

The Federal Budget Outlook: No News Is Bad News

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This updates our most recent analysis of the budget outlook (Auerbach and Gale 2012) to incorporate the latest Congressional Budget Office projections (CBO 2012b), the Obama Administration's 2013 budget (OMB 2012), and CBO's analysis of the President's budget (CBO 2012c). We thank Samuel Brown and Spencer Smith for research assistance. All opinions and any mistakes are those of the authors and should not be attributed to the staff, officers, or trustees of any of the institutions with which they are affiliated.

ABSTRACT

We present new estimates of the budget outlook, incorporating the latest projections by the Congressional Budget Office (CBO). Although the official budget figures have improved relative to a year ago (primarily as a result of last summer's debt-limit deal and lower interest rate projections), realistic budget projections show that the medium-term outlook remains troublesome and the long-term outlook remains unsustainable. Even with the economy recovering fully by 2018, as projected by CBO, a path following current policy with respect to taxes and spending (for example, by making the Bush tax cuts permanent and indexing the alternative minimum tax for inflation) will result in deficits close to \$10 trillion (5 percent of GDP) over the next decade, with the debt-to-GDP ratio nearing 90 percent by 2022 and continuing to rise thereafter. CBO estimates that the Administration's budget proposal would place the debt-to-GDP ratio at about 76 percent by the end of the ten-year budget window.

The long-term budget outlook is sensitive to assumptions about how health care spending will respond to recent legislation. Assuming that current policy holds for the next decade, the long-term fiscal gap ranges between 6.0 percent and 10.4 percent of GDP, depending on the assumed growth rate of health care outlays. Policymakers and the public will eventually be forced to address these issues. Although a still-weak economy limits the scope for large adjustments in the very short term, addressing this long-term imbalance sooner rather than later will allow for more reasonable and gradual adjustments.

I. INTRODUCTION

The United States faces the prospect of continuing large federal fiscal deficits in the immediate future, the next 10 years, and the longer term. Although perhaps subject to the greatest public attention, criticism and expressions of concern, the short-term deficits — the result of the tax cuts and spending increases of the last decade, the “Great Recession” and economic policy adjustments that responded to it — are generally thought to be helping the economic recovery, even though the recovery has been weak to date. In contrast, the medium-term deficits projected for the next 10 years and the long-term deficits projected beyond 2022 are a source of concern. Even if they do not lead to an immediate crisis, these medium- and long-term deficits will nevertheless create growing and serious burdens on the economy.

The unsustainability of federal fiscal policy has been discussed since at least the 1980s. But the problem has increased in importance and urgency in recent years, for several reasons. First, the medium-term projections have deteriorated significantly. Second, the issues driving the long-term projections — in particular, the retirement of the baby boomers and the aging of the population and the resulting pressure on Medicare and Social Security — which were several decades away in the 1980s — are now imminent. Third, there are increasing questions about the appetite for U.S. debt on the part of foreign purchasers, including some who have voiced their concerns quite publicly. Fourth, many countries around the world and many of the U.S. states now face daunting fiscal prospects themselves, creating a more challenging environment for any attempts at U.S. fiscal consolidation. In light of these issues and the recent agreement to raise the debt limit that included provisions aimed at dealing with the U.S. fiscal imbalance, this paper

provides new projections of the federal budget outlook.¹

The biggest recent change in the policy and economic environment results from the budget deal that President Obama signed into law on August 2, 2011 (Pub. L. No. 112-25). The Budget Control Act of 2011 reduces the deficit in two phases. First, discretionary spending caps and program integrity initiatives reduce the deficit by a cumulative amount of \$895 billion over ten years (CBO 2011b). Second, automatic enforcement procedures, including sequestration and lower discretionary spending caps, will reduce the 10-year deficit by an additional approximately \$1.0 trillion (CBO 2012a). The automatic cuts became effective because a bipartisan Joint Select Committee on Deficit Reduction created by the debt deal was unable to reach agreement last year on alternative ways to reduce the deficit.

Even with the Budget Control Act in place, CBO (2012b) projects the fiscal-year 2012 deficit to be about \$1.2 trillion, or 7.6 percent of GDP. This is lower than the 2009, 2010, and 2011 deficits of 10.0, 9.4, and 8.7 percent of GDP, respectively, but still high relative to historical standards. Prior to 2009, the last time the deficit surpassed 7 percent of GDP was 1946, the year after World War II ended. For 2013-2022, the CBO baseline projects a cumulative deficit of about \$2.9 trillion, with deficits declining sharply to 0.8 percent of GDP in 2018 and hovering around 1.0 percent of GDP through 2022.

This would be a reassuring budget outcome, at least for the medium term, except that the CBO baseline is not intended to represent likely or probable outcomes. Rather, it essentially reports the implications of the assumption that Congress does (almost) nothing over the next 10 years to amend existing legislation. For example, the baseline is calculated assuming that all major tax provisions currently scheduled to expire are allowed to expire. Although this method is

¹ This paper builds on analysis and conventions developed in a long series of previous papers, beginning with Auerbach (1994, 1997) and Auerbach and Gale (1999, 2000) and including most recently Auerbach and Gale (2011a, 2011b).

useful as a basis by which to assess the fiscal consequences of legislation, it is not meant to be predictive nor does it represent the extent of the fiscal problem facing the nation.

An alternative way to project future outcomes is to assume that future Congresses will act more or less like previous Congresses, for example in granting continuances to expiring tax provisions. To generate a better measure of where fiscal policy is headed, we alter the CBO baseline assumptions in ways that we believe are more representative of current policies. Under this extended policy scenario, we estimate a 10-year deficit of about \$9.8 trillion, or 4.9 percent of GDP. As in CBO's baseline, deficits decline in the near term, but only to 4.2 percent of GDP in 2018, and unlike in CBO's baseline, deficits then rise substantially.

By 2022, although the economy is projected to have been at full employment for several years, the deficit under these alternative assumptions rises to 5.3 percent of GDP, the debt-to-GDP ratio rises to 89.5 percent (the highest since 1947), and net interest payments rise to 3.5 percent of GDP (the highest share ever).

The estimates above, for the 10-year horizon and the debt-to-GDP ratio headed into the next decade, are improved relative to those from one year ago (Auerbach and Gale 2011a). The cumulative extended policy deficit for the 2012-2021 period has fallen from \$11.8 trillion (6.0 percent of GDP) to \$9.7 trillion (5.0 percent of GDP). Much of the savings result from the first phase of Budget Control Act. (As discussed below, our extended policy projections assume the second phase — automatic sequestration and even lower caps on discretionary spending — does not occur.)

Another scenario to consider is President Obama's budget proposal (OMB 2012). Outcomes under the Obama budget are not quite as pessimistic as those under extended policy, but troubling nonetheless. CBO projects the 10-year deficit under the Obama budget to be \$6.4

trillion. The annual deficit declines to 2.5 percent of GDP by 2017. By 2022, although the economy is projected to have been at full employment for several years, the deficit rises to 3.0 percent of GDP. Spending rises to 22.8 percent of GDP (the highest since 1985), debt-to-GDP rises to 76.3 percent (its highest since the post-WWII expansion, excluding the recent downturn), and net interest payments rise to 3.0 percent of GDP.

After 2022, under all scenarios, the deficit and debt-to-GDP ratios are poised to rise further, with revenues growing much more slowly than spending, implying that the situation is unsustainable. The debt-to-GDP ratio will pass its 1946 high of 108.6 percent in the late 2020s under extended policy and in the late 2040s under the CBO baseline. Under both scenarios, however, the debt-to-GDP ratio would then continue to rise rapidly, contrary to its sharp decline in the years immediately after 1946.

To examine long-term issues more formally, we estimate a long-term fiscal gap — the immediate and permanent increase in taxes or reduction in spending that would keep the long-term debt-to-GDP ratio at its current level. Using current-law assumptions for Medicare spending, as put forth by the Medicare trustees (2011), and assuming that the automatic budget cuts specified in the Budget Control Act are not only enforced as legislated over the decade, but also persist for the indefinite future, we find that the long-term fiscal gap is about 3.0 percent of GDP under the assumptions in the CBO baseline. This rises to 3.9 percent of GDP under the Obama budget and 6.1 percent of GDP in the extended policy scenario. However, these estimates hinge critically on the evolution of health care spending. The long-term gap rises by almost 3 percent of GDP under each of these scenarios when substituting the Medicare outlay estimates put forth by the Medicare actuaries (CMS Office of the Actuary 2011) and rises by an additional 1.4 percent of GDP when using assumptions employed by CBO (2011b). If the

implementation of a budget solution is delayed by a decade, the fiscal gap at that point will be about 1 percent of GDP higher in each of the scenarios noted above.

These estimates show that health care reform is an important part of the long-term budget outlook, but also that even very substantial and sustained reform of health care will leave a significant fiscal gap. They also demonstrate quite forcefully that the debt-limit deal, as painful as it was to achieve, is only a prelude to the much bigger adjustments that will be needed in the coming years.

II. THE 10-YEAR OUTLOOK

A. Alternative Scenarios

This section discusses estimates of the 10-year budget outlook. The first estimate is simply CBO's March 2012 baseline. The CBO baseline is typically referred to as a "current law" baseline. However, it differs from current law in at least two prominent ways. First, it assumes that the debt ceiling will be increased over time even if there are no enacted changes to tax and spending policies. Second, although it assumes that (almost all) temporary tax provisions are allowed to expire as scheduled under current law, it assumes that mandatory spending programs that are slated to expire are in fact continued.²

The second approach, which we call extended policy, examines the implications of continuing the tax and spending policies that are currently in place. Table 1 displays these adjustments relative to the CBO baseline (with annual details in Appendix Table 1). In their baseline, CBO assumes that all temporary tax provisions (other than excise taxes dedicated to trust funds) expire as scheduled. All of the provisions that were extended in the Tax Relief,

² CBO (2012a) reports that the baseline includes \$1,234 billion in outlays, not including debt service costs, for mandatory spending programs that are assumed to be extended beyond their expiration dates.

Unemployment Insurance Reauthorization, and Job Creation Act of 2010 are slated to expire by the end of 2012. In projecting extended policy, we assume that the income, estate, and AMT provisions are extended permanently. We do not, however, assume extension of the temporary payroll tax cuts that were introduced in the 2010 legislation, beyond their current expiration date at the end of 2012. 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 all of these provisions will be extended.

Second, the alternative minimum tax (AMT) will grow to affect more than 41 million households by 2020 under current law (Tax Policy Center 2010). Congress has repeatedly endorsed tax policies that limit the growth in households affected by the AMT. Our estimates reflect the continuation of this choice. Beginning in 2012, we index the AMT exemption (starting from the already-increased 2011 exemption amount) as well as the AMT tax brackets for inflation.

Third, under current law, payments to physicians under Medicare were scheduled to decline by about 30 percent in January 2012. The temporary payroll tax cut legislation, however, extended current payment rates for another year. Now the rates are scheduled to drop 27 percent in January 2013. In every year since 2003, however, the Administration and Congress stepped in to postpone these reductions. We assume similar actions will prevail in the future and thus include the cost of freezing physician payment rates under Medicare at their current levels.

Fourth, we assume that war-related defense spending will follow the policy outlined in CBO's alternative scenario in the budget. Such a policy calls for steep decreases in war-related defense funding after 2012 and results in a \$838 billion reduction in defense spending relative to the CBO's defense baseline. This is the only adjustment that reduces the extended policy deficit

relative to the CBO baseline deficit.

A final issue involves discretionary spending other than war-related defense spending. Unlike taxes and entitlement spending, which are governed by current law, discretionary spending typically requires new appropriations by Congress each year. The CBO baseline typically assumes that discretionary spending will remain constant in real dollars at the level prevailing in the first year of the budget period. Currently, the baseline assumes that the discretionary spending caps and sequestration procedures as imposed in the Budget Control Act will be enforced. This would reduce real discretionary spending by about 9.8 percent over the next decade relative to a policy that held annual real discretionary spending outlays constant (CBO 2012a). We assume the original caps on discretionary appropriations set out in the Budget Control Act remain in effect, but the automatic enforcement procedures of the legislation (sequestration in 2013 and lowered caps on discretionary budget authority in 2014-2021) do not.

It is worth noting several deficit-increasing measures — tax cuts or spending increases — that we do *not* include in the extended policy scenario. As previously noted, we do not extend the payroll tax cut beyond the end of 2012. Second, for non-stimulus, non-defense discretionary spending, we note that maintaining current services often would require increases for inflation and population growth.³ However, in following the Budget Control Act caps just put in place, we do not adjust baseline discretionary expenditures for this factor.

We present a third estimate of the budget outlook using CBO's analysis of President Obama's latest budget proposal (CBO 2012c), which falls between current policy and current law. As can be seen in Table 2 (with annual details in Appendix Table 2), relative to current law (the CBO baseline), President Obama proposes tax cuts and new spending on transportation and

³ 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).

other programs. The President's budget assumes that the automatic cuts due to the sequesters in the recent debt deal are not enforced. President Obama's budget proposal limits the rate at which deductions and exclusions reduce tax liability to 28 percent, reduces spending for military operations in Afghanistan and elsewhere, and, while protecting physician payment rates under Medicare, the budget proposes other changes to Medicare to fully offset the cost over ten years.

Although not shown in Table 2, the President's budget proposal can also be described relative to the extended policy scenario. Specifically, relative to extended policy, President Obama's budget includes significant increases in taxes on high-income households. For higher-income taxpayers, he does not extend the Bush-Obama tax cuts, and he proposes to return to the estate and gift tax provisions in effect in calendar year 2009.

B. Results

The three approaches to the 10-year budget outlook display several important differences. The time paths of deficits differ under the alternative scenarios (Figure 1, Tables 1 and 2, and Appendix Tables 1 and 2). All three scenarios show deficits shrinking sharply relative to GDP through the recovery, but CBO's baseline shows a much steeper drop through 2015 and little-to-no net increase in the deficit as a share of GDP after 2015, whereas the extended policy scenario and the Obama budget show increasing deficits as a share of GDP, particularly toward the end of the decade. Note also that because the CBO economic projections are for the economy to reach full employment by 2018, all of the deficit figures for subsequent years represent full-employment deficits.

More specifically, the CBO baseline shows deficits declining by almost 7 percent of GDP from 2012 to 2018 and then remaining roughly constant thereafter at approximately 1 percent of GDP. The sharp decline to 2015 is the result of a recovering economy, but also of the

assumptions that scheduled expirations in the stimulus package, AMT extensions, and the 2001 and 2003 tax cuts are allowed to take place. Our extended policy baseline also shows deficits declining sharply, but only to 4.2 percent of GDP in 2018, since the extended policy scenario extends the tax cuts and the AMT provisions. After 2018, however, the deficit in the extended policy scenario starts rising, ending up at 5.3 percent of GDP by 2022. President Obama's budget proposal produces an intermediate outcome: deficits fall to 2.5 percent of GDP in 2018 and then rise gradually to 3.0 percent of GDP by 2022.

These differences in time paths turn into substantial annual differences by the end of the decade. By 2022, the CBO baseline deficit is \$303 billion; the deficit reaches \$1.3 trillion under extended policy; and the deficit under the Administration's budget would be \$728 billion. As a result of these differences, the overall fiscal shortfalls vary substantially. The CBO baseline projects a 10-year deficit of \$2.9 trillion. In contrast, extended policy produces a 10-year deficit of \$9.8 trillion and Obama policy produces a 10-year deficit of \$6.4 trillion.

Figure 2 shows trends in the ratio of debt held by the public to GDP over time under the three scenarios. Under the baseline, public debt rises at first to about 75.8 percent of GDP in 2013 and 2014 but then falls over the rest of the decade, reaching 61.3 percent of GDP by 2022. In contrast, under the extended policy scenario, the debt-to-GDP ratio rises steadily and reaches 89.5 percent by 2022. President Obama's budget puts debt-to-GDP at 76.3 percent in 2022.⁴

Under President Obama's proposal, despite several years of full employment, total

⁴As of 2022, accounting for the net financial asset holdings of the federal government would reduce net public debt by 8 percentage points (CBO 2012a). For some purposes, this adjustment is appropriate. For example, while the conventionally reported debt held by the public shows how much the government owes to outside entities, the net financial assets shows much the government owns in offsetting, typically relatively liquid financial assets. As recently as fiscal year 2008, financial assets were small relative to the debt, primarily composed of the Treasury's operating cash balance and direct and guaranteed loans. Since then, federal financial asset holdings have increased due to provisions in TARP, the conservatorship of FNMA and Freddie Mac, and changes to student loan policies. Net financial assets held by the federal government are 5.7 percent of GDP in 2012 and are expected to rise gradually over the decade.

spending reaches 22.8 percent of GDP by 2022, which (prior to fiscal year 2009) is its highest level since 1985. This rise primarily reflects growth in mandatory spending programs.

Mandatory spending would rise to 14.6 percent of GDP, its highest share ever with the exception of 2009, in which outlays for financial intervention (e.g. TARP) were recorded as mandatory spending.⁵ Relative to the extended policy scenario, in 2022, President Obama's budget proposal raises total revenue by 1.5 percent of GDP and cuts discretionary spending by 0.3 percent of GDP, while keeping mandatory spending at about the same level.

In summary, while it is clear that the current deficits include a temporary surge from trend due to the recession and its continuing effects, the 10-year outlook suggests that they may not subside as much as would be desired. In addition, according to the extended policy scenario, borrowing will rise again later in the decade in a manner that appears to be unsustainable in the long term.

III. THE LONG-TERM OUTLOOK

The fiscal gap is an accounting measure that is intended to reflect the long-term budgetary status of the government.⁶ 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.⁷

⁵ Part of this trend is due to the Obama Administration's stated policy of reclassifying education and transportation discretionary spending as mandatory.

⁶ Auerbach et al. (2003) discuss the relationship between the fiscal gap, generational accounting, accrual accounting and other ways of accounting for government.

⁷ Over an infinite planning horizon, this requirement is equivalent to assuming that the debt-to-GDP ratio does not explode (Auerbach 1994, 1997). For the current value of the national debt, we use publicly-held debt. As discussed

Equivalently, it would establish the same debt-to-GDP ratio in the long run as holds currently. The gap may be expressed as a share of GDP or in dollar terms.

A. Initial Assumptions

There are a variety of assumptions necessary to compute the fiscal gap. It is helpful to break these assumptions down into those regarding the 10-year budget period and those regarding the years thereafter, for which no official CBO projections are available. For the 10-year budget period, our initial approach is simply to follow the March 2012 CBO baseline through 2022. We also consider, as an alternative, the extended policy scenario and President Obama's budget proposal through 2022 as laid out above.

For the years after 2022, for which no official baseline is available, we must decide on assumptions and, where available, projections for different components of taxes and spending. We assume that, after 2022, most categories of spending and revenues remain constant as a share of GDP. These long-run assumptions, however, would be seriously misleading for the major entitlement programs and their associated sources of funding, for which recent long-term projections are available. For the Medicare and OASDI programs, projections for all elements of spending and dedicated revenues (payroll taxes, income taxes on benefits, premiums and contributions from states) are available or can be calculated from figures presented for the intermediate projections in the 2011 Trustees reports.⁸ For our base case, we use the Trustees' projections of the ratios of taxes and spending to GDP for the period 2020–2085 for OASDI and 2020–2080 for Medicare, assuming that these ratios are constant at their terminal values

above, an alternative might be to subtract government financial assets from this debt measure, but the impact on our long-term calculations would be small (reducing the fiscal gaps reported in Table 3 by less than 0.1 percent of GDP).

⁸ Details of these computations are available from the authors upon request. The 2011 Medicare Trustees Report is at <http://www.cms.gov/ReportsTrustFunds/downloads/tr2011.pdf>. The 2011 OASDI Trustees Report is at <http://www.ssa.gov/OACT/TR/2011/tr2011.pdf>.

thereafter. As discussed below, we also consider alternative projections for Medicare provided by the Medicare actuary and the CBO, both more pessimistic than the official Trustees' projections. For Medicaid, CHIP, and exchange subsidies we follow CBO's most recent long-term projections (CBO 2011a) through 2085 and assume that spending as a share of GDP is constant thereafter.⁹

It is important to understand how to interpret these assumptions. They do not represent a pure projection of current law 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.

For Medicare spending, the intermediate projections of the Trustees have for many years incorporated the assumption that Medicare growth will eventually slow in the future. Starting in the 2010 report, however, the Trustees' official medical projections have assumed a much stronger slowdown, as a consequence of provisions in the health care bill passed in 2010. These assumptions, though they may be consistent with the impact of the bill's provisions should they remain in force over the long term, are controversial, for the sustainability of such spending reductions is not clear. Reflecting this controversy, the Medicare Actuary took the unusual step, beginning in 2010 and again last year, of releasing a separate set of projections (CMS Office of

⁹ CBO projects two scenarios for spending and revenues, which it refers to as its "Extended-Baseline" and "Alternative" scenarios. For federal spending on Medicaid, CHIP and exchange subsidies, these two scenarios are relatively similar, differing by about 0.4 percent of GDP in 2085. We use the higher of these two sets of projections, the Alternative scenario, to be consistent with our use of the Medicare projections from this scenario as one of the cases we will consider below.

the Actuary 2011) showing less optimistic (although still positive) reductions in spending. We provide long-term calculations for each of these projected paths as well as the even more pessimistic projections under CBO’s Alternative long-term scenario.¹⁰

B. Estimates

Table 3 displays calculations of the long-term fiscal gap. For each option, we show three variants according to the source of post-2022 Medicare projections — the Medicare Trustees, the Medicare Actuary, and CBO’s Alternative scenario. For each combination of 10-year baseline and long-term Medicare projections, we show the fiscal gap over two horizons: through 2085, and over the infinite horizon. We begin by discussing the various baselines that rely on the most optimistic Medicare projections, those in the official Trustees report, shown in the top row of the table.

Under the CBO baseline assumptions, we estimate that the fiscal gap through 2085 is now 1.99 percent of GDP (Table 3).¹¹ This implies that an immediate and permanent increase in taxes or cut in spending of 1.99 percent of GDP — roughly \$310 billion per year in current terms — would be needed to maintain fiscal balance through 2085. In present-value dollars, rather than as a share of GDP, the fiscal gap through 2085 under these assumptions amounts to \$18.8 trillion. 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 2085. If the horizon is extended indefinitely, for example, the fiscal gap rises to 2.95 percent of GDP under the CBO baseline, or \$52.5 trillion.

¹⁰ The Medicare projections under CBO’s more optimistic Extended-Baseline scenario yield estimates of the long-term gap that are similar over the infinite horizon to those based on the CMS Actuary’s projections.

¹¹ The discount rate in these calculations is based, for 2023 onward, upon the intermediate assumptions of the Social Security trustees, which include a nominal interest rate of about 5.7 percent. For the first 10 years of the calculation, through 2022, we use a blend of the CBO forecasts of the ten-year and 3-month Treasury rates that roughly replicates the debt accumulation pattern under the CBO baseline.

Under the Obama budget, the fiscal gap is substantially larger. Through 2085, it amounts to 3.03 percent of GDP, or 1 percent of GDP more than under the CBO baseline. In present-value dollars, the fiscal gap through 2085 is \$28.6 trillion. Over an infinite horizon, the gap grows to 3.94 percent of GDP, or \$70.1 trillion.

Under extended policy, the fiscal gap is its largest. This scenario's assumptions actually involve only small increases in spending relative to the CBO baseline, but the revenue trajectory is so much lower than under the CBO baseline that projected deficits are much higher. Under extended policy, the fiscal gap through 2085 amounts to 5.01 percent of GDP, or 3 percent of GDP more than under the CBO baseline. In present-value dollars, the fiscal gap under this scenario amounts to \$47.3 trillion through 2085. Over the infinite horizon, the fiscal gap under the extended policy baseline is 6.03 percent of GDP, or \$107.4 trillion.

In the second row, we see the impact of using the projections offered separately by the Medicare Actuary. Doing so raises the fiscal gap by about 1.7 percent of GDP through 2085 and around 2.8 percent of GDP under an infinite horizon. For example, under the scenario based on the CBO baseline, the fiscal gap rises to 3.68 percent of GDP through 2085 and 5.78 percent of GDP under an infinite horizon.

The third set of projections for Medicare spending, from the Alternative Fiscal Scenario in CBO's long-term budget outlook (2011a), are the most pessimistic we consider and are shown in the third row of Table 3. These projections raise the gap by about an additional 0.4 percent of GDP through 2085 and 1.4 percent of GDP over the infinite horizon, compared to the Medicare Actuary projections. As a result, the permanent fiscal gap is 7.16 percent of GDP under the CBO 10-year baseline scenario, 8.09 percent of GDP under President Obama's budget proposal, and 10.39 percent of GDP under the extended policy scenario.

Compared to our estimates just before the Budget Control Act's passage (Auerbach and Gale 2011a), these new estimates show a reduction of approximately 1.3 percent of GDP through 2085 under the CBO baseline and a change of 0.6 percent of GDP or less under our extended policy scenario. These reductions, however, still leave substantial fiscal gaps, and the CBO baseline estimate may also overstate the impact of the recent legislation. Specifically, the estimate assumes that the changes required by the Budget Control Act are not only enforced throughout the next decade, but are also made permanent. That is, discretionary spending is held constant at its already-reduced 2022 share of GDP and future Medicare spending is lower in all future years by a constant percentage, relative to what would have occurred had the Act not taken effect.

Figure 3 shows projected revenues and non-interest expenditures through 2085 under two “bracketing” scenarios: an optimistic scenario (CBO 10-year baseline and Medicare Trustees assumptions) and a pessimistic scenario (extended policy and CBO Alternative Medicare). Under the former, non-interest outlays will keep rising and will reach 24.5 percent of GDP by 2085 – higher than the 21 percent of revenue projected for that year under the scenario. Under the pessimistic scenario, revenue will be lower — at 18 percent of GDP, much closer to its historical share — and non-interest outlays will approach 32 percent of GDP by 2085. Thus, even using the most optimistic projections for both the short term and the long term, there is much that must still be done to close the gap between spending and revenues. Moreover, these optimistic projections assume that much work will already have been done; tax cuts will have expired, medical spending growth will have come under much better control, the budget cuts called for by the Budget Control Act will be sustained not simply for the 10-year legislation period but permanently, and so forth. Under either set of assumptions, therefore, and by

implication for those that lie somewhere in between, sizable adjustments to revenues and spending will be required.

Figure 4 shows the implied debt-to-GDP ratios under the most optimistic and most pessimistic sets of projections. Under the first set, the economy would pass its highest-ever debt-to-GDP ratio (108.6 percent, in 1946) by 2050. This benchmark would be passed much sooner (around 2028) under the more pessimistic scenario. In both cases, the following years would see very rapid further growth of the debt-to-GDP ratio. Indeed, the projected debt-to-GDP ratios rise to astronomical levels later in the century no matter how optimistic the assumptions.

Although not shown in the table, delaying the implementation of a fiscal solution will make the fiscal gap increase and thus make the problem harder to solve. If a solution is not implemented until 2018 — that is, when CBO projects the economy to return to full employment — the estimated permanent fiscal gaps for the most optimistic and pessimistic scenario rises to 3.11 percent and 10.98 percent of GDP, respectively, or 0.17 and 0.59 percentage points of GDP more than if a fiscal adjustment were implemented immediately. Although gradual or slightly delayed implementation may be preferable in light of a struggling recovery, the decision to delay should be made actively with full awareness that the necessary fiscal adjustment will then be larger and will require more difficult sacrifices, rather than passively acquiescing to inertia and recent political impasses. And if a solution is not implemented for 10 years (i.e., not until 2023), the estimated permanent fiscal gaps for the most optimistic and pessimistic scenarios will be about 0.33 and 1.16 percent of GDP larger than shown in Table 3.

IV. CONCLUSIONS

While the changes enacted in the Budget Control Act have moved projected deficits in the right direction, these deficit reductions still exist only on paper, with the lack of action since the Act's passage leading one to question whether they will be sustained. Even if they are, the federal budget outlook is still unsustainable, primarily because of a rise in entitlement spending that is not accompanied by an increase in revenues. Under even the most optimistic scenario, the necessary adjustments must be several times the size of those adopted under the recent legislation. The changes needed relate much more to medium- and long-term deficits, rather than the very large short-term deficits, which to a considerable extent still reflect the weakness of the economy.

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Table 1
Federal Budget Deficit and Debt
CBO Baseline and Extended Policy 2013-2022¹

	<u>Deficit</u>		<u>Debt in 2022</u>
	\$ billions	% of GDP	% of GDP
CBO Baseline	2,887	1.4	61.3
Adjustments for tax policy			
Extend income tax, estate tax, and AMT provisions	2,840	1.4	
Index AMT for inflation (includes interaction)	1,724	0.9	
Extend other expiring tax provisions	839	0.4	
Net interest	963	0.5	
Total adjustments for tax policy	6,365	3.2	
Adjustments for spending policy			
Drawdown in defense spending	-838	-0.4	
Freeze Medicare physician payment rates	316	0.2	
Assume automatic cuts do not occur	984	0.5	
Net interest	99	0.0	
Total adjustments for spending policy	562	0.3	
Extended Policy	9,814	4.9	89.5

¹See Appendix Table 1 for sources and notes.

Table 2

**Federal Budget Deficit and Debt
CBO Baseline and Obama Budget 2013-2022¹**

	<u>Deficit</u>		<u>Debt in 2022</u>
	\$ billions	% of GDP	% of GDP
CBO Baseline	2,887	1.4	61.3
Adjustments for tax policy			
Provisions related to EGTRRA and JGTRRA	2,077	1.0	
Index AMT for inflation (includes interaction)	855	0.4	
Limit the tax rate at which deductions and exclusions reduce tax liability	-523	-0.3	
Modify estate and gift tax provisions	245	0.1	
Modify the U.S. international tax system	-168	-0.1	
Extend the research and experimentation tax credit	96	0.0	
Extend the American Opportunity Credit	81	0.0	
Reinstate and modify the Build America Bonds program	-63	0.0	
Extend full expensing for certain property	-27	0.0	
Other proposals	-219	-0.1	
Total adjustments for tax policy	2,354	1.2	
Adjustments for spending policy			
Changes to transportation programs	123	0.1	
Extend or expand certain refundable tax credits	366	0.2	
Freeze Medicare physician payment rates	271	0.1	
Other changes to Medicare	-276	-0.1	
Changes to Medicaid	-66	0.0	
Reinstate and modify the Build America Bonds program	70	0.0	
Assume automatic cuts do not occur	979	0.5	
Drawdown in defense spending	-810	-0.4	
Other	-94	0.0	
Net interest	586	0.3	
Total adjustments for spending policy	1,150	0.6	
Obama Budget	6,390	3.2	76.3

¹See Appendix Table 2 for sources and notes.

Table 3
Fiscal Gaps

Health Spending Assumptions	CBO Baseline		Obama Budget		Extended Policy¹	
	Through 2085	Permanent	Through 2085	Permanent	Through 2085	Permanent
Medicare Trustees						
as a percent of GDP	1.99	2.95	3.03	3.94	5.01	6.03
in billions of present-value dollars	18,758	52,465	28,614	70,085	47,295	107,386
CMS Actuary						
as a percent of GDP	3.68	5.78	4.70	6.73	6.76	8.96
in billions of present-value dollars	34,736	102,917	44,375	119,848	63,846	159,646
CBO alternative scenario						
as a percent of GDP	4.07	7.16	5.08	8.09	7.16	10.39
in billions of present-value dollars	38,385	127,495	47,974	144,091	67,626	185,105

Source: Authors' calculations

¹The "Extended Policy" scenario begins by assuming CBO's "Alternative Fiscal Scenario," which includes extending all expiring tax provisions (other than the payroll tax cut), freezing Medicare physician payment rates, indexing the AMT for inflation, and assuming the automatic enforcement procedures of the Budget Control Act do not occur. It then incorporates the effects of extending the payroll tax cut through December 2012 and cutting defense spending by reducing the number of troops deployed overseas.

Appendix Table 1
Federal Budget Deficit
CBO Baseline and Extended Policy 2013-2022^{1,2}

	Deficit (\$ billions)											
	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2013-2022</u>
CBO Baseline	1,171	612	385	257	259	201	175	224	234	237	303	2,887
as percent of nominal GDP	7.6	3.8	2.3	1.5	1.4	1.0	0.8	1.0	1.0	1.0	1.2	1.4
Adjustments for tax policy												
Extend income tax and estate tax provisions	2	107	233	267	283	296	308	318	330	342	355	2,840
Index AMT for inflation (includes interaction)	9	125	101	115	130	148	169	192	219	246	278	1,724
Index AMT for inflation	9	89	39	45	52	61	73	86	101	119	140	804
Interaction effect of indexing AMT	0	35	62	70	78	87	97	107	117	128	139	920
Extend other expiring tax provisions	12	78	115	102	89	81	77	73	73	75	77	839
Subtotal	23	309	449	483	502	526	554	584	622	663	710	5,403
Net interest	0	2	7	18	37	63	94	128	165	203	245	963
Total adjustments for tax policy	23	311	456	501	539	589	648	712	786	867	955	6,365
as percent of nominal GDP	0.2	2.0	2.8	2.8	2.9	3.0	3.1	3.3	3.5	3.7	3.9	3.2
Adjustments for spending policy												
Drawdown in defense spending	0	-20	-48	-72	-87	-94	-98	-102	-104	-106	-108	-838
Freeze Medicare physician payment rates	9	19	21	23	26	29	32	36	40	43	47	316
Assume automatic cuts do not occur	0	66	93	101	104	106	106	105	105	105	94	984
Subtotal	9	64	67	53	43	41	39	40	41	42	33	463
Net interest	0	0	1	3	5	8	10	13	16	19	22	99
Total adjustments for spending policy	9	65	68	56	48	48	50	53	57	61	55	562
as percent of nominal GDP	0.1	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.3
Extended Policy	1,204	988	909	813	847	838	873	990	1,078	1,165	1,313	9,814
as a percent of nominal GDP	7.8	6.2	5.5	4.6	4.5	4.3	4.2	4.6	4.8	4.9	5.3	4.9
GDP	15,508	15,914	16,575	17,618	18,704	19,708	20,661	21,616	22,603	23,614	24,655	201,666

¹Columns may not sum to total due to rounding.

²The source of these estimates is CBO (January 2012) "Budget and Economic Outlook: Fiscal Years 2012 to 2022" and CBO (March 2012) "Updated Budget Projections: Fiscal Years 2012 to 2022."

Appendix Table 2
Federal Budget Deficit
CBO Baseline and Obama Budget 2013-2022^{1, 2}

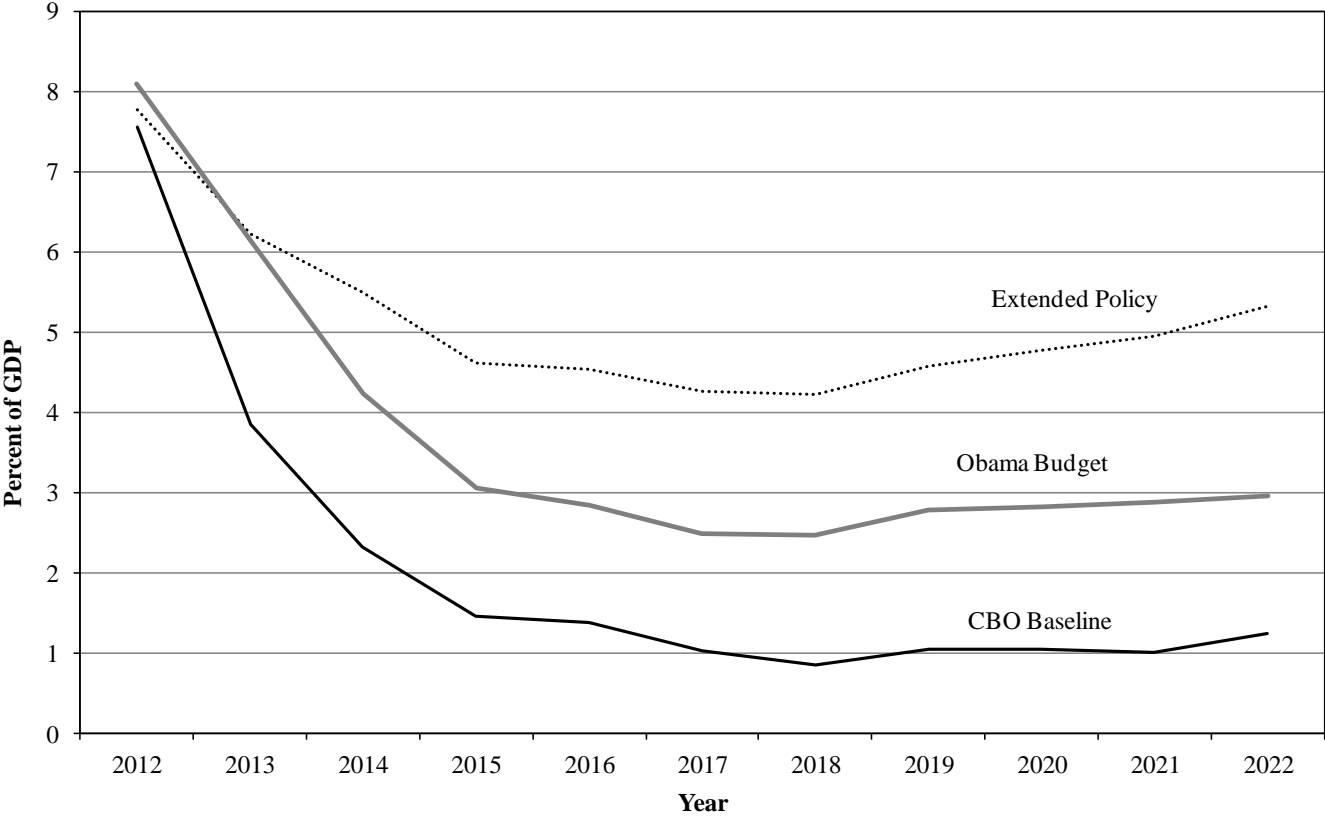
	Deficit (\$ billions)											
	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2013-2022</u>
CBO Baseline	1,171	612	385	257	259	201	175	224	234	237	303	2,887
as percent of nominal GDP	7.6	3.8	2.3	1.5	1.4	1.0	0.8	1.0	1.0	1.0	1.2	1.4
Adjustments for tax policy												
Provisions related to EGTRRA and JGTRRA	1	108	173	187	198	208	219	230	241	252	262	2,077
Index AMT for inflation (includes interaction)	9	94	42	49	57	66	78	92	107	125	144	855
Limit deductions and exclusions	3	-19	-43	-43	-48	-52	-56	-60	-64	-67	-71	-523
Modify estate and gift tax provisions	*	1	19	22	24	26	27	29	31	32	34	245
Modify the U.S. international tax system	0	-7	-15	-16	-17	-18	-19	-19	-20	-19	-18	-168
Extend research and experimentation credit	3	5	6	7	8	9	10	11	12	13	14	96
Extend the American Opportunity Credit	0	2	7	8	8	8	9	9	9	10	10	81
Reinstate and modify Build America Bonds	*	-1	-2	-3	-4	-5	-7	-8	-10	-11	-13	-63
Extend full expensing for certain property	32	16	-13	-9	-7	-6	-3	-2	-1	-1	-1	-27
Other proposals	13	28	3	-25	-38	-39	-30	-26	-32	-31	-29	-219
Total adjustments for tax policy	61	228	178	176	181	198	229	256	274	301	333	2,354
as percent of nominal GDP	0.4	1.4	1.1	1.0	1.0	1.0	1.1	1.2	1.2	1.3	1.4	1.2
Adjustments for spending policy												
Mandatory												
Reclassify surface transportation	0	15	35	45	49	53	55	57	58	59	61	486
Other changes to transportation programs	*	10	13	11	13	16	20	17	10	6	4	123
Extend or expand refundable tax credits	*	1	39	39	40	41	41	41	41	42	42	366
Freeze Medicare physician payment rates	0	11	18	21	24	26	28	31	34	37	41	271
Other changes to Medicare	*	*	-8	-18	-22	-26	-30	-32	-39	-46	-54	-276
Changes to Medicaid	0	1	2	-3	-4	-9	-9	-10	-9	-10	-15	-66
Reinstate and modify Build America Bonds	*	1	2	3	4	6	7	9	11	12	14	70
Assume automatic cuts do not occur	0	9	13	13	14	14	15	16	17	17	6	134
Other proposals	18	45	29	23	7	2	-1	-1	-2	-2	-45	54
Subtotal	19	93	144	136	124	122	127	128	120	116	53	1,163
Discretionary												
Assume automatic cuts do not occur	0	56	79	87	89	91	90	89	88	87	88	845
Drawdown in defense spending	0	-12	-52	-75	-85	-90	-93	-96	-99	-102	-106	-810
Reclassify surface transportation	0	-15	-35	-45	-49	-53	-55	-57	-58	-59	-61	-486
Other	*	11	-4	-12	-17	-23	-22	-21	-19	-21	-21	-148
Subtotal	*	41	-12	-44	-62	-75	-80	-85	-88	-95	-100	-598
Net interest	2	4	7	14	27	42	59	78	98	119	139	586
Total adjustments for spending policy	20	137	139	106	90	89	106	121	131	139	92	1,150
as percent of nominal GDP	0.1	0.9	0.8	0.6	0.5	0.5	0.5	0.6	0.6	0.6	0.4	0.6
Obama Budget	1,252	977	702	539	529	488	510	602	638	678	728	6,390
as a percent of nominal GDP	8.1	6.1	4.2	3.1	2.8	2.5	2.5	2.8	2.8	2.9	3.0	3.2

GDP 15,508 15,914 16,575 17,618 18,704 19,708 20,661 21,616 22,603 23,614 24,655 201,666

¹Columns may not sum to total due to rounding.

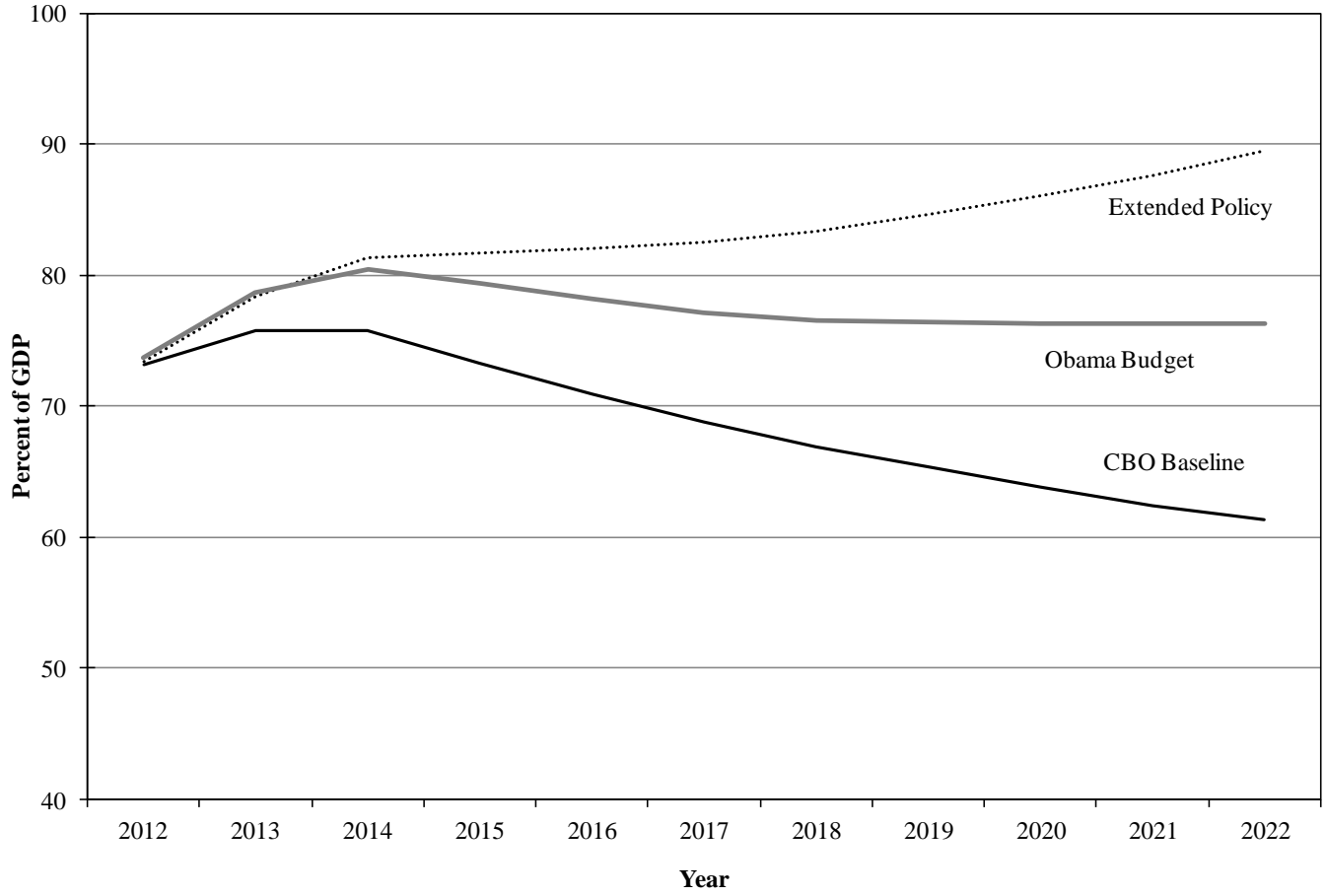
²The source of these estimates is CBO (March 2012) "Updated Budget Projections: Fiscal Years 2012 to 2022" and CBO (March 2012) "An Analysis of the President's 2013 Budget."

Figure 1. Alternative Deficit Projections, 2012-2022



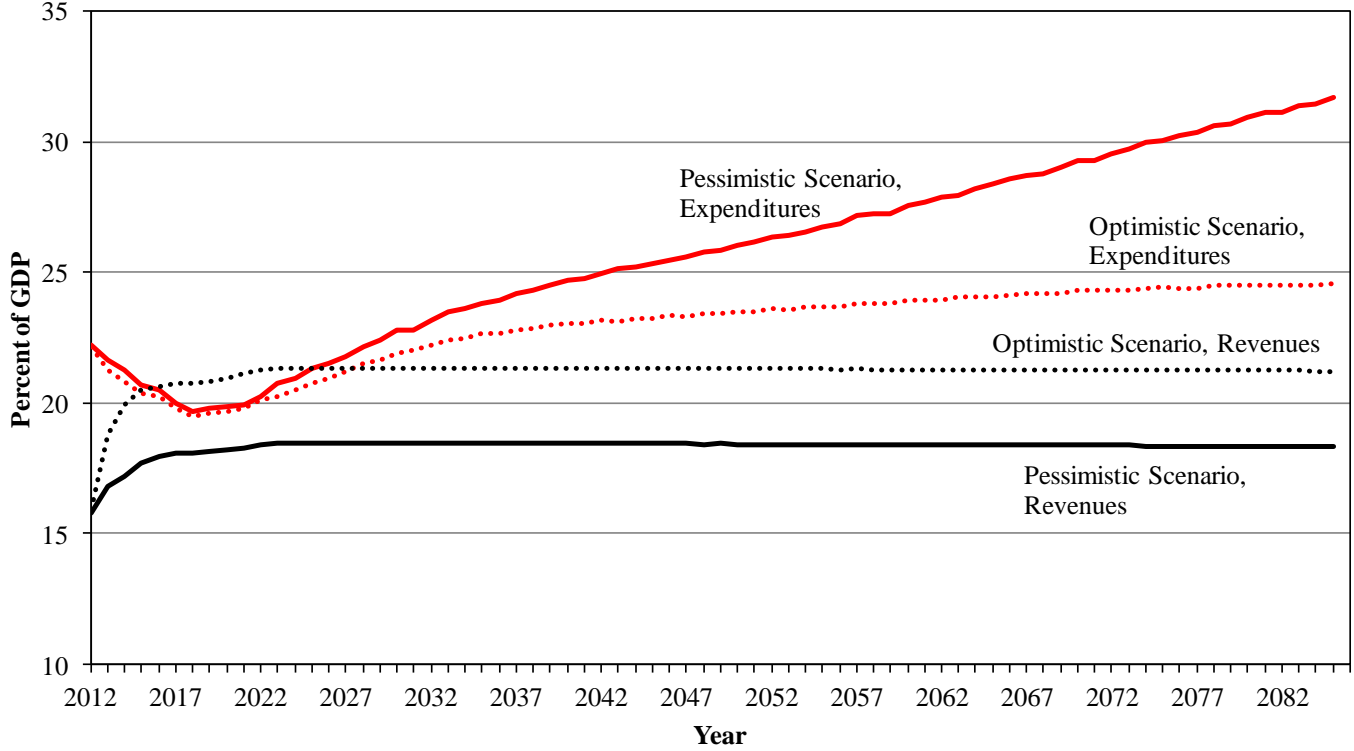
Source: CBO and authors' calculations.

Figure 2. Alternative Debt Projections, 2012-2022



Source: CBO and authors' calculations.

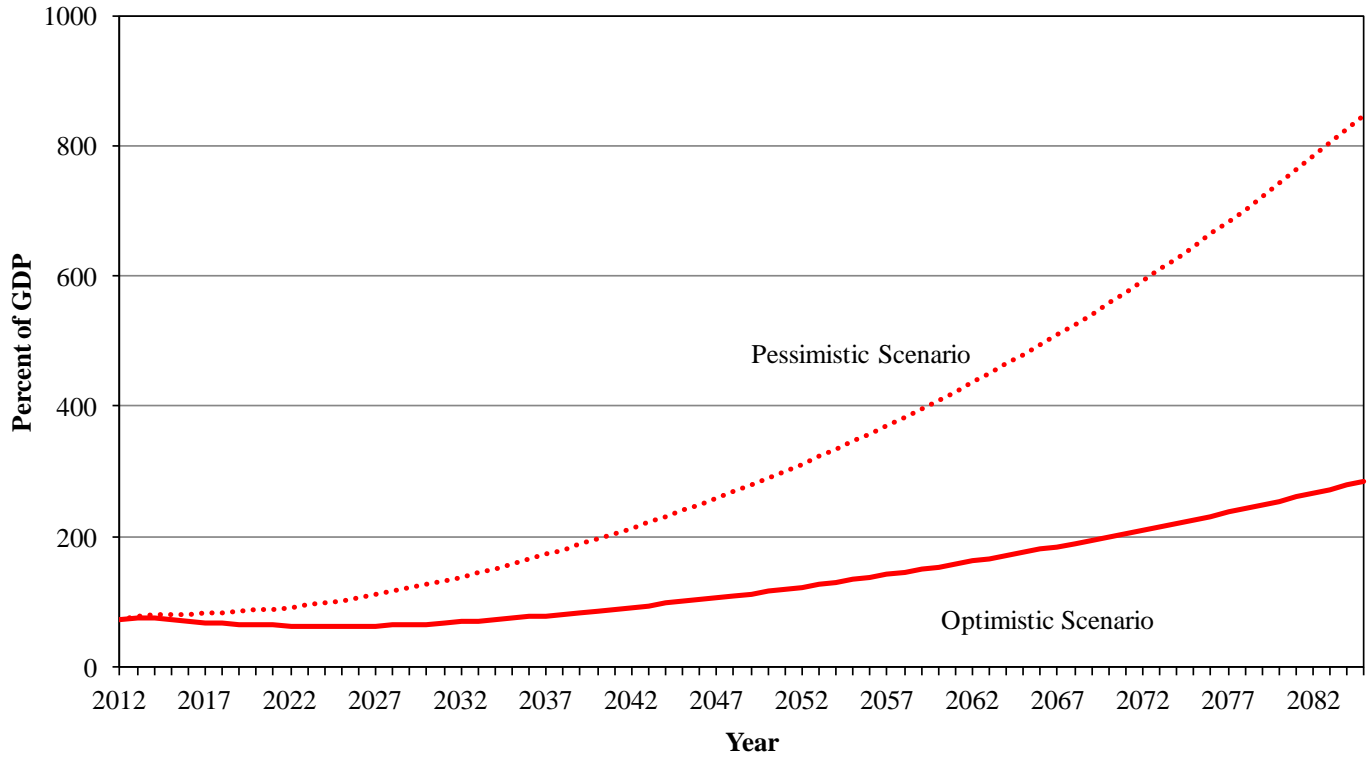
Figure 3. Alternative Projections of Revenue and Non-Interest Outlays, 2012-2085



The optimistic scenario assumes a current law baseline with health care spending growing in line with the intermediate projections of the Medicare Trustees. It also assumes automatic cuts set out in the Budget Control Act represent a permanent downshift in spending. The pessimistic scenario assumes our Extended Policy baseline with health care spending growing according to CBO's alternative projections. Sequestration and caps on discretionary spending end in 2021.

Source: CBO, Medicare Trustees, and authors' calculations.

Figure 4. Alternative Projections of the National Debt, 2012-2085



The optimistic scenario assumes a current law baseline with health care spending growing in line with the intermediate projections of the Medicare Trustees. It also assumes automatic cuts set out in the Budget Control Act represent a permanent downshift in spending. The pessimistic scenario assumes our Extended Policy baseline with health care spending growing according to CBO's alternative projections. Sequestration and caps on discretionary spending end in 2021.

Source: CBO, Medicare Trustees, and authors' calculations.