FISCAL MYOPIA

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ABSTRACT

While political leaders remain tied up in discussions of government shutdowns and debt ceiling increases, we focus on the medium- and long-term budget outlook, where more serious challenges lie. With the passage of the American Taxpayer Relief Act, the imposition of the sequester, and changes in health care cost projections, some observers are claiming that fiscal issues have been resolved. The release of several new reports provides an opportunity to re-examine these issues. Our overarching conclusion is that, while the nation faces many other pressing economic and social issues, we are still far from attaining a sustainable fiscal policy.

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I. Introduction

   While political leaders remain tied up in discussions of government shutdowns and debt ceiling increases, this paper focuses on the medium- and long-term budget outlook, where more serious fiscal challenges lie. With the passage of the American Taxpayer Relief Act of 2012 (in early January, 2013), the imposition of the sequester, and changes in health care cost projections, some observers are claiming that fiscal issues have been, essentially, resolved and that the nation should move on to other issues. The release of several new reports – including the Congressional Budget Office's Updated Budget Projections (May 2013), CBO's long-term budget outlook (September 2013), long-term projections from the Trustees of Social Security and Medicare (May 2013) and BEA's GDP revisions (July 2013) – provide an opportunity to re-examine these issues and to update our own estimates (most recently, Auerbach and Gale 2013) of the fiscal status of the country. Our overarching conclusion from this analysis is that, while the nation faces many other pressing economic and social issues – including boosting the strength and pace of the current recovery – we are still far from attaining a sustainable fiscal policy.

   While we may not face an imminent budget *crisis*, the 10-year budget outlook remains tenuous. There is no "smoking gun" in the 10-year projections. Mainly, there is "just" an overall continuing imbalance between spending and taxes. Under current policy projections, revenue is not projected to collapse, as it did in 2009-12, but rather to grow to higher-than-historical-average levels. Likewise, spending isn't spiraling out of control—it is projected at about the same share of GDP in 2023 as it was in 2013, as large cuts in discretionary spending are offset by increases in mandatory spending and net interest rising to historically high levels. Nevertheless, the budget situation is hardly optimal.

   Even if seemingly everything goes right – with respect to keeping the fiscal house in order – we still face the prospect of a high and rising debt-GDP ratio by the end of the next decade. For example, under the current policy baseline, even if:

- Revenues average 17.9 percent of GDP as projected from 2015 through 2023 and revenues from the personal income tax rise steadily to 9.4 percent of GDP in 2023 (a figured exceeded only once in U.S. history);

- There are no new wars; defense spending falls to its lowest share of the economy since before WWII;

- There are no new spending programs; non-defense discretionary spending falls to its lowest share of the economy since before separate records were kept starting in 1962;

- Significant reductions in projected health care cost growth occur as projected; and

- The economy returns to full employment in 2017 as projected and remains there without recession through 2023;

Nevertheless, the implications of those favorable trends (under the current policy baseline) would be that:

- Net interest payments will rise from 1.3 percent of GDP in 2013 to 3.1 percent in 2023, which is close to the highest ratio of interest to GDP in history (3.2 percent in 1991) and a sign of approaching fiscal unsustainability;

- The full-employment deficit would reach 3.5 percent of GDP in 2022 and 3.4 percent of GDP in 2023; (other than in the 2009-12 period, these would be the largest full-employment deficits except for four of the past 50 years);

- The debt/GDP ratio would be 72 percent by 2023. The ratio would be more than 20 percentage points higher in every year during the next decade than it was for any year between 1957 and 2007, and it would be double the 36 percent level it averaged during the 1957-2007 period and the 35 percent level it attained in 2007.

And, of course, the fiscal problems worsen after the following 10 years. Under current policy, and under the most optimistic of the health care spending scenarios we employ, the debt/GDP ratio will rise to 100 percent in 2034, continue to rise to 200 percent by 2057 and then continue to increase after that. All told, to keep the 2040 debt-GDP ratio at just over 70 percent, its current value, would require immediate and permanent policy adjustments – reductions in spending or increases in taxes – of 1.5-1.8 percent of GDP. To keep the ratio at its current level through 2089 would require adjustments of 3.0-4.6 percent of GDP. If policy makers wanted to return the debt/GDP ratio to its historical average of about 36 percent, the required policy adjustments would be even larger.

II. The 10-Year Budget Outlook

We provide two estimates of the 10-year outlook. The first estimate is simply CBO's May 2013 baseline (CBO 2013c). The CBO baseline is typically referred to as measuring "current law," but it differs from current law in at least three 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.[1] Third, the baseline assumes that if dedicated trust

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[1] CBO is instructed to assume that most mandatory programs that are slated expire during the budget window will persist throughout the entire projection period. CBO (2013c) 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. CBO is also instructed to assume the continuation of excise taxes that are dedicated to trust funds, even if they are scheduled to expire within the projection period.

funds – such as Medicare or OASDI – run out of money from which to pay scheduled benefits, that those scheduled benefits are paid anyway.[2]

The second approach, which we call "current policy," adjusts the current-law baseline for four factors. First, in its baseline, CBO assumes that all temporary tax provisions (other than excise taxes dedicated to trust funds) expire as scheduled. In our current policy baseline, these provisions are assumed to be extended. Second, under current law, payments to physicians under Medicare are scheduled to decline by about 25 percent in January 2014. In every year since 2003, however, the Administration and Congress stepped in to postpone these reductions, adopting the so-called "doc fix." Our current policy baseline assumes that similar actions will prevail in the future and thus includes the cost of maintaining physician payment rates under Medicare at their current levels. Third, based on CBO's projections of scenarios not included in its official baseline (CBO 2013a, Table 1-7), we assume that war-related defense spending will fall steeply after 2013, resulting in a $582 billion reduction in defense spending relative to the CBO's baseline. Fourth, we assume that the increase in disaster relief spending that occurred last year will not be permanent,

Note that we do not remove the sequester from the baseline. Both the current-law baseline and our current-policy baseline assume that the discretionary spending caps and sequestration procedures as imposed in the Budget Control Act of 2011 will be enforced. (CBO offers an alternative fiscal scenario (AFS). In the AFS, they remove the sequester, and make the first two adjustments that we make for current policy, but not the last two. Our adjustments reduce future deficits relative to the AFS.)

We analyze the 10-year situation through a series of graphs and highlight major conclusions. Deficit/GDP and debt/GDP ratios under the two scenarios are reported in Table 1, Appendix Table 1, and Figures 1 and 2. Under the current-law baseline, deficits fall from 3.9 percent of GDP currently to 2.1 percent in 2015, before rising to 3.3 by the end of the decade. Under current policy, the deficit falls to 2.4 percent by 2015 before rising to 3.4 percent by the end of the decade. Note that the underlying economic projection assumes that the economy returns to full employment by 2017 and remains there throughout the remainder of the projection period, so that all projections after 2017 represent full-employment deficits.

The debt-to-GDP ratio is projected to fall slightly until 2018 under each the scenarios – from 72.5 percent of GDP currently to 68.4 percent under current law and 69.2 percent under current policy -- and then to rise by 2023 – to 71.1 percent under current law and 72.0 percent under current policy.

(1) There are no major differences between the current-law baseline and current-policy baselines.

With the passage of the American Taxpayer Relief Act of 2012, much of the difference between the current-law baseline and various current policy scenarios has disappeared. In April

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[2] See CBO (2010, footnote 11), which states "CBO prepares cost estimates for legislation under the assumption that *scheduled payments* will be made, which is consistent with a long-standing statutory requirement that CBO, in its baseline projections, assume that laws are implemented as specified and that funding for entitlement programs is adequate to make all payments. See section 257 of the Balanced Budget and Emergency Deficit Control Act of 1985, Public Law 99-177, as amended"; 2 U.S.C. 907.

2012, we estimated a difference between current law and current policy of $6.9 trillion in deficits through 2022 and a 28 percent of GDP difference in debt/GDP levels at the end of 2022. Now those differences (over the same time period) have shrunk to $223 billion and less than 1 percent of GDP, respectively. The vast majority of this narrowing comes from the permanent adoption of several long-standing but temporary tax policies, relating to the Bush tax cuts and the alternative minimum tax.

(2) The debt/GDP ratio is projected to remain high over the next decade.

Debt is projected to hover above 70 percent of GDP over most of the decade under either baseline. These levels are high compared to past experience. The U.S. has only faced higher levels in 7 years in its entire history, all around World War II. From 1957 to 2007, the ratio did not exceed 50 percent and averaged just 36 percent of GDP. In 2007, before the financial crisis and the Great Recession, the ratio was 35 percent. Relative to the recent shifts of historical magnitude -- the doubling of the ratio since 2007 -- the debt/GDP ratio is projected to be relatively stable at a new, higher level over the next 10 years.

(3) The debt-GDP ratio is projected to be rising at the end of the decade.

Under the CBO baseline, the debt-GDP ratio rises by 2.7 percentage points from 2018 to 2023. Under the current policy baseline, the increase is 2.9 percentage points over the same period. These increases occur despite the projection that the economy will be at full employment during this period. The trends hint at the unsustainability of the fiscal situation and the need for longer-term analysis.

Figure 3 looks at total spending, non-interest spending and revenues over the next decade under the current policy baseline, and offers several key conclusions.

(4) Total spending is projected to be about the same as a share of the economy in 2023 as it is in 2013.

Under current policy, total spending was 21.1 percent of GDP in 2013, and is projected to fall to 20.3 percent in 2018, before rising to 21.5 percent by 2023.

(5) Net interest payments are projected to rise to high levels.

Net interest payments rise from 1.3 percent of GDP in 2013 to 3.1 percent in 2023 under the current policy baseline, a high level relative to the past. Net interest payments previously peaked at 3.2 percent of GDP in 1991. The projected high level is due to the increase in the debt/GDP level in recent years, coupled with an expected rise in interest rates as the economy returns to full employment. The projected rise in interest rates is particularly notable given both the low levels of current interest rates and the magnitude of the projected changes. The three-month Treasury bill rate rises to 4.0 percent in 2023 compared to 0.1 percent in 2013, according to CBO's February 2013 economic projections. The 10-year Treasury note rate rises to 5.2 percent in 2023 compared to 1.9 percent in 2013. Various measures of the inflation rate are expected to rise by between 0.5 and 0.7 percentage points over the same period, so almost all of the projected increases represent higher real interest rates.

(6) Non-interest spending is projected to fall.

In 2013, non-interest spending was 19.5 percent of GDP. Under current policy, this figure is projected to fall to 18.0 percent by 2018. It rises slightly by 2023 to 18.4 percent, but still remains 1.1 percentage points of GDP lower than the 2013 level. This is a higher spending level than the historical average. From 1957 to 2007, non-interest spending averaged about 17.5 percent of GDP.

(7) Revenues are not only projected to recover from extremely low levels in recent years, but to rise significantly to above average historical levels.

Due to the recession and slow recovery, as well as tax policy choices, federal revenues have been at historic lows, hovering around 15 percent of GDP since 2009, representing the lowest share of GDP in almost 60 years. As the economy recovers, and ATRA and surtaxes adopted under the Affordable Care Act (ACA) kick in, revenue will rise to 18.1 percent of GDP by 2016 and remain close to that level for the rest of the decade. Receipts averaged 17.5 percent of GDP from 1957 to 2007.

Income tax revenues are projected to grow steadily and stay high (not shown in the figure). Revenues from the individual income tax are projected to rise steadily through the decade, reaching 9.4 percent of GDP by 2023 under current law. The only years the income tax has ever raised at least 9 percent of GDP in revenue were 1944 (at the height of the war), 1981-82 (leading to the Reagan tax cuts) and 1998-2001 (leading to the Bush tax cuts in 2001 and 2003).[3]

Figure 4 shows data on the composition of spending over the next 10 years.

(8) The decline in non-interest spending is due to declines in discretionary spending, including both the defense and non-defense portions.

The projected decrease in discretionary spending is due to the Budget Control Act of 2011. The legislation instituted caps on discretionary spending that would, by themselves, reduce discretionary spending to its lowest share of the economy since records separate records were kept in 1962. The legislation also instituted, in the absence of further deficit reduction, a broad-based sequester of federal spending – mainly discretionary – that will drive down discretionary spending even further.

Under current policy, discretionary spending will decrease from 7.5 percent of GDP in 2013 to 4.8 percent in 2023. Defense spending is projected to fall from 3.9 percent of GDP in 2013 to 2.4 percent in 2023. Non-defense discretionary spending, having already fallen from a peak of 4.5 percent of GDP in 2010, is projected to fall from 3.6 percent of GDP in 2013 to 2.5 percent of GDP in 2023.

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[3] The expiring tax provisions include the partial expensing of investment property, section 179 expensing, and the new and expanded refundable tax credits originally enacted in the 2009 stimulus, among many minor provisions. Although it is not immediately clear how much extension of temporary tax policies would reduce income tax receipts (as opposed to other receipts), the total revenue loss is 0.4 percent of GDP – that is, even if the entire loss occurred in the income tax, revenues from that source would still be high relative to levels that have been viable politically in the past. In our work in the long-term section and in Kogan et al. (2013) about one quarter of the costs of extending temporary tax policies is allocated to the income tax. Most of the rest is allocated to the corporate tax.

All of these shares are remarkably low relative to historical figures. Between 1962 and 2012, the lowest discretionary spending level as a share of GDP occurred in 1999, at 6.0 percent, and the lowest share for defense spending was 2.9 percent of GDP in 1999-2001.

(9) Mandatory spending rises, but slower cost growth is projected for Medicare and Medicaid.

Mandatory spending is projected to rise from 12.2 percent of GDP in 2013 to 13.5 percent in 2022 and 2023. This is lower than CBO's projection last year for 2022, which was 13.8 percent.[4] The lower mandatory spending is due to slower projected cost growth in the major federal health programs, Medicare and Medicaid. Last year, CBO expected Medicare and Medicaid to account for about 6.7 percent of GDP in 2022; this year it projects these programs to be 6.3 percent of GDP in 2022. CBO's projections for non-health and non-Social Security mandatory spending increased by 0.1 percentage points of GDP, partially offsetting the projected decrease in Medicare and Medicaid growth (CBO 2013b).

III. THE LONG-TERM OUTLOOK

A. Building a Projection

We build our long-term model starting from the current-law and current-policy baselines described above. We assume that most categories of spending and revenues remain constant at their 2023 share of GDP in subsequent years. Thus, for those categories, any differences in the baselines as of 2023 are maintained throughout the long-term scenarios. Assuming constant shares of GDP, however, would be seriously misleading for the major entitlement programs and their associated sources of funding. For the Medicare and OASDI programs, we project all elements of spending and dedicated revenues (payroll taxes, income taxes on benefits, premiums and contributions from states) using the intermediate projections in the 2013 Trustees reports.[5] Social Security spending, Medicare spending, and payroll taxes follow the growth rates assumed in the Trustees' projections of the ratios of taxes and spending to GDP for the period 2024–2090 for OASDI and 2024–2080 for Medicare, assuming that these ratios are constant at their terminal values thereafter. For Medicaid, CHIP, and exchange subsidies, we use growth rates implied by CBO's most recent long-term projections (CBO 2013e) through 2088 and assume that spending as a share of GDP is constant thereafter. Net interest is calculated as the product of the Social Security Trustees' projected interest rate on government debt and the projection of the level of net debt held at the beginning of the year.

These assumptions 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. If current-law tax parameters were extended forward, income taxes would

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[4] Last year's CBO's projection of Medicare and Medicaid costs in 2022 was 14.4 percent, using GDP projections and health care spending projections at that time (CBO 2012). The 13.8 percent reported in the text takes CBO's spending projection from last year (in dollars) and divides by the updated GDP projection for 2022 (CBO 2013d).

[5] Details of these computations are available from the authors upon request. The 2013 Medicare Trustees Report is at http://www.cms.gov/ReportsTrustFunds/downloads/tr2013.pdf. The 2013 OASDI Trustees Report is at http://www.ssa.gov/OACT/TR/2013/tr2013.pdf.

rise as a share of GDP (due to bracket creep and rising withdrawals from retirement plans). Our projection implicitly assumes policymakers will cut taxes in response. Our projection also assumes that a richer society will want to spend more on discretionary spending, going beyond the services provided by government in 2023. Kamin (2012) and Kogan et al. (2013) provide additional perspective on these assumptions and we provide sensitivity estimates below.

We provide three projections of Medicare spending. As noted, our base case projections come from the intermediate projections of the Medicare Trustees, which 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 ACA. 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 has, since 2010, released a separate set of projections (CMS Office of the Actuary 2013) showing less optimistic (although still positive) reductions in spending. CBO's long-term budget outlook (2013e) provides a third, and more pessimistic projected path of Medicare spending.

B. Basic projections

Figure 5 shows projected revenues and non-interest expenditures through 2089 under two "bracketing" scenarios: the most optimistic scenario (CBO current-law baseline, Medicare Trustees health spending assumptions) and the most pessimistic scenario (our current-policy baseline, CBO's extended Medicare projections[6]). Under the former, non-interest outlays will keep rising and will reach 22.9 percent of GDP by 2089 – significantly higher than the 18.4 percent of GDP projected for revenue for that year. Thus, even using the most optimistic projections for both the short term and the long term, the current gap between spending and revenues persists, and indeed grows, far into the future. Under the pessimistic scenario, revenue will be lower — at 17.9 percent of GDP, closer to its historical share — and non-interest outlays will exceed 27 percent of GDP.

Figure 6 shows the implied debt-to-GDP ratios under the most optimistic and most pessimistic projections. Under either scenario, the economy would pass its highest-ever debt-to-GDP ratio (106.1 percent, in 1946) by shortly after 2035. Projected debt/GDP ratios would hit 200 percent in 2059 under the most optimistic scenario and in 2053 under the most pessimistic. In all cases, the following years would see additional growth in the debt-to-GDP ratio.

C. Fiscal gap

The fiscal gap is an accounting measure that is intended to reflect the long-term budgetary status of the government (Auerbach 1994).[7] The fiscal gap answers the question: if

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[6] CBO's alternative fiscal projection for Medicare and Medicaid is even more pessimistic in the long run, projecting these two categories of spending each to be 0.4 percent higher as a share of GDP than under the extended baseline. The associated fiscal gap, due to these two program areas, would be higher than under the extended baseline by somewhat less, with the exact increase depending on the length of the horizon over which the gaps is calculated.

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

you want to start a policy change in a given year and reach a given debt/GDP target in a given future year, what is the size of the annual, constant-share-of-GDP increase in taxes and/or reductions in non-interest expenditures that would be required? For example, one might ask what immediate and constant policy change would be needed to obtain the same debt/GDP in 2089 as exists today. [8] Or one might ask, if we wanted the debt/GDP ratio to return to its historical average of 36 percent by 2038, what immediate and constant-share-of-GDP change would be required starting in 2018?

Table 2 displays calculations of the long-term fiscal gap under the two baseline scenarios described above for the next 10 years, and under three scenarios for federal health care spending. We show the required policy changes over three horizons -- through 2040, through 2089, and over the infinite horizon – assuming the policy changes begin in 2013, and aiming for the same debt/GDP ratio in the terminal year (70.1 percent of GDP) as existed at the end of 2012.

Under the current-law baseline, with the Medicare Trustees assumptions about projected health expenditures, the gap through 2040 is 1.49 percent of GDP.[9] This implies that an immediate and permanent increase in taxes or cut in spending of roughly $250 billion per year in current terms would be needed to achieve the current debt/GDP ratio in 2040.

The fiscal gap is larger if the time horizon is extended, since the budget is projected to be running substantial deficits in future years. If the horizon is extended through 2089, the gap rises to 3.05 percent of GDP. If it is extended indefinitely, the fiscal gap rises to 4.01 percent of GDP.

The estimated gaps are about 0.2 percent of GDP larger under the current policy baseline. The choice of health care scenario has a significant and changing impact on the estimated fiscal gaps. Through 2040, the differences in the fiscal gaps implied by the different health care scenarios are small – about 0.15 percent of GDP. Through the 2089 horizon, however, the differences are much larger. Using the CMS actuaries' projection raises the fiscal gap by about 1 percent of GDP relative to use the Medicare Trustee projections. Using the CBO Medicare projections raises the gap by an additional 0.4 percent of GDP. These differences are substantially larger – 1.7 percent of GDP and an additional 0.95 percent of GDP – over the infinite horizon.

All told, the fiscal gaps range from 1.5-1.8 percent of GDP through 2040, 3.0-4.6 percent of GDP through 2089 and even larger amounts – 4 to 7 percent of GDP on a permanent basis.

Although not shown in the table, delaying the implementation of a fiscal solution will increase the fiscal gap. If a solution is not implemented until 2018 — after CBO projects the economy will have returned to full employment — the estimated permanent fiscal gaps rise by 0.3-0.4 percentage points of GDP. Although gradual or slightly delayed implementation may be

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[8] 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. 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 by less than 0.1 percent of GDP).

[9] 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 2023, 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.

preferable in light of a still-struggling recovery, the decision to delay should be made with awareness that the necessary fiscal adjustment will then be larger.

As noted above, the projections assume that outlays for discretionary spending remain constant as a share of GDP after 2023. If we instead assumed that such spending stayed constant in real, per capita terms, discretionary spending would fall from 4.8 percent of GDP in 2023 under the current policy baseline, to 3.8 percent in 2040 and 1.8 percent in 2089. This would reduce the fiscal gap by about 0.5 percent of GDP through 2040, 2 percent of GDP through 2080 and just over 3 percent of GDP on a permanent basis.

We assumed that tax revenues would remain a constant share of GDP after 2023. Under a strict view of current law, tax revenues would rise as a share of GDP because of "real bracket creep" (i.e., the increase in the tax/GDP ratio caused by real income growth pushing taxpayers into higher brackets) and increased withdrawals from retirement accounts. Assuming that policy makers do not offset these increases, revenues would rise from 17.9 percent of GDP in 2023 under the current policy baseline to 19.5 percent of GDP in 2040 and 21.8 percent of GDP in 2089. This would reduce the estimated fiscal gaps by slightly less than the discretionary spending adjustment noted above over the same time horizons.

Table 3 shows fiscal gaps under the current policy baseline, under different combinations of dates when policy changes begin, debt targets, and dates for reaching the target. We employ two start dates for policy – current (i.e. 2013) and 2018, the latter reflecting the reality of political deadlock, the undesirability of austerity policies in a weak economy, and the possibility of implementation delays. We employ three debt targets – 70.1 percent, the current ratio of debt-to-GDP; 60 percent, a ratio proposed by several Commissions, including Bowles-Simpson (National Commission on Fiscal Responsibility and Reform 2010) and Domenici-Rivlin (Debt Reduction Task Force 2010), and 36 percent (representing both the average from 1957-2007 and roughly the value in 2007 before the financial crisis and Great Recession hit). We look at both roughly 25-year and 75-year target dates for reaching the new debt/GDP level.

The main message of Table 3 is that it will be quite difficult to return to historical levels of the debt/GDP ratio anytime soon. In order to get the debt/GDP ratio down to 36 percent, even over the next 25 years, would require cuts on the order of 3.4 percent of GDP, starting in 2018. To reach that ratio by 2089 would require cuts on the order of 3.9 percent of GDP starting in 2018. Even reducing the gap to 60 percent over the next 25 years would require cuts of 2.5 percent of GDP beginning in 2018.

IV. CONCLUSIONS

Recent legislative changes – including the Budget Control Act of 2011 and the American Taxpayer Relief Act of 2012 – along with recent and projected slowdowns in the growth rate of health care spending have helped improve the nation's medium-term and long-term budget picture. But the country was starting from a position of a substantial fiscal gap, and so while the recent improvements have helped shave part of the problem away, there is still a long way to go. Moreover, even as current-period deficits fall to more typical historical levels from the enormous levels that persisted in 2009-11, the nation now must carry a debt load that is twice as large as its

historical average and that makes budget outcomes much more sensitive to interest rates.

Under even the most optimistic scenario, the necessary adjustments will be large relative to those adopted under the recent legislation. Moreover, under the most optimistic long-run scenario, the projections already incorporate the effects of success at "bending the curve" of health care cost growth, so further measures will clearly be needed. Also, the changes needed relate much more to medium- and long-term deficits, not short-term deficits. They thus are essentially unrelated to and unaffected by the ongoing fiscal drama in Washington, which is basically a side-show as far as the most pressing fiscal issues are concerned.

REFERENCES

Auerbach, Alan J. 1994. "The U.S. Fiscal Problem: Where We Are, How We Got Here, and Where We're Going." In *National Bureau of Economic Research Macroeconomics Annual 1994, Volume 9*, edited by Stanley Fischer and Julio Rotemberg, 141–175. Cambridge, MA: MIT Press.

Auerbach, Alan J. 1997. "Quantifying the Current U.S. Fiscal Imbalance." *National Tax Journal* 50 (3): 387–98.

Auerbach, Alan J., William G. Gale, Peter R. Orszag, and Samara Potter. 2003. "Budget Blues: The Fiscal Outlook and Options for Reform." In Aaron, Henry J., James Lindsay, and Pietro Nivola (eds.), *Agenda for the Nation*, 109–143. Brookings Institution, Washington, DC.

Auerbach, Alan J., and William G. Gale. 2013. "Fiscal Fatigue: Tracking the Budget Outlook as Political Leaders Lurch from One Artificial Crisis to Another." Brookings Institution, Washington, DC.

Board of Trustees, Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds. 2013. *The 2013 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds*. Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds, Washington, DC.

Board of Trustees, Federal Hospital Insurance and Federal Supplemental Medical Insurance Trust Funds. 2013. *The 2013 Annual Report of the Board of Trustees of the Federal Hospital Insurance and Federal Supplemental Medical Insurance Trust Funds*. Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds, Washington, DC.

CMS Office of the Actuary. 2013. *Projected Medicare Expenditures under Illustrative Scenarios with Alternative Payment Updates to Medicare Providers*. Centers for Medicare and Medicaid Services, Baltimore, MD.

Congressional Budget Office. 2010. *Social Security Policy Options*. Congressional Budget Office, Washington, DC.

Congressional Budget Office. 2012. *An Update to the Budget and Economic Outlook: Fiscal Years 2012 to 2022*. Congressional Budget Office, Washington, DC.

Congressional Budget Office. 2013a. *The Budget and Economic Outlook: Fiscal Years 2013 to 2023*. Congressional Budget Office, Washington, DC.

Congressional Budget Office. 2013b. "How Have CBO's Projections of Spending for Medicare and Medicaid Changed Since the August 2012 Baseline?" Blog Post. Available at: <http://cbo.gov/publication/43835>

Congressional Budget Office. 2013c. *Updated Budget Projections: Fiscal Years 2013 to 2023*. Congressional Budget Office, Washington, DC.

Congressional Budget Office. 2013d. "CBO's Baseline Budget Projections, as of May 2013, With Percentages of GDP Updated to Reflect Recent Revisions by the Bureau of Economic Analysis." Data or Technical Information. Available at: <http://cbo.gov/publication/44574>

Congressional Budget Office. 2013e. *The 2013 Long-Term Budget Outlook*. Congressional Budget Office. Washington, DC.

Debt Reduction Task Force. 2010. "Restoring America's Future: Reviving the Economy, Cutting Spending and Debt, and Creating a Simple, Pro-Growth Tax System." Senator Pete Domenici and Dr. Alice Rivlin, Bipartisan Policy Center.

Kamin, David. 2012. "Are We There Yet?: On a Path to Closing America's Long-Run Deficit." *Tax Notes* 137 (3): 53-70.

Kogan, Richard, Kathy Ruffing, and Paul N. Van de Water. 2013. "Long-Term Budget Outlook Remains Challenging, But Recent Legislation Has Made It More Manageable." Center on Budget and Policy Priorities, Washington, DC.

National Commission on Fiscal Responsibility and Reform. 2010. "The Moment of Truth: Report of the National Commission on Fiscal Responsibility and Reform."
Peterson-Pew Commission on Budget Reform. 2010. "Getting Back in the Black."

Table 1

Federal Budget Deficit and Debt
CBO Baseline and Extended Policy 2014-2023[1]

	Deficit		Debt in 2023
	$ billions	% of GDP	% of GDP
CBO Baseline	**6,340**	**2.9**	**71.1**
Adjustments for tax policy			
Extend expiring tax provisions	938	0.4	
Net interest	185	0.1	
Adjustments for spending policy			
Drawdown in defense spending	-582	-0.3	
Remove extrapolation of continued disaster relief funding	-302	-0.1	
Freeze Medicare physician payment rates	138	0.1	
Net Interest	-133	-0.1	
Current Policy	**6,586**	**3.0**	**72.0**

Table 2
Fiscal Gaps for 70.1% Debt-GDP Ratio, Starting in 2013

Health Spending Assumptions	CBO Current Law			Extended Current Policy[1]		
	Through 2040	Through 2089	Permanent	Through 2040	Through 2089	Permanent
Medicare Trustees						
as a percent of GDP	1.49	3.05	4.01	1.68	3.26	4.23
in billions of present-value dollars	6,847	31,563	82,715	7,720	33,706	87,186
CMS Actuary						
as a percent of GDP	1.64	4.02	5.71	1.83	4.24	5.95
in billions of present-value dollars	7,503	41,569	117,762	8,382	43,810	122,577
CBO Extended Baseline						
as a percent of GDP	1.62	4.41	6.76	1.81	4.63	7.00
in billions of present-value dollars	7,431	45,616	139,297	8,309	47,896	144,324
Alternative Policy Options[2]						
Revenues Grow with Bracket Creep and Retirement Withdrawals	-0.48	-1.84	-2.86	-0.47	-1.82	-2.83
Discretionary and Other Mandatory Outlays Grow at Real Per Capita Rates	-0.49	-2.06	-3.30	-0.46	-1.95	-3.12
Use CBO's Estimates of Social Security Benefit Spending	0.13	0.36	0.59	0.13	0.36	0.59

Source: Authors' calculations

[1]The "Extended Policy" scenario differs from the CBO's baseline scenario by assuming that defense outlays will decrease as troops involved in Overseas Contingency Operations, assuming that Medicare SGR payment cuts will not occur, removing the extrapolation of disaster relief spending, and permanently extending the expiration of all scheduled tax cuts.

[2]The Alternative Policy Options are additive to the above fiscal gaps as they do not interact with the different health scenarios.

Table 3
Fiscal Gap Caculations for Various Start and Target Dates
Current Policy

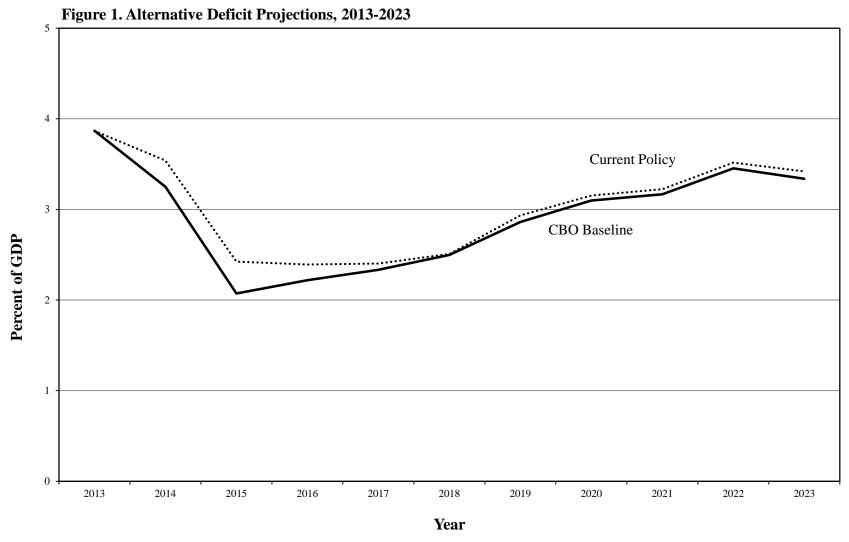|	Start Date	
	2013	**2018**
Target Date: 2040		
Debt target (current)	1.68	2.05
Debt target (60)	2.04	2.49
Debt target (36)	2.81	3.43
Target Date: 2089		
Debt target (current)	3.26	3.54
Debt target (60)	3.36	3.65
Debt target (36)	3.57	3.88

Source: Authors' calculations

Appendix Table 1

Federal Budget Defici
CBO Baseline and Extended Policy 2014-2023[1, 2]

Deficit ($ billions)

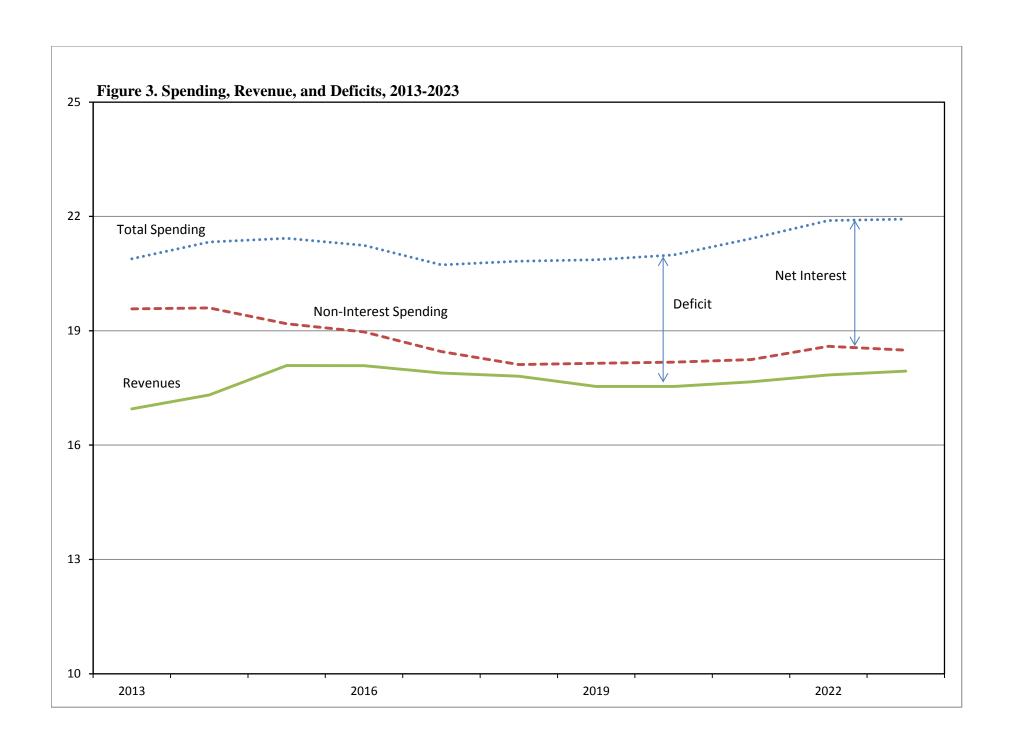|	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-23
CBO Baseline	**642**	**560**	**378**	**432**	**482**	**542**	**648**	**733**	**782**	**889**	**895**	**6,340**
as percent of nominal GDP	**3.9**	**3.3**	**2.1**	**2.2**	**2.3**	**2.5**	**2.9**	**3.1**	**3.2**	**3.5**	**3.3**	**2.9**
Adjustments for tax policy												
Extend expiring tax provisions	0	54	94	87	83	82	102	102	106	111	117	938
Subtotal	0	54	94	87	83	82	102	102	106	111	117	938
Net interest	0	0	1	4	8	14	19	25	31	38	45	185
Total adjustments for tax policy	0	55	95	91	91	96	121	127	137	148	162	1,123
as percent of nominal GDP	0.0	0.3	0.5	0.5	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.5
Adjustments for spending policy												
Drawdown in defense spending	0	-16	-37	-51	-60	-64	-67	-69	-71	-73	-74	-582
Remove extrapolation of continued disaster relief funding	0	-2	-9	-18	-26	-33	-38	-41	-43	-45	-47	-302
Freeze Medicare physician payment rates	0	14	16	13	12	12	13	14	14	15	16	138
Subtotal	0	-5	-30	-56	-73	-85	-92	-96	-100	-103	-105	-745
Net interest	0	0	0	-2	-4	-9	-13	-18	-23	-29	-35	-133
Total adjustments for spending policy	0	-5	-30	-57	-77	-94	-105	-114	-123	-132	-140	-878
as percent of nominal GDP	0.0	0	0	0	0	0	0	0	0	-1	-1	0
Current Policy	**642**	**610**	**442**	**465**	**496**	**544**	**665**	**746**	**795**	**905**	**917**	**6,586**
as a percent of nominal GDP	**3.9**	**3.5**	**2.4**	**2.4**	**2.4**	**2.5**	**2.9**	**3.2**	**3.2**	**3.5**	**3.4**	**3.0**
GDP	16,596	17,231	18,251	19,451	20,660	21,678	22,658	23,656	24,678	25,731	26,819	220,813

[1]Columns may not sum to total due to rounding.

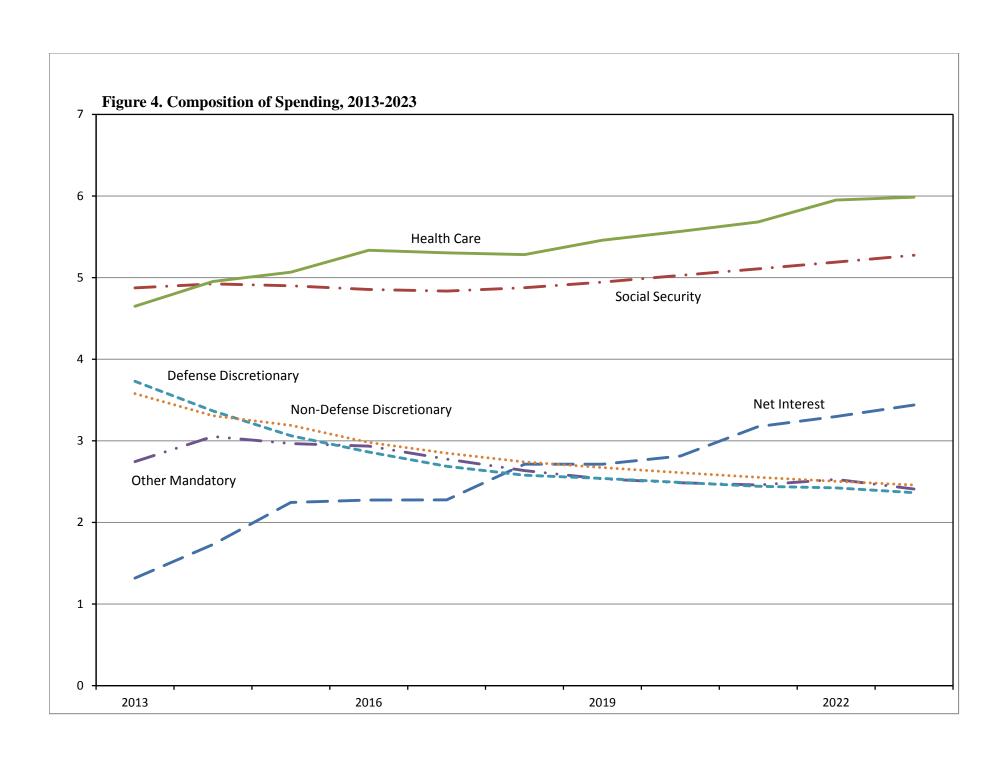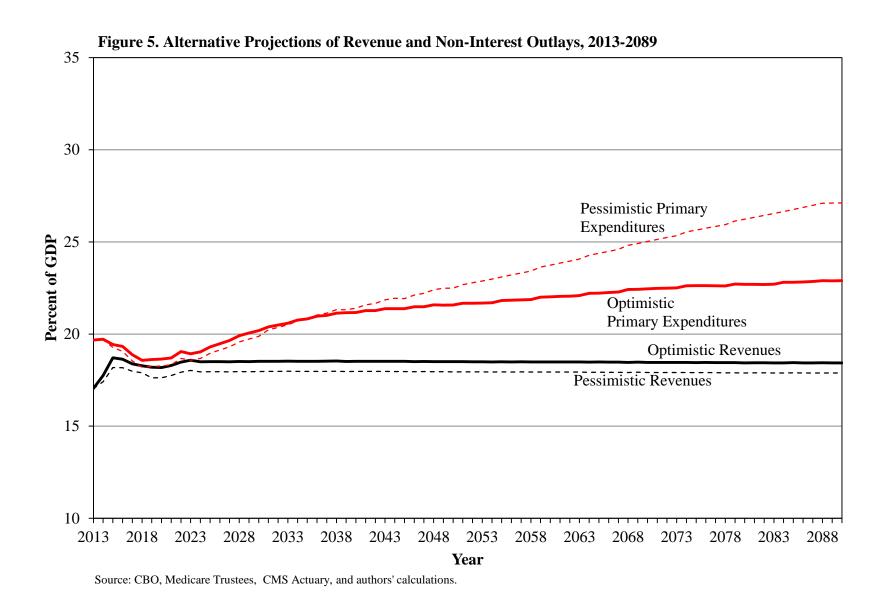[2]The source of these estimates is CBO (May 2013) "Updated Budget Projections: Fiscal Years 2013 to 2023."

Figure 1. Alternative Deficit Projections, 2013-2023

Source: CBO and authors' calculations.

Figure 2. Alternative Debt Projections, 2013-2023

Source: CBO and authors' calculations.

Figure 3. Spending, Revenue, and Deficits, 2013-2023

Figure 4. Composition of Spending, 2013-2023

Figure 5. Alternative Projections of Revenue and Non-Interest Outlays, 2013-2089

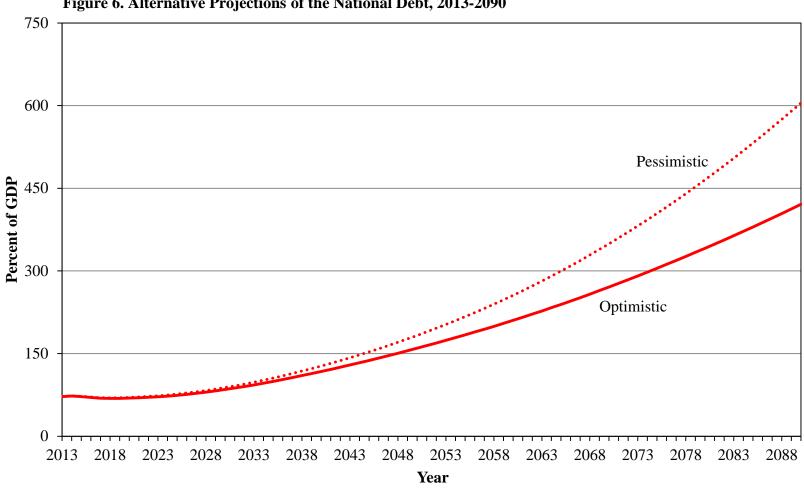Source: CBO, Medicare Trustees, CMS Actuary, and authors' calculations.

Figure 6. Alternative Projections of the National Debt, 2013-2090

The "Optimistic" debt projection uses the Extended Current Law Baseline and the Medicare Trustees' health assumptions. The Pessimistic debt projection uses the Extended Current Policy Baseline and the CBO's health assumptions in the *Long-Term Budget Outlook* (2013).

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