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E.Q Trendwatch™

Quantitative Endgame?

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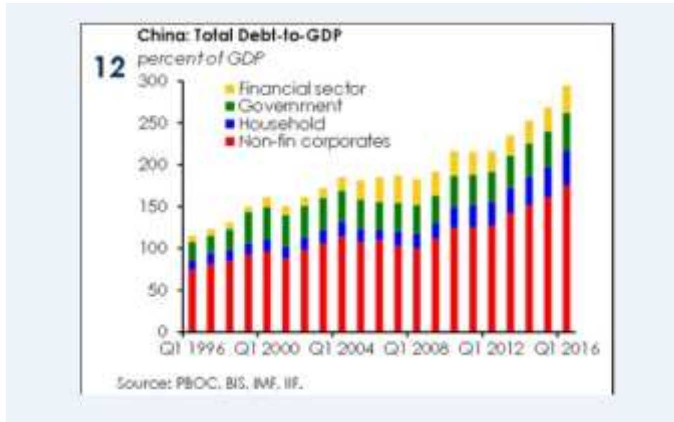
> *"Zero rates and asset purchases of central banks have, thus far, proved much more favorable to Wall Street, capitalists, shadow banks, 'unicorns,' and so on than it has for Main Street, workers, savers, banks and the jobs market…The 'Wall Street boom, Main Street bust' narrative is one central banks would very much like to avoid in 2016. The markets have not priced in quantitative failure."* --Michael Hartnett, chief investment strategist Bank of America

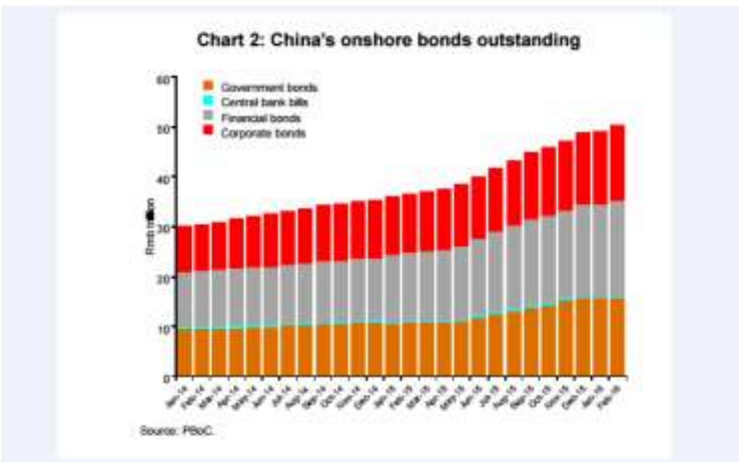
From 2010 to 2014, the US Federal Reserve embarked on a series of experimental schemes to weaken the US dollar and revive animal spirits in financial markets. As economic growth failed expectations and has slowed with each successive year, other central banks tried monetary maneuvers designed to weaken their currencies and buoy exports. By 2014, the US dollar lost the debasing race and rebounded as commodities, stocks and corporate bonds fell. The more the dollar rose, the more commodity prices (in U$) weakened, the more resource-dependent economies contracted, the more global growth declined, deficits spiked, and debt rose.

Nowhere have these impacts been more magnified than in China, the world's second largest economy, where debt has quadrupled since 2007. Today, with total debt approaching $30 trillion (300% of the nation's $10 trillion GDP), credit created since just 2007 is greater than the outstanding debt of the US, Japanese, German, and Indian commercial banking systems combined. Moody's warned this month that 1/5th (conservatively) of the debts owed by China's state-owned entities (SOEs) may require restructuring. As reported by Ambrose Evans-Pritchard of the UK telegraph, defaults are spreading from local SOE's to the bigger state giants, once believed to have a sovereign guarantee. The scope and scale of global impacts are hard to model.

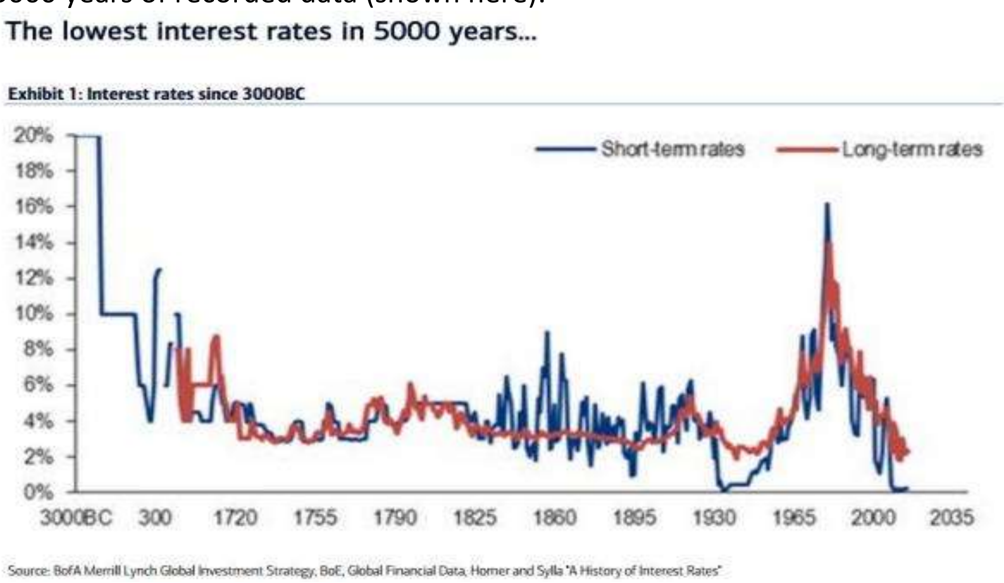
Growth in Chinese debt has been historically unprecedented—more than doubling since 2008 (chart lower right). As points of comparison, a 50% jump in leverage has been a reliable precursor of previous credit crises: debt rose by 50% of GDP in Japan before the Nikkei bubble burst in 1990, in Korea before the East Asia financial crisis in 1998, and in the US before the subprime bust hit in 2007. All of these lesser implosions spread through global markets.

As in other countries to a lesser extent, Chinese companies have issued bonds to augment cash flow as revenues have contracted. In China, as usual, the scale has been epic. Over just the past year, the stock of Chinese corporate bonds—money borrowed by corporations—has jumped by 78% to $2.3 trillion (chart lower left).





Debt and levered bets on debt have built a global financial house of cards. Surfing on Central bank 'liquidity', financial multinationals have doubled down on the riskiest derivatives trading—estimated to be 20% bigger in 2013 than it was in 2007. The largely unregulated 'shadow banking' system driven by hedge funds and other financial intermediaries, has grown an estimated $1.3 trillion a year since 2011. In the process, short and long term government interest rates globally are at the lowest levels in 5000 years of recorded data (shown here).



<u>This might seem counter-intuitive: at a time when more companies and governments are selling more bonds to raise capital than ever in history, interest rates are at their lowest in 5000 years</u>. In free markets, one would expect a soaring supply of bonds to drive the price down (and yields up) in order to entice buyers and compensate their capital for the increased risk that comes with higher indebtedness. But because central banks have been fabricating capital out of thin air (computers) and indiscriminately buying back financial assets worldwide there has so far been a rising supply of captive and increasingly levered currency, recycling robotically through markets regardless of price or value. This has undermined free market forces and led to widespread 'dumb' capital misallocating globally.

For an excellent, comprehensive look at all the self-defeating impacts that the preoccupation with financial engineering is having on the global economy and social order, we highly recommend a new book by economic analyst and Time columnist Rana Forhoohar, entitled *Makers and Takers, the rise of finance and the fall of American Business, pg 5:*

> *"Our economic illness has a name: financialization. It's a term for the trend by which Wall Street and its way of thinking have come to reign supreme in America, permeating not just the financial industry but all American business. This very type of short-term, risky thinking that nearly toppled the global economy in 2008 is today widening the gap between rich and poor, hampering economic progress, and threatening the future of the American dream itself.*
>
> *…the traditional role of finance within an economy—the one our growth depends on—is to take the savings of households and turn it into investment. But that critical link has been lost. Today finance engages mostly in alchemy, issuing massive amounts of debt and funneling money to different parts of the financial system itself, rather than investing in Main Street. The trend varies slightly country by country, but the broad direction is clear: across all advanced economies, and the United States and the U.K. in particular, the role of the capital markets and the banking sector in funding new investment is decreasing. Most of the money in the system is being used for lending against existing assets."*

Policymakers have managed to turn the US based mortgage debt bubble of 2005-07 into a bubble in virtually every asset class globally. As shown in the graph on left, the price of total financial assets as a ratio of US disposable household income reached the highest level ever in 2014—past the previous record peaks just before asset markets halved in 2000 and 2007.

Of course, the high value of financial assets relative to disposable income is not due to a higher level of savings but rather due to extreme valuations in financial assets themselves. <u>Since 2000, household saving as a fraction of household income has been half the average of the prior 50 years</u>*.* <u>The US national saving rate of 2.6% in</u>

late 2015 was less than half the 6.3% average of the last three decades. In order to truly rebuild strength, first there must be a sustained period of reduced consumption and increased savings:

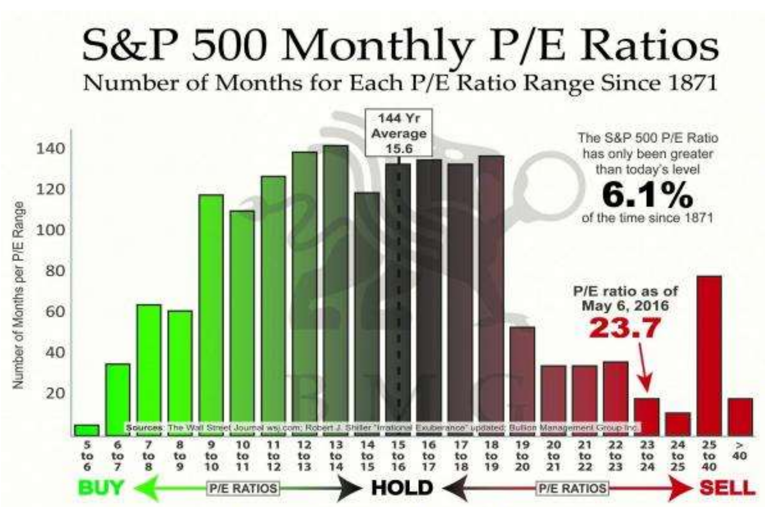
> *"A pro-saving US policy agenda should draw on the following: longer-term fiscal consolidation, expanded IRAs (individual retirement accounts) and 401Ks, consumption-based tax reform (such as value-added or sales taxes), and interest-rate normalization. Instead, US politicians continue to focus on keeping the consumption binge going, regardless of its implications for America's saving imperative…It is time for politicians to own up to the uncomfortable truth: The saving deficit is the single greatest threat to the American Dream."—Stephen Roach, Americas Savings Perils, May 23, 2016*

History proves that asset bubbles are finite. And prices have in fact been slowly churning lower again since 2014. Eventually under-saved over-levered participants need to raise cash and sell assets to do so. Just beginning, this third liquidation cycle since 2000 is set up to be beyond anything seen in history to date.

The earnings mean reversion cycle, already underway for 18 months, may just be getting started.

In the first quarter, S&P 500 companies earned $87 per share during the prior 12 months—12% below the $99 per share reported in Q1 2015 and 18% lower than the $106 a share reported in the year ended in September 2014. Falling profits in most sectors suggest second quarter 2016 earnings are on track to decline by a further 4.7%.

This month the Securities and Exchange Commission (SEC) released new rules meant to address the abuse of Regulation G which was implemented in 2003 allowing companies to report Non GAAP earnings. The initial thought was that companies could provide additional clarity to investors by excluding one-time items from their earnings. However, as we noted in last month's letter *"Cooked books and the end of Alchemy"* the practice of 'adjusting' earnings became a mainstay—from Microsoft to Pepsi to Eli Lilly—90%+ of public corporations have been using Non-GAAP earnings to overstate GAAP results by more than 30%. In the process, financial media and analysts adopted the habit of routinely using 'adjusted' earnings in their valuation assessments.



If the new reporting requirements are followed, starting in Q2, S&P 500 adjusted earnings are set to fall a further 15% on average, just on the new rules alone.

Since the S&P 500 has remained within 3% of its May 2015 all-time high of 2130, its price to earnings ratio has climbed to 23.7x earnings even as median stock prices have declined. As shown on left, stocks have only been more richly valued 6.1% of the time since 1871, and then only for fleeting periods before dramatically correcting lower.

As a point of cyclical reference, David Stockman noted on May 24 that at the last cycle peak in June 2007, S&P 500 earnings topped at $85 per share:

> *"The arithmetic of the matter, therefore, is that corporate earnings have grown at a miniscule* 0.2% annual rate *during the last nine years. Take the inflation out of that and adjust for nearly $3 trillion of stock buybacks and shrinkage of the share count in the interim, and you have less than no growth at all.*
>
> *The worse thing is that we have been here before - at this same juncture exactly eight years ago in May 2008. The just completed earnings season had generated S&P profits of about $61 per share. That was down more than* 25% *from the prior year peak of $85, but the casino punters ignored the warning signs. The S&P 500 index remained within* 3% *of its November 2007 high (1570) for a few more months. Then the sky fell. Nine months later the market was down by 57% and* and the U.S. economy was in the worst recession since the 1930s."

Magnifying price risk, GDP growth expectations for 2016 have been diving (red below) under the S&P (green).

At present extremes, monetary 'stimulants' are backfiring and acting as a tax or weight on consumption.

As profits recede, banks have been focused on cutting overhead while raising reserves for bad debts. In Japan and Europe, negative deposit rates at central banks are prompting lenders in search of spread to increase consumer loan rates—the opposite of stimulation for consumer spending. Although keen for revenue, banks can't pass negative deposit rates on to their customers without the self-defeating effect of driving deposits out of the banks. A recent study from the St Louis Fed concludes:

> *"At the end of the day, negative interest rates are taxes in sheep's clothing. Few economists would ever claim that raising taxes on households will stimulate spending. So why would they think negative interest rates will?"*

In a world of no revenue and wage growth, and no meaningful rate cut room remaining, debt restructuring/reduction becomes the last viable option to increase cash flow and savings. This can happen nearer term through bankruptcy and write-offs, or slower through many years of gradual repayments. But debt must be retired and savings rebuilt one way and another.

The Organization for Economic Development (OECD) reports that the rising old-age dependency ratio (those over 64/working age population) in developed economies will result in significantly higher public spending needed on health care, long-term care and pensions over the next 30 years. Public pension spending on its own is already the largest budget item in many countries accounting for 17% of government expenditures. And that is while still factoring in unrealistically high future return assumptions of 7.6% annually from current levels. Funding needs soaring while income is falling, and already impossibly indebted. Something has to give.

Quantitative Endgame: internal, partial default on government debt held at central banks?

In 2008, reviewing the complex web of ginormous debt and derivative markets, we rather simplistically noted that the reality of aging demographics and debt left from the credit bubble, suggested the necessity of a credit jubilee that 'knocked off zeros'. Since then, policymakers have spent 8 years swapping out trillions in government bonds off the balance sheets of financial institutions and on to that of Central Banks. This has enabled global debt to increase a further 40%+. But it was always a temporary extend and pretend strategy. Rising national debt (even at low rates) is absorbing an ever increasing portion of income critically needed to fund spending and investment.

Recently we have noted some rumblings around the edges of a next generation financial trick: governments defaulting on tranches of Treasuries held by their own central banks as a controlled 'internal' way to lower outstanding debt and free up revenue needed for present spending, social programs and infrastructure investment. In international credit, the term 'default' does not actually apply to payments a government fails to make to itself. This is complicated in Europe where the ECB now holds the bonds of many different member countries. In the US (and Japan too) it is less complex. Of the $13.4 trillion of US Treasuries outstanding, the US central bank is the largest holder at $2.3 trillion (up from $500 billion in 2008), and more than double the $1 trillion held each by the next largest holders, China and Japan. Arguably on an internal default of Treasuries held at the Fed, other external institutions, pensions and foreigners could still be paid, so no credit rating downgrade need necessarily follow. Prestidigitation: voila, *debt disappears!?* The idea was hinted at by *This Time is Different*, co-author Carmen Reinhart in a Dec 31, 2015 Project Syndicate article: A Year of Sovereign Defaults?

> *"When it comes to sovereign debt, the term "default" is often misunderstood. It almost never entails the complete and permanent repudiation of the entire stock of debt; indeed, even some Czarist-era Russian bonds were eventually (if only partly) repaid after the 1917 revolution.*
>
> *Rather, nonpayment — a "default," according to credit-rating agencies, when it involves private creditors — typically spurs a conversation about debt restructuring, which can involve maturity extensions, coupon-payment cuts, grace periods, or face-value reductions (so-called "haircuts"). If history is a guide, such conversations may be happening a lot in 2016."*

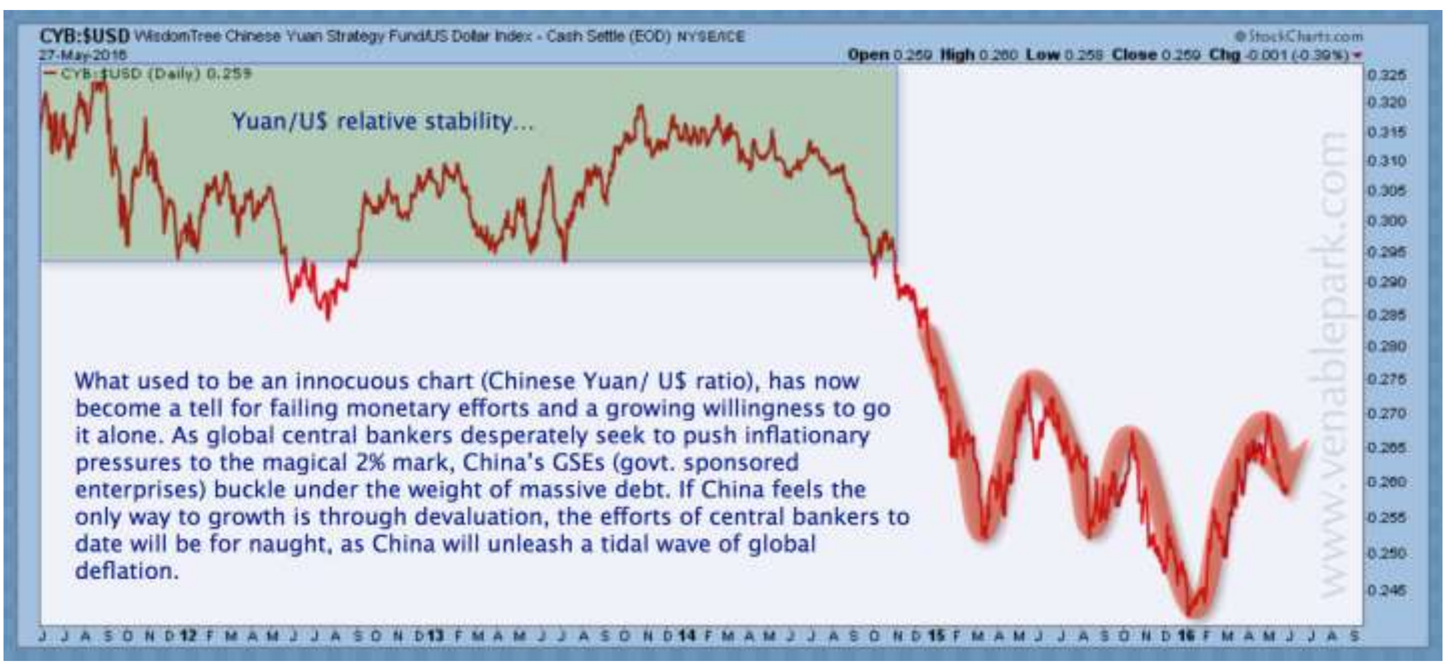
No doubt there are unforeseen shocks that would flow from an internal default on some US Treasuries. In a world that is massively inter-levered, knocking off zeros on some government bonds owed by the world's largest creditor is a nerve-wracking experiment and would very likely have contagion effects on other global markets. But the US is also the world's largest stable of able consumers, and developing countries need it to get back in the black as soon as possible. The plan would also acknowledge some mathematical truth that debts which cannot be diminished by inflation as in previous cycles—cannot be repaid with stagnant, falling, insufficient income.

Personally, we would not be surprised to see more talk of 'controlled' or 'internal' government defaults in the months ahead - especially if financial markets continue to struggle and political pressure continues to mount for 'change' away from the 'let them eat credit' philosophies, which have governed the free world for the past 30 years. But debt reduction is just part of what is needed. Without a decrease in government spending and increased tax revenue, knocking off liabilities would be short-lived relief since deficits will regrow debt.

In the meantime, now is the time for practical, sober steps and planning in order to carefully build and guard savings. We find ourselves concurring with these words of economist and money-manager John Hussman last week:

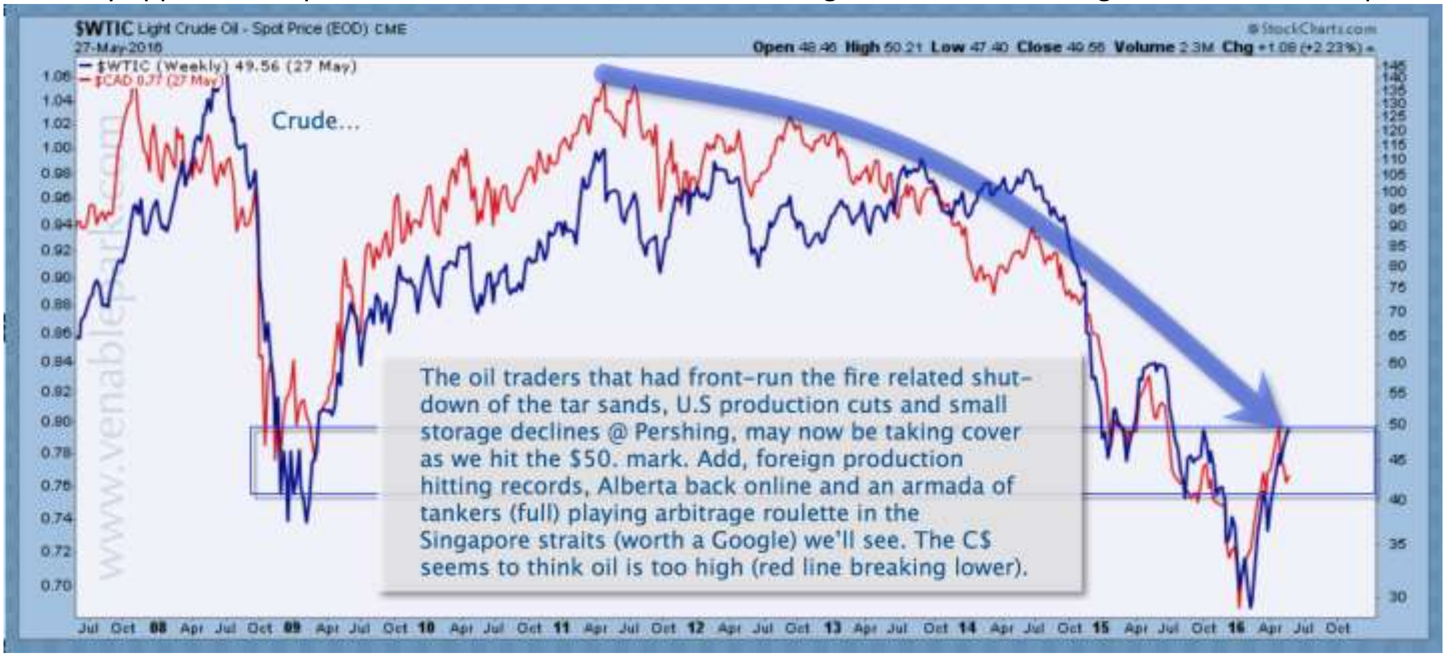
> *"We strongly encourage investors to continue to save in a disciplined way, but nothing forces investors to allocate these funds to speculative asset classes.*
>
> *…The tide will turn, as it always has in complete market cycles across history, and as investors discovered during the market collapses of 2000-2002 and 2007-2009. The erasure of realized past returns will restore reasonable prospects for future investment, as other retreats have done. Meanwhile, keep saving, reach for umbrellas, fasten your seat belt, and brace for the consequences and eventual opportunities that the current recklessness will bring."*

The US dollar index re-strengthened in May against the basket of global currencies. In May, the People's Bank of China devalued the Yuan to the lowest since March 2011 by raising its fixed exchange rate with the U$ to 6.5693, the highest in over 5 years. Other countries wish to follow suit to compete for falling exports.



The resource-centric Canadian Venture Exchange (in blue) and Canadian dollar (in red) hit resistance and rolled over in May. With global growth faltering, disappointments may accelerate over the next few months prompting safe haven flows back to the U$ and another relapse for resources and the loonie.

Oil (WTIC in blue) rebounded in May even as OPEC production hit the highest levels since 2008 and the US dollar rallied. With global gluts still building and no agreement on cuts, the dramatic rebound in crude since February appears too speculative to be durable. The weakening loonie this month agrees with crude skeptics.



5-year/30-year US treasury yields signalling cyclical slowdown: Shown below since 1997, the US Treasury yield spread has been flattening since 2014 as deflationary pressures spread. This casts further doubt on the Fed's 'expanding growth' thesis even as the central bank would like to raise rates.

And it's not just US government bond yields that are signalling deflation. Bond yields in the world's most developed economies: Japan, Germany and the UK have all been falling along with central bank credibility since QE madness began in 2010.

Shown here since 2008, the US dollar rebounded against commodity centric currencies like the loonie this month even as oil prices (priced in U$) rallied. Most other commodities weakened on the month in line with rising global risk aversion, falling demand and still rising supply and stockpiles of most goods.

Canadian TSX: long-time languish continues 2.5 years and counting. No new highs mean lower lows likely.

The S&P 500 has been stuck within a topping pattern since November 2014 (between arrows below). The wobbly rebound this month returned prices to upper resistance and exhibits all the signs of computer driven "algo" trading/gaming accomplishing nothing but outrageous valuations and still massive downside risk.

US Broker/dealers (index in red) and S&P 500 (in blue) since 1998: Broker/dealers have broken all the rules and exacted insanely preferential treatment, but their profits and share prices seem to have run out of steam nonetheless. Rolling over since 2015, the broker/dealers led the broader S&P lower in both 2000 and 2007.

The secular bear that began in 2000 for global stock and corporate debt markets is now in year 17. Despite a rebound of some losses since February, a downtrend resumption is baked into today's excessive valuations. Meanwhile, North American government bonds and cash continue to offer capital stability, liquidity and steady income. We make our management choices accordingly.

Happy June!! *Quotes of the month:*

"*There's a crater under every bubble. Every one.*" –Bank of Canada head, Stephen Poloz, May 3, 2016

"It's easier to fool people than to convince them that they have been fooled."—Mark Twain

"Impunity means that the rich and powerful escape from punishment even when their malfeasance is in full view. Impunity is epidemic in America. The rich and powerful get away with their heists in broad daylight." —Jeffrey Sachs, economist, The age of impunity, May 17, 2016

"The flood of money that central banks are creating pollutes the Western capitalistic system and free markets, as well as democracy. The consequences are anemic economic growth, deep social discontent, a culture of cheating, and moral degeneration."
—Marc Faber, When a political system authorizes plunder, May 31, 2016

In case you missed the thought stimulating presentation posted on the blog this month by innovation expert and author Tony Seba entitled *Why Energy & Transportation will be Obsolete by 2030*, we highly recommend it. Here is a direct video link to his March talk in Oslo Norway available on Youtube.

The keynote, based on the book 'Clean Disruption of Energy and Transportation' asserts that four technology categories will disrupt energy and transportation:
1- Batteries / Energy Storage
2- Electric Vehicles
3- Self-Driving Vehicles
4- Solar Energy

The outcome of the Clean Disruption is that by 2030
- *All new vehicles will be electric.*
- *All new vehicles will be autonomous (self-driving).*
- *Oil will be obsolete*
- *Coal, natural gas and nuclear will be obsolete*
- *80+ per cent of parking spaces will be obsolete.*
- *Individual car ownership will be obsolete.*
- *All new energy will be provided by solar (and wind)*

Don't forget to visit our blog www.jugglingdynamite.com for daily charts and commentary.