Rocaton

INSIGHTS

Investing in a Low Return Environment

August 2014

203.621.1700 | **rocaton.com**

EXECUTIVE SUMMARY

* U.S. equity market valuations are elevated relative to history
* Developed market interest rates are at or near all-time low levels
* Bond spreads are tight, but in many cases are above levels reached in 2007
* Prospective returns for nearly all asset classes are likely to be modest
* Volatility across markets has subsided since 2013's "taper tantrum"
* Investors may want to consider reducing total portfolio risk either through asset allocation adjustments or hedging strategies

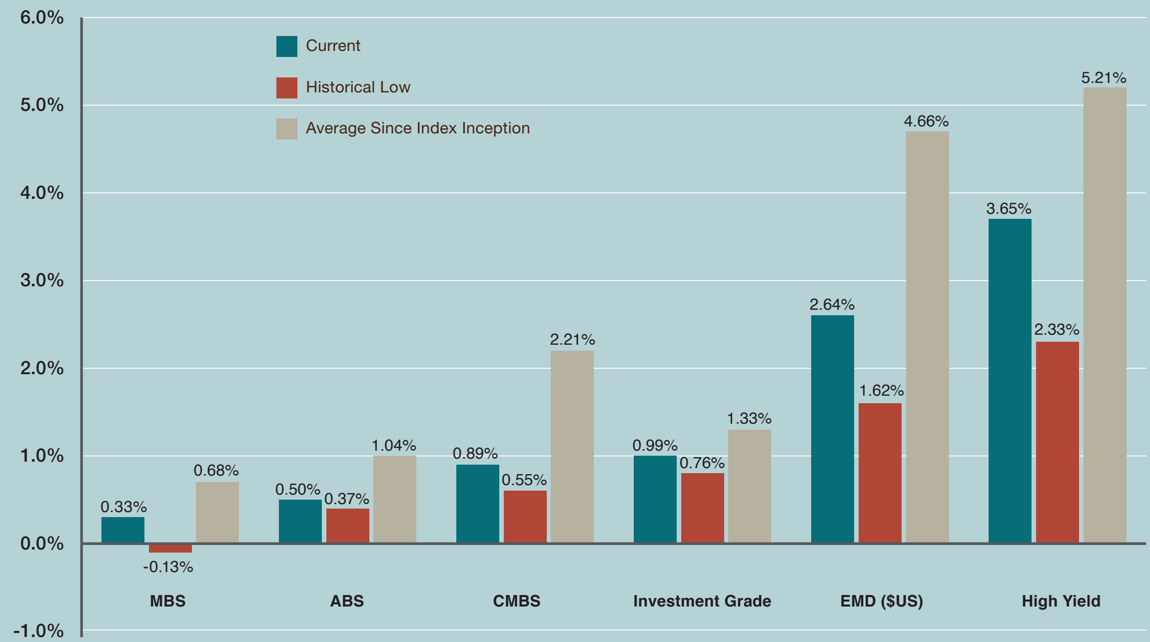
Introduction

Over the last five years, capital markets across the globe have rewarded investors handsomely. Unprecedented monetary stimulus from central banks around the world has lowered interest rates and boosted equity markets. This has led to a scarcity of attractively priced assets and lowered future return expectations for most asset classes. As a result, investors may be asking themselves how to position their portfolios. The balance of this *Insights* will describe potential routes that investors might consider including moving to a more defensive positioning, hedging against downside outcomes (i.e. options or tail risk management strategies), increasing portfolio risk to compensate for low expected returns or maintaining existing allocations. While not suggesting a crisis is on the horizon, we believe investors should explicitly consider whether they wish to take action in light of these low absolute and risk-adjusted return expectations.

Current Market Valuations

Given the outsized returns generated by many asset classes in recent years, it should come as no surprise that valuations are unattractive for many asset classes. Although developed market interest rates have been low for some time, the recent tightening of corporate bond spreads has further compressed fixed income return potential. For example, high yield corporate bond spreads recently dropped as low as 3.23% during June, their lowest level since the summer of 2007. Tight spreads *(see Figure 1)* along with low Treasury yields has brought nominal yields on below investment-grade bonds to approximately 5%. With starting yields at this level and the potential for interest rates to rise and spreads to widen, future return expectations for high yield (and other fixed income markets) are modest at best.

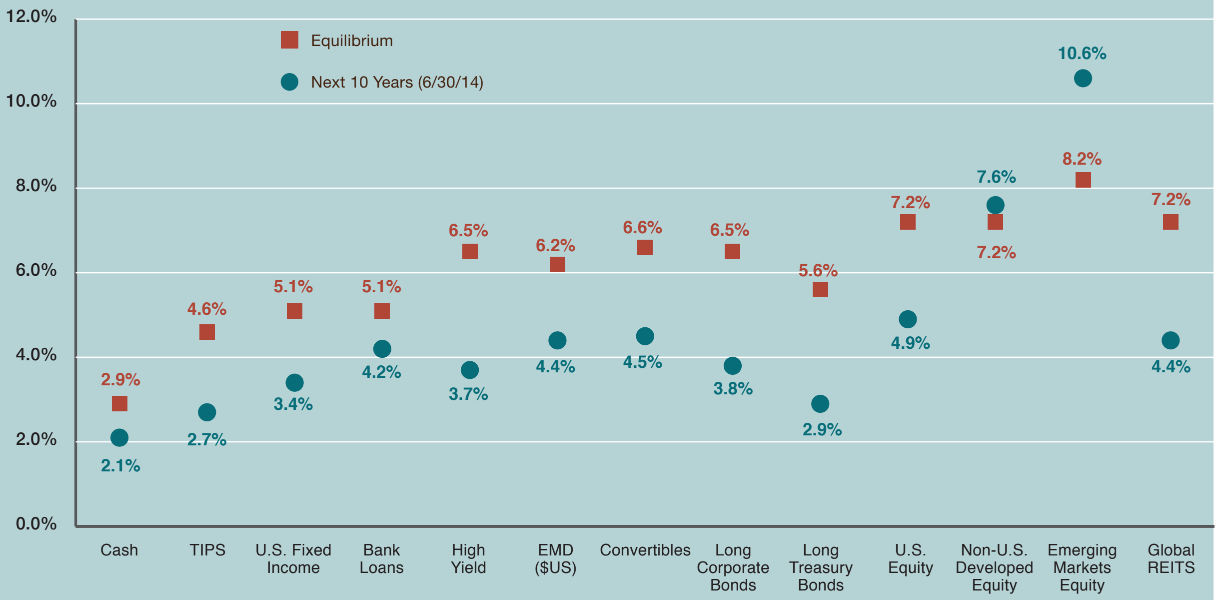
Figure 1:
Spreads–Current, Historical Low & Historical Average



Source: Bloomberg. Data as of July 23, 2014. Averages based on monthly data; current and historical low based on daily data.

With fixed income returns largely dependent on income, investors can clearly see the limited potential for fixed income markets from this point forward. Though not as obvious to many, equity markets expectations, particularly in the U.S., only seem marginally better. Rocaton's U.S. equity return forecast (4.9% next 10-year assumption) is only modestly above that of Core U.S. Fixed Income (3.4%). Current multiples are elevated relative to history as indicated by the cyclically adjusted P/E ratio (Robert Shiller methodology) for U.S. equities which reached 25.9x on June 30th. This represents the highest level since the end of 2007 and is well above Rocaton's equilibrium expectation of 20.0x. It is worth mentioning that during the tech bubble of the early 2000s U.S. equity valuations climbed to nearly 45x. Valuations in non-U.S. equity markets, however, appear attractive relative to U.S. markets. At the end of the second quarter, non-U.S. developed equity markets were trading at a multiple of 17.4x and emerging equity markets were trading at a multiple of 13.9x. These multiples compare favorably to Rocaton's equilibrium expectations of 18.0x and 17.5x for non-U.S. developed and emerging markets, respectively. However, while valuations appear to be attractive in these markets, uncertainty and structural problems present challenges. Figure 2 displays Rocaton's current and equilibrium return forecasts across various capital markets.

Figure 2:
Rocaton Capital Market Return Forecasts



Based on Rocaton's June 30, 2014 Capital Market Assumptions. These are long-term, forward looking expectations which may not be realized.

How should investors respond?

With the understanding that markets are trading at elevated valuations and prospective returns for nearly all asset classes are low, investors are left with few options for generating strong returns. We recognize that valuations can remain stretched for a number of years and that equity markets in particular may continue to generate strong returns. However, over the long-term, valuations have shown a tendency to revert back towards equilibrium levels.

Defensive Positioning

One potential option for investors with a medium-term horizon is to position their portfolios in a more defensive manner. This could potentially include decreasing U.S. equity allocations in favor of cash or high quality fixed income investments, particularly government and Treasury bonds. While many investors are worried about the threat of rising interest rates, we would remind investors that fixed income allocations can be a store of wealth. It is also worth noting that in the current environment the most effective way to get attractive long-term returns from investment grade fixed income investments is for interest rates to rise. Rising interest rates result in a cost in the short- and medium-term, but are essential for the long-term health of financial markets and investors' portfolios. Rising rates would enable fixed income investors to re-invest cash flow from coupons and maturities at higher yields with greater promise for future return.

We acknowledge prospective returns from fixed income markets are modest and that meaningful losses are possible in the short-term, but we would also point out that the potential downside outcomes over the medium-term for these markets are far better than potential equity market downside scenarios. Based on Rocaton's June 30th capital market forecasts, which take into account current yields, expectations that rates are likely to rise, and current equity market valuations, core fixed income has a high probability of preserving investor capital over a five-year horizon (99% of return outcomes are expected to be above -0.2% annualized). In contrast, the downside risk for U.S. equity investors over the same five-year time horizon is much greater (99% of all outcomes are expected to be only better than a -13.6% annualized for U.S. equities over the next 5-years). For comparison purposes, dating back to 1976, the worst 5-year annualized historical return for the Barclays U.S. Aggregate was +2.1% while the worst outcome for the S&P 500 was -6.6%. We would be quick to point out that history may not be an appropriate guide given historically low interest rates and unprecedented central bank stimulus. In addition to potential downside protection, increasing allocations to high quality fixed income may improve overall portfolio diversification for investors who currently hold large allocations to equities and other risky assets. Of course, this increased diversification benefit assumes that the historical relationship (i.e. negative correlation) between high quality fixed income and risk assets continues to hold true.

Defined benefit plans implementing a liability driven investing strategy and following a glide path target, may want to take a similar approach. This could take the form of moving down the glide path (i.e. increasing long duration fixed income allocations) sooner rather than later. We believe this is especially important for plan sponsors who are close to their next glide path trigger, either as a result of an increased funded status or simply via the passage of time. Moving down the glide path sooner would allow sponsors to "lock in" some of the funded status gains achieved in recent years. An increase in long duration fixed income investments would also mitigate the potential funded status decline that might occur in the event of an equity market correction. Potential drawbacks to increasing fixed income allocations for all investors include the opportunity cost associated with continued rising equity markets and the need to lower return expectations even further. A rapid increase in interest rates and/or widening of corporate bond spreads would also undermine returns for fixed income portfolios in the short-term.

Buy Downside Protection

Investors who are unable or unwilling to shift assets into cash or fixed income may want to consider hedging against declines in global equity markets. At the most basic level, investors could simply buy put options on the S&P 500 or other broad equity market indexes. Depending on the contract size, term structure, and strike price, investors would stand to profit from a decline in the underlying equity market index. There is, of course, a cost associated with purchasing puts which is largely dependent on the type of protection investors are seeking. For example, buying puts on the S&P 500 expiring in 12 months and with a strike price that is 10% out of the money will cost investors a premium of approximately 3.1%. To protect against declines of 20% and 30% with the same 12 month expiry, premiums are currently 1.5% and 0.7%, respectively.[1] While the cost of purchasing outright puts can ultimately create a drag on portfolio returns, it should be noted that the cost of protection today is at historically cheap levels. The most striking evidence of this fact is the VIX index, which as of June 30th, was trading at 11.3, near its record low of 9.3.[2] To put the current reading in perspective, the

[1] Pricing is from Bloomberg as of July 24, 2014 and is subject to change.
[2] Although the VIX index is commonly used to forecast short-term risk, the index itself is calculated based on a combination of puts and calls on the S&P 500 index. A lower level indicates that options are inexpensive.

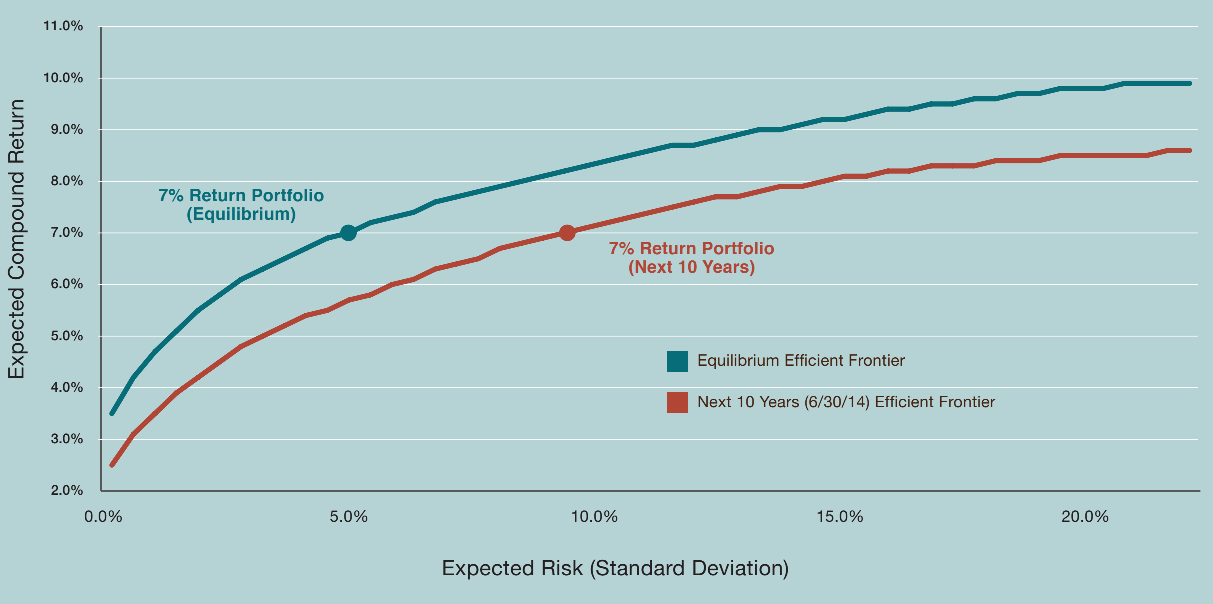
VIX traded above 80 at the peak of the global financial crisis and its long-term average is 20. Aside from simply purchasing puts on the S&P 500, there are many options structures ranging in complexity that can hedge against an equity market correction, including costless collar strategies which seek to offset the cost of buying a put by writing a similarly priced call option which would sell the upside potential beyond a certain return. Investors could also consider dedicated tail risk management ("TRM") strategies to protect against large equity market drawdowns. These strategies typically utilize derivatives across credit, currency, interest rate and commodities markets to purchase investments that are expected to exert a small drag on portfolio returns in normal times but are designed to have strong performance when risk assets fall significantly in value (i.e. during so-called "tail events").

As already mentioned, the primary drawbacks of hedging strategies are the costs and potential complexity. Investors must also be cognizant of term structure and basis risk. For dedicated TRM strategies, there are relatively few investment managers who possess the range of skills and experience necessary to implement this type of strategy.

Increase Portfolio Risk

Some investors might be tempted to reach for the additional return they need over the long-term by increasing their portfolio risk. For most investors, this would require a significant shift in risk posture to compensate for the low return environment we find ourselves in today. By way of example, an investor targeting a 7% return using Rocaton's equilibrium return expectations would need to accept approximately 5.8% annual portfolio volatility. In comparison today, a 7% return expectation could only be achieved by assuming 9.9% risk *(see Figure 3)*.

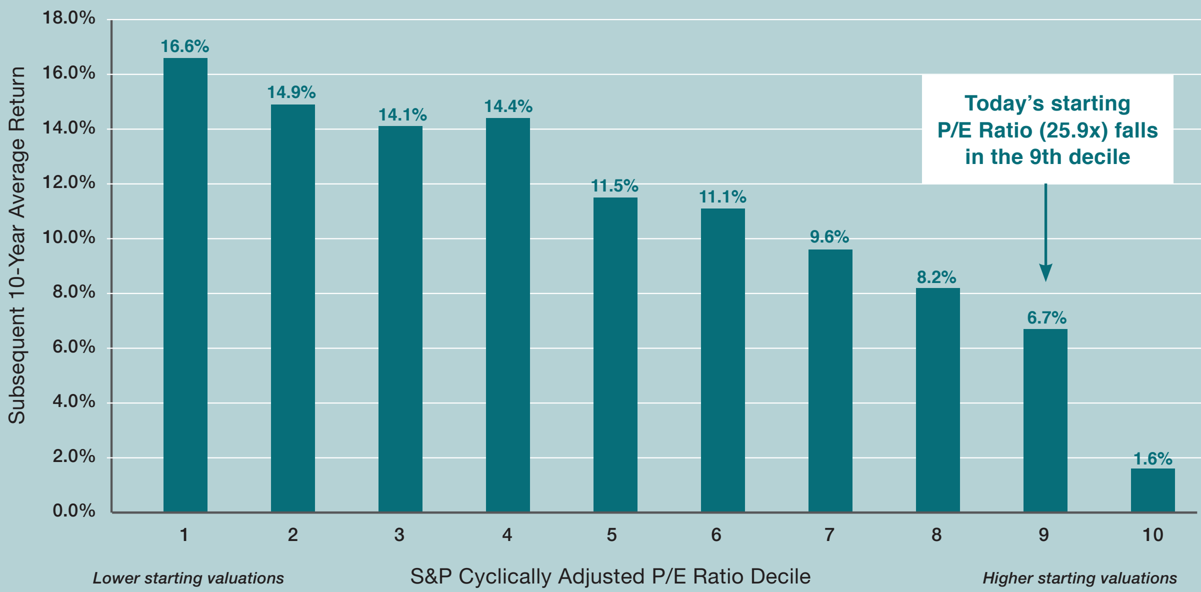
Figure 3:
Rocaton Efficient Frontiers (Equilibrium and Next 10 Years)



Based on Rocaton's June 30, 2014 Capital Market Assumptions. These are long-term, forward looking expectations which may not be realized.

At a time of stretched valuations, it is rarely the correct response to increase portfolio risk and reach for that illusive return target. In fact, history has demonstrated that for long-term investors, peak valuation periods provide the worst prospective returns for equity investors. Breaking the Shiller P/E ratio into historical deciles demonstrates that there is a relatively strong inverse relationship between valuations and future returns *(see Figure 4)*.

Figure 4:
S&P 500 Average 10-Year Returns Grouped by Starting P/E Ratio Deciles



Source: Standard & Poors; Rocaton. Average 10-year returns based on monthly data.

While a wholesale shift in portfolio risk seems ill-advised, the disparity of valuations within global equity markets and even certain fixed income markets might provide some opportunity for investors to enhance portfolio risk-adjusted return. As already discussed, non-U.S. and emerging equity markets are priced cheaply relative to U.S. markets and bank loans may offer both better return potential as well as better downside protection than high yield bonds based on current market valuations. While portfolio shifts in these asset classes probably won't completely compensate for low return expectations, it could provide some marginal benefit in an otherwise bleak picture for prospective returns.

Remain at Target and Rebalance

Rather than adjusting asset allocations or establishing a hedging strategy, investors may simply choose to remain at their target allocations. Presumably, investors have studied potential downside outcomes when determining their strategic asset allocation policy and are, therefore, comfortable with the range of potential outcomes. As we have described in the past, market timing can be a difficult exercise as markets can remain in a state of dis-equilibrium for many years and investors must correctly time both their market exit and subsequent re-entry. With this in mind, a strict rebalancing policy may be the best approach for investors, particularly those who have a long-term horizon and are concerned about the timing risks of reinvesting back into markets. Rebalancing proved to be particularly helpful during the global financial crisis as investors were able to purchase equities at cheap prices in late 2008 and early 2009.

Of course, today it is possible that investors may be overweight equities, particularly U.S. equities, given how much they have appreciated in recent periods. In that case, we would advise investors to continue to adhere to their rebalancing policies and move back to target allocations as necessary. Remaining at current target weights would allow investors to fully participate in further gains across equity and debt markets, but would do little to mitigate downside outcomes.

Conclusion

The current market environment is arguably unlike any of the recent time periods in which valuations were elevated. For example, in 2007, prior to the global financial crisis, safe assets such as cash provided investors with a healthy yield. In the late 1990s when tech stocks became massively overvalued, other equity and risk markets continued to offer attractive valuations. Today's environment, driven by excessive global liquidity, is plagued with non-existent yields on safe assets and what could be overvalued U.S. equity markets. Moving to a more defensive positioning or hedging equity outcomes via derivatives may help investors avoid the full brunt of an equity market correction, but it should be noted that selling out of unattractive markets is only half the task. Reinvesting back into markets after a significant decline is often difficult to do, but essential. Reaching for return by increasing portfolio risk is a dangerous road to go down and might lead to even worse outcomes. Investors could, however, consider modest portfolio shifts in order to take advantage of cross-market valuation disparities as discussed above. By choosing to remain at their current target weights, investors will be able to maintain their current level of expected return, but may do little to improve their outcomes in the event of a market correction. Regardless of the route investors take, we would urge investors to better understand the risks inherent in their portfolio and be prepared in the event of a market correction.

Rocaton

Investing in a Low Return Environment

Disclosures

Rocaton is registered as an investment adviser with the U.S. Securities and Exchange Commission. Rocaton's Form ADV, Part 2 is available upon request. The information included in this publication has been taken from sources considered reliable. No representations or warranties are made as to the accuracy or completeness of this information and no responsibility or liability (including liability for consequential or incidental damages) is assumed for any error, omission or inaccuracy in this information. This information is subject to change over time. This publication is not intended as investment advice. Before acting on any information contained in this material you should consider whether it is suitable for your particular circumstance. Any opinions expressed in this publication reflect our judgment at this date and are subject to change. No part of this publication may be reproduced or redistributed in any manner without the prior written permission of Rocaton Investment Advisors, LLC.

Performance Information and Return Expectations

The analysis contained in this document may include projections of long-term return and risk expectations. There is no guarantee that the projected returns or risk will be realized. The projections are based in part on historical performance of various asset classes, and past performance is no guarantee of future performance. The projections include assumptions, including those regarding risk and return. These assumptions are used for modeling purposes only and may not be realized. Because the analysis is based on assumptions and projections, there can be no warranties or guarantees.

203.621.1700 | **rocaton.com**