdown in the growth of total labor hours. In the projections that include feedbacks, the decline in the growth of real GDP can be even sharper when deficits reduce the economy's potential for growth.

Economists often use GDP to put a common scale on budget revenues and outlays over time, and CBO has followed that practice in this chapter. But for measuring real economic income per person, CBO used the concept of gross national product, or GNP. Unlike GDP, gross national product does not include the net dividend and interest payments owed to foreigners who invest in the United States; as a result, it is a better measure than GDP of the income actually available to the U.S. population. In the projections without economic feedbacks, the growth of GNP matches that of GDP quite closely. However, in the projections with feedbacks, GNP and GDP di-

5. The OASDI trustees' projection implies a similar slowing in the growth of hours.

6. CBO adjusted the TFP published by the Commerce Department so that advances in computer power were recorded as gains to TFP, not as increases in the size of the capital stock. That adjustment allowed CBO to avoid developing projections for computer prices, which have been falling steadily for years.

Table 4-3.
Projections of the Deficit and Debt Held by the Public, Using the Assumptions of the Base Scenario, Calendar Years 1995-2050 (As a percentage of GDP)

	Preliminary 1995[a]	2000	2005	2010	2015	2020	2025	2030	2050
Discretionary Spending Grows with Inflation After 2006									
Without Economic Feedbacks									
NIPA deficit	2	3	3	4	6	8	10	12	19
Debt held by the public	51	53	57	64	77	97	124	157	311
With Economic Feedbacks									
NIPA deficit	2	3	3	4	6	9	15	26	n.c.
Debt held by the public	51	53	57	63	78	104	148	229	n.c.
Discretionary Spending Grows with the Economy After 2006									
Without Economic Feedbacks									
NIPA deficit	2	3	3	5	7	9	12	15	24
Debt held by the public	51	53	57	65	81	106	139	180	373
With Economic Feedbacks									
NIPA deficit	2	3	3	5	7	11	19	37	n.c.
Debt held by the public	51	53	57	65	83	116	174	293	n.c.

SOURCE: Congressional Budget Office.

NOTES: Projections without economic feedbacks assume that deficits do not affect either interest rates or economic growth. Projections with feedbacks allow deficits to push up interest rates and lower the rate of economic growth.

NIPA = national income and product account; n.c. = not computable (debt would exceed levels that the economy could reasonably support).

a. Consistent with the first official estimate for 1995 published on March 4, 1996.

verge significantly because deficits are partly financed by additional borrowing from foreigners.

Interest Rates. Like CBO's projections of economic growth, its projections of interest rates also depend on the presence or absence of economic feedbacks from the growth of federal debt. If feedbacks are not included, interest rates on government securities fall slightly, as the slower growth of hours increases the ratio of capital to labor.[7] By contrast, rates can climb sharply when the economic feedbacks from rising federal debt are included. As federal debt displaces private capital, capital becomes scarcer, and the real return from capital rises--which causes other interest rates to climb as well. CBO assumed that real interest rates would rise point for point with increases in the real return from capital. In some of its projections, CBO examined the effects of balancing the budget. In those projections, CBO assumed that the Federal Reserve would soften the short-term effects on the economy of balancing the budget by working to reduce short-term rates. Over time, the monetary stimulus from the Federal Reserve would be withdrawn, and interest rates in the long run would be determined solely by the amount of capital relative to labor.

7. That projection is somewhat optimistic because the retirement of the baby-boom generation is likely to cause a decline in private saving that will put upward pressure on interest rates.

Table 4-4.
Projections of Federal Receipts and Expenditures, Using the Assumptions of the Base Scenario Without Economic Feedbacks, Calendar Years 1995-2050 (As a percentage of GDP)

	Preliminary 1995[a]	2000	2005	2010	2015	2020	2025	2030	2050
Discretionary Spending Grows with Inflation After 2006									
NIPA Receipts	20	20	20	20	20	20	20	20	20
NIPA Expenditures									
Federal consumption expenditures	6	6	5	5	4	4	4	4	3
Transfers, grants, and subsidies									
Social Security	5	5	5	5	5	6	6	7	7
Medicare	3	3	4	4	5	6	7	7	8
Medicaid	1	2	2	2	3	3	3	3	4
Other	5	5	4	4	4	4	4	4	4
Net interest	3	3	3	3	4	5	6	8	14
Total	23	22	23	24	26	28	30	32	40
NIPA Deficit	2	3	3	4	6	8	10	12	19
Debt Held by the Public	51	53	57	64	77	97	124	157	311
Discretionary Spending Grows with the Economy After 2006									
NIPA Receipts	20	20	20	20	20	20	20	20	20
NIPA Expenditures									
Federal consumption expenditures	6	6	5	5	5	5	5	5	5
Transfers, grants, and subsidies									
Social Security	5	5	5	5	5	6	6	7	7
Medicare	3	3	4	4	5	6	7	8	8
Medicaid	1	2	2	2	3	3	3	3	4
Other	5	5	4	4	4	4	4	4	4
Net interest	3	3	3	3	4	5	7	8	16
Total	23	22	23	24	27	29	32	35	44
NIPA Deficit	2	3	3	5	7	9	12	15	24
Debt Held by the Public	51	53	57	65	81	106	139	180	373
Memorandum:									
Gross Domestic Product (Trillions of dollars)	7.2	9.2	11.6	14.6	18.1	22.1	26.9	32.8	72.1

SOURCE: Congressional Budget Office.

NOTES: Projections without economic feedbacks assume that deficits do not affect either interest rates or economic growth.

NIPA = national income and product account.

a. Consistent with the first official estimate for 1995 published on March 4, 1996.

Projections Without Economic Feedbacks

The assumptions described above are the key elements in the long-term projections, and because of their critical importance, a wide range of alternative assumptions will also be considered. But to keep the analysis relatively simple, the first long-term projections CBO presents use the assumptions of the base scenario without considering how deficits would adversely affect the economy--that is, without incorporating economic feedbacks.

Even without those feedbacks, the outlook for the budget deficit is gloomy in the early decades of the 21st century. Without changes in budget policy, the deficit would increase to relatively high levels by 2030. Under either assumption about discretionary spending (that it rises either with the rate of inflation or at the same rate as the economy), the deficit would climb from 2 percent of GDP in 1995 to between 12 percent and 15 percent in 2030 (see Table 4-3 on page 77). Moreover, the deficit would continue to rise rapidly in the years thereafter, surging to between 19 percent and 24 percent of GDP in 2050. By any standard, the deficit would be exceptionally large, even before considering the effects of economic feedbacks. In fact, since the nation's founding, the U.S. deficit has exceeded 10 percent of GDP for only a few brief periods--and those occurred during major wars.

In turn, the total amount that the government owed would soar to historic levels. Since 1790, the United States has let its federal debt exceed 100 percent of GDP only once for a brief period during World War II, and until the 1980s, the ratio of debt to GDP had never risen significantly during a period of peace and prosperity. But under the base scenario, the national debt would surge from 51 percent of GDP in 1995 to 157 percent in 2030 if discretionary spending grew with inflation. If it grew with the economy, the debt would burgeon to 180 percent of GDP. Because the debt would be forever growing faster than the economy, it would ultimately become unsustainable.

Although deficits need not reduce economic growth if the funds they provide have been used to finance productive government investment, little of the projected growth in federal debt would be used for that purpose. Instead, the growth in borrowing would go largely to increase consumption by elderly people and to pay interest on the debt (see Table 4-4). In CBO's projections, outlays for Social Security would increase from 5 percent of GDP in 1995 to 7 percent in 2050; Medicare spending would rise from 3 percent of GDP in 1995 to 8 percent in 2050. Federal Medicaid spending would move upward from 1 percent of GDP in 1995 to about 4 percent in 2050, reflecting the growth in the cost of health care per enrollee and the increasing number of elderly people who need nursing home care. Revenues and other noninterest outlays would remain a relatively constant share of GDP.

Projections with Economic Feedbacks

The long-term budget outlook becomes even bleaker when the projections include the effect of the deficit on the economy. With discretionary outlays growing with inflation, the federal deficit would increase to 26 percent of GDP in 2030 (see Table 4-5). And if discretionary spending grew with the economy, the federal deficit would climb to 37 percent of GDP.

Those increases would clearly push federal debt to unsustainable--indeed, unthinkable--levels. In the end, they would greatly weaken the economy and end the long-term upward trend in real GNP per capita that the United States has enjoyed over its history (see Figure 4-2). If discretionary outlays grew with inflation, federal debt would rise to more than twice the size of GDP by 2030; if they grew with the economy, federal debt would surge to almost three times GDP. With federal debt growing so rapidly, the economy would enter a period of accelerating decline.

CBO's projections show the economy responding smoothly to the rapidly rising debt; in actuality, however, those adjustments would probably be much more disorderly. Foreign investors might suddenly stop investing in U.S. securities, causing the exchange value of the dollar to plunge, interest rates to shoot up, and the economy to tumble into a severe recession. (Those developments have occurred in some countries with rapidly growing government

Table 4-5.
Projections of Federal Receipts and Expenditures, Using the Assumptions of the Base Scenario with Economic Feedbacks, Calendar Years 1995-2050 (As a percentage of GDP)

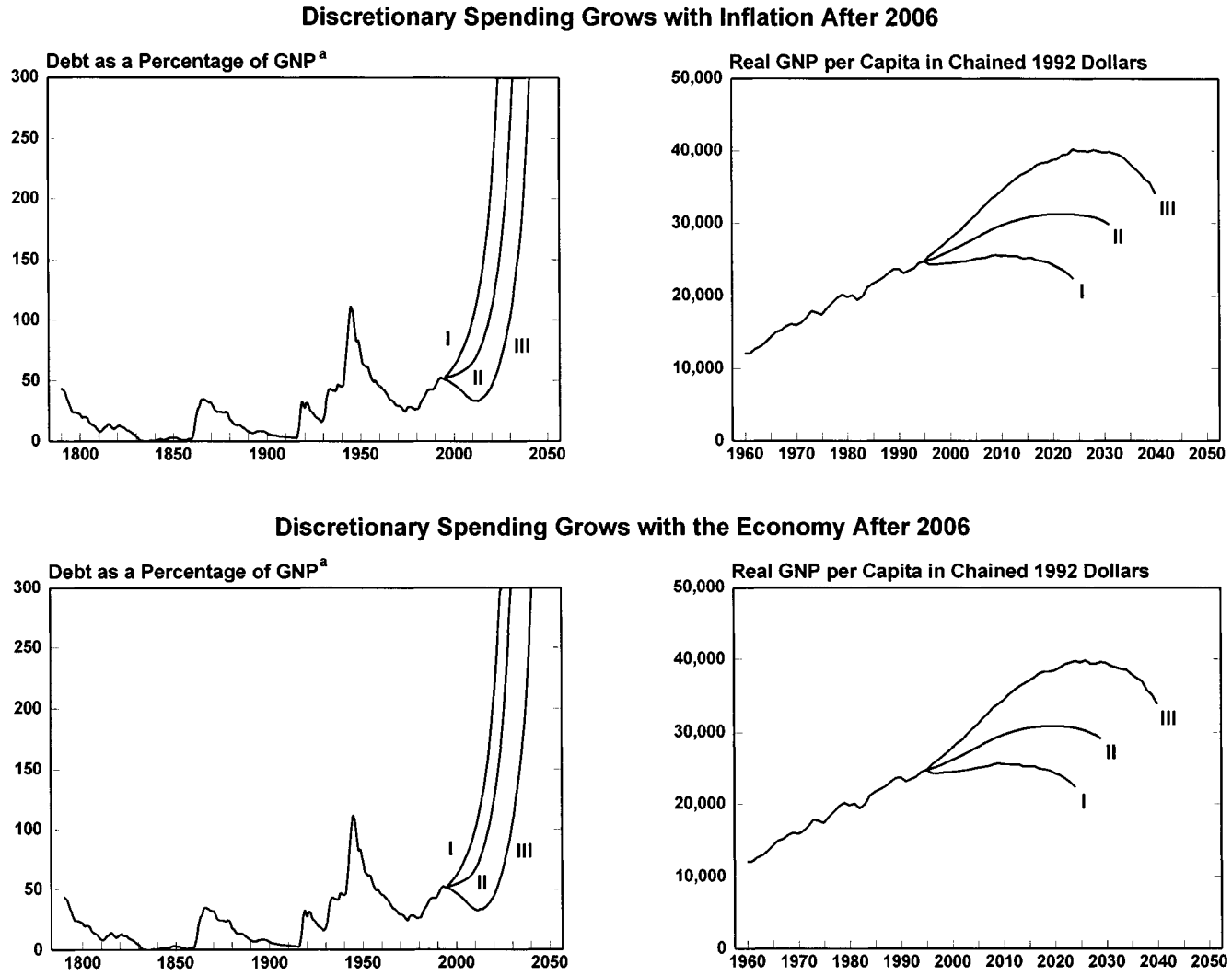
	Preliminary 1995[a]	2000	2005	2010	2015	2020	2025	2030	2050
Discretionary Spending Grows with Inflation After 2006									
NIPA Receipts	20	20	20	20	20	20	20	21	n.c.
NIPA Expenditures									
Federal consumption expenditures	6	6	5	5	4	4	4	4	n.c.
Transfers, grants, and subsidies									
Social Security	5	5	5	5	5	6	7	7	n.c.
Medicare	3	3	4	4	5	6	7	8	n.c.
Medicaid	1	2	2	2	3	3	3	3	n.c.
Other	5	5	4	4	4	4	4	4	n.c.
Net interest	3	3	3	3	4	6	10	20	n.c.
Total	23	22	23	24	26	29	35	47	n.c.
NIPA Deficit	2	3	3	4	6	9	15	26	n.c.
Debt Held by the Public	51	53	57	63	78	104	148	229	n.c.
Memorandum:									
Gross Domestic Product (Trillions of dollars)	7.2	9.2	11.6	14.6	17.9	21.5	25.3	29.0	n.c.
Discretionary Spending Grows with the Economy After 2006									
NIPA Receipts	20	20	20	20	20	20	20	21	n.c.
NIPA Expenditures									
Federal consumption expenditures	6	6	5	5	5	5	5	5	n.c.
Transfers, grants, and subsidies									
Social Security	5	5	5	5	5	6	7	8	n.c.
Medicare	3	3	4	4	5	6	7	8	n.c.
Medicaid	1	2	2	2	3	3	3	3	n.c.
Other	5	5	4	4	4	4	4	4	n.c.
Net interest	3	3	3	3	5	7	13	31	n.c.
Total	23	22	23	24	27	31	39	58	n.c.
NIPA Deficit	2	3	3	5	7	11	19	37	n.c.
Debt Held by the Public	51	53	57	65	83	116	174	293	n.c.
Memorandum:									
Gross Domestic Product (Trillions of dollars)	7.2	9.2	11.6	14.6	17.8	21.2	24.7	27.7	n.c.

SOURCE: Congressional Budget Office.

NOTES: Projections with economic feedbacks allow deficits to push up interest rates and lower the rate of economic growth. NIPA = national income and product account; n.c. = not computable (debt would exceed levels that the economy could reasonably support).

a. Consistent with the first official estimate for 1995 published on March 4, 1996.

Figure 4-2.
Projections of Federal Debt and Real GNP per Capita, Using the Assumptions of the Base Scenario with Economic Feedbacks



SOURCE: Congressional Budget Office.

NOTES: Simulations I, II, and III are based on alternative assumptions about population and productivity growth (see Box 4-2 on page 86). Simulation II is the base scenario, which assumes that the population grows according to the midrange path of the Social Security Administration and that total factor productivity grows at 0.7 percent annually. Simulations I and III are defined so that two-thirds of the 750 alternative simulations fall between them. Thus, the chance of an outcome better than scenario III is about 15 percent; correspondingly, the chance of an outcome worse than scenario I is also about 15 percent.

The projections of real GNP per capita are truncated when debt held by the public exceeds 300 percent of GNP.

a. Based on the definition of GNP before the January 1996 benchmark revision.

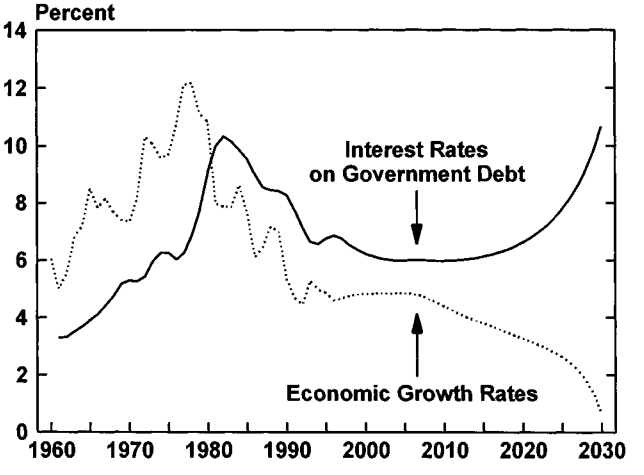
debt.) Higher levels of debt might also ignite fears of inflation in the nation's financial markets, which would push up interest rates even further. Amid the anticipation of declining profits and rising rates, the stock market might collapse, and consumers, fearing economic catastrophe, might suddenly reduce their spending.[8] Moreover, severe economic problems in this country could spill over to the rest of the world and might seriously affect the economies of U.S. trading partners, undermining international trade.

But those disturbing projections are not predictions of what will inevitably happen. Policymakers would surely take action before the economy was driven into such dire straits. As Herbert Stein, former Chairman of the Council of Economic Advisers, once said, "If something cannot go on forever, it will stop." Nonetheless, the projections illustrate what might occur if no changes were made to policy--and demonstrate the importance of controlling the growth of federal debt before it gets out of hand.

Why Economic Feedbacks Worsen the Outlook. Economic feedbacks intensify the nation's long-term budgetary problems for two reasons. First, the cost of interest on the debt would soar as interest rates went up and the stock of federal debt kept getting larger. Because interest costs would be growing continually faster than the economy's income, they would eventually reach an unsustainable level. Indeed, the growth of debt would accelerate out of control as the government attempted to finance its interest payments by issuing more debt. With each new round of debt, the rate of interest that the government paid would move up, and the rate of economic growth would move down (see Figure 4-3). Interest rates in 1995 already exceeded the rate of economic growth, but that situation would grow much worse because interest payments on the debt would be rising ever faster than the economy's ability to service that debt. Eventually, the government would find itself caught in a vicious circle of issuing ever larger amounts of debt to pay for ever higher interest charges.

The second reason that economic feedbacks intensify the nation's long-term budgetary problems concerns the baby boomers. The feedbacks weaken the economy, and as a result, less income is available to finance retirement benefits for the baby-boom generation. Under current law, those benefits are based on retirees' past wages, but they are financed mostly by a tax on the wages of current workers. Thus, even though wages would grow more slowly as the economy weakened, federal spending for Social Security benefits would not begin to slow down right away. Consequently, federal outlays for Social Security would absorb a much larger fraction of the economy's income. The Medicare and Medicaid programs do not pose quite the same problem because spending for them is not linked to past wages. Instead, CBO assumed that as the economy weakened, the growth of health care costs would also slow.

Figure 4-3.
Long-Term Projections of Interest Rates on Federal Debt and Rates of Economic Growth, Using the Assumptions of the Base Scenario with Economic Feedbacks



SOURCE: Congressional Budget Office.

NOTE: Discretionary spending is assumed to grow with the economy. Interest rates and growth rates are smoothed using a centered, three-year moving average. Economic growth rates are measured as percentage changes in nominal gross national product. Interest rates on government debt are based on a weighted average of rates on all maturities of debt.

8. Some people might dramatically increase their saving in the face of economic collapse, which could improve the economic outlook somewhat. In the extreme, if consumers offset all of the increase in the deficit with higher levels of private saving and invested their savings in the United States, the deficit would have no effect on the capital stock, on GDP, or on interest rates. But assuming that consumers would behave that way is unrealistic and extremely risky. Moreover, it seems doubtful that such forward-looking people would invest in the United States, given the risk of a stock market collapse or an increase in inflation.

A Measure of the Imbalance in U.S. Budget Policy. The underlying budgetary imbalances, though daunting, are much smaller than the previous projections make them appear. Those projections are so severe in part because of the compounding effects of interest: the government would be borrowing to cover the shortfall between revenues and spending--and then borrowing again to pay the interest on that debt. Because even a relatively small imbalance between revenues and outlays can be significantly amplified by escalating interest costs, the projections do not necessarily imply that resolving the nation's budgetary problems would require huge changes in spending or revenues.

To estimate the size of the budgetary imbalance, CBO used a standard measure for assessing the sustainability of a government's policies.[9] That measure is based on a hypothetical experiment: determining by how much rates of taxation would have to be permanently raised today to prevent the debt from exceeding its current percentage of GDP for the foreseeable future. (Larger imbalances require higher tax rates; the imbalances could also be measured as the size of the spending cuts that would be needed.) The experiment is hypothetical because it would be impractical to control the growth of the debt with a sudden, major change in tax rates. Nevertheless, it provides a rough measure of the size of the "hole" in the budget and is similar in spirit to other summary measures of budgetary imbalances. For example, the trustees of the Social Security trust funds routinely estimate by how much payroll taxes would have to be raised to ensure a sufficient balance in the funds in 2070 to meet the following year's projected expenditures. Generational accounting (described below) shows how high taxes would have to be on the lifetime incomes of future generations to ensure the long-run solvency of the government.

Using the sustainability measure, the budgetary imbalances are significant but manageable. Assuming that discretionary spending grew with the economy, CBO estimated that permanently increasing revenues by 5 percent of GDP would keep the debt (as a percentage of GDP) at or below its current level for the foreseeable future. Since revenues are now about 20 percent of GDP, that amount represents a tax hike of about 25 percent. If discretionary spending was assumed to grow only with the rate of inflation, taxes would have to rise by about 3 percent of GDP, or about 15 percent of current revenues.

The Sensitivity of the Results to Changes in Key Assumptions

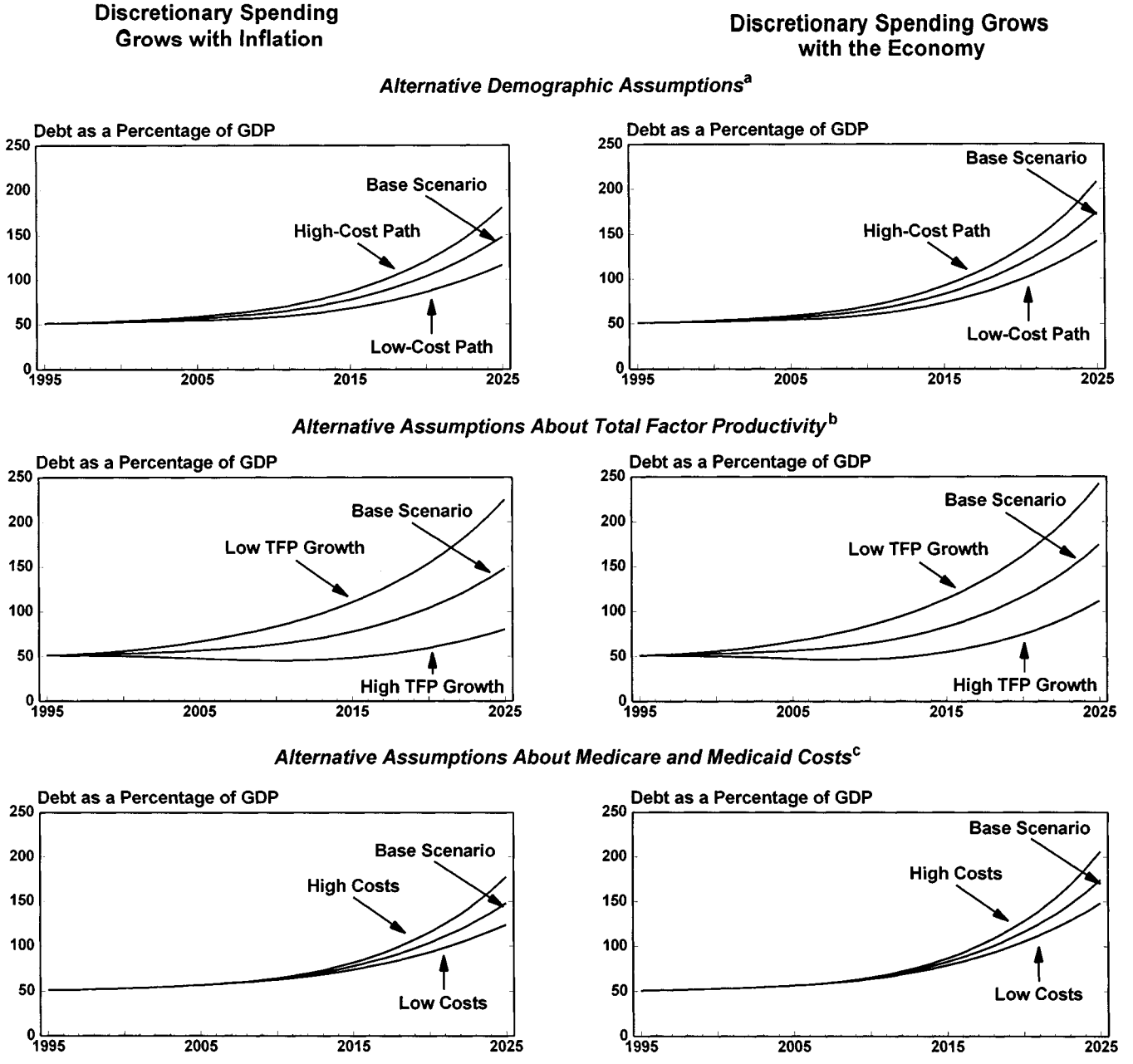
The long-term projections presented in the previous section are highly uncertain. They depend critically on assumptions about birth and death rates, immigration, marriage rates, labor force participation, productivity growth, interest rates, and the general structure of the economy. Changes in those assumptions would affect the quantitative results that CBO found; choosing more optimistic assumptions would significantly delay the projected emergence of serious trouble. But trouble eventually shows up, even when highly optimistic assumptions are used. Thus, the basic qualitative findings of this chapter appear to stand up despite the huge uncertainties involved in making long-range projections.

Demographic Assumptions. The budget picture would be brighter if the labor force grew more quickly or the population of retirees grew more slowly. The base scenario relied on the population assumptions of the intermediate-cost projections prepared by the trustees of the OASDI trust funds. (The trustees prepare three sets, based on low-cost, intermediate-cost, and high-cost population projections.) But the federal debt would still grow out of control even under the trustees' most favorable (the low-cost) assumption about population (see Figure 4-4). Moreover, reasonable increases in immigration or fertility rates or in the age of retirement probably would not keep the government from having to deal with long-term budgetary problems.

Assumptions about Capital. The stock of capital in the United States could grow faster than the projections assume, which would also improve the economic outlook, but faster growth would require either larger inflows of funds from abroad or higher rates of saving at home--neither of which seems particularly

9. Olivier Blanchard and others, "The Sustainability of Fiscal Policy: New Answers to an Old Question," *OECD Economic Studies*, no. 15 (Autumn 1990).

Figure 4-4.
Projections of Federal Debt, Using Alternative Assumptions About Demographics, Productivity, and Health Costs (As a percentage of GDP)



SOURCE: Congressional Budget Office.

a. In the low-cost projection, population cohorts grow according to the low-cost path projected by the trustees of the Old-Age, Survivors, and Disability Insurance (OASDI) program. In the high-cost projection, population cohorts grow according to the high-cost path projected by the OASDI trustees.

b. In the high-growth projection, productivity is assumed to grow 0.5 percent faster each year than in the base scenario. In the low-growth projection, productivity is assumed to grow 0.5 percent slower each year than in the base scenario.

c. In the low-cost projection, spending for each enrollee in Medicare and Medicaid of a given age and sex is assumed to grow 1 percentage point slower than in the base scenario after 2006. In the high-cost projection, spending per enrollee is assumed to grow 1 percentage point faster than in the base scenario after 2006.

likely or, indeed, capable of improving things much. Although inflows of funds from abroad would increase the capital stock, they would do little to improve the nation's economic income after the interest and dividends were paid on those inflows. Private saving might increase more than CBO has projected, but the projections already assume a sizable response--gross private saving increases from 15 percent of GDP in 1995 to 35 percent in 2030 in the base scenario with economic feedbacks and discretionary programs growing with the economy.[10] A larger reaction does not seem especially reasonable.

Total Factor Productivity. Total factor productivity might also grow faster than CBO has assumed, but that, too, would not fundamentally alter CBO's conclusions. To be sure, the growth of TFP has varied significantly over the post-World War II period: it grew at an average annual rate of 1.4 percent between 1950 and 1973, but since 1973, it has declined slightly on average. Yet even if productivity grew 0.5 percent faster each year than the base scenario assumes, the nation would still face significant budgetary imbalances in the long run. Moreover, bad luck is always possible, and if TFP grew 0.5 percent slower each year than in the base scenario, the budgetary imbalances would be worse.

A detailed statistical accounting of the uncertainty in the assumptions about productivity and population does not overturn those simple findings. To the contrary, that analysis suggests that the chances are low that the nation could grow out of its long-term budgetary problems with favorable developments in productivity or demographics (see Box 4-2).

Interest Rates. The budget outlook deteriorates quickly in CBO's projections when economic feedbacks are included, in part because mounting debts push up interest rates and debt-service costs (see Figure 4-3 on page 82). However, rates could rise much more quickly than projected. For example, CBO assumed that interest rates on government debt would move point for point with increases in the real return from capital, despite soaring levels of federal debt that should cause investors to demand an additional risk premium for holding government securities. Moreover, although CBO's calculations show long-term rates rising with contemporaneous changes in short-term rates, they do not allow for any anticipation by the markets of the worsening of the budget picture. Incorporating such expectations would further accelerate the projected explosion in the budget because federal interest costs would climb even faster.

Health Care Costs. In its base scenario, CBO assumed that the rate of growth of health care expenditures for each enrollee of a given age and sex would gradually decline to equal the rate of advance of hourly wages in 2020 and would grow at that rate thereafter. However, if expenditures for medical care grew faster than CBO has assumed, the budget outlook would be worse. For example, if medical care expenditures per beneficiary after 2006 grew faster than the base scenario assumed by 1 percentage point, federal debt would rise to more than 300 percent of GDP in 2030 (if discretionary spending grew with the economy). Moreover, even if those expenditures grew more slowly than in the base scenario by 1 percentage point--which seems unlikely without any changes to policy--the long-term budget outlook would still be bleak (see Figure 4-4).

Thus, the basic conclusion that the nation's current budget policy is unsustainable holds true despite the uncertainty that inevitably comes from projecting health care costs so far forward. Because of the federal government's role in supporting elderly people, the aging of the baby-boom generation will place enormous pressures on the budget. Dealing with those inevitable demographic developments will require some changes in current policy to keep the government solvent and the economy healthy.

Comparison with Other Studies

CBO is not alone in raising concerns about the long-term implications of the current set of commitments that the federal government has implicitly made with its budget policies. Several other organizations and academic analysts have voiced similar warnings.

10. Gross private saving consists of personal saving, undistributed corporate profits, and the consumption of corporate and noncorporate fixed capital. In 1995, personal saving constituted 3.3 percent of GDP, undistributed profits were 2.1 percent, and capital consumption was 9.4 percent.

Box 4-2.
Statistical Evaluation of Alternative Assumptions About Population and Productivity

The projections presented in Figure 4-4 account for only some of the potential variations in demographics and total factor productivity (TFP). To provide a richer range of possibilities, the Congressional Budget Office used statistical models that generated 750 alternative assumptions about the U.S. population and TFP.[1] The models were based on the historical behavior of those two variables, and the range of the alternatives reflected the likelihood that the various periods of U.S. history would repeat themselves. Thus, the alternatives explicitly incorporate the chance that a period of exceptional prosperity, such as the one the nation enjoyed in the three decades after World War II, will come again.

From those simulations, CBO generated a distribution of alternative paths for the budget and the economy. For illustrative purposes, CBO selected high- and low-debt alternatives so that two-thirds of the 750 simulations lay between the two paths. That spread represents a common measure of uncertainty. The slower the growth of TFP and the labor force, and the faster the growth of the retiree population, the higher would be the ratio of debt to gross domestic product (GDP).

The main conclusions of this chapter survive even in the face of the full uncertainty that accompanies assumptions about the growth of the population and of productivity. In the pessimistic high-debt path, federal debt exceeds 200 percent of gross national product (GNP) as early as 2019, regardless of the assumption about discretionary spending. In the optimistic low-debt path, the point when the debt exceeds 200 percent of GNP is delayed only to 2037. All paths show federal debt eventually growing out of control.

The simulations can also be used to estimate the likelihood that the nation could grow out of its debt problems without having to take action on the budget. Based on the 750 simulations, there is only about a 35 percent chance that the ratio of debt to GDP will be less than 200 percent by 2030 (see the table below). Those probabilities drop below 10 percent when the horizon is extended to 2050. Moreover, the chance that real GNP per capita will have entered a persistent downward trend is 51 percent in 2030 and above 90 percent by 2050.

1. The alternative population assumptions were generously provided by Ronald D. Lee of the University of California, Berkeley, and Shripad Tuljapurkar of Stanford University. See Ronald D. Lee and Shripad Tuljapurkar, "Stochastic Population Forecasts for the United States: Beyond High, Medium, and Low," *Journal of the American Statistical Association*, vol. 89, no. 248 (December 1994), pp. 1175-1189.

Estimated Probabilities of Adverse Outcomes Using the Assumptions of the Base Scenario, Calendar Years 1995-2050 (In percent)

	1995	2000	2005	2010	2015	2020	2025	2030	2050
Federal Debt Rises Above 200 Percent of GDP	0	0	0	0	3	15	40	64	94
Real GNP per Capita Declines for Three Consecutive Years	0	6	5	5	10	16	30	51	92

SOURCE: Congressional Budget Office.

NOTE: The estimates assume that discretionary spending grows with inflation.

Some, like CBO, have used the traditional approach of extending projections of spending and revenues and examining their impact on the federal debt over the next few decades. Others have used a new method called generational accounting. Yet despite differences in technique, all of the studies have concluded that U.S. budget policy cannot be sustained indefinitely.

Traditional Approach. Three prominent studies belong in this category.[11] Since 1992, the General Accounting Office (GAO) has presented results showing that, if left unchecked, the federal budget deficit could grow to over 23 percent of GDP by 2025. GAO's model incorporates some economic feedbacks between the deficit and the economy, although it holds interest rates constant.

Last year, the Bipartisan Commission on Entitlement and Tax Reform weighed in with another alarm. The commission saw growing imbalances between spending and revenues in the early decades of the 21st century unless changes were made to federal entitlement programs. Using a model without economic feedbacks, the commission projected budget deficits in excess of 15 percent of GDP by 2030. Its projections assumed that discretionary spending grew with the economy.

This year, the Administration released its long-term budget projections. Its calculations showed that the deficit would climb to 6 percent of GDP by fiscal year 2020 and to 12 percent in 2030 unless policies were changed. In its base scenario, the Administration assumed that discretionary spending would grow only with inflation, and it developed its base projections without economic feedbacks. (The Administration also projected the long-term implications of the President's policy to balance the budget.)

Compared with CBO's projections without economic feedbacks, the Administration projected that the deficit under its base scenario would be somewhat smaller in the early years and slightly larger by 2050. But the differences are not substantial; they are primarily due to the Administration's starting its long-term projections in 2006 with a more favorable outlook for the deficit than CBO expects. Under current policy, the Administration projected that the budget deficit would reach 2 percent of GDP in fiscal year 2005, whereas CBO projected a budget deficit of 3.3 percent.

Generational Accounting. This alternative approach was developed by Alan Auerbach, Jagadeesh Gokhale, and Laurence Kotlikoff. It examines the distribution of net taxes among people of various generations, including those not yet born.[12] (Net taxes are taxes minus transfer payments.) Among other things, generational accounting answers the following hypothetical question: at what rate would the government have to levy net taxes on the lifetime income of people not yet born in order to remain solvent?

The approach assumes that people who are alive today (from the old to those just born) continue to receive all the benefits from Social Security, Medicare, Medicaid, and other programs that have been promised to them and continue to pay taxes at currently prevailing rates. A higher tax rate must then be levied on future generations to keep the government solvent. Like long-term projections, generational accounting does not predict what will actually happen; it only indicates what would happen if policy did not change.

With respect to the generations alive today, the calculations of Auerbach, Gokhale, and Kotlikoff show that lifetime net tax rates increased somewhat between the generation born in 1900 and that born in 1950; however, since 1950, they have remained about the same (see Table 4-6).[13] Those researchers find, however, that future generations will have a considerable tab to pick up. Indeed, according to their calculations, those generations would face a lifetime net tax rate of 84 percent, compared with the

11. General Accounting Office, *Budget Policy* and *The Deficit and the Economy*; Bipartisan Commission on Entitlement and Tax Reform, *Final Report to the President* (January 1995); Office of Management and Budget, *Budget of the United States Government*.

12. Alan J. Auerbach, Jagadeesh Gokhale, and Laurence J. Kotlikoff, "Generational Accounts: A Meaningful Alternative to Deficit Accounting," in David Bradford, ed., *Tax Policy and the Economy*, vol. 5 (Cambridge, Mass.: MIT Press, 1991), pp. 55-110.

13. A lifetime net tax rate is the present value at birth of lifetime net taxes as a percentage of the present value at birth of lifetime labor income.

Table 4-6.
Estimated Lifetime Net Tax Rates in the United States by Year of Birth (In percent)

Year of Birth	Net Tax Rate[a]
1900	24
1910	27
1920	29
1930	30
1940	31
1950	33
1960	34
1970	34
1980	34
1990	34
1993	34
Future Generations[b]	84

SOURCE: Alan J. Auerbach, Jagadeesh Gokhale, and Laurence J. Kotlikoff, "Restoring Generational Balance in U.S. Fiscal Policy: What Will It Take?" *Review,* Federal Reserve Bank of Cleveland, vol. 31, no.1 (First Quarter 1995), pp. 2-12.

NOTES: The rates shown are for combined net taxes for all levels of government--federal, state, and local. The estimates assume a real discount rate of 6 percent, a prospective annual rate of growth in productivity of 1.2 percent, and the midrange path of population growth used by the Social Security Administration in its 1994 annual report.

The values in the table reflect the implications of generational accounts as constructed by Auerbach, Gokhale, and Kotlikoff and do not necessarily represent the views of the Congressional Budget Office.

a. A lifetime net tax rate is the present value at birth of lifetime net taxes as a percentage of the present value at birth of lifetime labor income. Net taxes are taxes less transfers.

b. Future generations are all those born in 1994 and thereafter.

34 percent rate facing people born in 1993. To impose so large a burden on future generations, the government would have to increase their taxes and cut their transfers substantially--another way of saying that current U.S. budget policy is unsustainable.

The results from generational accounting depend on uncertain and arguable assumptions. Consequently, they must be viewed with as much or even more caution than the results of the long-term budget model.[14] Still, generational accounting's qualitative conclusions also hold under a wide range of alternative assumptions.

Sustainable Budget Strategies

To avoid the adverse economic consequences laid out above, the ratio of debt to GDP must be brought under control. This section considers two possible budget strategies that would meet that goal: the first permanently balances the budget by 2002; the second holds the ratio of debt to GDP roughly at its current level. Both strategies are sustainable because they prevent the debt from ever growing faster than the economy. Other approaches are possible, but those two examples illustrate some of the implications such strategies have for the budget and for the nation's economic outlook.[15]

A budget that was permanently balanced would freeze the level of federal debt and continuously diminish the ratio of debt to GDP (see Table 4-7).[16] As the economy grew, the ratio of debt to GDP would slowly decline from 51 percent of GDP in 1995 to 6 percent in 2050. Over that period, the deleterious effects of the debt on interest rates and economic growth would gradually disappear. A balanced budget would also put the United States back on its historical path of declining debt as a share of GDP during times of peace and prosperity. However, a ratio of debt to income as low as 6 percent would be unusual in modern history; the debt ratio has not been so low since America's entry into World War I.

Permanently balancing the budget is not the only strategy that could prevent catastrophic problems for the U.S. economy. The worst aspects of the base sce-

14. Congressional Budget Office, *Who Pays and When? An Assessment of Generational Accounting* (November 1995).

15. Another strategy is to balance all categories of the budget except the Social Security accounts, which would imply a surplus in the total budget as long as the total income (including interest) of the trust funds exceeded their outgo (as is expected to be the case until about 2020). That strategy would offer greater long-run payoffs than those from just balancing the total budget but would require larger short-run sacrifices.

16. Although the model technically assumes that the budget is balanced each year, similar results would be seen if the government allowed the budget to move into deficit during recessions--provided that the budget moved into surplus during expansions and was balanced on average.

nario could be avoided if budget policies were altered so that the debt did not always grow faster than GDP. One way to achieve that goal would be to stabilize the ratio of debt to GDP at its current level of roughly 50 percent. Because the national debt would continue to grow, the government would still have a budget deficit--but it would not be growing relative to the economy. Instead, the deficit would eventually stabilize at about 1.6 percent of GDP.

Table 4-7.
Projections of the Deficit and Debt Held by the Public Under Alternative Budget Strategies, Calendar Years 1995-2050 (As a percentage of GDP)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Permanently Balance the Budget												
Primary Deficit[a]	-1.3	-1.8	-2.1	-1.7	-1.3	-1.1	-0.9	-0.7	-0.6	-0.5	-0.4	-0.3
Interest on the Debt	3.5	2.8	2.1	1.7	1.3	1.1	0.9	0.7	0.6	0.5	0.4	0.3
NIPA Deficit	2.2	1.0	0	0	0	0	0	0	0	0	0	0
Debt Held by the Public	51	49	38	30	25	20	17	14	11	9	8	6
Stabilize the Ratio of Debt to GDP												
Primary Deficit[a]	-1.3	-1.0	-0.7	-0.8	-1.0	-1.0	-1.0	-1.0	-0.9	-1.0	-1.0	-1.0
Interest on the Debt	3.5	3.1	2.9	2.9	2.9	2.8	2.7	2.6	2.7	2.7	2.7	2.7
NIPA Deficit	2.2	2.1	2.2	2.1	1.9	1.7	1.7	1.7	1.7	1.7	1.7	1.6
Debt Held by the Public	51	51	51	51	52	52	52	52	52	52	52	52
Continue with the Base Scenario[b]												
Primary Deficit[a]	-1.3	-0.6	-0.2	0.8	2.3	3.8	5.3	6.2	n.c.	n.c.	n.c.	n.c.
Interest on the Debt	3.5	3.3	3.4	3.9	5.1	7.7	13.5	31.0	n.c.	n.c.	n.c.	n.c.
NIPA Deficit	2.2	2.7	3.2	4.6	7.3	11.5	18.8	37.2	n.c.	n.c.	n.c.	n.c.
Debt Held by the Public	51	53	57	65	83	116	174	293	n.c.	n.c.	n.c.	n.c.

SOURCE: Congressional Budget Office.

NOTES: The projections include economic feedbacks (deficits push up interest rates and lower the rate of economic growth).

NIPA = national income and product account; n.c. = not computable (debt would exceed levels that the economy could reasonably support).

a. The primary deficit is revenues minus noninterest spending. Negative numbers indicate a budget surplus.

b. The base scenario assumes that discretionary spending grows with the economy.

Setting goals for the ratio of debt to GDP is not a new idea. The 15 member nations of the European Union have already pledged to reduce their debt-to-income and deficit-to-income ratios. Goals are specified by the Maastricht Treaty, which aims to create a monetary union with a single European currency. With some exceptions, the treaty requires that a nation wishing to join the union must bring its combined debt from all levels of government to 60 percent of GDP or less and its combined deficit to 3 percent of GDP or less.

Implications for the Economy

Compared with the base scenario, the long-term economic outlook would be significantly brighter if policymakers either balanced the budget permanently or stabilized the debt at about 50 percent of GDP. By 2025, gross national product per capita would be between 10 percent and 15 percent higher than in the base scenario, and that gap would grow substantially in the years thereafter (see Table 4-8). Of the two strategies, the balanced budget would provide the greater long-term economic gains, but at the cost of more near-term sacrifice.

The economic benefits of stabilizing the debt-to-income ratio are almost as large as those of balancing the budget. Stabilization implies that by 2025, real GNP would be only about 2 percentage points less than GNP under the balanced budget. The smaller GNP stems from the difference in what happens to the deficit: stabilizing the ratio of debt to GDP does not eliminate it but merely controls its growth. Thus, some capital investment is still crowded out.

Implications for the Budget

Permanently balancing the budget or keeping the ratio of debt to income steady would require significant changes in government spending and revenues. Those changes could be achieved, but they would involve paring entitlement benefits for elderly people, sharply reducing other spending, or increasing taxes.

Interest Costs. Both budget strategies would significantly reduce the amount required to service the debt compared with the base scenario. However, interest costs would decline more with a balanced budget than with a steady ratio of debt to income.

Table 4-8.
Projections of Real GNP per Capita Under Alternative Budget Strategies

	1995	2000	2005	2010	2015	2020	2025	2030
In Chained 1992 Dollars per Capita								
Permanently Balance the Budget	24,800	26,300	28,400	30,400	31,900	33,100	34,200	35,500
Stabilize the Ratio of Debt to GDP	24,800	26,300	28,100	30,000	31,400	32,600	33,600	34,900
Continue with the Base Scenario[a]	24,800	26,200	28,000	29,700	30,600	30,900	30,400	28,500
Percentage Above Real GNP per Capita in the Base Scenario								
Permanently Balance the Budget	0	0	1	3	4	7	12	25
Stabilize the Ratio of Debt to GDP	0	0	0	1	3	5	10	23

SOURCE: Congressional Budget Office.

a. The base scenario assumes that discretionary spending grows with the economy.

With a balanced budget, the cost of interest on the debt would eventually decline to insignificance as a share of GDP. In CBO's projections, that cost drops from 3.5 percent of GDP in 1995 to 0.3 percent in 2050 (see Table 4-7 on page 89). The decline comes from fixing the debt in dollar terms after 2002 and from having interest rates on government debt fall relative to the rate of growth of the economy. By contrast, when the ratio of debt to income is kept constant, interest costs stabilize at about 2.7 percent of GDP.

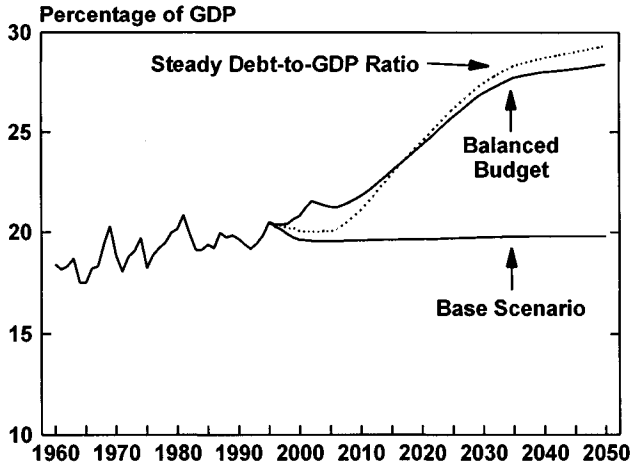
The pattern for interest payments has implications for the rest of the budget--the so-called primary budget. To maintain balance, the primary budget must show a surplus that exactly matches the interest payments on the debt.[17] Thus, as interest payments declined over time, the surplus required in the rest of the budget would also fall. The projections show that the primary surplus required under a balanced budget would be 2.1 percent of GDP in 2005 but would drop to 0.3 percent by 2050. By contrast, if the ratio of debt to income was held steady, the required surplus in the rest of the budget would not decline over time but would nearly stabilize at about 1.0 percent of GDP.

Comparing the primary surpluses required under the two strategies shows, in a rough form, how much taxes and spending would have to be changed. Before 2022, the primary surplus would have to be larger with a balanced budget. As a result, during those early years, the government would have to make larger cuts in the growth of spending or impose higher taxes. After 2022, however, the situation would be reversed. The primary surplus would actually be somewhat smaller under the balanced budget because interest payments would be lower. The government would then be making slightly smaller cuts in spending or imposing modestly smaller increases in taxes.

Those results may seem surprising at first because they appear to be at odds with the common perception that deficit spending is an "easier" policy than a balanced budget. That view is certainly correct for the short run, when differences in fiscal policy have little effect on federal interest costs. But over periods as long as 30 years, a deficit policy eventually carries much higher interest costs than a balanced budget policy--and those additional costs ultimately have to be financed by cutting the growth of spending or raising taxes. Intuitively, deficit spending expands current consumption above what would otherwise have been possible. But that additional consumption is achieved only by sacrificing some future consumption through future tax hikes and spending cuts.

Required Policy Changes. Both budget strategies would require significant changes in spending and revenues. If the budget was balanced (or the ratio of debt to GDP stabilized) through tax increases alone, those increases would be small in the early years but would grow considerably as the baby boomers began to retire (see Figure 4-5). To keep the budget balanced, federal revenues would have to rise from 20

Figure 4-5.
Projections of Receipts When Tax Increases Alone Are Used to Balance the Budget or Stabilize the Ratio of Debt to GDP

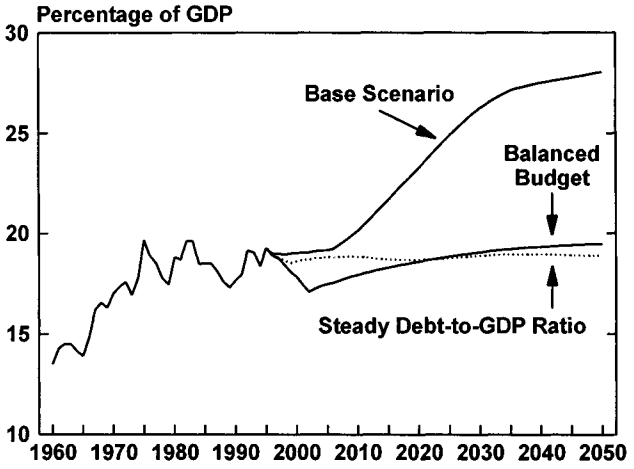


SOURCE: Congressional Budget Office.

NOTE: The balanced budget path assumes that the budget is balanced by 2002 and remains balanced thereafter. The path with the steady ratio of debt to gross domestic product assumes that the ratio is stabilized at its current level. The projections of the base scenario use the balanced budget economic assumptions. Receipts are as defined in the national income and product accounts.

17. Another way to think about the primary budget is that it shows all revenues and all spending for "programs" but not for interest on the debt. A primary surplus then means the amount of revenues in excess of outlays for programs.

Figure 4-6.
Projections of Noninterest Outlays When Spending Cuts Alone Are Used to Balance the Budget or Stabilize the Ratio of Debt to GDP



SOURCE: Congressional Budget Office.

NOTE: The balanced budget path assumes that the budget is balanced by 2002 and remains balanced thereafter. The path with the steady ratio of debt to gross domestic product assumes that the ratio is stabilized at its current level. The projections of the base scenario use the balanced budget economic assumptions. Noninterest outlays are as defined in the national income and product accounts.

percent of GDP in 1995 to about 28 percent in 2050.[18] Keeping the ratio of debt to income steady would require smaller tax increases at first than would balancing the budget, but the additional interest costs would eventually require slightly larger increases. Under the steady debt-to-income strategy, revenues would rise from 20 percent of GDP in 1995 to 29 percent in 2050. (That scenario does not describe a sudden tax increase such as the one mentioned earlier, but a gradual increase that is sufficient to keep the budget balanced.)

Substantial reductions in current commitments for spending would also be required if budgetary actions focused solely on the spending side of the ledger (see Figure 4-6). Projections using the base scenario with balanced budget economic assumptions show noninterest outlays increasing from 19 percent in 1995 to 28 percent in 2050.[19] To keep the budget balanced, noninterest spending would have to be cut sharply at first, and it would decline to 17 percent of GDP by 2002. But as interest costs fell, spending under a balanced budget could rise to slightly above 19 percent of GDP in 2050. By contrast, to keep the ratio of debt to GDP steady, noninterest spending would have to be held at about 19 percent of GDP throughout the projection period.

Neither strategy could be implemented by focusing solely on cutting the government's consumption of goods and services. (Government consumption consists largely of discretionary spending and excludes outlays for roads, military equipment, and other government investments.) Under either plan, the extent of the required changes in the budget would exceed total consumption by the federal government around 2020. That finding means that the long-term budgetary situation cannot be stabilized solely by limiting the growth of this category of spending. Stability also requires reductions in the growth of other spending categories or increases in taxes.

Examples of Two Policy Packages

The discussion so far has examined the implications of setting overall deficit targets for the budget and the economy. In developing a budget, however, the Congress must move beyond setting goals to making changes in specific laws. During the past year, both the Congress and the President advanced plans to balance the budget by 2002 and proposed a variety of other changes to revenues and spending, including caps on the rates of growth of Medicare and Medicaid. Those proposals raise a number of issues. Would balancing the budget by 2002 by itself solve the long-term budgetary problem? Or would additional policy changes be needed? And how would capping the growth of federal health programs affect the long-term economic and budget outlook? Although deep-seated uncertainties make it impossible to examine the precise long-term impacts of specific

18. Those estimates probably understate the actual size of the tax increase that would be needed because they do not account for the adverse impact that increasing marginal taxes would have on incentives to work and save.

19. Balanced budget economic assumptions are used here for the same reason that they are used in Chapter 2: they implicitly incorporate the fiscal dividend.

legislative initiatives, CBO's long-range model can provide a rough assessment of how changes in policy might affect the budget over the next several decades.

To address those issues, CBO examined two possible packages for reducing the deficit. The first would balance the budget by 2002 by making a series of one-time changes to spending and revenues--but it would not alter the underlying pressures that cause spending to increase after 2006. That approach deals directly with the question of whether simply balancing the budget in the near term will solve the nation's long-run budgetary problems. Although the package would restrain the growth of entitlement spending from 1996 to 2006, entitlement programs would grow at the same rate as in the base scenario after 2006. In addition, the growth of discretionary spending would be sharply restricted from 1996 to 2006 but would grow with the economy in the long run.

What this scenario shows is that balancing the budget by 2002 would bring about a major reduction in the long-term budgetary imbalances in the United States, but it would not be enough to extricate the nation from the looming budgetary quagmire (see Table 4-9). Although the budget would remain close to balance for another 10 years or so, the demands of the retired baby boomers on the Social Security, Medicare, and Medicaid programs during the 2020s would significantly increase annual budget deficits. By 2030, federal debt would climb to 67 percent of GDP and would grow rapidly thereafter. By 2050, it would exceed levels that the economy could reasonably support. That situation obviously would be much better than what would result under the base scenario, but it would still command attention.

The second policy package is based on assumptions similar to those that the Administration used in its long-term projections of the President's policy. The package assumed that the budget would be balanced by 2002 with one-time changes to spending and revenues but that, in addition, the growth of Medicaid outlays would be restricted after 2006 so that it did not exceed the rate of growth of the economy. (Compared with the base scenario, the cap on Medicaid spending would be quite stringent and could be difficult to maintain in the face of an aging population and growing demands for nursing home care. Indeed, in recent years, per capita expenditures for elderly Medicaid beneficiaries have been about six times the level for children and other nondisabled adults receiving Medicaid assistance. Without the cap, Medicaid spending is projected to grow, on average, about 2 percentage points faster than GDP each year from 2006 to 2030.) At the same time, discretionary spending would be limited: rather than growing with the economy, it would be allowed to increase at the rate of inflation. Under that policy package, the budget would remain close to balance for another 20 years or so, and the ratio of debt to GDP would gradually shrink over that period. Still, the increasing pressure from the baby boomers would eventually push the budget out of balance, and federal debt would grow from 16 percent of GDP in 2020 to 26 percent in 2030 and 87 percent in 2050.

CBO is more pessimistic than the Administration about the long-term implications of this policy package. Yet apart from interest costs, the differences between CBO's and the Office of Management and Budget's projections are relatively unimportant. Both agencies project a primary surplus under this policy in the early years. That surplus disappears, however, and as a result of a buildup of debt and rising interest rates, interest costs begin to climb quickly. Because the Administration holds interest rates constant, interest costs remain lower in its projections than in CBO's.

The Benefits of Acting Soon

Timing is an important factor in dealing with the nation's budgetary problems. The federal deficit has fallen substantially as a share of GDP from its level in the early 1990s, and it is now lower than the deficit shares of many other developed countries. But that temporary phenomenon should not lull people into believing that no problem exists. The pressures of an aging population and rising health care costs will become severe in just a few years.

The stakes get higher when the baby boomers begin to retire. At that point, the budget deficit will begin to mount rapidly if no change in policy has occurred. Delaying action until then would add increasing amounts to the debt to be serviced and cor-

Table 4-9.
Projections of Federal Receipts and Expenditures, Using Alternative Assumptions About Policy and Incorporating Economic Feedbacks, Calendar Years 1995-2050
(As a percentage of GDP)

	Preliminary 1995[a]	2000	2005	2010	2015	2020	2025	2030	2050
Policy Package I: Balance the Budget by 2002[b]									
NIPA Receipts	20	20	20	20	20	20	20	20	n.c.
NIPA Expenditures									
Federal consumption expenditures	6	5	4	4	4	4	4	4	n.c.
Transfers, grants, and subsidies									
Social Security	5	5	5	5	5	6	6	7	n.c.
Medicare	3	3	3	4	5	5	6	7	n.c.
Medicaid	1	1	2	2	2	2	3	3	n.c.
Other	5	4	4	4	4	4	4	4	n.c.
Net interest	3	3	2	1	1	1	2	3	n.c.
Total	23	21	19	20	21	23	25	28	n.c.
NIPA Deficit	2	1	-1	0	1	2	5	7	n.c.
Debt Held by the Public	51	49	38	29	26	31	45	67	n.c.
Primary Deficit[c]	-1	-2	-3	-2	-1	1	2	3	n.c.
Policy Package II: Balance the Budget by 2002, Limit Discretionary Spending, and Slow the Growth of Medicaid[d]									
NIPA Receipts	20	20	20	20	20	20	20	20	21
NIPA Expenditures									
Federal consumption expenditures	6	5	4	4	4	3	3	3	3
Transfers, grants, and subsidies									
Social Security	5	5	5	5	5	6	6	7	7
Medicare	3	3	3	4	5	5	6	7	7
Medicaid	1	1	2	2	2	2	2	2	2
Other	5	4	4	4	4	4	4	4	3
Net interest	3	3	2	1	1	0	1	1	5
Total	23	21	19	19	19	20	22	23	28
NIPA Deficit	2	1	-1	-1	-1	0	1	3	7
Debt Held by the Public	51	49	38	27	19	16	18	26	87
Primary Deficit[c]	-1	-2	-3	-3	-2	-1	0	1	1

SOURCE: Congressional Budget Office.

NOTES: Projections with economic feedbacks allow deficits to push up interest rates and lower the rate of economic growth. Negative deficit numbers indicate a budget surplus.

NIPA = national income and product account; n.c. = not computable (debt would exceed levels that the economy could reasonably support).

a. Consistent with the first official estimate for 1995 published on March 4, 1996.

b. Policy package I balances the budget by 2002 with one-time changes to spending and revenues.

c. The primary deficit is revenues minus noninterest outlays.

d. Policy package II balances the budget by 2002 and, after 2006, slows the growth of Medicaid to the rate of growth of GDP and limits the growth of discretionary spending to the rate of inflation.

respondingly raise interest costs. As those costs rose, efforts to balance the budget would have to cut the growth of spending more deeply or increase taxes more steeply. Postponing difficult decisions now will make the choices that have to be made later even harder.

Other considerations also argue for attacking this problem now. If changes in entitlements for the elderly are to be part of the solution, those changes should be announced well before they take effect. Entitlement programs for elderly people are generally viewed as long-term arrangements between the government and the citizenry, who have structured their behavior based on current provisions of the law. Deciding soon on any future changes in such programs and making gradual shifts in spending and tax policies would give people more time to plan and adjust their saving behavior accordingly during their working years. By increasing their saving now, today's workers would be in a much better position to finance their retirement with less support from the government. Moreover, as national saving increased, the private sector would grow stronger, capital investment would expand, and wages would rise.

Conclusion

The economic benefits of achieving budget discipline in the United States are potentially massive. The retirement of the baby-boom generation beginning in about 2010--and the rapidly rising expenditures per beneficiary for Medicare and Medicaid--will place increasing pressure on the federal budget. Those fiscal demands could produce unsustainably high levels of federal debt unless additional actions are taken to control federal spending. Scaling back entitlements for the elderly, taking measures to limit other kinds of spending, and raising taxes are possible approaches to achieving that restraint. If cuts are to be made in the growth of entitlement programs for the elderly, making such decisions sooner rather than later is both fairer and more effective. Making those decisions now would give people time to adjust their plans. By contrast, waiting until the baby-boom generation was ready to retire could be extremely disruptive. CBO will discuss options for limiting the growth of Social Security and Medicare in a chapter of its forthcoming report *Reducing the Deficit: Spending and Revenue Options*.

Balancing the budget by 2002--but not addressing the factors that cause the deficit to increase in later years--would improve the budget outlook but not fully eliminate the imbalances that threaten the economy over the long term. (The converse is also true: measures that make a big difference to the long-run outlook might have little short-run impact on the deficit--and perhaps might even raise deficits temporarily.) The outlook for the economy will, of course, depend on how policymakers lower the deficit. Other things being equal, the economic benefits would be smaller if the deficit was reduced by raising marginal tax rates on labor or capital or by making cuts in productive government investments.

But those considerations should not obscure the fundamental importance of resolving the budgetary problems that are rapidly coming into focus on the long-term economic horizon. Although alternative deficit reduction packages would have different effects, those differences are much smaller than the economic benefits that any such package would bring. The estimates in this chapter are inherently uncertain, but one thing should be clear: doing nothing about the deficit indefinitely is not a feasible option.

Appendixes

Appendix A

Understanding and Measuring the Structural Federal Deficit

The federal budget deficit indicates the amount by which federal spending exceeds federal revenues in a fiscal year. Its size depends on economic conditions and decisions about fiscal policy. The deficit expands automatically during recessions and other periods of exceptionally slow growth and rising unemployment. By contrast, the deficit shrinks automatically during economic recoveries and other periods of exceptionally fast growth and declining unemployment. Because of that sensitivity to cyclical fluctuations, the change in the size of the budget deficit usually is not a good measure of changes in fiscal policy. A different measure is needed to separate the short-term budget effects of economic fluctuations (so-called automatic stabilizers) from the budget effects of changes in tax and spending policies.

To disentangle those effects, economists have constructed a variety of so-called structural budget measures, which adjust the budget for cyclical fluctuations of the economy and other factors. The standardized-employment deficit, for example, is the measure of the structural deficit used in Chapter 1. It shows how large the deficit would be if the economy were operating at full use of its resources. Changes in the standardized-employment deficit from one year to the next indicate whether fiscal policy is stimulating or restricting short-term growth through its effect on total demand for goods and services in the economy. Decreases in the structural deficit indicate restraint on total demand, either directly, through federal purchases of goods and services, or indirectly, through taxes and transfer payments. Increases indicate a fiscal stimulus. By contrast, the level of the structural deficit is more important than changes in its level for issues of long-run growth, such as national saving and the supply of capital.

For a variety of purposes, however, just adjusting the budget for the effects of the business cycle is not sufficient. For example, the structural deficit does not take into account some economic factors that would reduce the impact of federal borrowing on credit markets and thus interest rates. Also, it provides no information about other important issues, such as the long-term sustainability of current fiscal policy, the long-term effects of taxes and spending programs on the supply of labor and capital and future living standards (supply-side considerations), or the relative burden of taxes and transfer payments on different generations and income groups. Addressing those issues requires other types of measures, some of which are variations of the structural deficit.[1]

Those variations are designed to address differing issues or questions (see Table A-1). For example: *the standardized-employment deficit* simply excludes the effects of the business cycle on the budget. That measure of the structural deficit is a widely used gauge of the stance of fiscal policy (see Chapter 1).

1. Some of those issues are considered in Chapter 4 of this report and in Congressional Budget Office, *Who Pays and When? An Assessment of Generational Accounting* (November 1995).

Table A-1.
Measures of the Structural Federal Budget Deficit (By fiscal year)

	Budget Deficit	Standardized-Employment Budget Deficit	Inflation-Corrected Structural Budget Deficit[a]	Primary Structural Budget Deficit
		In Billions of Dollars		
1956	-4	1	-3	-4
1957	-3	1	-7	-5
1958	3	1	-5	-5
1959	13	12	10	6
1960	0	0	-3	-7
1961	3	-2	-4	-9
1962	7	6	3	-1
1963	5	4	1	-4
1964	6	8	5	0
1965	1	7	2	-2
1966	4	16	8	7
1967	9	21	14	11
1968	25	36	25	25
1969	-3	11	-5	-2
1970	3	9	-7	-5
1971	23	21	9	6
1972	23	24	15	9
1973	15	30	9	12
1974	6	19	-19	-3
1975	53	36	5	13
1976	74	54	31	27
1977	54	47	8	17
1978	59	63	17	28
1979	41	52	-22	10
1980	74	57	-24	4
1981	79	53	-19	-16
1982	128	64	24	-21
1983	208	126	100	36
1984	185	158	111	47
1985	212	198	153	69
1986	221	205	183	69
1987	150	129	53	-10
1988	155	147	68	-4
1989	152	148	53	-21
1990	221	168	38	-17
1991	269	187	105	-8
1992	290	224	140	24
1993	255	233	150	34
1994	203	192	102	-11
1995	164	192	100	-41
1996[b]	144	154	48	-86
1997[b]	171	177	60	-69
1998[b]	194	183	65	-74
1999[b]	219	205	84	-66
2000[b]	244	230	100	-53
2001[b]	259	243	104	-54
2002[b]	285	267	120	-45
2003[b]	311	291	134	-37
2004[b]	342	321	153	-25
2005[b]	376	354	173	-11
2006[b]	403	380	186	-6

SOURCE: Congressional Budget Office.
NOTE: The three columns showing structural deficits exclude outlays for deposit insurance, allied contributions for Operation Desert Storm, and offsetting receipts from spectrum auctions. Negative numbers indicate a budget surplus.

Table A-1.
Continued

	Budget Deficit	Standardized-Employment Budget Deficit	Inflation-Corrected Structural Budget Deficit[a]	Primary Structural Budget Deficit
		As a Percentage of Potential GDP		
1956	-1.0	0.2	-0.6	-1.0
1957	-0.8	0.1	-1.7	-1.1
1958	0.6	0.2	-1.1	-1.0
1959	2.6	2.4	2.0	1.2
1960	-0.1	0	-0.7	-1.3
1961	0.6	-0.4	-0.8	-1.6
1962	1.2	1.0	0.5	-0.2
1963	0.8	0.6	0.1	-0.6
1964	0.9	1.3	0.8	0.0
1965	0.2	1.0	0.3	-0.3
1966	0.5	2.3	1.2	1.0
1967	1.1	2.7	1.8	1.4
1968	3.0	4.3	2.9	3.0
1969	-0.4	1.2	-0.6	-0.2
1970	0.3	0.9	-0.7	-0.5
1971	2.1	2.0	0.8	0.6
1972	2.0	2.1	1.3	0.8
1973	1.2	2.3	0.7	1.0
1974	0.4	1.3	-1.3	-0.2
1975	3.3	2.2	0.3	0.8
1976	4.1	3.0	1.7	1.5
1977	2.7	2.3	0.4	0.8
1978	2.7	2.9	0.8	1.3
1979	1.6	2.1	-0.9	0.4
1980	2.7	2.1	-0.9	0.2
1981	2.5	1.7	-0.6	-0.5
1982	3.7	1.9	0.7	-0.6
1983	5.7	3.4	2.7	1.0
1984	4.8	4.1	2.8	1.2
1985	5.1	4.8	3.7	1.7
1986	5.0	4.7	4.2	1.6
1987	3.2	2.8	1.1	-0.2
1988	3.1	3.0	1.4	-0.1
1989	2.9	2.8	1.0	-0.4
1990	3.9	2.9	0.7	-0.3
1991	4.4	3.1	1.7	-0.1
1992	4.6	3.5	2.2	0.4
1993	3.9	3.5	2.3	0.5
1994	3.0	2.8	1.5	-0.2
1995	2.3	2.7	1.4	-0.6
1996[b]	1.9	2.0	0.6	-1.1
1997[b]	2.2	2.2	0.8	-0.9
1998[b]	2.3	2.2	0.8	-0.9
1999[b]	2.5	2.4	1.0	-0.8
2000[b]	2.7	2.5	1.1	-0.6
2001[b]	2.7	2.5	1.1	-0.6
2002[b]	2.8	2.7	1.2	-0.4
2003[b]	3.0	2.8	1.3	-0.3
2004[b]	3.1	2.9	1.4	-0.2
2005[b]	3.2	3.1	1.5	-0.1
2006[b]	3.3	3.1	1.5	0

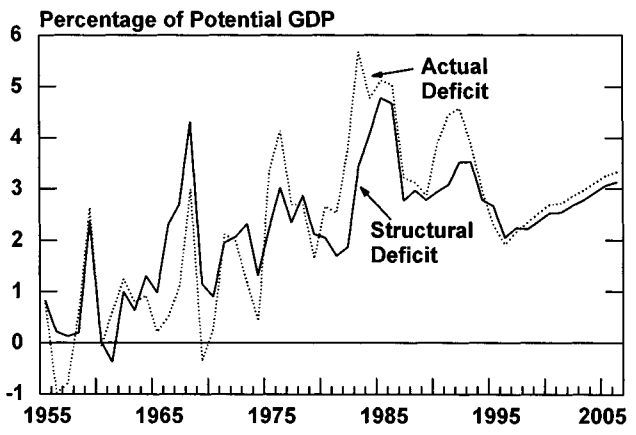
a. The structural deficit adjusted for inflation was calculated using the consumer price index.
b. Projection based on current policy and capped discretionary spending with inflation.

The structural deficit corrected for inflation incorporates an adjustment for the decline in the value of federal debt caused by inflation. That decline in real wealth may induce bondholders to rebuild their assets by saving more than otherwise and, if so, would temper the effects of federal deficits on interest rates. *The primary structural deficit*, which excludes federal interest payments in addition to the cyclical component of the deficit, is useful for determining the long-run sustainability of current budget policies.

The Standardized-Employment Deficit

The Congressional Budget Office (CBO) calculates the standardized-employment deficit--the measure of the structural deficit shown in Figure A-1--by estimating the size of the deficit if the economy were operating at a level consistent with a stable rate of inflation. The lowest rate of unemployment that can be sustained in the context of a stable rate of inflation is known as the nonaccelerating inflation rate of unemployment (NAIRU). That rate depends on many factors, including labor productivity and the shares of different demographic groups in the labor force. At the NAIRU, wages and prices are not necessarily constant but there is no tendency for their rate of change to accelerate or decelerate. By contrast, if policymakers tried to reduce unemployment below the NAIRU by stimulating total demand, the annual increases in wages and prices would grow because the supply of labor would not be sufficient to satisfy the higher demand for labor. Inflation would continue to increase as long as the actual rate of unemployment remained below the NAIRU. Alternatively, if the rate of unemployment rose and remained above the NAIRU, the rate of inflation would steadily decline, provided other factors--such as oil price shocks--were not also at work. Only if the unemployment rate is at the NAIRU will the inflation rate remain steady.

Figure A-1.
The Structural Deficit (By fiscal year)



SOURCE: Congressional Budget Office.

NOTE: Projections are based on current policy and capped discretionary spending with inflation. Negative numbers indicate a budget surplus.

The output of the economy when its actual unemployment rate is at the NAIRU is known as potential gross domestic product (GDP).[2] A level of output below potential implies that the unemployment rate is above the NAIRU and that the rate of inflation will tend to fall. By contrast, a level of output above potential implies that the unemployment rate is below the NAIRU and that there are upward pressures on the rate of inflation.

Revenues in the standardized-employment budget are computed by estimating what they would be if GDP were equal to potential GDP. Most of the cyclical adjustment of revenues depends on the size of the gap between GDP and potential GDP, but it also reflects the sensitivity of various revenue categories to cyclical movements in the components of taxable income. Changes in the tax structure can affect that sensitivity. For example, if consumption replaced income as the base for the tax system, tax collections would be less sensitive to the business cycle.

Similarly, outlays in the standardized-employment budget are calculated by estimating how much they would be if the unemployment rate were at the NAIRU. The cyclical adjustment of outlays depends on both the size of the unemployment gap and the sensitivity of various types of transfer payments to

2. See Congressional Budget Office, *CBO's Method for Estimating Potential Output*, CBO Memorandum (October 1995).

changes in unemployment. The cyclical sensitivity of outlays would be reduced if some entitlement programs became block grants.

A reduction in the cyclical sensitivity of federal revenues and outlays would lessen the automatic stabilizing properties of the federal budget. Those stabilizers automatically stimulate total demand during recessions as revenue collections fall and transfer payments rise. They automatically restrain the economy when it is above its potential.

Other benchmarks for output and unemployment could be used to adjust the federal deficit for the effects of the business cycle. For example, the benchmark for output (and the rate of unemployment) could be a trend line connecting the peaks or troughs of business cycles or some other common point in between, such as the middle-expansion trend that roughly corresponds to the economy's average performance over time.[3] Alternatively, the benchmarks could simply be the level of output and rate of unemployment in the previous year.[4] In varying degrees, all of those benchmarks would serve the same purpose of removing short-term variations in the economic variables that cause most of the movement of the budget deficit during economic downturns and recoveries. But alternative benchmarks would produce different estimates of the size of the structural deficit.

For a given level of actual GDP, a relatively high GDP benchmark implies a larger GDP gap and a larger cyclical deficit. A relatively low GDP benchmark implies the opposite. Since potential GDP usually is higher than the other benchmarks mentioned above, calculations of the structural deficit based on potential GDP usually attribute more of the deficit to cyclical factors than other benchmarks for output do. For a given deficit, the larger the cyclical component, the smaller the structural component.

Potential GDP is used as a benchmark because it corresponds to the highest rate of resource use that does not increase inflation. Departures from potential output are measures of either temporary economic slack (if actual output is below potential output) or temporary excess demand (if actual output is above potential output). When there is economic slack, the rate of inflation tends to decline (assuming no inflationary effects from other factors); when there is excess demand, the rate of inflation tends to rise.

But potential GDP also has some shortcomings as a benchmark. First, estimates of potential GDP are subject to considerable uncertainty and cannot be verified by direct measurement.[5] Second, the economy has generally operated below its estimated potential, which implies that, on average, cyclical deficits are not matched by cyclical surpluses. Consequently, the implied cyclical component of the federal debt grows over time rather than averaging out to zero. Finally, there is some debate about whether cyclical shocks to GDP have permanent rather than just temporary effects; the evidence is inconclusive.[6] If the effects are permanent, estimates of the structural deficit based on potential GDP will be misleading because the cyclical component of the deficit will not be temporary.

The estimates of the change in the structural deficit from one year to the next, however, are not particularly sensitive to the choice of a benchmark. And it is the change rather than the level of the structural deficit that indicates whether fiscal policy is stimulating or restraining short-term economic growth. Restraint is indicated when the structural deficit falls as a percentage of potential output (or some other

3. The construction of the middle-expansion trend is described in Frank de Leeuw and Thomas M. Holloway, "Cyclical Adjustment of the Federal Budget and Federal Debt," *Survey of Current Business*, vol. 63 (December 1983), pp. 25-40.

4. That alternative is discussed in Olivier Blanchard, *Suggestions for a New Set of Fiscal Indicators*, Economics and Statistics Department Working Paper (Paris: Organization for Economic Cooperation and Development, 1991).

5. Part of that uncertainty stems from uncertainty about the level of the NAIRU. See Congressional Budget Office, *The Economic and Budget Outlook: An Update* (August 1994), Appendix B.

6. See Charles R. Nelson and Charles I. Plosser, "Trends and Random Walks in Macroeconomic Time Series: Some Evidence and Implications," *Journal of Monetary Economics*, vol. 10, no. 2 (September 1982), pp. 139-162; Mark W. Watson, "Univariate Detrending Methods with Stochastic Trends," *Journal of Monetary Economics*, vol. 18, no. 1 (July 1986), pp. 49-75; and Olivier Jean Blanchard and Danny Quah, "The Dynamic Effects of Aggregate Demand and Supply Disturbances," *American Economic Review*, vol. 79, no. 4 (September 1989), pp. 655-673.

benchmark); stimulus is indicated when it rises.[7] Thus, estimates of the stance of fiscal policy based on different benchmarks are likely to differ by less than the estimates of the size of the structural deficit do.

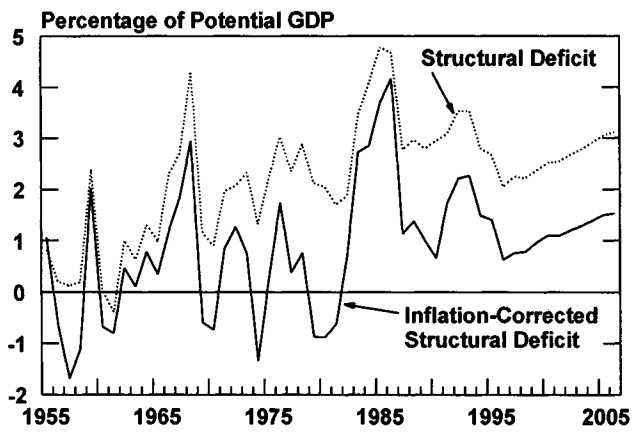
Although the cyclical adjustment is the most important for calculating the structural deficit, CBO makes other modifications. For example, outlays for deposit insurance are excluded because they mainly reflect exchanges of assets that have no contemporaneous economic effect. That also is true of receipts from such activities as auctions of the electromagnetic spectrum. Also, in 1991 and 1992 the allied contributions for Operation Desert Storm were excluded. From time to time, other adjustments have been made to take into account the difference between the economic and budget impacts of other fiscal actions, including some types of tax changes.

Although movements in the standardized-employment deficit measure the stance of fiscal policy, the estimated impact of fiscal policy on short-term growth depends on the underlying assumptions about how the economy works. In some economic models, for example, changes in fiscal policy may have little or no effect on total demand for goods and services because deficit-financed policy changes may be fully offset by increases in private saving. Under that assumption, tax cuts would not generate additional consumer spending that would otherwise raise short-term growth. But that result is based on extreme theoretical assumptions. In most models of the economy, changes in fiscal policy affect total demand not only directly through federal purchases of goods and services, but also indirectly through taxes, transfer payments, and federal debt. The standardized-employment deficit, however, does not weight the components of taxes, spending, and federal debt in an attempt to distinguish their relative impact on total demand for goods and services.

Even in models in which fiscal policy matters, many factors come into play when determining the impact of fiscal policy on short-term growth. For example, many people are likely to base their current demand for goods and services, not only on current fiscal policy, but also on their expectations of future policy. An expectation of steady progress toward a balanced budget could lower interest rates in advance and thus stimulate some parts of total demand that are sensitive to borrowing costs. That drop in interest rates would also tend to reduce the international value of the dollar, making U.S. exports cheaper to foreigners and U.S. imports more expensive at home. Such developments would tend to lessen the restrictive effects of fiscal restraint on total demand. The structural deficit, however, does not reflect the effects of those expectations, which would require assumptions about the nature of future policy actions and their credibility.

In summary, estimates of the structural deficit can differ because of different assumptions about the NAIRU and potential GDP (or other benchmarks) and about the responses of revenues and outlays to fluctuations in output and unemployment. Those assumptions are less likely to affect measures of the changes in fiscal policy from one year to the next.

Figure A-2.
The Structural Deficit Corrected for Inflation
(By fiscal year)



SOURCE: Congressional Budget Office.

NOTE: Projections are based on current policy and capped discretionary spending with inflation. Negative numbers indicate a budget surplus.

7. For an analysis of cases in which fiscal restraint may increase rather than reduce short-term growth, see Francesco Giavazzi and Marco Pagano, "Non-Keynesian Effects of Fiscal Policy Changes: International Evidence and the Swedish Experience" (paper presented at the International Monetary Fund Research Seminar, Washington, D.C., November 6, 1995); and Giuseppe Bertola and Allan Drazen, "Trigger Points and Budget Cuts: Explaining the Effects of Fiscal Austerity," *American Economic Review*, vol. 83, no. 1 (March 1993), pp. 11-26.

How much those changes affect economic activity depends on how businesses and consumers respond.

The Structural Budget Deficit Corrected for Inflation

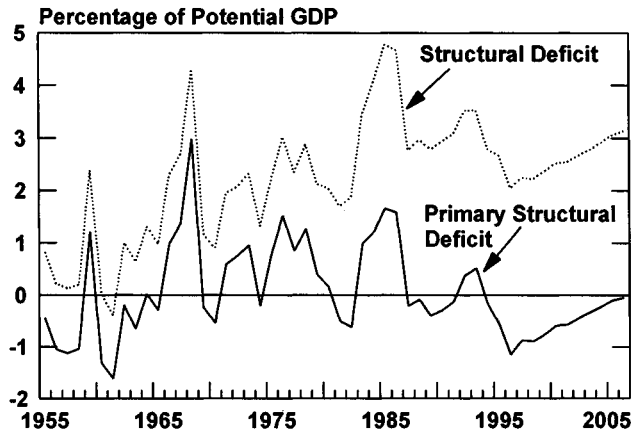
To assess the effects of fiscal policy on real interest rates, the structural deficit frequently is adjusted for the inflation-induced capital losses experienced by holders of federal debt.[8] If owners of Treasury securities increase their savings to offset those capital losses, the impact of federal borrowing on national saving and real interest rates will be less than indicated by the standardized-employment deficit (see Figure A-2).

The sizes of those capital losses can be estimated by multiplying the outstanding stock of publicly held federal debt by the rate of inflation. For example, using a 3 percent rate of inflation, the capital loss on $3 trillion of publicly held federal debt would be $90 billion (0.03 times $3 trillion). That capital loss would transform a $200 billion structural deficit into a $110 billion structural deficit that is corrected for inflation. Unless the rate of inflation changes significantly from year to year, however, adjusting the structural deficit for capital losses on federal debt related to inflation will have little effect on the change in the structural deficit, which is the key measure of the stance of fiscal policy.

The Primary Structural Budget Deficit

When interest payments on the federal debt are removed from the structural deficit, the result is called the primary structural deficit (see Figure A-3). It goes one step beyond the measure that is corrected for inflation by excluding real interest payments as well as payments that simply compensate bondholders for inflation. Because legislators cannot directly control interest payments, the primary structural deficit may be a better indicator of changes in fiscal policy than measures that include interest payments.[9]

Figure A-3.
The Primary Structural Deficit (By fiscal year)



SOURCE: Congressional Budget Office.

NOTE: Projections are based on current policy and capped discretionary spending with inflation. Negative numbers indicate a budget surplus.

More important, however, the primary structural deficit helps to determine the sustainability of current fiscal policy. Fiscal policy cannot be sustained in the long run if it generates a federal debt that will become too large for the economy to accommodate. As discussed in Chapter 4, an unchecked rise in the debt-to-output ratio would increasingly crowd out the stock of private capital, increase the nation's indebtedness to foreigners, raise interest rates, and possibly result in a currency crisis. Although it is difficult to determine how much more federal debt can be absorbed, the current debt-to-output ratio of about 50 percent in the United States is large for peacetime, and much larger ratios have emerged only during periods of war. If current fiscal policy is not sustainable, actions must be taken sooner or later to increase taxes or reduce spending enough to keep the federal

8. See Robert Eisner, *How Real Is the Federal Deficit?* (New York: The Free Press, 1986). The study also considers how changes in interest rates affect the wealth and savings of federal bondholders.

9. For a discussion of federal interest payments, see Congressional Budget Office, *Federal Debt and Interest Costs* (May 1993).

debt from growing additionally in relation to the size of the economy.

Whether the fiscal structure is sustainable depends on three factors: the size of the primary structural deficit or surplus, the gap between the potential rate of economic growth and the average rate of interest paid on federal debt (both rates measured either in nominal or in real terms), and the size of the federal debt already accumulated. Fiscal policy is always sustainable when there is a primary structural surplus and the interest rate is less than the growth rate. (When the total budget is in surplus, the size of the federal debt actually shrinks.) By contrast, fiscal policy is never sustainable when a primary structural deficit is combined with an interest rate greater than the growth rate.

In the other two cases, fiscal policy may or may not be sustainable. When the economy's growth rate exceeds the interest rate but a primary structural deficit exists instead of a surplus, the debt-to-output ratio could rise, fall, or remain unchanged. It is more likely to reach intolerable levels when the primary structural deficit is large and the growth rate barely exceeds the interest rate. For example, when the growth rate exceeds the interest rate by only 1 percentage point, a primary structural deficit equal to 1 percent of potential GDP eventually would put the federal debt at 100 percent of potential GDP. If the growth rate is more than 1 percentage point larger than the interest rate and the primary structural deficit is less than 1 percent of potential GDP, the federal debt would not reach 100 percent of potential GDP.

Finally, when the economy's growth rate is less than the interest rate, fiscal policy is sustainable only if there is a primary structural surplus. And that surplus must be large enough to offset the growth in interest payments that exceeds the growth of the economy. For any growth rate of the economy, the required size of the surplus rises with the interest rate and the existing size of the debt (see Table A-2). In a growing economy, however, balancing the total budget (including interest payments) would be unnecessary to make fiscal policy sustainable.

Under current policies, the primary structural surplus that now amounts to about 1 percent of potential GDP would be replaced by large primary structural deficits in the next century--the carryover from previous actions in conjunction with demographic developments (see Chapter 4). Thus, some adjustments in tax and spending rates will be needed to make fiscal policy sustainable. The longer the delay in making those changes, the larger the adjustments that would be needed because the additional debt accumulated would increase the size of the pri-

Table A-2.
Primary Structural Surplus Needed to Maintain an Initial Debt-to-Output Ratio Under Different Economic Assumptions (As a percentage of potential GDP)

Initial Ratio of Federal Debt to Potential GDP	Interest Rate Minus Growth Rate			
	1 Percentage Point	2 Percentage Points	3 Percentage Points	4 Percentage Points
0.5	0.5	1.0	1.5	2.0
0.6	0.6	1.2	1.8	2.4
0.7	0.7	1.4	2.1	2.8
0.8	0.8	1.6	2.4	3.2
0.9	0.9	1.8	2.7	3.6
1.0	1.0	2.0	3.0	4.0

SOURCE: Congressional Budget Office.

NOTE: A primary structural surplus exists when structural budget revenues are greater than structural budget noninterest outlays. Measured in dollars, the size of the primary structural surplus would have to be at least (r-g)D, where r is the interest rate, g is the potential growth rate, and D is the outstanding stock of federal debt. Thus, if the interest rate was 1 percentage point higher than the growth rate, the primary structural surplus would have to be at least 1 percent of the debt.

mary structural surplus that is necessary for fiscal sustainability.

Structural Deficits in Other OECD Countries

A broader view of fiscal policy considers not only what is happening in the United States but also policy changes in other countries. Fiscal stimulus abroad tends to raise demand for U.S. exports. Unsustainable fiscal policies in other countries put upward pressure on their interest rates, which tends to appreciate their currencies and worsen their trade balances. If large countries have unsustainable policies, world interest rates are likely to be higher. Over time, unsustainable fiscal policies abroad not only crowd out capital formation there, but also tend to reduce worldwide capital formation.

The Organization for Economic Cooperation and Development (OECD) calculates the structural deficit for most of its member countries (see Table A-3). Because it uses somewhat different data, concepts, and methodologies, its estimates for the United States differ from those presented above. Nevertheless, the calculations provide information for comparing the fiscal policies of different countries.

Most of the OECD countries improved their fiscal positions over the past few years. But the United States has made more progress than most other countries. As indicated above, that progress would be overturned in the next century under current policies. In the other OECD countries, further improvement depends on the strength of their dedication to fiscal discipline.

The 15 countries of the European Union have agreed to maintain fiscal discipline, whether or not they are initial members of a single European currency system. That commitment was reaffirmed at the Madrid summit in November 1995. Under the Maastricht Treaty, member countries agreed to avoid excessive government deficits, specifying a reference value of 3 percent of GDP. A common interpretation holds that the reference value allows for the effects of recessions on budget deficits. Moreover, European authorities have begun to discuss ways in which budgetary discipline could be maintained after a single currency is adopted. Under one suggestion, participants in the proposed currency union would aim to keep fiscal deficits below 1 percent of GDP in normal times.[10] For most of the countries in the European Union, meeting that guideline would produce primary structural surpluses large enough to ensure fiscal sustainability, whereas recent primary structural balances generally would not (see Table A-4).

10. See Organization for Economic Cooperation and Development, *OECD Economic Outlook* (Paris: OECD, December 1995), p. 19.

Table A-3.
Structural Budget Balances in OECD Countries (By calendar year, as a percentage of potential GDP)

	1980	1981	1982	1983	1984	1985	1986	1987
United States[a]	-1.2	-0.6	-1.5	-2.5	-2.8	-3.2	-3.5	-2.7
Japan	-4.7	-4.0	-3.5	-2.9	-1.4	-0.4	0.2	1.7
Germany	-3.9	-3.5	-1.5	-0.8	-0.7	-0.2	-0.6	-0.9
France	-0.4	-1.5	-3.0	-2.7	-1.7	-1.6	-1.5	-0.6
Italy	-9.7	-12.2	-11.1	-9.9	-10.7	-11.7	-11.0	-10.8
United Kingdom	-3.2	-0.7	-0.1	-1.8	-2.6	-2.2	-2.9	-3.2
Canada	-2.9	-1.5	-2.6	-3.9	-5.2	-6.7	-5.5	-4.6
Australia	-1.9	-0.9	0.5	-2.0	-2.8	-2.9	-2.7	-0.4
Austria	-2.9	-1.5	-2.5	-3.1	-1.3	-1.5	-2.5	-3.0
Belguim	-11.6	-13.8	-11.4	-10.9	-8.7	-7.8	-7.7	-5.8
Denmark	-3.4	-5.4	-8.0	-6.4	-4.4	-3.3	1.7	1.7
Finland	2.2	3.6	1.8	0.6	2.9	2.7	3.3	0.3
Greece	-3.8	-8.8	-5.7	-5.6	-7.2	-10.8	-9.6	-8.3
Ireland	-12.6	-13.6	-12.5	-8.9	-7.7	-9.2	-7.6	-5.7
Netherlands	-5.1	-5.0	-4.4	-3.9	-4.9	-3.8	-5.4	-5.3
Norway	-4.2	-4.4	-4.2	-5.5	-3.5	-2.4	-0.6	-0.3
Portugal	4.7	-11.9	-8.6	-10.1	-5.2	-5.3	-4.9	-4.9
Spain	-1.0	-1.9	-3.9	-3.0	-3.4	-5.3	-4.8	-3.4
Sweden	-4.4	-4.6	-5.9	-4.1	-3.9	-5.1	-2.9	1.7
Total[b]	-2.9	-2.8	-2.9	-3.2	-3.1	-3.2	-3.1	-2.3

SOURCE: Organization for Economic Cooperation and Development, *OECD Economic Outlook* (Paris: OECD, December 1995).

NOTE: The data are for general governments, which combine the central government with other levels of government. Negative numbers indicate a deficit and positive numbers a surplus.

Table A-3.
Continued

	1988	1989	1990	1991	1992	1993	1994	Estimated 1995
United States[a]	-2.6	-2.2	-3.0	-3.4	-3.8	-3.1	-2.2	-2.0
Japan	1.6	2.0	1.7	1.5	0.3	-1.6	-2.9	-2.2
Germany	-1.8	0.1	-3.1	-4.6	-4.3	-2.8	-2.1	-2.5
France	-1.3	-1.8	-2.2	-2.0	-3.5	-3.8	-4.1	-3.5
Italy	-11.0	-10.7	-11.7	-10.7	-9.3	-7.9	-7.4	-6.1
United Kingdom	-1.9	-2.0	-3.1	-2.2	-4.3	-5.7	-5.3	-3.6
Canada	-4.4	-4.7	-4.7	-5.0	-4.9	-4.7	-4.0	-3.1
Australia	0.6	0.4	0.4	-1.3	-2.2	-2.6	-4.1	-1.9
Austria	-2.9	-3.6	-3.2	-3.2	-2.1	-3.0	-3.7	-5.1
Belguim	-6.4	-6.6	-6.6	-7.4	-7.6	-5.0	-3.7	-2.8
Denmark	0.6	0	-0.6	-0.9	-0.9	-2.3	-2.5	-1.4
Finland	2.4	3.4	2.7	-0.1	-2.2	-3.8	-2.6	-3.8
Greece	-11.7	-15.4	-13.6	-11.5	-11.4	-10.9	-10.2	-8.5
Ireland	-1.6	-0.3	-2.4	-1.3	-1.1	-0.3	-1.0	-2.2
Netherlands	-3.8	-5.1	-6.4	-3.9	-4.5	-2.2	-2.5	-2.6
Norway	0.8	-0.7	-1.4	-4.0	-5.9	-6.6	-6.0	-5.3
Portugal	-3.8	-3.4	-7.2	-8.0	-4.3	-6.6	-4.2	-3.8
Spain	-4.6	-5.1	-6.7	-7.1	-5.0	-6.1	-5.0	-4.6
Sweden	0.5	2.1	1.4	-2.2	-7.0	-9.7	-7.6	-6.0
Total[b]	-2.4	-2.1	-3.0	-3.3	-3.7	-3.7	-3.3	-2.8

a. These estimates differ from those in Table A-1 because the OECD uses different data, concepts, and methodologies.

b. Total is the weighted average for the above countries.

Table A-4.
Primary Structural Budget Balances in OECD Countries (By calendar year, as a percentage of potential GDP)

	1980	1981	1982	1983	1984	1985	1986	1987
United States[a]	0	0.9	0.1	-0.9	-0.8	-1.1	-1.5	-0.7
Japan	-3.7	-2.8	-2.1	-1.3	-0.3	1.3	1.8	3.1
Germany	-2.6	-1.9	0.4	1.4	1.5	2.1	1.7	1.5
France	0.4	-0.3	-1.8	-1.0	0.2	0.4	0.6	1.5
Italy	-4.8	-6.6	-4.6	-3.1	-3.4	-4.5	-3.3	-3.4
United Kingdom	-0.1	2.5	3.0	1.2	0.6	1.2	0.2	-0.1
Canada	-1.0	0.8	0.1	-1.2	-1.8	-2.7	-1.3	-0.3
Australia	-1.0	0	1.4	-0.9	-1.2	-0.9	-0.5	1.7
Austria	-1.2	0.4	-0.2	-0.8	1.3	1.3	0.3	0
Belguim	-5.9	-6.5	-2.8	-2.3	0.4	1.8	2.4	3.8
Denmark	-2.9	-3.7	-5.4	-2.2	1.4	2.9	7.0	6.2
Finland	1.2	2.5	0.8	-0.4	2.0	1.8	2.3	-0.6
Greece	-1.4	-5.7	-3.3	-2.3	-2.9	-5.7	-4.7	-1.6
Ireland	-9.1	-9.0	-7.1	-3.6	-2.0	-2.9	-1.3	-0.7
Netherlands	-2.7	-2.0	-0.7	0.2	-0.5	0.9	-0.7	-0.4
Norway	-4.0	-4.6	-4.5	-5.8	-4.5	-3.9	-2.6	-2.8
Portugal	7.6	-7.0	-3.7	-4.6	1.8	2.7	3.5	2.9
Spain	-0.7	-1.6	-3.5	-2.3	-1.9	-2.7	-1.6	-0.5
Sweden	-4.8	-4.3	-4.3	-2.2	-1.5	-2.0	-0.6	3.5

SOURCE: Congressional Budget Office calculations based on Annex Tables 11, 31, and 33 in Organization for Economic Cooperation and Development, *OECD Economic Outlook* (Paris: OECD, December 1995). Because of data limitations, no calculations were made for the average of all countries.

Table A-4.
Continued

	1988	1989	1990	1991	1992	1993	1994	Estimated 1995
United States[a]	-0.7	-0.2	-0.9	-1.2	-1.7	-1.2	-0.3	0.1
Japan	2.7	2.9	2.4	1.9	0.6	-1.3	-2.5	-1.7
Germany	0.5	2.3	-1.1	-2.5	-1.6	-0.2	0.6	0.8
France	0.8	0.4	0.2	0.5	-0.7	-0.9	-1.1	-0.4
Italy	-3.3	-2.1	-2.4	-0.9	1.5	3.2	2.5	3.9
United Kingdom	1.0	0.5	-0.7	-0.1	-2.3	-3.6	-2.8	-0.8
Canada	0.1	0.3	0.7	0.0	-0.3	-0.2	0.5	1.8
Australia	2.4	2.3	2.2	0.3	-0.9	-1.5	-2.1	0.1
Austria	0.3	-0.5	0.1	0.1	1.3	0.5	-0.3	-1.6
Belguim	2.9	3.1	3.4	2.2	2.4	4.5	5.7	5.6
Denmark	4.8	3.8	2.7	2.5	1.9	1.2	0.7	2.2
Finland	1.5	2.1	0.8	-2.1	-4.1	-4.2	-2.0	-3.1
Greece	-4.2	-7.7	-3.4	-1.8	0.6	1.9	4.1	4.5
Ireland	4.4	5.5	3.7	4.3	4.0	4.3	3.4	2.1
Netherlands	1.0	-0.7	-1.9	0.8	0	2.5	2.1	2.1
Norway	-2.5	-2.8	-2.7	-5.3	-7.1	-7.4	-6.1	-5.4
Portugal	3.3	3.2	1.8	0.8	3.5	0	1.5	1.8
Spain	-1.5	-1.9	-3.3	-3.4	-1.0	-1.3	-0.3	0.2
Sweden	1.5	2.6	1.5	-2.1	-6.8	-8.6	-5.5	-3.4

NOTE: The data are for general governments, which combine the central government with other levels of government. Negative numbers indicate a deficit and positive numbers a surplus.

a. These estimates differ from those in Table A-1 because the OECD uses different data, concepts, and methologies.

Appendix B

An Analysis of Congressional Budget Estimates

In May 1994, the Congress adopted a budget resolution for fiscal year 1995 that anticipated a deficit of $175 billion in that year. Unlike the one in the previous year, the budget resolution for 1995 did not assume passage of significant new legislation, and thus the deficit figure differed little from the Congressional Budget Office's (CBO's) deficit projection under current laws and policies. When fiscal year 1995 ended, the Treasury Department announced an actual deficit of $164 billion--marking the third straight year in which the actual deficit was less than that anticipated by the budget resolution. (Before the recent trend, the actual deficit exceeded the figure in the budget resolution for 13 years in a row). The $11 billion difference in the 1995 deficit can be traced to a mix of factors affecting both spending and revenues.

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. An example of the former is emergency appropriations, such as those for aid to victims of natural disasters, 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 a 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 1995 budget resolution), the economic assumptions are drawn from a CBO forecast, although in about one-third of the cases--notably in 1982 and for most of the years between 1988 and 1992--the Congress chose a non-CBO forecast, generally one from the Administration.

Soon after the end of the fiscal year, 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 information available at that time; that allocation is not subsequently changed, even though revisions of data about GDP and taxable incomes continue to trickle in thereafter. Only the differences that can be linked rigorously to those major variables are labeled economic. Other differences that might 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.

All other types of discrepancies are classified as *technical* differences. The portions of the budget that have contributed the largest technical differences since 1980 are noted at the end of this appendix. Not surprisingly, technical misestimates are concentrated in revenues and in open-ended commitments of the government such as entitlement programs. Large technical differences often prompt both CBO and the Administration to review their methods of projection, but some such differences are inevitable given the size and complexity of the budget.

The Budget Resolution for Fiscal Year 1995

In contrast to both the previous year and the year that would follow, the Congress's budget resolution for fiscal year 1995 sought to keep the growth of federal spending in line with current law rather than chart a course for steep reductions in the deficit. Discretionary spending proposed in the budget resolution equaled the limits set by the Budget Enforcement Act of 1990. The budget resolution did not include any reconciliation instructions altering mandatory spending levels or revenues.

As a whole, the resolution for fiscal year 1995 called for total outlays of $1,514 billion, revenues of $1,338 billion, and a deficit of $175 billion (see Table B-1). Ultimately, outlays came in $6 billion higher and revenues $17 billion higher, resulting in a deficit that was $11 billion smaller than that envisioned in the resolution.

Changes in Policies

Policy actions added slightly to the deficit assumed in the budget resolution. Emergency spending--in the form of disaster aid to farmers and victims of the Oklahoma City bombing, antiterrorism initiatives, and expenditures on defense readiness--increased outlays by nearly $4 billion in 1995 (see Table B-2). Under the terms of the Balanced Budget and Emergency Deficit Control Act of 1985, emergencies are a

Table B-1.
Comparison of the CBO April 1994 Baseline, the 1995 Budget Resolution, and Actual Budget Totals for Fiscal Year 1995 (In billions of dollars)

	CBO April 1994 Baseline[a]	Budget Resolution[b]	Actual[c]	Actual Minus CBO April 1994 Baseline	Actual Minus Budget Resolution
Revenues	1,338	1,338	1,355	17	17
Outlays	1,518	1,514	1,519	1	6
Deficit	180	175	164	-16	-11

SOURCE: Congressional Budget Office.

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

a. From Congressional Budget Office, *An Analysis of the President's Budgetary Proposals for Fiscal Year 1995* (April 1994), Appendix A.

b. Concurrent Resolution on the Budget for Fiscal Year 1995.

c. From *Budget of the United States Government, Fiscal Year 1997.*

valid reason for extra spending and do not require increases in revenue or offsetting cuts in other programs. In 1995, however, the Congress did offset some emergency spending by enacting rescissions in the last half of the fiscal year that trimmed outlays for appropriated accounts by more than $1 billion. The Congress also passed legislation to reform the crop insurance program (a shift that may reduce the future need for stopgap emergency aid to farmers). But because that modification was anticipated in the

Table B-2.
Sources of Differences Between the CBO April 1994 Baseline, the 1995 Budget Resolution, and Actual Budget Totals for Fiscal Year 1995 (In billions of dollars)

	Policy Differences			Economic	Technical	
	Emergencies	Other	Subtotal	Differences	Differences	Total
Actual Minus CBO April 1994 Baseline						
Revenues	0	a	a	16	1	17
Outlays						
Discretionary spending	4	-2	2	0	-3	a
Mandatory spending	0	1	1	-3	-6	-8
Deposit insurance	0	0	0	0	-6	-6
Net interest	0	a	a	20	-1	19
Offsetting receipts	0	a	a	0	-3	-3
Total	4	-1	3	17	-19	1
Deficit	4	-1	2	2	-20	-16
Actual Minus Budget Resolution						
Revenues	0	a	a	16	1	17
Outlays						
Discretionary spending	4	-1	2	0	3	5
Mandatory spending	0	a	a	-3	-6	-9
Deposit insurance	0	0	0	0	-6	-6
Net interest	0	a	a	20	-1	19
Offsetting receipts	0	a	a	0	-4	-4
Total	4	-2	2	17	-14	6
Deficit	4	-2	2	2	-15	-11

SOURCE: Congressional Budget Office.

a. Less than $500 million.

budget resolution, it had little effect on the differences caused by changes in policy. In all, legislation affecting emergency and nonemergency outlays, combined with legislation that boosted tax receipts slightly, yielded a net increase of about $2 billion in the deficit attributable to policy actions.

Economic Factors

The economy grew somewhat faster in 1995 than had been assumed in the budget resolution. Nonetheless, economic differences as a whole expanded the deficit by $2 billion. Although sustained economic growth and lower unemployment rates improved the deficit picture by pushing up revenues and suppressing costs for benefit programs, higher-than-expected interest rates caused the picture to deteriorate.

Interest rates rose throughout 1994 as the Federal Reserve attempted to rein in a strongly growing economy. Despite some reduction in rates in 1995, for the fiscal year as a whole, interest rates on three-month Treasury bills were 130 basis points (1.3 percentage points) higher than had been assumed in the budget resolution. Long-term interest rates (such as those on 10-year Treasury notes), rose by almost as much, but because the government's long-term debt turns over less quickly than its short-term debt holdings, that increase was not quite as important in explaining the jump in net interest outlays in 1995. In all, extra costs for debt servicing caused mostly by misestimates of interest rates topped $20 billion--more than erasing the surge in revenues and the reductions in mandatory spending that were brought about by higher-than-expected growth and lower unemployment.

Technical Factors

As described above, both legislative and economic factors added to the deficit figure called for in the 1995 budget resolution. Differences caused by technical factors--the label given to any incorrectly estimated amount that cannot be traced to legislative actions or inaccurate economic assumptions--more than offset all other differences, however. Most of the $15 billion misestimate that could be attributed to technical factors fell on the outlay side of the budget.

Because the budget resolution generally employed CBO's technical assumptions, most of the technical misestimates crop up in the same categories of spending. The category of discretionary spending is an exception, however. Emergency appropriations of nearly $5 billion, passed by the Congress in early 1994 to aid victims of the Los Angeles earthquake and other disasters, were included in CBO's baseline but not in the budget resolution, even though the emergency legislation had already been enacted. In this analysis, the resulting underestimate of outlays in the budget resolution is called a technical, rather than a policy, difference.

In all other categories of spending, most notably mandatory programs and deposit insurance, technical factors led to overestimates of total outlays when the budget resolution was compared with actual outcomes. Although Medicaid continued to consume a considerable portion of federal entitlement spending, its rapid growth in recent years slowed slightly in 1995. Largely as a result of states' efforts to limit optional coverage and shift enrollees into health maintenance organizations and other cost-saving arrangements, Medicaid spent $7 billion less in 1995 than CBO estimated in early 1994.

The overestimate of Medicaid spending was partly offset, however, by an unexpected jump in mandatory outlays of $4.3 billion. (A corresponding increase in revenues of $4.3 billion was also recorded.) This addition stemmed from a change in the treatment of transactions of the Universal Service Fund, which spreads the burden of providing telephone service among high- and low-cost areas. Before this year, those transactions were not included in federal outlay or revenue totals. However, the Office of Management and Budget (OMB) has now determined, and CBO has agreed, that the fund's income and disbursements should be recorded by the federal government, and therefore OMB has included both the fund's future and past transactions in the President's budget for fiscal year 1997. Because this increase in fiscal year 1995 outlays and revenues results from an accounting change, it falls in the category of technical differences.

Smaller misestimates appeared in a variety of other mandatory programs. Commodity Credit Corporation spending, for example, was nearly $2 billion less than expected, while spending for veterans' benefits was slightly higher than earlier estimated. In all, technical factors accounted for a nearly $6 billion overestimate of mandatory program spending.

Deposit insurance outlays resulting from the savings and loan cleanup have also proven difficult to predict. As with the other mandatory spending described above, the budget resolution for 1995 overestimated deposit insurance outlays by about $6 billion. Much of that incorrectly estimated amount could be traced to lower-than-expected disbursements to failed banks and savings and loan institutions and to higher proceeds from the sale of assets acquired by the government. Differences in offsetting receipts--fees and charges assessed by the government that are recorded as negative outlays--reduced the deficit assumed in the budget resolution as well. The Federal Communications Commission's electromagnetic spectrum auctions were the largest contributor to the $4 billion in added receipts, attracting more bids in 1995 than anticipated. Conversely, lower payments to the government's retirement funds, resulting in part from cuts in federal employment, reduced total receipts by about $1 billion. But because the employment cuts were largely assumed in the budget resolution, their effect on offsetting receipts is noticeable only under the baseline comparison.

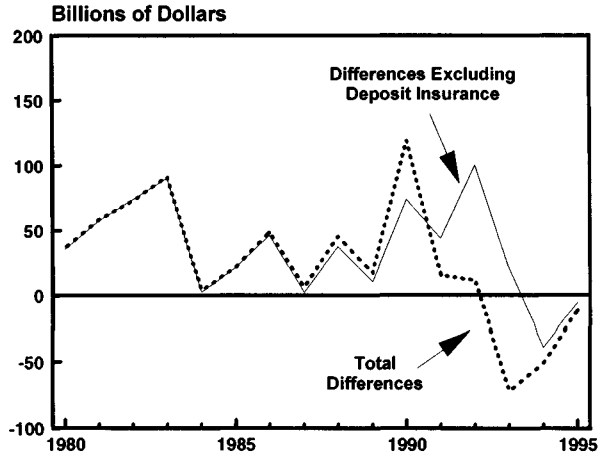
Budget Resolutions in 1980 Through 1995

In 1980 through 1992, the deficit consistently exceeded the figure in the budget resolution by amounts ranging from a negligible $4 billion to a staggering $119 billion (see Table B-3). The 1993 budget resolution altered that pattern. The good news was muted, however, because the incorrectly estimated amount was more than explained by deposit insurance spending that was less than expected (see Figure B-1). In 1994 and 1995, the deficit continued to come in below the resolutions' assumptions, but in each of those years, the improvement was more broadly based.

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 periods when policymakers trimmed the deficit more, or added to it by less, than the resolution permitted--namely, in fiscal years 1982, 1987, and 1991. In fiscal year 1982, the first Reagan-era budget, that situation occurred mainly because the first-year tax cut contained in the Economic Recovery Tax Act of 1981 was smaller than the resolution assumed; in 1987, it happened principally because the new Tax Reform Act temporarily swelled collections; and in 1991, it took place chiefly because $43 billion in contributions from foreign nations to help finance Operation Desert Storm streamed in, dampening total outlays commensurately. Since 1991, the Congress has hewed faithfully to the strictures of the Budget Enforcement Act, and nearly all additions to the deficit have been for emergency spending.

Because the budget process for a fiscal year begins about nine months before the year starts, economic performance is a regular source of uncertainty. Constant revisions to economic data, which continue long after the fiscal year in question, often make it hard to disentangle economic and technical errors.

Figure B-1.
Differences Between Actual Deficits and Deficits in Budget Resolutions, Fiscal Years 1980-1995



SOURCE: Congressional Budget Office.

Table B-3.
Sources of Differences Between Actual Budget Totals and Budget Resolution Estimates, Fiscal Years 1980-1995 (In billions of dollars)

	Policy Differences	Economic Differences	Technical Differences	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
1994	-1	12	4	15
1995	a	16	1	17
Average	a	-15	-5	-20
Absolute Average[c]	6	25	8	29
		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
1994	10	-9	-36	-35
1995	2	17	-14	6
Average	10	2	-6	6
Absolute Average[c]	13	12	26	37

Table B-3.
Continued

	Policy Differences	Economic Differences	Technical Differences	Total
		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
1994	11	-21	-40	-50
1995	2	2	-15	-11
Average	10	17	-1	26
Absolute Average[c]	15	22	25	43

SOURCE: Congressional Budget Office.

NOTES: Differences are actual outcomes minus budget resolution assumptions.

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.

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

c. The absolute average disregards whether the differences are positive or negative.

Nevertheless, with only two exceptions (in 1989 and 1994), budget resolutions over the 16-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 caused Congressional drafters to err on the optimistic side to the tune of $17 billion.

Technical misestimates of the deficit have surprisingly averaged close to zero--although in absolute terms, disregarding whether they were positive or negative, they caused the average estimate of the deficit to be off by $25 billion. 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 were even weaker than economic data seemed to justify. On the outlay side, farm price supports, receipts from offshore oil leases, defense, and

benefit programs dominated the errors through the mid-1980s. Such errors briefly faded at decade's end. Although underestimates of benefit outlays, especially for health care, swelled once again in 1991 and 1992, the last two years have witnessed overestimates of both Medicare and Medicaid spending. Deposit insurance remains a major source of technical misestimates as well, but it was not nearly as significant a factor in 1995 as it was during the 1990-1993 period, the height of the savings and loan crisis.

Appendix C

How the Economy Affects the Budget

The federal budget is highly sensitive to the economy. Revenues depend on taxable incomes--including wages and salaries, interest and other nonwage income, and corporate profits--which generally move in step with economic growth. Many benefit programs are pegged to inflation, either directly (like Social Security) or indirectly (like Medicare). And the Treasury continually borrows and refinances the government's debt at market interest rates.

The Congressional Budget Office (CBO) has summarized some of the links between key economic assumptions and federal budget projections with three rules of thumb. Those rules generate estimates of the impact on budget totals of changes in real growth, inflation, and interest rates. The real growth rule assumes 0.1 percentage-point slower growth than CBO's baseline, starting in January 1996. The inflation and interest rate rules assume each is 1 percentage point greater than CBO's baseline, starting in January 1996. Each of the three rules is roughly symmetrical; the impacts of faster growth, lower inflation, or lower interest rates would be about the same size as those shown in Table C-1, but with the opposite sign. Sustained errors of 0.1 or 1 percentage point are used for the sake of simplicity; they do not represent typical forecasting errors.

Each year, CBO presents rules of thumb in its annual report. Their magnitudes always change somewhat from year to year because of the intervening growth in the economy (principally affecting revenues), changes in interest rates, and new projections of growth in benefit programs. This year's rules, however, reflect a substantial shift in emphasis. Previously, CBO produced estimates of the effects of different economic assumptions on projections during a six-year budget period. The estimates of the effects of changes in real growth and unemployment were generally intended to reflect possible cyclical changes in the economy. Because CBO has now begun to produce budget projections for 11 years, and because there is great interest in what the budget will look like in the later years of the projection period, CBO's approach to the rules of thumb has changed.

For instance, the new rule of thumb for real growth is an illustration of the change in the budget if the growth of potential gross domestic product (GDP) departs from the baseline, not an illustration of the effects of a cyclical change. As a result, the rule of thumb has been recast as a 0.1 percentage-point decline in real growth instead of the 1 percentage-point change assumed in the past. Although it was not unreasonable to assume that real growth could be 1 percentage point lower than CBO's baseline over the next few years because of cyclical effects, it does not seem at all realistic to assume that real growth could be as much as 1 percentage point lower than the baseline projections for the next 10 years. In addition, because the unemployment effect that used to be included in the real growth rule of thumb and the unemployment rule of thumb itself were measures of cyclical effects, both have been eliminated.

As noted below, these rules of thumb are highly simplified and should be used with caution. Budget projections are also subject to other kinds of errors

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

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Real Rate of Growth Is 0.1 Percentage Point a Year Lower Beginning in January 1996											
Change in Revenues	-1	-2	-4	-6	-8	-10	-13	-16	-19	-22	-26
Change in Outlays											
Net interest (Debt service)	a	a	a	1	1	2	2	3	5	6	8
Change in Deficit	1	2	4	7	9	12	16	19	24	29	34
Inflation Rate Is 1 Percentage Point a Year Higher Beginning in January 1996[b]											
Change in Revenues	8	23	38	55	73	92	114	138	164	193	224
Change in Outlays											
Net interest											
Higher rates	3	15	23	29	34	38	42	46	50	54	58
Debt service	a	a	a	a	1	2	4	5	7	8	11
Discretionary spending	0	3	8	13	19	26	33	40	48	57	66
Mandatory spending	a	5	14	24	35	47	58	74	91	109	128
Total	3	23	44	66	89	113	136	165	195	228	263
Change in Deficit	-5	1	6	12	16	20	22	28	31	35	39
Interest Rates Are 1 Percentage Point a Year Higher Beginning in January 1996											
Change in Revenues	0	0	0	0	0	0	0	0	0	0	0
Change in Outlays											
Net interest											
Higher rates	3	15	23	29	34	38	42	46	50	54	58
Debt service	a	1	2	3	5	8	11	14	18	22	26
Mandatory spending	a	a	a	a	a	a	a	1	1	1	1
Total	3	16	25	32	40	46	53	60	68	76	85
Change in Deficit	3	16	25	32	40	46	53	60	68	76	85

SOURCE: Congressional Budget Office.

a. Less than $500 million.

b. Assuming that discretionary spending grows with inflation.

that are technical in nature and not directly related to economic forecasting. There is no way, however, to develop rules of thumb for those other uncertainties.

Real Growth

Strong economic growth narrows the federal budget deficit and weak economic growth widens it. The first rule of thumb produces an estimate of the budgetary impact of economic growth that is slightly weaker than that assumed in CBO's baseline.

In CBO's baseline, growth of real GDP averages slightly above 2 percent a year. Subtracting 0.1 percentage point from the rate of real growth, beginning in January 1996, implies slightly slower growth throughout the projection period. Under that slow-growth scenario, GDP lies roughly 1 percent below CBO's baseline assumption by 2006.

The same scenario implies lower growth in taxable incomes, leading to revenue losses that mount from $1 billion in 1996 to $26 billion in 2006 (see Table C-1). The loss in revenues in 2006 is roughly 1 percent of baseline revenues, on a par with the loss in GDP. In addition, the government borrows more and incurs greater debt-service costs. In sum, the deficit in 2006 would be an estimated $34 billion (or 8 percent) larger than in CBO's baseline.

Inflation

Inflation produces effects on the federal budget that largely offset each other. The second rule of thumb generates estimates of the budgetary impact of inflation that is 1 percentage point higher than CBO's baseline assumption. If other economic variables are not affected, higher inflation leads to larger taxable incomes and hence greater revenues. But higher inflation also boosts spending. Nearly all benefit programs would cost more, although with a lag; so would discretionary programs, unless policymakers decided to ignore the steady erosion of real budget resources. And interest rates would almost surely rise with inflation, fueling higher debt-service costs.

Table C-2.
Effects on Budget Projections of a Change in CBO's Projection of Inflation, Assuming Discretionary Spending Remains Level (By fiscal year, in billions of dollars)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Change in Revenues	8	23	38	55	73	92	114	138	164	193	224
Change in Outlays											
Net interest											
Higher rates	3	15	23	29	34	38	42	46	50	54	58
Debt service	a	a	a	-1	-1	-1	-2	-3	-4	-6	-9
Discretionary spending	0	0	0	0	0	0	0	0	0	0	0
Mandatory spending	a	5	14	24	35	47	58	74	91	109	128
Total	3	20	36	52	68	83	98	117	136	157	178
Change in Deficit	-5	-2	-2	-3	-5	-9	-16	-21	-28	-36	-46

SOURCE: Congressional Budget Office.

NOTE: Inflation is assumed to grow at a 1 percentage-point higher annual rate beginning in January 1996.

a. Less than $500 million.

Higher inflation has little effect on the deficit initially, as revenues rise almost in tandem with outlays. The extra spending eventually overtakes the additional revenues, however, increasing the deficit by an estimated $39 billion in 2006.

The effects of inflation on the budget are subtle, and varying conclusions are possible if one or two key assumptions are changed. The assumption that interest rates rise in step with inflation is crucial--it contributes $58 billion in extra spending by 2006. The treatment of discretionary programs is also critical. Because discretionary spending is controlled by annual appropriation acts, both the appropriate method of projecting discretionary spending under current policies and the effect of inflation on those projections are ambiguous.

As discussed in Chapter 2, CBO uses two different approaches in projecting discretionary spending. Both approaches begin with the actual level of appropriations enacted in the current year--in this instance 1996. The first assumes that appropriations grow with inflation, although they will be somewhat constrained in 1998 by the statutory caps that are in place through 1998 (under the law, the caps themselves are adjusted for changes in inflation). The other approach assumes that the 1996 dollar level is appropriated each year through 2006. Under the first approach to projecting discretionary spending, a 1 percentage-point increase in inflation generates extra discretionary spending of $3 billion in 1997 and $66 billion in 2006 (see Table C-1). Under the second approach, inflation has no effect on discretionary spending. In that case, the assumed increase in the rate of inflation generates a reduction in the deficit of $46 billion in 2006 (see Table C-2). This beneficial effect on the deficit has a hidden cost: an erosion of the real resources for discretionary programs.

Interest Rates

The final rule of thumb illustrates the sensitivity of the budget to interest rates. The Treasury finances the government's large and growing debt at market interest rates. Assuming that interest rates are 1 percentage point higher than in the baseline for all maturities in each year, while assuming that all other economic variables are unchanged, would drive up interest costs by more than $3 billion in 1996. That initial boost in interest costs is fueled largely by the extra costs of refinancing the government's short-term Treasury bills, which make up almost one-fourth of the marketable debt. More than $800 billion worth of Treasury bills are now outstanding, all of them maturing within the next year.

The bulk of the marketable debt, however, consists of medium- and long-term securities, mainly those with initial maturities of two to 10 years. Inevitably, many of those securities will come due for refinancing over the next several years. And the Treasury continually adds new debt to finance the deficit. Thus, the budgetary effects mount as more and more debt is hit with higher interest rates. By 2006, the vast majority of the debt would be affected. Of the marketable debt outstanding at the end of that year, CBO estimates that more than 47 percent would have been originally borrowed in the 1996-2006 period and therefore would be affected by higher rates. About 39 percent would have been outstanding in early 1996 and then refinanced during the 1996-2006 period. Only about 14 percent of the debt would be unaffected by higher interest rates. As a result of the rise in interest rates, the deficit in 2006 would increase by $85 billion.

This rule of thumb incorporates small changes in other interest-sensitive spending, primarily student loans, but it does not include any possible effects on revenues of such a large change in interest rates. In CBO's calculation of the economic effects of deficit reduction, the drop in interest rates caused by deficit reduction is assumed to reduce the interest income share in GDP, raise the corporate profits share, and reduce Federal Reserve earnings. On balance, such changes result in higher revenues. Higher interest rates, conversely, would result in lower revenues. Those economic effects are omitted from this rule of thumb because many users of these rules are interested in only the direct effect of higher interest rates on the deficit, excluding effects on income shares and other macroeconomic variables. If those effects were included, however, the deficit would be higher by an additional $15 billion in 2002 and $20 billion in 2006.

Appendix D

The Federal Sector of the National Income and Product Accounts

In addition to the usual budget presentation, the economic influence of federal government revenues and spending can be portrayed through the national income and product accounts (NIPAs). The NIPAs provide a picture of government activity in terms of production, distribution, and use of output. That 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.

This year the federal NIPAs have changed somewhat from the past. As part of a major revision of the full set of NIPA accounts, the Bureau of Economic Analysis (BEA) has changed its treatment of government investment and capital consumption and its treatment of contributions to federal employee retirement programs.

Relationship Between the Budget and the NIPAs

A handful of major differences distinguish the NIPA version of federal receipts and expenditures from its budgetary counterpart. 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. For the most part, they affect receipts that the budget records as negative outlays because they are either voluntary or intrabudgetary in nature and are not considered results of the government's taxing power. To give a more comprehensive picture of receipts from all sources in the economy, the NIPAs shift those negative outlays from the expenditures to the receipts side of the ledger (see Table D-1). That shift does not affect the deficit.

Foremost among netting and grossing adjustments are voluntary premiums for Medicare coverage ($20 billion in 1996) and intrabudgetary receipts for retirement contributions on behalf of federal workers ($66 billion in 1996). The BEA revised its treatment of retirement contributions this year and now counts their actual amount instead of imputing them to be equal to benefits paid. This change increases the netting and grossing adjustment. Another relatively large item is deposit insurance premiums. Deposit insurance outlays are financed in part by premiums levied on banks and thrift institutions; those premiums boosted the netting and grossing adjustment by $7 billion in 1995 but by just $2 billion each year thereafter. A netting and grossing item that has recently become important is the Federal Communications Commission's auctions of the electromagnetic spectrum. Auction receipts are expected to total $5 billion in 1996 and $12 billion in 1997.

By contrast, other differences between the federal budget and the NIPAs do affect the deficit. The

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 1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
					Receipts							
Revenue (Budget basis)[a]	1,355	1,428	1,483	1,544	1,609	1,681	1,758	1,840	1,931	2,023	2,124	2,232
Differences												
Netting and grossing												
Government contributions for employee retirement	68	66	68	70	72	75	78	82	85	89	93	96
Medicare premiums	20	20	21	23	24	25	26	27	29	30	31	32
Deposit insurance premiums	7	2	2	2	2	2	2	2	2	2	2	2
Other	3	5	12	2	-1	-2	-2	-1	-2	-4	-4	-6
Geographic exclusions	-3	-3	-3	-3	-3	-3	-3	-3	-4	-4	-4	-4
Other	13	8	3	3	1	-1	1	2	2	5	4	4
Total	108	98	103	98	96	97	103	108	113	119	122	125
Receipts (NIPA basis)	1,463	1,527	1,587	1,642	1,705	1,778	1,861	1,949	2,044	2,142	2,246	2,357
					Expenditures							
Outlays (Budget basis)[a]	1,519	1,572	1,654	1,737	1,828	1,925	2,016	2,125	2,242	2,365	2,500	2,636
Differences												
Netting and brossing												
Government contributions for employee retirement	68	66	68	70	72	75	78	82	85	89	93	96
Medicare premiums	20	20	21	23	24	25	26	27	29	30	31	32
Deposit insurance premiums	7	2	2	2	2	2	2	2	2	2	2	2
Other	3	5	12	2	-1	-2	-2	-1	-2	-4	-4	-6
Lending and financial transactions												
Deposit insurance	11	8	2	-1	-1	-1	-2	-2	-3	-3	-3	-3
Other	-5	4	3	1	b	b	-1	-1	-1	-2	-1	-2
Defense timing adjustment	1	5	5	1	1	1	1	1	1	1	1	1
Geographic exclusions	-9	-9	-10	-10	-11	-11	-12	-12	-13	-13	-14	-15
Treatment of investment and capital consumption	6	9	8	10	10	10	10	10	10	10	10	10
Other	11	7	3	4	4	-1	8	4	4	4	-2	5
Total	111	117	114	102	100	98	110	109	113	115	112	121
Expenditures (NIPA basis)	1,630	1,690	1,768	1,839	1,928	2,023	2,127	2,235	2,355	2,480	2,612	2,757
					Deficit							
Deficit (Budget basis)[a]	164	144	171	194	219	244	259	285	311	342	376	403
Differences												
Lending and financial transactions	6	12	4	b	-1	-2	-2	-3	-4	-4	-4	-5
Defense timing adjustment	1	5	5	1	1	1	1	1	1	1	1	1
Geographic exclusions	-7	-7	-7	-7	-8	-8	-8	-9	-9	-10	-10	-11
Treatment of investment and capital consumption	6	9	8	10	10	10	10	10	10	10	10	10
Other	-2	b	b	b	3	b	7	2	2	-1	-6	-2
Total	3	19	11	4	4	1	7	1	b	-4	-10	-3
Deficit (NIPA basis)	167	163	182	198	223	245	266	286	311	338	366	400

SOURCE: Congressional Budget Office.

a. Includes Social Security and the Postal Service.

b. Less than $500 million.

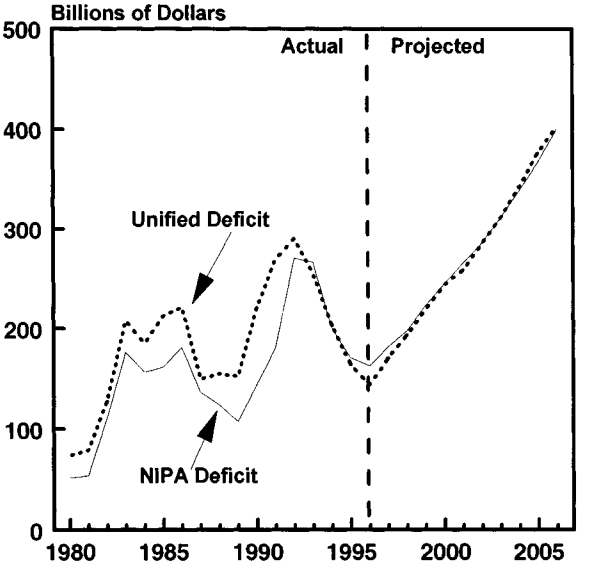
NIPA totals exclude transactions that involve the transfer of existing assets and liabilities and therefore do not contribute to current income and production. Prominent among such *lending and financial* adjustments are those for deposit insurance outlays and cash flows for direct loans made by the government before credit reform. Other factors driving a wedge between budget and NIPA deficit accounting include *geographic adjustments* (the exclusion of Puerto Rico, the Virgin Islands, and a few other areas from the national economic statistics) and *timing adjustments* (such as correcting for irregular numbers of benefit checks or paychecks because of calendar quirks).

Another difference between the NIPA and unified budgets lies in their differing treatment of *investment and capital consumption*. The unified budget includes all expenditures of the federal government, including investment purchases such as buildings and aircraft carriers. The NIPA budget has been recently revised and now shows the current or operating account for the federal government; consequently, government investment is left out and the government's consumption of fixed capital (depreciation) is included. (Government investment does not disappear but is classed along with private investment rather than in the government accounts.) The inclusion of depreciation in the NIPA budget parallels the treatment of the private sector, where the accounts have long recognized the depreciation of fixed capital. The revised NIPA treatment of the federal budget largely follows and supplants the "capital budget" that in recent years has been published in the supporting volumes of the President's annual budget.

CBO estimates that consumption of capital will be $6 billion greater than new investment in 1996 and roughly $10 billion greater in each of the following years. This difference increases the NIPA deficit in relation to the unified deficit.

In the early and mid-1980s, the NIPA deficit and the unified budget deficit generally paralleled each other, and the NIPA deficit was several billion dollars lower than its budgetary counterpart (see Figure D-1). Since then, the difference between the two has fluctuated widely because of large swings in lending and financial exclusions. For example, sizable deposit insurance outlays in 1989 through 1991 significantly widened the gap between the NIPA and unified budget deficits. Since 1992, when deposit insurance spending plummeted, the gap between the NIPA and unified measures has narrowed. In CBO's new projections, the NIPA deficit will be $19 billion greater than the unified deficit in 1996 and grow closer to it in time.

Figure D-1.
A Comparison of NIPA and Unified Budget Deficits, Fiscal Years 1980-2006



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

NOTE: NIPA = national income and product accounts.

NIPA Receipts and Expenditures

The federal sector of the NIPAs generally classifies 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 1996-2006 period is taxes and fees paid by individuals. Following that category closely are contributions (including premiums) for social

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

	Actual 1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Receipts												
Personal Tax and Nontax Receipts	607	649	673	707	743	783	825	869	914	963	1,015	1,070
Corporate Profits Tax Accruals	183	181	185	186	185	186	190	197	204	215	225	237
Indirect Business Tax and Nontax Accruals	92	94	103	95	95	97	100	103	109	111	113	116
Contributions for Social Insurance	581	602	625	653	681	712	745	780	816	853	893	934
Total	1,463	1,527	1,587	1,642	1,705	1,778	1,861	1,949	2,044	2,142	2,246	2,357
Expenditures												
Consumption												
Defense consumption	243	243	249	252	259	269	271	283	292	301	314	321
Consumption of fixed defense capital	60	62	63	65	67	69	71	73	76	78	80	83
Nondefense consumption	141	140	147	151	157	163	168	173	181	186	192	197
Consumption of fixed nondefense capital	11	11	11	12	12	13	13	14	14	15	16	16
Subtotal	455	455	470	480	496	514	524	544	563	580	602	617
Transfer Payments												
Domestic	697	742	789	837	886	937	992	1,050	1,112	1,180	1,251	1,330
Foreign	16	13	13	13	14	14	14	14	15	15	15	16
Subtotal	713	756	803	850	900	951	1,006	1,064	1,127	1,195	1,266	1,346
Grants-in-Aid to State and Local Government	204	218	228	241	256	270	287	306	327	350	375	402
Net Interest	225	228	231	242	255	266	280	294	310	328	345	365
Subsidies Less Current Surplus of Government Enterprises	33	33	36	37	34	36	38	37	39	40	41	43
Required Reductions in Discretionary Spending[a]	n.a.	n.a.	n.a.	-12	-12	-14	-8	-11	-12	-13	-17	-15
Total	1,630	1,690	1,768	1,839	1,928	2,023	2,127	2,235	2,355	2,480	2,612	2,757
Deficit												
Deficit	167	163	182	198	223	245	266	286	311	338	366	400

SOURCE: Congressional Budget Office.

NOTE: n.a. = not applicable.

a. Unspecified reductions needed to reach CBO's capped baseline.

insurance, such as Social Security, Medicare, unemployment insurance, and federal employees' retirement. The two categories are expected to raise around $650 billion and $600 billion, respectively, in 1996. The remaining categories are accruals of taxes on corporate profits, including the earnings of the Federal Reserve System, and indirect business tax (chiefly excise taxes) and nontax accruals (chiefly fees).

Government expenditures are classified according to their purpose and destination. Defense and nondefense consumption of goods and services are purchases made by the government for immediate use. The largest share of current consumption is compensation of federal employees. Consumption of fixed government capital (depreciation) is the use the government gets from its fixed assets.

Transfer payments are cash payments made directly to people or foreign nations. Grants-in-aid are payments made by the federal government to state or local governments. They are then used by the states or localities for transfers (such as Medicaid), consumption (such as school lunches), or investment (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 largest is the contrasting treatment of interest received on late payments of personal and business taxes. In the budget, both types of payments are counted on the revenue side, as individual income taxes and corporate income taxes, respectively. In the NIPAs, those differences appear as offsets to federal interest payments, thereby lowering net interest payments by $11 billion to $17 billion each year through 2006.

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 public housing. Subsidies are dominated by housing assistance, which accounts for approximately two-thirds of 1996 subsidy expenditures.

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 1996, the current surplus of government enterprises will be approximately $500 million. *Government enterprises* should not be confused with *government-sponsored enterprises* (GSEs), private entities established and chartered by the federal government to perform specific financial functions, usually under the supervision of a government agency. Examples of GSEs include the Federal National Mortgage Association (Fannie Mae) and the Student Loan Marketing Association (Sallie Mae). As privately owned organizations, GSEs are not included in the budget or in the federal sector of the NIPAs.

A final category under expenditures is required reductions in discretionary spending (see Table D-2). That is not a category in the NIPAs but is an accounting for policy changes that must be made in the future. Policymakers must comply with future discretionary spending caps but may do so in any number of ways. Unspecified savings of $12 billion in 1998 and larger amounts thereafter will thus be required. Those savings cannot be assigned to particular NIPA categories; however, they are most likely to come from defense and nondefense consumption and grants to states and local governments.

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 1995 are reported in Table E-1, along with estimates of potential gross domestic product (GDP), 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.

As discussed in Appendix A, the change in the standardized-employment deficit is a commonly used measure of the short-term impact of discretionary fiscal policy on total demand. The standardized-employment deficit--which is often called the structural deficit--excludes the effects on revenues 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. Those 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 operating at an unemployment rate consistent with stable inflation --the NAIRU, which is also the benchmark used to compute potential GDP. Standardized 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.

Budget data consistent with the budget projections in Chapter 2 are available for fiscal years 1962 through 1995 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. It should be noted that the Bureau of Economic Analysis has revised historical GDP upward; the tables showing data as a percentage of GDP are therefore all changed from previous tables (see Box 1-1 in Chapter 1 for a discussion of GDP revisions). It should also be noted that these tables are not identical to the tables found in the *Budget of the United States Government, Fiscal Year 1997: Historical Tables*. Those tables were compiled before the revised GDP measure was released and use the old measure.

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.

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. 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. Deposit insurance represents the net costs of dealing with insolvent banks and savings and loan institutions; such outlays were especially volatile beginning in 1988. 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 was swelled by contributions from allied nations to help pay the costs of Operation Desert Storm.

Table E-1.
Standardized-Employment Deficit and Related Series, Fiscal Years 1956-1995

	Standardized-Employment[a]						Gross Domestic Product (Billions of Dollars)		
	In Billions of Dollars			As a Percentage of Potential GDP					NAIRU[b]
	Revenues	Outlays	Deficit (-)	Revenues	Outlays	Deficit (-)	Potential	Actual	(Percent)
1956	71	72	-1	17.6	17.8	-0.2	403	416	5.5
1957	77	78	-1	18.0	18.2	-0.1	429	439	5.5
1958	82	83	-1	18.0	18.2	-0.2	454	448	5.5
1959	80	92	-12	16.4	18.8	-2.4	488	484	5.5
1960	93	93	c	17.8	17.8	d	520	519	5.5
1961	100	97	2	18.2	17.8	0.4	547	530	5.6
1962	101	107	-6	17.6	18.6	-1.0	573	568	5.6
1963	108	112	-4	17.9	18.5	-0.6	604	599	5.6
1964	111	119	-8	17.4	18.8	-1.3	635	641	5.6
1965	113	119	-7	16.8	17.8	-1.0	672	687	5.7
1966	120	137	-16	16.8	19.1	-2.3	717	756	5.8
1967	140	160	-21	18.0	20.7	-2.7	774	810	5.8
1968	145	181	-36	17.3	21.6	-4.3	840	870	5.8
1969	177	188	-11	19.4	20.5	-1.2	915	948	5.9
1970	191	200	-9	19.0	19.9	-0.9	1,001	1,010	5.9
1971	190	211	-21	17.5	19.4	-2.0	1,088	1,078	6.0
1972	207	232	-24	17.6	19.7	-2.1	1,176	1,175	6.0
1973	219	249	-30	17.3	19.6	-2.3	1,268	1,310	6.1
1974	255	273	-19	18.1	19.4	-1.3	1,407	1,438	6.2
1975	293	329	-36	18.2	20.4	-2.2	1,609	1,554	6.2
1976	311	365	-54	17.5	20.5	-3.0	1,782	1,733	6.2
1977	360	407	-47	18.1	20.5	-2.3	1,989	1,972	6.3
1978	396	459	-63	18.0	20.9	-2.9	2,200	2,214	6.3
1979	455	508	-52	18.4	20.6	-2.1	2,470	2,498	6.3
1980	532	589	-57	19.1	21.2	-2.1	2,778	2,719	6.3
1981	619	672	-53	19.9	21.6	-1.7	3,119	3,048	6.2
1982	668	732	-64	19.5	21.4	-1.9	3,417	3,214	6.2
1983	659	785	-126	18.0	21.5	-3.4	3,656	3,422	6.1
1984	681	840	-158	17.5	21.6	-4.1	3,885	3,820	6.1
1985	742	940	-198	17.9	22.7	-4.8	4,142	4,108	6.1
1986	776	981	-205	17.7	22.3	-4.7	4,396	4,368	6.1
1987	868	997	-129	18.6	21.4	-2.8	4,659	4,609	6.0
1988	909	1,057	-147	18.3	21.3	-3.0	4,960	4,957	6.0
1989	979	1,128	-148	18.4	21.2	-2.8	5,315	5,355	6.0
1990	1,032	1,200	-168	18.2	21.1	-2.9	5,688	5,683	5.9
1991	1,108	1,295	-187	18.3	21.4	-3.1	6,058	5,861	5.8
1992	1,144	1,367	-224	18.0	21.6	-3.5	6,341	6,149	5.8
1993	1,189	1,422	-233	18.0	21.5	-3.5	6,604	6,475	5.8
1994	1,270	1,461	-192	18.5	21.3	-2.8	6,872	6,832	5.8
1995	1,355	1,547	-192	18.9	21.5	-2.7	7,182	7,181	5.8

SOURCE: Congressional Budget Office.

a. Excludes deposit insurance, receipts from auctions of the electromagnetic spectrum, 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.

c. Less than $500 million.

d. Less than 0.05 percent.

Table E-2.
Revenues, Outlays, Deficits, and Debt Held by the Public, Fiscal Years 1962-1995 (In billions of dollars)

			Deficit (-) or Surplus				Debt
	Revenues	Outlays	On-Budget	Social Security	Postal Service	Total	Held by the Public[a]
1962	99.7	106.8	-5.9	-1.3	b	-7.1	248.0
1963	106.6	111.3	-4.0	-0.8	b	-4.8	254.0
1964	112.6	118.5	-6.5	0.6	b	-5.9	256.8
1965	116.8	118.2	-1.6	0.2	b	-1.4	260.8
1966	130.8	134.5	-3.1	-0.6	b	-3.7	263.7
1967	148.8	157.5	-12.6	4.0	b	-8.6	266.6
1968	153.0	178.1	-27.7	2.6	b	-25.2	289.5
1969	186.9	183.6	-0.5	3.7	b	3.2	278.1
1970	192.8	195.6	-8.7	5.9	b	-2.8	283.2
1971	187.1	210.2	-26.1	3.0	b	-23.0	303.0
1972	207.3	230.7	-26.4	3.0	b	-23.4	322.4
1973	230.8	245.7	-15.4	0.5	b	-14.9	340.9
1974	263.2	269.4	-8.0	1.8	b	-6.1	343.7
1975	279.1	332.3	-55.3	2.0	b	-53.2	394.7
1976	298.1	371.8	-70.5	-3.2	b	-73.7	477.4
1977	355.6	409.2	-49.8	-3.9	b	-53.7	549.1
1978	399.6	458.7	-54.9	-4.3	b	-59.2	607.1
1979	463.3	504.0	-38.7	-2.0	b	-40.7	640.3
1980	517.1	590.9	-72.7	-1.1	b	-73.8	709.8
1981	599.3	678.2	-74.0	-5.0	b	-79.0	785.3
1982	617.8	745.8	-120.1	-7.9	b	-128.0	919.8
1983	600.6	808.4	-208.0	0.2	b	-207.8	1,131.6
1984	666.5	851.8	-185.7	0.3	b	-185.4	1,300.5
1985	734.1	946.4	-221.7	9.4	b	-212.3	1,499.9
1986	769.1	990.3	-238.0	16.7	b	-221.2	1,736.7
1987	854.1	1,003.9	-169.3	19.6	b	-149.8	1,888.7
1988	909.0	1,064.1	-194.0	38.8	b	-155.2	2,050.8
1989	990.7	1,143.2	-205.2	52.4	0.3	-152.5	2,189.9
1990	1,031.3	1,252.5	-277.8	58.2	-1.6	-221.2	2,410.7
1991	1,054.3	1,323.6	-321.6	53.5	-1.3	-269.4	2,688.1
1992	1,090.5	1,380.9	-340.5	50.7	-0.7	-290.4	2,998.8
1993	1,153.5	1,408.7	-300.5	46.8	-1.4	-255.1	3,247.5
1994	1,257.7	1,460.8	-258.8	56.8	-1.1	-203.1	3,432.1
1995	1,355.2	1,519.1	-226.3	64.4	-2.0	-163.9	3,603.4

SOURCE: Congressional Budget Office.

a. End of year.

b. In fiscal years 1962 through 1988, the Postal Service was on-budget and included in the on-budget total.

Table E-3.
Revenues, Outlays, Deficits, and Debt Held by the Public, Fiscal Years 1962-1995 (As a percentage of GDP)

			Deficit (-) or Surplus				Debt
	Revenues	Outlays	On-Budget	Social Security	Postal Service	Total	Held by the Public[a]
1962	17.6	18.8	-1.0	-0.2	b	-1.3	43.7
1963	17.8	18.6	-0.7	-0.1	b	-0.8	42.4
1964	17.6	18.5	-1.0	0.1	b	-0.9	40.1
1965	17.0	17.2	-0.2	c	b	-0.2	38.0
1966	17.3	17.8	-0.4	-0.1	b	-0.5	34.9
1967	18.4	19.4	-1.6	0.5	b	-1.1	32.9
1968	17.6	20.5	-3.2	0.3	b	-2.9	33.3
1969	19.7	19.4	-0.1	0.4	b	0.3	29.3
1970	19.1	19.4	-0.9	0.6	b	-0.3	28.1
1971	17.4	19.5	-2.4	0.3	b	-2.1	28.1
1972	17.6	19.6	-2.2	0.3	b	-2.0	27.4
1973	17.6	18.8	-1.2	c	b	-1.1	26.0
1974	18.3	18.7	-0.6	0.1	b	-0.4	23.9
1975	18.0	21.4	-3.6	0.1	b	-3.4	25.4
1976	17.2	21.5	-4.1	-0.2	b	-4.3	27.6
1977	18.0	20.8	-2.5	-0.2	b	-2.7	27.8
1978	18.0	20.7	-2.5	-0.2	b	-2.7	27.4
1979	18.5	20.2	-1.6	-0.1	b	-1.6	25.6
1980	19.0	21.7	-2.7	c	b	-2.7	26.1
1981	19.7	22.3	-2.4	-0.2	b	-2.6	25.8
1982	19.2	23.2	-3.7	-0.2	b	-4.0	28.6
1983	17.5	23.6	-6.1	c	b	-6.1	33.1
1984	17.4	22.3	-4.9	c	b	-4.9	34.0
1985	17.9	23.0	-5.4	0.2	b	-5.2	36.5
1986	17.6	22.7	-5.4	0.4	b	-5.1	39.8
1987	18.5	21.8	-3.7	0.4	b	-3.2	41.0
1988	18.3	21.5	-3.9	0.8	b	-3.1	41.4
1989	18.5	21.3	-3.8	1.0	c	-2.8	40.9
1990	18.1	22.0	-4.9	1.0	c	-3.9	42.4
1991	18.0	22.6	-5.5	0.9	c	-4.6	45.9
1992	17.7	22.5	-5.5	0.8	c	-4.7	48.8
1993	17.8	21.8	-4.6	0.7	c	-3.9	50.2
1994	18.4	21.4	-3.8	0.8	c	-3.0	50.2
1995	18.9	21.2	-3.2	0.9	c	-2.3	50.2

SOURCE: Congressional Budget Office.

a. End of year.

b. In fiscal years 1962 through 1988, the Postal Service was on-budget and included in the on-budget total.

c. Less than 0.05 percent.

Table E-4.
Revenues by Major Source, Fiscal Years 1962-1995 (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	22.9	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	18.6	1,153.5
1994	543.1	140.4	461.5	55.2	15.2	20.1	22.3	1,257.7
1995	590.2	157.0	484.5	57.5	14.8	19.3	31.9	1,355.2

SOURCE: Congressional Budget Office.

Table E-5.
Revenues by Major Source, Fiscal Years 1962-1995 (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	8.0	3.6	3.0	2.2	0.4	0.2	0.1	17.6
1963	7.9	3.6	3.3	2.2	0.4	0.2	0.2	17.8
1964	7.6	3.7	3.4	2.1	0.4	0.2	0.2	17.6
1965	7.1	3.7	3.2	2.1	0.4	0.2	0.2	17.0
1966	7.3	4.0	3.4	1.7	0.4	0.2	0.2	17.3
1967	7.6	4.2	4.0	1.7	0.4	0.2	0.3	18.4
1968	7.9	3.3	3.9	1.6	0.4	0.2	0.3	17.6
1969	9.2	3.9	4.1	1.6	0.4	0.2	0.3	19.7
1970	9.0	3.3	4.4	1.6	0.4	0.2	0.3	19.1
1971	8.0	2.5	4.4	1.5	0.3	0.2	0.4	17.4
1972	8.1	2.7	4.5	1.3	0.5	0.3	0.3	17.6
1973	7.9	2.8	4.8	1.2	0.4	0.2	0.3	17.6
1974	8.3	2.7	5.2	1.2	0.4	0.2	0.4	18.3
1975	7.9	2.6	5.4	1.1	0.3	0.2	0.4	18.0
1976	7.6	2.4	5.2	1.0	0.3	0.2	0.5	17.2
1977	8.0	2.8	5.4	0.9	0.4	0.3	0.3	18.0
1978	8.2	2.7	5.5	0.8	0.2	0.3	0.3	18.0
1979	8.7	2.6	5.6	0.8	0.2	0.3	0.4	18.5
1980	9.0	2.4	5.8	0.9	0.2	0.3	0.5	19.0
1981	9.4	2.0	6.0	1.3	0.2	0.3	0.5	19.7
1982	9.3	1.5	6.3	1.1	0.2	0.3	0.5	19.2
1983	8.4	1.1	6.1	1.0	0.2	0.3	0.5	17.5
1984	7.8	1.5	6.3	1.0	0.2	0.3	0.4	17.4
1985	8.1	1.5	6.5	0.9	0.2	0.3	0.5	17.9
1986	8.0	1.4	6.5	0.8	0.2	0.3	0.5	17.6
1987	8.5	1.8	6.6	0.7	0.2	0.3	0.4	18.5
1988	8.1	1.9	6.7	0.7	0.2	0.3	0.4	18.3
1989	8.3	1.9	6.7	0.6	0.2	0.3	0.4	18.5
1990	8.2	1.6	6.7	0.6	0.2	0.3	0.5	18.1
1991	8.0	1.7	6.8	0.7	0.2	0.3	0.4	18.0
1992	7.7	1.6	6.7	0.7	0.2	0.3	0.4	17.7
1993	7.9	1.8	6.6	0.7	0.2	0.3	0.3	17.8
1994	7.9	2.1	6.8	0.8	0.2	0.3	0.3	18.4
1995	8.2	2.2	6.7	0.8	0.2	0.3	0.4	18.9

SOURCE: Congressional Budget Office.

Table E-6.
Outlays for Major Spending Categories, Fiscal Years 1962-1995 (In billions of dollars)

	Discretionary Spending	Entitlements and Other Mandatory Spending	Deposit Insurance	Net Interest	Offsetting Receipts	Total Outlays
1962	72.1	35.1	-0.4	6.9	-6.8	106.8
1963	75.3	36.6	-0.4	7.7	-7.9	111.3
1964	79.1	39.3	-0.4	8.2	-7.7	118.5
1965	77.8	40.1	-0.4	8.6	-7.9	118.2
1966	90.1	43.9	-0.5	9.4	-8.4	134.5
1967	106.4	51.3	-0.4	10.3	-10.2	157.5
1968	117.9	60.2	-0.5	11.1	-10.6	178.1
1969	117.3	65.3	-0.6	12.7	-11.0	183.6
1970	120.2	73.1	-0.5	14.4	-11.5	195.6
1971	122.5	87.3	-0.4	14.8	-14.1	210.2
1972	128.4	101.5	-0.6	15.5	-14.1	230.7
1973	130.2	116.9	-0.8	17.3	-18.0	245.7
1974	138.1	131.6	-0.6	21.4	-21.2	269.4
1975	157.8	169.1	0.5	23.2	-18.3	332.3
1976	175.3	190.0	-0.6	26.7	-19.6	371.8
1977	196.8	206.8	-2.8	29.9	-21.5	409.2
1978	218.5	228.7	-1.0	35.5	-22.8	458.7
1979	239.7	249.1	-1.7	42.6	-25.6	504.0
1980	276.1	291.8	-0.4	52.5	-29.2	590.9
1981	307.8	341.0	-1.4	68.8	-37.9	678.2
1982	325.8	373.0	-2.1	85.0	-36.0	745.8
1983	353.1	411.9	-1.2	89.8	-45.3	808.4
1984	379.2	406.6	-0.8	111.1	-44.2	851.8
1985	415.7	450.4	-2.2	129.5	-47.1	946.4
1986	438.4	460.3	1.5	136.0	-45.9	990.3
1987	444.0	471.1	3.1	138.7	-53.0	1,003.9
1988	464.3	494.9	10.0	151.8	-57.0	1,064.1
1989	488.7	527.1	22.0	169.3	-63.9	1,143.2
1990	500.4	568.7	57.9	184.2	-58.8	1,252.5
1991	533.3	635.6	66.2	194.5	-106.0	1,323.6
1992	534.5	713.2	2.6	199.4	-68.8	1,380.9
1993	541.0	764.0	-28.0	198.8	-67.1	1,408.7
1994	543.9	790.7	-7.6	203.0	-69.1	1,460.8
1995	545.7	839.4	-17.9	232.2	-80.2	1,519.1

SOURCE: Congressional Budget Office.

Table E-7.
Outlays for Major Spending Categories, Fiscal Years 1962-1995 (As a percentage of GDP)

	Discretionary Spending	Entitlements and Other Mandatory Spending	Deposit Insurance	Net Interest	Offsetting Receipts	Total Outlays
1962	12.7	6.2	-0.1	1.2	-1.2	18.8
1963	12.6	6.1	-0.1	1.3	-1.3	18.6
1964	12.3	6.1	-0.1	1.3	-1.2	18.5
1965	11.3	5.8	-0.1	1.3	-1.1	17.2
1966	11.9	5.8	-0.1	1.2	-1.1	17.8
1967	13.1	6.3	a	1.3	-1.3	19.4
1968	13.6	6.9	-0.1	1.3	-1.2	20.5
1969	12.4	6.9	-0.1	1.3	-1.2	19.4
1970	11.9	7.2	a	1.4	-1.1	19.4
1971	11.4	8.1	a	1.4	-1.3	19.5
1972	10.9	8.6	-0.1	1.3	-1.2	19.6
1973	9.9	8.9	-0.1	1.3	-1.4	18.8
1974	9.6	9.2	a	1.5	-1.5	18.7
1975	10.2	10.9	a	1.5	-1.2	21.4
1976	10.1	11.0	a	1.5	-1.1	21.5
1977	10.0	10.5	-0.1	1.5	-1.1	20.8
1978	9.9	10.3	a	1.6	-1.0	20.7
1979	9.6	10.0	-0.1	1.7	-1.0	20.2
1980	10.2	10.7	a	1.9	-1.1	21.7
1981	10.1	11.2	a	2.3	-1.2	22.3
1982	10.1	11.6	-0.1	2.6	-1.1	23.2
1983	10.3	12.0	a	2.6	-1.3	23.6
1984	9.9	10.6	a	2.9	-1.2	22.3
1985	10.1	11.0	-0.1	3.2	-1.1	23.0
1986	10.0	10.5	a	3.1	-1.1	22.7
1987	9.6	10.2	0.1	3.0	-1.1	21.8
1988	9.4	10.0	0.2	3.1	-1.1	21.5
1989	9.1	9.8	0.4	3.2	-1.2	21.3
1990	8.8	10.0	1.0	3.2	-1.0	22.0
1991	9.1	10.8	1.1	3.3	-1.8	22.6
1992	8.7	11.6	a	3.2	-1.1	22.5
1993	8.4	11.8	-0.4	3.1	-1.0	21.8
1994	8.0	11.6	-0.1	3.0	-1.0	21.4
1995	7.6	11.7	-0.2	3.2	-1.1	21.2

SOURCE: Congressional Budget Office.

a. Less than 0.05 percent.

Table E-8.
Discretionary Outlays, Fiscal Years 1962-1995 (In billions of dollars)

	Defense	International	Domestic	Total
1962	52.6	5.5	14.0	72.1
1963	53.7	5.2	16.3	75.3
1964	55.0	4.6	19.5	79.1
1965	51.0	4.7	22.1	77.8
1966	59.0	5.1	26.1	90.1
1967	72.0	5.3	29.1	106.4
1968	82.2	4.9	30.9	117.9
1969	82.7	4.1	30.5	117.3
1970	81.9	4.0	34.3	120.2
1971	79.0	3.8	39.7	122.5
1972	79.3	4.6	44.5	128.4
1973	77.1	4.8	48.3	130.2
1974	80.7	6.2	51.1	138.1
1975	87.6	8.2	62.0	157.8
1976	89.9	7.5	77.9	175.3
1977	97.5	8.0	91.3	196.8
1978	104.6	8.5	105.3	218.5
1979	116.8	9.1	113.8	239.7
1980	134.6	12.8	128.7	276.1
1981	158.0	13.6	136.1	307.8
1982	185.9	12.9	127.0	325.8
1983	209.9	13.6	129.7	353.1
1984	228.0	16.3	134.9	379.2
1985	253.1	17.4	145.2	415.7
1986	273.8	17.7	146.8	438.4
1987	282.5	15.2	146.3	444.0
1988	290.9	15.7	157.7	464.3
1989	304.0	16.6	168.1	488.7
1990	300.1	19.1	181.2	500.4
1991	319.7	19.7	193.9	533.3
1992	302.6	19.2	212.7	534.5
1993	292.4	21.6	226.9	541.0
1994	282.3	20.8	240.8	543.9
1995	273.5	20.1	252.0	545.7

SOURCE: Congressional Budget Office.

Table E-9.
Discretionary Outlays, Fiscal Years 1962-1995 (As a percentage of GDP)

	Defense	International	Domestic	Total
1962	9.3	1.0	2.5	12.7
1963	9.0	0.9	2.7	12.6
1964	8.6	0.7	3.0	12.3
1965	7.4	0.7	3.2	11.3
1966	7.8	0.7	3.4	11.9
1967	8.9	0.7	3.6	13.1
1968	9.4	0.6	3.6	13.6
1969	8.7	0.4	3.2	12.4
1970	8.1	0.4	3.4	11.9
1971	7.3	0.3	3.7	11.4
1972	6.7	0.4	3.8	10.9
1973	5.9	0.4	3.7	9.9
1974	5.6	0.4	3.6	9.6
1975	5.6	0.5	4.0	10.2
1976	5.2	0.4	4.5	10.1
1977	4.9	0.4	4.6	10.0
1978	4.7	0.4	4.8	9.9
1979	4.7	0.4	4.6	9.6
1980	5.0	0.5	4.7	10.2
1981	5.2	0.4	4.5	10.1
1982	5.8	0.4	4.0	10.1
1983	6.1	0.4	3.8	10.3
1984	6.0	0.4	3.5	9.9
1985	6.2	0.4	3.5	10.1
1986	6.3	0.4	3.4	10.0
1987	6.1	0.3	3.2	9.6
1988	5.9	0.3	3.2	9.4
1989	5.7	0.3	3.1	9.1
1990	5.3	0.3	3.2	8.8
1991	5.5	0.3	3.3	9.1
1992	4.9	0.3	3.5	8.7
1993	4.5	0.3	3.5	8.4
1994	4.1	0.3	3.5	8.0
1995	3.8	0.3	3.5	7.6

SOURCE: Congressional Budget Office.

Table E-10.
Outlays for Entitlements and Other Mandatory Spending, Fiscal Years 1962-1995 (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	8.1	30.7	35.1
1963	0.2	4.6	4.7	15.5	0	2.9	3.6	3.4	6.5	31.9	36.6
1964	0.2	4.8	5.0	16.2	0	3.3	3.4	3.4	8.0	34.3	39.3
1965	0.3	5.0	5.2	17.1	0	3.6	2.7	2.8	8.7	34.9	40.1
1966	0.8	5.0	5.8	20.3	a	4.1	2.2	1.4	10.1	38.1	43.9
1967	1.2	5.0	6.2	21.3	3.2	4.8	2.3	2.0	11.6	45.1	51.3
1968	1.8	5.7	7.5	23.3	5.1	5.7	2.2	3.3	13.1	52.7	60.2
1969	2.3	6.4	8.6	26.7	6.3	5.2	2.3	4.2	11.9	56.6	65.3
1970	2.7	7.4	10.1	29.6	6.8	6.6	3.1	3.8	13.0	63.0	73.1
1971	3.4	10.0	13.4	35.1	7.5	8.3	5.8	2.9	14.4	74.0	87.3
1972	4.6	12.3	16.9	39.4	8.4	9.6	6.7	4.1	16.5	84.6	101.5
1973	4.6	12.1	16.7	48.2	9.0	11.7	4.9	3.6	22.8	100.2	116.9
1974	5.8	14.3	20.2	55.0	10.7	13.8	5.6	1.0	25.4	111.5	131.6
1975	6.8	18.8	25.7	63.6	14.1	18.3	12.8	0.6	34.1	143.4	169.1
1976	8.6	21.9	30.5	72.7	16.9	18.9	18.6	1.1	31.3	159.5	190.0
1977	9.9	23.4	33.2	83.7	20.8	21.6	14.3	3.8	29.3	173.5	206.8
1978	10.7	24.5	35.2	92.4	24.3	23.7	10.8	5.7	36.6	193.5	228.7
1979	12.4	25.9	38.3	102.6	28.2	27.9	9.8	3.6	38.8	210.8	249.1
1980	14.0	31.0	45.0	117.1	34.0	32.1	16.9	2.8	44.1	246.9	291.8
1981	16.8	34.8	51.6	137.9	41.3	37.4	18.3	4.0	50.4	289.3	341.0
1982	17.4	34.4	51.8	153.9	49.2	40.7	22.2	11.7	43.5	321.2	373.0
1983	19.0	37.9	56.9	168.5	55.5	43.2	29.7	18.9	39.3	355.0	411.9
1984	20.1	37.9	58.0	176.1	61.0	44.7	17.0	7.3	42.6	348.6	406.6
1985	22.7	39.5	62.2	186.4	69.6	45.5	15.8	17.7	53.2	388.3	450.4
1986	25.0	41.1	66.1	196.5	74.2	47.5	16.1	25.8	33.9	394.2	460.3
1987	27.4	42.5	70.0	205.1	79.9	50.8	15.5	22.4	27.4	401.1	471.1
1988	30.5	46.6	77.1	216.8	85.7	54.2	13.6	12.2	35.4	417.9	494.9
1989	34.6	49.4	84.1	230.4	94.3	57.2	13.9	10.6	36.7	443.1	527.1
1990	41.1	53.0	94.1	246.5	107.4	59.9	17.5	6.5	36.9	474.6	568.7
1991	52.5	62.6	115.2	266.8	114.2	64.4	25.1	10.1	39.9	520.4	635.6
1992	67.8	73.3	141.1	285.2	129.4	66.6	36.9	9.3	44.8	572.1	713.2
1993	75.8	80.7	156.4	302.0	143.1	68.7	35.4	15.6	42.9	607.6	764.0
1994	82.0	88.4	170.4	316.9	159.5	72.1	26.4	9.9	35.5	620.3	790.7
1995	89.1	92.5	181.6	333.3	177.1	75.2	21.3	5.8	45.2	657.8	839.4

SOURCE: Congressional Budget Office.

a. Less than $50 million.

Table E-11.
Outlays for Entitlements and Other Mandatory Spending, Fiscal Years 1962-1995 (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	0.7	0.8	2.5	0	0.5	0.6	0.4	1.4	5.4	6.2
1963	a	0.8	0.8	2.6	0	0.5	0.6	0.6	1.1	5.3	6.1
1964	a	0.7	0.8	2.5	0	0.5	0.5	0.5	1.2	5.4	6.1
1965	a	0.7	0.8	2.5	0	0.5	0.4	0.4	1.3	5.1	5.8
1966	0.1	0.7	0.8	2.7	a	0.5	0.3	0.2	1.3	5.0	5.8
1967	0.1	0.6	0.8	2.6	0.4	0.6	0.3	0.2	1.4	5.6	6.3
1968	0.2	0.7	0.9	2.7	0.6	0.7	0.2	0.4	1.5	6.1	6.9
1969	0.2	0.7	0.9	2.8	0.7	0.6	0.2	0.4	1.3	6.0	6.9
1970	0.3	0.7	1.0	2.9	0.7	0.7	0.3	0.4	1.3	6.2	7.2
1971	0.3	0.9	1.2	3.3	0.7	0.8	0.5	0.3	1.3	6.9	8.1
1972	0.4	1.0	1.4	3.3	0.7	0.8	0.6	0.3	1.4	7.2	8.6
1973	0.4	0.9	1.3	3.7	0.7	0.9	0.4	0.3	1.7	7.6	8.9
1974	0.4	1.0	1.4	3.8	0.7	1.0	0.4	0.1	1.8	7.7	9.2
1975	0.4	1.2	1.7	4.1	0.9	1.2	0.8	0.0	2.2	9.2	10.9
1976	0.5	1.3	1.8	4.2	1.0	1.1	1.1	0.1	1.8	9.2	11.0
1977	0.5	1.2	1.7	4.2	1.1	1.1	0.7	0.2	1.5	8.8	10.5
1978	0.5	1.1	1.6	4.2	1.1	1.1	0.5	0.3	1.7	8.7	10.3
1979	0.5	1.0	1.5	4.1	1.1	1.1	0.4	0.1	1.6	8.4	10.0
1980	0.5	1.1	1.7	4.3	1.2	1.2	0.6	0.1	1.6	9.1	10.7
1981	0.6	1.1	1.7	4.5	1.4	1.2	0.6	0.1	1.7	9.5	11.2
1982	0.5	1.1	1.6	4.8	1.5	1.3	0.7	0.4	1.4	10.0	11.6
1983	0.6	1.1	1.7	4.9	1.6	1.3	0.9	0.6	1.1	10.4	12.0
1984	0.5	1.0	1.5	4.6	1.6	1.2	0.4	0.2	1.1	9.1	10.6
1985	0.6	1.0	1.5	4.5	1.7	1.1	0.4	0.4	1.3	9.5	11.0
1986	0.6	0.9	1.5	4.5	1.7	1.1	0.4	0.6	0.8	9.0	10.5
1987	0.6	0.9	1.5	4.4	1.7	1.1	0.3	0.5	0.6	8.7	10.2
1988	0.6	0.9	1.6	4.4	1.7	1.1	0.3	0.2	0.7	8.4	10.0
1989	0.6	0.9	1.6	4.3	1.8	1.1	0.3	0.2	0.7	8.3	9.8
1990	0.7	0.9	1.7	4.3	1.9	1.1	0.3	0.1	0.6	8.4	10.0
1991	0.9	1.1	2.0	4.6	1.9	1.1	0.4	0.2	0.7	8.9	10.8
1992	1.1	1.2	2.3	4.6	2.1	1.1	0.6	0.2	0.7	9.3	11.6
1993	1.2	1.2	2.4	4.7	2.2	1.1	0.5	0.2	0.7	9.4	11.8
1994	1.2	1.3	2.5	4.6	2.3	1.1	0.4	0.1	0.5	9.1	11.6
1995	1.2	1.3	2.5	4.6	2.5	1.0	0.3	0.1	0.6	9.2	11.7

SOURCE: Congressional Budget Office.

a. Less than 0.05 percent.

Appendix F

Major Contributors to the Revenue and Spending Projections

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

Revenue Projections

Mark Booth	Corporate income taxes, Federal Reserve System earnings, excise taxes
Drew McMorrow	Excise taxes
Peter Ricoy	Social insurance contributions, estate and gift taxes
David Weiner	Individual income taxes
Stephanie Weiner	Customs duties, miscellaneous receipts

Spending Projections

Defense, International Affairs, and Veterans' Affairs

Elizabeth Chambers	Military retirement, atomic energy defense, military health care
Kent Christensen	Defense
Sunita D'Monte	International affairs
Victoria Fraider	Veterans' education and housing, defense (weapons)
Michael Groarke	Veterans' housing and medical care
Raymond Hall	Defense (weapons)
Mary Helen Petrus	Veterans' compensation, pensions, and medical care
Amy Plapp	Defense (personnel)
Jeannette Van Winkle	Defense (weapons)
JoAnn Vines	Defense (weapons)
Joseph Whitehill	International affairs

Health

Tom Bradley	Medicare Part A, managed care
Cynthia Dudzinski	Public Health Service, Medicare
Jean Hearne	Medicaid
Anne Hunt	Public Health Service, Medicare
Jeffrey Lemieux	Federal employee health benefits, national health expenditures, Medicare Part B
Robin Rudowitz	Medicaid, Medicare, long-term care

Human Resources

Wayne Boyington	Civil Service Retirement, Social Security, Pension Benefit Guarantee Corporation
Sheila Dacey	Aid to Families with Dependent Children, child support enforcement
Christie Hawley	Unemployment insurance, training programs
Deborah Kalcevic	Education
Justin Latus	Education, foster care, child care
Dorothy Rosenbaum	Social services, food stamps, child nutrition
Kathy Ruffing	Supplemental Security Income, Social Security
Brent Shipp	Housing assistance

Natural and Physical Resources

Gary Brown	Water resources, other natural resources
Kim Cawley	Energy, pollution control and abatement
Clare Doherty	Transportation
Rachel Forward	Commerce, spectrum auction receipts
Mark Grabowicz	Justice, Postal Service
Kathleen Gramp	Energy, science and space
Victoria Heid	Conservation and land management, Outer Continental Shelf receipts
Roger Hitchner	Agriculture
David Hull	Agriculture
Craig Jagger	Agriculture
Mary Maginniss	Deposit insurance, legislative branch
Susanne Mehlman	Justice, Federal Housing Administration
David Moore	Spectrum auction receipts
Carla Pedone	Federal Housing Administration
Deborah Reis	Recreation, water transportation
John Righter	General government
Rachel Robertson	Community and regional development, disaster assistance

Other

Janet Airis	Appropriation bills
Edward Blau	Authorization bills
Jodi Capps	Appropriation bills
Karin Carr	Budget projections
Betty Embrey	Appropriation bills
Kenneth Farris	Computer support

Mary Froehlich	Computer support
Vernon Hammett	Computer support
Sandra Hoffman	Computer support
Jeffrey Holland	Net interest on the public debt
Deborah Keefe	Computer support
Daniel Kowalski	Credit programs, other interest
Catherine Mallison	Appropriation bills
Robert Sempsey	Appropriation bills
Michael Simpson	National income and product accounts, historical budget data
Susan Strandberg	Budget projections, civilian agency pay

Glossary

This glossary defines economic and budgetary terms as they relate to this report. Some entries sacrifice precision for brevity and clarity to the lay reader. Where appropriate, sources of data for economic variables are indicated as follows:

- BLS denotes the Bureau of Labor Statistics in the Department of Labor;
- CBO denotes the Congressional Budget Office;
- FRB denotes the Federal Reserve Board; and
- NBER denotes the National Bureau of Economic Research.

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

aggregate demand: Total purchases of a country's output of goods and services by consumers, businesses, government, and foreigners during a given period. (Bureau of Economic Analysis)

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

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

Balanced Budget and Emergency Deficit Control Act of 1985: Also known as Gram.-Rudman-Hollings or the Balanced Budget Act, this law set forth specific deficit targets and a sequestration procedure to reduce spending if the targets were exceeded. The Budget Enforcement Act of 1990 established new budget procedures through fiscal year 1995 as well as revised targets, which exclude the Social Security trust funds. The Omnibus Budget Reconciliation Act of 1993 further extended various provisions of the Balanced Budget Act, without including fixed deficit targets beyond fiscal year 1995. See **discretionary spending caps** and **pay-as-you-go**.

baseline: A benchmark for measuring the budgetary effects of proposed changes in federal revenues or spending. As specified in the Budget Enforcement Act of 1990 (BEA), the baseline for revenues and entitlement spending generally assumes that laws now on the statute books will continue. The discretionary spending projections are based on the discretionary spending caps set by the BEA in 1995 through 1998. The *baseline with discretionary inflation* adjusts discretionary appropriations for inflation; the *baseline without discretionary inflation* does not.

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

budget authority: Legal authority to incur financial obligations that will result in the spending of federal government funds. Budget authority may be provided in an authorization or an appropriation act. Offsetting collections, including offsetting receipts, constitute negative budget authority.

budget deficit: Amount by which budget outlays exceed budget revenues during a given period.

Budget Enforcement Act of 1990 (BEA): Title XIII of the Omnibus Budget Reconciliation Act of 1990. This act amended both the Congressional Budget Act of 1974 and the Balanced Budget and Emergency Deficit Control Act of 1985. The BEA provided for new budget targets, sequestration procedures, pay-as-you-go procedures, credit reform, and various other changes. The discretionary spending caps and the pay-as-you-go process were extended through 1998 by the Omnibus Budget Reconciliation Act of 1993. See **discretionary spending caps** and **pay-as-you-go**.

budget function: One of 20 areas into which federal spending and credit activity are divided. National needs are grouped into 17 broad budget functions, including national defense, international affairs, energy, agriculture, health, income security, and general government. Three functions--net interest, allowances, and undistributed offsetting receipts--do not address national needs but are included to complete the budget.

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

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

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

capacity constraints: Limits on the amount of output that can be produced without also significantly increasing prices. Causes of capacity constraints include shortages of skilled labor or of capital needed for production.

capacity utilization rate: The seasonally adjusted output of the nation's factories, mines, and electric and gas utilities expressed as a percentage of their capacity to produce output. Capacity is defined as the greatest output a plant can maintain with a normal work pattern. (FRB)

capital: *Physical capital* is the output that has been set aside to be used in production rather than consumed. According to the national income and product accounts, private capital goods are composed of residential and nonresidential structures, producers' durable equipment, and business inventories. *Financial capital* is the funds raised by an individual, business, or government by issuing securities, such as a mortgage, stock certificate, or bond. *Human capital* is a term for education, training, health, and other attributes of the workforce that increase its ability to produce goods and services.

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

chain-type GDP price index: An overall measure of the price level in which the calculation of the change in prices uses the composition of output in adjoining years. This price index is currently set to equal one in 1992. Because this measure uses the composition of output in adjoining years, it is a more accurate measure of the way in which price change affects economic welfare than either the GDP implicit deflator or the fixed-weighted GDP price index. Compare with **implicit deflator** and **fixed-weighted price index**. (Bureau of Economic Analysis)

chained (1992) GDP: A measure of real economic output (economic output adjusted to remove the effects of inflation) in which prices in adjoining years are used to calculate the growth rate for total output. Chained (1992) GDP is set to equal nominal GDP in 1992. Because this measure uses prices in recent periods, it is a more accurate measure of real growth than traditional constant-dollar measures that use prices for a specific base year. See **gross domestic product (GDP)** and **constant dollar**. (Bureau of Economic Analysis)

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

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

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

constant dollar: Measured in terms of prices of a base period to remove the effects of inflation. Compare with **current dollar**.

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

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

consumption: Total purchases of goods and services during a given period by households for their own use. (Bureau of Economic Analysis)

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

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

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

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

credit reform: A revised system of budgeting for federal credit activities that focuses on the cost of subsidies conveyed in federal credit assistance. The system was authorized by the Federal Credit Reform Act of 1990, which was part of the Budget Enforcement Act of 1990.

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

currency value: See **exchange rate**.

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

current dollar: Measured in the dollar value--reflecting prices that prevailed then--of the period under consideration. Compare with **constant dollar**.

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

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

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

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

deflator: See **implicit deflator**.

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

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

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

direct spending: The Budget Enforcement Act of 1990 defines direct spending as (a) budget authority provided by an authorization, (b) entitlement authority (including mandatory spending contained in appropriation acts), and (c) the Food Stamp program. A synonym is **mandatory spending**. Compare with **discretionary spending**.

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

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

discretionary spending: Spending for programs whose funding levels are determined through the appropriation process. The Congress has the discretion each year to determine how many dollars will be devoted to continuing current programs and funding new ones. Compare with **direct spending**.

discretionary spending caps: Annual ceilings through fiscal year 1998 on budget authority and outlays for discretionary programs defined in the Balanced Budget Act of 1985, as amended by the Budget Enforcement Act of 1990 and the Omnibus Budget Reconciliation Act of 1993. One cap covers appropriations from the Violent Crime Reduction Trust Fund. A separate cap covers all other (that is, general-purpose) discretionary spending. Discretionary spending caps are enforced through Congressional rules and sequestration procedures.

disposable (personal) income: Income received by individuals, including transfer payments, minus personal taxes and fees paid to government. (Bureau of Economic Analysis)

domestic demand: Total purchases of goods and services, regardless of origin, by U.S. consumers, businesses, and governments during a given period. Domestic demand equals gross domestic product minus net exports. (Bureau of Economic Analysis)

entitlements: Programs that make payments to any person, business, or unit of government that seeks the payments and meets the criteria set in law. The Congress controls these programs indirectly by defining eligibility and setting the benefit or payment rules. Although the level of spending for these programs is controlled by the authorizing legislation, funding may be provided in either an authorization or an appropriation act. The best-known entitlements are the major benefit programs, such as Social Security and Medicare. See **direct spending.**

excess reserves: Total monetary reserves in excess of required reserves. See **monetary reserves** and **reserve requirements**.

exchange rate: The number of units of a foreign currency that can be bought with one unit of the domestic currency. (FRB)

excise tax: A tax levied on the purchase of a specific type of good or service, such as tobacco products or telephone services.

expansion: A phase of the business cycle that extends from a trough to the next peak. See **business cycle**. (NBER)

federal funds: See **trust fund**.

federal funds rate: Overnight interest rate at which financial institutions borrow and lend monetary reserves. A rise in the federal funds rate (compared with other short-term rates) suggests a tightening of monetary policy, whereas a fall suggests an easing. (FRB)

Federal Open Market Committee (FOMC): The group within the Federal Reserve System that determines the direction of monetary policy. The open market desk at the Federal Reserve Bank of New York implements the policy with open market operations--the purchase or sale of government securities--which influence short-term interest rates and the growth of the money supply. The FOMC is composed of 12 members, including the seven members of the Board of Governors of the Federal Reserve System and five of the 12 presidents of the regional Federal Reserve Banks.

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

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

financial intermediary: An institution that indirectly matches borrowers with lenders. For example, depository institutions, such as commercial banks or savings and loan institutions, lend funds that they have accepted from depositors. Nondepository institutions, such as life insurance companies or pension funds, lend or invest funds that they hold in reserve against future claims by policyholders or participating retirees.

financing account: Any account established under credit reform to finance the portion of federal direct loans and loan guarantees not subsidized by federal funds. Since these accounts are used only to finance the nonsubsidized portion of federal credit activities, they are excluded from the federal budget and considered a means of financing the deficit.

fiscal policy: The government's choice of tax and spending programs, which influences the amount and maturity of government debt as well as the level, composition, and distribution of national output and income. An "easy" fiscal policy stimulates the short-term growth of output and income, whereas a "tight" fiscal policy restrains their growth. Movements in the standardized-employment deficit constitute one overall indicator of the tightness or ease of federal fiscal policy; an increase relative to potential gross domestic product suggests fiscal ease, whereas a decrease suggests fiscal restriction. The President and the Congress jointly determine federal fiscal policy.

fiscal year: A yearly accounting period. The federal government's fiscal year begins October 1 and ends September 30. Fiscal years are designated by the calendar years in which they end--for example, fiscal year 1996 began October 1, 1995, and will end on September 30, 1996.

fixed-weighted price index: An index that measures the overall price level (compared with a base period) without being influenced by changes in the composition of output or purchases. Compare with **implicit deflator** and **chain-type GDP price index**.

GDP: See **gross domestic product**.

GDP gap: The difference between potential real GDP and real GDP, expressed as a percentage of potential real GDP. See **potential real GDP**.

GNP: See **gross national product**.

government purchases of goods and services: Purchases from the private sector (including compensation of government employees) made by government during a given period. Government purchases constitute a component of GDP, but they encompass only a portion of all government expenditures because they exclude transfer payments (such as grants to state and local governments and net interest paid). (Bureau of Economic Analysis)

government-sponsored enterprises: Enterprises established and chartered by the federal government to perform specific financial functions, usually under the supervision of a government agency, but in all cases wholly owned by stockholders rather than the government. Major examples are the Federal National Mortgage Association, the Student Loan Marketing Association, and the Federal Home Loan Banks.

grants: Transfer payments from the federal government to state and local governments or other recipients to help fund projects or activities that do not involve substantial federal participation.

grants-in-aid: Grants from the federal government to state and local governments to help provide for programs of assistance or service to the public.

gross domestic product (GDP): The total market value of all goods and services produced domestically during a given period. The components of GDP are consumption, gross domestic investment, government purchases of goods and services, and net exports. (Bureau of Economic Analysis)

gross investment: A measure of additions to the capital stock that does not subtract depreciation of existing capital.

gross national product (GNP): The total market value of all goods and services produced in a given period by labor and property supplied by residents of a country, regardless of where the labor and property are located. GNP differs from GDP primarily by including the excess of capital income that residents earn from investments abroad over capital income that nonresidents earn from domestic investment.

implicit deflator: An overall measure of the price level (compared with a base period) given by the ratio of current-dollar purchases to constant-dollar purchases. Changes in an implicit deflator, unlike those in a fixed-weighted price index, reflect changes in the composition of purchases as well as in the prices of goods and services purchased. See **fixed-weighted price index** and **chain-type GDP price index**. (Bureau of Economic Analysis)

index: An indicator or summary measure that defines the overall level (compared with a base) of some aggregate--such as the general price level or total quantity--in terms of the levels of its components.

inflation: Growth in a measure of the general price level, usually expressed as an annual rate of change.

infrastructure: Government-owned capital goods that provide services to the public, usually with benefits to the community at large as well as to the direct user. Examples include schools, roads, bridges, dams, harbors, and public buildings.

inventories: Stocks of goods held by businesses either for further processing or for sale. (Bureau of Economic Analysis)

investment: *Physical investment* is the current product set aside during a given period to be used for future production; in other words, an addition to the stock of capital goods. As measured by the national income and product accounts, private domestic investment consists of investment in residential and nonresidential structures, producers' durable equipment, and the change in business inventories. *Financial investment* is the purchase of a financial security. *Investment in human capital* is spending on education, training, health services, and other

activities that increase the productivity of the workforce. Investment in human capital is not treated as investment in the national income and product accounts.

labor force: The number of people who have jobs or who are available for work and are actively seeking jobs. *Labor force participation rate* is the labor force as a percentage of the noninstitutional population age 16 years or older. (BLS)

liquidating account: Any budgetary account established under credit reform to finance direct loan and loan guarantee activities that were obligated or committed before October 1, 1992 (the effective date of credit reform).

liquidity: The characteristic of an asset that permits it to be sold on short notice with little or no loss in value. Ordinarily, a shorter term to maturity or a lower risk of default will enhance an asset's liquidity.

long-term interest rate: The interest rate earned by a note or bond that matures in 10 or more years.

M2: A measure of the U.S. money supply that consists of the nonbank public's holdings of currency, traveler's checks, and checking accounts (collectively known as M1); small (less than $100,000) time and savings accounts; money market deposit accounts held at depository institutions; most money market mutual funds; overnight repurchase agreements; and overnight Eurodollar accounts held by U.S. residents. (FRB)

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

marginal tax rate: The tax rate that applies to an additional dollar of taxable income.

means of financing: Ways to finance federal deficits or use federal surpluses. The largest means of financing is normally federal borrowing from the public, but other means of financing include any transaction that causes a difference between the federal (including off-budget) surplus or deficit and the change in debt held by the public. The means of financing include changes in checks outstanding and Treasury cash balances, seigniorage (that is, government revenue from the manufacture of money), and the transactions of the financing accounts established under credit reform.

means-tested programs: Programs that provide cash or services to people who meet a test of need based on income and assets. Most means-tested programs are entitlements--for example, Medicaid, the Food Stamp program, Supplemental Security Income, family support, and veterans' pensions--but a few, such as subsidized housing and various social services, are funded through discretionary appropriations.

merchandise trade balance: Net exports of goods. The merchandise trade balance differs from net exports by excluding exports and imports of services. (Bureau of Economic Analysis)

monetary policy: The strategy of influencing movements of the money supply and interest rates to affect output and inflation. An "easy" monetary policy suggests faster money growth and initially lower short-term interest rates in an attempt to increase aggregate demand, but it may lead to a higher rate of inflation. A "tight" monetary policy suggests slower money growth and higher interest rates in the near term in an attempt to reduce inflationary pressure by reducing aggregate demand. The Federal Reserve System conducts monetary policy in the United States.

monetary reserves: The amount of funds that banks and other depository institutions hold as cash or as deposits with the Federal Reserve System. See **reserve requirements**.

money supply: Private assets that can readily be used to make transactions or are easily convertible into assets that can. See **M2**.

NAIRU (nonaccelerating inflation rate of unemployment): The unemployment rate consistent with a constant inflation rate. An unemployment rate greater than the NAIRU indicates downward pressure on inflation, whereas a lower unemployment rate indicates upward pressure on inflation. Estimates of the NAIRU are based on the historical relationship between inflation and the aggregate unemployment rate. CBO's procedures for estimating the NAIRU are described in Appendix B of *The Economic and Budget Outlook: An Update* (August 1994).

national income and product accounts (NIPAs): Official U.S. accounts that detail the composition of GDP and how the costs of production are distributed as income. (Bureau of Economic Analysis)

national saving: Total saving by all sectors of the economy: personal saving, business saving (corporate after-tax profits not paid as dividends), and government saving (budget surplus or deficit--indicating dissaving--of all government entities). National saving represents all income not consumed, publicly or privately, during a given period. (Bureau of Economic Analysis)

net exports: Exports of goods and services produced in a country minus its imports of goods and services produced elsewhere.

net interest: *In the federal budget*, net interest includes federal interest payments to the public as recorded in budget function 900. Net interest also includes, as an offset, interest income received by the government on loans and cash balances. *In the national income and product accounts* (NIPAs), net interest is the income component of GDP paid as interest--primarily interest that domestic businesses pay, minus interest they receive. The NIPAs treat government interest payments as transfers, so they are not part of GDP.

net national saving: National saving less depreciation of physical capital.

NIPAs: See **national income and product accounts**.

nominal: Measured in the dollar value (as in nominal output, income, or wage rate) or in market terms (as in nominal exchange or interest rate) of the period under consideration. Compare with **real**.

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

off-budget: Spending or revenues excluded from the budget totals by law. The revenues and outlays of the two Social Security trust funds and the transactions of the Postal Service are off-budget and (except for discretionary Social Security administrative costs) are not included in any Budget Enforcement Act calculations.

offsetting receipts: Funds collected by the federal government that are recorded as negative budget authority and outlays and credited to separate receipt accounts. More than half of offsetting receipts are intragovernmental receipts that reflect agencies' payments to retirement and other funds on behalf of their employees; those receipts simply balance payments elsewhere in the budget. An additional category of receipts (proprietary receipts) come from the public and generally represent voluntary, business-type transactions. The largest items are the flat premiums for Supplementary Medical Insurance (Part B of Medicare), timber and oil lease receipts, and proceeds from the sale of electric power.

outlays: Spending to fulfill a federal obligation, generally by issuing a check or disbursing cash. Unlike outlays for other categories of spending, outlays for interest on the public debt are counted when the interest is earned, not

when it is paid. Outlays may be for payment of obligations incurred in previous fiscal years or in the same year. Outlays, therefore, flow in part from unexpended balances of prior year budget authority and in part from budget authority provided for the current year.

pay-as-you-go (PAYGO): A procedure required in the Budget Enforcement Act of 1990 to ensure that, for fiscal years 1991 through 1995, legislation affecting direct spending and receipts did not increase the deficit. The pay-as-you-go process was extended through fiscal year 1998 by the Omnibus Budget Reconciliation Act of 1993. Pay-as-you-go is enforced through Congressional rules and sequestration procedures.

peak: See **business cycle**.

personal saving: Saving by households. Personal saving equals disposable personal income minus spending for consumption and interest payments. *Personal saving rate* is personal saving as a percentage of disposable personal income. (Bureau of Economic Analysis)

point-year of unemployment: An unemployment rate that is 1 percentage point above the NAIRU for one year. For example, if the unemployment rate averaged 2 percentage points above the NAIRU for one and one-half years, that would be three point-years of unemployment. See **NAIRU**.

potential real GDP: The highest level of real GDP that could persist for a substantial period without raising the rate of inflation. CBO's calculation relates potential GDP to the nonaccelerating inflation rate of unemployment, which is the unemployment rate consistent with a constant inflation rate. (CBO)

present value: A single number that expresses a flow of current and future income (or payments) in terms of an equivalent lump sum received (or paid) today. The calculation of present value depends on the rate of interest. For example, given an interest rate of 5 percent, today's 95 cents will grow to $1 next year. Hence, the present value of $1 payable a year from today is only 95 cents.

private saving: Saving by households and businesses. Private saving is equal to personal saving plus after-tax corporate profits minus dividends paid. (Bureau of Economic Analysis)

producers' durable equipment: Primarily nonresidential capital equipment--such as computers, machines, and transportation equipment--owned by businesses. (Bureau of Economic Analysis)

productivity: Average real output per unit of input. *Labor productivity* is average real output per hour of labor. The growth of labor productivity is defined as the growth of real output that is not explained by the growth of labor input alone. *Total factor productivity* is average real output per unit of combined labor and capital inputs. The growth of total factor productivity is defined as the growth of real output that is not explained by the growth of labor and capital. Labor productivity and total factor productivity differ in that increases in capital per worker would raise labor productivity but not total factor productivity. (BLS)

program account: Any budgetary account that finances credit subsidies and the costs of administering credit programs.

real: Adjusted to remove the effects of inflation. *Real (constant-dollar) output* represents volume, rather than dollar value, of goods and services. *Real income* represents power to purchase real output. *Real data* are usually constructed by dividing the corresponding nominal data, such as output or a wage rate, by a price index or deflator. *Real interest rate* is a nominal interest rate minus the expected inflation rate. Compare with **nominal**.

receipt account: Any budget or off-budget account that is established exclusively to record the collection of income, including negative subsidies. In general, receipt accounts that collect money arising from the exercise of the government's sovereign powers are included as revenues, whereas the proceeds of intragovernmental transactions or collections from the public arising from business-type transactions (such as interest income, proceeds from the sale of property or products, or profits from federal credit activities) are included as offsetting receipts--that is, credited as offsets to outlays rather than included in receipts.

recession: A phase of the business cycle extending from a peak to the next trough--usually lasting six months to a year--and characterized by widespread declines in output, income, employment, and trade in many sectors of the economy. Real GDP usually falls throughout a recession. See **business cycle**. (NBER)

reconciliation: A process the Congress uses to make its tax and spending legislation conform with the targets established in the budget resolution. The budget resolution may contain reconciliation instructions directing certain Congressional committees to achieve deficit reduction through changes in tax or spending programs under their jurisdiction. Legislation to implement the reconciliation instructions is usually combined in one comprehensive bill. The reconciliation process primarily affects taxes, entitlement spending, and offsetting receipts. As a general rule, decisions on discretionary programs are determined separately through the appropriation process, which is also governed by allocations in the budget resolution.

recovery: A phase of the business cycle that lasts from a trough until overall economic activity returns to the level it reached at the previous peak. See **business cycle**. (NBER)

reserve requirements: The amount of funds that banks and other depository institutions must hold as cash or as deposits with the Federal Reserve System. The Federal Reserve specifies reserve requirements depending on the level of deposits. Such requirements reduce the risk of bank failure and allow the Federal Reserve to influence the money supply. (FRB)

reserves: See **monetary reserves**.

residential investment: Investment in housing, primarily for construction of new single-family and multifamily housing and alterations plus additions to existing housing. (Bureau of Economic Analysis)

retained earnings: Corporate profits after tax that are used for investment rather than paid out as dividends to stockholders. (Bureau of Economic Analysis)

revenues: Funds collected from the public arising from the sovereign power of the government. Revenues consist of receipts from income taxes (individual and corporate), excise taxes, and estate and gift taxes; social insurance contributions; customs duties; miscellaneous receipts such as Federal Reserve earnings, gifts, and contributions; and fees and fines. Revenues are also known as federal governmental receipts but do not include offsetting receipts, which are recorded as negative budget authority and outlays.

sequestration: The cancellation of budgetary resources to enforce the discretionary spending caps and pay-as-you-go process established under the Budget Enforcement Act of 1990 and the Omnibus Budget Reconciliation Act of 1993. Sequestration is triggered if the Office of Management and Budget determines that discretionary appropriations exceed the discretionary spending caps or that legislation affecting direct spending and receipts increases the deficit. Changes in direct spending and receipt legislation that increase the deficit would result in reductions in funding for entitlements not otherwise exempted by law. Discretionary spending in excess of the caps would cause the cancellation of budgetary resources within the discretionary spending category.

short-term interest rate: The interest rate earned by a debt instrument that will mature within one year.

standardized-employment deficit: The level of the federal budget deficit that would occur under current law if the economy was operating at potential GDP. It provides a measure of underlying fiscal policy by removing the influence of cyclical factors from the budget deficit. Compare with **cyclical deficit**. (CBO)

structural deficit: Same as **standardized-employment deficit**.

supply shock: A large and unexpected change in the production of a good or service. Examples include bumper crops, crop failures, or sudden restrictions on the supply of oil as occurred in 1973-1974 and 1979-1980. A supply shock that restricts output will raise the price of the good in short supply; a surfeit will lower the price of the good.

ten-year Treasury note: Interest-bearing note issued by the U.S. Treasury that is redeemed in 10 years.

three-month Treasury bill: Security issued by the U.S. Treasury that is redeemed in 91 days.

thrift institutions: Savings and loan institutions and mutual savings banks.

total factor productivity: See **productivity**.

transfer payments: Payments in return for which no good or service is currently received--for example, welfare or Social Security payments or money sent to relatives abroad. (Bureau of Economic Analysis)

trough: See **business cycle**.

trust fund: A fund, designated as a trust fund by statute, that is credited with income from earmarked collections and charged with certain outlays. Collections may come from the public (for example, taxes or user charges) or from intrabudgetary transfers. More than 150 federal government trust funds exist, of which the largest and best known finance several major benefit programs (including Social Security and Medicare) and certain infrastructure spending (the Highway and the Airport and Airway trust funds). The term "federal funds" refers to all programs that are not trust funds.

underlying rate of inflation: Rate of inflation of a modified CPI-U that excludes from the market basket the components most volatile in price--food, energy, and used cars.

unemployment: Joblessness. The measure of unemployment is the number of jobless people who are available for work and are actively seeking jobs. The *unemployment rate* is unemployment as a percentage of the labor force. (BLS)

yield: The average annual rate of return on a security, including interest payments and repayment of principal, if held to maturity.

yield curve: The relationship formed by plotting the yields of otherwise comparable fixed-income securities against their terms of maturity. Typically, yields increase as maturities lengthen. The rate of this increase determines the "steepness" or "flatness" of the yield curve. Ordinarily a steepening (or flattening) of the yield curve is taken to suggest that relatively short-term interest rates are expected to be higher (or lower) in the future than they are now.

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