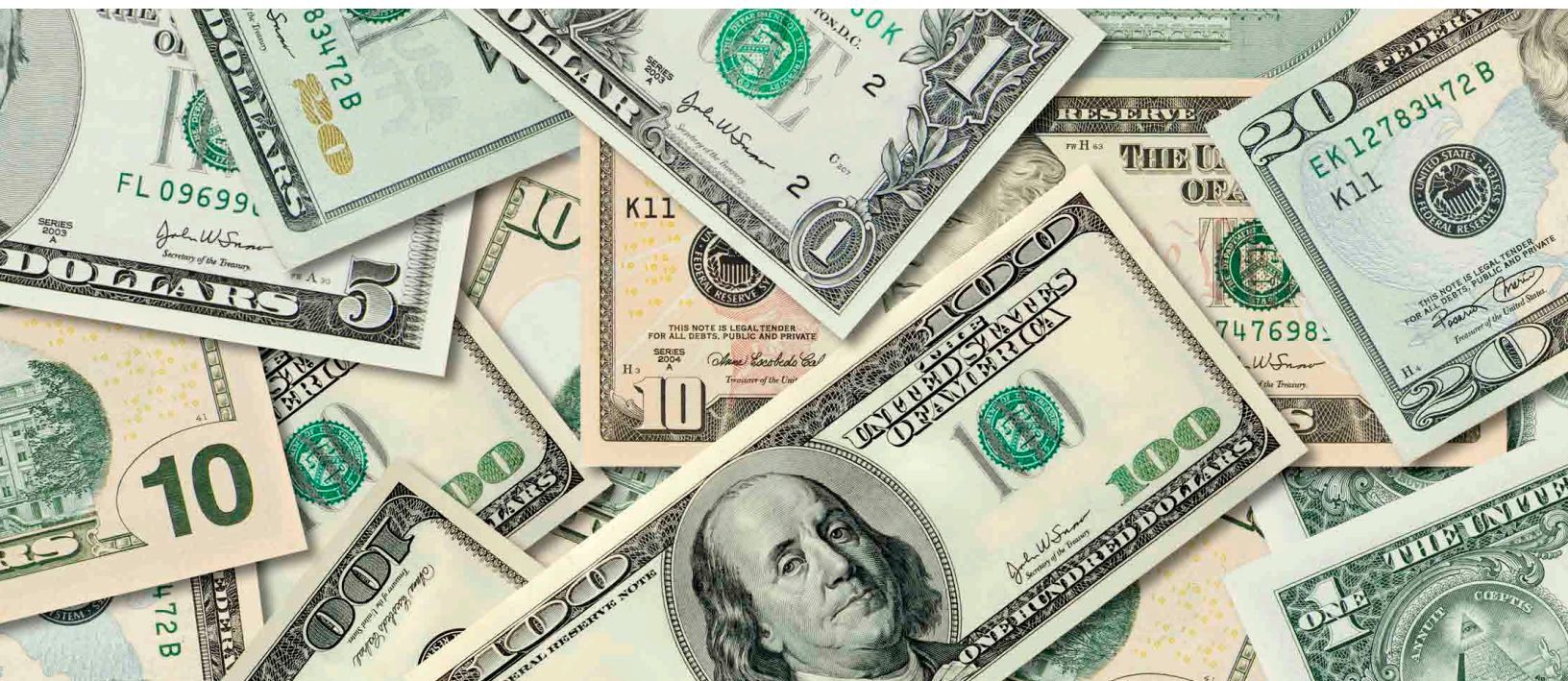


MARCH 2015



U.S. DEBT BURDEN

A special report by the Portfolio Advisory Group

There's Wealth in Our Approach.™

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For Required Disclosures see page 7.
Priced in USD as of February 27, 2015, unless otherwise stated.



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U.S. DEBT BURDEN

Perhaps no issues have attracted more commentary over the past three decades than those of the debt situation in the U.S. and the associated issues of unfunded liabilities.

Beginning with the large defense-driven federal deficits of the 1980s, followed by excessive consumer balance sheet leveraging of the 1990s and early 2000s, and culminating in the enormous state and federal deficits of the past decade, prognostications of eventual doom for the U.S. economy have come from all corners of the spectrum. Furthermore, when we read about the potential deficits facing Social Security and Medicare, we are thrown figures of \$50T, \$100T, \$150T, which quite literally grow every day (or at least seem to grow depending on how much the author wishes to send chills of despair down investors' spines).

While we readily acknowledge that the issues facing the U.S. are large and require action, we believe it has the means and will to eventually take that action. However, while we think the timing is not yet urgent, the sooner these issues are faced, the easier it will be for the economy to absorb them.

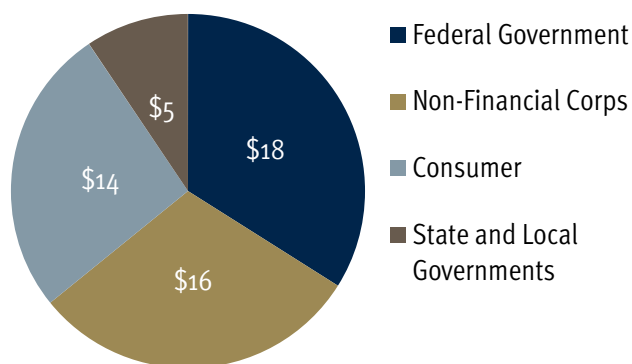
SOME COLD HARD FACTS

The balance sheet is the best place to begin. More specifically, if we look at the latest edition of the Fed's quarterly Flow of Funds report (December 11, 2014), we get a good picture regarding U.S. balance sheet liabilities of more than \$50T through September 30, 2014.

- **Consumers:** This group has total liabilities of approximately \$14T with about two-thirds primary and secondary mortgages and about 23% credit card debt.
- **Corporations:** Their debt and liabilities total approximately \$16T. They have about \$7.5T debt outstanding with corporate bonds comprising just under 60%. Corporations' other approximate \$8.5T of liabilities is comprised largely of foreign ownership in U.S. corporations and miscellaneous liabilities.
- **State and Local Governments:** Total liabilities of just over \$5T are comprised of about 60% municipal bonds, with unfunded pension liabilities of about \$1.2 trillion comprising the second-largest component.
- **Federal Government:** The U.S. federal debt outstanding is approximately \$18T. The U.S. government, the largest single debt holder, owns about \$5.6T of its own debt through the Social Security surplus, the Federal Reserve (primarily through the various quantitative easing programs) and various intergovernmental programs. Of the approximate \$12.4T of debt outstanding to the public, China and Japan own about \$1.2T each (meaning the largest single holder outside of the federal government controls about 7% of the debt), with the remainder of foreign governments collectively owning about \$3.6T.

Liabilities

In Trillions of USD



Source - Fed Flow of Funds Report - December 2014

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In aggregate, these are very big numbers. Furthermore, they do not include off-balance sheet liabilities, including unfunded future obligations such as Social Security and Medicare, which could easily double the \$50T+ amount, and the liabilities of government-sponsored enterprises such as Fannie Mae and Freddie Mac, which have about \$8T debt outstanding.

BUT, A BALANCE SHEET HAS TWO SIDES

It would be folly to downplay the enormity of the numbers just discussed. However, for anyone who has ever analyzed a company, we do not stop the analysis with the liabilities of the company, but rather we also take a look at the asset side of the balance sheet. Put another way, when one goes to the bank looking for a loan, the banker does not ask only about other outstanding debts, but also seeks an accounting of the assets and income of the would-be borrower. Returning primarily to the Flow of Funds report, we can get a more-complete picture of the net worth of the United States.

■ **The Consumer:** U.S. consumers have assets of just over \$95T (almost 7x their liabilities). Stock ownership either through publicly traded companies, ownership in non-corporate businesses, or pension entitlements amount to about \$50T, while real estate makes up about \$20T. Cash equivalents amount to about \$10T (about 70% of outstanding liabilities). If the U.S. consumer is viewed as a company, one might say that it has shareholder equity (assets minus liabilities) of about \$81T (a debt-to-equity ratio of about 17%).

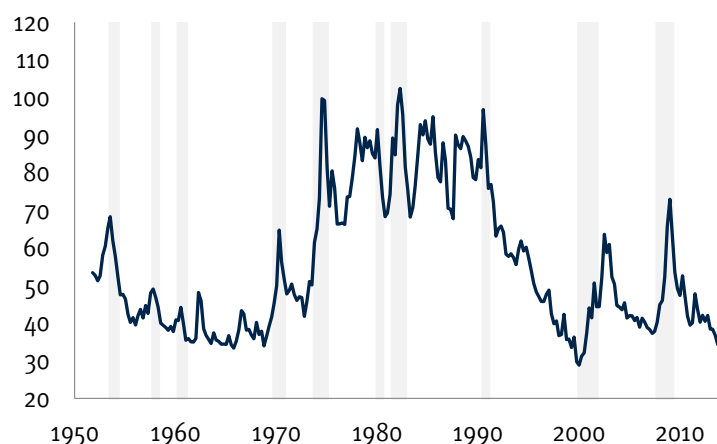
■ **Corporations:** Assets totaling approximately \$36T with a near-even split between hard assets (land, equipment, inventories) and financial assets (cash, stocks, and bonds). Net worth is just under \$20T (about 3x corporate debt), and if we look at the debt-to-equity ratio using the current market value of equities, it stands at about 34%, close to all-time lows (see chart).

■ **State and Local Governments:** Assets at the state and local level total just under \$3T, which leaves about a \$2T deficit. This analysis ignores assets such as land, bridge, and tunnel concessions and road concessions, which some estimates place in the tens of trillions of dollars. Thus, while the on-balance sheet picture looks bleak, there may be more to the story than a simple balance sheet analysis can bring to bear.

■ **Federal Government:** In a similar vein, the federal government has a small on-balance sheet asset base amounting to about \$1.8T, substantially below the \$12.4T of debt owed to the public. However, the U.S. government also owns more than 600 million acres of land, not to mention countless mineral rights on these lands. Furthermore, the government controls another 1.7 billion acres of land offshore. While estimates can vary widely on the actual value of these assets, the Institute for Energy Research places the value of technically recoverable oil and gas assets at between \$50T and \$130T (the variation is mainly due to the assumption on commodity prices), which is many times the size of the national debt.

Corporate Debt Levels Remain Low

Nonfinancial Corporate Business; Credit Market Debt as a Percentage of the Market Value of Corporate Equities, Percent, Quarterly, Not Seasonally Adjusted



Source - Board of Governors of the Federal Reserve System (U.S.), Bloomberg; data through July 2014

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Combining consumers, businesses, and government, the on-balance sheet “surplus” amounts to about \$80T. If off-balance sheet assets are added to the mix, the surplus would likely push to \$150T or higher.

UNFUNDED LIABILITIES

Perhaps no issues can draw more fire from various circles than Social Security and Medicare and their so-called unfunded liabilities. The size of these liabilities is open to interpretation as the number of assumptions needed to arrive at an actual dollar figure makes any precise estimate extremely difficult.

In 2009, the Social Security and Medicare trustees issued reports indicating the difference between expected future tax revenues and expected future expenditures (the unfunded liability) amounted to about \$5T for Social Security and about \$15T for Medicare over the next 75 years. Due to the decline in long-term interest rates since these reports were issued, the approximate \$20T figure has likely grown significantly as these liabilities are inversely correlated to the level of rates (the lower the rate, the greater the liability for reasons we won't get into).

While this sounds dire, it is important to dig a bit deeper before declaring force majeure on the U.S. simply because of unfunded liabilities.

SOCIAL SECURITY – THERE'S NO SUCH THING AS BANKRUPTCY

Under current law, the surplus that has been generated since Social Security was created will likely run out sometime around 2035 (note that the so called “trust fund” is really just the surplus tax revenues that have been collected since the program was initiated). This does not mean, as has been cast by some, that Social Security will go bankrupt, as it is impossible for a program funded by taxes to go bankrupt. Rather, it means taxes will have to go up, benefits down, or some combination of the two so that the existing workforce can support those that have retired. The Social Security trustee estimates that if no changes are made, benefits would need to be cut by about 23% to continue the program post exhaustion of the surplus.

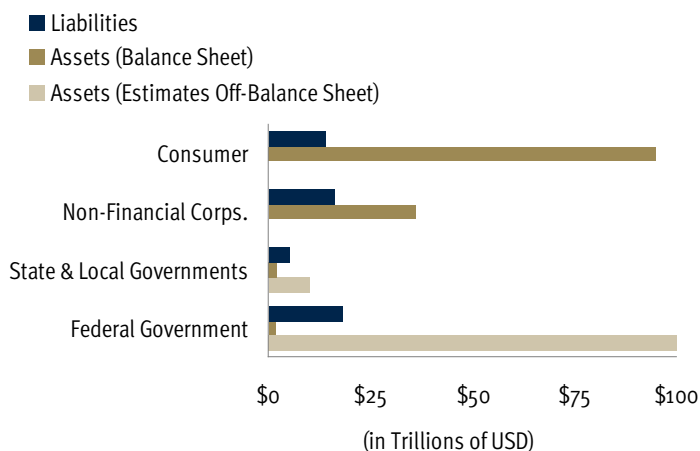
MEDICARE – THE MATH IS CHALLENGING

In the years to come, Medicare will take up an increasing share of the economy as more and more baby boomers reach retirement age. The problem with changing Medicare eligibility rules (i.e., raising the age of eligibility) is that it would likely increase the number of individuals that utilize Medicaid, a program designed for lower-income individuals not yet eligible for Medicare. In other words, one program's savings becomes another program's costs, and the ultimate cost savings are diluted.

It is worth noting that controlling health care costs is one of the best ways to control projected Medicare costs. Health care costs have historically inflated at a rate well above inflation, while annual health care expenditures have risen an average of 6.5% per annum since 1990. The good news is that health care inflation has dropped sharply in the past few years, which has helped to slow the overall health expenditures growth rate to below 4%.

Assets Are Far in Excess of Liabilities

U.S. Balance Sheet



Source - Fed Flow of Funds Report - December 2014, Institute for Energy Research, RBC Dominion Securities Inc.

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To put this in perspective, the difference between health care expenditures in 2023 (the last year of the Congressional Budget Office's [CBO] current projections) using the CBO's estimated annual growth rate (6%) vs. the lower growth rate of the past few years (3.9%), amounts to an annual difference of about \$800B by 2023 and an aggregate difference of about \$3.4T over the next nine years. In other words, cost containment is key (see chart).

WHAT ABOUT THE AFFORDABLE CARE ACT?

While the Affordable Care Act (ACA) has attracted much attention, it has no impact on future unfunded liabilities, as it is fully funded on an annual basis as part of the federal budget. In early 2010, just before the ACA became law, the CBO and the Joint Committee on Taxation (JCT) estimated the ACA would reduce aggregate budget deficits by about \$125B over the next decade (2010–2019) as the cost of insurance (about \$1.3T) would be more than offset by various cost savings. Since then, the CBO has updated those estimates several times, and while the projected savings have deteriorated modestly, the overall projections have largely held. We acknowledge that both sides of the political aisle disagree sharply on the question of budget savings; however, for the purposes of this report, we will rely on the non-partisan CBO and JCT estimates.

So, Is the U.S. Doomed? Channeling Winston Churchill

The analysis usually tends to end there. That is, we talk in big numbers about the future costs of entitlement programs, but do not address the fact that something can be done to offset costs. We won't get into all of the details, but just as small changes to assumptions can have a very big impact on these future liabilities, so too can small changes to taxes, benefits, and eligibility rules.

For example, in 1983, Congress raised the eligibility age for Social Security to 67 from 65. The change was designed to phase in over many years with only those born after 1959 subject to the full two-year adjustment. Despite what sounds like a minor change, the aforementioned surplus was extended for more than two decades. Effecting these changes can be very hard, especially given the political disagreement over how best to solve these problems and the various constituencies that can be impacted. But, as Winston Churchill once famously said, "You can always count on Americans to do the right thing - after they've tried everything else."

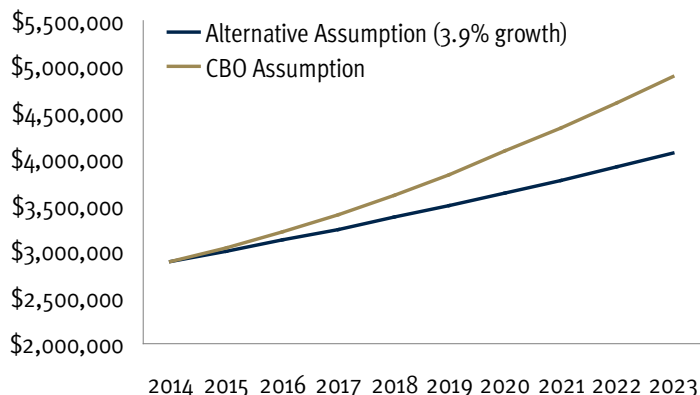
DEFICITS

The good news is that the deficit has ostensibly returned to where it's been relative to GDP for most of the past six decades. That is, the U.S. has essentially run an annual deficit between 2% and 3% GDP since World War II, roughly where it falls today.

The bad news is that based on CBO projections, deficits in absolute terms and relative to GDP are set to rise sharply. The primary drivers of this are two-fold: 1) the aforementioned rise in entitlement spending and 2) an assumed rise in interest rates.

National Health Care Expenditures: Two Scenarios

in 000,000's



Source - Congressional Budget Office, RBC Dominion Securities Inc.

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Thus, while at the present time, and probably through decade end, the U.S. has ostensibly gotten its fiscal house in order, more is likely needed to offset those two approaching headwinds. As we have seen over the past few years in which the deficit was reduced by more than a trillion dollars, despite enormous political rancor, significant change can be achieved. But, the longer it takes to effect this change, the deeper is the hole.

THE BEST CURE FOR ALL OF THIS MAY BE A SUSTAINABLY HEALTHY ECONOMY

While we believe changes need to be made to entitlement programs to make them more sustainable long term, perhaps the best medicine for the debt situation is simply economic strength. Economic growth and job creation act to lower

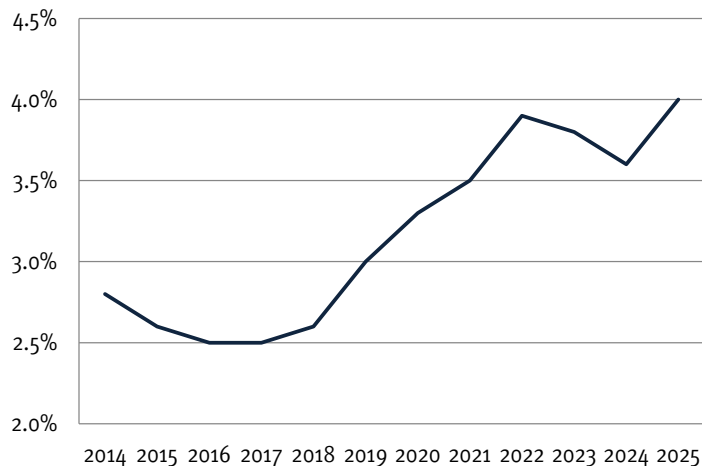
deficits as a percentage of GDP, lower overall debt relative to the size of the economy, and position consumers and businesses to better handle their obligations.

The good news on this front is that following several years of stagnation, the U.S. economy appears to be entering a more-robust period of growth marked by exceptionally strong job creation numbers (2014 was the strongest job year since 1999). This is not to suggest economic strength alone will make some of these problems go away, but strong growth and policies fostered to promote this growth could do a good deal of the heavy lifting.

CONCLUSION

While all of this may seem very daunting, we would start with the premise that the U.S. has an enormous base of wealth, which exceeds \$100T and may approach \$200T. That base of wealth, while not a magic bullet, gives the U.S. the time and resources to deal with the challenges before it. Furthermore, even small changes to eligibility requirements, tax rates, tax thresholds, the rate of inflation of health care costs, and many other factors can have an significant impact on the manageability of future liabilities. To be sure, changes need to be made, and achieving these changes can be especially challenging in an environment in which both sides are deeply entrenched. But, we believe as with most of the challenges the U.S. has faced in its approximately 240 years (many of these challenges brought about similar predictions of doom), it will deal with them, although not necessarily in a straight line or at the most opportune time.

U.S. Projected Deficit to GDP



Source - Congressional Budget Office

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