Research Department
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FRBSF Weekly Letter

Understanding Federal Deficits

There is considerable concern these days with the prospect of high and rising federal deficits. Even with the passage of the August 1982 tax package, with budget savings of about $130 billion spread over the next three years, the deficit may reach $155 billion each year through 1985, according to the Congressional Budget Office (CBO). This compares with a pre-1982 deficit high of $66 billion in 1976. The 1982 fiscal year deficit was $110 billion.

Public concern with growing deficits has led to Congressional proposals for a balanced budget amendment to the U.S. Constitution. Although such a proposal was passed by the U.S. Senate this summer, the House version was defeated in early October. Nevertheless, debate over an amendment is likely to resurface as high deficits drive the Treasury to sizable borrowing in credit markets just as the anticipated recovery increases the borrowing needs of the private sector.

This *Letter* attempts to provide a framework for understanding federal deficits by describing the two components of federal budgets: discretionary policy and automatic effects. We begin with a discussion of the reasons for public concern with federal deficits.

Spending concerns

The supporters of a balanced budget amendment can point to substantial historical evidence to support their case for limiting government's taxing and spending powers. Over the past thirty years, for instance, an increasing share of our national income has gone to the federal government. During the 1950s, federal receipts averaged about 18 percent of the nation's income. This average increased to just over 19 percent during the next twenty years. According to our estimates, federal receipts may average 19.4 percent of GNP in 1983 even after the 25 percent tax cuts initiated in 1981. This estimate assumes about 3.5 percent real growth and 5 percent inflation next year.

Over the same 30-year period, federal expenditures rose faster than receipts. Expenditures increased from an average of 18 percent of GNP in the last half of the 1950s to 21 percent in the 1970s. They may jump to about 25 percent of GNP in 1982 and 1983 as the increased demands of national defense and interest payments on the national debt surpass budget retrenchments elsewhere.

These trends tell a story of growing deficits, a growth that has gained momentum in the last 15 years. From a small average size of .3 percent of GNP in the 1960s, deficits grew to 1.8 percent of GNP in the 1970s and may average near 5.0 percent in 1982 and 1983, according to our estimates.

The market's concern with deficits comes from the fact that federal borrowing to finance them absorbs part of the nation's net savings. Only the residual of savings is then available for adding to the private sector's capital stock—ranging from housing to business plant and equipment. Accordingly, large and growing deficits, without comparable increases in net savings, may slow the growth of private business investment and reduce the nation's growth in productive capacity and productivity. This event is often referred to as "crowding out."

The federal government has been taking, and will take, an increasing share of the nation's net savings—from an average of 4.5 percent in the last half of the 1950s to an average of about 25 percent in the 1970s and 60 percent in 1983, according to our estimates.

Discretionary policy

Substantial increases in the deficit generally occur during business slowdowns such as those that dominated the 1970s. How would deficits appear if adjusted for such business cycle changes? Adjusted historical estimates, known as high employment surpluses or deficits, are provided by the U.S. Commerce

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Department. They are based on the assumption that the economy's potential growth is realized at 5.1 percent unemployment. Because they are estimated at high employment, these deficits provide a measure of the thrust of discretionary federal government policy.

In the last half of the 1950s, the high employment budget averaged a surplus of 1.1 percent of potential GNP. Thereafter, these budgets consistently averaged in the red, with deficits increasing from .3 percent of potential GNP in the 1960s to .8 percent in the 1970s. There is a possibility that the high employment deficit will reach an historical high of 1.1 percent in 1983. These deficits may remain high or even increase somewhat through 1985. According to recent CBO estimates, for instance, high employment deficits may be greater in fiscal year 1985, averaging 1.3 percent of potential employment GNP, than in any earlier year. Indeed, their persistence has led to a new name: "structural" deficits.

Automatic inflation effects
High employment deficits would have been even larger were it not for the revenues which flowed to the federal government as a result of inflation. As inflation (and money wages) rises, tax revenues automatically increase (as people are pushed into higher marginal tax brackets) more than expenditures (due to cost-of-living adjustments and the like).

This automatic inflation effect, popularly known as "fiscal drag," has been sizable during times of relatively high inflation. For instance, during 1976, when inflation averaged about 4.5 percent, additional revenues associated with fiscal drag amounted to $3.7 billion, according to Commerce Department estimates. In 1981, when inflation had risen to an average of just over 8.5 percent, additional revenues owing to fiscal drag amounted to $28.7 billion.

Automatic cyclical effects
Federal budgets are also designed to respond automatically to changes in business conditions, and this response may have positive economic effects.

Deficits occur during recessions because tax receipts automatically decline with income and profits. At the same time, federal expenditures increase, primarily because of increases in unemployment compensation outlays. Similarly, the budgetary system ensures increasing revenues during a business recovery, and a decline in unemployment payments. These automatic "stabilizing" features of our federal tax and spending programs act essentially as shock absorbers, cushioning the fall in income during recessions and moderating the rise during recoveries.

Suppose that unemployment averages one percentage point more in the first year of a business recession than in the previous year, say, increasing from 7 to 8 percent. As a rule of thumb, a one percentage point increase in joblessness leads to a $33 billion increase in the federal deficits, under current conditions. Tax receipts will fall on average by close to $26 billion, and federal expenditures, mostly for unemployment payments, will increase about $7 billion for the year. Similarly, a reduction in unemployment of 1 percentage point will reduce the deficit by $33 billion.

Attempts to reduce deficits would reduce some of these positive automatic cyclical effects. In a recession, any reduction in expenditures will offset the stabilizing influences of the increased unemployment payments. And any tax raises would reduce private purchasing power and could worsen the recession. Such actions could have the unintended consequence of increasing the deficit.

Looking at the components
We may separate changes in the deficit due to policy decisions that alter tax rates and expenditure programs from those due to automatic effects. How important have these separate changes been to the overall deficit?

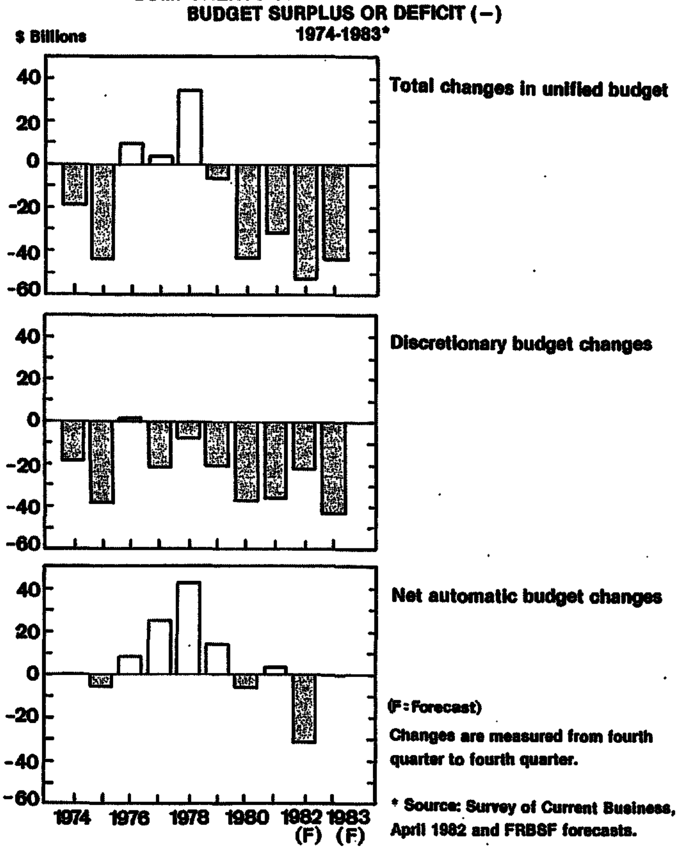
During the 1974–1975 recession, for instance, the deficit increased a combined $62 billion. Automatic cyclical effects added $44 billion to the deficit, but these were largely offset by increased revenues of $38 billion due to inflation effects. The *net* automatic effect was a deficit increase of around $6 billion, or 10 percent of the total change in the deficit. The remaining 90 percent, totalling $56 billion was the result of discretionary policy actions which increased expenditures more than receipts (see chart).

As the subsequent recovery proceeded through 1978, automatic effects would have more than offset the 1974–1975 accumulated deficit and produced a moderate surplus. However, the budget remained in deficit, in the amount of $18 billion, by the end of 1978, owing to the discretionary components of the budget.

Since 1979, the deficit has steadily grown; it reached a new height in 1982 and can be expected to increase in 1983. The accumulated net automatic effects are likely to constitute a larger proportion of the total change in the deficit in the early 1980s than in the 1970s due both to less inflation and higher unemployment. Nonetheless, discretionary policy changes may remain a substantial if not major factor in the deficit picture.

Rose McElhattan

COMPONENTS OF CHANGES IN THE FEDERAL BUDGET SURPLUS OR DEFICIT (–) 1974-1983*



(F: Forecast)
Changes are measured from fourth quarter to fourth quarter.

* Source: Survey of Current Business, April 1982 and FRBSF forecasts.

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BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT
(Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding 10/13/82	Change from 10/6/82	Change from year ago Dollar	Change from year ago Percent
Loans (gross, adjusted) and investments*	162,906	– 494	9,942	6.5
Loans (gross, adjusted) — total#	143,025	– 641	10,966	8.3
Commercial and industrial	45,950	– 356	5,754	14.3
Real estate	57,610	102	2,732	5.0
Loans to individuals	23,365	– 77	144	.6
Securities loans	2,857	267	1,346	89.0
U.S. Treasury securities*	6,562	76	979	17.5
Other securities*	13,319	71	– 2,003	– 13.0
Demand deposits — total#	41,053	94	– 1,112	– 2.6
Demand deposits — adjusted	28,857	277	– 952	– 3.2
Savings deposits — total	32,027	– 119	2,431	8.2
Time deposits — total#	101,504	193	15,290	17.7
Individuals, part. & corp.	91,309	74	12,978	16.6
(Large negotiable CD's)	39,105	– 79	5,245	15.5

Weekly Averages of Daily Figures	Week ended 10/13/82	Week ended 10/6/82	Comparable year-ago period
Member Bank Reserve Position			
Excess Reserves (+)/Deficiency (–)	63	102	81
Borrowings	12	3	13
Net free reserves (+)/Net borrowed(–)	51	99	68

* Excludes trading account securities.
# Includes items not shown separately.

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