

Projecting Federal Deficits And the Impact of the Gramm-Rudman-Hollings Budget Cuts

Spending cuts made now will reduce the amount of subsequent cutbacks needed to balance the budget by lowering interest obligations. Forecasting future deficits remains a problematic undertaking, nevertheless.

Thomas J. Cunningham and Rosemary Thomas Cunningham

Economic forecasting has never been an easy task. The further one looks into the future, the more difficult it becomes to predict the course of events reliably, as one must depend more and more on assumptions about long-run behavior that may or may not hold true. Such is the case in projecting federal budget deficits. By the very nature of the problem, short term forecasts for one or two quarters are not particularly useful. The relevant horizon for government budgets may be several years, and this is precisely the period of time that poses the greatest forecasting difficulties.1 Nevertheless, current events-in particular the Gramm-Rudman-Hollings balanced budget law-have generated a great deal of interest in deficit estimates. This article sheds some light on how the Gramm-Rudman-Hollings legislation could affect government spending over the next few years.

If the Gramm-Rudman-Hollings deficit targets are to be met without raising taxes, given a reasonable economic scenario, a 4 percent reduction in programmatic government spending would be necessary for fiscal year 1987, followed by a slightly less than 2 percent reduction for fiscal 1988 and an approximately 1 percent reduction in spending in fiscal years 1989 through 1991. Increasing the size of the cut now will lower future interest obligations, progressively reducing future budget cuts necessary to achieve the budget bill's final objective.

The authors are, respectively, a macropolicy economist for the Atlanta Fed's Research Department and an assistant professor of economics at Agnes Scott College in Decatur, Georgia. However, certain caveats must be issued concerning the effort to predict the impact of the Gramm-Rudman-Hollings legislation.

A Somewhat Murky Crystal Ball

To estimate future deficits, both income and expenditures must be forecast. Estimates of expenditures are not as easy to make as they might first appear, though in some areas the process is mechanical and straightforward. Estimating costs of future construction projects is one example. If the contracts have been signed, the time and amount of nominal disbursements are already specified. In other areas, forecasting outlays is extraordinarily difficult Anticipating the costs associated with the Strategic Defense Initiative ("Star Wars"), for instance, is problematic, because it is hard to gauge how much Congress will be willing to appropriate and because new technologies may present expensive unforeseen problems to overcome before the system can function. The difficulty of predicting costs on most budget items generally lies somewhere between

Inflation can serve to reduce... the deficit, though the effect is not as pronounced as with real growth.



these extremes. Medicare expenses, for example, depend on the number of people eligible, a figure known with some certainty, and on changes in the cost of medical care, which are more difficult to anticipate.

Both the Congressional Budget Office (CBO) and the Office of Management and Budget have large staffs devoted to such estimation problems, and this article does not presume to better their judgment. Total federal expenditure, with some notable exceptions, is rather well understood.

The greatest challenge in forecasting deficits is anticipating changes in economic conditions. A higher-than-expected real rate of economic growth, for example, will reduce income maintenance expenditures by raising the level of income. Programs other than income maintenance are less influenced by changes in real economic activity so their expenditure level remains largely unchanged. At the same time, real growth means a real increase in tax revenue. The net effect of real economic growth, then, is a reduction in the size of deficits. If, however, the economy slides into a recession, these effects would reverse themselves to create a budget shortfall much larger than expected.

About one half of all government spending is indexed to inflation, as are income taxes. As a result, inflation can serve to reduce the real size of government expenditure commitments, and hence reduce the deficit, though the effect is not as pronounced as with real growth.

Table 1 presents current CBO projections of federal deficits through 1991, the relevant timetable for Gramm-Rudman-Hollings.² The most striking feature of these revised deficit projections is their time trend. Baseline budget deficits are now projected as consistently declining.³ By the year 1991, the CBO projects a deficit of \$104 billion, down from a fiscal year 1986 deficit of \$208 billion.

The baseline budget projections make two crucial assumptions, each of which deserves some discussion. First, they presuppose no real growth in defense spending. Second, they take for granted several aspects of economic performance over the course of the next five years.

The supposition that no real growth in defense expenditure will occur seems somewhat misleading. The budget submitted by the Reagan administration for fiscal year 1987 calls for real growth in defense outlays of approximately

Table 1
CBO Baseline Budget Projections
(Billions of dollars)

	1986	1987	1988	1989	1990	1991
Revenue	778	844	921	991	1,068	1,144
Outlay	986	1,025	1,086	1,135	1,188	1,248
Deficit	208	181	165	144	120	104

Source: CBO, The Economic Review and Budget Outlook: Fiscal Years 1937-1991, February 1986.

3 percent, and real growth in the military budget authority of almost 8 percent. While no one knows how much of this real growth Congress will underwrite, the baseline budget projection is not designed to accommodate any program changes not already mandated by Congress, and a significant increase in real military expenditure represents a program

change.

Anticipating economic growth is, as discussed above, a substantial problem in forecasting deficits. The baseline budget projections rest on a real rate of growth varying from 3.1 to 3.5 percent and averaging 3.3 percent over the next five years. Inflation is assumed to range between 3.4 and 4.4 percent over the same period, averaging slightly less than 4.2 percent. Growth at a higher rate than this would serve to reduce the deficit at a much faster rate. Sustained real growth over 4 percent per year would, the CBO projects, easily eliminate the deficit within the next five years. The CBO's low-growth scenario sees deficits rising substantially with a recession but then resuming a downward path as the economy returns to its historical long-run growth rate of slightly over 3 percent. Even though revenues are sensitive to changes in economic performance, the baseline budget indicates that the economy will eventually outgrow the deficit regardless of fluctuations in the economy.

Cutting Spending From Here to Eternity

Despite these hazards to prediction, an estimate of the size of the budget cuts needed to

achieve the targets of the Gramm-Rudman-Hollings amendment is desirable. Table 2 presents the baseline budget series and the size of spending reductions necessary to balance the federal budget by 1991, following the deficit time path specified in the amendment. Some explanation of the table's categories is in order:

The deficit series in Table 2 reports both the actual baseline deficit, as in Table 1, and the same deficit divided between the "basic deficit" and interest payments on the outstanding federal debt⁵ The basic deficit represents the difference between spending on programs and tax revenue; it is the total deficit minus interest This distinction is useful for several reasons. First, the government has only indirect control over current interest expenses. Interest rates are determined in money and capital markets, and the amount of debt outstanding is determined by previous spending and taxation decisions. Interest outlays represent commitments on bonds already sold; these expenditures cannot be reduced unless the government were to default on its debt, an extremely unlikely eventuality. Interest expenditures can be reduced only by borrowing less or borrowing at reduced rates. The former depends heavily on program spending and implies a reduction in the basic deficit, while the latter is largely out of the government's control.

The government does, however, have a great deal of control over how much is spent on various programs. To reduce deficits below their baseline levels, spending on programs must be reduced. The result will be a reduction

in the basic deficit.

FEDERAL RESERVE BANK OF ATLANTA

Table 2
Cuts Needed to Meet Gramm-Rudman-Hollings Targets
(Billions of dollars)

1986 1987 1988 1989 1990 1991							
Outlay 986 1,025 1,086 1,135 1,188 1,248 Deficit 208 181 165 144 120 104 Gramm-Rudman-Hollings — 144 108 72 36 0 Baseline Deficit Less Gramm-Rudman-Hollings — 37 57 72 84 104 Net Interest 139 145 154 158 159 160 Basic Deficit 69 36 11 -14 -39 -56 Cuts Needed to Meet Gramm-Rudman-Hollings — 37 16 12 8 13 Size of Program Cut (in percent) — 4.2 1.7 1.1 0.7 1.0		1986	1987	1988	1989	1990_	1991
Deficit 208 181 165 144 120 104 Gramm-Rudman-Hollings — 144 108 72 36 0 Target Baseline Deficit Less — 37 57 72 84 104 Gramm-Rudman-Hollings 139 145 154 158 159 160 Basic Deficit 69 36 11 -14 -39 -56 Cuts Needed to Meet Gramm-Rudman-Hollings — 37 16 12 8 13 Size of Program Cut (in percent) — 4.2 1.7 1.1 0.7 1.0	Revenue	778	844	921	991	1,068	1,144
Gramm-Rudman-Hollings — 144 108 72 36 0 Baseline Deficit Less Gramm-Rudman-Hollings — 37 57 72 84 104 Net Interest 139 145 154 158 159 160 Basic Deficit 69 36 11 -14 -39 -56 Cuts Needed to Meet Gramm-Rudman-Hollings — 37 16 12 8 13 Size of Program Cut (in percent) — 4.2 1.7 1.1 0.7 1.0	Outlay	986	1,025	1,086	1,135	1,188	1,248
Target Baseline Deficit Less — 37 57 72 84 104 Gramm-Rudman-Hollings Net Interest 139 145 154 158 159 160 Basic Deficit 69 36 11 -14 -39 -56 Cuts Needed to Meet — 37 16 12 8 13 Gramm-Rudman-Hollings Size of Program Cut — 4.2 1.7 1.1 0.7 1.0 (in percent) — 4.2 1.7 1.1 0.7 1.0	Deficit	208	181	165	144	120	104
Gramm-Rudman-Hollings Net Interest 139 145 154 158 159 160 Basic Deficit 69 36 11 -14 -39 -56 Cuts Needed to Meet — 37 16 12 8 13 Gramm-Rudman-Hollings Size of Program Cut — 4.2 1.7 1.1 0.7 1.0 (in percent) — 4.2 1.7 1.1 0.7 1.0		_	144	108	72	36	0
Basic Deficit 69 36 11 -14 -39 -56 Cuts Needed to Meet — 37 16 12 8 13 Gramm-Rudman-Hollings Size of Program Cut (in percent) — 4.2 1.7 1.1 0.7 1.0		_	37	57	72	84	104
Cuts Needed to Meet — 37 16 12 8 13 Gramm-Rudman-Hollings Size of Program Cut — 4.2 1.7 1.1 0.7 1.0 (in percent)	Net Interest	139	145	154	158	159	160
Gramm-Rudman-Hollings Size of Program Cut — 4.2 1.7 1.1 0.7 1.0 (in percent)	Basic Deficit	69	36	11	-14	-39	-56
(in percent)			37	16	12	8	13
Cumulative Cut — 37 53 65 73 86		<u>-</u>	4.2	1.7	1.1	0.7	1.0
	Cumulative Cut		37	53	65	73	86

Source: CBO, The Economic and Budget Outlook: Fiscal Years 1937-1991, February 1986.

In Table 2, the deficit is represented as a positive number, and surpluses are represented as negative quantities. Note that in 1989 the basic budget shows a surplus of approximately \$14 billion. After 1989, the deficit consists solely of interest expenses on debt already outstanding.

To meet the Gramm-Rudman-Hollings targets, baseline budget expenditures must be reduced by \$104 billion by 1991. Table 2 presents the size of the cuts needed to meet this goal, and also expresses them as a fraction of basic budget spending. (Again, spending on interest payments could not be reduced unless the government were to default on interest payments on its debt.) As stated in the introduction, the budget-balancing goals can be met through overall spending reductions of 4.2 percent in 1987, 1.7 percent in 1988, and approximately 1 percent for the next three years, if the CBO baseline budget assumptions discussed above are correct. The actual size of

the cut on a year-by-year basis is shown as Cuts Needed to Meet Gramm-Rudman-Hollings, while the Cumulative Cut row shows a running total of the yearly spending reductions. Cumulative cuts of \$86 billion ultimately result in the \$104 billion reduction in the size of the deficit necessary to meet the target.

The importance of separating the basic deficit and interest expenditures can now be illustrated. To have a balanced federal budget by 1991, overall government spending must be reduced a total of \$104 billion from baseline estimates. The cuts outlined in Table 2 achieve that result but with cuts that total less than \$104 billion, because reductions in the deficit occurring before 1991 result in smaller borrowing needs and hence lower future interest expenses. A reduction in the deficit now lowers future deficits through both the cut in spending and the smaller future interest liabilities. By meeting the deficit reduction targets, which call for substantial cuts now in the basic deficit, future

interest expenses are reduced, requiring progressively smaller future cuts. Thus, total program cuts of \$86 billion could result in a \$104 billion decrease in expenditure by 1991.

Taking this relation between the change in expenditure and the change in interest obligation to an extreme, an expenditure reduction of \$80 billion occurring in fiscal year 1987 would be sufficient to bring about a balanced federal budget by the year 1991. This would represent an across-the-board reduction of 9 percent in government spending on programs. Waiting until 1991 would require the full \$104 billion to be cut at once.

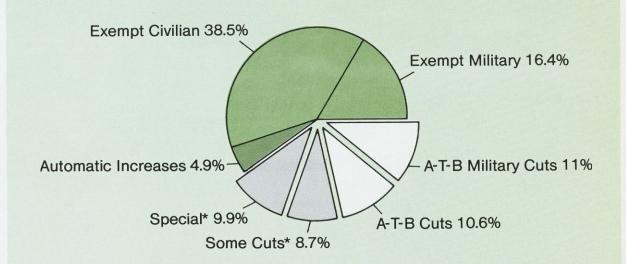
The Gramm-Rudman-Hollings legislation does more than simply specifying deficit targets for a balanced budget in 1991; it also names areas in which cuts will be made automatically in the event that the deficit targets (plus a

margin for error) are not met. (The automatic spending reduction mechanism is the subject of the legal challenge to Gramm-Rudman-Hollings Act based on the constitutional separation of powers.)

Chart 1 represents the current fiscal year's budget, divided into various expenditure categories. Under the balanced budget legislation, only 35 percent of total government expense including interest is subject to automatic cuts. Regardless of the constitutionality of Gramm-Rudman-Hollings, if it is viewed in any sense as a potential guideline for reductions in outlay, the difficulty of achieving a balanced budget is easily perceived. A comparatively small portion of overall spending is subject to cuts, which, if confined to these areas, would result in substantial reductions in the levels of services affected.

Chart 1. The Fiscal Year 1986 Budget Divided Into Gramm-Rudman-Hollings Categories

About 65 percent of the 1986 budget is exempt from cuts and 35 percent is subject to across-the-board (A-T-B) or partial cuts



*Programs in these areas, including some retirement, medicare, and student loans, may be eligible for cuts but are also exempt from cuts in certain areas.

Source: CBO and Office of Management and Budget, December 1985.



Conclusion

Recent concern over the size of federal deficits has sparked a general interest in the eventual elimination of these deficits. CBO baseline budget projections see the federal deficit falling to roughly half its current size over the next five years, given a seemingly reasonable set of economic assumptions. If the deficit is to be eliminated by then without raising taxes, substantial cuts in expenditures are essential.

The sooner these curtailments are made, however, the smaller the need for overall reduction from current baseline spending levels.

Taking the cuts now not only lessens the absolute level of government spending but also diminishes the necessary size of future cuts by putting future outlays on a more rapidly declining time path. Lowering future interest expenditures will significantly reduce the size of future cuts needed to balance the budget.

NOTES

¹Over a much longer horizon, the importance of business cycles diminishes. Forecasting output growth for the next few decades may be done without reference to temporary swings in economic activity.

²Congressional Budget Office, The Economic and Budget Outlook Fiscal Years 1987-1991, Government Printing Office,

February 1986.

3"Baseline budgets" are constructed on the assumption that current expenditure programs remain in their current state. With programs neither added nor deleted, and following economic assumptions discussed below, this is the course that the budget would take by itself with no changes in programs.

**From Budget of the United States Government, Fiscal Year 1987, GPO, 1986. Budget outlays differ from budget authority in that budget authorization (authority) must occur before outlays can take place. Not all budgeted funds authorized in a fiscal year will be spent in that year. For a more complete description of the budget process and terms, see Lisa Rockoff, "The Federal Budget Process: How It Works," Economic Review, vol. 70, no. 5 (May 1985), pp. 38-40.

The implications of this division are discussed at length in "The Long-Run Outcome of a Permanent Deficit," this issue. The implied average rate of interest on government debt outstanding is assumed to continue following CBO estimates, even though the level of debt outstanding is reduced slightly from baseline projections. The CBO presupposes that the 3-month Treasury bill rate will monotonically decline from 6.8 percent to 5.4 percent over the next five years. Since the average length to maturity of all publicly held federal debt is now 5 years (*Treasury Bulletin*, Winter issue, first quarter fiscal year 1986), these interest rate and expenditure assumptions apply to half the debt outstanding through the relevant Gramm-Rudman-Hollings period.

⁷The source of the numbers used is the Office of Management and Budget and the CBO, December 1985, as reported in the

New York Times, January 16, 1986.

⁸In 1987 alone, the required cut in spending shown in Table 2 represents a reduction in spending of approximately 10.3 percent on programs that are subject to automatic reductions (both across the board and special rule).