In Debt We Trust: An In-depth Analysis
(a.k.a. A Case of Too Much Debt that Everyone Owns)

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A dysfunctional Moment

Too much has been written about the debt ceiling and political dysfunction in the US and it’s critical corroding effects on global confidence. Congress in the 12th hour did pass a debt ceiling increase to $14.7 trillion on October 15th, enough to keep the government functioning until early February when Congress has another opportunity to restore some of its tarnished image, or embarrass itself again. The most important action Congress could take would be to abolish the debt ceiling because it has proved to be not a good procedure to control budget deficits. Moreover, each episode of debt-ceiling crises has become a global weapon to undermine US political and financial credibility.

How Much Debt is There?

Measuring the size of the national debt has become more complicated in recent years. In the past US sovereign debt was composed of US Treasury securities. As the chart portrays, the outstanding amount of Treasury debt grew slowly over most of the past 60 years, even declining for a brief period at the turn of the century. And, its ratio to NGDP remained below 40% over this broad period. At the end of fiscal year

US Treasury Debt ($Bn.) keeps Rising, and as % of NGDP

2013 the US public debt stood at $11.9 trillion, or 71% of NGDP.

This measure of the public debt does not include debt owned by inter-government
accounts such as Social Security Trust Fund, the Federal Housing Administration, the Federal Savings & Loan Resolution Fund, and the Federal Hospital Insurance Trust Fund. Their holdings of Treasury debt total $4.8 trillion raising total national debt to $16.7 trillion. However, debt owed by one arm of government to another is usually not considered a liability for international comparisons. However, inter-government debt is included along with debt owned by the public in the debt limit.

**Some New Additions to the National Debt**

Since the great recession and the debt crisis in 2008, the US government had to take on the debt created by the GSE’s and agencies that provided liquidity to the mortgage market by creating mortgage-backed products. The GSE’s went broke in 2008 and the government had to back up their debt. In September 2013 the GSE’s credit liabilities added an additional $6.1 trillion of debt to the US government. Consequently, total government debt owned by the public climbed to $18.1 trillion and that pushed the debt to NGDP ratio up to 108%.

In another definitional dispute over the size of government debt some analysts now want to add the debt of state and local governments to the Federal total. European debt figures include regional debt in their sovereign debt totals. Presently state and local debt outstanding amounts to $3.1 trillion. This would raise the national debt to $21.1 trillion, or 126% of NGDP.

**Comparisons to other sovereign issuers**

Fortunately a good test case has recently arisen, which sheds some light on the Federal government’s obligation to local governments. Detroit, the former auto capital city of the world, fell into bankruptcy. Since this city has its own revenue base, it will be responsible for its own obligations. Thus, the federal government’s debt to NGDP ratio slides back to 108%.

Fortunately, comparison with other nations’ national debt to NGDP ratios, places the US at the low end of fiscally solvent countries. Only the fiscally-needy countries in Europe had debt to NGDP ratios above 100% such as: Italy, Greece, Portugal and Ireland. Japan has the highest ratio, well above 200%, but Japanese citizens own nearly all of Japan’s national debt, and interest rates in Japan are barely positive.

**Who Owns All the Debt?**

US institutions and households own approximately half of the outstanding $11.9
trillion of publicly-owned Treasury debt (52.4%); and the other half (47.6%) is owed by rest of the world. Within the US the Federal Reserve is the principle owner ($1,937 billion), followed by households and non-financial businesses ($1,290 billion). Money market and mutual funds own another $919 billion, which probably means that households own most of this amount as well as their direct holdings.

China and Japan are the biggest holders of Treasury debt among foreign owners. Combined they own 20.4% of outstanding publicly-owned Treasury securities. Their heavy concentration of Treasury assets follows from their huge trade surpluses with the US, and the total size of their economies. At this time they cannot find sufficiently large alternative ‘safe’ assets to diversify their reserve base into.

Within the US the Fed’s proportion of GSE debt is approximately the same as it is of Treasury securities, 16.5%. Banks and mutual funds gain share to 26% and 12% respectively, as households do not hold much of these assets directly. Once QE taper begins, the Fed will probably manage to reduce its portfolio in a proportionate way to eliminate any effect on spreads between mortgages and Treasuries.

**The Debt Outlook**

Ordinarily the national debt to NGDP ratio would decline in years of cyclical expansion. As economic growth accelerates it raises revenue growth and reduces future budget deficits. In such years the national debt would not grow as fast as the economy. Moreover, in present circumstances, an improvement in the US housing market should improve the value of underlying mortgage debt in the GSE’s portfolio encouraging these agencies to sell some of their presently depressed assets.

However, the near future of the US budget and national debt is also critically dependent upon whether Congress will permit income tax rates to rise back to previous levels as mandated by current federal law, or not. If so, the publicly-owned Treasury debt to NGDP ratio should decline slightly, or at least stabilize at present levels around 70%.
In the longer run the US budget and national debt levels are subject to an extreme increase, if Congress cannot reduce the social mandate of providing social security and medical care under current benefit levels. CBO estimates that without responsible legislation reducing the deficit from these mandates the deficit burden would become economically stifling.

**The History of the Debt Ceiling**

Congress created a national debt ceiling in 1917 as a means to control rising debt associated with the US efforts during and immediately after WW1. Additional debt ceiling legislation was thereafter enacted in 1939 and 1941, which established the modern debt ceiling law. It is a separate law from the budget process although Congress in the past would legislate an increase in the debt ceiling automatically, along with passage of a budget deficit.

Since 1941 the debt ceiling has been raised 95 times. The biggest increases in the debt ceiling occurred during and immediately after WW2 when the federal debt to NGDP ratio soared above 120%, and in the late 1980’s when budget deficits increased following the twin recessions and the Reagan tax rate reductions. Recently, contentious Congresses have used the debt ceiling standoff as a lever to achieve some social - usually partisan - objectives on nine occasions. Budget impasses have also caused 19 government shutdowns since 1974.

**The Aftermath of the Debt Ceiling Fiasco**

The intransigent Congress caused the US government to be shut down for 15 days this October, in which federal payrolls were missed and contractors to the government were not paid. Most agencies were shut down and 800,000 workers were temporarily furloughed.

**Increases in the Debt Ceiling since 1980 ($ Bils.)**

The immediate economic damage to the economy was relatively small, an estimated 0.2% to 0.3% of GDP growth in Q4. Because the time period was relatively short, 15 days, and the government would back-pay federal employees and contractors. However, a broader sense of unease and uncertainty permeates through the economy over Congress’ intent. It will most likely cause businesses to delay hiring and postpone new investment until this budget hurdle is surmounted. This will bruise GDP growth in Q1 2014.

There is no sense of optimism that the same chronic partisan politics will not play out again at the start of 2014. Consequently, the economy will again be
damaged. The Fed therefore, recognizing this probable political impasse, will probably have to continue QE purchases through Q1 2014 delaying tapering until the budget impact is past. Their delaying actions should provide support for both stock and bond markets in the US and abroad until the US fiscal crisis is past.

While the economic damage to the US economy is probably relatively minor, the global political damage has been inestimable and potentially much more severe. A global loss of confidence in the US political process has centered on the debt credit worthiness of the world’s reserve currency. It is not a trivial matter. At a minimum it will mean somewhat higher borrowing costs for the US than before and relative to other high-grade sovereign borrowers. Already Germany, France, Netherlands and Japan have cheaper sovereign debt borrowing costs than the US. More importantly it will hasten the world’s search for an alternative to the US dollar and US debt as the foundation for the world’s liquidity.

For more information, please contact camri@nus.edu.sg
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Source: Bloomberg

APPENDIX

GLOSSARY OF KEY TERMS (Source: Bloomberg, with tickers in parenthesis. In US$ where applicable)

S&P500: capitalization-weighted index of the prices of 500 US large-cap stocks (SPX)
FTSE: capitalization-weighted index of the prices of the 100 largest LSE-listed stocks (UKX)
NIKKEI: capitalization-weighted index of the largest 225 stocks of the Tokyo Stock Exchange (NKY)
HANG SENG: capitalization-weighted index of companies from the Hong Kong Stock Exchange (HSI)
STI: cap-weighted index of the top 30 companies listed on the Singapore Exchange (FSSTI)
EUR: USD/EUR exchange rate: 1 EUR = xx USD (EUR)
YEN: YEN/USD exchange rate: 1 USD = xx YEN (JPY)
CMCI: Constant Maturity Commodity Index (CMCIP)
Oil: West Texas Intermediate prices, $ per barrel (CLK1)
3MO LIBOR: interbank lending rate for 3-month US dollar loans (US0003M)
10YR UST: 10-year US Treasury yield (IYC8 – Sovereigns)
10YR BUND: 10-year German government bond yield (IYC8 – Sovereigns)
10YR SPG: 10-year Spanish government bond yield, proxy for EU funding problems (IYC8 – Sovereigns)
10YR SGS: 10-year Singapore government bond yield (IYC8 – Sovereigns)
US ISM: US business survey of more than 300 manufacturing firms by the Institute of Supply Management that monitors employment, production inventories, new orders, etc. (NAPMPMI)
EU PMI: Purchasing Managers’ index for the 17-country EU region (PMITMEZ)
JP TANKAN: Bank of Japan business survey on the outlook of Japanese capital expenditures, employment and the overall economy, quarterly index (JNTGALLI)
CHINA IP: China’s Industrial Production index, with 1-month lag (CHVAIOY)
LC: Local Currency

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