



If The Yield Curve Could Talk

Opportunities and Challenges of a Flatter Yield Curve

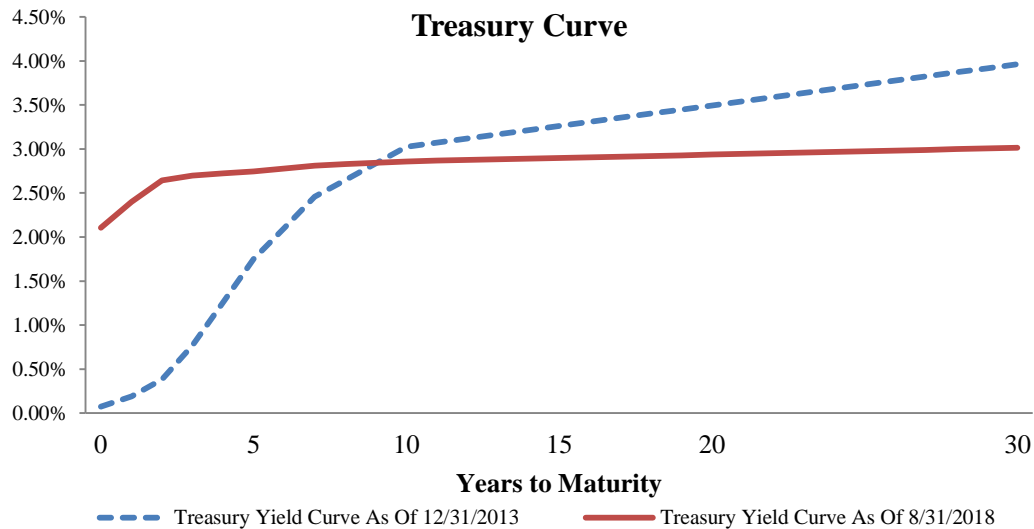
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The Dynamic Yield Curve

For those who may have a life beyond the daily activities in the bond market, it is possible to have missed the dramatic changes in the Treasury yield curve over the last several years. Short-term yields have risen sharply while long-term rates have fallen, with the intermediate maturity segment of the curve as the pivot point for the shift. Chart 1 below illustrates the dramatic change in the curve structure from the end of 2013 through August 2018. During this time, the slope of the Treasury curve flattened 212 bps between the 2-year and 10-year maturities, from a steep slope of +264 bps in late-2013 to a relatively flat +20 bps recently.

Chart 1:



Source: Bloomberg

As many investors know, the yield curve has been one of the more reliable leading indicators of economic growth and inflation over many cycles. A flattening curve has often been a signal of slower growth ahead. More worrisome has been an inverted curve, where short-term rates are higher than long-term, which has preceded every post-World War II recession. The curve's predictive value, however, is not perfect, with occasional false positive signals for both flat and steep curves. The steep 2013 curve was, in fact, a false signal of faster growth and higher inflation. Instead, the curve was reflecting the Fed's extended zero-rate policy which held short-term rates historically low. Since then, the Fed's financial repression has ended as the Fed normalizes monetary policy.

The curve may once again be sending misleading signals as we do not yet see signs of economic warning clouds on the horizon. Rather, growth has strengthened; averaging 2.8% year-over-year through the second quarter of 2018, and the outlook for growth in the balance of 2018 remains favorable. In addition, the corporate and individual tax cuts continue to provide a tailwind for growth this year and, more importantly, will likely help to extend the length of this economic cycle. August was the 110th month in this economic expansion and surpassing the record 120-month expansion of the 1990s now seems a high probability.

A growing economy has provided support for the Fed's gradual rate hikes since the first move in December 2015. The market currently expects two additional rate hikes over the second half of 2018 which, if correct, would push the target federal funds range to 2.25% - 2.50%, approaching the level that many economists believe is the "neutral" rate, or the rate at which monetary policy neither slows nor enhances the pace of growth. Presumably further rate adjustments above the neutral range would occur

only to tamp down persistent inflation above the Fed's 2% target. While 2-year Treasury yields should continue to rise as the federal funds rate rises, it's possible that investors would expect a slowing in the pace of Fed rate hikes near neutral which would in turn also slow the rise in short-term Treasury rates as well.

Further out the curve, the decline in long-term yields has been due to a combination of favorable fundamental and technical factors. Relatively slow growth and moderate inflation plus strong demand from natural, long-maturity buyers, such as life insurers and pensions de-risking, have contributed to the lower yield trend. Abundant global liquidity and a nearly insatiable demand for income from retiring baby boomers have been supportive as well. Although no single indicator is infallible, including the yield curve, experienced investors know to keep an eye on the shape of the yield curve when considering their outlook.

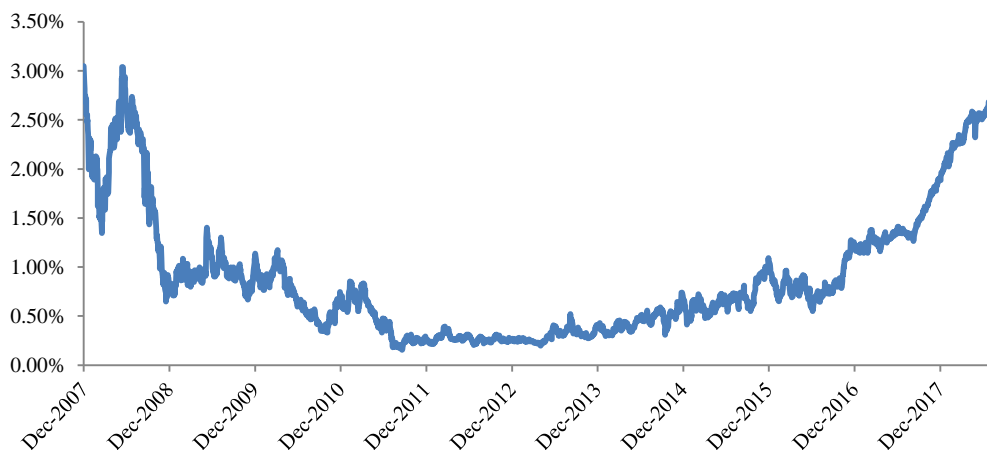
Value in Short-Term Bonds

The sharp rise in short-term rates in recent months has created attractive valuations on the front end of the investment-grade curve. If the curve could speak, almost certainly the shorter maturities would now be shouting, "look at me ...look at me!" (see Chart 2). Not since mid-2008 have investors been able to earn over 2.5% on high-quality, short-term bonds such as 2-year Treasury notes. Investment-grade corporates and short-term mortgage and asset-backed products, even higher-quality, short-term tax-free municipal bonds when tax adjusted, all offer even more yield than do Treasuries. Considering the Fed's extended period of near-zero rates, the recent boost in short-term yields not only allows investors to once again earn a reasonable nominal return on their money without needing to take significant duration risk, but it also provides an opportunity to earn a modestly positive *real* return, since core inflation measures remain below the below the 2-year Treasury yield.

In recent years, conservative investors who focused on the short end of the yield curve bore the brunt of the Fed's extraordinarily easy monetary policy, while the more aggressive investors who responded to the Fed's message to move out the yield curve and/or down in credit quality were handsomely rewarded. Fortunately, there remains a massive amount of cash on the sidelines that can now benefit from the value in short-term bonds. According to the Federal Reserve's Q1 2018 data on the Financial Accounts of the United States, \$14.7 trillion of household assets was sitting in bank time and savings deposits and money market mutual funds in the U.S. In addition, a *Wall Street Journal* analysis (January 17, 2018) estimates that 311 companies had a total of more than \$2.5 trillion in unremitted foreign profits at year end, a significant portion of which will be repatriated back to the U.S. over time due to the recent tax law changes.

Chart 2:

2-Year Treasury Yield (12/31/07 - 8/31/18)



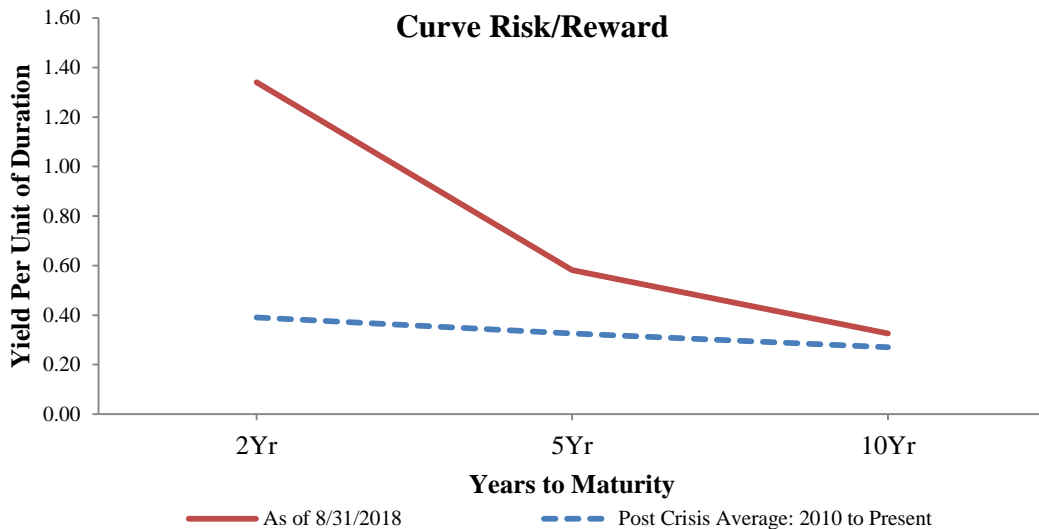
Source: Bloomberg

Risk, Reward, and Roll Along the Curve

In analyzing the curve, one rather simple means of identifying relative value is to consider what percentage of the yield of the entire curve is available in short and intermediate maturities. For example, a 2-year Treasury yielding 2.6% would provide over 90% of the yield of a 10-year bond (2.6 vs. 2.8%), yet with just over one-fifth the duration risk (2.0 years vs. 9.0 years). This is

another way of describing the “**yield per unit of duration**” at various maturity dates. The same 2-year Treasury in this example offers 1.3 units of yield per each unit of duration (2.6% yield/2.0 years duration). The yield-per-unit of duration measure becomes less favorable further out the curve, as illustrated in Chart 3 below. It is noteworthy that the current short-end risk/reward metric compares very favorably to the average measure in the post-crisis environment since 2010. Until recently, investors received approximately the same yield per unit of duration whether they were invested in 2-year or 10-year bonds.

Chart 3:



Source: Bloomberg

Another consideration: not only do the risk/reward metrics decline as you extend on the curve, but when the curve is flat the roll down opportunity – the excess return a bond earns as it ages along a positively sloped curve – is also less rewarding. Consider the 7-year spot on the two curves in Chart 1 above. The 7-year Treasury yield was 33 bps higher at the end of August than it was at the end of 2013 (2.78% and 2.45%, respectively), but the roll potential has declined significantly. In December 2013, the 7-year Treasury offered the expectation of 210 bps of roll return over the next 12 months, assuming an unchanged yield curve, whereas in August 2018 the expected annual roll return had declined to just 12 bps. Although intermediate yields are higher, the total return prospects for the 7-year Treasury has declined by 165 bps (+33 bps in yield, - 198 bps roll) relative to 2013.

Duration and Curve Allocation – Two Separate Decisions

Given the value among short-term maturities highlighted above, it would be natural to ask whether intermediate and/or long-term holdings should be sold and the money redeployed down the curve. In our view, however, an investor’s target duration and the yield curve allocation are two different decisions. The target average duration of a bond portfolio should be driven by the expected investment horizon of the investor. Put differently, the average duration of the assets should roughly align with the average duration of the liabilities it is intended to fund. For example, if there is a known tax liability to the IRS within a year, then it would be most appropriate to have assets invested with 12-month average duration. But if a fixed income portfolio is intended to fund a long-term liability stream, such as an endowment, retirement savings plan, or the income needs of a retiree, then a longer duration investment portfolio is perfectly appropriate. That said, an investor should continually evaluate the relative value at different points along the curve to determine the optimal curve position to maintain the desired overall duration target.

Summary

If one had to select just one market indicator to help forecast the outlook for growth and inflation over some reasonable time frame, the yield curve would be among the best available. Yet, it is not infallible. The unusually steep curve four years ago sent a false signal of faster growth and higher inflation. Instead, the flattening trend since then has been caused by moderate growth with low inflation combined with abundant global liquidity and strong demand for both duration and income. We don’t yet see signs of a recession on the near horizon that a flattening curve has historically signaled. In fact, growth is improving and the cycle length may ultimately become the longest on record.

We now see the financial repression that held short-term rates unusually low as over, with positive real rates now available after being deeply negative for an extended period. We also know that investing in a relatively flat yield curve environment presents both opportunities and challenges. We continue to see value in the front end of the yield curve. Short-term bonds offer the highest nominal and real returns that we have yet seen in this cycle. Conservative investors with excess cash may now want to consider reallocating a portion of that money to the short end of the yield curve. Investors in intermediate and longer-term core bond portfolios should only consider changing the average duration of their assets if the average duration of their liabilities has also changed. Otherwise, maintaining the same target duration while considering ways to capture the value along the yield curve is the appropriate strategy in the current environment.

Disclosures

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