NUS National University of Singapore | Centre for Asset Management Research & Investments
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CAMRI Global Perspectives

Monthly digest of market research & views — **Issue 42, March 2017**

Debt: Too Much, or Do We Need More?

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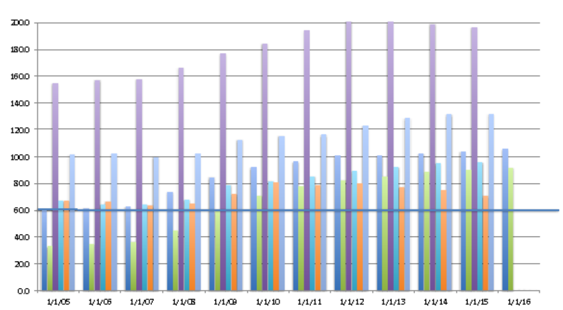
New government initiatives require more financing

As more advanced economy governments respond to the challenge posed by President Trump's announced economic plans to inject new dynamism into the sluggishly growing US economy, all are facing a crucial decision of financing these important and some grandiose plans for reigniting moribund economic growth. Unfortunately most advanced economies already have relatively high indebtedness.

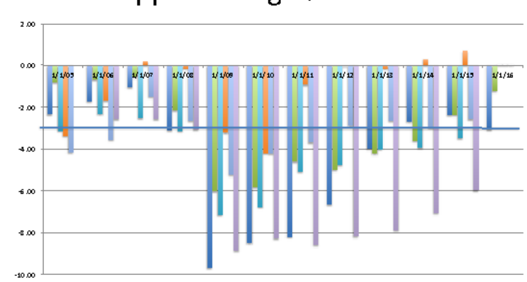
All Advanced Economies Debt/GDP ratios exceed 60



High - or too high - indebtedness abounds

The debt to GDP ratios of most advanced economies of the world have exceeded the conventionally-accepted optimum ratio of 60% for many years now. Moreover, nearly every one of these large economies is laboring under high national budget deficits.

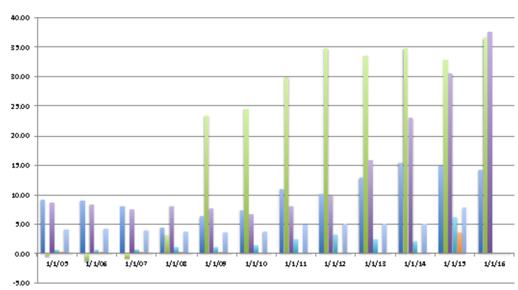
Most countries budget deficits are approaching 3% of GDP



Central banks own a disproportionately high share of own government debt

After successive rounds of unprecedented quantitative easing, central banks in nearly all advanced economies own huge shares of their own government's debt. The most egregious example is the UK and Japan. In contrast, the Federal Reserve owns approximately 14% of outstanding US Treasury debt, about 60% less than the central banks of the UK and Japan. This is because the latter's quantitative easing policies were larger and longer, and their governments' outstanding debt was considerably smaller than the US.

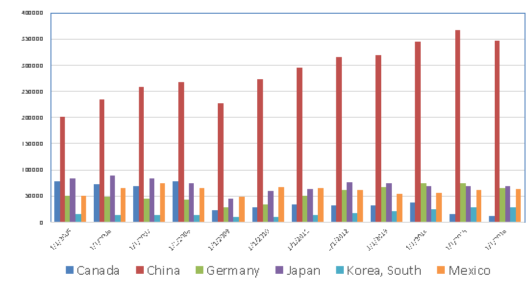
Central Banks Own Growing proportions of their Government's debt



That said, foreign central bank ownership of US Treasury securities is very high

Central banks around the world have purchased vast quantities of Treasury securities partly to secure their own currency with the most widely-available global reserve currency, and partly to prevent their currency from appreciating against the dollar. As the following chart illustrates, the countries with the greatest trade surpluses with the US over the past several decades have accumulated the largest pile of US Treasury debt.

US Trade Deficit by Top 6 Trade Partners



Since the dollar is presently considered relatively and historically strong, central banks will be less encouraged to depreciate their currencies against the dollar. This would slow down their purchases of Treasury securities significantly.

China reserve outflow

Official institutions in China hold the largest proportion of outstanding US Treasury securities. In 2013, the People's Bank of China's holdings of Treasury securities peaked at $1.27 trillion. At the end of 2016 their holdings shrunk by $212 billion. Of course, the PBOC's holdings do not reveal the extent of China's holdings of Treasury securities. Chinese sovereign wealth funds also own Treasury securities, thus boosting the nation's combined holdings by a few trillion dollars more.

Since September 2016, the renminbi has been subject to significant depreciation pressure against the dollar, on the back of continued capital outflows. According to balance of payments data, 40% of the roughly $490 billion of outflows in 2016 took place during the fourth quarter. Other indicators suggest that outflows continued in January, albeit at a slower pace. China's selling of Treasury securities has added to the outstanding supply. The capital outflow from China is likely to continue, especially if China maintains its current policy of gradually opening its capital markets. Thus the Chinese central bank will be forced to sell more Treasury securities into the open market.

Inflation is on the rise

Inflation is rising in all of the advanced economies. It has breached 2% in the US and turned positive in Japan. Higher oil prices have contributed to the upward momentum, but so too have prices of many domestic products, as seen in the next chart. Once inflation rises above intolerant levels, central banks will shed their holdings of government debt in an effort to restrain final demand. Some central banks that had indulged heavily in quantitative easing have already stopped buying their government's securities and are merely replacing maturing debt. The US Federal Reserve is an example; others are soon to follow as inflation has begun to accelerate in many advanced economies. Soon, some central banks will stop replacing maturing Treasury securities after they decide that they need to complement their current policy of gradually raising official rates.

Government supply will be rising

At that point, the outstanding supply of Treasury securities will rise significantly due to the new issues needed to finance major infrastructure projects and the rising supply from maturing Treasury securities that are rolled, which the Federal Reserve declines to repurchase. Other central banks are very close to making the same decision: to suspend new purchases and stop replenishing maturing debt in their portfolios.

The inevitability of higher long term yields

The era of ultra-low and declining interest rates is over. Central banks are presently seeking to return to policy neutrality. However, increasing inflation will foil those central bank policy plans and they will need to do more than seek neutrality. The rising tide of new and maturing Treasury securities, plus increasing inflation, prompting market expectations for tighter monetary policy, will raise the yields on all Treasury securities. Higher interest rates and a firm (or firmer) dollar will stress all those non US borrowers who sold US denominated debt over the past several years.

US dollar-denominated debt a threat to emerging market economies

The amount of outstanding US dollar-denominated securities issued by emerging market economies (EMEs) rose from US$509 billion in 2008 to US$1.25 trillion as of end-September 2016 on a residence basis. Non-financial corporations issued around 40% of this debt. Total US dollar debt (including bank loans) of EMEs' non-bank borrowers stood at US$3.6 trillion at end-September 2016. As a fraction of GDP, however, total EME debt denominated in foreign currency is still below the levels observed just before the Asian financial crisis.*

The composition of this total non-dollar debt has changed; bank debt has been partially replaced by longer-term debt securities issuance. In addition, EMEs have in general much larger international reserve buffers now compared with the 1990s. Nevertheless, the higher debt burden and a strengthening dollar with higher interest rates could turn into a significant financial headwind, especially if advanced economies became less open to trade.

More securities chasing fewer investors

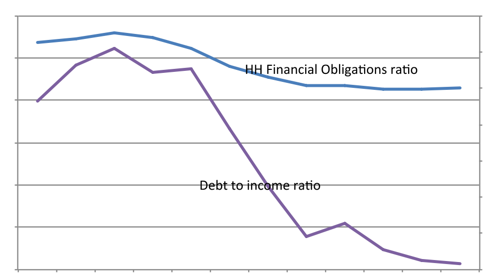
In the US a US$1 trillion dollar government spend on infrastructure investment will produce copious quantities of US Treasuries, and enlarge an already bulging deficit for many years into the future. In Japan, Prime Minister Abe's efforts to stimulate his economy have left humungous deficits and enormous piles of JGB securities in the central bank's balance sheet. European countries are also feeling the pressure to stimulate their economies and circumvent stringent budget standards by offering their own government spending plans.

Since central banks will purchase significantly fewer Treasury securities than they have in the past decade, governments will have to attract more private sector domestic investors. In past business cycles, government's share of the domestic capital market usually grew at the expense of private sector borrowers.

Households borrowing again

The tremendous disruption caused during the 'great recession' in 2009 concentrated most upon the household sector when the values of their property plunged, bankruptcies soared, and unemployment spread like wildfire. Burned by these financial shocks the household sector retreated for years by paying down debt and resisting temptations to create new indebtedness.

Household leverage has improved significantly since the debt crisis

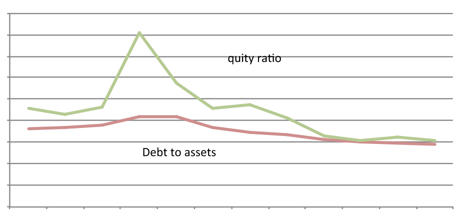


This prudent household behavior was initially responsible for the sluggish beginning to the present economic expansion. Household behavior slowly changed, and households began to increase their debt exposure in 2012, and debt growth gradually accelerated from 1.8% in 2013 to 4% in 2016. In spite of this increase in indebtedness, household net worth is an impressive $90.2 trillion and growing. Moreover, the ratio of household liabilities to personal income was 92.5% in 2016 after having peaked at 116 % in 2007.

In addition, the Federal Reserve's household debt obligations ratio has also improved from over 13% in 2007 to 10% in 2016. Thus, the household sector has the capacity to leverage its assets further in the coming years, as long as the business expansion carries on.

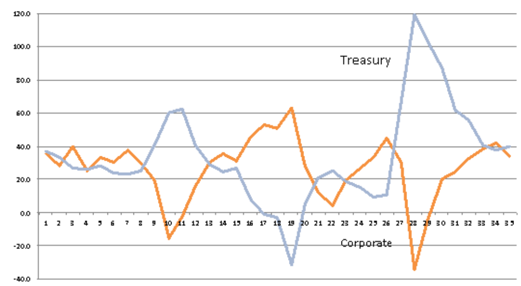
The specter of crowding out will return

Corporate debt/equity and debt/asset ratios have improved



When interest rates are rising and the government is monopolizing the bond market to fund its public objectives, the loser in terms of access to the credit markets typically falls upon the business sector. Presently, US non-financial companies' debt-to-equity ratios have fallen, as have debt-to-non-financial assets; the result of the cautious attitudes of US businesses following the debt crisis of 2008-2009 and the surge in corporate profitability that followed those dark days. However, in years when the Treasury had to fund rising deficits, the government took a bigger proportion of the debt market flows. As shown in the next chart, Treasury and corporate proportions of credit markets are inversely related.

US Government dominates credit markets in big deficit years (% of funds raised)



Conclusion: More debt is coming

Public infrastructure projects have most usually been financed in the credit markets by sponsoring governments. Given the business history of the new US President's financial operations in his various businesses, it would seem even more likely that federal budget deficits in the next few years would be expanded greatly and financed with debt. Already the sound of financial conservatives' hooves in Congress retreating can be soundly heard. Therefore, other borrowers will be squeezed from the debt queue, and all will pay higher rates for their financing.

Moreover, while US budget deficits mount, and foreign and domestic central banks shrink their asset bases, the dollar will eventually come under downward pressure. This could partially mitigate the supply demand imbalance in the market for Treasury securities, as emerging market central banks attempt to prevent their currencies from appreciating excessively against the dollar.

More debt and higher yielding debt may alleviate the strain on long term investors that need higher yields to immunize their growing pension, and annuity liabilities.

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	KEY INDICATORS TABLE (AS OF 28 FEBRUARY 2017)							
INDEX	**LEVEL (LC)**	**%1MO (LC)**	**%1MO (USD)**	**%1YR (LC)**	**%1YR (USD)**	**INDEX**	**LEVEL**	**%1YR**
S&P500	2363.64	3.97%	3.97%	23.96%	23.96%	3MO LIBOR	1.06	67.53
FTSE	7263.44	3.10%	1.85%	24.25%	11.18%	10YR UST	2.39	35.61
NIKKEI	19118.99	0.47%	1.42%	20.40%	22.53%	10YR BUND	0.21	41.75
HANG SENG	23740.73	2.01%	1.95%	27.77%	27.97%	10YR SPG	1.66	5.29
STI	3096.61	1.81%	2.65%	21.52%	22.32%	10YR SGS	2.31	0.84
EUR	1.06	-2.06%		-3.27%		US ISM	57.70	18.72
YEN	112.77	-0.03%		-1.08%		EU PMI	55.40	5.93
CMCI	1191.69	0.47%		30.46%		JP TANKAN	7.00	-22.22
Oil	54.01	2.27%		64.77%		CHINA IP	6.00	1.69

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 (CMCIPI)
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