The GRH legislation excludes certain one-time savings from the calculation of deficit reduction, eliminating continued reliance on one-time saving methods. Congress and the administration will be forced to focus on spending and revenue policies.

The amended GRH Act does allow for several escape clauses, however. The budget summit agreement of last fall included some limits on the size of automatic cuts for FY 1988 and FY 1989. Furthermore, provisions retained from the original GRH Act allow for suspension of the automatic spending reductions if the economy either declines or is expected to perform poorly.4

The GRH Act is a step in the right direction by forcing attention on the structural component of the deficit. The Act also permits flexibility for changing economic conditions and allows the executive branch—the OMB in particular—discretion for determining the need for spending adjustments.

■ Conclusion

The economy has been operating at high employment for the past several quarters, but is still generating large deficits. This suggests that the core of

Federal Reserve Bank of Cleveland Research Department P.O. Box 6387 Cleveland, OH 44101 the current deficit problem is not cyclical and that further deficit reduction is unlikely without additional fiscal

Rapid economic growth from 1983 to 1985 was associated with rising, instead of declining, deficits. One-time, special factors accounted for some of the deficit improvement in FY 1987. Policy decisions to slow the growth of outlays and speed the growth of revenues, however, also provided improvement.

The experience of FY 1987 illustrates the need for further policy action if structural deficits are to be reduced. Despite the two-year deficit reduction plan, projections for the five-year outlook still show high deficits.

Policy decisions that would reduce federal deficits have been difficult in recent years because of conflicting national priorities. Consequently, some budget analysts have suggested that a freeze on spending accompanied by continued growth in revenues would minimize these differences and would still allow the budget to move toward a surplus by 1991.

Additional deficit-reduction legislation will be necessary if deficits are to be gradually reduced to meet annual deficit targets.

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The views stated herein are those of the authors and not necessarily those of the Federal Reserve Bank of Cleveland or of the Board of Governors of the Federal Reserve System.

■ Footnotes

- 1. For a further discussion of the cyclically adjusted federal budget concept, see Frank de Leeuw and Thomas M. Holloway, "Cyclical Adjustment of the Federal Budget and Federal Debt," *Survey of Current Business*, vol. 63, no. 12 (December 1983), pp. 25-40.
- 2. During an economic cycle, as defined by the National Bureau of Economic Research, each quarter is classified into one of four phases. Constant-growth-rate lines are used to connect the averages of real GNP during the middle-expansion phase and thus give the path of middle-expansion trend GNP. See de Leeuw and Holloway, ibid., pp. 28-29.
- 3. "The Economic and Budget Outlook: Fiscal Years 1989-1993," Congressional Budget Office, February 1988, pp. xiii:xvii.
- 4. Congress can suspend the automatic spending cut mechanism if real GNP is negative for two consecutive quarters or if the OMB and the CBO project real growth of less than one percent for two consecutive quarters.

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ECONOMICCOMMENTARY

Federal Reserve Bank of Cleveland

Federal Budget Deficits: Sources and Forecasts

by John J. Erceg and Theodore G. Bernard

Federal budget deficits have been large and persistent over the past several years, rising to a postwar high of \$221 billion in fiscal year (FY) 1986 before declining a record \$71 billion in FY 1987. The Congressional Budget Office (CBO) and the administration's Office of Management and Budget (OMB) project a declining trend of deficits over the next five years (table 1).

The OMB's more optimistic economic assumptions and policy proposals foresee a steadily declining federal deficit trend between fiscal years 1988 and 1993. Nevertheless, in two of the next three years, projected deficits slightly exceed the recently upwardrevised deficit targets initially established under the Gramm-Rudman-Hollings Act (GRH). Between 1991 and 1993, they exceed the initial GRH targets by about \$20 billion annually. By 1993—the year now targeted for a balanced budget—the federal budget would still be in a slight deficit, according to OMB projections.

The CBO's less optimistic scenario projects a jagged downward path of deficits between 1988 and 1993. The projected deficit path is much higher than that projected by OMB, and increasingly exceeds the GRH deficit targets, reaching \$134 billion in 1993.

This *Economic Commentary* discusses the sources of federal budget deficits, examines the OMB and CBO forecasts, and suggests the need for additional policy actions to achieve a

declining trend of deficits into the 1990s. Under either scenario, it is likely that at some point during the next five years, automatic spending cuts will be required under the current GRH Act.

■ The Cyclically Adjusted Federal Budget

U.S. Department of Commerce estimates suggest that much of the deficits are associated with policy decisions, although the federal budget is highly sensitive to changes in economic activity. To distinguish between these deficit sources, analysts divide the budget into cyclical and structural components. The cyclical component of the budget measures the response of outlays and revenues to changes in economic conditions, while the structural component measures discretionary fiscal policy and other noncyclical components.

We can estimate what federal receipts and outlays would be if the economy were growing at a trend rate of gross national product (GNP), free from cyclical fluctuations; this calculation yields the structural component of the budget. The difference between the actual and structural measures of receipts and outlays is the cyclical component. This disaggregation helps to separate the interaction between the federal budget and economic activity.

Currently, the U.S. Department of Commerce, Bureau of Economic Analysis (BEA) publishes two alternative esti-

Despite a two-year deficit reduction plan, government projections for the five-year federal budget outlook still show large deficits. Additional legislative actions will be necessary if federal budget deficits are to be reduced sufficiently to meet annual deficit targets.

mates of the structural budget, also called the cyclically adjusted budget. The high-employment budget measures what the federal budget, on a National Income and Product Account (NIPA) basis, would be if the unemployment rate were 6 percent. The second measure is an estimate of what the NIPA-basis federal budget would be if the economy were expanding along a particular trend path—middle-expansion trend GNP in this case.²

Cyclically adjusted federal budget deficits, measured either way, increased substantially during the 1980s and account for the bulk of actual deficits in recent years. The federal deficit was reduced in 1987 on both an actual and a cyclically adjusted basis; the actual deficit is now between the two BEA measures of the structural deficit.

Thus, under either adjusted measure, structural deficits account for all, or almost all, of the current federal deficit. Moreover, BEA estimates of the cyclically adjusted budget suggest that both OMB and CBO projected deficits are mostly structural and that a highgrowth economy alone would not eliminate the deficit.

■ Composition of Federal Spending Because the cyclical component of the federal deficit is now estimated to be near zero, further reductions in the actual deficit must come from the structural component. The sources of structural deficits have varied over the years as budget priorities and policies have changed. Throughout the 1960s and early 1970s, revenues and outlays tended to grow at a similar pace. Outlays (on a unified budget basis) began to soar during the late 1970s and rose to about 24 percent of GNP by the mid-1980s, while revenue growth slowed (figure 1).

Moreover, the composition of spending has changed dramatically in recent years. Spending for national defense more than doubled between 1980 and 1987 while spending for nondefense items increased by 58 percent. Consequently, defense spending rose from 5.0 percent of GNP in 1980 to 6.4 percent in 1987 (figure 2).

As a share of GNP, defense outlays have leveled off and are well below the 9.4 percent share of the early 1960s. Apparently, the defense build-up has run its course. Growth in defense spending is projected to slow sharply through the early 1990s, according to both the CBO and OMB.

The CBO projects that growth in non-defense spending will also slow in the early 1990s and, relative to GNP, will decline from a high of 16.7 percent in 1983 to 14.1 percent in 1993. Most of the slowdown in total spending growth in the past several years has occurred in discretionary spending programs, such as training programs, social services, energy, and natural resources and the environment. Continued slow growth in discretionary spending will reduce its share of GNP

from a recent high of 5.9 percent in 1980 to a projected 3.4 percent by 1993, according to the CBO.

Entitlements and so-called mandatory spending have been the major growth category since the late 1960s and have accounted for the steady upward trend in total federal spending. Entitlements, which encompass virtually all of the major federal benefit programs, provide benefits to those who meet eligibility requirements set by Congress. Outlays for the greater portion of entitlement programs, dominated by Social Security and Medicare, are not subject to an income standard for eligibility. Social Security, in fact, accounts for nearly one-fourth of the entire federal budget.

In general, entitlement spending is projected to continue to grow into the early 1990s, according to the CBO, despite little or no growth for some programs, such as family support, veterans' pensions, guaranteed student loans, and unemployment compensation.

Interest expense has also accounted for trend growth in total spending. Net interest costs are the costs of borrowing to finance the federal debt, offset by the receipt of interest payments from government trust funds and loans. A combination of recent asset sales, prepayments, and sluggish new lending portends virtually flat interest income over the next several years.

As the total federal debt rises, the government needs to borrow money in order to finance current operations, while also seeking new funds to refinance maturing debt. Although refinancing often occurs at higher interest rates, lower rates during FY 1987 offset much of the cost associated with the growing federal debt and allowed for large one-time savings.

Net interest costs, of course, are highly sensitive to interest rates. Thus, projections of future net interest expenses depend on assumptions about interest rates and the size of deficits. Although economic variables are closely related and seldom, if

ever, move in isolation, some rules of thumb from the CBO offer an insight into how higher interest rates would affect the budget. These rules indicate that a one-percentage-point increase in interest rates from the beginning of FY 1988 to the end of FY 1993—for all maturities of debt issued—would cause outlays in 1988 to increase by \$3 billion and by 1993 to increase by \$30 billion.

High federal deficits and the federal debt explosion in recent years have boosted net interest costs to nearly 14 percent of total outlays and slightly more than 3 percent of GNP, well above recent historical experience. Neither the CBO nor the OMB expects relief over the next several years. Thus, even if the current status of the cyclically adjusted budget allowed for further deficit reduction from economic expansion, the growing burden of net interest costs would continue.

Moreover, about \$54 billion has already been cut from previously projected defense spending between FY 1988 and FY 1990. Future deficit reductions will therefore require hard choices among nondefense, noninterest spending components of the budget, unless taxes are increased.

Recent Policy Actions
Revenues as a share of GNP averaged nearly 19 percent annually between FY 1980 and FY 1987, but this average masks an important development. From FY 1980 through FY 1982, revenues averaged 19.7 percent of GNP. Extensive tax changes since 1981, especially the Economic Recovery Act of 1981, substantially reduced revenue growth. Revenues have averaged only 18.3 percent of GNP between FY 1983 and FY 1986.

A significant change in the budget outlook occurred in FY 1987, when the deficit fell to \$150 billion, a reduction of \$71 billion from FY 1986. The FY 1987 deficit reduction resulted from three major factors: 1) special one-time gains, 2) favorable economic conditions, and 3) discretionary policy changes.

Approximately half of the \$71 billion reduction was the result of one-time

TABLE 1 FEDERAL BUDGET DEFICIT PROJECTIONS (fiscal year, billions of dollars)

	1988	1989	1990	1991	1992	1993
OMB estimate (% of GNP)	\$ -147 (3.1%)	\$-130 (2.6%)	\$-104 (1.9%)	\$.79 (1.4%)	\$ -51 (0.8%)	\$-23 (0.4%)
CBO baseline estimate (% of GNP)	\$ -157 (3.4%)	\$-176 (3.5%)	\$-167 (3.1%)	\$-158 (2.8%)	\$-151 (2.5%)	\$-134 (2.1%)
Gramm-Rudman-Hollings (GRH) target	\$ -144	\$ -136	\$ -100	\$ -64	\$ -28	-0-
Shortfall from GRH target OMB estimate	\$-3	\$ 6	\$ -4	\$ -15	\$ -23	\$ -23
CBO baseline estimate	\$ -13	\$ -40	\$ -67	\$-94	\$-123	\$-134

SOURCES: Office of Management and Budget, Budget of the United States Government, Fiscal Year 1989; and Congressional Budget Office, The Economic and Budget Outlook: Fiscal Years 1989-1993.

FIGURE 1 FEDERAL GOVERNMENT OUTLAYS AND REVENUES RELATIVE TO GNP

Percent of GNP

24

22

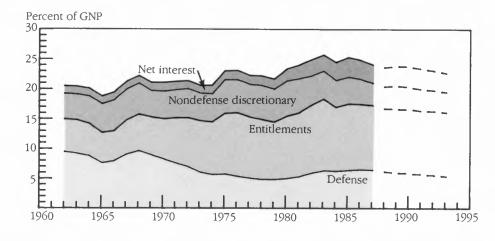
20

18

Revenues

1960 1965 1970 1975 1980 1985 1990 1995

FIGURE 2 FEDERAL GOVERNMENT OUTLAYS RELATIVE TO GNP



NOTE: Actual data through 1987 and projected data from 1988-1993 are measured in the fiscal year for both figure 1 and figure 2. Solid lines represent actual data; dashed lines represent projections by the Congressional Budget Office; and dotted lines represent projections by the Office of Management and Budget. Revenues and outlays are on a unified budget basis.

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

factors. The initial effects of the Tax Reform Act of 1986 boosted receipts by an estimated \$22 billion more than would have been expected without tax law changes. Capital gains payments surged in late 1986 as investors apparently took advantage of the special long-term capital gains treatment under the old tax law. On the other hand, CBO estimates project that tax law changes, due to the implementation of the remaining individual tax rate reductions, will reduce receipts by approximately \$10 billion in FY 1988.3

Other one-time gains arose from federal asset sales (including loan prepayments, direct loan sales, and the Conrail sale), which added about \$8 billion, and the shifting of certain outlays into FY 1988, which saved about \$5 billion. This unprecedented deficit reduction is not likely to be sustained without further policy actions.

A second source of improvement was cyclical in nature. Generally lower interest rates and an improvement in the agricultural economy led to lower outlays. In addition, stronger employment and income growth in 1987 helped to boost receipts. These gains from economic factors helped to reduce the cyclical component of the budget deficit, which was small relative to the structural component.

Discretionary policy changes, which affect the structural component of the deficit, also accounted for some of the deficit reduction. Spending cuts in defense programs and in several non-defense discretionary programs, such as education, transportation, housing, and fiscal assistance to state and local governments, represented policy actions to cut the federal deficit.

Against a prospect for large deficits that exceed the GRH annual targets, Congress and the administration have agreed to legislation to cut the FY 1988 deficit by \$30 billion and to reduce the projected FY 1989 deficit by \$46 billion. Economic and technical assumptions for FY 1989, to be presented in the administration's midsession budget report in August, will indicate if further legislative action is necessary.