SIGNATURE RESOURCES
CAPITAL MANAGEMENT

Commentary: September 2017

GLIDING HOME

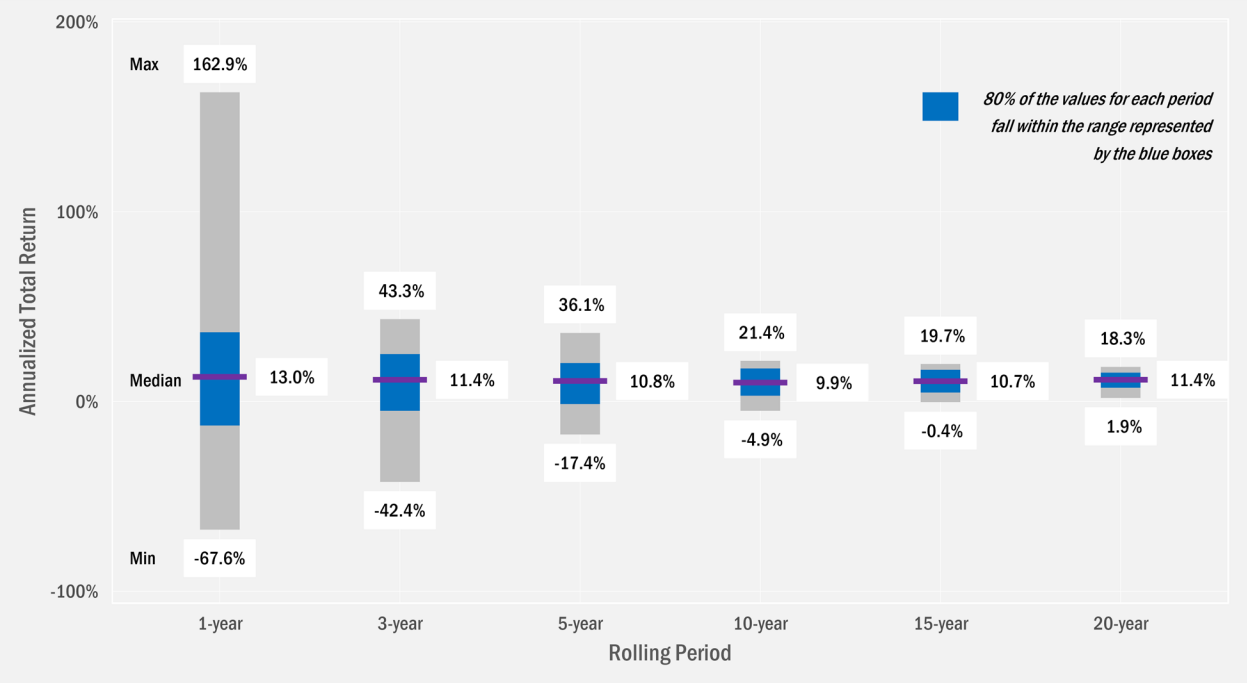
Risk is as much a part of investing as is return. Two sides of the same coin. In many cases, it is likely that individual tolerance for market risk will wane over time. Often due to age-induced pragmatism, we might like our portfolios to become less volatile as our demands for the security of the amount of those funds we have managed to accumulate grows. A progression in portfolio exposures from higher to lower overall expected portfolio risk can be labelled a "glidepath." This glidepath expresses the past and potential future mix of exposures in the portfolio in order to set expectations for relative potential risk and return. In this month's commentary, using the more recent past performance of U.S. equity and fixed income investments as a guide, we seek to show the relative potential risk and return impact of incorporating a glidepath into an investment process.

Where Depends on How

When it comes to investing, the answer to "how much?" is heavily dependent, in our view, on the answers to "where are we now?" and "how do we expect to get there?" A response to the former is a matter of taking stock of our current savings. Added to that value are estimations for future savings. If we intend to invest those dollars, answering the "how", the return we expect from those investments is a critical determinant of the eventual value of our invested funds. As critical, however, to achieving that eventual value is the risk that we take on with those investments. While the return can set the expectation of an eventual value, the risk of our investments tells us how likely we are to achieve that value over various periods of time.

Reprising a chart we presented in last month's commentary, Figure 1 expresses the relative narrowing in the range of expected equity returns over increasing periods of time. The figure also shows a positive bias in return over longer periods of time suggesting that the longer we expect to hold onto our equity investments, the greater may be our confidence in achieving a gain. The data support the thinking that it is fair to expect a higher (lower) long-term return from portfolios with more (less) exposure to equity. But, the thinking is fair in our view only if that expectation for higher returns from higher levels of equity is accompanied by an expectation for increasing volatility from portfolios as the level of equity increases. Our desires to take on more equity in our portfolios should be based on our comfort with the potential to miss the mark of our original expectations. Of course, fixed income investments carry risk, too. But, generally speaking, bonds may be seen as less risky than stocks, such that we generally will shift our equity investments to fixed income as risk tolerance diminishes.

Figure 1: S&P 500 Historical Range of Returns by Time Horizon



Monthly data from 01.31.26 to 06.30.17. SOURCE: SRCM using data from Standard & Poor's Index Services Group via Dimensional Fund Advisors

Plotting the Path

Importantly, the greater the difference between how much we presently have saved and invested, versus how much we desire eventually to have for spending or gifting, the more likely we are to want to choose a riskier investment approach. Over the near and medium term, our expectations should be that we at times will diverge greatly from a direct path plotted at the outset. We should be able to offset any interim discomfort, however, with the expectation that we are more likely to converge to our original expectations over the long term. Incremental saving along the way may further bolster our likelihood of success. Over time, as our desire for certainty with regard to our invested funds increases, we are likely to shift to fixed income to impart greater confidence in our outcomes.

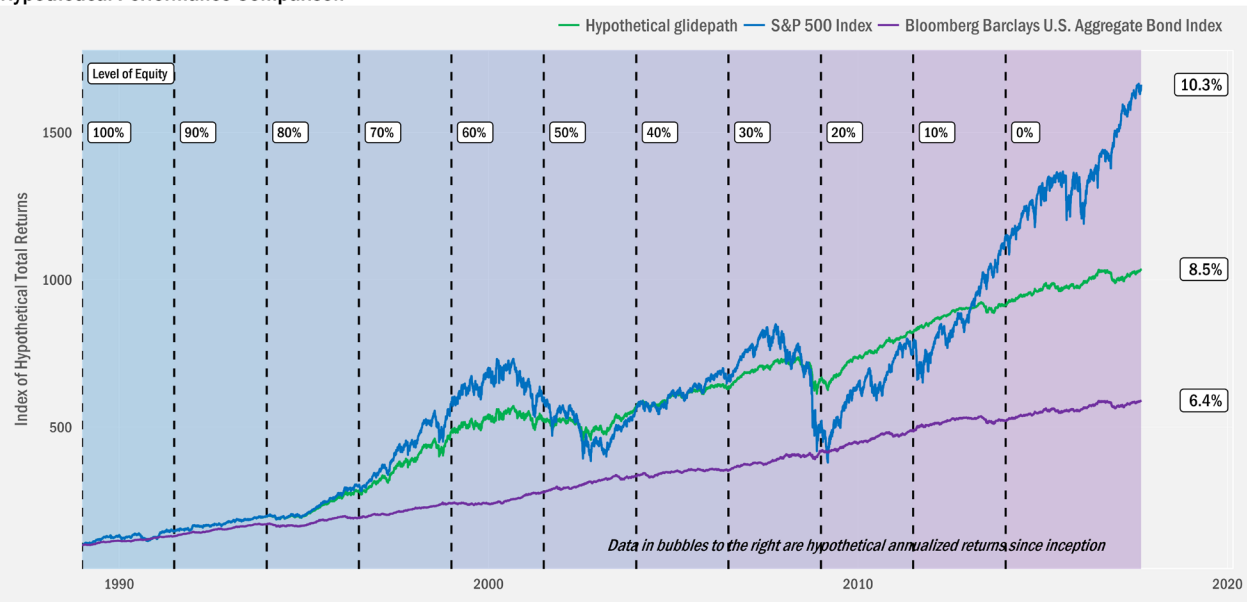
But, what might that progression look like from a risk and return standpoint? To answer that question, we have developed a hypothetical glidepath and charted the resulting hypothetical returns as demonstrative of the potential impacts of incorporating such a strategy[1]. Importantly, such hypothetical reviews may not at all

[1] First, though, some warnings regarding hypothetical returns: This backtested performance review involves simulation of a quantitative investment allocation by applying investment rules to a set of indexes during a specific market period and measuring the changes in value of the hypothetical investment based on the actual prices of the indexes during the period covered. Hypothetical allocations are based on a static allocation to indexes and allocations are rebalanced at each quarter end. The results are entirely hypothetical in nature and should not be relied upon as a source of probable or possible investment return or risk scenarios. No risk or return profile can be guaranteed. Backtested performance does not represent actual account performance and should not be interpreted as such. Backtested performance does not reflect the impact that material economic and market factors might have had

be indicative of the manner and scale of market returns we might see on a going-forward basis. They can, however, be useful in expressing an investment concept, which is how we will use them here. In doing so, we hope to demonstrate the nature of relative risk in investing while in part substantiating an approach that seeks to methodically reduce exposure to market risk over time.

To create a hypothetical glidepath of portfolio exposures, we started by gathering the past nearly three decades of returns for the S&P 500 Index (equity portfolio) and the Bloomberg Barclays U.S. Aggregate Bond Index (fixed income portfolio). These two indexes also will represent the equity and fixed income allocations, in that order, of our hypothetical portfolio. For this hypothetical portfolio, we assume a shift in weights between equity and fixed income since the beginning of the data until now. Starting with 100% equity on December 31, 1988, we drop the equity weight of the hypothetical portfolio by 10% every 2.5 years (30 months) until we reach 100% fixed income at the end of 2013. Meantime, we track the overall performance of that hypothetical combination. The total return performance of all three series are detailed in Figure 2.

Hypothetical Performance Comparison



From 12.31.88 to 08.31.17. Values reindexed to 100 on 12.31.88. SOURCE: SRCM using data from Bloomberg

Perhaps the first detail of note regarding the relative performance is that the equity portfolio outpaced the hypothetical glidepath portfolio, which outpaced the fixed income portfolio. From what we already have discussed this result might have been expected. However, also obvious is that the equity portfolio was not always ahead of the others. Greatly exceeding the performance of the hypothetical glidepath and bond portfolios through the turn of the millennium, the Tech Bubble wrought havoc on the equity exposures leading to strong downturns in both the equity and the hypothetical glidepath portfolio. Even so, the lower exposure to equity in the latter led to relative outperformance as the bubble burst. The same pattern occurred

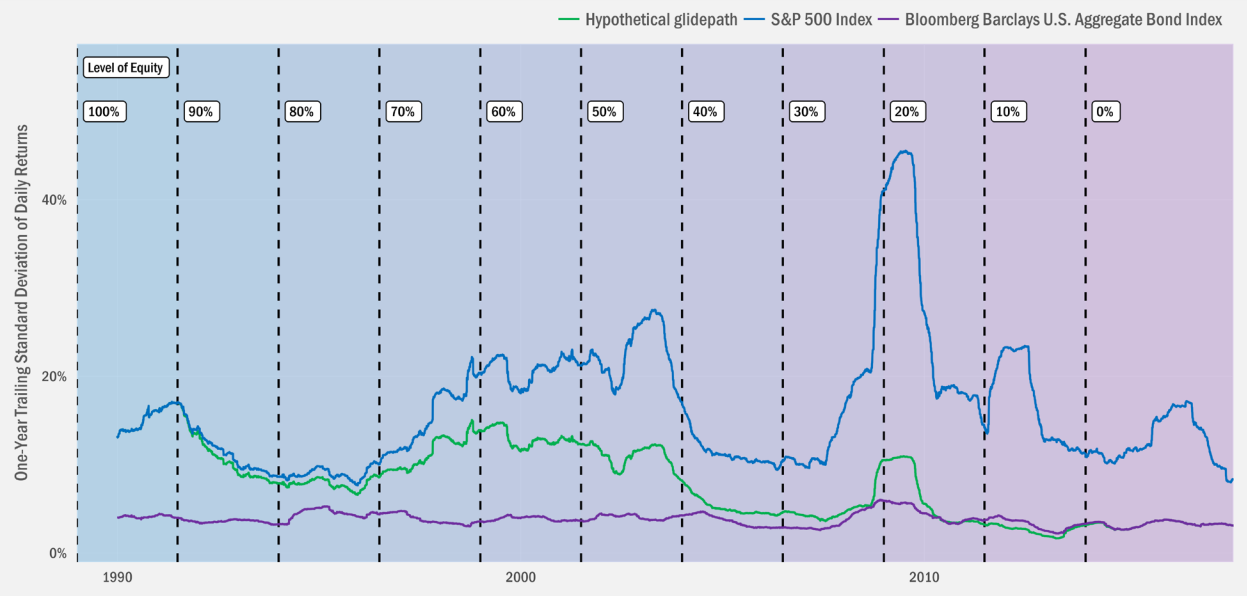
on the investment decision-making process if SRCM were managing actual assets. The period reviewed may not be indicative of the results one might have expected were a different period chosen for the study.

during the Financial Crisis, this time leading the equity exposure to underperform fixed income all the way back to the beginning of the study. Since then, however, equities have gone on to recover all those relative losses and much more. Meantime, the performance of the hypothetical glidepath portfolio participated less in that recovery as the overall allocation to equity declined. Even so, the overall long-term result was substantially better than the 100% exposure to fixed income.

Turned Down Vol

Volatility is the subtext of that high-level long-term performance review. While the hypothetical performance chart suggests a higher level of volatility in those allocations with more equity, we can review relevant data more directly. In Figure 3, we present trailing[2] 1-year standard deviation data. Obvious is the always higher level of volatility of the equity portfolio, versus the fixed income portfolio. Over time, the volatility of the hypothetical glidepath portfolio shifted from equaling that of the equity portfolio to matching that of the fixed income portfolio.

Figure 3: Hypothetical Standard Deviation Comparison



From 12.31.88 to 08.31.17. Standard deviation is a statistical metric that describes the variation of a set of data about its average. A higher number reflects more variation (or volatility). SOURCE: SRCM using data from Bloomberg

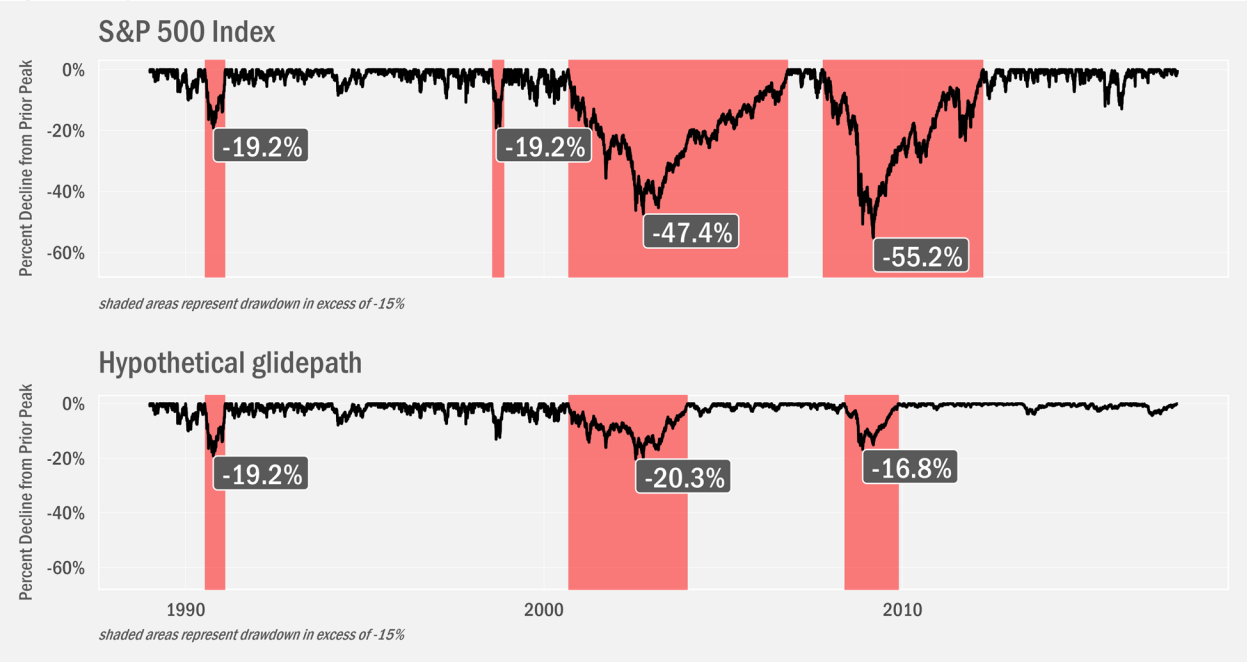
Persistence is Key

Even with the extra volatility, the long-term returns of the equity portfolio—with perfect hindsight, at least—likely present an attractive scenario for some. Turning back to one of the challenges of hypothetical

[2] A rolling period is a window of time of a specific length with an underlying periodicity. An example would be 10 years using monthly periods (meaning there are 120 months in each rolling 10-year period). Importantly, rolling periods overlap. For a 10-year monthly series, we start with the first 120 months to take a measurement. We then drop the first month (month 1) and include the month after the last month in the prior series (month 121) along with each month in between. This process goes on until we arrive at the final 120 months in the series. Since we are looking at the data from the end of each rolling 10-year period, we refer to the data as a trailing series.

scenarios, which include even the hypothetical investment in an all-equity index, we must consider one's ability to stick with a particular investment strategy through thick and thin. To have seen anything like those long-term returns, one must have remained invested through each of the four major declines in the S&P 500 greater than 15%, which we chart in Figure 4. For certain individuals, such losses may have proved too much to bear, such that they may have exited the market on the way down or at the bottom and may not have participated in the eventual recovery. Noting again that the past is not predictive of future performance, the relatively lighter (though still substantial in most cases) drawdowns of the hypothetical glidepath portfolio demonstrate the potential volatility-dampening characteristics of fixed income allocations.

Figure 4: Hypothetical Drawdown Review



From 12.31.88 to 08.31.17. Drawdown may be measured as the maximum loss from a prior peak value and/or the length of time the portfolio requires to return to breakeven after a prior peak. SOURCE: SRCM using data from Bloomberg

Your Glidepath

The continued evolution of the mutual fund and exchange-traded fund (ETF) landscape has enabled efficient, relatively inexpensive access to equity and fixed income securities traded around the globe. Even more, this evolution has afforded tremendous ability to globally diversify portfolios while also engendering strong adaptability of portfolio investments to changing investment circumstances. With individual client needs top of mind, SRCM has sought to take advantage of these favorable characteristics in developing a range of solutions suitable for the core of many investors' investment portfolios and informed by each client's individual tolerance for market risk.

Understanding that risk tolerance can change over time, from this collection of unique solutions our Advisors can develop and implement an expected path of allocations to fixed income and equity suitable for each client's situation, while incorporating a level of flexibility that supports efficient shifts in portfolio allocations

in response to changing client goals. We invite interested readers to reach out to our Advisors to learn more about how we customize the expected evolution of portfolio allocations to fit the unique circumstances of each of our clients.

Important Information

Investing involves risks. Past performance is not indicative of future results.

One cannot invest directly in an index. Index performance does not reflect the expenses associated with the management of an actual portfolio.

The S&P 500 Index represents 500 U.S. companies and captures approximately 80% coverage of available market capitalization.

The Bloomberg Barclays U.S Aggregate Bond Index is a broad-based benchmark that measures the investment grade, U.S. dollar-denominated, fixed-rate taxable bond market. Components of the index include Treasury, Corporate, Agency and Securitized bonds.

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