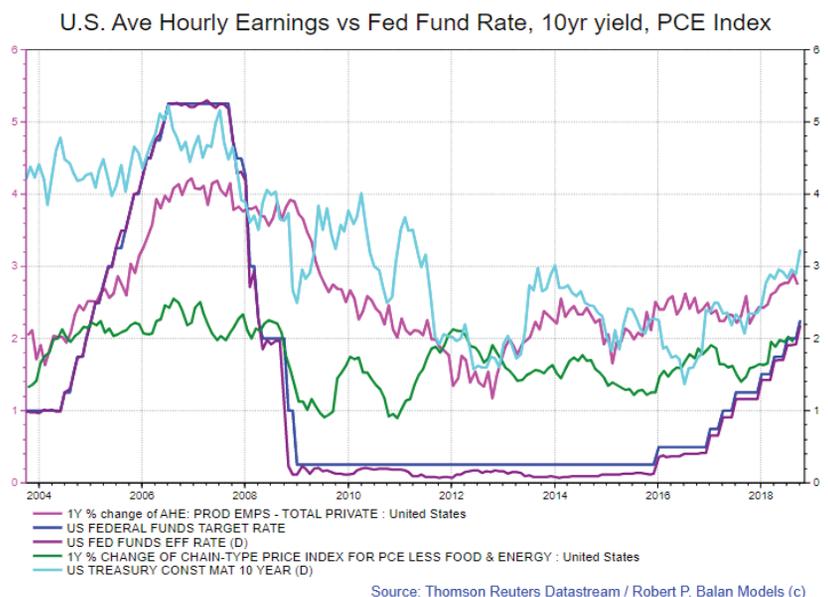
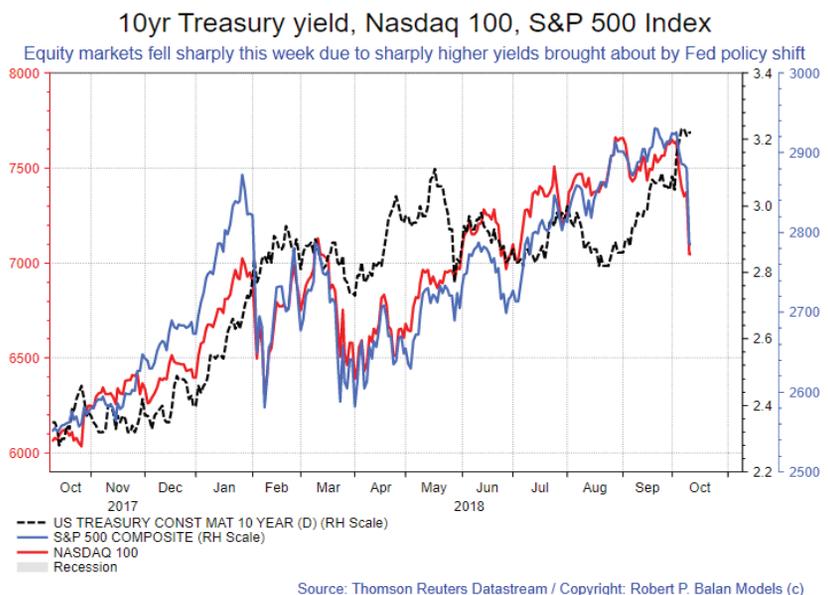


## 34 / The equity markets take fright at the sharp rise in yields and Fed's policy communication folly; risk-parity fund managers will push markets towards "convergence to the mean"

On Wednesday, October 10 U.S. equities fell sharply lower with S&P500(SPX) losing 3.29% and with the Nasdaq 100 Index leading losses with a drop of 4.44%. The S&P500 is down a fifth consecutive day -- it is the longest slide since the election which made Donald Trump the president of the United States. **The S&P 500 has lost about 5% since last month's record high, but it's still up about 4% year to date. It's painful, but still far short of a typical correction (-10%).** The culprit? The mass media cite the 80 bps rise in 10-yr bond yields this year, Fed tightening, rising tariffs, and the flatter yield curve (a claim which is dubious).

**The proximate cause is the bond selloff (sharp rise in bond yields), there's no question about that, in our opinion. Last week's rapid run up in long-end Treasury yields is the proverbial talk of the market and judging by the market response, equity investor's earlier equanimity with rising yields ran out at above roughly 3.20% on the 10-year bond. The sharp rip higher in yields has been caused by the Fed's transition from pseudo-dovish to outright bullishness in the pace of policy tightening.**

In turn, the proximate reason for the Fed's shift into a tighter stance has been the substantial change in wage growth. Wage growth has been the so-called "missing ingredient" for the economy and, by extension, for Fed monetary policy. There have been long and winding debates inside and outside the US central bank about wage growth. The bottom line is that with unemployment trending below the rate the Fed considers sustainable over the longer run, the Fed models suggest that wage growth should accelerate, probably sharply. **But it had not, and wage growth stagnated for some time. Then earlier in the year, wages started to rise(see 2nd chart on this page).**



**Therefore, many at the Fed (and at the FOMC) and several prominent academics think that the central bank is officially behind the curve, policy-wise. That has pushed Fed Chair Jerome Powell and his cohorts to shuck their pseudo-dovish stance and turn hawkish.** Bond yields and term premium rose sharply, causing the yield curves to invert – rates are rising, and yield curves are steepening as bond term premia rise; investors have become leery of long-term bonds. Term premium -- the extra compensation investors typically demand to hold longer maturities – go higher in expectation of higher inflation

and negative growth issues up ahead. **Therefore, long-term investors, taking the cue from the Fed's shift in stance, are bailing out of long-term bonds due to perceived inflation threat up ahead and negative growth issues caused by higher rates (see 1st chart on the next page).**

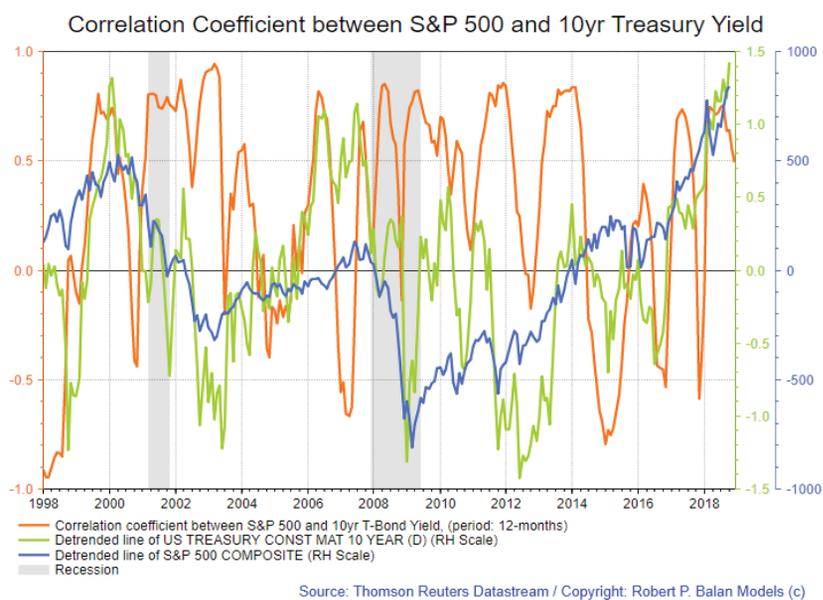
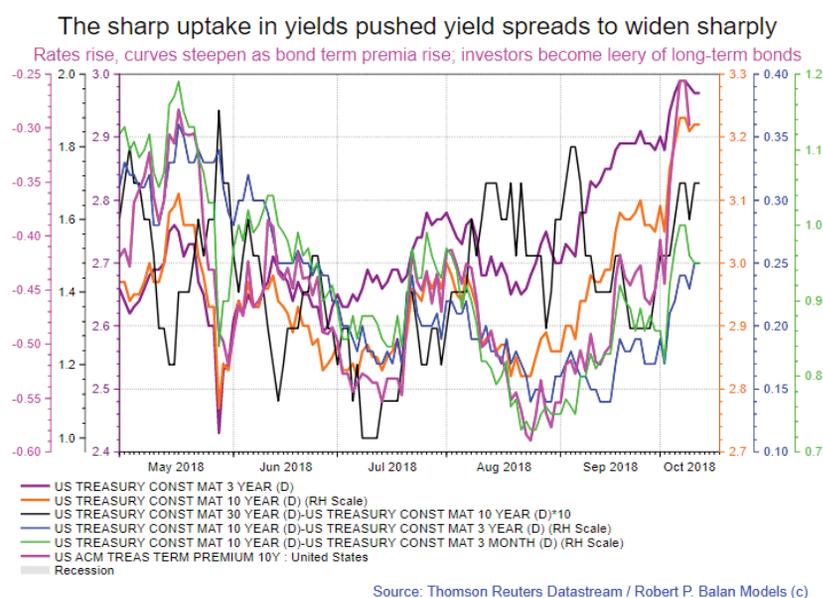
**As we discussed in another article in this issue of the Capital Observer ("The Fed shifts to restrictive policy stance, push yields sharply higher and steepen the yield curve; preparing for fallout on risk assets"), the Fed's shift into an overt tightening policy and is expected to make conditions**

restrictive, has finally struck a nerve in equity market investors. That is what has flipped the equity-rates correlation to negative (see 2nd chart on this page), so we are seeing the extreme volatility in the equity markets, culminating in the sell-off over the past few days, especially on the 10th of October.

This is the same thing that happened in late January (see 2nd chart on this page). As the January debacle showed, sharply rising yields would tend to undercut the equity markets when the composure of the equity markets is shattered. In this case, Fed Chair Powell's injudicious comments implying restrictive monetary policy to come was the veritable straw that broke the camel's back.

As the graph above shows, the correlation between yields and equities are mostly positive, and dip into negative territory only after five-year intervals, on average, and usually do not stay negative for very long. That has spawned investment strategies which build on this positive relationship. Foremost among these strategies are the so-called "risk-parity" funds pioneered by Bridgewater Associates led by Ray Dalio. The divergence of the yields and equities have strongly negative impact on the valuation of these "risk-parity" funds, which by latest count could have assets of up to \$1.4trn. A report on bond markets by AllianceBernstein estimates that with leverage the Risk Parity industry now controls about \$1.4trn of assets. Some compare the rise of Risk Parity to the invention of "portfolio insurance" in the 80's which played a significant part of the 1987 crash.

In the post-Great Financial Crisis (GFC) world, the "attraction" of diversification benefits inherent in a negative stock-bond return correlation (positive equity-rates correlation) was magnified by an "everybody wins" scenario, where both stocks and yields generally rallied together – forming a natural hedged pair. That has been a



great selling point for the "risk parity" funds – and that idea did attract large AUMs.

**Now, that attraction has the potential to turn deadly (if the divergence persists). Also, it has been proven that the speed of the bond selloff matters even if the interpretation of rate rise is benign (ostensibly, a response to rising economic growth).** That is, even if rising yields are a sign of economic strength, a 2+ standard deviation rise in 10-year yields in the space of a month generally weighs on stocks irrespective of the interpretation (see 1st chart on next page). Sometimes, it takes a while for the danger to be realized, and the market could be blasé about the bond yield rise for some time. That point is critical. Last week, equities not only

digested the rate rise with alacrity -- stocks actually celebrated the bond selloff on the assumption that rising long end yields represented the bond market "catching up" with economic reality.

But fast forward to this week, and stocks weren't so sure anymore. By Wednesday the 10th of October, it was clear that even if rising yields were "validation" of U.S. economic prosperity, the rapidity of rate rise was perceived by the market as a threat to equities. And that rapid rise in rates and steepening of the yield curve, we reiterate, was largely caused by injudicious remarks from Fed Chair Powell and several DOMC members implying even more restrictive policy measures to come. Those tongue-slips are even more remarkable, given the

new policy announced by the Fed that there will be no more advance policy guidance provided.

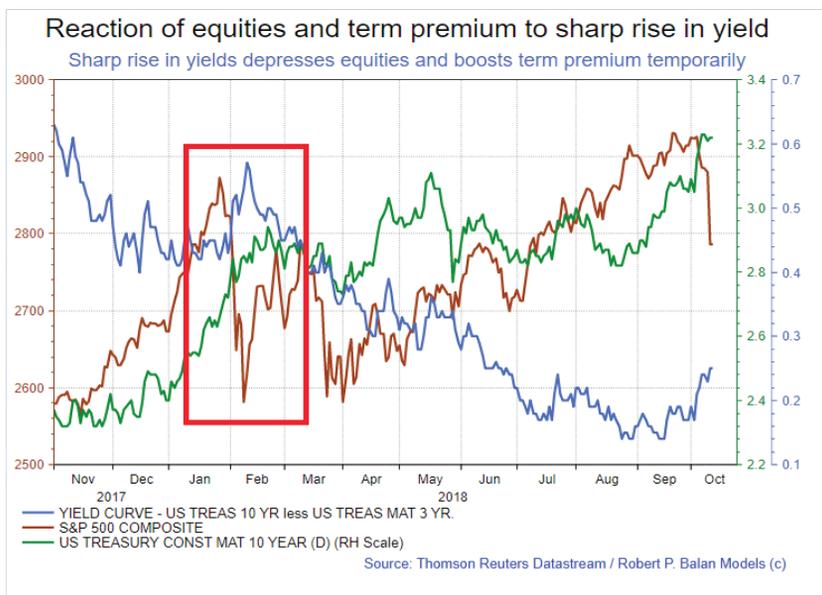
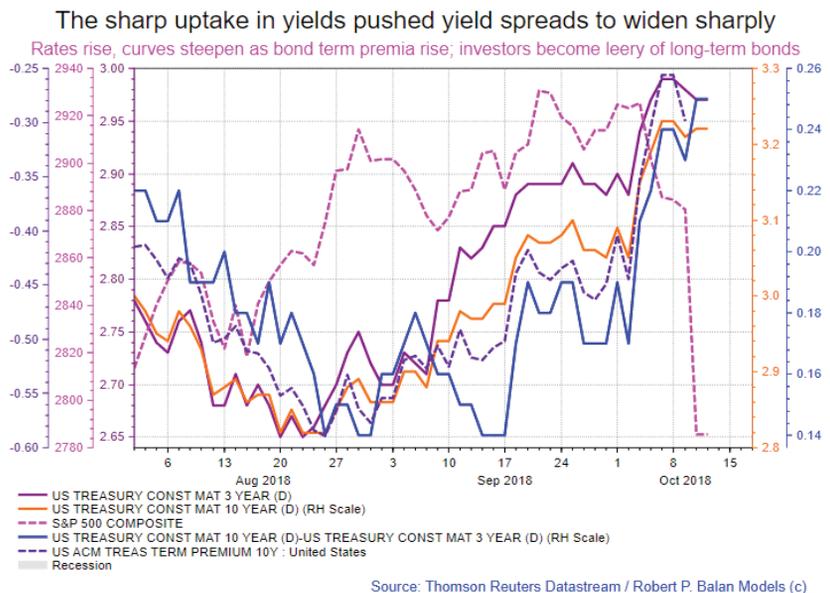
What do we expect going forward? For clues, we return to the theme underlying “risk-parity” funds and how the managers of these funds will respond to the latest divergence in the direction of equities and yields.

Here is Wikipedia describing “risk (premia) parity: “The risk parity approach attempts to equalize risk by allocating funds to a wider range of categories such as stocks, government bonds, credit-related securities and inflation hedges (including real assets, commodities, real estate and inflation-protected bonds), while maximizing gains through financial leveraging.”

The concept/process attempts to provide a lower risk and lower fee alternatives to the traditional portfolio allocation of 60% stocks and 40% bonds which carries 90% of its risk in the stock portion of the portfolio. The main thrust of the concept is to equalize the inherent risk on both sides of the allocation by applying leverage (usually via volatility plays) to the bond part of the portfolio in such a way that both stock and bond investments achieve true risk parity or equality in their risk profiles. The primary idea is to bump up the returns from the bond portfolio without unduly increasing the risk from this sector, or diminishing the yield potential from the equity portion of the general portfolio.

We discussed these issues in an article in the December 2017 issue of the Capital Observer when there was a clear divergence in the direction of equities and yields (see 2nd chart on this page). We observed at that time:

Risk parity investors are double winners when equities are rising and US Treasury bonds yields were falling (bond prices were rising) – risk parity heaven, they called it. What the current equity sell-off threatens is the other side of the coin – risk parity hell – when both investments in the asset allocation equation lose money as US equity markets



fall even as bond yields rise. This would be opposite of the prevailing market situation up to about a week ago. Under this circumstance, both investments in equities and in its implied bond hedges lose money.

And our conclusion at that time: The immediate response from the asset classes could vary in the short-term, with the response from equities the biggest question mark. But based on historical performance since November 2008 (when systemic liquidity became the major determinant of assets prices), after a sorting out process for a week or two, asset classes will likely resume the positive covariance that has defined their relationship post the GFC recovery.

The defining element will be the response from risk parity fund managers: in similar situations before, they attempted to engineer a “convergence to the mean” – in this case, cause yields to fall and equities to rise. And they have the clout to do it.

**Summary:** Those observations were made late last year, as the bond and equity markets taken-for-granted relationship started to fray. The market did eventually sort itself out, and the established relationship did reassert. **There was indeed a convergence to the mean: equities subsequently rose, the term premium collapsed, the yield curve resumed its flattening course and the long bond declined** (see 2nd chart above) **but will the risk-parity fund managers be offered the same easy way out this time around?**