RISING INTEREST RATES: THE IMPACT ON BOND PORTFOLIOS, OTHER ASSET CLASSES AND THE ASSET ALLOCATION DECISION

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Background and Concerns

From May 2, 2013, to September 12, 2013, 10-year US Treasury yields rose by 128 basis points, intensifying bond investor anxiety about their fixed income allocations and about the magnitude of losses that could be had should interest rates continue their upward trajectory. Unfortunately, many investors compare the current events with past experiences like the 160 basis point yield increase from 5/03 to 6/07 or the 220 basis point increase from 9/98 to 1/00, periods when the S&P 500 returned 13.5% and 23% annualized, respectively, and conclude that they should have little to no exposure to traditional fixed income in their portfolios. With these events as a backdrop, many investors have also been talking about the end of the long bond bull market or even talk about a bond bubble ready to burst. While most investors would not argue against the overvaluation of US treasuries, today's environment is so unique in terms of central bank involvement in global financial markets and the misallocation of capital caused by years of zero rate policy and countless QE programs, that it is easy for investors to potentially reach the wrong conclusions and embark in costly asset allocation decisions.

Traditionally, the role of central banks was to use short-term interest rates as a tool to smooth the business cycle, cooling the economy with higher rates or fostering growth with lower rates. It comes as no surprise that the stock market produced such attractive returns when rates were going higher, during the periods mentioned earlier. Driven by lower rates during the prior years and other events, such as globalization forces and technology driven productivity increases in the late 90s, the US economy was expanding at a rapid pace, driving stock market returns. During the period from 5/03 to 6/07, GDP grew at a 3% average rate, while during the period from 9/98 to 1/00, the average GDP growth was 5.3%. Compare this with the average 2.0% GDP growth of the last 3 years, and one has to wonder why the US stock indices have reached record levels in 2013.

Another reason often cited for investor concern is the absolute level of interest rates. When bonds are yielding 2%, there is less of a cushion to absorb losses than when rates are at 4% (200 basis points less). Another way of putting it is that the breakeven rise in rates is far less. For example, if one holds a 5 year duration bond yielding 2% and has a one year horizon, rates need to only rise by 40 basis points (=200/5) before capital losses are more than the income (coupon payment and any premium or discount amortization). The same bond at 4% provides an 80 basis points cushion.

The Role of Fixed Income

Before deciding whether to exit traditional fixed income for the seemingly greener grass of other asset classes, one should thoroughly consider the role of traditional fixed income in the overall asset allocation decision, and the potential relative performance of fixed income relative to other asset classes, given the current environment.

The role of investment grade fixed income has traditionally been to serve as a volatility and correlation reducing asset class. There are the riskier and higher expected return asset classes, such as equities, emerging markets, high yield and so forth, which are supposed to drive returns in the portfolio, while traditional fixed income has been used to provide the optimal asset allocation mix by reducing portfolio risk due to its lower volatility and lower correlation with other asset classes. Fixed income has also served as an insurance policy against a flight to quality event, such as the Lehman collapse of 2008 or the events in Greece more recently, an insurance

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policy that has paid off handsomely during the past decade on multiple occasions. Due to the lower yield environment of today, a lot of investors in their eternal reach for returns are neglecting the risk side of the equation, loading their portfolios with riskier and riskier assets. While such portfolios might provide acceptable returns in the short term, the laws of probability and finance are telling us that such portfolios are destined to underperform a more balanced portfolio in the long run. This has to do with the less than perfect correlation between investment grade bonds and equities. When equities go up, one often wishes they had all their money in stocks, but it is when equities go down that a diversified investor can sell part of the better performing bond portfolio and invest in equities at more attractive valuations. Over time, this dollar cost averaging should produce returns that exceed those of a non-diversified portfolio with the same amount of volatility.

Relative Performance in Rising Rate Enviroments

The next question is: how are other asset classes going to fare relative to fixed income if interest rates rise? The big mistake here is to use what in statistics is called unconditional probabilities for expected returns of the various asset classes as opposed to conditional expectations. For example, if you want the probability of getting a total of 10 when you roll a dice twice, that probability is going to be very different if the first roll of the dice got you a 2 or a 6. If you rolled a 2, the probability of getting a 10 total after rolling the dice the second time is 0, where if you rolled a 6 the probability is 1/6 (the probability of rolling a 4 the second time).

As a result, the proper way of phrasing the relevant question here is: what is the likelihood of fixed income underperforming other asset classes, when the Fed withdraws its stimulus? To gain more insight, one has to answer the question: Why would the Fed taper off QE3? We do not believe it is because inflation is accelerating or because the economy is expanding at a solid pace. It is just not supported by the data. There have been some positive statistics recently, but many involve rate sensitive sectors such as housing. We do not believe that would be enough to convince the Fed to remove the stimulus unless something else was at play. The most likely explanation is that, as a few Fed governors have pointed out, the zero rate policy creates a misallocation of capital and with cheap borrowing and leverage, riskier asset classes have been able to produce returns that are just not supported by the fundamentals. While supportive of the economy, the Fed's desire is to reduce speculation and avoid the creation of new bubbles (and it is not US Treasuries they have in mind). Also, the pure size of the Fed balance sheet has to give one pause and cause one to wonder whether that trajectory is sustainable in the long run (it has been ballooning for the past 5 years).

If the reason for the Fed stimulus removal is strong economic growth, the odds of the conditional expectation are in favor of the risky asset classes and leaving bonds for equities and emerging markets might be the right choice. However, if the reason is to reduce the leverage and risk-taking in the system to more appropriate levels then, by definition, the odds shift significantly in the favor of fixed income, which will not only help portfolio volatility and correlations but also potentially outperform other asset classes that have in the recent past produced outsized returns through the use of leverage and cheap borrowing.

Currently, we believe that the second outcome is the more plausible and investors should not only not significantly reduce traditional fixed income allocations, but also lock in some of the past gains of riskier asset classes and take advantage of recent higher rates. The environment of the past few months, where good news made risky assets rally (for obvious reasons) and bad news made risky assets rally (because the Fed will continue its unlimited support), has to make one wonder. If that is not irrational exuberance, few other things come close to it.

Scenario Analysis for Rising Rate Enviroments

The tables below summarize the projections of three fixed income benchmark portfolios, under various rising rate environments.

Bear Market ROR (%)
One year time horizon

Rate Move (in Basis points)	Aggregate Index	Gov/Credit Index	Gov/Credit Interm. Index
+100	-1.6	-1.7	-0.5
+200	-5.9	-5.7	-3.3
+300	-10.0	-9.4	-5.9

Source: Yield Book, Rates as of 9/30/13

Bear Market ROR (%) Two year time horizon			
Rate Move (in Basis points)	Aggregate Index	Gov/Credit Index	Gov/Credit Interm. Index
+100	0.8	0.7	1.1
+200	-0.9	-0.9	0.2
+300	-2.6	-2.3	-0.7

Source: Yield Book, Rates as of 9/30/13

From the levels at the end of the third quarter of 2013, it would take a 1% rise in rates before an intermediate bond portfolio produces a negative rate of return (ROR) over a twelve-month holding period. A 200 basis point rise in interest rates over the next twelve months would cause an intermediate portfolio to lose a little over 3%. That would mean the 10-year rate is approximately 4.60%. The obvious question is how would the stock market and the housing market fare under such a rate increase? Chances are that they would lose more than 3%, unless the economy is booming, a far cry from the current situation. In addition, the impact of discounting future cash flows from equities at a higher rate normally leads to a lower present value (stock price), unless earnings are growing fast enough to offset the higher discount factor.

Conclusion

Before investors choose to abandon fixed income for more return promising asset classes, it is important to evaluate the expected impact of rising rates on bond portfolios and other asset classes, given different sources of higher rates. We believe that unless the source of higher rates is a rapidly growing economy and rapidly rising inflation, all other scenarios warrant an allocation to fixed income. The allocation to fixed income will not only act as insurance against an unknown that could cause another flight to quality, but the allocation could very well outperform equities and other risky asset classes should the source of the rising rate environment be stimulus withdrawal by the Federal Reserve in an attempt to control capital misallocation and potential new asset bubbles stemming from the cheap money environment of the past 5 years.

A short to intermediate maturity bond portfolio, with an emphasis on corporate bonds with strong fundamentals and a higher yield than treasuries, appears to be the best choice for investors in the current environment. Short to intermediate portfolios will not only produce modest declines should interest rates continue their climb, but should allow a diversified investor to capitalize on the powerful dollar cost average strategy should equities decline, while also allowing for the reinvestment of cash flows at higher rates, thus buffering the negative impact on the portfolio.

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