Viewpoint

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Econ 101 takes on Portfolio Management 101

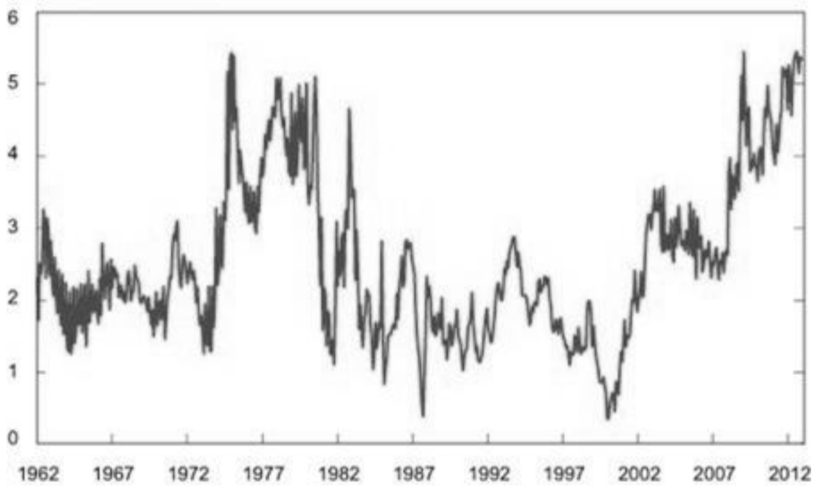
The intellectual foundations of Quantitative Easing (QE) rest on the notion of the portfolio balance effect, namely saturating the market with official sector bids for government bonds will:

a) drive investors into other (riskier) assets;

b) drive down the market yield for said government bonds, as well as the whole term structure of interest rates. It is hoped that by cheapening the cost of capital and boosting banks' reserves, investment in the real economy will occur. This approach comes straight from Econ 101: the interaction of supply, demand, price and the substitution effect.

So far so good. But, as the New York Federal Reserve observed in early May, equity risk premia remain very high, according to most measures (see figure 1 below). The implied cost of equity capital has not fallen sharply in line with fixed income yields, and thus the difference between the implied cost of equity capital and risk-free government bond yields (the equity risk premium) has widened.

Figure 1: NY Federal Reserve estimation of the Equity Risk Premium, 1962-2012 (percentage annualised)



Sources: Authors' calculations; Barclays; Deusche Bank; Duke/CFO Business Oulook survey; Federal Reserve Board; Federal Reserve Bank of New York; Goldman Sachs; J.P.Morgan; Nomura; the Center for Research in Security Prices; Federal Reserve Economic Data; Thomson Reuters; the websites of NYU's Aswath Damodaran; Dartmouth's Kenneth French, University of Lausanne's Amit Goyal, University of California at Berkeley's Martin Lettau, Yale's Robert Shiller.

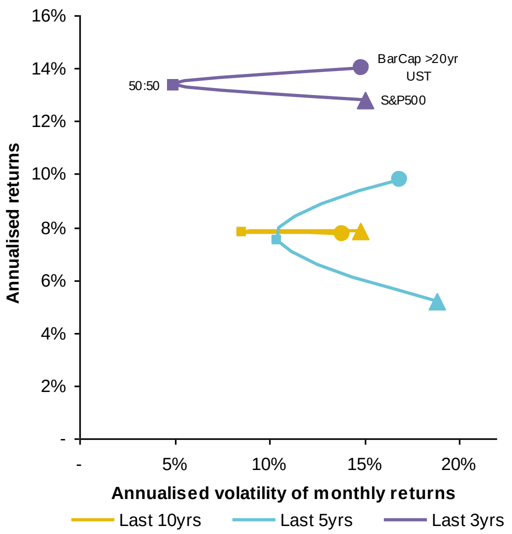
Source: http://libertystreeteconomics.newyorkfed.org/2013/05/are-stocks-cheap-a-review-of-the-evidence.html

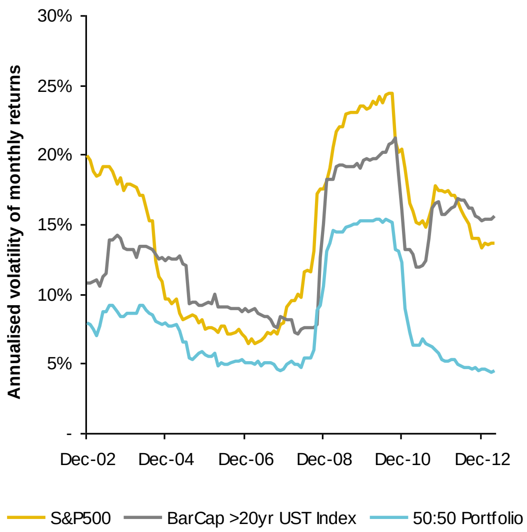
There are numerous explanations for the widening in risk premia: the belief of equity investors that QE will prove temporary; the sluggish economic environment and a sharp and potentially unsustainable rise in margins that the equity market is generally loath to price as permanent, both of which accompany this policy; or the degree of policy uncertainty that abounds.

But, as an asset allocation portfolio manager, there seems to be one huge glaring omission from this arsenal of explanations. Part of the portfolio balance effect is based on the assumption that bonds and equities compete for capital. Indeed, this sounds like the sort of assumption they do not even teach in Finance 101 for fear of sounding overly patronising. And for some, or indeed many, investors it may be true that they really do compete: lowering the yield of 30-year US treasuries certainly makes them appear less attractive to an investor compared to, say, US stocks, in total return terms. Perhaps, therefore when yields fall, investors will sell bonds and buy stocks and the "Great Rotation" trade will finally come to fruition.

However, despite working in asset management for sixteen years, I have never met a major, sophisticated, institutional end-investor who did not believe (with a good degree of confidence) that on a five-year horizon stocks outperform bonds. Moreover, for the first ten of those sixteen years, I was a bond manager with responsibility for all or part of the bond portfolios of institutional clients! This begs the questions of why give out bond mandates at all when clients could go all out on their favourite asset? The answer, of course, is that they care about the volatility of their overall portfolio returns. Long-dated US Treasuries are as volatile an asset as a basket of US stocks. However, add these to an equity portfolio and watch the portfolio volatility fall. Figure 2 below shows the ex-post efficient frontiers of static portfolios consisting of different proportions of US equities and long-dated US Treasuries over the past three, five and ten years. Neither returns nor volatility are stable. However, the most important point in the chart is that a fully-committed investor looking to minimise portfolio volatility has been able to use bonds to reduce overall portfolio volatility. In other words, combining these volatile assets has delivered a lower level of overall portfolio volatility. Figure 3 below shows the rolling 24 month volatility of 30-year US Treasuries, S&P500 stocks, and a portfolio split equally between them. Again, the message is that bonds reduce the bumpiness of the ride.

Figure 2 & 3: US equity and bond ex post efficient frontiers, Rolling 24 month standard deviations of returns





Source: Source: Threadneedle & Bloomberg, 30 April 2013.

The more government bonds an investor owned, the more equity they could have owned for their given risk tolerance. Thus, in this sense, government bonds did not compete with equity for capital, but complemented investment in equity. They acted as a positively-yielding portfolio hedge (the best kind). This insight is not revolutionary, but is simply Portfolio Management 101.

Now that we understand government bonds as complementary assets, or portfolio hedges, let's think again about the consequences of QE. By bidding yields on government bonds down to current levels, monetary policymakers have *largely extinguished government bonds as an effective portfolio hedge*. Investors can now decide to either increase their risk appetite on a structural basis and hold more risky assets (that is to say assets that are positively correlated with equities), or increase their cash positions and hold less equity than they would otherwise do to retain the same level of portfolio risk.

How should one react to this revelation? Well, I have not cast aside my risk controls (although doing so would have, in retrospect, been quite helpful). However, most developed government bond markets now achieve little for my portfolio, and I have sold them down to zero. I prize those markets that do offer the promise of offsetting equity volatility with a positive yield and use them to maintain chunky exposures to the most attractive equity markets. Corporate bonds - high grade and high yield - screen well, but their popularity makes me increasingly nervous. But, paradoxically, zero-yielding cash is becoming increasingly attractive. Central bankers have reduced rates to zero to scare me out of this horrible asset, but the alternative for volatility-aware portfolios – close to zero-yielding core government bonds – look less attractive given the asymmetric profile of downside capital risks with which they are associated.

I hope that Econ 101 wins out if this is accompanied by economic growth, but Portfolio Management 101 is not helping.

The views expressed above reflect our position as at 13 May 2013.