Risky Bonds And The Dollar Index

Financial markets are full of shorthand creating cases of mistaken identity. Many times people say "commodities" when they really mean crude oil, maybe with a little gold thrown in for good measure because it is shiny. Similarly, people will say "the dollar" in reference to the ICE dollar index (DXY) when they really mean the euro if for no other reason than the common currency with the uncommon problems has a 57.6 percent weight in that index and not even the Swedes can come up with a decent argument for why the krona is in that index at all.

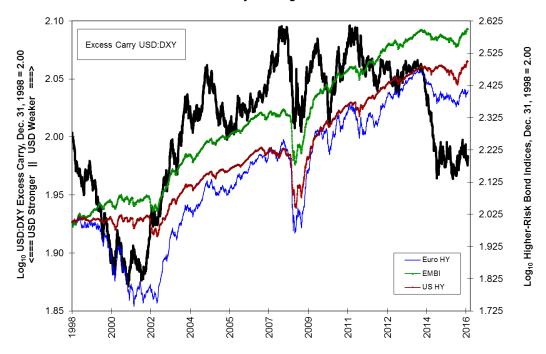
But given the choice between swimming upriver or downriver, we always should take the latter unless you happen to be a salmon swimming up the Columbia, in which case you can take the ladder. Let's go with the flow, use the DXY and construct a measure of the excess carry return for borrowing the USD and lending into its six members. This trade is the index-weighted combination of the combined spot rate and interest rate spread returns, less the opportunity cost of holding short-term USD deposits. We can denote it as the USD:DXY excess carry return. Please note in the charts below a weaker USD will have a rising USD:DXY measure and vice-versa.

Risky Bonds

Now let's take three different indices of riskier bonds as maintained by Bank of America/Merrill Lynch, U.S. and Eurozone high-yield and emerging market bonds. These indices are not as comparable as we might think. The U.S. high-yield market has developed over the past three decades from the repository of lapsed investment-grade bonds, so-called "fallen angels," to a vibrant market of original issue bonds used to finance start-ups, leveraged buyouts, private equity and mergers & acquisitions. European firms traditionally have relied less on the bond market and more on commercial bank credit for lending; as a result, this market is far less developed than its U.S. counterpart. Emerging market bonds are defined as much by their currency, political and commodity risks as they are by their credit risks.

Regardless, if we take the total return streams of these three bond indices in USD terms and map both them and the USD:DXY excess carry return on logarithmic scales since the advent of the euro at the start of 1999 and extending to the end of July 2016, we see two things clearly. First, U.S. high-yield and emerging market bond returns tend to move in parallel to each other with the Eurozone high-yield index being more divergent. Second, only the Eurozone high-yield index tends to be affected significantly by moves in the USD:DXY excess carry return index. This is unsurprising given the euro's weight in the DXY. As an important corollary to the above, we can dismiss comments made about a stronger USD squeezing either the U.S. high-yield or the emerging market bond indices. Both have done just fine during the combination of a bond bull market and stronger USD extant since the start of Operation Twist way back in August 2011.

The USD:DXY Carry And Higher-Risk Bond Indices



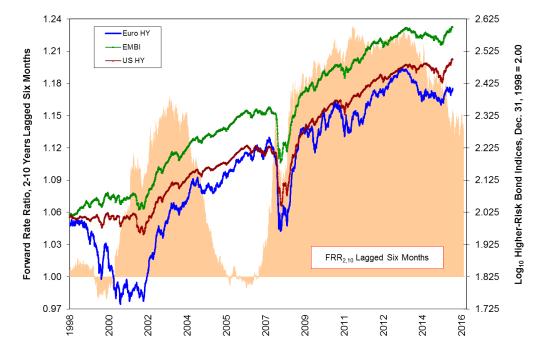
Source: Bloomberg

Enter The Yield Curve

Now that we have mentioned Operation Twist and the subsequent bullish flattening of the U.S. Treasury yield curve, let's map the total return paths in USD of the three bond indices against the yield curve as measured by the forward rate ratio between two and ten years ($FRR_{2,10}$). This is the rate at which we can lock in borrowing for eight years, starting two years from now, divided by the ten-year rate itself. The more the $FRR_{2,10}$ exceeds 1.00, the steeper the yield curve is; an inverted yield curve has a $FRR_{2,10}$ less than 1.00.

While the FRR_{2,10} leads the bond return measures by six months on average, the story is a little more complicated than that. We should expect a steepening yield curve, such as those seen in the aftermaths of the dotcom bust and the financial crisis to reward high-yield bonds as the net carry returns for borrowing short and lending into these bonds expands. However, high-risk bonds can do fine during periods of yield curve flattening if accompanied by improving credit quality. The was seen between 2004 and 2007.

The U.S. yield curve has been in a flattening trend since November 2013. This was associated first with the tapering of quantitative easing in the U.S. and expectations for higher short-term rates. It was then associated with the expansion of quantitative easing outside of the U.S. and a strong demand for U.S. Treasuries by foreign investors along with regulatory constraints on bank portfolios favoring sovereign over corporate debt. The return paths for all three risky bond markets were pressured over the November 2013-August 2015 period, but then rebounded after the global equity selloff of 2015 and the spread of negative interest rates led to a manic search for yield.



The U.S. Yield Curve And Higher-Risk Bond Indices

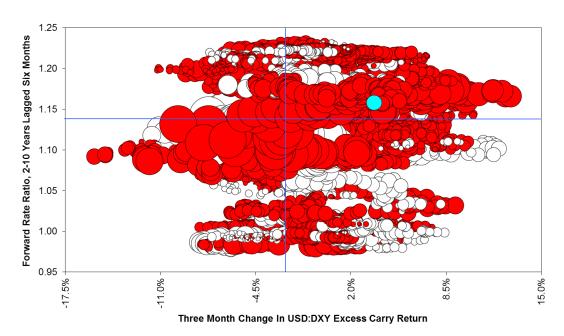
Source: Bloomberg

Prospective Risky Bond Returns

Now let's map the three month-ahead returns in USD terms of these bonds as functions of the three-month change in the USD:DXY excess carry return and the $FRR_{2,10}$ led six months. In all cases, positive prospective returns are depicted in colored bubbles and negative returns in white; the diameters of the bubbles correspond to the absolute magnitude of the return. The last datum used, from May 4, 2016, is highlighted and the environment on July 29, 2016 is marked with a bombsight. The data sample begins in January 1999.

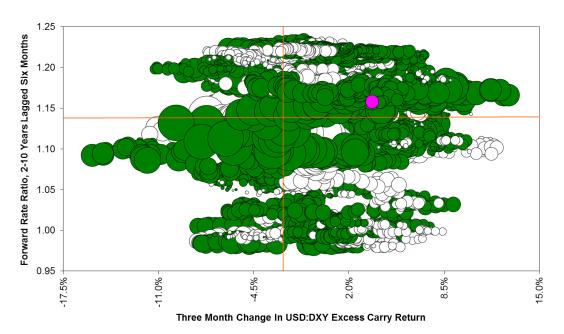
The environment shifted to the west-southwest over the last three months used. This places all three classes of bonds in zones of positive prospective returns. Only an abrupt steepening of the FRR_{2,10} combined with a rapid decline in the USD:DXY excess carry return, the unlikely combination of a stronger USD and a steeper yield curve, would put prospective returns back into a negative zone.

Three Month-Ahead Returns, USD Terms U.S. High-Yield



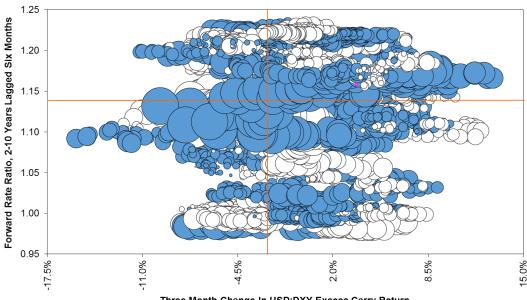
Source: Bloomberg

Three Month-Ahead Returns, USD Terms Emerging Markets



Source: Bloomberg

Three Month-Ahead Returns, USD Terms Euro High-Yield



Three Month Change In USD:DXY Excess Carry Return

Source: Bloomberg

Time In The Market

One takeaway we should have from the charts above is the importance of patience. Just as the rewards for trying to time the stock market are fewer and further between than most of us want to admit, so it is with risky bonds. When return paths move along a logarithmic scale from the southwest to the northeast, pausing to get clobbered along with everything else during the financial crisis, we should conclude investors in risky bonds get rewarded for buying, holding and collecting compound interest during a period of secular interest rate declines.

Still, the temptation to get fancy and improve on buy-and-hold is extreme. What is the point of living otherwise? Surely there are other variables out there such as inflation expectations and the price of crude oil important to these bonds return paths, are there not? We will take a look at those next month.