Facing the Music: The Fiscal Outlook at the End of the Bush Administration

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I. Introduction

With the economy rocked by mortgage defaults, illiquidity in financial markets, a falling dollar, and declining consumer confidence, fiscal matters have been placed on the back burner to some extent by policy makers and commentators. However, the fiscal problems facing the country not only won't go away by themselves, but are actively getting worse with the passage of time and continuing inaction. This paper discusses the most recent Congressional Budget Office (CBO) baseline projection, and uses it to examine the causes of the fiscal decline since 2000 and the medium- and longer-term fiscal outlook.

The latest Congressional Budget Office analysis projects the unified budget deficit at \$357 billion in fiscal year 2008, or 2.5 percent of GDP (CBO 2008b). Although this figure includes the costs of the stimulus package already passed into law, the actual unified deficit will likely be larger than the projection due to a combination of legislative actions like additional supplemental bills for Iraq and Afghanistan and the fact that the economy is weaker than forecasted. The unified budget, however, hides important compositional effects. The federal budget can be divided into Social Security, Medicare and government retirement programs on the one hand, and the rest of the government on the other. The first group of programs is experiencing temporary cash-flow surpluses but faces long-term deficits. The deficit in the rest of the budget is projected to be \$617 billion in 2008, or 4.3 percent of GDP.

Over the longer run the budget could take two very different paths. If Congress does not increase discretionary spending in real terms and if it pays for all new proposals, including any extensions of the tax cuts enacted starting in 2001 and alternative minimum tax relief, the medium-run deficits would be modest. The large projected increases in health and retirement spending would be offset by discretionary spending falling to historically unprecedented low levels as a share of GDP and taxes rising to historically unprecedented levels as a share of GDP. If instead Congress extends the tax cuts and provides AMT relief without paying for them and grows discretionary spending at a more rapid rate, then the medium-run and especially the long-run fiscal challenge will be daunting.

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There is no single "correct" method for decomposing the short-run or longer-run deficit into its component causes. Aaron (2007) and the Congressional Budget Office (2007) have cited projected increases in health spending as the primary cause of the long-run deficit. Another explanation of the long-run deficit is the legislation enacted since 2001. According to the Congressional Budget Office, increased spending and reduced taxes enacted since 2001 will worsen the fiscal balance by \$967 billion in fiscal year 2008, or 6.8 percent of GDP. Regardless of the cause, the solution to the fiscal gap remains the same: a combination of increased revenues and reduced spending.

The rest of the paper discusses these issues in more detail. Section II looks at the fiscal deterioration since 2000. Section III examines the 10-year budget outlook. Section IV looks at the long-term situation. Section V is a short conclusion.

II. Why Has the Fiscal Situation Deteriorated Since 2000?

In 2000, the unified federal budget surplus stood at 2.4 percent of GDP. As of January 2001, the surplus was projected to grow over time, rising to \$635 billion, or 4.5 percent of GDP, in 2008, as shown in the top line of Figure 1. Since 2000, the fiscal situation has deteriorated dramatically, however, and the budget in 2008 shows a deficit of \$357 billion, or 2.5 percent of GDP. What accounts for this almost \$1 trillion (7.0 percent of GDP) deterioration in budget outcomes?

It turns out that the 2001 projection was based on reasonably accurate assumptions about future economic and technical developments like GDP growth and the cost of healthcare. Correcting for CBO's forecasting errors in these areas would change the deficit estimate by only about \$25 billion in 2008 (see Table 1). The vast share of the discrepancy between CBO's 2001 projection for the 2008 budget and the CBO's 2008 projection for the 2008 budget is that tax cuts and spending increases signed into law since January 2001 have a total budgetary cost of \$967 billion in 2008. Of this, 47 percent is attributable to the tax cuts and associated debt service costs, 28 percent is attributable to defense and homeland security outlays and associated debt service costs, and the remainder is due to other spending increases.

Table 1 also shows an accounting of the \$8.2 trillion deterioration of the cumulative deficit from 2002-11 in the 2008 projection relative to the projection in January 2001. The causes of this decline are similar to those of the 2008 deficit although in the earlier years of this period CBO's economic and technical forecasting errors were a larger source of the discrepancy than policy changes (see Figure 2).

It is also possible to look at how the components of the actual budget evolved from 2000 to 2008 (see Table 2). Falling revenues as a share of GDP account directly for 60 percent of the deterioration in the unified budget balance. Increases in non-interest spending as a share of GDP, including increases in both mandatory and discretionary spending, account for 53 percent of the

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² See Auerbach, Gale and Orszag (2004) for a discussion of the conceptual difficulties of doing so and some illustrative calculations.

worsening. Interest spending has fallen as a share of the economy, largely because of the dramatic reduction in interest rates on public debt since 2000.

III. The Ten-Year Outlook

CBO projects that the deficit as a share of GDP will fall as the economy recovers in 2009 and 2010 and the temporary stimulus measures expire. Then as a result of the expiration of the tax cuts in 2010 the unified budget would go into surplus in 2012 and stay in surplus for the remainder of the decade (see the top line of Figure 3). This CBO baseline, however, is based on a set of mechanical assumptions rather than realistic forecasts. The remainder of this section describes what would happen if 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.³

A. Adjustments to Reflect Alternative Assumptions about Future Policy

In this section we explain the rationale for our choices. The most important area in which we revise the baseline involves expiring tax provisions. The CBO assumes (by law) that Congress will extend some expiring mandatory spending programs, 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 AMT, which, absent changes, would grow to affect more than 40 million households (see Burman, Gale, and Rohaly, 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 2007 — including higher AMT exemption levels that had been in place since the 2001 tax cuts and the use of personal nonrefundable credits against the AMT, which had been in place for an even longer period — are granted a continuance. Second, we index the AMT exemption amount for inflation starting in 2008.

The third issue 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 might be needed to maintain current services (because the number of veterans may rise faster than the population and because health costs may rise faster than the overall price level). The CBO

³ 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, although 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 McKelvey (2003).

⁴ CBO (2008a, Table 3-6) reports that the baseline includes \$870 billion in outlays, not including debt service costs, for mandatory spending programs that are assumed to be extended beyond their expiration dates.

baseline's projection implies that that by 2018 discretionary spending would fall by 21 percent relative to GDP and by 14 percent in real per capita terms. Given the issues just discussed, 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, we adjust the baseline by assuming a further supplemental bill this year for Iraq and Afghanistan that the President intends to submit to Congress. We assume here that the number of troops deployed in relation to the war on terrorism is reduced to 75,000 by 2013. That assumption generates a 10-year spending level on discretionary outlays and interest payments that is 0.2 percent of GDP higher than what would occur if real discretionary spending remained constant (as in the baseline).

B. 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 those imbalances is long-term commitments to pay pension and healthcare benefits to the elderly through Social Security, Medicare, Medicaid, and the federal employees' retirement program. There are several potential ways to address that problem, each with different strengths and weaknesses. The approach we take in this part, where we focus on the 10-year outlook, is to separate some of those 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 in which cash flows of those programs turn negative.

C. Implications of the Adjustments

Table 3 and Figure 3 show the sizable effects of adjusting the budget for alternative policy assumptions and retirement trust funds over the 10-year period. (Appendix Table 1 provides annual figures.) The CBO unified budget baseline projects a 10-year surplus of \$270 billion. Adjusting the CBO baseline for our assumptions regarding alternative policies implies that the unified budget will be in deficit to the tune of \$5.1 trillion (2.8 percent of GDP) over the next decade. Rather than shrinking over time, the deficit reaches \$428 billion (2.6 percent of GDP) in 2011 and rises to \$709 billion (3.2 percent of GDP) by 2018. The adjusted unified baseline shows a deficit that amounts to at least 2.2 percent of GDP in every year through 2018 and is growing over the course of the budget horizon. By 2018 the annual difference between the official projected unified budget and our alternative unified deficit is \$911 billion (4.1 percent of GDP).

The unified budget, moreover, includes retirement trust fund surpluses of more than \$3.0 trillion. Excluding retirement funds, which already face long-term deficits themselves, the rest of the government is projected to face a 10-year deficit of \$8.2 trillion, or 4.4 percent of GDP. The deficit outside of the retirement trust funds is projected to be at least 4.0 percent of GDP in every year through 2018 and reaches to 4.5 percent of GDP by 2018.

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 2018. Second, adjusting for the fact that the retirement trust funds are currently running 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 (7.6 percent) over the next decade, deficits would be \$1.6 trillion (0.9 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 \$3.5 trillion over the next decade; including interest costs, the deficit would rise by \$4.2 trillion. About 71 percent of those effects occur in the second half of the 10-year horizon, between 2014 and 2018. Extending the other expiring provisions reduces revenue by another \$447 billion and raises the deficit by \$547 billion. The additional adjustments to the AMT noted above (indexing for inflation) would reduce revenues by \$210 billion and increase the deficit by \$244 billion.

All told, the tax changes would reduce the level of revenues by \$3.9 trillion over the 2009-2018 period. That represents 2.1 percent of GDP and 10.6 percent of baseline revenues over the budget period. Moreover, those figures grow over time. In 2018, for example, revenues would decline by \$583 billion, representing 2.6 percent of GDP and 12.8 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 18.9 percent of GDP in 2009 to 20.3 percent in 2018. Under our adjusted baseline, revenues fall as a share of GDP, at 18.3 percent in 2009 and 17.5 percent in 2018.

Adjusting real discretionary spending to grow with the population and realistically account for the war on terror, as described above, raises outlays by \$338 billion relative to the CBO baseline and raises the deficit by \$457 billion. With that adjustment, discretionary spending still declines from 7.6 percent of GDP in 2008 to 6.3 percent in 2018, relative to 6.1 percent of GDP under the CBO baseline in 2018. Total expenditures in the adjusted baseline rise by about 0.1 percent of GDP from 20.6 percent in 2008 to 20.7 percent in 2018; the CBO baseline has spending at 20.4 percent in 2008 and 19.4 percent in 2018.

Under the CBO's baseline, the ratio of public debt to GDP declines from 37.7 percent in 2008 to 23.5 percent by 2018. Under the adjusted baseline, the debt-to-GDP ratio rises to 47.8 percent in 2018, the highest share of GDP since 1996.

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.⁵ As developed by Auerbach (1994) and implemented in

⁵ Auerbach, Gale, Orszag, and Potter (2003) discuss the relationship between the fiscal gap, generational accounting, accrual accounting and other ways of accounting for government.

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. 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.

A. Assumptions

We start by examining 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 2018, we assume under both scenarios that most categories of spending and revenues remain constant as a share of GDP at their 2018 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 2008 Trustees reports (see Medicare Trustees Report, 2008; OASDI Trustees Report, 2008). We use the Trustees projections of the ratios of taxes and spending to GDP for the period 2019-2085 for OASDI and 2019-2080 for Medicare, assuming that these ratios are constant at their terminal values thereafter. For Medicaid, we assume that spending through 2082 is based on CBO's recent long-term projections (CBO 2007)⁸ and that spending as a share of GDP is constant thereafter.

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. 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.

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⁶ 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, Concord Coalition, and Center on Budget and Policy Priorities (2003), McKelvey (2003), and Muhleisen and Towe (2004).

⁷ Details of these computations are available from the authors upon request.

⁸ CBO (2007) provides two long-run scenarios for medical spending, but the projections for Medicaid are the same for both.

B. Estimates

Figure 4 shows total non-interest expenditure and revenue under both sets of projections through 2085. As the figure shows, the principal difference among the scenarios is on the revenue side, with revenue roughly 2.8 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 expenditures 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 2082 is now 2.93 percent of GDP over the same period (Table 4). This implies that an immediate and permanent increase in taxes or cut in spending of 2.93 percent of GDP – or over \$400 billion per year in current terms – would be needed to maintain fiscal balance through 2082. In present-value dollars, rather than as a share of GDP, the fiscal gap through 2082 under these assumptions amounts to \$20.8 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 2082 amounts to 5.76 percent of GDP, or 2.83 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 2082.

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 2082. If the horizon is extended indefinitely, for example, the fiscal gap rises to 4.96 percent of GDP under the official baseline and 7.87 percent of GDP under the adjusted baseline. In present-value dollars, the fiscal gaps corresponding to these annual measures are estimated at \$65.4 trillion and \$103.8 trillion, respectively.

The required adjustments represent substantial shares of current spending or revenue aggregates. A fiscal adjustment of 7.87 percent of GDP, for example, translates into a permanent reduction in non-interest spending of 31.9 percent or a permanent increase in revenues of 45.8 percent, both calculated relative to their projected trajectories. Narrower means of closing the gap would be even more Draconian – a 72.0 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-

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⁹ 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.

GDP ratio. If current forecasts are correct, Figure 5 shows the annual changes that would be required under this policy scenario. By 2020 the primary balance would have to improve by 1.99 percent of GDP. The required adjustment would accelerate sharply, to 4.71 percent of GDP in 2030, 7.16 percent of GDP in 2050, and 9.94 percent of GDP in 2080. Note that the required adjustment in 2080 is far larger than the cost of making immediate and permanent adjustments today.

These long-run projections are, of course, subject to considerable uncertainty. While uncertainty can in general push in either direction, there is considerable risk that these forecasts understate long-run fiscal pressure in one area. In keeping with past practice, the Medicare Trustees project that the growth in health care spending, adjusted for demographics, will eventually moderate. But no mechanism by which this moderation will occur is specified, and the historical experience offers little support for it. Thus, one might reasonably project much faster Medicare growth later in the projection period, after the Trustees' assumed slowdown takes effect, and this is the approach taken recently by CBO (2007) in its long-run Medicare projections. Even under its more moderate projections (its "Extended Baseline" scenario rather than its "Alternative Baseline" scenario) CBO projects Medicare spending that exceeds the Medicare Trustees' projections by nearly 6 percent of GDP. It is not surprising, then, that using CBO's long-run Medicare projections rather than the Trustees¹⁰ produces an even bleaker long-run picture, with spending following the dotted-line trajectory in Figure 4 and the fiscal gap under the adjusted baseline reaching 7.30 percent of GDP through 2082 and 11.41 percent of GDP over the infinite horizon.

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.

Several caveats are worth exploring. First, the budget outlook depends critically on the choices of policy-makers. Congress has recently passed pay-as-you-go rules as part of its respective budget resolution. If those rules are maintained without significant 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 and the long-run deficit would be reduced.

Second, the large changes in the deficit earlier in this decade because of economic and technical factors (see Figure 2) are a reminder of the tremendous uncertainty in budget projections. That's especially true for projections of the deficit, which is the difference between

¹⁰ In this alternative scenario, we also adopt CBO's long-run projections for Social Security spending, which are also higher than those of the OASDI Trustees – by nearly 0.6 percent of GDP toward the end of the projection period.

two large numbers, revenues and outlays. Even small forecast errors in those variables can result in large swings in the deficit. For 2008, data available since CBO's March forecast suggests the deficit is likely to be larger than projected – potentially much larger.

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 the CBO predicts (that is, the economy grows more than one-third faster than projected), our calculations suggest that the adjusted unified budget would still show a deficit averaging 1.4 percent of GDP over the full decade, while the deficit in the adjusted budget excluding retirement trust funds would average 3.1 percent of GDP over the full decade and amount to 2.3 percent of GDP in 2018. 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.

In sum, although economic weakness makes it unlikely and probably undesirable to mount a major, short-run deficit reduction effort, the necessity of such an effort is eventually inevitable – and the cost of delaying it grows the longer it is neglected.

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Appendix Table 1

Baseline and Adjusted Budget Outcomes for 2004-2017 March 2008 Projections (Surplus or Deficit in \$ billions)

AMT with real DS/person constant as percent of nominal GDP	4. Unified Budget adjusted for expiring tax provisions and	Adjustment for holding real DS/person constant ⁷ Hold real DS/person constant Interest Subtotal	as percent of nominal GDP	3. Unified Budget adjusted for expiring tax provisions, and AMT	Adjustment for AMT ⁶ Index AMT Interest Subtotal	as percent of nominal GDP	2. Unified Budget adjusted for expiring tax provisions	Adjustment for All Expiring Tax Provisions Revenue Interest Subtotal	Adjustment for other Expiring Provisions ⁵ Revenue Interest Subtotal	Subtotal as percent of nominal GDP	Total of above for Interest Calculation Interest	Extend Reduced Tax Rates on Dividends and Capital Gains* Extend Other Non-AMT Provisions of EGTRRA, JGTRRA ² Extend AMT Provisions of EGTRRA IGTRRA ³	Adjustment for Expiring Bush Tax Cuts Extend Estate and Gift Tax Repeal ²	1. CBO Unified Budget Baseline ^l as percent of nominal GDP	
-3.6	-413	0 0 0	-3.6	-413	0.0	-3.6	-413	0 0 0	0 0 0	0.0	0.0	0.0	0.0	-413 -3.6	2004
-2.6	-318	0 0 0	-2.6	-318	0.0	-2.6	-318	0 0 0	0 0 0	0.0	0.0	0.0	0.0	-318 -2.6	2005
-1.9	-248	0 0 0	-1.9	-248	0.0	-1.9	-248	0 0 0	0 0 0	0.0	0.0	0.0	0.0	-248 -1.9	2006
-1.2	-162	0 0 0	-1.2	-162	0.0	-1.2	-162	0 0 0	0 0 0	0.0	0.0	0.0	0.0	-162 -1.2	2007
-2.8	-399	30 0 30	-2.6	-369	-0.5 0.0 -1	-2.6	-368	-11 0	-6 0 -6	-6 0.0	-5.5 0.0	0.0	0.0	-357 -2.5	2008
-2.4	-350	48 1 50	-2.0	-300	-2.9 0.0 -3	-2.0	-297	-89 -1 -91	-15 0	-75 -0.5	-74.2 -1.1	0.0	-1.4	-207 -1.4	2009
-2.4	-375	51 4 55	-2.1	-321	-5.5 -0.2 -6	-2.0	-315	-96 -6 -102	-22 -1 -23	-79 -0.5	-74.3 -4.3	-70.5	-2.3	-213 -1.4	2010
-2.6	-428	47 7 54	-2.3	-374	-7.2 -0.6 -8	-2.2	-366	-258 -15 -273	-33 -36	-237 -1.4		-1/./ -96.5 -79.8	-30.5	.93 -0.6	2011
-2.2	-379	34 10 43	-1.9	-335	-11.5 -1.1 -13	-1.9	-323	-395 -32 -427	42 47	-381 -2.2	-353.2 -27.4	-20.1 -175.2 -88.5	-69.4	105 0.6	2012
-2.7	-481	27 12 38	-2.4	-443	-15.2 -1.8 -17	-2.4	-426	-441 -54 -495	-46 -7 -53	-442 -2.4		-40.9 -178.2 -98.8	-77.0	70 0.4	2013
-2.7	-512	19 13 33	-2.5	480	-20.3 -2.8 -23	-2.4	457	-468 -79 -547	-50 -10 -60	-487 -2.6		-42.4 -181.5 -109.7	-84.2	90	2014
-2.8	-559	16 15 31	-2.7	-528	-26.1 -4.0 -30	-2.5	498	-495 -107 -602	-54 -13 -66	-535 -2.7		-44.4 -185.4 - -120.9 -	-90.7	104 0.5	2015
-3.2	-658	22 17 39	-3.0	-619	-32.1 -5.6 -38	-2.8	-581	-523 -137 -660	-58 -16	-586 -2.9	-465.7 -490.6 -516.3 -120.7 -150.0 -181.9	-190.4 -195.2 -131.9 -142.6	-97.4 -	79 0.4	2016
-3.2	-687	32 19 50	-3.0	-637	-40.4 -7.7 -48	-2.7	-589	-553 -170 -722	-62 -20 -82	-641 -3.0	490.6 - 150.0 -	-4/.9 -195.2 - -142.6 -		134 0.6	2017
-3.2	-709	41 22 63	-2.9	-646	-48.8 -10.2 -59	-2.6	-587	-583 -206 -789	-66 -24 -91	-698 -3.1	516.3 181.9	-49.8 -200.3 -154.2	112.0	202 0.9	2018 2
-2.8	-5139	338 119 457	-2.5	4682	-210 -34 -244	-2.4	-4438	-3900 -808 -4708	-447 -100 -547	-4161 -2.2	-3453 -708	-310 -1403 -1070	-670	270 0.1%	2009-2018
						-0.021	-0.106	-0.0260 -0.021057279 -0.106204155	0.708	-3308.93 -3452.90 -2948	-0.022 -2692	-0.1133		ļ	% of GDP %
								-0.128		0.795	0.647				% of Baseline Revenues 2016

Nominal GDP ⁹	as percent of nominal GDP	5. Non-retirement fund budget adjusted for expiring tax	Subtotal	Government Pension	Medicare	Social Security	Adjustment for Retirement Funds ⁸	as percent of nominal GDP	total difference from CBO unified budget baseline
11504	-5.4	-617	204	40	13	151		0.0	0
12245	-4.5	-546	227	40	14	173		0.0	0
13023	-3.8	-490	242	34	23	185		0.0	0
11504 12245 13023 13671 14242 14773	-2.8	-386	224	20	17	187		0.0	0
14242	-4.6	-659	260	47	16	197		-0.3	-42
14773	4.1	-613	263	53	11	199		-1.0	-143
15589 16490 17284 18077 18885 19713	-4.2	-654		55		210		-1.0	
16490	4.4	-720	292	58	~	226		-2.0	-334
17284	-4.0	-694	315	61	16	238			-484
18077	-4.4	-796 -833	315	65	6	244		-3.0 -3.2	-551
18885	-4.4	-833	321	69	2	250		-3.2	-603
	-4.5	-880	321	73	-5	253		-3.4	-663
20569 21457 22386	-4.7	-967	309	77	-22	254		-3.6	-737
21457	4.7	-998	311	83	-25	253		-3.8	-821
22386	-4.5	-1016	307	88	-30	249		-4.1	-911
185223	-4.4	-8172	3033	682	-25	2376		-2.9	-5409

¹Congressional Budget Office. "Preliminary Analysis of the President's Budget Request for 2009." March 2008. Table 1.

⁹Congressional Budget Office. "Preliminary Analysis of the President's Budget Request for 2009." March 2008. Table 2.

as % of GDP	Non-retirement fund budget adjusted for expiring tax provisions and AMT with real DS/person constant WITH 1% higher GDP growth	CBO Unified Budget Baseline WITH 1% higher GDP growth	Effect of a 1% positive change in GDP growth Effect of a 0.1% lower GDP growth	=Budget Adjusted for Bush Tax Provisions Unified Baseline Extend Bush Cuts Extend Other Provisions Fix AMT Exclude Retirement Extend Bush Cuts and Other Provisions
-5.4	-617	-413	2004	413 -3.6 -3.6 -3.6 -5.4 -3.6
-4.5	-546	-318	2005	-318 -2.6 -2.6 -2.6 -2.6 -4.5 -2.6
-3.8	-490	-248	2006	-248 -1.9 -1.9 -1.9 -1.9 -3.8
-2.8	-386	-162	2007	-162 -1.2 -1.2 -1.2 -1.2 -2.8 -1.2
-4.6	-649	-347	2008 10 -1	-362 -2.5 -2.5 -2.6 -2.6 -4.6 -2.6
-3.9	-573	-167	2009 40 -4	-282 -1.4 -1.9 -2.0 -2.0 -4.1 -2.5
-3.7	-584	-143	2010 70 -7	-292 -1.4 -1.9 -2.0 -2.1 -4.2 -2.6
-3.7	-610	17	2011 110 -11	-330 -0.6 -2.0 -2.2 -2.3 -4.4 -3.7
-3.1	-534	265	2012 160 -16	-276 0.6 -1.6 -1.9 -4.0 -4.1
-3.2	-586	280	2013 210 -21	-372 0.4 -2.1 -2.4 -2.4 -4.4
-3.0	-573	350	2014 260 -26	-397 0.5 -2.1 -2.4 -2.5 -4.4
-2.8	-560	424	2015 320 -32	-431 0.5 -2.2 -2.5 -2.7 -4.5
-2.9	-587	459	2016 380 -38	-508 0.4 -2.5 -2.8 -3.0 -4.7
-2.6	-548	584	2017 450 -45	-507 0.6 -2.4 -2.7 -3.0 -4.7 -6.0
-2.3	-506	712	2018 <u>2</u> 510 -51	-497 0.9 -2.2 -2.6 -2.9 -4.5
-3.1	-5662	2780	2009-2018 2510 -251	

³Congressional Budget Office. "Updated Estimates for Table 4-9, 'Effect of Extending Tax Provisions Scheduled to Expire Before 2018 in CBO's January Budget and Economic Outlook." March 2008. The sum of lines "Increased AMT Exemption Amount", "Treatment of Nonrefundable Personal Credits under the AMT", and "Interaction Effect from Extending All Provisions Together". ²Congressional Budget Office. "Updated Estimates for Table 4-9, 'Effect of Extending Tax Provisions Scheduled to Expire Before 2018 in CBO's January Budget and Economic Outlook." March 2008.

⁴Author's calculations using January 2008 CBO debt service matrix.

Budget and Economic Outlook." March 2008. Authors' calculations so the subtotal (excluding interest) equals total from CBO's "Updated Estimates for Table 4-9, 'Effect of Extending Tax Provisions Scheduled to Expire Before 2018 in CBO's January

⁶Congressional Budget Office. "Update of Table 1-5, The Budgetary Effects of Selected Policy Alternatives Not Included in CBO's Baseline,' from the January 2008 Budget and Economic Outlook." April 2008. The sum of the lines "Index the AMT for inflation" and "Interactive Effect of Extending EGTRRA and JGTRRA and Indexing the AMT" minus the value found for "Extend AMT Provisions of EGTRRA, JGTRRA," found above in this table. The values do not include interest.

troop reduction option in CBO, "Update of Table 1-5. The Budgetary Effects of Selected Policy Alternatives Not Included in CBO's Baseline,' from the January 2008 Budget and Economic Outlook." April Authors' calculations using Census 2000 projections of population growth. Only increases outlays which are not for defense "Operations in Iraq and Afghanistan." Increases these outlays using second

^{*}Congressional Budget Office. "The Budget and Economic Outlook: Fiscal Years 2008-2018." January 2008. Table B-1

as percent of nominal GDP	Extend AMT Provisions of EGTRRA, JGTRRA3 Interest4	Extend Other Non-AMT Provisions of EGTRRA, JGTRRA2	Extend Estate and Gift Tax Repeal2 Extend Reduced Tax Rates on Dividends and Capital Gains2		Subtotal Before Interest of Extending Bush Tax Cuts	Total	Increased AMT Exemption Amount Treatment of Personal Credits under AMT Interaction from Extending All Provisions Together Subtotal "Extent AMT"	Reduced Tax Rate on Repatriated Dividents (Table 4-10)		Total above Total above less dividents, capital gains, and estate/gift	Income Tax Provisions of EGTRRA	Other	PEP/PEASE	Income Tax	Pension Estate and Gift	Education	EITC	10 percent	capital gains	saver's credit	Table 4.10 EGTRRA line item extensions
 0	000	0	0 0	2004					2004												
 0 0	000	0	0 0	2005	0	0	0000	0													
 0 0	000	0	0	2006	0	0	0000	0	2005 21												
 0 0	000	0	0 0	2007	0	•	0 0 0	0	2006 2	0 0											
 -0.039	-5.5 -0.042	0	0 0	7 2008	0	•	0 0 0 0	0	2007	0 0										0	
		0	-1.4 0.3		-5.5	Ė	-5.4 -0.1 0 -5.5	0	2008	0 0				c	0					0	
-0.51 -		0		2009 2	-74.2	-89	-72.7 -0.4 0 -73.1	0	2009	-1.1 0				1	-1 4				0.0	0	
-0.5044	-70.5 -4.3289		-2.3 -1.5	2010	-74.3	-96	-70 -0.5 0 -70.5	0	2010	-3.8 0				į	را د				-2.3	0 0	
 -1.436	-79.8 -12.33	-96.5	-30.5 -17.7	2011	-224.5	-258	0 -64.1 -0.5 -15.2 -79.8		2011		-93.2 -96.5	-0:3 -0:3	-7.2		-30.5	-0.7	L/- L/-	-31.4	-12.3		
 -2.202		-175.2	-69.4 -20.1	2012	5 -353.2	8 -395	1 -36.3 5 -0.2 2 -52 8 -88.5	0	1 2012	1 -179.8 7 -264.7 5 -175.2		3 -1.3			5 -69.4	7 -1.		1		5	
 -2.445		-178.2	-77 -40.9	2013	2 -394.9	5 -441	٠ يا ي	0	<u>2</u> 2013	8 -183.5 7 -296.1 2 -178.2	6 -168.3 2 -178.2	3 ·		ī	6 -5.8 4 -77	1 1.	4 -35.6 4 -4	1	3 -20.2 2 -14.7		
 5 -2.58		2 -181.5	-84.2 -42.4	2014	.9 417.8		<u></u>	0	<u>13</u> <u>2014</u>		.3 -171.3 .2 -181.5				3 -6 77 -84 2	1		1	.7 -14.6		
 -2.715		5 -185.4	-90.7 -44.4	2015	7.8 -441.4	-468	-48.9 -56.7 -0.3 -0.4 -60.5 -63.8 109.7 -120.9	0		7.5 -192.2 8.1 -320.5 1.5 -185.4		ġ ‡ 				-1.2	ن د 4				
 01 0	.9 -132 .9 -121 3 5 86	.4 -190	7 -97.4 1 -46	2016		-495 -		0	2015 2										-27.7 -3 -14.7 -1		
	2 -143 1 -150	0 -195	.4 -105 -47.9	6 2017	-466	-523 -	-64.9 -7 -0.5 - -66.5 -6 -132 -1	0	<u>2016</u> <u>20</u>	-198 -2 -334 -3 -190 -1									-31.2 -3 -14.8 -1		
	3 -154 0 -182	5 -200	5 -112 .9 -49.8	7 2018	-491 -	-553 -	-73.5 -8 -0.6 - -68.5 -6 -143 -	0	2017 2	-203 -348 -348 -4195 -4195 -4195 -4195 -4195 -4195 -4195 -4195									-32.6 -3 -15.1 -1		
12	¥ 73 ō	ŏ	1.8	18	-516	-583	-83.7 -0.7 -69.8 -154	0	2018	-200 -362 -200	189	15	21.8	36.6	113	-1.4	4.2	12.1	-15.4	2 2	

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Cost of Just the Indexation (used to be done in tax model, but now have all the numbers in CBO projections)	Total	New AMT Treatment Index the AMT for Inflation Interaction Between Indexing the AMT and Bush Tax Cuts	For Figure 8 Adjust for Retirement Trust Fund as a % of GDP	For Figure 7 Unified Baseline Extend Other Provisions and Index AMT Adjust for Bush Tax Cuts	Adjustment for Expiring Bush Tax Cuts Extend Estate and Gift Tax Repeal ² Extend Reduced Tax Rates on Dividends and Capital Gains ² Extend Other Non-AMT Provisions of EGTRRA, IGTRRA ² Extend AMT Provisions of EGTRRA, IGTRRA ³ Interest ⁴ Subtotal as percent of nominal GDP
0.0	0	0 0	-617 -5.362	-3.588 -3.588 -3.588	
0.0			-546 -4.458	-2	000000
	0	0 0	.6 -490 8 -3.766	-2.600 -1.906 -2.6 -1.906 -2.6 -1.906	000000
0.0	0	0		06 -1.185 06 -1.185 06 -1.185	000000
0.0	0	0 0	ı		0 0 5.5 0.0 0.0 0.0
-0.5	-6	0 -6	-617 -4.331	-2.506 -2.549 -2.588	1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
-2.9	-76	-76 0	-470 -3.18	-1.399 -1.525 -2.034	1.4 -0.3 0 0 73.1 1.0787 75.279 0.5096
-5.5	-76	-76 0	-492 -3.1566	-1.367 -1.5593 -2.0637	0 I.4 2.3 30.5 69.4 77 84.2 90.7 0 -0.3 1.5 17.7 20.1 40.9 42.4 44.4 0 -0.3 1.5 79.8 88.5 98.8 109.7 120.9 0.0424 1.0787 4.32894 12.333 27.394 47.147 69.403 93.903 5.5424 75.279 78.6289 236.83 380.59 442.05 487.2 535.3 0.0389 0.5096 0.50439 1.4363 2.202 2.4453 2.5798 2.7155
-7.2	-87	-70 -17	-385 -2.337	-0.567 -0.848 -2.284	30.5 17.7 96.5 79.8 12.333 1.4363
-11.5	-100	-39	-210 -1.217	0.606 0.2344 -1.968	69.4 20.1 175.2 88.5 27.394 380.59 2.202
-15.2	-114	-46 -68	-245 -1.357	0.386 -0.044 -2.489	77 40.9 178.2 98.8 47.147 442.05 2.4453
-20.3	-130	-54 -76	-245 -231 -217 -1.357 -1.221 -1.099	0.479 -0.012 -2.592	77 84.2 90.7 40.9 42.4 44.4 178.2 181.5 185.4 98.8 109.7 120.9 47.147 69.403 93.903 442.05 487.2 535.3 2.4453 2.5798 2.7155
-26.1	-147	- 64	-217 -1.099	0.529 -0.027 -2.742	
-32.1		-74	-230 -1.12		97.4 46 190.4 131.9 120.7 586.4 2.851
-40.4	-183	-86 -97	-177 -0.83		104.9 47.9 195.2 142.6 150 640.6 2.985
-48.8	-203	-99 -104	-105 -0.47	0.9 0.125 -2.99	1112 49.8 200.3 1154.2 1181.9 698.2 3.119