Tempting Fate: The Federal Budget Outlook

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June 30, 2011

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The authors thank Ben Harris for his varied contributions to the project and Ilana Fischer 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. This paper has been revised to take into account the Obama Administration's 2012 budget, released in February, the analysis of the President's budget by CBO, released in April, the Medicare and Social Security Trustee reports released in May, and CBO's most recent Long-Term Budget Outlook, released in June.

ABSTRACT

We present new estimates of the budget outlook, based on the latest projections from the Congressional Budget Office and the Medicare and Social Security Trustee reports. The medium-term and long-term budget outlook have not changed appreciably since last year. Under reasonable assumptions, the federal government is likely to face deficits in excess of 6 percent of GDP by late in the decade, even with a strong economy, with the debt-GDP ratio reaching 87.4 percent by 2021. The long-term budget outlook is sensitive to assumptions about how health care spending will respond to recent legislation. However, even under the most optimistic assumptions regarding health care spending, the most likely estimates suggest a long-term fiscal gap of between 5 and 6 percent of GDP. Policy makers and the public will eventually be forced to address these issues, but addressing them sooner rather than waiting until a full-blown crisis hits would allow for more reasonable and gradual adjustments.

I. INTRODUCTION

The United States faces the prospect of large federal fiscal deficits in the immediate future, the next 10 years, and the longer term. The short-term deficits — the result of the tax cuts and spending increases of the last decade, the “Great Recession,” and economic policy adjustments in the past year — are generally thought to be helping the economic recovery. In contrast, the medium-term deficits projected for the next 10 years and the long-term deficits projected beyond 2021 are a source of concern. Even if they do not lead immediately to a crisis, they will nevertheless create growing and serious burdens on the economy.

The unsustainability of federal fiscal policy has been discussed at least since 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 to some extent Social Security — which were several decades away in the 1980s — are now imminent. Third, there are increasing questions about the rest of the world's appetite for U.S. debt, as the United States has changed from a net creditor country in 1980 to a vast net debtor currently. Fourth, many countries around the world and many of the U.S. states also face daunting fiscal prospects currently.

In light of these issues, this paper provides new projections of the federal budget over the medium and long terms.[1] This paper provides new projections of federal budget outcomes, using the January and March 2011 Congressional Budget Office (CBO 2011a, 2011b) projections, recent reports by the Social Security and Medicare trustees (Medicare Trustees 2011), an

[1] This paper builds on analysis and conventions we have developed in numerous previous papers including Auerbach and Gale (1999, 2000, 2001, 2009, 2010a, 2010b), Auerbach et al. (2003), and Auerbach, Furman and Gale (2007, 2008).

analysis by Medicare actuaries (Medicare Actuary 2011), and CBO's June 2011 Long-Term Projections (CBO 2011c). It updates the analysis in Auerbach and Gale (2010a, 2010b).

The analysis begins with the most recent Congressional Budget Office (CBO) baseline budget projections. CBO (2011b) projects the 2011 deficit to be $1.4 trillion, about 9.3 percent of GDP. Other than 2009, this represents the largest deficit as a share of the economy since World War II. For 2012–2021, the CBO baseline projects a cumulative deficit of $6.7 trillion, with deficits declining sharply to 3 percent of GDP by 2015 and hovering around 3.0 percent of GDP through 2021. This would be a reassuring 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 nothing over the next 10 years. All major tax provisions currently scheduled to expire are assumed to do so as scheduled, for example.

A more plausible way to project future outcomes may be 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 the continuation of current policies. Under this extended policy scenario, we estimate a 10-year deficit of $11.9 trillion, or 6.0 percent of GDP. As in CBO's baseline, deficits decline in the near term, but only to 5.6 percent of GDP by 2015, and unlike in CBO's baseline, deficits then rise substantially.

By 2021, although the economy is projected to have been at full employment for several years, the deficit under these alternative assumptions rises to 6.5 percent of GDP. Spending rises to 24.7 percent of GDP (the highest since World War II, except for the current downturn), the debt-to-GDP ratio rises to 97 percent (the highest since 1947), and net interest payments rise to 4.4 percent of GDP (the highest share ever and larger than defense or non-defense discretionary spending).

A third way to project future outcomes is to examine the Administration's budget proposals. These figures are not quite as pessimistic as those under extended policy, but are troubling nonetheless. The 10-year deficit under Obama policy is projected to be $9.5 trillion. The deficit declines to 4.1 percent of GDP by 2015. By 2021, although the economy is projected to have been at full employment for several years, the deficit rises to 4.9 percent of GDP. Spending rises to 24.2 percent of GDP (the highest since World War II, except for the current downturn), the debt-to-GDP ratio rises to 87 percent (the highest since 1947), and net interest payments rise to 3.9 percent of GDP (the highest share ever and larger than defense or non-defense discretionary spending).

All of these figures are poised to rise further after 2021, and revenue growth is projected to be much weaker than spending growth, implying that the situation is unsustainable. The debt-to-GDP ratio will pass its 1946 high of 108.6 percent early in the 2020's under extended policy and in the following decade 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.

All of the estimates above, for the 10-year horizon and the debt-GDP ratio headed into the next decade, are very close to those provided in Auerbach and Gale (2010a, 2010b). That is, little has changed to alter the medium-term (10-year) budget outlook in the period since last year, except for health care legislation, which our earlier work already incorporated.

The health reform package's impact on the long-term budget outlook is more controversial. 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 depending on the time frame employed, the fiscal gap is estimated to be about 3 ½ – 4 percent of GDP under the assumptions in the CBO baseline, about 5 ½ – 6 ½ percent of GDP in the extended policy scenario, and about 1 percent of GDP less than this under a continuation of Administration policy. However, the fiscal gap rises by 2-3 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 percent when using assumptions employed by CBO (2011c). As a result, the gap is estimated to be over 10 percent of GDP under our worst-case scenario. 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. As a result, the budget outlook will create difficult trade-offs for policy makers and the American public.

II. THE 10-YEAR OUTLOOK

A. Three Scenarios

This section presents three estimates of the 10-year budget outlook. The first estimate is simply the CBO March 2011 baseline (CBO 2011b). The second approach, which we call extended policy, examines the implications of continuing the tax and spending policies that are in place currently. Table 1 displays these adjustments relative to the CBO baseline (with annual details in Table A1). First, CBO assumes that all temporary tax provisions (other than excise taxes dedicated to trust funds) expire as scheduled. With the exception of the AMT patch—which expires at the end of 2011—all of the provisions that were extended in the recent tax bill are slated to expire by the end of 2012. We assume that the income, estate, and AMT provisions are extended permanently. We do not, however, assume extension of the temporary payroll tax cuts, which are slated to expire at the end of 2011, given that these were explicitly adopted as a countercyclical measure. 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.[2]

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 in two ways. In addition to assuming that the AMT provisions that were temporarily extended at the end of 2010 — including higher AMT exemption levels — are granted a continuance, we also index the AMT exemption amount for inflation starting in 2012.

Third, under current law, payments to physicians under Medicare will decline by about 28 percent in January 2012 and will continue to decline in future years. In the past, however, the Administration and Congress stepped in to postpone such reductions. We assume similar actions will prevail in the future, so we include the costs of freezing physician payment rates under Medicare at their 2011 levels.

[2] CBO (2011a) reports that the baseline includes $1,029 billion in outlays, not including debt service costs, for mandatory spending programs that are assumed to be extended beyond their expiration dates.

The fourth issue involves discretionary 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 assumes that discretionary spending will remain constant in real dollars at the level prevailing in the first year of the budget period. We divide discretionary spending into three categories and make different assumptions with respect to each. First, as in the CBO baseline, we assume that discretionary spending in the stimulus package is allowed to expire as scheduled.

Second, 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 $1,134 billion reduction in defense spending relative to the CBO's defense baseline.

Third, for non-stimulus, non-supplemental, non-defense discretionary spending, we note that maintaining current services often would require increases for both inflation and population growth, rather than just inflation.[3] Accordingly, we adjust baseline expenditures to allow for population growth.

Our last estimate of the budget outlook is derived from CBO's March 2011 estimate of the Administration's budget (CBO 2011b). As can be seen in Table 2 (with annual details in Table A2)**,** relative to current law (the CBO baseline), the Administration proposes a raft of tax cuts and significant new spending on education, health, and other programs. Although not shown in Table 2, President Obama's policies can be also described and characterized relative to the extended policy scenario. Specifically, relative to extended policy, the Administration's proposals include significant increases in taxes on high-income households (including the estate tax, the top income tax rates,

[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).

capital gains and dividend taxes, and limitations on itemized deductions and personal exemptions), tax cuts for lower-income households, closing of corporate income tax loopholes, expansion of the Build America Bonds program, reclassification of discretionary surface transportation spending from discretionary to mandatory, a partial offset to the cost of freezing Medicare physician payments, and increases in non-defense, non-transportation discretionary spending.

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 and Tables 1, 2, A1, and A2). All the measures show deficits shrinking sharply relative to GDP through the recovery, but CBO's baseline shows a steeper drop through 2015 and a slower increase in the deficit as a share of GDP after 2015**,** while the extended policy baseline and Administration policy shows more rapid increases in the deficit as a share of GDP over the last six years of the projection. Note also that because the CBO economic projections are for the economy to reach full employment by 2016, all of the deficit figures for subsequent years represent "full employment" deficits.

More specifically, the CBO baseline shows deficits declining by nearly 7 percent of GDP from 2010 to 2014 and then remaining roughly constant thereafter at approximately 3 percent of GDP. The sharp decline through 2015 is the result of a recovering economy, but also of the assumptions that scheduled expirations in the stimulus package, AMT extensions, financial interventions, and the 2001 and 2003 tax cuts are allowed to take place. Our extended policy baseline also shows deficits declining sharply, but only to 5.6 percent of GDP in 2015, since the extended policy baseline extends the tax cuts and the AMT provisions. After 2015, however, the deficit in the extended policy baseline starts rising, ending up at 6.5 percent of GDP by 2021.

Obama policy represents an intermediate outcome: deficits fall to 4.1 percent of GDP in 2015, and then gradually rise to 4.9 percent of GDP by 2021.

These differences in time paths turn into substantial annual differences by the end of the decade. By 2021, the CBO baseline deficit is $729 billion; the deficit reaches $1.54 trillion under extended policy. As a result of these differences, the overall fiscal shortfalls vary substantially. The CBO baseline projects a 10-year deficit of $6.7 trillion. In contrast, extended policy shows a 10-year deficit of $11.9 trillion and the Obama policy shows a decade-long deficit of $9.5 trillion.

Figure 2 shows trends in the ratio of debt held by the public to GDP over time under the two scenarios. Under the baseline, the debt rises to 75.6 percent by 2021, rising rapidly at first to about 75.1 percent of GDP in 2013 and then flattening out over the decade. In contrast, under the extended policy scenario, the debt-GDP ratio rises steadily, and exceeds 97 percent by 2021. The Administration budget shows debt-to GDP reaching 87.4 percent in 2021.

Although not shown in the tables and figures, a possible third scenario for the 10-year period would assume that *all* temporary policies are extended. This scenario starts with extended policy, as explained above, and assumes also that (a) the temporary payroll tax cuts are extended permanently and (b) discretionary spending that is part of the stimulus package and that occurs in 2011 is also extended permanently. Under this scenario, the 10-year deficit is $14.6 trillion or 7.4 percent of GDP. By 2021, the deficit equals 8.1 percent of GDP and the debt-GDP rises to 109 percent.

What is perhaps most notable is how problematic the 2021 outcomes are under Obama policy, despite being preceded by several years of full employment. Spending in 2021 would be 24.2 percent of GDP, the highest level since World War II (other than during the 2009-2011 spike), and would be rising over time. The deficit would stand at 4.9 percent of GDP and also would be rising over time. Other than the deep recession year of 1983 and the current downturn (2009–2012), this would be the highest deficit share of GDP in more than 60 years and, as noted above, would represent a full-employment deficit. The debt–to-GDP ratio would be 87.4 percent — the highest level since 1947 — and rising.

The rise in spending would occur in mandatory programs, which in 2021 would be at their highest share of GDP ever, except in 2009 (in which the financial interventions were recorded as mandatory programs).[4] In contrast, defense spending would fall dramatically and non-defense discretionary spending would drop to its lowest share of GDP in the past 50 years. Achieving those discretionary spending figures would require significant political discipline.

Finally, net interest payments would rise to 3.9 percent of GDP by 2021, the largest figure ever, and larger than total non-defense discretionary spending or defense spending in that year.   Net interest payments would equal 19 percent of revenue by 2021.

In summary, while it is clear that the current deficits are expected to represent a temporary surge in government borrowing, the 10-year outlook suggests that the surge may well not subside as much as would be desired. In addition, borrowing will rise again later in the decade in a manner that appears to be unsustainable in the long term. Of course, as shown in Figure 1, as bad as outcomes are under Obama Administration policy, outcomes would be even worse under a mechanical extension of current policies.

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

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.[5] 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.[6] 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. We start with perhaps the simplest approach for the 10-year budget period, following the April 2011 CBO baseline through 2021. We assume that, after 2021, 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

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

[6] Over an infinite planning horizon, this requirement is equivalent to assuming that the debt-to-GDP ratio does not explode (Auerbach 1994, 1997).

presented for the intermediate projections in the 2011 Trustees reports.[7] 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 thereafter. For Medicaid, CHIP and exchange subsidies we follow CBO's most recent long-term projections (CBO 2011c) through 2085 and assume that spending as a share of GDP is constant thereafter.[8]

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

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[7] 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.

[8] 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.

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 last year and once again this year, of releasing a separate set of projections (CMS Office of the Actuary 2011) showing less optimistic (although still positive) reductions in spending. Reflecting the considerable uncertainty about the path of Medicare, we provide long-term calculations for each of these projected paths. To these, we add one more, the even more pessimistic projections under CBO's Alternative long-term scenario.[9]

B. Estimates

Table 3 displays calculations of the long-term fiscal gap for CBO, Extended Policy, and Obama Policy 10-year baselines. For each of these policy baselines, we show three variants according to the source of post-2021 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 three horizons: 25-year (i.e., through 2035), 75-year (i.e., through 2085), and permanent (i.e., over the infinite horizon). Although the shortest of these horizons is perhaps not particularly useful for assessing the long-term fiscal situation, we include it help illustrate how the paths of fiscal shortfalls differ under the various scenarios. 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 panel of the table.

[9] 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.

Under the CBO baseline assumptions, we estimate that the fiscal gap through 2085 is now 3.31 percent of GDP (Table 3).[10] This implies that an immediate and permanent increase in taxes or cut in spending of 3.31 percent of GDP — roughly $500 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 $25.0 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 4.13 percent of GDP under the CBO baseline, or $57.8 trillion.

Moving across the top panel of Table 3, we see that the fiscal gap is substantially larger under the extended policy scenario. This scenario's assumptions lead to a lower level of revenue and a higher level of spending than the CBO baseline. Under extended policy, the fiscal gap through 2085 amounts to 5.60 percent of GDP, or 2.29 percent of GDP more than under the CBO baseline. In present-value dollars, the fiscal gap under this scenario amounts to $42.3 trillion through 2085. Over the infinite horizon, the fiscal gap under the extended policy baseline is 6.47 percent of GDP, or $90.7 trillion. For the Administration policy scenario, the fiscal gap estimates are about 1 percent of GDP below those of extended policy. This will also turn out to be the case in the second and third panels of the table, which we now discuss.

Moving to the table's second panel, we see the impact of using the projections offered separately by the Medicare Actuary. Doing so raises the fiscal gap to 4.95 percent of GDP through 2085 and 6.91 percent of GDP over an infinite horizon under the scenario based on the CBO baseline. Our overall fiscal gap estimates are lower than those reported last year, but higher

[10] 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.

than those based on the 2009 Trustees' Report. For example, the infinite-horizon gap was 9.07 percent of GDP under extended policy using the 2009 Trustees' report, it is now 9.25 percent, down from 9.85 from last year, given this set of Medicare projections. This worsening since 2009 is due to higher projections of *Medicaid* and other health spending in CBO (2011c) relative to CBO (2009), on which our 2009 estimates were based.[11]

The third set of projections for Medicare spending, from CBO's Alternative scenario, are the most pessimistic that we consider. Note that fiscal gaps through 2035 under this scenario are no worse than those based on the Medicare Actuary's alternative projections. The differences between these two sets of projections appear only when the horizon of the calculation is lengthened. Under the CBO Alternative scenario and the infinite horizon, the estimated long-term gap rises to nearly 8 percent of GDP even under the CBO 10-year baseline, and to over 10 percent of GDP under the extended 10-year baseline.[12] In summary, even under the most optimistic assumptions available for health spending over the long term, health care reform has eliminated only a small portion of the fiscal gap; other health care projections paint an even bleaker picture than those from last year.

Figure 3 shows projected revenues and non-interest expenditures through 2085 under these two "bracketing" scenarios, CBO 10-year baseline/Medicare Trustees and extended policy/CBO Alternative Medicare. Under the most optimistic scenario, non-interest outlays will keep rising, but will have reached "only" 25 percent of GDP by 2085 – higher than the 21 percent of revenue projected for that year under the scenario. Under the most pessimistic

[11] We infer that this increase in projected spending reflects the effects of the 2010 health care expansion, in particular the added costs of CHIP and exchange subsidies, although CBO does not report the individual components separately. Medicaid projections for 2011 are lower than those projected by CBO last year (CBO 2010).

[12] Our projections using CBO's Alternative scenario are reduced relative to our estimates based on last year's CBO report for this scenario because we now also incorporate CBO's estimates for offsetting Medicare revenues under this scenario, which are higher than those projected by the Medicare Trustees.

projections, revenue will be lower – at 18 percent of GDP much closer to its historical share – and non-interest outlays will be on a rapidly exploding trajectory, approaching 32 percent of GDP by the end of the period shown. 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. Yet these optimistic projections essentially assume that much work already will have been done; tax cuts will have expired, medical spending growth will have come under much better control, 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 beyond those that have been contemplated in the formulation of any set of projections.

Figure 4 shows the implied debt-to-GDP ratios under the most optimistic (CBO 10-year baseline; Medicare Trustees projections) and most pessimistic (Extended baseline; CBO Alternative scenario for Medicare) sets of projections. Under the first set, the economy would pass its highest-ever debt-to-GDP ratio (108.6 percent, in 1946) by 2032. This benchmark would be passed much sooner 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.

IV. CONCLUSIONS

The current U.S. fiscal deficit is enormous, but its enormity is temporary — or at least is expected to be. The real concerns lie in the 10-year projection and long-term outlook. The medium-term and long-term budget shortfalls will create growing burdens on the economy. These burdens can happen gradually or suddenly. In the gradual scenario, budget shortfalls will reduce national saving. In the absence of increased capital inflows, the reduction in national saving will raise interest rates, reduce investment and reduce future national output. Increased capital inflows from abroad can mitigate or eliminate the increase in interest rates and/or the decline in investment. This in turn will offset some of the decline in future national income, but of course the inflows create increasing claims on the domestic capital stock and hence still reduce future national income. In either case, under the gradual scenario, sustained large deficits will reduce future national income and living standards. In the sudden scenario, long-term budget shortfalls could trigger a political or market reaction that leads to a sudden change in interest rates, exchange rates, capital outflows, etc. Avoiding these outcomes will require significant and sustained changes to spending and revenue policies, much larger changes than have received serious consideration in the policy process to date.

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Figure 1
Alternative Deficit Projections, 2011-2021

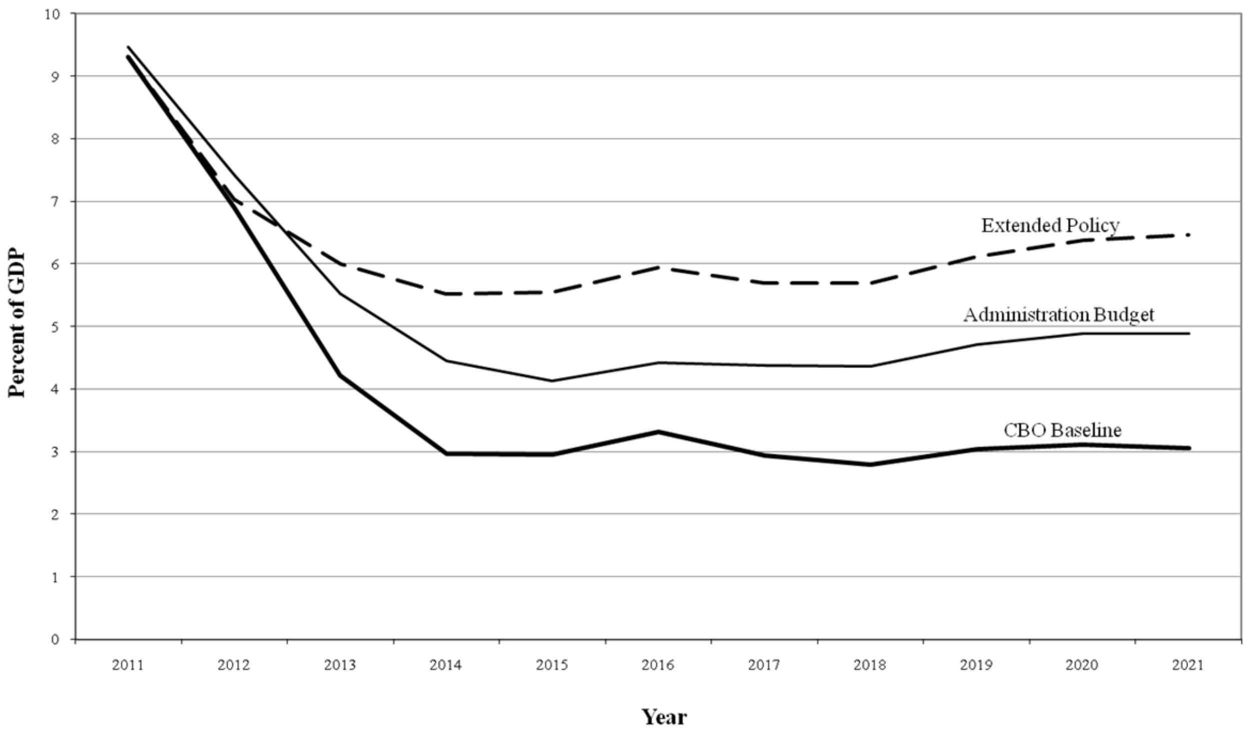

Figure 2
Alternative Debt Projections, 2011-2021

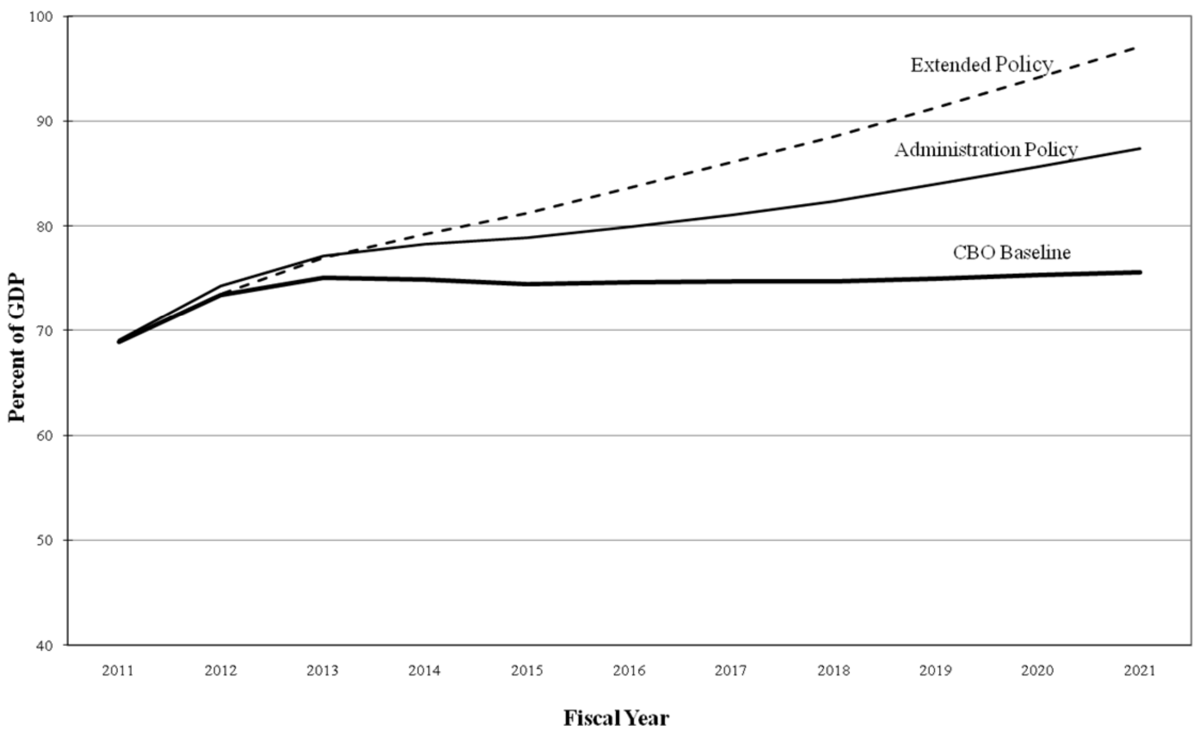

Figure 3. Alternative Projections of Revenues and Non-Interest Outlays, 2011-2085

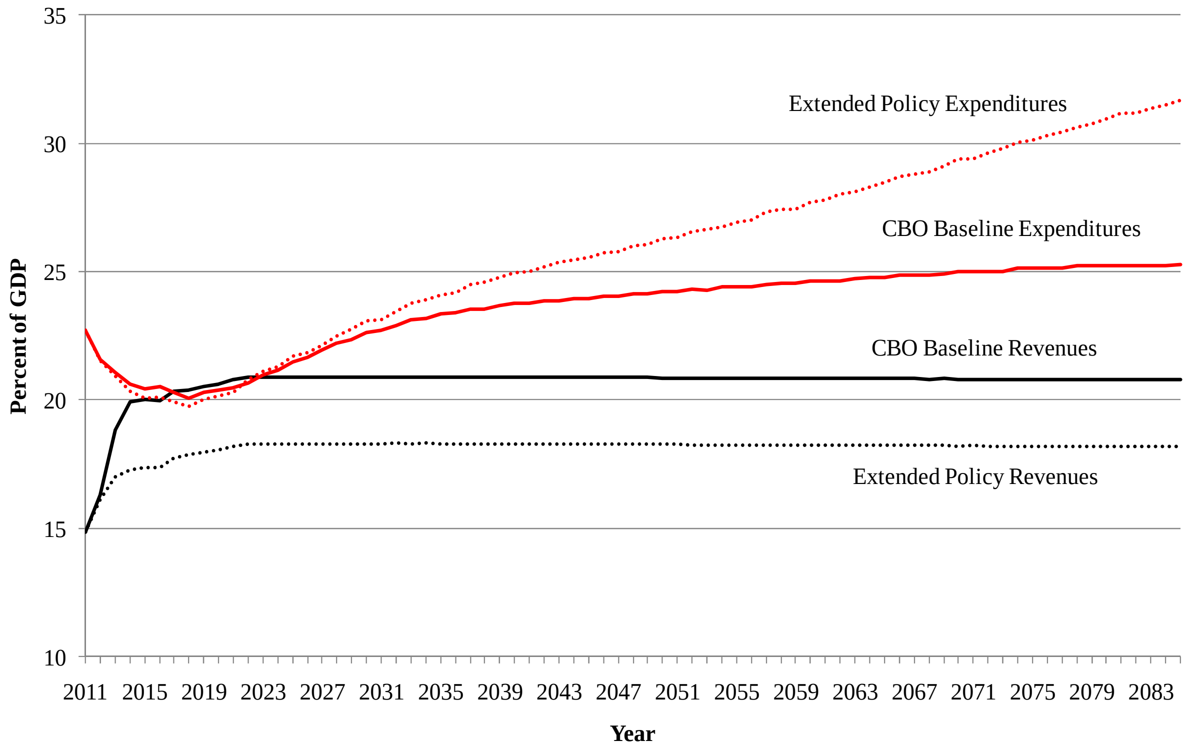

Figure 4. Alternative Projections of the National Debt, 2011-2085

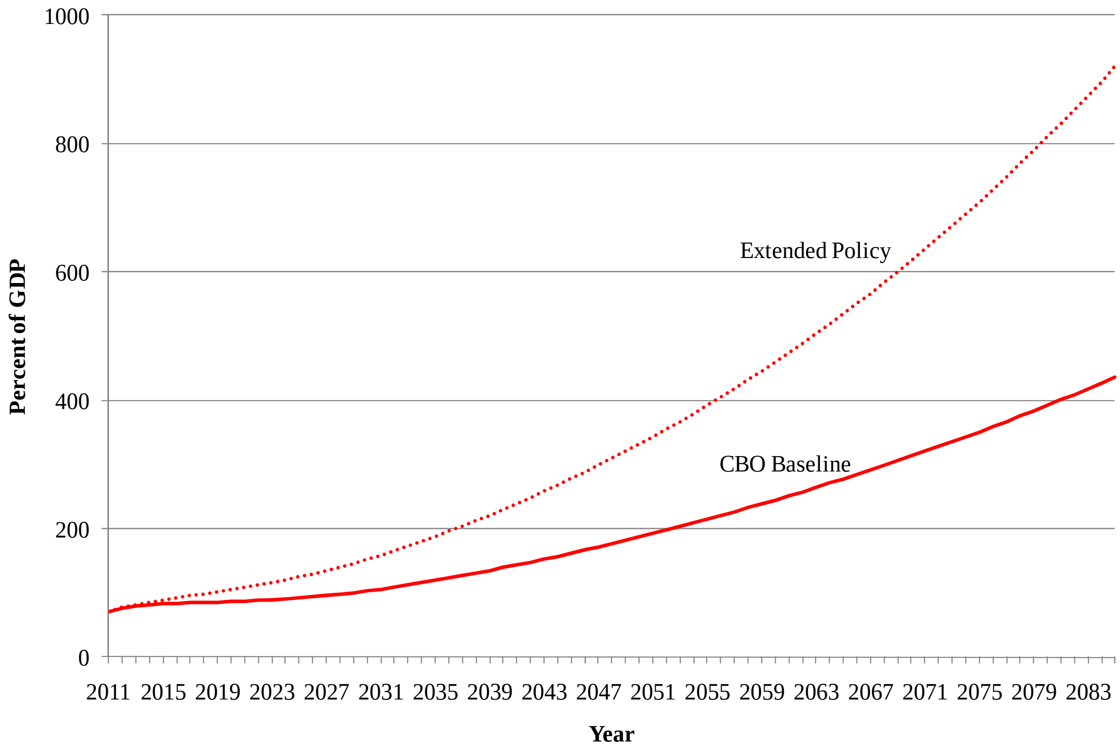

Table 1

Federal Budget Deficit
CBO Baseline and Extended Policy 2012-2021

	Dollars (billions)	Percent of GDP
CBO Baseline	**6,737**	**3.4**
Adjustments for tax policy		
Extend income tax, estate tax, and AMT provisions	2,502	1.3
Index AMT for inflation (includes interaction)	1,318	0.7
Extend other expiring tax provisions	759	0.4
Subtotal	4,579	2.3
Adjustments for spending policy		
Adjust defense spending	-1,134	-0.6
Adjust non-defense non-stimulus DS for population growth	366	0.2
Freeze Medicare physician payment rates	249	0.1
Subtotal	-519	-0.3
Net Interest	1,053	0.5
Extended Policy	**11,850**	**6.0**

Table 2

Federal Budget Deficit
CBO Baseline and Administration Budget 2012-2022

	Dollars (billions)	Percent of GDP
CBO Baseline	**6,737**	**3.4**
Adjustments for tax policy		
Provisions related to EGTRRA and JGTRRA	1,823	0.9
Index the AMT starting from 2011 levels	682	0.3
Modify estate and gift tax rates	239	0.1
Limit the tax rate at which itemized deductions reduce tax liability	-292	-0.1
Reform the U.S. international tax system	-134	-0.1
Tax most dividends at 20% for higher- income taxpayers	95	0.0
Extend the research and experimentation tax credit	88	0.0
Extend the American Opportunity Credit	73	0.0
Modify and extend the Build America Bonds Program	-71	0.0
Other proposals	-176	-0.1
Subtotal	2,327	1.2
Adjustments for spending policy		
Reclassify surface transportation spending as mandatory	503	0.3
Increase transportation funding	214	0.1
Freeze Medicare physician payment rates at 2011 levels	297	0.2
Offset cost of freezing Medicare's physician payment	-49	0.0
Extend or Expand certain refundable tax credits	299	0.2
Modify and extend the Built America Bonds program	76	0.0
Other proposals	-8	0.0
Discretionary Spending- Defense	-853	-0.4
Discretionary Spending- Non Defense	-598	-0.3
Subtotal	-119	-0.1
Net Interest	585	0.3
Administration Budget	**9,530**	**4.9**

Table 3

Fiscal Gaps

Baseline:	CBO Baseline			Extended Baseline			Administration Baseline		
	Through 2035	Through 2085	Permanent	Through 2035	Through 2085	Permanent	Through 2035	Through 2085	Permanent
As a Percent of GDP	1.99	3.31	4.13	4.12	5.60	6.47	3.14	4.53	5.37
In Billions of Present-Value Dollars	6,334	24,969	57,805	13,104	42,251	90,673	10,005	34,208	75,300
w/ CMS actuary Medicare	2.34	4.95	6.91	4.46	7.24	9.25	3.49	6.18	8.16
	7,435	37,366	96,779	14,205	54,648	129,648	11,106	46,605	114,274
w/ CBO Alt. Scenario Medicare	2.28	5.31	7.93	4.41	7.60	10.28	3.44	6.53	9.18
	7,265	40,040	111,101	14,034	57,322	143,970	10,936	49,279	128,597

Source: Authors' calculations

Appendix Table 1

Federal Budget Deficit
CBO Baseline and Extended Policy 2012-2021

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2012-2021
1. CBO Baseline	**1,399**	**1,081**	**692**	**513**	**538**	**635**	**590**	**585**	**665**	**710**	**729**	**6,737**
as percent of nominal GDP	**9.3**	**6.9**	**4.2**	**3.0**	**3.0**	**3.3**	**2.9**	**2.8**	**3.0**	**3.1**	**3.1**	**3.4**
Adjustments for tax policy												
Extend income tax, estate tax, and AMT provisions	0	2	118	245	276	287	297	306	314	323	333	2,502
Index AMT for inflation (includes interaction)	0	9	105	99	110	123	138	154	173	192	213	1,318
Extend other expiring tax provisions	0	12	77	113	100	87	80	75	72	71	73	759
Subtotal	0	24	300	457	486	498	515	534	559	587	619	4,579
as percent of nominal GDP	0.0	0.2	1.8	2.7	2.7	2.6	2.6	2.6	2.6	778.6	2.6	2.3
Adjustments for spending policy												
Adjust defense spending	0	-21	-54	-87	-113	-129	-137	-142	-147	-150	-153	-1,134
Adjust non-defense non-stimulus DS for population growth	0	6	12	18	25	31	39	46	54	63	72	366
Freeze Medicare physician payment rates	0	12	19	19	21	24	25	28	31	34	36	249
Subtotal	0	-3	-23	-49	-67	-74	-74	-68	-61	-53	-45	-519
as percent of nominal GDP	0.0	0.0	-0.1	-0.3	-0.4	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.3
Net Interest	0	3	15	32	53	79	108	140	174	212	237	1,053
as a percent of nominal GDP	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.7	0.8	0.9	1.0	0.5
3. Extended Policy	**1,399**	**1,105**	**983**	**953**	**1,010**	**1,138**	**1,140**	**1,191**	**1,337**	**1,455**	**1,540**	**11,850**
as a percent of nominal GDP	**9.3**	**7.0**	**6.0**	**5.5**	**5.6**	**5.9**	**5.7**	**5.7**	**6.1**	**6.4**	**6.5**	**6.0**
GDP	15,034	15,693	16,400	17,258	18,195	19,141	20,033	20,935	21,856	22,817	23,810	196,138

Appendix Table 2

Federal Budget Deficit
CBO Baseline and Administration Budget 2012-2021

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2012-2021
1. CBO Baseline	**1,399**	**1,081**	**692**	**513**	**538**	**635**	**590**	**585**	**665**	**710**	**729**	**6,737**
as percent of nominal GDP	**9.3**	**6.9**	**4.2**	**3.0**	**3.0**	**3.3**	**2.9**	**2.8**	**3.0**	**3.1**	**3.1**	**3.4**
Adjustments for tax policy												
Provisions related to EGTRRA and JGTRRA	0	1	113	182	191	199	209	217	226	237	248	1,823
Index the AMT starting from 2011 levels	0	9	93	39	45	53	62	73	87	102	119	682
Modify estate and gift tax rates	0	0	1	21	25	27	29	31	33	35	37	239
Limit the tax rate at which itemized deductions reduce tax liability	0	-4	-20	-25	-28	-30	-33	-35	-37	-39	-41	-292
Reform the U.S. international tax system	0	-6	-13	-12	-13	-13	-14	-15	-16	-17	-15	-134
Tax most dividends at 20% for higher- income taxpayers	0	0	3	8	9	10	11	13	13	14	14	95
Extend the research and experimentation tax credit	0	3	6	7	8	9	9	10	11	12	13	88
Extend the American Opportunity Credit	0	0	2	8	8	8	9	9	9	10	10	73
Modify and extend the Build America Bonds Program	*	-1	-2	-3	-5	-6	-8	-9	-11	-12	-14	-71
Other proposals	1	11	6	3	-42.0	-66	-21	-17	-13	-20	-17	-176
Subtotal	1	13	189	228	198	191	253	277	302	322	354	2,327
as percent of nominal GDP	0.0	0.1	1.2	1.3	1.1	1.0	1.3	1.3	1.4	1.4	1.5	1.2
Adjustments for spending policy												
Reclassify surface transportation spending as mandatory	0	15	36	45	50	54	57	59	61	62	64	503
Increase transportation funding	0	6	13	15	18	21	25	28	29	30	29	214
Freeze Medicare physician payment rates at 2011 levels	0	12	19	23	26	29	31	34	37	41	45	297
Offset cost of freezing Medicare's physician payment	0	0	-1	-1	-3	-4	-6	-6	-7	-8	-13	-49
Extend or Expand certain refundable tax credits	0	0	1	36	36	37	37	38	38	38	38	299
Modify and extend the Built America Bonds program	0	1	2	3	5	7	8	10	12	13	15	76
Other proposals	16	16	8	6	-2	-3	-5	-6	-7	-7	-8	-8
Discretionary Spending- Defense	4	13	-36	-71	-85	-95	-100	-107	-115	-124	-133	-853
Discretionary Spending- Non Defense	4	4	-28	-49	-61	-68	-73	-76	-81	-79	-87	-598
Subtotal	24	67	14	7	-16	-22	-26	-26	-33	-34	-50	-119
as percent of nominal GDP	0.2	0.4	0.1	0.0	-0.1	-0.1	-0.1	-0.1	-0.2	-0.1	-0.2	-0.1
Net Interest	1	4	11	20	31	43	59	76	95	116	129	585
as a percent of nominal GDP	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.5	0.3
3. Administration Budget	**1,425**	**1,165**	**906**	**768**	**751**	**847**	**876**	**912**	**1,029**	**1,114**	**1,162**	**9,530**
as a percent of nominal GDP	**9.5**	**7.4**	**5.5**	**4.5**	**4.1**	**4.4**	**4.4**	**4.4**	**4.7**	**4.9**	**4.9**	**4.9**
GDP	15,034	15,693	16,400	17,258	18,195	19,141	20,033	20,935	21,856	22,817	23,810	196,138