

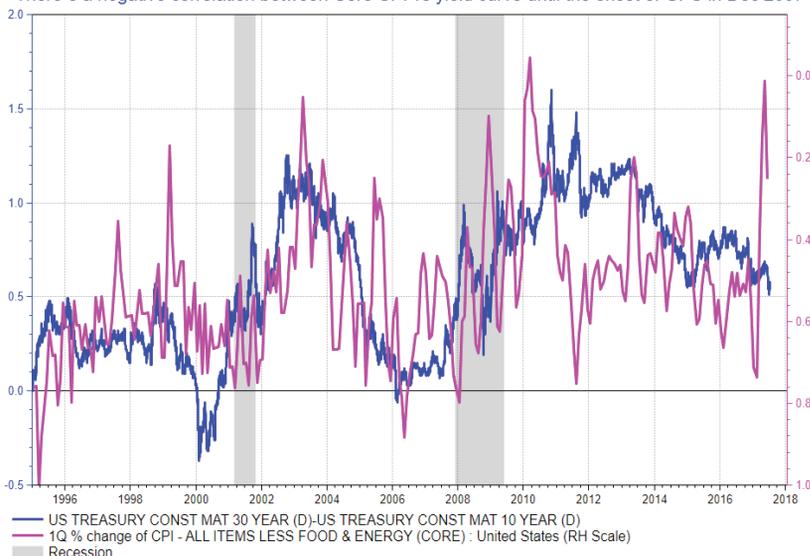
17 / All that you know before Nov 2008 is now all wrong: understanding how QE skewed the relationship of financial variables

Fed Chair Janet Yellen testified before the US Congress and basically confirmed what pundits have been saying for some time -- that **the Fed will raise its policy rate of interest just one more time this year, and will begin to reduce size of its securities portfolio later this year -- September being the best guess for the initial reduction of the Fed's balance sheet.** And the market is also waiting for indications from ECB president Mario Draghi if the central bank's monetary stimulus will finally end, and when. Pundits are raising alarm that these attempts to reduce global systemic liquidity may finally usher in the end of the equity bull market. Some alarmists even speculate that with these moves to reduce global systemic liquidity, the almost 4 decades of bond bull markets will end as well. This presents an awkward situation where both the equity and bull markets are supposed to shudder to a halt, as global central banks take away the proverbial «punch bowl».

So, is «Quantitative Tightening» in the pipeline? Inevitably, that will happen, but let's be careful with the semantics here. Central banks, courtesy of the Eurozone and Japan, are still buying financial assets with both hands, despite impressions of Mr. Draghi about to turn off the tap. The Bank of Japan made it clear that the stimulus will go on, until the central bank has figuratively seen the whites of domestic inflation's eyeballs. In the part of the Federal Reserve, the central bank has spent over eight years, since it began the movement to spur on the economic recovery, not to make any error that could destabilize the banking system or the financial markets and bring to a halt the economic rebound.

Historic correlation between Core CPI and the 30yr-10yr yield curve

There's a negative correlation between Core CPI vs yield curve until the onset of GFC in Dec 2007



Source: Thomson Reuters Datastream / DCC & Robert P. Balan Models (c)

The Catastrophe of 1937-1938 looms large in the minds of Federal Reserve officials. It prolonged the Great Depression which started in 1929. The U.S. made the mistake of a premature fiscal consolidation in 1937, when then US Treasury Secretary Henry Morgenthau argued that the modest budget deficits Roosevelt ran in his first term were exacerbating the economy's problems, rather than being part of the cure. In 1937, Morgenthau was successful in getting Roosevelt to raise taxes and cut spending, and in convincing the Fed to tighten monetary policy because prices were finally starting to rise. This was, of course, absolutely the wrong policy. The actual federal budget deficit was in fact much too small in every year of the Great Depression to power the economy towards escape velocity.

And, of course, it was disastrous for the government to try and run a surplus in 1937. Economists are unanimous in their view that this was one of the greatest economic mistakes in history. **The result was an immediate economic setback, and unemployment started rising again, prolonging**

the Great Depression by another two years. The Fed, we can all be sure, does not want to commit the same mistake, or if they want to emulate the self-immolation, they will do it slowly.

But the fact is that global monetary authorities have snapped up a record amount of financial assets in the year to date, in addition to the previous 8 years of cumulative stimuli. That's despite all the focus on the Federal Reserve's plan to begin winding down its balance sheet and speculation the European Central Bank could be nearing the end of its bond-buying spree. **The ECB in December extended its bond-buying program to December 2017 from March, but said it would reduce the size of monthly purchases from 80 billion euros (\$85.6 billion) to €60 billion beginning in April 2018. Until then, we believe that the «punch bowl» would remain filled close to the brim.** And this matters a lot. Many analysts (including us) believe that it is the "only one flow that matters," and that \$1 trillion of financial assets bought by the European Central Bank and Bank of Japan year-to-date would equal a \$3.6 trillion annualized pace, which would

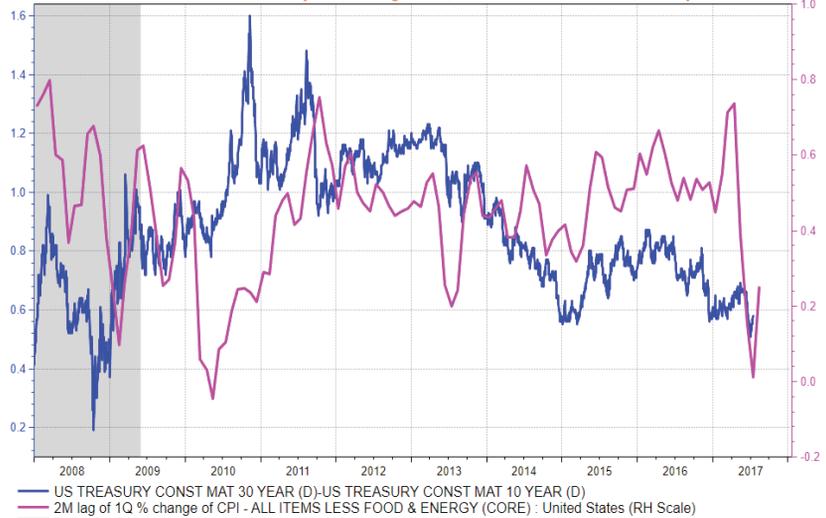
be the strongest since 2007. This is our main argument: that this surfeit of liquidity has been the prime mover of global stocks and bonds which are hitting annualized double-digit gains, year to date, despite Trump, Russian-Gate, and macro miscues over the past six months.

However, the blessings come with some cleverly disguised, insidious pit-falls. The first Quantitative Easing program, initiated by the Fed on November 2008, altered the relationships and correlations among financial variables, and those skewed relationships will probably stay with us for as long as global systemic liquidity remains very high. Since we believe that the global monetary authorities will be loath to make a redo of the Catastrophe of 1937-1938, high liquidity levels will be a feature of the global financial landscape for a long while. Therefore, learning what has been changed in those decades-old relationships need to be internalized. As a starter, we will illustrate that the old relationships between inflation and yield curves, and yield curves and bond yields have been profoundly altered.

Case in point: there was a historic, negative correlation between Core CPI and long yield curve, the 30Yr-10Yr spread. Historically, lower Core CPI was accompanied by a steeper yield curve. However, this relationship started to get skewed after the onset of the Great Financial Crisis in December 2007. Then, the correlation started to significantly break down after stimulus from the global central banks unleashed a flood of global systemic liquidity (see graph on previous page)

Correlation between Core CPI and 30yr-10yr yield curve, post-Dec 2007

After the QE program in Nov 2008, correlation between Core CPI and yield curve became positive
Lower inflation is now followed by a flattening curve, vice versa -- Core CPI leads by 2 months



Source: Thomson Reuters Datastream / DCC & Robert P. Balan Models (c)

Correlations: Core CPI, 30yr-10yr yield curve, 3yr yield post-Dec 2007

After the QE program in Nov 2008, correlation between Core CPI and yield curve became positive
3yr yield became negatively correlated with 30y-10yr curve -- lags behind Core CPI by 2 months



Source: Thomson Reuters Datastream / DCC & Robert P. Balan Models (c)

3yr bond yield: the direct mover of risk-on, risk-off assets

Equities diverging with the pack, but will likely fall with further fall in yields and USD/JPY
Gold should benefit from fall in 3yr yield, USD/JPY, USD TWI



Source: Thomson Reuters Datastream / DCC & Robert P. Balan Models (c)

The skew in the relationship progressively got worse as global central banks created more electronic money. By 2011, the correlation between the two variables have completely reversed – the relationship turned positive. And now changes in the Core CPI leads the yield curve by 2 months (the lag was marginal pre-November 2008). **Put another way, lower Core CPI is now followed by a flattening of the yield curve, and vice versa.** Given this new set of relationship, it is conceivable that we could see a steepening of the 10Yr/30Yr yield curve soon, following the lead of the Core CPI qoq change, and in the back of our analysis that Core CPI will rise in Q3 2017 *(see first graph on previous page)*.

In and of itself, that new relationship is valuable because we now have a way of anticipating changes in the long yield curve, especially as this spread has been a traditional harbinger of long term inflation trends. **There is nothing more significant than the long bond spread being led by changes in the actual inflation measure, itself.** *(see first graph on previous page)*

But that is not all – liquidity offers another gift. Since November 2008, the spread between the 30yr and 10yr yields, has become a long-end proxy of the 3yr bond yield, in its inverse. The spread and the inverse of the 3yr yield move lock-step, and more importantly, both variables lag behind the Core CPI's qoq reading by 2 months. So, following the current trajectory of the quarterly Core CPI, we know that the spread will be widening, and the 3yr yield will be declining over the next two months *(see 2nd graph on previous page)*.

It is already a significant blessing if the manna from global liquidity stops falling from there – but no, there is more. You see, **the 3yr bond yield is the direct mover of many risk assets, and it does so with a 2-day advance notice. The USD/JPY and USD TWI rise and fall with it, and gold sinks when the 3yr yield rises. Most importantly, during most periods, the 3yr and S&P 500 have positive comovements, underlining how critical the 3yr yield should play in timing your strategies.** Currently, the S&P 500 index goes against the trend of the pack (lower, with Gold higher – *(see 3rd graph on previous page)*), but eventually we believe that SPX will decline (this analysis is the subject of another article in this same issue of the Capital Observer). **So, to summarize, one should understand that the relationships among financial variables prior to November 2008, are now all wrong and you should update one's analytical tool kit.**