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The Federal Budget Deficit: A Discussion of Recent Trends

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Summary

The federal budget deficit in FY2004 was 3.6% of gross domestic product (GDP). When the influence of economic conditions and temporary factors is excluded from the measurement of budget balances, the FY2004 deficit was 2.6% of GDP. By either measure, the deficit is above the historical average for the last 50 years.

The FY2004 deficit represents a dramatic turnaround from the FY2000 surplus of 2.4% of GDP. Most of this turnaround can be traced to a fall in receipts, from a 50-year high of 20.9% of GDP in FY2000 to a 45-year low of 16.3% of GDP in FY2004.

In percentage terms, tax cuts accounted for approximately 45% of the decline in the federal budget balance between FY2000 and FY2004. The downturn in the economy and temporary factors were responsible for about 38% of the deterioration in federal finances, while increases in federal outlays as a percentage of GDP were responsible for another 17%. This report presents historical data and will not be updated.

Concern over the federal budget deficit has prompted a growing debate in Congress over how the budget turned from surpluses into deficits, and what can be done to restore balance.¹ A review of the historical data on federal receipts, outlays, and deficits can help identify the forces that led to the current situation. Using standardized budget data, this report makes a peak surplus (2000) to peak deficit (2004) comparison to separate policy contributions to the deficit from economic factors.

This report addresses two specific issues. First, how do expected FY2004 federal receipts, outlays, and the resultant deficit compare to historical averages? Second, what factors caused the federal budget to change from a surplus in FY2000 to a deficit in FY2004?

¹ The economic effects of the budget deficit are discussed in CRS Report RL31235, *The Economic Effects of the Federal Budget Deficit*, by Brian Cashell.

Historical Data on Federal Receipts, Outlays, and Budget Balances

Figure 1 shows total federal receipts as a percentage of gross domestic product (GDP) over the FY1955 to FY2004 time period. Budgetary totals as a percentage of GDP provide the best measurement of fiscal balance over long periods of time because they correct for changes in the price level and growth in the economy.

As shown in **Figure 1**, over the last 50 years federal receipts have averaged about 18.1% of GDP. However, there has been a great deal of fluctuation around the average over time. The largest change as a share of GDP has occurred over the last five years, when receipts fell from a 50-year high of 20.9% of GDP in FY2000 to a 45-year low of 16.3% of GDP in FY2004, which is 1.8 percentage points below the 50-year average. (Standardized receipts are explained on page 3.)



Figure 1: Federal Receipts as a % of GDP, FY1955-2004

Figure 2 shows total federal outlays as a percentage of GDP. Over the last 50 years, outlays have averaged about 20% of GDP. The figure shows that there was an upward trend in federal outlays as a percentage of GDP between FY1955 and FY1983. Since FY1983, there has generally been a downward trend in outlays as a percentage of GDP. Between FY1992 and FY2000, federal outlays continuously declined as a percentage of GDP, reaching 18.4% of GDP in FY2000. In FY2001, federal outlays as a percentage of GDP began to rise again, and by FY2004 they reached 19.8% of GDP, about equal to their 50-year average.

As these two figures show, the deterioration in the budget balance since FY2000 is largely the result of falling receipts, not increases in outlays as a percentage of GDP. During this period, receipts fell from 20.9% of GDP to 16.3% of GDP (a decline of 4.6 percentage points), while outlays rose from 18.4% of GDP to 19.8% of GDP (an increase of 1.4 percentage points).



Figure 2: Federal Outlays as a % of GDP, FY1955-2004

This recent trend, with receipts falling as a percentage of GDP and outlays rising as a percentage of GDP, has caused the budget balance to turn from a surplus of 2.4% of GDP in FY2000 to a deficit of 3.6% of GDP in FY2004. The average budget balance over the FY1955 through FY2004 period has been a deficit of 1.9% of GDP. Thus, the budget deficit in FY2004 is 1.7 percentage points larger than the 50-year average.

But these data give no indication whether the fall in receipts and rise in spending were policy induced or the result of the economic slowdown. When GDP growth slows, tax receipts tend to fall as the growth in income slows and mandatory spending on certain programs — such as unemployment insurance — automatically rises without any change in policy.

To distinguish the effect of economic and policy changes on the budget, the Congressional Budget Office (CBO) calculates a standardized budget measure that strips out the economic and temporary effects.² This is done by estimating what receipts and outlays would be if the economy were at "full employment," with its labor and capital resources fully employed.³ The standardized budget measure makes other adjustments for temporary phenomena such as changes in capital gains realizations, the effects of changes in inflation on interest payments on the national debt, timing changes in federal payments and receipts, and so on.

² See Congressional Budget Office, *The Cyclically Adjusted and Standardized-Budget Measures*, March 2005.

³ For a discussion of the uncertainty of full employment measures, see CRS Report RL32274, *A Changing Natural Rate of Unemployment: Policy Issues*, by Marc Labonte.



Figure 3: Federal Surpluses/Deficits as a % of GDP, FY1955-2004

The previous three figures also show standardized receipts, outlays, and budget balances as a percentage of GDP for the FY1962 to FY2004 period. As the figures illustrate, part of the volatility over time is a result of changing economic conditions and temporary factors rather than policy changes. Standardized receipts and outlays show that annual deviations from the long-run averages that result from policy changes are smaller than the actual data would suggest.

For example, on a standardized basis, the FY2004 budget deficit is 2.6% of GDP. The standardized budget deficit, which strips out economic effects, shows that the FY2003 and FY2004 deficit would still be well above the historical average, even if there had not been an economic slowdown.

Changes in the Budget Balance, FY2000 to FY2004. Table 1 shows the effects of policy changes and economic conditions on receipts, outlays, and the budget balance between FY2000 and FY2004.

If the economy were at full employment and other temporary factors were removed (the standardized estimate), CBO estimates that receipts would equal 16.5% of GDP in 2004 — almost the same as actual receipts. In FY2000, CBO estimates the economy was above full employment — economic output (and therefore tax revenue) was unsustainably high. Standardized receipts were 19.3% of GDP in FY2000, while actual receipts were 20.9% of GDP.

The difference between the decline in actual receipts and standardized receipts represents the effect of the economic downturn and temporary factors on receipts. In this case, actual receipts fell by 4.6 percentage points and standardized receipts fell by 2.8 percentage points. Economic conditions were therefore responsible for about 1.8 percentage points of the total decline in actual receipts (4.6 percentage points less 2.8 percentage points). In percentage terms, this is about 39% of the decline in actual receipts.

Additionally, the change in standardized receipts gives a rough estimate of the effects of policy changes on federal receipts because economic and other temporary factors have been stripped out. Hence, policy changes (tax cuts) reduced federal receipts by 2.8 percentage points of GDP (61% of the total revenue decline) between FY2000 and FY2004.⁴

	Actual as a Percentage of GDP		Standardized as a Percentage of GDP		FY2000 to FY20004				
					Percentage Point Change			Percentage of Total Change	
	FY2000	FY2004	FY2000	FY2004	Actual	Due to Policy Changes	Due to Economic Conditions	Due to Policy	Due to Economic Conditions
Revenue	20.9%	15.8%	19.3%	16.5%	-4.6	-2.8	-1.8	61%	39%
Outlays	18.4%	20.0%	18.1%	19.2%	+1.4	+1.1	+0.3	79%	21%
Surplus/ Deficit	2.4%	-3.6%	1.1%	-2.6%	-6.0	-3.7	-2.3	62%	38%

Table 1: Actual and Standardized Budget Totals, 2000-2004 (as a % of GDP)

Source: CRS calculations based on CBO data.

The decline in standardized receipts is significantly larger than the "scoring" of legislative changes to the tax code by the Joint Tax Committee (JCT) and CBO at the time the tax cuts were enacted. It was estimated that the three tax cuts enacted between 2001 and 2003 (P.L. 107-16, P.L. 107-147, and P.L. 108-27) would cost about \$265 billion or 2.3% of GDP in 2004, compared to the 2.8% of GDP decline in standardized receipts from 2000 to 2004 forecast by CBO.

Unlike the revenue side, there is no straightforward way to make a comparison of policy changes affecting outlays over time because spending levels for discretionary programs are determined by annual appropriations. A number of different measurements of outlays could be considered to be "current policy," including keeping spending constant, increasing spending at the rate of inflation, or increasing spending at the rate of population growth. In this report, keeping spending constant as a percentage of GDP is used to make comparisons over time. Using any of the other measures would attribute a

⁴ There is a third potential cause of changes in revenue over time. Holding the tax code and the business cycle constant, the same tax code will yield a different amount of revenue at different times because of changes in the composition of GDP. For example, if a greater proportion of GDP is devoted to preferentially taxed activities (e.g., fringe benefits vs. wages) over time, the same tax code will yield less revenue. This factor should be unimportant over short periods of time. In fact, there are factors at work that would lead the same tax code to yield more revenue over time. Because of "real bracket creep," rising income leads to higher average effective tax rates with the same statutory rates. Relatively faster income growth among high income cohorts also leads to higher average effective tax rates with the same statutory rates. And because some parts of the tax system are not inflation adjusted, notably the alternative minimum tax, nominal changes in income lead to higher real taxes.

greater proportion of the change in overall fiscal balances to spending. As can be seen in **Figure 2**, spending as a percentage of GDP shows no clear upward or downward trend over the entire 50-year period, and that measure would therefore have made a better projection of policy in the long term than the other three measures, which would have consistently under-predicted spending levels.

Between FY2000 and FY2004, actual outlays increased from 18.4% to 19.8% of GDP, a change of 1.4 percentage points. Policy effects (changes in standardized budget outlays) accounted for 1.1 percentage points (79%) of the total increase in outlays. Subtracting changes in standardized outlays from changes in actual outlays shows that 0.3 percentage points (21%) of the increase was due to the economy and other temporary factors.⁵

Combining outlays and receipts, the actual budget balance changed from a surplus of 2.4% of GDP in FY2000 to a deficit of 3.6% in FY2004, a change of 6.0 percentage points. The standardized budget changed from a surplus of 1.1% of GDP in FY2000 to a deficit of 2.6% in FY2004, a change of 3.7 percentage points. Subtracting changes in standardized budget balances from changes in actual budget balances shows that 2.3 percentage points (38%) of the deterioration in the budget balance was due to the economy and other temporary factors. Thus, policy changes, primarily tax cuts, were responsible for 62% the deterioration in the budget balance since FY2000. Tax cuts accounted for 45% (2.8 percentage points) and the increase in outlays resulting from policy changes accounted for 17% (1.1 percentage points) of the overall deterioration. Absent policy changes, the budget would have stayed in surplus despite the recession.⁶

These figures overstate the contribution of outlay changes to increases in the deficit because policy changes that increase the deficit increase the interest payments on the debt, which are counted as an increase in outlays, whether the policy change affects receipts or outlays. The recent series of tax cuts accounts for about two-thirds of the increase in interest payments caused by policy changes.

⁵ In the case of mandatory spending, not all increases in spending are a result of policy changes. Some changes are the result of changes in eligibility among recipients (e.g., more retirees eligible for Social Security benefits). The standardized increase in mandatory spending between FY2000 and FY2004 was 0.5 percentage points of GDP. Since legislative changes to mandatory programs since 2000 have been estimated to cost 0.5% of GDP in 2004, it appears that most of the change in mandatory spending is due to legislation, not eligibility changes.

⁶ It is possible that policy changes between FY2000 and FY2004 caused economic growth and other macroeconomic variables to differ from what they would have been in the absence of policy changes. This report does not attempt to measure that effect.