



# Federal Liabilities 2015 Update

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Summary

The 2014 Financial Report of the United States Government (FRUSG) identifies total federal liabilities of \$20.8 trillion as of September 30, 2014. The debt held by the public, \$12.8 trillion, comprises 62% of these liabilities. Federal employees' accrued benefits make up another 32%, and various other categories round out the remainder.

Notably absent from the official liabilities is a measure of current retirees' expected Social Security and Medicare benefits even though these elderly entitlement benefits are conceptually equivalent to federal employees' accrued benefits. The Social Security and Medicare benefits payable to retirees do appear in the FRUSG's Statement of Social Insurance, but not as liabilities. We suggest adding these portions of the elderly entitlement programs' obligations – net benefits payable to current retirees – to the official liabilities of the federal government.

Limiting the Social Security and Medicare benefits to just those payable to current retirees produces a liability measure of almost \$17 trillion, an amount that exceeds the debt held by the public and that is 82% of the size of the official liability measure. Together the official liabilities and the Social Security and Medicare benefits to be received by current retirees total \$37.8 trillion, or 217% of GDP.

The liability measures arising from past actions combined with the forward-looking fiscal gap and unfunded obligation measures provide policy makers with a comprehensive set of metrics allowing them to distinguish between commitments that have already been made and those that are contingent on continuing programs in their current forms.

## Federal Liabilities: 2015 Update

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### Toward a Comprehensive Measure of Federal Liabilities

This is our second annual report highlighting federal liabilities in which we add Social Security and Medicare benefits payable to current retirees to the *official* federal liabilities to arrive at a more comprehensive measure of the government's indebtedness.<sup>1</sup>

In a nutshell, our argument for including the Social Security and Medicare benefits payable to current retirees as federal liabilities is based on the following observations. First, Social Security and Medicare benefits payable to current retirees meet the definition of liabilities as articulated in the Financial Report of the United States Government (FRUSG): "Liabilities are obligations of the Government resulting from prior actions that will require financial resources."<sup>2</sup> Second, accrued entitlement benefits are conceptually equivalent to the federal employees' accrued benefits that are reported as federal liabilities. Third, limiting the Social Security and Medicare benefits to those payable to current retirees, as we do here, provides a conservative estimate of the total entitlement debt. In sum, excluding the entitlements benefits payable to current retirees underestimates the liability position of the federal government.

This exercise is unique from other ways of accounting for the federal government's obligations because it recognizes the portions of Social Security and Medicare accrued benefits – those expected by current retirees – that are extremely likely to be paid in full, are definitely tied to past actions. As we will illustrate, this subset of accrued benefits is largely protected from legislative reforms.

Here we distinguish between the federal government's commitments arising from *past* actions in contrast to commitments that may arise from *future* actions. Importantly, it complements the established ways of reporting on the financial status of the Social Security and Medicare programs. The programs' unfunded

obligation measures combine past and future spending commitments with past and expected future revenues that presuppose the continuation of the programs into the indefinite future.

Accounting for all liabilities arising from the federal government's past actions gives policy makers additional understanding of the government's current indebtedness before they consider future government spending either through continuation of current programs or through new programs. This report offers a conservative estimate of the liabilities that are essentially already on the government's books.

All of the liabilities represent either commitments to bond holders, to current retirees, or to current federal military or civilian employees. These liabilities are all largely unaffected by policy changes and forecasting assumptions, and collectively provide an important starting point in accounting for how much the federal government owes today based on what it has done in the past.

While retirees do not have ownership rights to their Social Security and Medicare benefits, the payment of these benefits in full is expected. Few if any reform proposals significantly reduce current retirees' benefits.

The 2014 FRUSG identified liabilities totaling \$20.8 trillion as of September 30, 2014. Adding the \$17 trillion in Social Security and Medicare benefits payable to current retirees produces a total of \$37.8 trillion in federal liabilities based on prior actions. The Social Security and Medicare benefits payable to current retirees are a third larger than the debt held by the public and are 45% of the total liabilities that include them.

The proposed total federal liabilities are equal to 217% of GDP, which is three times the oft mentioned debt's share of GDP at 74%. These total liability claims on future resources represent more than a dozen years of federal tax revenues at their 50-year average share of GDP of 17.4%.<sup>3</sup>

## **Debts, Liabilities, Obligations, Gaps and Imbalances**

The emphasis here on liabilities associated with past actions differs from the forward-looking measures of the federal government's future obligations associated with both past and future actions. The forward-looking measures include the Social Security and Medicare programs' unfunded obligations and broader government-wide measures like the fiscal gap and the fiscal imbalance. All of these forward-looking measures provide for a complete understanding of the resources necessary to cover the government's future commitments assuming the continuation of current policies. The narrower focus here takes a retrospective view in defining a federal liability. The connection between the forward-looking measures and the retrospective view taken in the present report is discussed further in the appendix.

The forward-looking measures of an elderly entitlement program's unfunded obligation begins with the difference between the present values of future expenditures less future revenues for a particular time horizon – 75 years or the infinite horizon. The current value for the Trust Fund partially offsets this amount, producing the unfunded obligation. The calculation of the unfunded obligation is subject to the assumptions made about future economic conditions, demographic changes, and in the case of Medicare the all-important rate of per capita health care spending growth and its relationship to per capita income growth.

Two additional forward-looking measures that take into account the entire federal government are the fiscal gap and the fiscal imbalance. The 75-year fiscal gap is regularly estimated by the Congressional Budget Office (CBO) and by the Office of Management and Budget (OMB). While there are several ways to define the fiscal gap, it is most frequently defined as the degree by which the primary surplus (the surplus not including interest payments) must increase relative to current law tax and spending policies such that the ratio of the debt to GDP at the end of the projection period is the same as the current ratio. Thus, the way the fiscal gap term is defined by the CBO and the OMB means that it does not include the repayment of the current debt.

The fiscal imbalance measure does include the repayment of the debt and it is calculated over the infinite horizon. Like the unfunded obligation measures for Medicare and Social Security, the fiscal gap and the fiscal imbalance are sensitive to long run economic and demographic assumptions and to interpretations and applications of current law tax and spending policies. The expected benefits of current retirees are much less sensitive to the long-run assumptions.

The passage of the Affordable Care Act (ACA) substantially reduced the long-range Medicare spending forecast, but also introduced great uncertainty. Two recent estimates by the OMB illustrate how the new legislation's assumptions affect the size of the 75-year fiscal gap. The OMB's fiscal gap measures are presented in *Analytical Perspectives*, a document that accompanies the annual publication of the *Budget of the U.S. Government*. The pre-ACA estimate of the 75-year fiscal gap was 8.0% of GDP in the Fiscal Year 2011 *Analytical Perspectives* (p. 52) but the fiscal gap became a 75-year fiscal **surplus** of 1.8% of GDP in the Fiscal Year 2015 *Analytical Perspectives* (p. 26)!

## The Liabilities of the US Government

Each year the FRUSG identifies the government’s assets and liabilities on the federal government’s balance sheet. As of September 30, 2014, the federal government’s assets totaled about \$3.1 trillion and are comprised of financial assets (loans receivable, inventories, and cash) and of nonfinancial property assets. Additionally, the government owns stewardship assets and has the power to tax and set monetary policy.

Though the \$3.1 trillion in assets is sizable, the liabilities of the federal government dwarf this amount. The liabilities reported in the FRUSG include the debt held by the public, the federal civilian and military employees’ accrued pension benefits, other retirement and disability benefits, as well as other liabilities. Figure 1 presents the liabilities of the U.S. federal government from 1995 to 2014. As of September 30, 2014:

- the debt held by the public stood at

\$12.8 trillion,

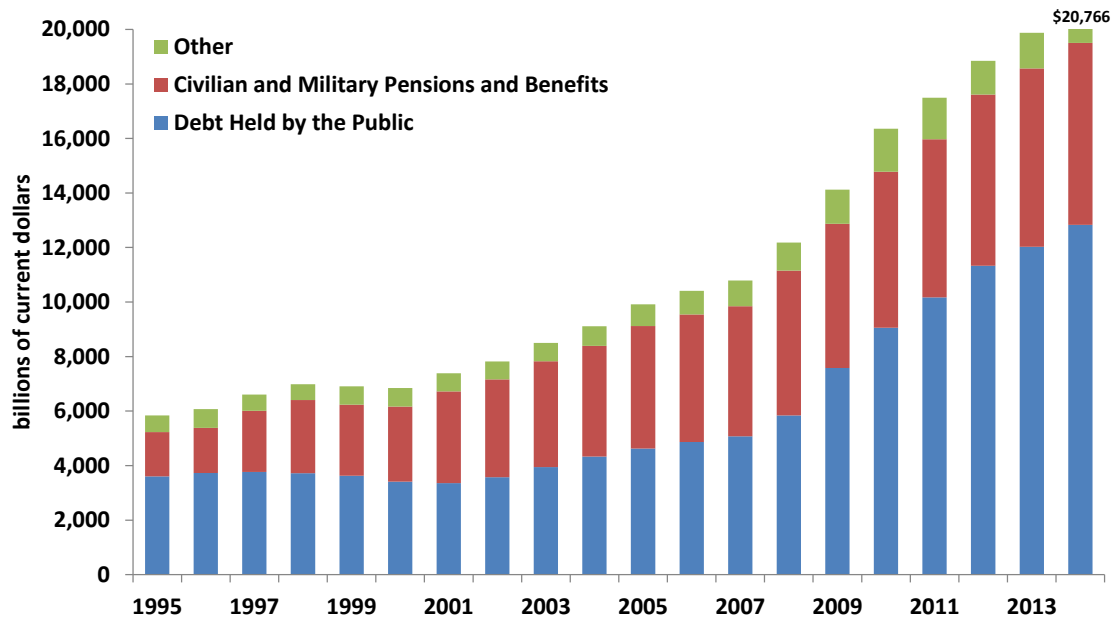
- federal employee and veteran benefits totaled \$6.7 trillion,
- and the other liabilities were about \$1.3 trillion,
- producing total liabilities of \$20.8 trillion.<sup>4</sup>

Figure 1 also illustrates the rapid growth in the federal liabilities in the years following the “Great Recession.” The liabilities grew 92% between 2007 and 2014 primarily due to the deficits’ additions to the debt held by the public. The debt held by the public in 2007 comprised 47% of the total liabilities reported in the FRUSG, but as of 2014, it accounted for 62%.<sup>5</sup>

One further note is merited at this point. The trust fund assets, like those held in the Social Security and Medicare Trust Funds, are assets to the particular agencies, but are also liabilities of the Treasury and thus they cancel each other in the consolidated financial statements.

FIGURE 1

LIABILITIES OF THE U.S. GOVERNMENT FROM THE FINANCIAL REPORTS OF THE UNITED STATES GOVERNMENT (1995-2014)



Source: Financial Reports of the United States Government (1998-2014) and Consolidated Financial Statements of the United States Government (1995-1997).

## Accrued Civilian and Military Pension and Benefit Liabilities

In addition to publicly held debt, the federal government's other major class of liabilities are the accrued retirement benefits of military and civilian employees. The benefits come in the form of pensions and other post-employment benefits (OPEBs) – mainly health care benefits. Figure 2 depicts the evolution of these accrued benefits from 1995 to 2014. The \$6,672 billion in accrued benefits as of September 2014 are comprised of:

- civilian pensions equal to \$1,905 billion (29% of the total),
- military pensions of \$1,565 billion (23% of the total),
- veterans' compensation and burial benefits of \$2,007 billion (30% of the total), and
- civilian and military OPEBs and other benefits of \$1,195 billion (18% of the total).

The veterans' compensation category includes disability and survivors benefits and

since 1995 this category has grown from 14% of the total accrued benefits to its present share of 30%. Altogether the accrued benefits have grown from 25% of contemporaneous annual GDP in 1995 to 38% of GDP in 2014.

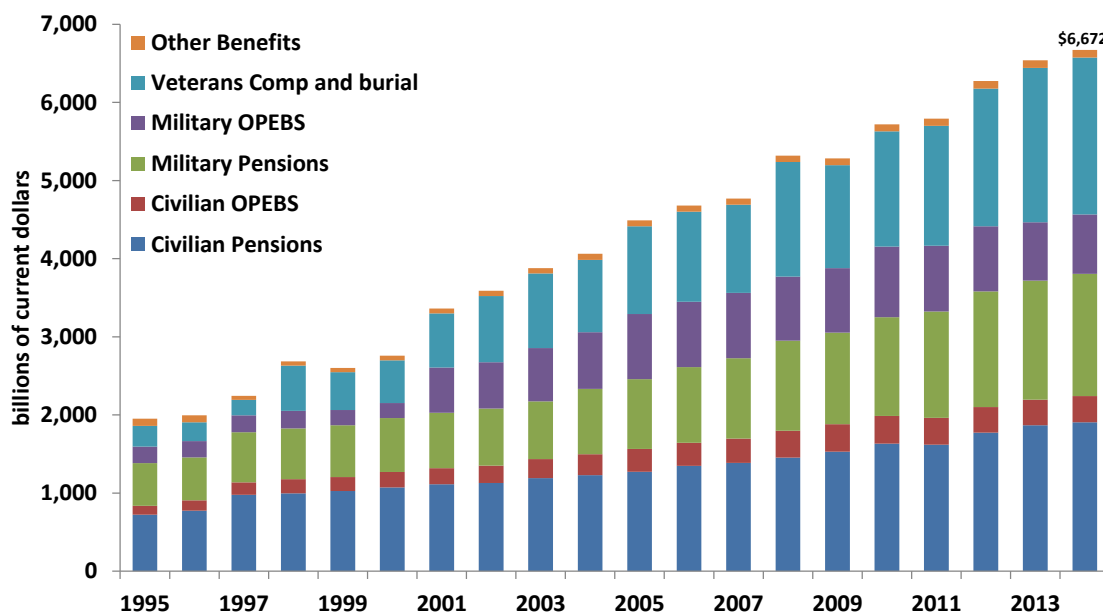
These liabilities are partially backed by intergovernmental securities, like those held in the Social Security and Medicare Trust Funds. However, as is the case with the entitlement programs' trust fund assets, the annual financial report of the Office of Personnel Management (OPM) makes clear that the assets held by the federal employee pension plan are concurrently liabilities of the Treasury and that the resources to pay benefits are not set aside by the federal government.<sup>6</sup>

"All of OPM's investments are in U.S. Treasury and Federal Financing Bank Securities held by Trust Funds – the Retirement, Health Insurance, and Life Insurance Programs. The Federal Government does not set aside assets to pay future benefits or other expenditures associates with the Trust Funds."

*OPM Fiscal Year Agency Financial Report, p. 56.*

FIGURE 2

### ACCRUED CIVILIAN AND MILITARY PENSION AND BENEFIT LIABILITIES (1995-2014)



Source: Financial Reports of the United States Government (1998-2014) and Consolidated Financial Statements of the United States Government (1995-1997).

## Are *Accrued Social Security and Medicare Benefits* also Liabilities of the Federal Government?

The inclusion of accrued federal civilian and military personnel retirement benefits in the liabilities of the federal government raises the question: If these retirement pensions and liabilities are included as liabilities why are accrued Social Security and Medicare benefits excluded from the liabilities?

The answer is not simple. For several years, the question of why Social Security and Medicare benefits were not included as liabilities on the federal government's balance sheet was addressed in the "Stewardship" chapter of *Analytical Perspectives*.<sup>i</sup>

The short answer to the question, given in *Analytical Perspectives*, is that while Social Security and Medicare are "obligations" of the federal government they are not liabilities "in a legal or accounting sense." *Analytical Perspectives* goes on to note that "the Government has unilaterally decreased as well as increased these benefits in the past, and future reforms could alter them again," and "There is no **bright line** dividing Medicare, Medicaid, and Social Security from other programs that promise benefits to people, and all the Government programs that do so should be accounted for similarly." "Finally, under Generally Accepted Accounting Principles (GAAP) Social Security is not considered to be a liability, so not accounting for it as such in this chapter is consistent with accounting standards."<sup>ii</sup>

The responses to the question of including Medicare and Social Security as federal liabilities do not make the distinction between liabilities arising from past actions and future obligations that presuppose the continuation of current policy. *The bright line* we propose to draw is between the Social Security and Medicare benefits that are already expected by and being paid to current retirees and the benefits that are expected by all other current as well as future participants in the programs. Accrued benefits of current workers are not included in our proposed Social Security and Medicare liability. These expected benefits, while based on prior actions, may be affected by future reforms.

Though retirees do not have a legal right to their expected Social Security and Medicare benefits, they have planned their retirement assuming that they will receive these benefits in full. They have acted as if these benefits are assets on par with private savings, pensions, and annuities.

Accounting for Social Security and Medicare presents an ongoing public policy puzzle. The benefits expected by retirees are not considered liabilities of the federal government or the assets (wealth) of the retirees. However, retirees (and their financial advisors) have behaved as if these benefits are wealth and almost all reform proposals ensure that current retirees are held harmless. Recognizing the expected benefits of retirees as both liabilities of the federal government and as the retirees' assets (wealth) will inform policy discussions.

<sup>i</sup> See Fiscal Years 1998-2010, *Analytical Perspective, Budget of the U.S. Government*. These versions of *Analytical Perspectives* include a "Stewardship" chapter in which the question of whether Social Security and Medicare should be included as government liabilities is addressed.

<sup>ii</sup> All quotes are from *Fiscal year 2010, Analytical Perspective, Budget of the U.S. Government*, p.186.

## Unfunded Obligations and Current Retirees' Expected Social Security and Medicare Benefits

The relationship between the accrued benefits payable to current retirees and the future-oriented unfunded obligation measures for Medicare and Social Security is laid out in the appendix.<sup>7</sup> The Medicare and Social Security Trustees Reports provide annual estimates of the programs' respective unfunded obligations and some of those components are incorporated into Table 1. Table 1 illustrates how the benefits payable to current retirees are related to the comprehensive accounting of a program's future scheduled benefits and dedicated tax revenues under current law.<sup>8</sup>

The benefits payable to current retirees net of their tax and premium payments in support of the programs are given in the first row of the table.<sup>9</sup> Net accrued Social Security benefits payable to participants who have attained the eligibility age of 62 totaled \$10.87 trillion as of

2014. Net Medicare benefits payable to participants who have attained the eligibility age of 65 totaled \$6.13 trillion as of 2014 and together the net Social Security and Medicare benefits payable to current retirees were \$16.99 trillion.

The next row presents the net benefits for current workers who have not reached the program's respective eligibility ages totaled \$39.91 trillion in 2014. This amount is comprised of \$17.33 trillion in net Social Security benefits and \$22.57 trillion in net Medicare benefits. The combination of the first two rows produces the 100-year closed-group unfunded obligation. These amounts indicate by how much current participants' expected future benefits exceed their future dedicated payroll tax payments and premium payments beginning in 2014 (at current tax rates).

Note that these shortfalls do not include general revenue transfers for Medicare Parts B and D even though these transfers are considered dedicated revenues in the Trustees Reports. The net benefits and shortfalls as

**TABLE 1**  
**SOCIAL SECURITY AND MEDICARE FUNDING SHORTFALLS AS OF JANUARY 1, 2014**  
**TRILLIONS OF DOLLARS**

	Social Security	Medicare	Total
<b>Net benefits accrued by current retirees</b>	<b>\$10.87</b>	<b>\$6.13</b>	<b>\$16.99</b>
<b>Net benefits of current workers*</b>	<b>\$17.33</b>	<b>\$22.57</b>	<b>\$39.91</b>
<b>Net benefits of future workers*</b>	<b>-\$0.60</b>	<b>\$19.20</b>	<b>\$18.60</b>
<b>Total infinite horizon shortfalls*</b>	<b>\$27.60</b>	<b>\$47.90</b>	<b>\$75.50</b>
<b>Trust Fund</b>	<b>\$2.76</b>	<b>\$0.28</b>	<b>\$3.04</b>
<b>Total infinite horizon shortfalls less Trust Funds*</b>	<b>\$24.84</b>	<b>\$47.62</b>	<b>\$72.46</b>

Source: Financial Report of the United States Government, 2014 and the 2014 Social Security and Medicare Trustees Reports. Net benefits are expected future expenditures less dedicated payroll taxes, premiums, and state transfers.

\*General revenue transfers in support of Medicare's Parts B and D are not included as offsetting revenues.

presented here for Medicare can thus be thought of as the revenues required by the programs that are in addition to payroll taxes, premiums, and state transfers.

The next row indicates the net benefits for future workers. The negative net Social Security benefits for future workers indicates that these workers will pay more in payroll taxes than they will receive in benefits even at the current tax rate which is significantly lower than the tax rate necessary to fund future Social Security expenditures.

The next row indicates the magnitude of the net shortfall over the infinite horizon at current tax rates, or alternatively, these are the amounts by which Social Security and Medicare are underfunded relative to their dedicated revenue sources of payroll taxes, taxes on Social Security benefits, and Medicare premium payments. Altogether the two programs will require \$72.5 trillion in additional revenues to pay scheduled benefits.<sup>10</sup>

For the present analysis, it is important to point out the 23% of the unfunded obligation is payable to current retirees and that their scheduled benefits are likely to be paid. We contend that they should be treated as liabilities in the same way that the federal employees' pensions and OPEBs are treated as liabilities. Most proposed reforms have minimal effects on reducing the liabilities associated with paying expected Social Security and Medicare benefits to retirees. Once retirees begin receiving benefits they are annuitants in an operational sense and these payments are essentially liabilities of the federal government.

In contrast, the forecast benefits of young current workers and future workers can be substantially affected by reforms, and are not necessarily related to prior actions of the government, particularly for younger current workers and future participants. The accrued Social Security benefits payable to older workers, those 55 and over, could arguably be considered liabilities as well, given that many of the leading reform proposals hold them harmless. So, including only the accrued benefits of current retirees is a conservative estimate of the total Social Security and Medicare liabilities.

## How are Retirees' Social Security and Medicare Benefits Affected by Reforms?

Though the benefits payable to retirees are consistent with the definition of a liability, one of the rationales for not including Social Security and Medicare on the federal balance sheet is that the government can unilaterally change the programs.

This section illustrates that the passage of the ACA, significantly reduced estimates of Medicare's long-run unfunded obligation measures but had more muted effects on benefits payable to retirees. As will be illustrated, while the ACA's expense constraining provisions have produced significantly lower spending forecasts, achieving the lower spending is uncertain. The Medicare Modernization Act (MMA) on the other hand, with its addition of prescription drug coverage, increased Medicare benefits payable to retirees. It is true that the government can unilaterally change the programs, but the impacts of such changes are distributed differently across generations.

### Medicare

Two recent Medicare reforms illustrate the impact of policy changes on Medicare benefits payable to retirees. Figure 3 presents net Medicare benefits payable to participants who are 65 and older for the years 2000-2014. Medicare Parts A, B, and D are each identified. Consider the first policy change: the passage of the MMA in 2003. The Act added prescription drug benefits, or Part D, to the insurance package. As seen in the figure for 2004, retirees at that time were endowed with new benefits net of premiums equal to \$597 billion.

Congress did indeed act unilaterally in this case and expanded retirees' net benefits by 21% over the previous year. The benefit expansion resulted in new Medicare wealth of about \$17,000 on average for the almost 35 million Medicare enrollees 65 years of age and above. Reporting these new benefits as liabilities would have complemented the measures based on the long run forecasts.



In 2014, retirees’ Part D benefits net of premiums were \$566 billion. Thus, the passage of the MMA resulted in additional liabilities of the federal government payable to current retirees, and though the estimates of their size have varied, the variability in the estimates are less affected by changing assumptions than are the long-run estimates.

The other major policy change reflected in the figure is the impact of the passage of the Affordable Care Act (ACA) in March of 2010. Scoring its provisions resulted in a dramatic reduction in 75-year and perpetuity unfunded obligations, but as seen by comparing the current retirees’ benefits for the years 2009 and 2010 from the figure, it had a modest effect on these liabilities. Between the two years, the current retirees’ expected benefits declined by \$339 billion, from \$4,848 to \$4,509 billion or by only 7%.

This modest reduction in benefits payable to current retirees stands in stark contrast to the substantial decline in the long- run unfunded obligation measures between the 2009 and 2010

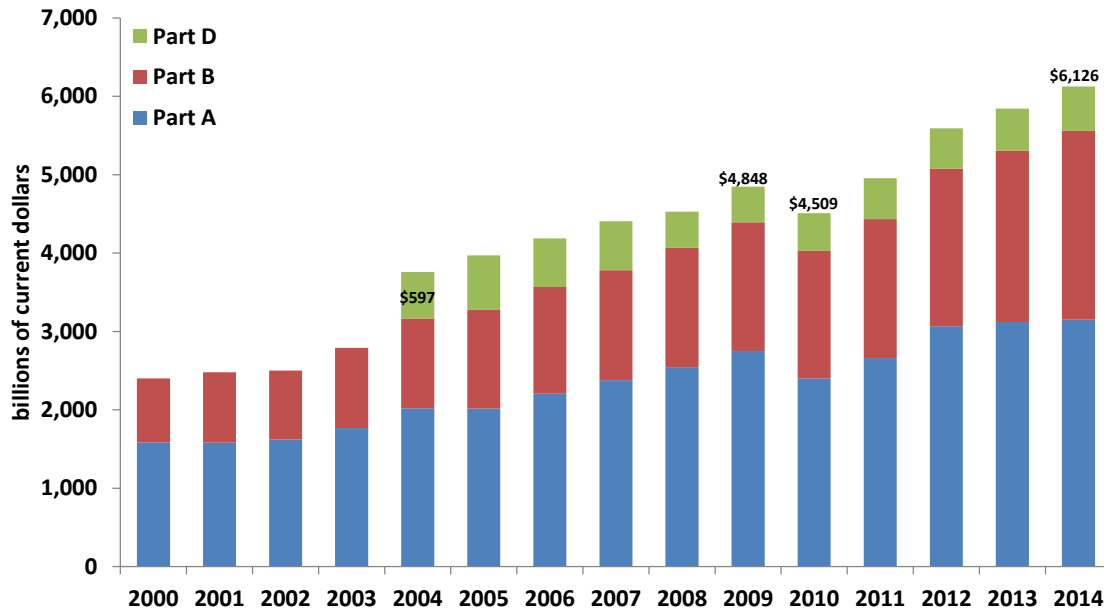
Trustees Reports. The considerable decline in the unfunded obligation estimates result from provisions in the ACA designed to limit per capita spending growth. The main provision is the productivity adjustment that primarily affects Medicare’s Part A spending projections and some of Part B spending. The provision requires that payment updates to most providers are adjusted downwards by the increase in total factor productivity.

As a consequence of this provision, the estimated 75-year unfunded obligation for Part A dropped from \$13.4 to \$2.4 trillion and the infinite horizon unfunded obligation for Part A dropped from \$36.4 trillion to -\$0.6 trillion!

The ACA’s productivity adjustment had less of an effect on the present value of the general revenue contributions necessary to fund Medicare Part B in addition to premiums from retirees, but the reductions were substantial nonetheless: the present value of the general revenues required to fund Part B over the 75 year horizon dropped 25% from \$17.2 trillion to \$12.9 trillion and over the infinite horizon they

FIGURE 3

**NET MEDICARE BENEFITS PAYABLE TO PARTICIPANTS WHO HAVE ATTAINED ELIGIBILITY AGE (2000-2014)**



Source: The Statements of Social Insurance, Financial Reports of the United States Government (2000-2014). See text for discussion of the Government Accountability Office’s opinion on the estimates beyond 2009.

fell 43% from \$37.0 trillion to \$21.1 trillion.

The productivity adjustment is a mechanism analogous to Sustainable Growth Rate (SGR) for physician payments applied to most other Medicare payments beside Part D payments. The history of legislative overrides of the SGR suggests the same fate for the productivity adjustment, though making projections based on “current law” has produced estimates that the Trustees themselves deem to be quite favorable and unlikely to be realized.<sup>11</sup>

Medicare spending on behalf of current retirees was estimated to be reduced by only 7% following the passage of the ACA, even though, should all of its spending constraints be realized, the entire infinite horizon unfunded obligation of the HI portion of the program was estimated to be eliminated. The impact on current retirees is muted because it takes time for all of the provisions to come online. The youngest retirees would see the greatest impact on their benefits relative to the prior forecasts.

The passage of the ACA produced significant difficulties for Medicare and Social Security Trustees who are charged with forecasting future Medicare expenditures. From 2010 to the present, the Medicare Trustees have had to wrestle with how to present forecast that both take into account the current law as well as expectations that generally run counter to the spending constraints in the law.<sup>12</sup>

As in 2013, the Government Accountability Office (GAO) was again prevented from expressing an opinion on the 2014 Statements of Social Insurance (SOSI) in the FRUSG. The culprit is again the Medicare forecasts. In fact, all of the post-ACA Medicare forecasts have caused problems for the auditors of the SOSI. The statement of the Comptroller General of the United States, included in the 2014 FRUSG notes:

“Significant uncertainties, primarily related to the achievement of projected reductions in Medicare cost growth reflected in the 2014, 2013, 2012, 2011, and 2010 Statements of Social Insurance, prevented us from expressing an opinion on those statements as well as on the 2014 and 2013 Statement of Changes in Social Insurance Amounts. About \$28.5 trillion, or 68.0 percent, of the reported total present value of future expenditures in excess of future

revenue presented in the 2014 Statement of Social Insurance relates to Medicare program reported in the Department of Health and Human Services’ (HHS) 2014 Statement of Social Insurance, which receive a disclaimer of opinion.”<sup>13</sup>

The auditor’s report accompanying the 2014 HHS Agency Financial Report “disclaimed” the post-ACA Medicare statements of social insurance. The auditor noted many of the same concerns voiced by the trustees in each of the post-ACA Trustees Reports.

“If the health sector cannot transition to more efficient models of care delivery and achieve productivity increases commensurate with economy-wide productivity, actual future costs for Medicare could exceed those shown in the projections. As a result of these limitations, we were unable to obtain sufficient audit evidence for the amounts presented in the statements of social insurance as of January 1, 2014, 2013, 2012, 2011, and 2010, and the related statements of changes in social insurance program for the periods ended January 1, 2014 and 2013.”<sup>14</sup>

Whether or not the ACA’s provisions are realized in the long run, the forecast spending on behalf of current retirees, as we have seen, was slightly negatively affected. The series in Figure 3 illustrates that these benefits were relatively static from 2009 to 2010 even in light of the provisions that affect the long-run forecasts. In regard to Medicare, reporting the liabilities payable to retirees in each year gives policy makers and the public a better idea of how legislative changes add to the liabilities with the passage of the MMA, or reduce the liabilities, in the case of the ACA. And even though the SOSI, the source of retirees’ expected Social Security and Medicare net benefits reported here, has been disclaimed, the Medicare liabilities arising from the expected payments on behalf of current retirees provide a conservative comparison to the other liabilities. For example, they have grown less rapidly than retirees’ expected Social Security benefits since 2009 (26% versus 58% for Social Security).

## Social Security and Medicare

The delayed or deferred effects of reforms to either Medicare or Social Security means that current retirees' benefits are marginally affected as they are phased-in in coming years.

Most Social Security reforms that have been discussed in recent years leave current retirees unaffected. Increasing the retirement age, increasing payroll taxes, raising the taxable maximum and instituting means testing for incoming groups of retirees have no effect on current retirees and the expected benefits presented in Figure 4.

The cost of living adjustment is the only reform, among those currently receiving attention, that would reduce current retirees' expected benefits. However, the effect on the aggregate liability would be minor. Most leading proposals prefer replacing the current CPI-W (consumer price index for wage and salary workers) with the chained version of the CPI as the index used to make cost of living adjustments to Social Security Benefits.<sup>15</sup> Over the next 30 years, the present value of benefit payouts are

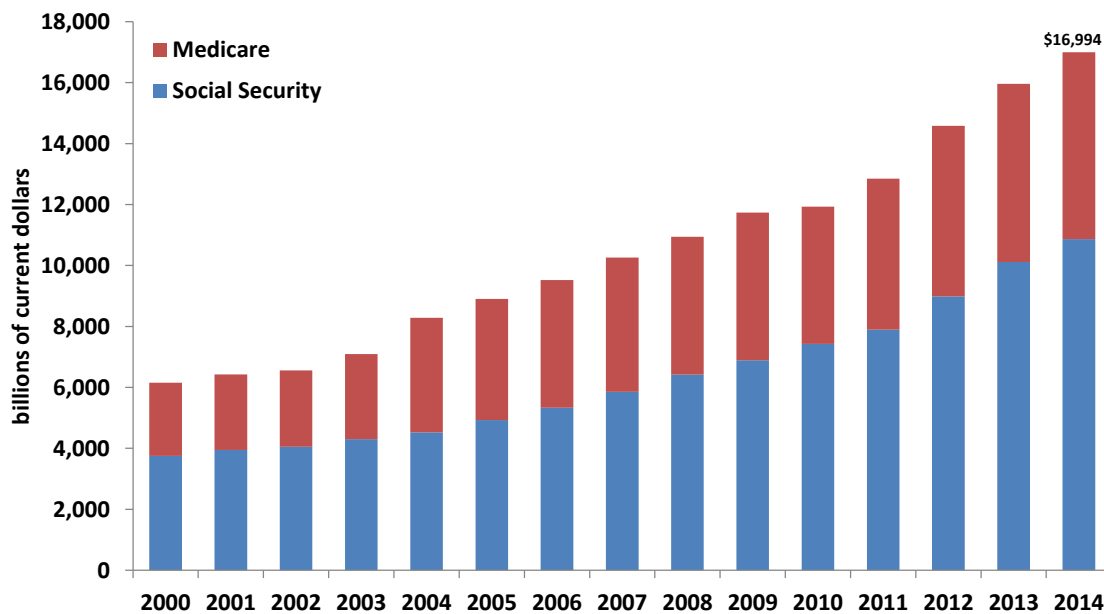
reduced by less than 3% if the cost of living adjustments are bound on the chained CPI rather than the CPI-W. Thus, the expected benefits payable to current retirees would be reduced slightly if this reform were implemented.

Figure 4 indicates that the total of the Medicare and Social Security benefits payable to retirees has risen steadily in nominal dollars. They have also risen steadily as a share of GDP. In 2000 they were equal to 60% of GDP, by 2007 they were 71%, and as of 2014 they were 98% of GDP.

It is because current retirees' Medicare and Social Security benefits conform to the definition of a liability, are only modestly affected by reforms, and are substantial in size, that we propose reporting them as liabilities of the federal government along with the debt held by the public and federal employees' accrued retirement benefits.

FIGURE 4

SOCIAL SECURITY AND MEDICARE BENEFITS PAYABLE TO PARTICIPANTS WHO HAVE ATTAINED ELIGIBILITY AGE (2000-2014)



Source: The Statements of Social Insurance, Financial Reports of the United States Government (2000-2014). See text for discussion of the Government Accountability Office's opinion on the estimates beyond 2009.

## Adding Retirees’ Expected Social Security and Medicare Benefits to Federal Liabilities

Figures 5 and 6 depict the composition and size of the “official” federal liabilities combined with retirees’ expected Social Security and Medicare benefits in nominal dollars and as a share of GDP.

As seen in Figure 5, the total of the official liabilities and retirees’ expected Social Security and Medicare benefits were almost \$38 trillion in 2014. The \$17 trillion in retirees’ expected Social Security and Medicare benefits comprised 45% of the total, were equal to 82% of the official liabilities reported in the FRUSG, and were 32% higher than the debt held by the public. Altogether, these liabilities more than doubled their size over the last decade.

Denominating the combined liabilities by contemporaneous annual GDP is depicted in Figure 6. By 2014 the total liabilities were equal to 217% of GDP. The figure indicates that the liabilities’ share of GDP was fairly static from 2000 to 2007. Prior to the recession the

combined liabilities were 145% of GDP. The increase in the debt held by the public accounts for 54% of the growth in the share of GDP from 2007 to 2014 and the Social Security benefits of retirees account for 31%.

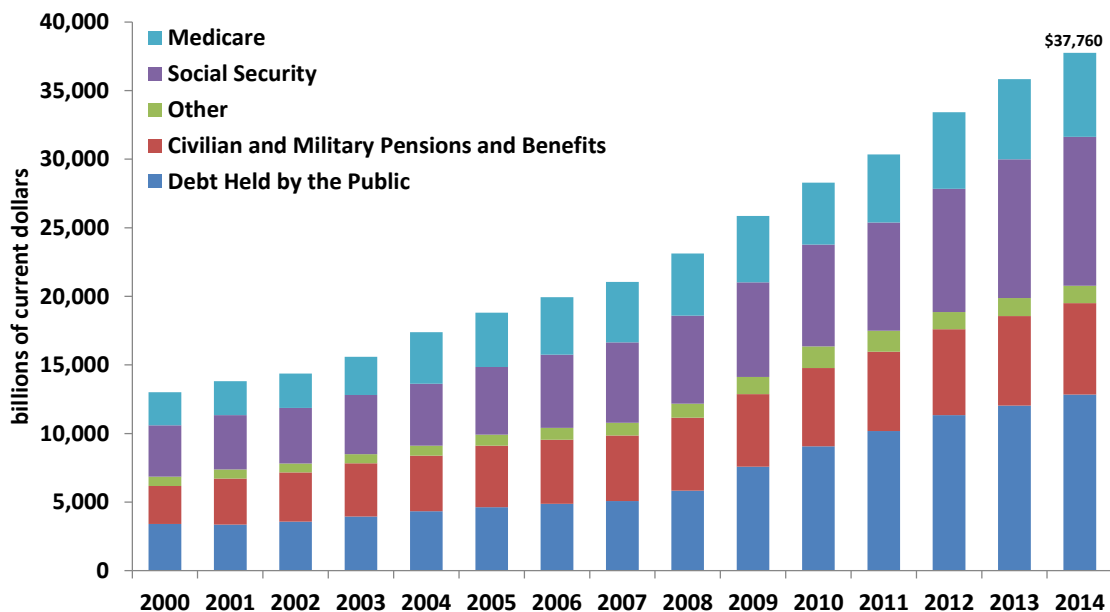
The debt held by the public tells one part of the federal liability story. Accrued retirement liabilities payable to federal employees are another part and including Social Security and Medicare benefits payable to retirees is a further step towards completing the story.

## Conclusion

With the federal debt held by the public approaching 75% of GDP, many are concerned about the future path of fiscal policy. The debt held by the public is but one form of federal liability. The federal government is also already committed to paying federal employees’ accrued pensions and other post-employment benefits – primarily health care benefits. Adding these federal employee retirement liabilities and other federal liabilities to the debt held by the public produces the \$20.8 trillion liability on the federal government’s balance sheet as of September 30,

FIGURE 5

FEDERAL LIABILITIES AND SOCIAL SECURITY AND MEDICARE BENEFITS PAYABLE TO PARTICIPANTS WHO HAVE ATTAINED ELIGIBILITY AGE (2000-2014)



Source: The Statements of Social Insurance, Financial Reports of the United States Government (2000-2014). See text for discussion of the Government Accountability Office’s opinion on the estimates beyond 2009.

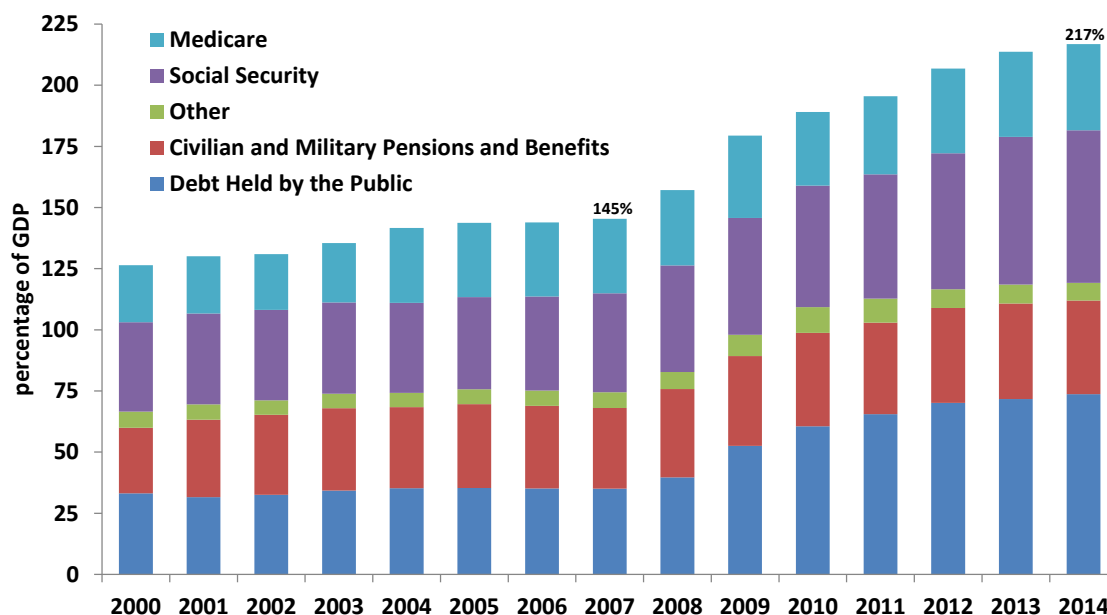
2014.

We suggest that the Social Security and Medicare benefits expected to be paid to current retirees should also be added to the official federal liabilities to provide a comprehensive

assumptions than are the long-run unfunded obligation measures. Together, they exceed the debt held by the public and are 82% the size of the official federal liabilities reported in the FRUSG. Finally, they are relevant to policy

FIGURE 6

**FEDERAL LIABILITIES AND SOCIAL SECURITY AND MEDICARE BENEFITS PAYABLE TO PARTICIPANTS WHO HAVE ATTAINED ELIGIBILITY AGE AS A PERCENTAGE OF GDP (2000-2014)**



Source: Financial Reports of the United States Government (2000-2014). GDP from the Bureau of Economic Analysis.

measure of the government's indebtedness based on past actions. When they are added to the "official" liabilities, the total proposed liability measure is \$37.8 trillion or 217% of GDP. Paying off these liabilities would take more than 12 years of all federal revenues if they remain at the 50-year average of 17.4% of GDP.

The liability measure we propose is distinctly retrospective in its treatment of Social Security and Medicare commitments. We have argued that the benefits expected by current retirees provide a conservative estimate of commitments that meet the definition of a liability: they are obligations of the government resulting from prior actions that will require financial resources. These benefits are also much less affected by changes in forecasting

makers and the public. These are the benefits on which retirees rely, and retirees are politically motivated to assure that their benefits are not reduced.

The accounting treatment of retirees' expected Social Security and Medicare benefits also informs other public policy questions as well. Recent studies of wealth inequality do not include Social Security and Medicare as assets.<sup>16</sup> If accrued Social Security and Medicare benefits should be included as part of the federal government's liabilities, as we have argued in this report for the portion payable to current retirees, so should they be counted in the wealth measures.

While the net Social Security and Medicare benefits payable to retirees appear in the

FRUSG's Statement of Social Insurance these portions of the elderly entitlement programs' obligations deserve added attention. Reporting them as liabilities complements the forward-looking unfunded obligation measures by

distinguishing between those payable to current retirees and those payable to future retirees and participants. The former is much less likely to be reduced by reforms than the latter.

## Appendix

### Net Benefits to Current Retirees in the Unfunded Obligation Measures for Social Security and Medicare

The debt accumulated in Social Security or Medicare is better understood in the context of the unfunded obligation of the programs. The financing gap in a program can be measured by the perpetuity unfunded obligation defined as

$$UO^{\infty} = \sum_{t=0}^{\infty} \frac{B_t}{(1+r)^t} - \sum_{t=0}^{\infty} \frac{R_t}{(1+r)^t}.$$

where  $UO^{\infty}$  is the perpetuity or infinite horizon unfunded obligation at the valuation year, 0,  $B_t$  are total benefits in year  $t$ ,  $R_t$  are total dedicated revenues in year  $t$ , and  $r$  is the discount rate. The Social Security trust fund is not included as an offsetting asset because we are viewing the unfunded obligation from the consolidated federal budget perspective.

Benefits in year  $t$  can be decomposed as follows

$$B_t = B_t^{rcp} + B_t^{wcp} + B_t^{fp}.$$

$B_t^{rcp}$  are benefits in year  $t$  payable to retired current participants who, in the case of Social Security, are age 62 and above in the evaluation year,  $t = 0$ .  $B_t^{wcp}$  are benefits in year  $t$  payable to working current participants who are 15 to 61 years of age in the evaluation year,  $t = 0$ . Finally,  $B_t^{fp}$  are benefits in year  $t$  payable to future participants who are 14 years of age or below or yet to be born in the evaluation year,  $t = 0$ .

Revenues in year  $t$  can be decomposed similarly as

$$R_t = R_t^{rcp} + R_t^{wcp} + R_t^{fp}.$$

$R_t^{rcp}$  are the benefit taxes in year  $t$  that will be paid by retired current participants.  $R_t^{wcp}$  and  $R_t^{fp}$  are payroll tax revenues and benefit taxes that will be paid by working age current participants and by future participants, respectively.

Putting the benefits and tax revenues together the infinite horizon unfunded obligation can be written as:

$$UO^{\infty} = \left( \sum_{t=0}^{\infty} \frac{B_t^{rcp}}{(1+r)^t} - \sum_{t=0}^{\infty} \frac{R_t^{rcp}}{(1+r)^t} \right) + \left( \sum_{t=0}^{\infty} \frac{B_t^{wcp}}{(1+r)^t} - \sum_{t=0}^{\infty} \frac{R_t^{wcp}}{(1+r)^t} \right) + \left( \sum_{t=0}^{\infty} \frac{B_t^{fp}}{(1+r)^t} - \sum_{t=0}^{\infty} \frac{R_t^{fp}}{(1+r)^t} \right)$$

Each difference (term) in the parentheses in the equation represents the component parts of the

infinite horizon unfunded obligation. The unfunded obligation is equal to the present value of net benefits for retired current participants plus the present value of net benefits for working age current participants plus the present value of net benefits for future participants. For Social Security, the first two terms are positive whereas the third term is negative suggesting Social Security is a worse-than-market deal to participants from a lifetime perspective.

The first term is the debt a program owes to the current retirees as of the evaluation year, and the second term is the debt to the current workers. The first two terms together identify the debt the program owes to all the current participants as of the evaluation year, also known as the closed-group unfunded obligation. The close-group unfunded obligation is thus the difference between scheduled (or current-law) benefits and taxes associated with current participants in the program defined as individuals age 15 and above as of the evaluation year. It measures how much the program on net owes its current participants, if the program were closed to all future participants beginning at the evaluation date.

So there are two natural candidates for the debt measure in a program: a narrowly defined debt measure consisting of the net benefits to current retirees alone, and a more inclusive debt measure consisting of the net benefits to both current retirees and current workers. The latter debt measure is comprehensive, but it could be argued that the net benefits to current workers – and especially to the younger workers – can be easily changed by entitlement reforms. In contrast, the former debt measure is about the net benefits to the retirees alone, which, while not as comprehensive as the latter measure, are largely unaffected by entitlement reforms. Social Security and Medicare benefits payable to current retirees are liabilities quite similar conceptually to federal employees' accrued pensions and benefits in that they derive from prior actions. Demarcating as liabilities as only the Social Security and Medicare benefits payable to current beneficiaries who have reached the age of eligibility results in a conservative estimate of total accrued liabilities. We therefore propose to use the net benefits to retirees as the (conservative) debt measure in a program, on par with the public debt.

The Medicare and Social Security Trustees Reports include estimates of the unfunded obligations of elderly entitlement programs over the infinite horizon. These estimates can be broken down into the net benefits to the retired current participants, the net benefits to the working age current participants and the net benefits to the future participants. Adding the debts (i.e. the net benefits to the retired current participants) in Social Security and Medicare to the federal liabilities from the Financial Report of the United States Government, it is obvious that the real debt the federal government owes is a multiple of the public debt that draws most media and public attention.



## Notes

<sup>1</sup> See *Federal Liabilities: Past Actions with Future Consequences*, May 2014 available at: [perc.tamu.edu/perc/Publication/policybrief/report\\_5\\_2014.pdf](http://perc.tamu.edu/perc/Publication/policybrief/report_5_2014.pdf)

<sup>2</sup> *Financial Report of the United States Government, Fiscal Year 2014*, Department of the Treasury, 2014, page 38.

<sup>3</sup> The years to pay for these liabilities are based on the present value of 17.4% of future GDP where the GDP and discount rate forecasts are from the 2014 Social Security Trustees Report Table VI.G6.

<sup>4</sup> The other liabilities include environmental and disposal liabilities, accounts payable, insurance and guarantees, and a subset “other liabilities.” See *Financial Report of the United States Government, Fiscal Year 2014*, Department of the Treasury, 2014, page 48.

<sup>5</sup> See *Analytical Perspectives, Budget of the United States Government, Fiscal Year 2012*, Office of Management and Budget, Table 31-2, for other estimates of the total liabilities and assets for the years 1960-2010.

<sup>6</sup> Note 3 from the *OPM Fiscal Year Agency Financial Report*, p. 56 continues: “The cash receipts collected from the public for the trust funds are deposited in the U.S. Treasury, which uses the cash for general Government purposes. Treasury securities are issued to the OPM as evidence of its receipts. Treasury securities are an asset to OPM and a liability to the U.S. Treasury. Because OPM and the U.S. Treasury are both parts of the Government, these assets and liabilities offset each other from the standpoint of the Government as a whole. They are eliminated in consolidation for the U.S. Government-wide financial statements.”

<sup>7</sup> The appendix illustrates the how accrued liability measure is related to the close group and open group unfunded obligation measures. See *Federal Liabilities: Past Actions with Future Consequences*, May 2014 for previous studies on federal liabilities.

<sup>8</sup> The infinite horizon open group, 75-year open group, and the 100-year closed group measures are presented in the annual Social Security and Medicare Trustees Reports. The accrued benefit liability for all current Social Security participants is available in an annual Actuarial Note published by the Social Security Administration’s Office of the Actuary. In 2014, the accrued benefits of all current participants totaled \$31.2 trillion. Thus, the benefits of current retirees accounts for more than one-third of the total accruals. See Jason Schultz and Daniel Nickerson, “Unfunded Obligation and Transition Cost for the OASDI Program,” Actuarial Note, Number 2014.1, Social Security Administration, Office of the Chief Actuary, August 2014.

<sup>9</sup> Table 1 presents the *net* Social Security and Medicare benefits payable to current retirees. Thus, premium payments for Part B and D are netted out of the Medicare benefits as are remaining dedicated Social Security and HI payroll taxes and income taxes on Social Security benefits. Federal income taxes in support of Medicare Parts B and D are not subtracted from the expected benefits. However, the *HHS Agency Financial Report, FY 2014* does identify the income taxes payable from retirees as offsetting revenue.

<sup>10</sup> The Supplementary Medical Insurance portions of Medicare (Parts B and D) are funded by premium payments from participants and from general revenues. Officially, these parts of the program do not have unfunded obligations because the general revenues are assumed to cover the difference between premium revenues (about 25% of expenditures) and expenditures.

<sup>11</sup> See the 2014 Medicare Trustees Report, p. 5.

<sup>12</sup> New to the 2014 Medicare Trustees Report is a baseline forecast that lies between the “current law” forecast (that assumes the ACA’s productivity adjustments and SGR constraints are realized) and an alternative scenario (that assumes a more rapid reversion to higher per capita health care spending growth rates). The new baseline forecasts serves as the primary forecast on which the estimates in the statement of social insurance are based.

<sup>13</sup> *Financial Report of the United States Government, Fiscal Year 2014*, page 26. See also Note 24. Social Insurance pages 128-32 for alternative estimates of Medicare’ 75-year funding gap.

<sup>14</sup> Ernst and Young provided the independent audit of the 2014 HHS Agency Financial Report. The excerpt from their report is in section that gives the basis for the disclaimer of an opinion on the statements of social insurance. See *HHS Agency Financial Report, FY 2014* pages 56-57 for the entire basis for disclaimer of opinion and disclaimer of opinion.

<sup>15</sup> See the Social Security Administration’s Office of the Actuary web page for the scoring of variants of all of the

provisions that are components of current reform proposals. The estimates in the text are based on provision A3: <http://www.ssa.gov/OACT/solvency/provisions/cola.html>.

<sup>16</sup> Saez and Zucman(2014) for example, do not include Social Security and Medicare in their study of wealth inequality. See “Wealth Inequality in the United States since 1913: Evidence from Capitalized Income Tax Data,” NBER Working Paper 20625, October 2014. They derive their asset definition from the United Nation’s *System of National Accounts 2008*. Their working definition of assets “includes all the non-financial and financial assets over which ownership rights can be enforced and that provide economic benefits to their owners.” p. 5. They also exclude from their asset estimates those portions of the pensions of federal, state and local government employees that are unfunded.