

Thoughts on Fixed Income Portfolio Positioning

A few days ago, I was asked how I would position the fixed income portion of a portfolio. In order to provide an answer in a timely fashion I basically responded that due to the currently low interest rate environment, a steep yield curve predicting higher rates to come and corporate credits that would be sensitive to either an improving or weakening economy I would weight the portfolio toward short duration, government debt. Longer duration credits would only be favorable as a means to speculate on falling rates in the short-term or in an economic forecast that gives a high probability to decade with very low inflation. Under any other conditions, long-term bonds are not priced to deliver adequate real returns so a strategy of rolling short-duration bonds should outperform.

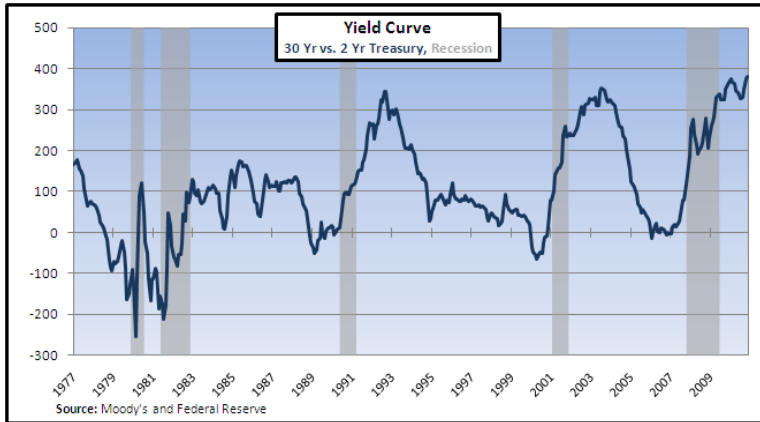


Figure 1

While my conclusions remain largely the same I would like to expand on this answer by looking separately at the classes of fixed income securities and exploring a few other options for a fixed income strategy. Fixed income securities include Treasury securities (bills, bonds and TIPS), corporate debt, municipal securities and mortgage back securities (MBS). We will look at each in order and then finish with conclusions and recommendations.

Treasury bills and bonds

Treasury bills are securities with a maturity less than one year and are discount instruments. Bonds have a maturity greater than one year and typically pay a coupon. They may or may not sell at a discount. Treasury instruments are “backed by the full faith and credit of the U.S. government” and are often call “risk-free”. This risk refers to default or credit risk but not interest rate risk. Because of the current lower interest rate environment interest rate risk is a primary concern.

Treasury Bonds	
Yield	2 yr @ .83%, 10 yr @ 3.63%, 30 yr @ 4.69%
Valuation	10 year implied real yield at 1.3% with 2.3% inflation.
Conclusion	Low real and nominal yields leave long term securities exposed to rising rates.



Figure 2

As you can tell from the Figure 2, interest rates have historically moved in long cycles. There was a long cycle from '53 to '81 where yields rose from 2.8% to 15.3%. Yields have been in a down trend since the early eighties and presently the yield on the 10 year treasury of 3.6% is low compared to the historical pattern. With interest rates effectively bound by zero there is not a lot of room for further rate compression. The greater risk lies with

interest rates surprising to the upside which would push the prices on longer duration credits down. In order to achieve the historical average of a 2.5% real return, the 10 year treasury is implying a better

chance of a Japan-like scenario of a decade of minimal inflation than all other scenarios.¹ This weighting seems high over the course of the next decade given the current fiscal policy. Under all other inflation scenarios, longer durations credits are likely to disappoint.

Unless your outlook calls for a decade with essentially zero inflation or short-term speculation, the long end of the treasury curve appears less favorable than the short end. As James Montier recently wrote, “It is possible to build a speculative case for bond investment (i.e. riding the deflationary news flow down), however, as ever this leaves participants with the conundrum of Cinderella’s ball as described by Warren Buffett “The giddy participants all plan to leave just seconds before midnight. There is a problem though: They are dancing in a room in which the clocks have no hands!””

Treasury Inflation-Protected Securities (TIPS)

TIPS are issued by the US Treasury and provide investors protection from inflation. The principle is adjusted with inflation, as measured by the CPI, and the fixed rate coupon payments are made based on the adjusted principle. In effect, both the coupon and the principle are adjusted to reflect inflation.

Currently, the ten year TIP is priced to yield 1.3%. This is below the average real yield since 2003 of 1.8% and well below the cyclical peaks of around 2.5%. If the economy continues to recover and rates rise the real yield on TIPS would be expected to increase, driving down prices.

TIPS	
Yield	10 yr @ 1.32%, 30 yr @ 2.16%
Valuation	10 year implied real yield at 1.32% with 2.3% inflation.
Conclusion	Low real yields leaves TIPS exposed to rising yields although they would be expected to outperform Treasury if inflation is higher than 2.3%.

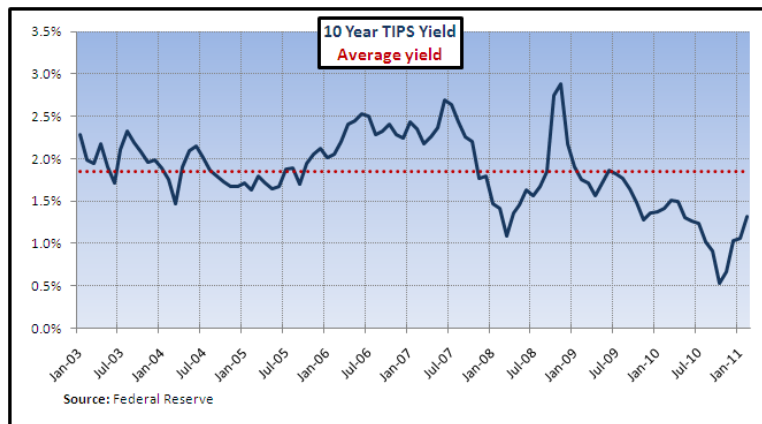


Figure 3

Although TIPS would be expected to outperform Treasuries if inflation rises to much past 2% they are also vulnerable to rising real yields. With the current real yield of 1.3% positioned 28% below the average yield long term TIPS do not appear favorable. Rolling short term instruments should be more favorable until real yields move closer to the historical average.

Corporate Debt

Corporations issue debt to finance and expand their operations. Typically bonds pay a coupon and are rated by the three main credit rating organizations. AAA is the highest rating with anything below Baa (Moody’s) considered a “junk” bond.

The spread between AAA rated corporate credit and a comparable duration treasury is currently 53 basis points or roughly 33% below the historical average spread. The

Corporate Debt	
Yield	AAA at 5.24%, BAA at 6.18%
Valuation	AAA spread is 53 basis points versus average of 79. BAA spread is 147 basis points versus average of 189.
Conclusion	Corporate debt is overvalued relative to Treasuries. Relatively low rates leave corporates at risk of rising rates.

¹ Using the methodology outlined by James Montier in “Bond Bubble: A Sterile Debate on Semantics”

Baa spread is 147 basis points or 22% below average. See figure 3. If the economy weakens from here spreads would be expected to widen, offsetting some price appreciation from falling yields. In an improving economy - a rising rate environment - spreads may compress further still but aggregate yields would be expected to increase from current low levels.

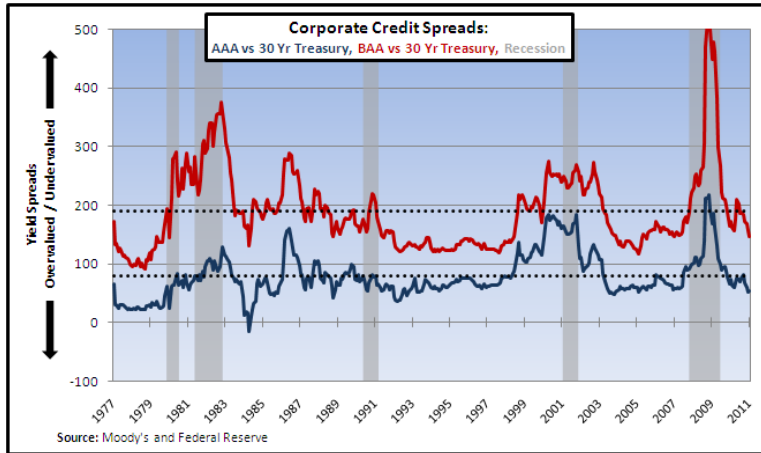


Figure 4

Based on the narrow yield spreads offered on corporate debt and the relatively low nominal rates, long term corporate debt does not appear to offer above average opportunities at this time.

Municipal Debt (Muni's)

Muni's are issued by states and local municipalities and have traditionally been purchased by individual investors seeking tax-free income. Muni's are typically exempt from Federal income tax and sometime state taxes as well. Because of this feature they have traditionally been utilized by the high net worth investor and other individual investors outside of a tax shielded account like a 401(k) or IRA.

Muni's have been in the news a lot recently thanks to Meredith Whitney's forecast that we could see "hundreds of billions of dollars worth of defaults." This forecast has come under much criticism as it is short on specifics but even still the bond giant PIMCO seems to acknowledge while there are opportunities that exist in the municipal bond space the environment is changing.

Municipal Bonds	
Yield	10-year yield at 3.58%
Valuation	Muni yield is 97.8% of 10 yr treasury vs 86.1% historical average.
Conclusion	Market is pricing in higher than average credit risk. Low absolute rates provide little interest rate protection.

They conclude that states and municipalities are largely in better fiscal shape than is widely assumed, at least in the short-term, and "we expect defaults will come in far below some of the more pessimistic forecasts that have been circulating in recent weeks." They go on to say,

*"With municipal taxable credit spreads still pricing in meaningful probabilities of default, and with tax exempt yields at similarly stressed levels, we believe investors should look beyond the headline noise and **selectively add exposure** to municipal credits at current yield and spread levels that do not reflect the true level of default risk. The municipal market will **continue to migrate from being a low-risk asset class to a credit asset class**. This transition will be painful in some cases, but investors with the **right framework for assessing credit risk** in municipal credits should be well positioned to win out over time."*²

² "Muni Market Bargains? A Closer Look at Municipal Debt, Deficits and Pensions" <http://pimco.com>

Essentially they are saying that opportunities exist in the space but an investor must be equipped and willing to do their homework into individual issuers. They do not appear to recommend buying a broad municipal bond index.

The current municipal yield is approximately 98% of the corresponding Treasury yield versus the historical average, according to Ned Davis Research, of 86%. What this means is that muni's are undervalued based on historical spreads and the market is pricing in a higher level of credit risk. Despite this undervaluation based on credit risk, Jim Grant says long term muni's still may not be a good buy due to interest rate risk. In a recent interview with Bloomberg he said, "You lose money every day just because rates are going up. You don't even need the drama of defaults."

Selected municipal securities do appear to offer some value but one must have the willingness and capability to analyze and select the most worthy credits and care should be give to avoid or hedge out some level of interest rate risk unless one has a view of stable to falling inflation over the next decade.

Mortgage Backed Securities (MBS)

A mortgage backed security is a securitized pool of mortgages that represents a claim on the cash flow of the underlying pool of mortgage loans. There are two primary types of MBS securities; agency and non-agency. Agency securities are those back by one of the GSE's such as Fannie Mae or Freddie Mac. These securities can become very complex with multiple different tranches with customized characteristics.

Presently the FNMA current coupon is 4.44% representing a 78 basis point spread over the 10 year treasury. This is a below average spread. See figure 5.

Mortgage Back Securities (MBS)	
Yield	FNMA Yield at 4.44%
Valuation	Yield is 78 basis points above the 10-year Treasury which is below
Conclusion	MBS are overvalued relative to Treasuries. Sensitive to rising rates due to negative convexity.

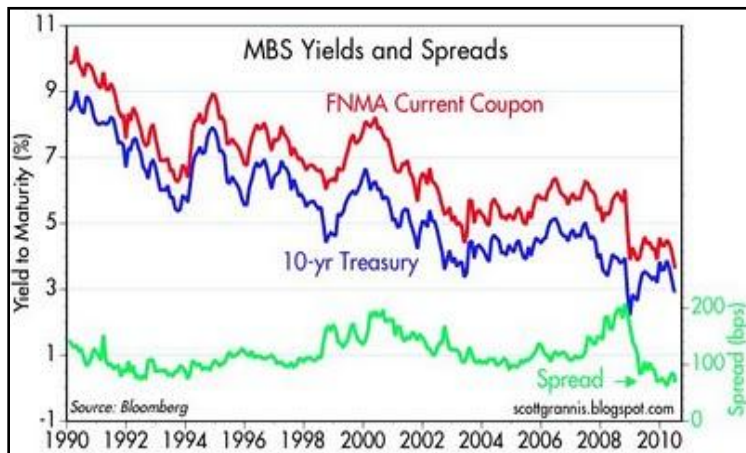


Figure 5

Mortgage backed securities display what is called "negative convexity". Essentially this means that as rates rise, the average duration of the security is also expected to rise. When rates rise homeowners are less apt to refinance thereby lengthening payoff on the average loan in the MBS pool. Because of this negative convexity MBS are more sensitive to rising rate environments.

Care should be taken to stay on the short end of the yield curve in a rising rate environment; favoring short duration securities. If time and ability permit, searching for seasoned securities with low loan balances and therefore higher expected prepayments would be expected to outperform if rates rise. In the search for higher yields investors should not sacrifice convexity but instead favor pools with an anticipated short duration.

Summary of Conclusions

- 1) Short duration securities are likely to outperform as rates rise from their current historically low levels due to an improving economy and accelerating political pressure to curb the current easy money policy.
- 2) While TIPS provide protection from inflation, real rates are still low leaving the lender vulnerable to rising real yields. Remain in short duration securities until more favorable real yields are available.
- 3) Tight corporate spreads make them overvalued relative to treasuries. Corporate debt would be sensitive to either an improving economy – rates increase – or a weakening economy – spreads widen.
- 4) Muni's are at favorable valuations if the market is over estimating the level of defaults. Despite this, interest rate risk still makes investing in longer duration securities unfavorable. Low rates do not compensate for the risk of guessing that the market is over pricing credit risk.
- 5) Due to negative complexity MBS are more sensitive to rising rates. Furthermore, with spreads below average, the MBS environment does not appear to be ripe with opportunities.

Strategy

- 1) The most passive and conservative strategy for a rising rate environment would be to roll short duration treasury securities until the real and nominal yields increase to more favorable levels.
- 2) Diversify internationally. Solnik and McLeavy have calculated the average correlation between the US bond market and eight other global markets was only 36.5% over a ten year period.³ In addition to offering higher yields, international markets should provide the benefits of diversification.
- 3) If you believe that credit risk is being overpriced by the municipal market and are investing in a taxable account there may be opportunity in the municipal market. If one has the time and ability to selectively analyze individual securities that is one option. The other option would be to select a fund manager, such as PIMCO, which is actively looking for value in the area.
- 4) Another option to play the municipal bond market would be to hedge out the interest rate risk. This bet would be that credit risk that is overpriced in the market and muni spreads will revert to their average levels. This would involve going long either an individual municipal security or a muni fund and short a comparable duration treasury security. Keep in mind that most muni yields are lower than treasury yields so you would be funding the coupon on the treasury. You would be expected to make money on this strategy if the muni spread narrows but would lose money if spreads widen.
- 5) Looking back at figure 1 we see that the yield curve is historically steep. This is due to an improving economy and Fed policy that is “sitting on” the short end of the curve. The yield curve would be expected to flatten at some point although this will largely depend on when the Fed changes policy. To bet on the flattening of the curve the following strategy could be employed. This strategy would involve going long long-term bonds and short short-term treasuries in an amount based on their respective price sensitivity to changing rates or duration. Because short-term prices are less sensitive to changing rates, a higher ratio of short-term treasuries would be held than long-term treasuries to employ a duration neutral strategy and isolate the bet to a flattening yield curve.

³ “Global Investments” Sixth Edition, by Bruno Solnik and Dennis McLeavey, CFA. Period analyzed was from January 1992-January 2002.