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# The U.S. Public Debt Situation

# Key Insights

- In 2012, U.S. federal debt held by the public increased to 73% of GDP, the highest level in the post-World War II era. Moreover, the Congressional Budget Office estimates that the nation's debt will climb to 77% of GDP within the next decade absent any policy changes.
- Entitlement spending, which makes up about 85% of all mandatory spending and about 42% of total government spending, is projected to increase by nearly \$1 trillion over the next decade.
- Currently, U.S. borrowing costs are commensurate with sustainable debt (although this is due partially to the quantitative easing by the Fed). If interest rates were to simply return to their historical average, all else equal, the country's debt level could reach 90% by 2023.
- Moving forward, the best approach for dealing with the United States' debt is with confidence-inspiring economic policies that reduce mandatory spending, increase federal revenue collections, and promote faster economic growth.

There are sharp differences of opinion in the United States about both the implications of high public debt levels and the urgency of addressing them. From debt ceilings to fiscal cliffs to sequesters, the U.S. debt situation has dominated economic and public policy debates over the past two years. With the backdrop of ongoing sovereign-debt crises in Europe and the downgrade of the U.S. debt rating by Standard and Poor's in August 2011, focus on the U.S. debt situation has become particularly concentrated and contentious. There are sharp differences of opinion in the United States about both the implications of high public debt levels and the urgency of addressing them.

Amid heightened political rhetoric and hyperbolic predictions, it is often difficult to cut through the noise and separate fact from fiction. This Key Insight will provide readers with an introduction to the U.S. debt situation, its implications for economic growth, warning signs of a debt crisis, and a potential debt-reduction scenario for the United States.

## How Did We Get Here and Where Are We Going?

Debt has always existed over the course of American history. During the Revolutionary War, the Founding Fathers issued paper bonds to domestic and international creditors in order to finance military operations. In fact, Alexander Hamilton, the nation's first Treasury Secretary, called the national debt "the price of liberty" and believed that it may be in the nation's best interest for there to be

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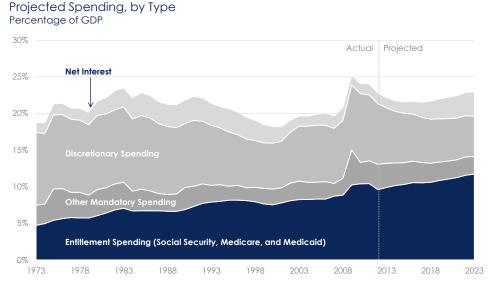
Federal outlays have historically averaged 21% of GDP, while revenues have averaged about 18% of GDP. a manageable level of debt. Over the course of time, however, the nominal value and main drivers of the debt have changed.

In 2012, federal debt held by the public increased to 73% of GDP, the highest level in the post-World War II era. Moreover, the Congressional Budget Office estimates that the nation's debt will climb to 77% of GDP within the next decade absent any policy changes. The single largest driver of this burgeoning debt has been continued, large annual budget deficits, which, with the exception of four years of surpluses in the 1990s, have averaged about 3.5% of GDP since 1973. Following the 2008 financial crisis, deficits rose to almost 10% of GDP, due both to weaker economic activity, and therefore tax receipts, and to increased spending through the Troubled Asset Relief Package, the American Recovery and Reinvestment Act, and a number of "automatic stabilizers". Deficits have since, however, slowly declined, and the 2013 deficit is expected to fall to 5.3% of GDP.

Despite this projected fall in 2013, deficits are expected to worsen in the latter half of the upcoming decade. The Congressional Budget Office's most recent projection estimates a budget deficit of nearly 6.0% of GDP in 2023.

Deficits, by definition, are a gap between government revenues and spending, and it is clear that the present debt situation is the result of a structural and persistent imbalance between government revenues and spending. Outlays have historically averaged 21% of GDP, while revenues have averaged about 18% of GDP. Looking forward, increased spending will be the main impetus behind this growing gap. On a more granular level, growth in mandatory spending - spending on programs required by existing law -will continue to drive deficit growth in the future [Figure 1].

Figure 1. Projected Spending by Type

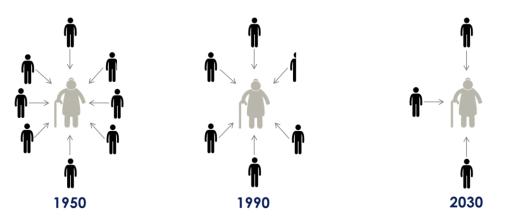




Entitlement spending, which makes up about 85% of all mandatory spending, is projected to increase by nearly \$1 trillion over the next decade. Entitlement spending, which makes up about 85% of all mandatory spending, is projected to increase by nearly \$1 trillion over the next decade. The causes behind this massive increase in entitlement spending are three-fold. For one, health care costs per capita continue to rise. In 2000, national health expenditures per capita were around \$2,000; by 2021, the CBO projects that amount to reach almost \$12,000. Secondly, millions of "baby boomers" are reaching the age of retirement. Significant gains in average life expectancy have also led U.S. citizens to live longer and therefore become the beneficiaries of mandatory spending programs for longer periods of time. Together, these two situations have led to a large decline in the number of workers per retiree in the United States. Economists frequently cite the "Dependency Ratio", which is the ratio of population aged 15-64 year olds per population aged 65 years and older. In 1950, the dependency ratio was 10:1, while by 2030, it is projected to decline to 3:1. When Social Security was originally created in 1935, it was designed to "kickin" at an age after the average life expectancy of many American citizens. Now, increased life expectancies have caused individuals to become the beneficiaries of such mandatory spending programs for longer periods of time. Altogether, these structural effects increase the amount of federal mandatory spending, thereby increasing the deficit.

Figure 2. U.S. Economic Dependency Ratio

Ratio of Population Aged 15-64 per Population Aged 65+



A debt-to-GDP ratio of more than 90% is associated with slower productivity growth by about 1.5 percentage points as compared to a below-30% debt ratio.

### Why Do Deficits Matters?

Amassed deficits unequivocally lead to debt, and debt can become an unsustainable burden on a nation by hurting its ability to borrow money. Once markets begin to lose confidence in a country's ability to pay its debts, the situation can quickly spiral out of control. Interest rates can spike rapidly, leading to a decline in investment spending. As less capital is invested, workforce productivity falls. Research by S. Salotti and C. Trecroci in 2012 shows that productivity in nations with a debt-to-GDP ratio of more than 90% is about 1.5 percentage points lower than it is in nations with debt-to-GDP ratios below-30%. Slow productivity growth undoubtedly hurts long-term economic growth.

If interest rates simply return to their historical average, the country's debt level could reach 90% by 2023.

The U.S. continues to be seen as "the best house in a bad neighborhood" in terms of debt, and heavy foreign investment helps shield the U.S. from a similar fate to its European peers.

More than onethird of U.S. debt is held by foreigners, which could potentially prove risky if countries choose to change policies or keep their money elsewhere. Another risk to investment and productivity growth is the potential risk of public-private crowding out, As entitlement spending continues to take up a growing share of the federal budget, public investment in key areas like education, infrastructure, and R&D could be crowded out. Rising interest rates impede the government's ability to focus on such infrastructure projects.

Over the past two years, long-term interest rates in the United States have actually fallen; yet this is not the case for all countries that fact high debt levels. In Europe, between 2009 and 2012, long-term interest rates in Portugal and Greece more than doubled, while long-term rates in Italy and Spain also spiked above "sustainable levels". What complicates the United States' debt situation is that it does not have to see interest rates rise to European levels in order for its debt to near a dangerous level. If, however, interest rates were to simply return to their historical average, all else equal, the country's debt level could reach levels where productivity and economic growth are shown to be compromised. Currently, U.S. borrowing costs are exceptionally low, making the nation's debt more sustainable (although this is due partially to the quantitative easing by the Fed).

#### Is the U.S. Different?

So far, the U.S. debt situation does appear to be different than those of its European peers, as evidenced by the fact that government, corporate, and household borrowing costs in the U.S. are at historic lows – although a large cause of this has been the Federal Reserve's easy-money policies. There are several other reasons why this is case, however, and they also help to explain why the U.S. may be less likely to suffer a debt crisis than other countries with similar debt-to-GDP ratios would be.

In particular, the U.S. dollar remains a reserve currency, which gives the U.S. monetary system an advantage over comparable economies, not only because it can borrow in its own currency, but also because the large number of foreign transactions denominated in U.S. dollars, along with a functioning regulatory regime, help bolster faith and credit in the U.S. dollar. Moreover, the U.S. continues to be seen as "the best house in a bad neighborhood." Furthermore, heavy foreign investment in U.S. debt and assets helps shield the U.S. from a similar fate to its European peers.

There are, however, also several reasons why the U.S. may not be different. Continued political gridlock has recently hampered efforts to reform the entitlement programs that are driving the U.S.'s long-term debt problem. Moreover, the Fed's monetary policy could potentially be sowing the seeds for future inflation or financial market imbalances. Lastly, more than one-third of U.S. debt is held by foreigners, which could potentially prove risky if countries choose to change policies or to keep their money elsewhere.

#### What a Debt Crisis Could Look Like

In the event that there were to be a debt crisis in the United States, there are several warning signs that could signal an oncoming debt crisis:



- (1) Loss of Market Confidence: One sign that investors have lost confidence would be if money is flowing from stocks into bonds.
- (2) Rising Yields: If investors become worried that the United States could default on its obligations, bonds would tend to be sold off, pushing up yields.
- (3) Warnings of Credit Downgrades: Rating agencies will issue warnings of potential future credit downgrades if the United States fails to get its fiscal house in order.
- (4) Continuing Political Stalemate: Continuing political stalemate would indicate that compromise on the U.S. debt/deficit situation is unlikely and could cause subsequent losses of confidence.
- (5) A Collapse in the Value of the Dollar: A collapsing dollar would mean lower yields on foreigners' domestic investments and thus increase the yield that foreign investors would demand to purchase future assets.

### Potential Ways Out of a High Debt Situation

There are several options available for reducing debt levels, with some being more feasible (and favorable) than others:

- (1) GDP Growth: Faster economic growth is the most favorable way to reduce a country's debt-to-GDP ratio, though policymakers have only limited abilities to control this, as market forces and technological progress are also critical components.
- (2) Fiscal Austerity: Policymakers have more direct control over fiscal policies than they do economic growth, and as a result they often turn to a strategy fiscal consolidation in order to reduce deficits. Austerity has been shown to slow economic growth, although growth outcomes are greatly affected by other factors, namely interest rates, central bank policy, and the nature of the deficit reduction. Typically, a fiscal consolidation equal to 1% of GDP is estimated to have a 0.5% reduction in GDP within 2 years.
- (3) Inflation: Central banks can also allow for high inflation to reduce the real value of the debt. This is commonly referred to as the government "inflating its way out of the problem". Inflation played a large role in the deficit reduction seen in the U.S. and U.K. following WWII. The downsides, however, are numerous, including hurting consumer purchasing power and investor confidence.
- (4) Bailout/Write-off: This tends to occur only after a debt crisis is occurring and confidence in a nation's ability to repay its debts is completely lost. It could result via either a current transfer or capital transfer from abroad (i.e., the IMF comes to the rescue, as it did for Argentina in 1999).
- (5) Default: Similar to a bailout, this option tends to occur only after a debt crisis is occurring. This refusal of an indebted country to pay its debts is typically the last resort and, also like a bailout, would have a lasting effect on the nation's ability to borrow.

Faster economic growth is the most favorable way to reduce a country's debt-to-GDP ratio.

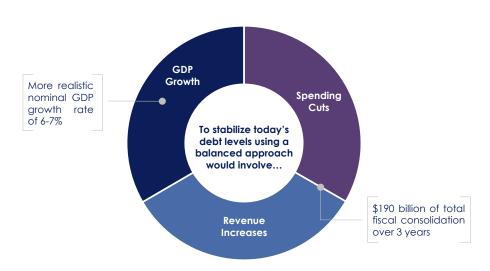
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## A Balanced Approach for the U.S.

The most commonly discussed ways for the U.S. to address its debt problem today are to reduce government spending, increase revenues, or promote faster economic growth. To stabilize today's debt levels in one year using solely one approach would require either a nominal GDP growth rate of 7-8% (up from today's 3.9%), a revenue increase of 15-16%, or a spending reduction of 11-12% - all of which are not likely feasible as standalone policies. For the United States, a credible deficit reduction package to achieve a more realistic debt-to-GDP ratio would include nominal GDP growth rate of 6-7% and roughly \$190 billion of total fiscal consolidation over 3 years, using a combination of both spending cuts and revenue increases.

Figure 3. A Balanced Deficit Reduction Package



Note: Assumes the average effective cost of borrowing remains at 2.1% Source: Keybridge Research