Still Crazy After All These Years: Understanding the Budget Outlook

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April 27, 2007

I. Introduction

The United States has gone undergone major fiscal changes in recent years. Despite the tax cuts enacted early in the decade and the increased spending enacted since then, the Congressional Budget Office (CBO, 2007b) currently projects a baseline *surplus* of \$586 billion in the unified budget over the next 10 years. Under the baseline, the deficit will decline over the next few years, and turn to a surplus by 2012 that will continue to grow through 2017.² This paper evaluates recent fiscal outcomes and assesses future fiscal prospects.

First, we review recent changes in the budget outlook. There has been a sizable net deterioration in the budget outlook since 2001. For example, in January 2001, the CBO baseline projected a unified budget surplus of \$573 billion in 2007. CBO's baseline now projects a deficit of \$177 billion for 2007 - a deterioration of \$750 billion or about 5.5 percent of GDP. This deterioration is due almost entirely to changes in policy. For example, more than 90 percent of the deterioration in the 2007 outlook since 2001 is attributable, according to CBO estimates, to policy changes - tax cuts and increases in spending. The changes in the deficit since 2001 reflect differing trends in policy choices and in economic factors. Beginning in 2001 the deficit rose due to a series of policy changes, including tax cuts, a new Medicare entitlement, and increased spending on defense and homeland security. These policy changes have increased the deficit with each passing year. At the same time, the economy and technical factors that caused revenues to decline in the early 2000s have recovered strongly in recent years. In short, the economic and technical factors that elevated the deficit from 2002-05 have almost entirely reversed themselves, while the effects of policy changes continue to accumulate. As a result, almost all of the net change in fiscal projections since 2001 is due to deficit-increasing changes in policy.

Second, we look forward to provide an alternative assessment of the fiscal outlook. The CBO baseline budget projections dominate public discussions of the fiscal status of the government. But as CBO itself emphasizes, the baseline is not intended to serve as a prediction of likely budget outcomes. The set of default assumptions about current spending and tax

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² All years are fiscal years unless otherwise noted.

policies used to develop the baseline are defined in part by statutory rules.³ Among other things, the baseline assumes that almost all expiring tax provisions will be allowed to expire, the alternative minimum tax (AMT) will be allowed to grow dramatically, no additional funding requests will be necessary to conduct the wars in Iraq and Afghanistan and discretionary spending (including defense) will be held constant in real terms. If Congress abides by the pay-as-you-go rules it recently adopted, then CBO's assumptions would be broadly realistic because any changes to, say, the limit the spread of the AMT would have to be fully paid for without increasing the deficit. If, however, the practices of recent years are continued and tax cuts and AMT relief are extended with offset then the fiscal outlook would be considerably worse than CBO's baseline forecast. Regardless of the assumption about future policy, an additional problem with CBO's featured estimates is that the unified budget figures include large cash-flow annual surpluses accruing in trust funds for Social Security, Medicare, and government pensions over the next 10 years. In the longer term, however, Social Security and Medicare face significant deficits.

We find that if expiring tax provisions are extended without offsetting changes to pay for them, the growth of the AMT is held in check (as described below), the war in Iraq is funded, and real discretionary spending keeps pace with population growth, the 10-year unified budget will face a deficit of \$4.0 trillion over the next decade, rather than a surplus. The differences between the CBO baseline and our adjusted unified budget projection grow over time. By 2017, the annual difference is \$803 billion. Outside of the retirement trust funds, the adjusted 10-year budget faces a deficit of \$6.9 trillion over the next decade. Thus, a simple way to summarize the fiscal status of the government over the next 10 years is to note that the retirement trust funds face substantial long-term deficits, and, under plausible assumptions about current policy, the rest of government faces deficits of almost \$7 trillion, more than 3 percent of GDP over the next decade.

The budget picture is even less attractive over the long-term. We estimate that over the next 75 years, the federal government faces a fiscal shortfall of 3.6 percent of GDP under the CBO baseline and 6.3 percent of GDP under the adjusted baseline. Over a permanent horizon, the shortfalls rise to 6.0 percent of GDP under the CBO baseline and 8.8 percent of GDP under the adjusted baseline. In present value dollars, the permanent-horizon figures reflect shortfalls between \$67 trillion and \$98 trillion. While the primary driving force behind the deficits in the adjusted baseline over the next 10 years is reduced revenue, the primary driving force behind the deficit over the long term is increasing per-capita health care expenditures, exacerbated by increasingly unfavorable demographics.

Section II discusses changes in the budget outlook since 2001. Section III provides our adjusted budget estimates over the next 10 years. Section IV explores the long-run fiscal outlook. Section V provides further discussion and section VI concludes.

³ See CBO (2007a, page 5) for discussion. CBO (2007a, Tables 1-5, 3-10 and 4-10) now prominently displays estimates of the budgetary implications of alternative assumptions.

II. Changes in the Baseline Budget

The middle line of Figure 1 shows the CBO March 2007 baseline projection, with falling unified deficits over the next few years turning to rising surpluses over time, for a net surplus of \$586 billon over the next decade. In the following section, we show that the upward slope of the line, and the projected surpluses themselves, are based on a series of mechanical assumptions. Our concern in this section is how and why the baseline projection itself has changed since 2001.

Magnitude of the decline

Figure 1 also shows the baseline projections made by CBO in January 2001 and January 2006. The figure clearly shows that the baseline projections have deteriorated dramatically since January 2001. (The data for the 2001, 2006 and 2007 projections are reported in Appendix Table 1.) Although not shown, the baseline deteriorated in every year from 2001 to 2006 before recovering slightly in 2007. Table 1 shows that, relative to the projections made in 2001, the projections made in 2007 show a cumulative decline of \$7.7 trillion over the 2002 to 2011 horizon, the equivalent of 5.8 percent of projected GDP over the same period. In 2007 alone the deficit is \$750 billion (or 5.5 percent of GDP) larger than originally projected, as the \$573 billion 2007 surplus that CBO projected in 2001 turned into a 2007 projected deficit of \$177 billion by 2007.

Sources of the decline

CBO decomposes changes in baseline projections into either policy changes – new spending rules or tax laws that were not in the original baseline – and economic and technical factors -- misprojections of the size of the economy or other factors that affects revenue or spending. Figure 2 cumulates CBO's estimates of policy changes and economic and technical changes over the 2001-7 period and shows the trends in policy changes and economic and technical factors. Economic and technical factors caused significant deteriorations in fiscal status early in the period as the 2001 recession, the stock market decline and other factors reduced revenues in 2002 and 2003. These factors have diminished in recent years as a result of several factors including strong economic growth, increasing inequality, high corporate profits, and a rising stock market. As a result, as shown in Figure 2, by March 2007 the net change in economic and technical factors since January 2001 is quite small. That is, almost all of the change in the projected 2007 deficit is due to policy changes.

Table 1 provides further detail. Economic and technical factors account for only 7 percent (\$56 billion) of the \$750 billion fiscal deterioration since January 2001 for fiscal year 2007. The remaining 93 percent (\$694 billion) in higher projected deficits for 2007 comes from the fact that CBO's January 2001 baseline did not include the subsequent tax cuts and spending increases, with 40 percent due to tax cuts enacted since 2001, 31 percent due to defense and homeland security increases, and 22 percent due to other outlays like the prescription drug benefit. Over the entire 2002-11 period, economic and technical revisions account for 26 percent of the total deterioration and the relative contributions of the different policies are similar to their shares of the 2007 policy changes.

Whereas Table 1 focuses on how projected outcomes have changed, Table 2 examines the actual decline in budget outcomes. The budget balance changed from a 2.4 percent of GDP surplus in 2000 to a projected 1.3 percent of GDP deficit in 2007, a 3.7 percentage point deterioration. About 59 percent of this deterioration is explained by the 2.2 percentage point reduction in revenues as a share of GDP. And half of the decline in taxes – 1.1 percentage points – is the result of the tax cuts enacted since 2001. Only 9 percent of the deterioration in the budget is due to increases in non-defense discretionary spending as a share of GDP. (Although not shown in the table, increased non-homeland security domestic spending – i.e., excluding both international assistance and non-defense homeland security – accounts for just 5 percent of the deterioration in the budget balance from 2000 to 2007.)

III. Adjusting the 10-Year Outlook

Current Policy

Because the CBO baseline is based on a set of mechanical assumptions, we adjust the baseline budget figures in several ways to reflect what would happen if the policy practices of recent years – like routinely extending tax cuts and AMT relief without paying for them – were continued.⁴ This clearly involves a set of judgment calls, so we explain the adjustments and their justifications below.

The most important area in which we revise the baseline involves expiring tax provisions. CBO assumes (by law) that Congress will extend some expiring mandatory spending programs,⁵ but that all temporary tax provisions (other than excise taxes dedicated to trust funds) expire as scheduled, even if Congress has repeatedly renewed them. The large majority of the tax cuts enacted since 2001 expire or "sunset" by the beginning of 2011 (see Gale and Orszag 2005). A variety of other tax provisions that have statutory expiration dates are routinely extended for a few years at a time as their expiration date approaches. We assume that almost all of these provisions will be extended.

The second issue involves the alternative minimum tax (AMT), which absent changes would grow to affect more than 40 million households (see Burman et. al. 2003). Our budget estimates reflect current policy toward the AMT in two ways. First, we assume that provisions of the AMT that expired at the end of 2006 – including higher AMT exemption levels that had been in place since the 2001 tax cuts and the use of personal non-refundable credits against the AMT, which had been in place for an even longer period – are granted a continuance. Second, we index the AMT exemption, brackets, and phase-outs for inflation starting in 2008.

⁴ The adjustments described in this section are described in more detail in Auerbach, Gale, Orszag, and Potter (2003). Our adjustments are similar in spirit and magnitude, though differing in some of the details, to those made by others, including the Committee for Economic Development, Concord Coalition, and Center on Budget and Policy Priorities (2003) and Goldman Sachs (2003). For earlier calculations of similar adjustments, see also Auerbach and Gale (1999, 2000, 2001), Auerbach, Gale and Orszag (2002, 2006), and Gale and Orszag (2003, 2004).

⁵ CBO (2007a, Table 3-6) reports that the baseline includes \$767 billion in outlays, not including debt service costs, for mandatory spending programs that are assumed to be extended beyond their expiration dates.

The third area where CBO's baseline assumptions appear to be an unrealistic measure of what it would mean to maintain current policy involves discretionary spending, which typically requires new appropriations by Congress every year. The CBO baseline assumes that discretionary spending will remain constant in real dollars at the level prevailing in the first year of the budget period. But maintaining "current services" for many programs would require increases for both inflation and population. In some cases, like Veterans' health benefits, even larger increases would be needed to maintain current services. The CBO baseline's projection implies that that by 2017 discretionary spending would fall by 20 percent relative to gross domestic product (GDP) and by 13 percent in real per capita terms.

Given these issues, baseline discretionary spending could be adjusted in any of several plausible ways. We adjust the baseline on the assumption that real discretionary spending grows at the same rate as the population, consistent with adjustments that we have made in earlier years. In addition, the baseline is adjusted to assume that the number of troops deployed in relation to the War on Terrorism is reduced to 75,000 by 2013.⁶ This assumption generates a 10-year spending level on discretionary outlays and interest payments that is 0.3 percent of GDP higher than what would occur if real discretionary spending remained constant (as in the baseline).

Retirement Funds

Unified budget projections can provide a misleading picture of the long-term budget position of the federal government when current or past policies result in a spending-revenue imbalance after the end of the budget projection period. Under current laws, an important source of such imbalances is long-term commitments to pay pension and health care benefits to the elderly through Social Security, Medicare, Medicaid, and the Federal Employees Retirement program. There are several potential ways to address this problem, each with different strengths and weaknesses. The approach we take in this section, where we focus on the 10-year outlook, is to separate some of these programs from the official budget. In particular, we exclude the trust funds for Social Security, Medicare, and government pensions. Below, we extend the budget horizon to be long enough to capture the time periods when cash flows of these programs turn negative.

Implications of the Adjustments

Table 3 and Figure 3 show the sizable effects of adjusting the budget for current policy assumptions and retirement trust funds over the 10-year period. (Appendix Table 2 provides annual figures.) As noted above, the CBO unified budget baseline projects a 10-year surplus of \$586 billion, with the budget over time. Adjusting the CBO baseline for our assumptions regarding current policy implies that the unified budget will be in deficit to the tune of \$4.0 trillion (2.2 percent of GDP) over the next decade. Rather than shrinking over time, the deficit reaches \$385 billion (2.3 percent of GDP) in 2011 and rises to \$586 billion (2.8 percent of GDP) by 2017. The adjusted unified baseline shows a deficit of at least 1.6 percent of GDP in every

⁶ This assumption reflects the second policy alternative outlined in Table 1-5 of the CBO's January report. It increases spending (in comparison to the CBO baseline) through 2012 and decreases spending thereafter.

year through 2017 and is growing at the end of the budget horizon. By 2017, the annual difference between the official projected unified budget and our alternative unified deficit is \$803 billion (3.8 percent of GDP).

The unified budget, moreover, includes retirement trust fund surpluses of more than \$2.9 trillion. Excluding retirement funds, which already face long-term deficits themselves, the rest of government is projected to face a 10-year deficit of \$6.9 trillion. The deficit outside of the retirement trust funds is projected to be at least 3.4 percent of GDP in every year through 2017 and grows to 4.1 percent of GDP by 2017.

Thus, one simple way to summarize the fiscal status of the government is to note that the retirement trust funds face substantial long-term deficits, and the rest of government is also well out of fiscal balance, facing deficits in excess of 3 percent of GDP over the next decade, under plausible assumptions about current policy.

The basic trends in the data are clear. First, the CBO baseline suggests that the future features deficits that decline within the 10-year window and turn into surpluses, while our adjusted unified budget baseline implies continual, substantial and rising unified deficits through 2017. Second, adjusting for the fact that the retirement trust funds are running current surpluses but will run deficits in the future shows that the budget outlook is far worse than even the adjusted unified budget figures would suggest – and the difference grows over time. If discretionary spending were to remain at its current share of GDP (7.5 percent) over the next decade, deficits would be \$1.8 trillion (1.0 percent of GDP) larger over the next 10 years than our adjusted baseline.

It is also worth noting the effects of the adjustments in detail. The tax adjustments have a significant impact on revenue levels and trends. Making the tax cuts permanent would reduce revenue by \$2.7 trillion over the next decade; including interest costs, the deficit would rise by \$3.2 trillion. About 76 percent of these effects occur in the second half of the 10-year horizon, between 2013 and 2017. Extending the other expiring provisions, except the temporary tax rate on repatriated dividends, reduces revenue by another \$448 billion and raises the deficit by \$542 billion. The further adjustments to the AMT noted above (indexing for inflation) would reduce revenues by \$224 billion and increase the deficit by \$256 billion.⁷

All told, the tax changes would reduce the level of revenues by \$3.2 trillion over the 2008-2017 period. This represents 1.8 percent of GDP and 9.2 percent of baseline revenues over the budget period. Moreover, these figures grow over time. In 2017, for example, revenues

⁷ Assuming the other expiring provisions are made permanent, the total revenue loss from extending the AMT exemption and the treatment of personal credits and indexing the AMT for inflation is \$1.1 trillion based on combined estimates from CBO and the Tax Policy Center Microsimulation Model. Table 3 splits these costs into two components. The cost of extending the exemption and use of non-refundable credits (\$890 billion) is shown as an "Extend AMT Provisions of EGTRRA, JGTRRA" and is based on CBO 2007 estimates. It is equal to the sum of lines "Increased AMT Exemption Amount", "Treatment of Nonrefundable Personal Credits under AMT", and "Interaction from Extending All Provisions Together" in the table titled "Effect of Extending Tax Provisions Scheduled to Expire Before 2017" in the CBO's current budget projections. The additional costs of indexing the AMT for inflation (\$224 billion) are shown separately and are based on estimates using the Tax Policy Center micro-simulation model. Under these assumptions about 7.4 million taxpayers would face the AMT in 2017.

would decline by \$511 billion, representing 2.4 percent of GDP and 12 percent of baseline revenues in that year. As a result, the adjustments alter not only the level of revenues, but also the trend. Under the CBO baseline budget, revenues rise from 19 percent of GDP in 2008 to 20.1 percent in 2017. Under our adjusted baseline, revenues fall as a share of GDP, at 18.5 percent in 2008 and 17.5 percent in 2017.⁸

Adjusting real discretionary spending to grow with the population and realistically account for the War on Terror, as described above, raises outlays by \$373 billion relative to the CBO baseline and raises the deficit by \$502 billion. With this adjustment, discretionary spending still declines from 7.7 percent of GDP in 2007 to 6.1 percent in 2017, relative to 5.9 percent of GDP under the CBO baseline in 2017. Total expenditures in the adjusted baseline rise by about 0.1 percent of GDP from 20.1 percent in 2007 to 20.2 percent in 2017; the CBO baseline has spending at 19.9 percent in 2007 and 19.1 percent in 2017.

Under CBO's baseline, the ratio of public debt to GDP declines from 36.7 percent in 2007 to 21.2 percent by 2017. Under the adjusted baseline, the debt-GDP ratio rises to 42.8 percent in 2017, the highest level since 1998.

IV. The Long-Term Budget Outlook

The fiscal gap is an accounting measure that is intended to reflect the long-term budgetary status of the government.⁹ As developed by Auerbach (1994) and implemented in many subsequent analyses, the "fiscal gap" measures the size of the immediate and permanent increase in taxes and/or reductions in non-interest expenditures that would be required to set the present value of all future primary surpluses equal to the current value of the national debt, where the primary surplus is the difference between revenues and non-interest expenditures.¹⁰ Equivalently, it would establish the same debt-GDP ratio in the long run as holds currently. The gap may be expressed as a share of GDP or in dollar terms.

In addition, this analysis shows an annual measure of the fiscal gap, specifically what changes in revenues or non-interest outlays would be required, on an annual basis, to stabilize the debt-to-GDP ratio at its current level.

⁸ An implication of this result is that factors such as real bracket creep and projected increases in withdrawals from retirement saving accounts do not explain the increase in the ratio of revenue to GDP in the baseline. The increase in revenue as a share of GDP in the CBO baseline is due to the assumptions that the expiring provisions actually expire and that the AMT is allowed to grow explosively. The decline over time in the adjusted baseline is largely due to CBO's projection that corporate tax revenues will fall by nearly 1 percent of GDP over the budget period, from the three-decade high reached in 2006.

⁹ Auerbach, Gale, Orszag, and Potter (2003) discuss the relationship between the fiscal gap, generational accounting, accrual accounting and other ways of accounting for government.

¹⁰ Over an infinite planning horizon, this requirement is equivalent to assuming that the debt-GDP ratio does not explode. See Auerbach (1994, 1997), Auerbach and Gale (1999, 2000, 2001), Auerbach, Gale, and Orszag (2002, 2003, 2004), Committee for Economic Development et al. (2003), Goldman Sachs (2003), and the International Monetary Fund (2004).

Assumptions

We examine two sets of projections for measuring the fiscal gap, differing with respect to whether the first ten years follow the CBO baseline or our adjusted baseline. After the CBO budget window ends in 2017, we assume under both scenarios that most categories of spending and revenues remain constant as a share of GDP at their 2017 values. The exceptions to this rule are spending on OASDI, Medicare and Medicaid and the earmarked taxes and offsetting receipts associated with the OASDI and Medicare programs. With the exception of Medicaid spending, projections for all of these elements of spending and revenues are available or can be calculated from figures presented in the 2007 Trustees reports (see Medicare Trustees Report, 2007; OASDI Trustees Report, 2007).¹¹ We use the Trustees projections of the ratios of taxes and spending to GDP for the period 2018-2085 for OASDI and 2018-2080 for Medicare, assuming that these ratios are constant at their terminal values thereafter. For Medicaid, we assume that spending through 2050 is based on Scenario 2 from CBO's most recent long-term projections (CBO 2005)¹² and that spending grows at the same rate as Medicare spending thereafter. Because these Medicaid projections are based on an earlier CBO baseline, we also adjust projections for Medicaid in 2018 and thereafter by a constant share of GDP to be consistent with the current CBO projections through 2017.¹³¹⁴

It is important to understand how to interpret these assumptions. They do not represent a pure projection of "current policy" but instead assume that policymakers will make a number of future policy changes, including a continual series of tax cuts, discretionary spending increases, and adjustments to keep health spending from growing too quickly. For example, if current tax parameters were extended forward income taxes would rise as a share of GDP. Our forecast implicitly assumes policymakers will cut taxes in response.¹⁵ Conversely, our forecast assumes that a richer society will want to spend more on discretionary spending, going beyond the current services provided by government. Finally, our forecasts for government health programs reflect the intermediate assumptions of the Medicare Trustees and are below the past rate of growth, implicitly assuming policymakers will make changes to reduce spending growth in these programs.

¹¹ Details of these computations are available from the authors upon request.

¹² Scenario 2 assumes that medical costs per beneficiary increase at 1.0 percent per year faster than per capita GDP growth, which is the same long-term assumption made in the Medicare trustees' projections. The CBO projections end in 2050.

¹³ In particular, we assume that the growth rate in the share of GDP between 2017 and 2018 equals the growth rate in the share of GDP between 2016 and 2017 currently projected by CBO.

¹⁴ CBO currently projects somewhat lower spending on Social Security and Medicare in 2017 than do the Trustees. Adjusting the Trustees' projections downward from 2018 onward by this difference would reduce the long-term gap estimates presented below by about one-third of a percent of GDP.

¹⁵ Note that our forecast reflects the projections of the Social Security Trustees and the CBO that payroll tax revenues will fall as a share of GDP because of the rising share of untaxed fringe benefits.

Estimates

Figure 4 shows total non-interest expenditure and revenue under all both sets of projections through 2085. As the figure shows, the principal difference among the scenarios is on the revenue side, with revenue roughly 2.7 percent of GDP lower in the out-years under the alternative baseline than under the official baseline. The fiscal gap reflects the present value of the difference between annual expenditure and annual revenue (such as those shown in Figure 4) plus the current value of the public debt.

Under the official baseline assumptions, we estimate that the fiscal gap through 2081 is now 3.62 percent of GDP over the same period (Table 4).¹⁶ This implies that an immediate and permanent increase in taxes or cut in spending of 3.62 percent of GDP – or roughly \$480 billion per year in current terms – would be needed to maintain fiscal balance through 2081. In present-value dollars, rather than as a share of GDP, the fiscal gap through 2081 under these assumptions amounts to \$23.5 trillion.

The fiscal gap is much larger, though, under the adjusted baseline, which assumes a lower level of revenue and a higher level of discretionary spending than the official baseline. Under the adjusted baseline – in which the 2001 and 2003 tax cuts are extended, the AMT is reformed and discretionary spending keeps pace with inflation and population growth over the next decade – the fiscal gap through 2081 amounts to 6.28 percent of GDP, or 2.66 percent of GDP more than under the official baseline. In present-value dollars, the fiscal gap under this scenario amounts to \$40.9 trillion through 2081.

The fiscal gap is even larger if the time horizon is extended, since the budget is projected to be running substantial deficits in years approaching and after 2081. If the horizon is extended indefinitely, for example, the fiscal gap rises to 6.01 percent of GDP under the official baseline and 8.76 percent of GDP under the adjusted baseline. In present-value dollars, the fiscal gaps corresponding to these annual measures are estimated at \$67.3 trillion and \$98.0 trillion, respectively.

The required adjustments represent substantial shares of current spending or revenue aggregates. A fiscal adjustment of 8.76 percent of GDP, for example, translates into a permanent reduction in non-interest spending of 34.2 percent or a permanent increase in revenues of 50.8 percent, both calculated relative to their projected trajectories. Narrower means of closing the gap would be even more Draconian – an 82.1 percent increase in income taxes, for example; and eliminating all discretionary spending would not suffice. Because the fiscal gap measures the size of the required *immediate* fiscal adjustment, the required adjustment also rises if action is delayed.

Alternatively, some have argued against making forward-looking policy changes based on projected deficits. Instead, it is argued, the goal of policy should be to stabilize the debt-to-GDP ratio. If current forecasts are correct, Figure 5 shows the annual changes that would be

¹⁶ The discount rate in these calculations is based upon the intermediate assumptions of the Social Security trustees, which assume a nominal interest rate of 5.7 percent.

required under this policy scenario. By 2016 the primary balance would have to improve by 1.19 percent of GDP, the equivalent of an 11 percent increase in all income tax rates or 25 percent benefit cut in Social Security. The required adjustment would accelerate sharply, to 5.43 percent of GDP in 2030, 8.97 percent of GDP in 2050, and 12.26 percent of GDP in 2081. Note that the required adjustments after 2050 are far larger than the cost of making immediate and permanent adjustments today.

A substantial portion of this fiscal gap is due to policies that have been enacted in recent years. The tax cuts enacted since 2001, along with associated relief of the AMT, total 2 percent of GDP. The prescription drug benefit is 1.1 percent of GDP over 75 years and 1.4 percent of GDP over an infinite horizon. Finally, discretionary spending is more than 1 percent of GDP higher than the January 2001 baseline – not counting spending on Iraq and Afghanistan. All told, recent policies have added more than 4 percent of GDP to the fiscal gap.

V. Discussion

Although the CBO baseline budget projection shows increasing unified surpluses over the next 10 years, we believe there are serious concerns in the fiscal outlook. The baseline is based on mechanical assumptions and includes the short-run, cash-flow surplus in retirement funds that actually face significant long-term shortfalls. Under assumptions that reflect the conduct of fiscal policy in recent years and more appropriate treatment of the retirement funds, the nation faces significant medium-term shortfalls and massive long-term deficits.

Nor is the fact that current deficits are low relative to historical norms much of a consolation, both for the reasons above and because recent economic growth, stock market increases and increasing income inequality should be serving to increase revenues and reduce the deficit relative to other periods. Moreover, with the private saving rate near an all-time low and current account deficits near an all-time high, dissaving by the federal government becomes increasingly problematic.

Several caveats are worth exploring. First, the budget outlook depends critically on the choices of policymakers. The House of Representatives and Senate have passed pay-as-you-go (PAYGO) rules as part of their respective budget resolutions. If these rules are maintained without loopholes or exceptions, the optimistic outcomes in the baseline projection for the unified budget become more plausible because policymakers would be forced to find offsets to pay for any tax cuts they chose to extend or for any AMT reform. As a result the short-term unified budget would be in significantly better shape. The long-run deficit, however, would still be substantial and even the short-run "operating budget" deficit, that is, the unified budget stripped of the revenue and expenditures associated with the retirement trust funds, would operate in continual deficit over the entire decade, with deficits totaling \$2.3 trillion.

Second, the large changes in the deficit in recent years due to economic and technical factors are a reminder of the tremendous uncertainty in budget projections. This is especially true for projections of the deficit, which is the difference between two large numbers, revenues and outlays. Even small forecast errors in these variables can result in large swings in the deficit. For example, the standard deviation of CBO forecast errors for the current fiscal year is equal to

3.6 percent of revenues. This translates into a one-third chance that the 2007 deficit will be more than \$90 billion higher or lower than CBO's current forecast, not even counting future policy changes. And this is even though CBO's forecast was made more than one-quarter of the way into the new fiscal year.

Third, significant new economic growth would improve the projected budgets but may not be the panacea it is sometimes claimed to be. For example, if economic growth were a full percentage point faster than CBO predicts (that is, the economy grows more than one-third faster than projected),¹⁷ our calculations suggest that the adjusted unified budget would still show a deficit averaging 0.7 percent of GDP over the full decade, while the deficit in the adjusted budget excluding retirement trust funds would average of 2.3 percent of GDP over the full decade, and would amount to 1.3 percent of GDP in 2017.¹⁸ In other words, more rapid economic growth can reduce the deficit, but even substantial increases in the growth rate would not eliminate the average fiscal imbalance over the next decade, let alone the imbalances thereafter. Of course, if growth is slower than expected, deficits will increase.

VI. Conclusion

Projecting near-term deficits is unusually difficult because of the presence of so many expiring tax provisions and the uncertainty about future defense spending. But the mandated assumptions incorporated in official CBO projections seem particularly optimistic given the likely tax and spending outcomes. Even under these optimistic assumptions, though, the long-term forecast is bleak and the long-term fiscal gap huge. Massive fiscal adjustments will be required, even if they are undertaken immediately and especially if they are delayed.

¹⁷ CBO (2007a) projects that potential output will grow at an average rate of 2.6 percent per year over the decade. This is somewhat lower than the 3.4 percent annual rate prevailing from 1950 to 2006. The difference is explained largely by the fact that the potential labor force is expected to grow much more slowly over the next decade (0.7 percent per year) than in the past (1.6 percent per year). CBO's projections of actual growth through 2012, which average 2.8 percent, are slightly smaller than those put out by the Administration which range from 2.7 to 3.1 percent.

¹⁸ These calculations are based on rules of thumb relating small changes in economic growth rates to changes in the projected budget outcomes, provided by CBO (2007a, Appendix B). CBO cautions against using the rules of thumb to project the effects of large changes, and that caveat applies to the interpretation of our results as well.

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Martin Muhleisen and Christopher Towe. 2004. "U.S. Fiscal Policies and Priorities for Long-Run Sustainability." International Monetary Fund. Occasional Paper 227. Table 1

Sources of Change in the Unified Budget Baseline, 2002-2011 January 2001 - March 2007^{1,2}

	20	07	2002-2	2011
	(\$ billions)	(% of change)	(\$ billions)	(% of change)
Legislative Changes				
Tax Cuts	297	39.7	2,594	33.5
Defense and HS Outlays ³	234	31.2	1,934	25.0
Other Outlays	162	21.7	1,176	15.2
Subtotal	694	92.6	5,703	73.7
Economic and Technical Changes				
Revenue	52	6.9	1,823	23.6
Outlay	4	0.5	213	2.8
Subtotal	56	7.4	2,036	26.3
Revenue - Total	349	46.6	4,417	57.1
Outlays - Total	400	53.4	3,323	42.9
Total Change in Surplus	750	100.0	7,738	100.0

¹Columns may not sum to total due to rounding.

²Congressional Budget Office. "The Budget and Economic Outlook: Fiscal Years 2008-2017." January 2007. Congressional Budget Office. "An Analysis of the President's Budgetary Proposals for Fiscal Year 2008." March 2007.

³Estimates for Non-Defense Homeland Security spending are derived using the August 2006 CBO estimates and then adjusted to account for the supplementals in fiscal year 2007.

Table 2

Sources of Change in Unified Budget, 2000 to 2007 (Percent of GDP)^{1,2}

	2000	2007	Difference	Share of Change
Unified Budget Surplus (or Deficit)	2.4	-1.3	-3.7	100.0
Revenues	20.8	18.6	-2.2	59.4
Spending	18.4	19.9	1.5	40.6
Net Interest	2.3	1.7	-0.6	-15.2
Non-Interest Spending	16.1	18.2	2.1	55.8
Mandatory	9.8	10.7	0.9	23.2
Discretionary	6.3	7.5	1.2	32.6
Defense	3.0	3.9	0.9	23.7
Non-Defense	3.3	3.6	0.3	8.9

¹Due to rounding, columns may not sum to total.

²Congressional Budget Office. "The Budget and Economic Outlook: Fiscal Years 2002-2011." January 2001. Congressional Budget Office. "Preliminary Analysis of the President's Budget Request for 2008." March 2007.

Table 3

	<u>Dollars</u> (billions)	<u>Percent of</u> <u>GDP</u>
CBO Unified Budget Baseline	586	2.4
Adjustment for Expiring Bush Tax Cuts		
Extend Estate and Gift Tax Repeal	-499	-0.3
Extend Reduced Tax Rates on Dividends and Capital Gains	-216	-0.1
Extend Other Non-AMT Provisions of EGTRRA, JGTRRA	-1,138	-0.6
Extend AMT Provisions of EGTRRA, JGTRRA	-890	-0.5
Interest	-504	-0.3
Subtotal	-3,248	-1.8
Adjustment for other Expiring Provisions		
Revenue	-448	-0.3
Interest	-94	-0.1
Subtotal	-542	-0.3
Adjustment for All Expiring Tax Provisions		
Revenue	-3,191	-1.8
Interest	-598	-0.3
Subtotal	-3,789	-2.1
=Unified Budget adjusted for expiring tax provisions	-3,204	-1.8
-Adjustment for AMT		
Index AMT	-224	-0.1
Interest	-32	0.0
Subtotal	-256	-0.1
=Unified Budget adjusted for expiring tax provisions and AMT	-3,459	-2.0
-Adjustment for holding real DS/person constant		
Hold real DS/person constant	373	0.2
Interest	129	0.1
Subtotal	502	0.3
=Unified Budget adjusted for expiring tax provisions and AMT with real DS/person constant	-3,961	-2.2
-Adjustment for Retirement Funds		
Social Security	2,464	1.4
Medicare	27	0.0
Government Pensions	425	0.2
Subtotal	2,916	1.6
=Non-retirement fund budget adjusted for expiring tax provisions and AMT with Real DS/person constant	-6,877	-3.9

Baseline and Adjusted Budget Outcomes for 2008-2017 (March 2007)

¹Due to rounding, columns may not sum to total.

²Source and notes: see Appendix Table 2.

Table 4
Fiscal Gaps

Baseline:	Official CBO	Baseline	Adjusted B	aseline
	Through 2081	Permanent	Through 2081	Permanent
As a Percent of GDP	3.62	6.01	6.28	8.76
In Trillions of Present-Value Dollars	23,546	67,300	40,854	98,042
Source: Authors' calculations				

<u>Unified Budget</u> January 2001 ² 313 359 397 433 505 57	<u>2003</u> 2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	<u>2002-</u> 2011
January 2001 ² 313 359 397 433 505 57															
	359 397	433	505	573	635	710	796	889							5610
January 2006 ³ -158 -375 -412 -318 -337 -27	-375 -412	-318	-337	-270	-259	-241	-222	-114	38	40	57	73	67		-2706
March 2007 ⁴ -158 -378 -413 -318 -248 -17	-378 -413	-318	-248	-177	-113	-134	-157	-35	155	139	163	186	163	217	-2129

¹Due to rounding, annual data from Appendix Table 1 may not sum to the CBO totals listed in Table 1.

²Congressional Budget Office. "The Budget and Economic Outlook: Fiscal Years 2002-2011." Tables 1-1 and 1-7.

³Congressional Budget Office. "The Budget and Economic Outlook: Fiscal Years 2007-2016." Tables 1-1, 1-6.

⁴Congressional Budget Office. "The Budget and Economic Outlook: Fiscal Years 2008-2017." Table 1-7. Congressional Budget Office. "An Analysis of the President's Budgetary Proposals for Fiscal Year 2008."

Appendix Table 2

Baseline and Adjusted Budget Outcomes for 2004-2017 (March 2007 Projections)

(Surplus or Deficit in \$ billions)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2008-17
1. CBO Unified Budget Baseline ¹	-413	-318	-248	-177	-113	-134	-157	-35	155	139	163	186	163	217	586
as percent of nominal GDP	-3.6	-2.6	-1.9	-1.3	-0.8	-0.9	-1.0	-0.2	0.9	0.8	0.0	1.0	0.8	1.0	2.4
Adjustment for Expiring Bush Tax Cuts Extend Estate and Gift Tax Reneal ²	00	00	00	0.0	- 1	-1 4	۲. ۲	-36.0	, 50 g	-67 <u>4</u>	5 5L-	C 02-	0.58-	- 10-	007-
Extend Reduced Tax Rates on Dividends	0.0	0.0	0.0	0.0	0.3		-1.8	-16.9	-15.2	-33.0	-34.7	-36.5	-38.4	-40.8	-216
and Capital Gains ² Extend Other Non-AMT Provisions of ECTPDA CTTPDA ²	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-93.7	-167.3	-169.1	-171.8	-175.1	-178.6	-182.7	-1138
EXTERNAL JULIANA Extend AMT Provisions of EGTRRA, IGTRRA ³	0.0	0.0	0.0	-9.4	-59.2	-57.2	-65.6	-74.0	-82.4	-91.8	-100.9	-110.0	-119.8	-129.7	-890
Total of above for Interest Calculation	0.0	0.0	0.0	-9.4	-61.0	-57.5	-70.4	-220.6	-324.7	-361.3	-380.9	-400.8	-421.8	-444.4	
Interest ⁴	0.0	0.0	0.0	-0.2	-1.9	-4.7	-8.0	-15.2	-28.7	-46.2	-65.8	-87.2	-110.6	-136.2	-504
Subtotal	0	0	0	-10	-63	-62	-78	-236	-353	-407	-447	-488	-532	-581	-3248
as percent of nominal GDP	0.0	0.0	0.0	-0.1	-0.4	-0.4	-0.5	-1.4	-2.1	-2.3	-2.4	-2.5	-2.6	-2.7	-1.8
Adjustment for other Expiring Provisions ⁵															
Revenue	0	0	0	ς	-11	-22	-32	-43	-47	-51	-54	-58	-63	-67	-448
Interest	0	0	0	0	0	-1	-2	4	L-	6-	-12	-15	-19	-23	-94
Subtotal	0	0	0	ή	-11	-23	-35	-47	-54	-60	-67	-74	-82	06-	-542
Adjustment for All Expiring Tax Provisions (Ex	xcept Repatr	iated Divid	(spua)												
Revenue	0	0	0	-12	-72	62-	-103	-263	-372	-412	-435	-459	-485	-511	-3191
Interest	0	0	0	0	-2	-9	-10	-20	-35	-55	-78	-103	-130	-159	-598
Subtotal	0	0	0	-12	- 74	-85	-113	-283	-407	-467	-513	-562	-614	-670	-3789
2. Unified Budget adjusted for expiring tax nravisions	-413	-318	-248	-189	-188	-219	-270	-317	-252	-328	-350	-375	-451	-453	-3204
as percent of nominal GDP	-3.6	-2.6	-1.9	-1.4	-1.3	-1.5	-1.7	-1.9	-1.5	-1.8	-1.9	-1.9	-2.2	-2.1	-1.8
Adjustment for AMT ⁶															
Index AMT	0.0	0.0	0.0	0.0	6.0-	-3.4	-6.6	-10.6	-15.3	-21.1	-27.8	-35.8	-45.5	-56.9	-224
Interest	0.0	0.0	0.0	0.0	0.0	-0.1	-0.4	-0.8	-1.4	-2.4	-3.6	-5.3	-7.4	-10.2	-32
Subtotal	0	0	0	0	-1	ςÌ	L-	-11	-17	-23	-31	-41	-53	-67	-256

3. Unified Budget adjusted for expiring	-413	-318	-248	-189	-189	-222	-277	-329	-269	-352	-382	-417	-504	-520	-3459
tax provisions and AMI 1 as percent of nominal GDP	-3.6	-2.6	-1.9	-1.4	-1.3	-1.5	-1.8	-2.0	-1.6	-2.0	-2.0	-2.1	-2.5	-2.4	-2.0
Adjustment for real DS/person constant7															
Hold real DS/person constant	0	0	0	25	50	57	47	46	34	21	19	25	32	43	373
Interest	0	0	0	0	7	5	8	10	13	14	16	18	20	23	129
Subtotal	0	0	0	25	52	62	55	56	46	35	35	43	52	65	502
4. Unified Budget adjusted for expiring tax provisions. AMT & real DS/nerson	-413	-318	-248	-214	-241	-284	-331	-385	-315	-387	-417	-460	-555	-586	-3961
as percent of nominal GDP	-3.6	-2.6	-1.9	-1.6	-1.7	-1.9	-2.1	-2.3	-1.8	-2.2	-2.2	-2.3	-2.7	-2.8	-2.2
total difference from CBO unified	0	0	0	-38	-127	-151	-175	-351	-470	-526	-580	-646	-719	-803	-4547
budget baseline as percent of nominal GDP	0.0	0.0	0.0	-0.3	-0.9	-1.0	-1.1	-2.1	-2.7	-2.9	-3.1	-3.3	-3.5	-3.8	-2.6
Adjustment for Retirement Funds ⁸															
Social Security	151	173	185	190	203	218	231	246	255	260	264	265	263	259	2464
Medicare	13	14	23	18	17	17	17	10	16	7	1	9-	-23	-29	27
Government Pension	40	40	34	38	39	39	39	40	41	42	44	45	48	48	425
Subtotal	204	227	242	246	259	274	287	296	312	309	309	304	288	278	2916
5. Non-retirement fund budget adjusted for expiring tax provisions, AMT & real	-617	-545	-490	-460	-500	-558	-618	-681	-627	969-	-726	-764	-843	-864	-6877
DS/person as percent of nominal GDP	-5.3	-4.4	-3.7	-3.4	-3.5	-3.7	-3.9	-4.1	-3.6	-3.9	-3.9	-3.9	-4.1	-4.1	-3.9
Nominal GDP ⁹	11554	12294	13065	13645	14300	15014	15742	16465	17205	17973	18764	19582	20425	21295	176766
¹ Congressional Budget Office. "An Analysis o ² Congressional Budget Office. Supplemental ³ Congressional Budget Office. Supplemental from Extending All Provisions Together". ⁴ Author's calculations using March 2007 CBO ⁵ Authors' calculations so the subtotal (excludir include repatriated dividends.	f the Preside Tables. Marc Tables. Marc Tables. Marc debt service ig interest) er	nt's Budget th 2007. th 2007. Tl th 2007.	ary Propos he sum of li estimate ta	als for Fisca nes "Increa ble titled "E	ll Year 200 sed AMT E ffect of Ex	8." March 3 Sxemption <i>E</i> tending Tax	2007. Table amount", "J Provisions	I-1. Freatment o	f Nonrefund to Expire I	dable Perso 3efore 2017	nal Credits " from sup	under the /	AMT", and ables, Marc	"Interaction the 2007. Do	Effect ss not
0 4 41 - 1 - 1 - 1 - 1 - 1 - 1	T 2 1 1	C	- 4 T - J			11			1				-		,

⁶Authors' calculations using microsimulation model of Tax Policy Center. Indexation of the AMT and allowing dependent exemptions to be counted against taxable income for AMT purposes slows, but does not stop, the increase in AMT taxpayers. ⁷Authors' calculations using Census 2000 projections of population growth. Only increases Outlays not for Defense Operations in Iraq and Afghanistan. Increases these outlays using second phaseout option in CBO, January 2007, Table 1-5. ⁸Congressional Budget Office. "The Budget and Economic Outlook: Fiscal Years 2008-2017." January 2007. Table 1-7. ⁹Congressional Budget Office. "An Analysis of the President's Budgetary Proposals for Fiscal Year 2008." March 2007. Table 1-2.



Figure 1 Changing Unified Budget Projections













