Congressional Research Service

The Federal Budget: Sources of the Movement from Surplus to Deficit

Marc Labonte
Specialist in Macroeconomic Policy

November 8, 2007

Congressional Research Service
7-5700
www.crs.gov
RS22550

CRS Report for Congress
Prepared for Members and Committees of Congress

Summary

The federal budget moved from a surplus of $128 billion in 2001 to a deficit of $413 billion in 2004. In 2007, the deficit equaled $163 billion. This report compares the actual budget balance from 2001 to 2007 to the projection made by the Congressional Budget Office (CBO) in January 2001 to determine what factors caused the budget to move from surplus to deficit. Actual results differed from CBO's projection for three reasons: legislative policy changes, economic changes, and technical changes. Over the past seven years as a whole, legislative changes accounted for about two-thirds of the cumulative shift from projected surplus to deficit. The largest legislative changes that increased the deficit were tax cuts and the increase in military spending in Iraq and Afghanistan.

The economic slowdown increased the size of the deficit from 2001 to 2003. Since then, the economy has had almost no effect on the deficit. Actual economic growth in recent years has been nearly identical to what CBO projected before the tax cuts were passed. This casts doubt on the claim that the tax cuts partly paid for themselves by boosting economic growth. Overall, economic changes accounted for 7% of the cumulative shift to deficit over the past seven years.

Technical changes to the projections occur when actual results turn out to be different from the non-economic assumptions that are the basis of the projections for mandatory spending and revenues. Technical changes accounted for about one-fourth of the cumulative shift to deficit over the past seven years. Large technical changes point to the great uncertainty behind budget projections, even over short periods of time.

Legislative reductions in revenue and increases in spending since 2001 have been large enough that even if economic and technical changes had been zero (that is, even if CBO's projection had been perfectly accurate), the budget would still have been in deficit from 2003 to 2007. Nor has the decline in the deficit since 2004 been attributable to legislative changes, which have continued to rise in cost over this period. Cumulatively, legislative changes accounted for 98% of the shift to deficit in 2007. This report will be updated annually.

In FY2001, the federal budget recorded a surplus of $128 billion. The next year, the budget moved into deficit and has remained there since. The deficit peaked at $413 billion in 2004, and has since fallen to $163 billion in 2007. Why did the budget move from surplus to deficit? The simple answer is because Congress chose an overall level of spending that exceeded their chosen revenue levels. The budget is the sum of its parts, so no particular spending or tax decision can be taken in isolation and be said to have "caused" the deficit in an absolute sense.

Furthermore, some determinants of spending and revenues are not directly controlled by Congress. When economic conditions change, spending and revenues automatically change without any change in law. For example, when economic growth slows, the growth of taxable income slows, so that less revenue is collected at a given tax rate than previously. Likewise, if a slowdown in economic growth causes unemployment to rise, spending on unemployment insurance and other means-tested mandatory spending programs will also rise without any change in law. Economists refer to these changes as "automatic stabilizers" because they automatically cause the deficit to rise when the economy slows, thereby helping to offset the slowdown in growth because of the deficit's expansionary effects on aggregate spending.[1]

For a more detailed answer to the question of why the budget moved from surplus to deficit, it is necessary to have some benchmark to which the actual deficit can be compared. One benchmark would be to compare the 2006 deficit to the 2001 surplus, but this approach would be fraught with several difficulties. For one thing, spending and revenues are expected to rise over time because of inflation, economic growth, and so on, so that $1 spent in 2006 is not comparable to $1 spent in 2001. For another, the economy in 2006 is not at the same level of production or in the same position in the business cycle as the economy in 2001, so the economy's effect on the budget is not the same either. Finally, the same law yields different levels of spending or revenue over time. For example, entitlement spending can increase automatically if the number of beneficiaries increases. Therefore, comparing spending or revenue levels from one year to the next could give the false impression that policy had changed when it had not.

This report uses a different benchmark: it compares the actual budget balance in the past six years to the January 2001 Congressional Budget Office's (CBO) baseline projection of the surplus for each of those years. CBO produces an updated 10-year budget baseline projection twice every year.[2] The baseline is a projection of the future path of government spending and revenues under current policy assuming no changes in the law. As can be seen in **Table 1**, CBO projected at that time that if policy had not changed, the surplus would have grown each year.[3] Any year could have been chosen as the benchmark; this report uses their 2001 baseline as the benchmark because their 10-year surpluses peaked in this projection. In subsequent reports, the surplus projections would be continually adjusted downward, as CBO became progressively more pessimistic about the future path of revenues, until the fall 2004 report. Since then, CBO has become more optimistic about future revenues, although revenues are still far lower today than they were projected to be in 2001. Thus, the results that follow are partly a function of the benchmark chosen.

[1] See CRS Report RL31235, *The Economics of the Federal Budget Deficit*, by Brian W. Cashell.

[2] For the most recent CBO baseline, see Congressional Budget Office, *The Budget and Economic Outlook: An Update,* August 2007.

[3] See CRS Report RL31414, *Baseline Budget Projections: A Discussion of Issues*, by Marc Labonte. For an alternative evaluation, see Alan Auerbach et al., "New Estimates of the Budget Outlook," Brookings Institution, *Issues in Economic Policy #3*, February 2006.

As seen in **Table 1**, CBO projected a 2007 budget surplus of $573 billion under the policies in place in January 2001. The actual budget deficit in 2007 turned out to be $163 billion. In other words, the difference between CBO's 2001 projection and the actual outcome was $736 billion. The difference between projections and actual results peaked in 2004, when the deficit equaled $413 billion, compared with a surplus of $397 billion that had been projected in 2001, a shift of $810 billion.

Table 1. Differences Between 2001 Baseline Projections and the Actual Budget Balance, 2001-2006

($ in billions)

	2001	2002	2003	2004	2005	2006	2007
Baseline Surplus Projection in Jan. 2001	281	313	359	397	433	505	573
Legislative Changes	-81	-150	-363	-519	-543	-632	-721
Revenue (Tax Cuts)	-74	-81	-186	-272	-218	-199	-233
Non-Defense Discretionary Spending	0	-12	-35	-49	-65	-93	-83
Defense Spending	0	-38	-84	-122	-155	-177	-205
Mandatory Spending	-7	-14	-43	-41	-41	-72	-72
Debt Service	0	-5	-15	-37	-60	-93	-131
Economic Changes	-37	-121	-113	-59	2	15	20
Technical Changes	-35	-201	-259	-231	-206	-137	-34
Total Changes	-153	-471	-737	-810	-751	-753	-736
Actual Budget Surplus(+)/Deficit(—)	128	-158	-378	-413	-319	-248	-163

Source: CBO, *Budget and Economic Outlook,* January 2002 to January 2007, *An Analysis of the President's Budgetary Proposals,* March 2002 to March 2007.

Notes: Debt service refers to additional interest payments made on the national debt resulting from all legislative changes to revenues or outlays. Columns may not be additive due to rounding. In the January baseline, CBO does not report changes to the previous year budget deficit that occurred since the August baseline. Therefore, any changes between the actual deficit and the baseline deficit reported in August have been apportioned evenly between economic and technical changes.

Differences between the projections made in 2001 for the budget balance and the actual budget balance in each of the past six years can be attributed to three broad causes: legislative, economic, and technical changes.

First, revenues have fallen and spending has risen due to *legislative changes*, because, as expected, policy has changed since CBO made its projection in 2001. Overall, legislative changes account for about two-thirds of the cumulative shift from surplus to deficit over the past seven years. The legislative changes that increased the deficit the most were the tax cuts (the largest of which were P.L. 107-16 and P.L. 108-27) and the increase in military spending in Iraq and Afghanistan.[4] For the cumulative total increase in the deficit between 2001 and 2007, tax cuts accounted for about half of all legislative changes and military spending accounted for about one quarter, with the other quarter being caused by higher mandatory and non-military discretionary

[4] The cost of revenue changes has declined since 2004 because of the expiration of certain tax provisions, most notably accelerated depreciation for corporate investment.

spending.[5] Comparing legislative changes to the baseline surplus projection made in 2001 demonstrates that, even if there had been no economic downturn or any other projection error, legislative changes alone would still have caused a budget deficit in each year from 2003 to 2007. The comparison also demonstrates that the decline in the deficit since 2004 is unrelated to policy changes. Legislative causes of the deficit have grown each year since 2001; it is only because economic changes and technical changes have become smaller that the deficit has declined since 2004. In 2007, the cumulative effects of legislative changes were responsible for 98% of the shift to deficit.

These legislative changes helped move federal revenues as a share of gross domestic product (GDP) from a 50-year high in 2000 to a 45-year low in 2004. The subsequent rise in revenues brought revenues slightly above the 50-year average share of GDP in 2007. Meanwhile, federal spending as a share of GDP rose from its lowest level in 35 years in 2000 to a level about equal to the 50-year average in 2004, where it remained in 2007.

Of course, an estimate of how much higher spending contributed to the shift to deficit depends on one's baseline definition of spending under current policy. Because discretionary spending is largely determined on an annual basis and not bound by previous year law, there is no obvious definition of current policy for discretionary spending. CBO's mandated definition of current policy is that discretionary spending grows at the same rate as inflation. Many analysts have criticized this definition as being too low because it would have consistently under-predicted spending historically. If a higher rate of spending growth (i.e., a rate equal to GDP growth) was assumed to represent current policy, then CBO's original estimates of future surpluses in 2001 would have been smaller, and higher spending would have subsequently accounted for a smaller proportion of the shift to deficit.

Second, actual economic conditions have differed from CBO's 2001 projection. As a result, revenues and spending are different than projected because of "automatic stabilizers," higher than expected inflation, and lower than expected interest rates. These are shown as *economic changes* in the table. The economic recession of 2001 was an important cause of the deficit in 2002 and 2003, but after 2003, economic conditions made barely any contribution to the shift to deficit. For the seven years as a whole, economic changes accounted for about 7% of the shift to deficit. The effect of the economy on the budget balance actually turned out to be slightly better in 2005, 2006, and 2007 than was projected in 2001.

Third, after legislative changes and the estimated effect of the economy are accounted for, the remaining difference between the original projection and actual results is classified as *technical changes*. These changes occur because CBO's projections of revenues and mandatory spending are also based on other technical assumptions unrelated to the state of the economy, and actual results will differ from these assumptions as well. For example, mandatory spending levels will depend on program participation rates that will differ from projected participation rates. Similarly, tax revenues will depend not only on the growth in income, but how quickly tax liability rises as income rises and how income growth is distributed across taxpayers. Most technical changes tend to be on the revenue side rather than the spending side of the budget. Technical changes peaked as a cause of the shift to deficit at $259 billion in 2003, and have declined somewhat since then. For

[5] Debt service is excluded from this calculation since the debt service shown in the table is the direct result of other legislative changes that increased government borrowing. (Debt service also increased because of economic and technical changes, but that is not broken out separately in the table.)

the last six years overall, technical changes accounted for about one-quarter of the shift from surplus to deficit.

Large economic and technical changes point to the significant uncertainty behind budget projections, even over short periods of time. For example, holding policy constant, the 2001 surplus was $72 billion smaller ($37 billion due to economic changes, $35 billion due to technical changes) than CBO's projection made only nine months earlier.

Some technical changes are the result of legislative changes. The cost of the legislative changes listed in **Table 1** are ex ante projections of their cost (as scored by CBO and the Joint Committee on Taxation) made at the time the policy was enacted. If policies turned out to be more (less) expensive than the official score, this would appear in the table as a negative (positive) technical change. There has been recent discussion that the 2007 deficit was smaller than anticipated because the tax cuts partly "paid for themselves" through higher economic growth, an effect that was not included in their original score. **Table 1** suggests otherwise—although the 2007 deficit was smaller than anticipated in projections made in 2004 and 2005, when CBO was extremely pessimistic about future revenues, the deficit was much larger than anticipated in projections made before 2004. The 2001 projection of the state of the economy in 2007—made before the tax cuts were enacted—turned out to be extremely close to the actual state of the economy in 2007. In other words, the actual performance of the economy after the tax cuts was almost identical to how CBO expected the economy to perform had there been no tax cuts. For example, CBO projected in 2001 that economic growth (without tax cuts) would average 3.1% between 2003 and 2007 (on a fiscal year basis); actual growth in those years equaled 3.0%. Furthermore, there were extremely large technical revisions from 2002 to 2006, mostly because tax revenue turned out to be lower than expected (after taking the tax cuts into account) each year. If anything, this would suggest that tax cuts cost more in reality than the original score had anticipated, rather than less.[6]

Author Contact Information

Marc Labonte
Specialist in Macroeconomic Policy
mlabonte@crs.loc.gov, 7-0640

[6] See also CRS Report RL32502, *What Effects Did the 2001 to 2003 Tax Cuts Have on the Economy?*, by Marc Labonte; and CRS Report RL33672, *Revenue Feedback from the 2001-2004 Tax Cuts*, by Jane G. Gravelle.