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Portfolio protection where Fixed Income may fall short

Institutional investors have traditionally used fixed income investments as a stabilizing ballast to mitigate the impact of public equity drawdowns on their portfolios.

- The behavior of bonds when equities fall can be quite variable and may not provide reliable stabilization.
- With Treasury bond yields now at historical lows, further strong price gains as a result of sharp drops in yields are unlikely.
- **Equity stabilization based on a reliable volatility-based mechanism could provide portfolio protection where fixed income may fall short**

Most institutional investors rely on public equities to generate much of the long-term returns they need to meet their mission objectives, which can expose them to high volatility. To dampen portfolio volatility, investors have traditionally relied on U.S. Treasuries and publicly traded corporate bonds.

Our research has shown that bonds have not provided reliable protection in equity drawdowns.

As we noted in a previous article, ["Reliably improving the risk/return ratio,"](#) there have been long periods where equities and bonds were positively correlated, and thus traditional portfolio diversification did not reduce portfolio risk to the extent many investors expected.

This unreliability has been masked over the past 40 years due to the long secular decline in interest rates during that period. Some may still remember that the 10-year U.S. Treasury yield peaked at 15.8%¹ in 1981 and has been falling (bumpily) ever since to its current 0.97% (December 4, 2020).² That rate decline produced unexpectedly high bond returns - in the 20 years to September 30, 2020, for example, the ICE B of A ML 10+ Year U.S. Treasury Index returned 7.65% on average per annum³ - helping to offset bonds' periodically positive correlation with equities.*

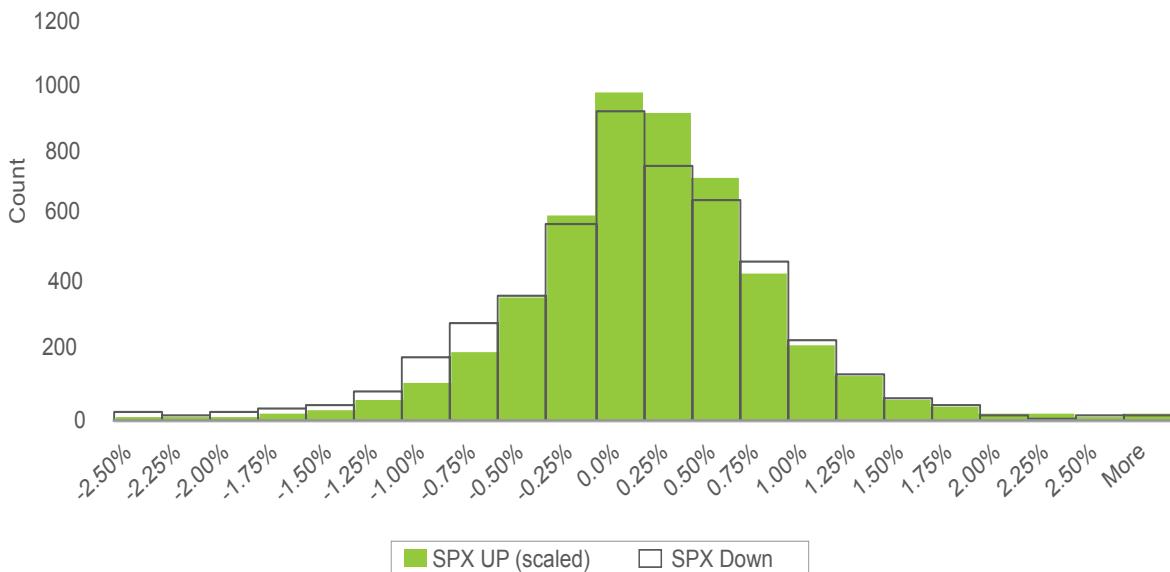
There is about an equal chance that bonds will likely move with or against equities

Can bonds reliably hedge shorter-term equity downdrafts? To answer this question, our quantitative strategies team examined the distribution of returns of long-term Treasury futures for days when the S&P 500® Index went up and days when it went down. The result is that regardless of whether the S&P 500® went up or down in a day, there was about an equal likelihood that the long-term Treasury futures moved the same way or the opposite way to the equities (see Figure 1).

FIGURE 1: THE DIRECTION OF DAILY BOND RETURNS HAS LITTLE RELATIONSHIP TO THE DIRECTION OF DAILY EQUITY RETURNS

Daily returns of US1 Treasury Futures on either SPX up or down days from 08/22/1977 through 07/31/2020

of Days Observed



Source: Bloomberg. The data spans 08/22/1977 through 07/31/2020 and displays the daily returns of US1 Treasury Futures on either SPX up or down days.

Bonds don't reliably offset equities – Detail for Figure 1

Figure 1 covers the 10,831 trading days ending July 31, 2020. There were over 5,800 days when the S&P 500® Index rose, and over 5,000 days when the S&P 500® fell. The green shaded bars show the distribution of the daily returns of long-term Treasury futures on days when the S&P 500® Index rose. For example, the tallest green bar shows that on almost 1,000 of the days when the S&P 500® Index rose, the long-term Treasury future returned between -0.25% and 0%. The green bars to the right of the tallest one show that in over 3,000 days when the S&P 500® rose, so did the long-term Treasury future - bonds moved the same direction as stocks.

Similarly, the heavily outlined bars show the distribution of the daily returns of long-term Treasury futures on days when the S&P 500® Index fell. Again, the tallest heavily outlined bar shows that on almost 1,000 days when the S&P 500® fell, the long-term Treasury future returned between -0.25% and 0%. Most importantly, adding up all the heavily outlined bars from the left (including the 0% bar) shows that on just over half the days when the S&P 500® fell, the long-term Treasury future did not rise. Bonds moved in the same direction - down - as stocks over half the time.

Bonds' lackluster protection against equity selloffs is unlikely to be offset by outsized bond performance going forward.

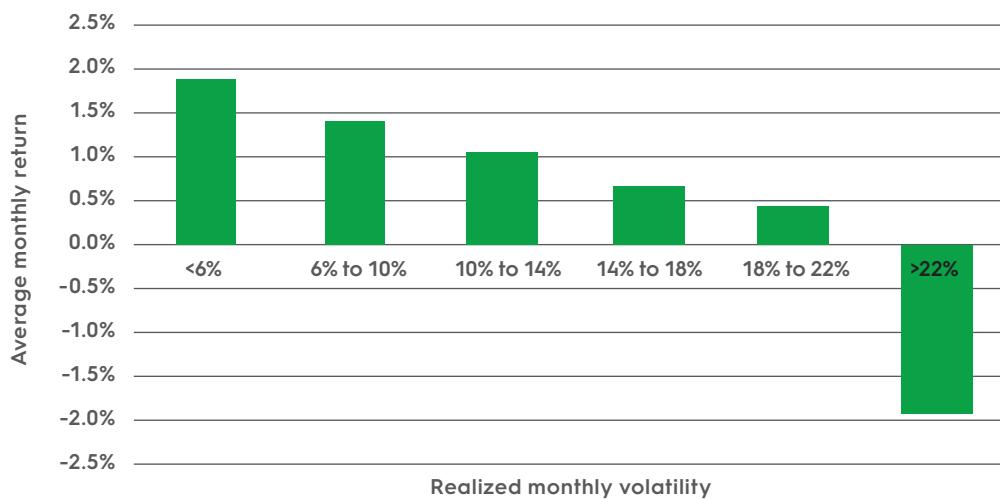
With the yield on the Bloomberg Barclays U.S. Aggregate Bond Index at about 1.2%, and given the Index's duration of about 6 years, even if the yield fell all the way to zero the Index would only gain approximately 7.2%. If bonds are held at the traditional 40% of an institution's total portfolio, this would result in a return of 2.9% at the portfolio level - again, nowhere near enough to protect the portfolio against a simple bear market decline of 10%, much less against the 35% selloffs experienced in 2008 and March 2020. Any counterbalancing from bonds in future equity corrections is likely to be ineffective at best.

Fortunately, there is a reliable mechanism for stabilizing equity returns.

As we discussed in detail in "[**Reliably improving the risk/return ratio,**](#)" the relationship between near-term equity volatility and equity returns is robust and dependable as a basis for volatility management (see Figure 2).

FIGURE 2: THERE IS A RELIABLE RELATIONSHIP BETWEEN EQUITY VOLATILITY AND EQUITY RETURNS

Average Monthly S&P 500 Index Returns for Ranges of Realized Monthly Volatility from January 1928 to June 2020



Source: Bloomberg. Data as of June 30, 2020. The data spans from January 1, 1928, to March 31, 2020, and the table displays the average monthly returns for the S&P 500® Index for the time periods shown where the average monthly volatility was in the different volatility categories shown. Volatility is measured as the annualized standard deviation of daily returns of the index. The S&P 500® Index is an unmanaged index of 500 stocks that is generally representative of the performance of larger companies in the U.S and investments cannot be made directly in the indices. See additional disclosures at the end of the materials for additional information.

At Securian Asset Management, Inc., we are able to successfully exploit this reliable relationship - which holds across all major equity markets - to stabilize the volatility of equity portfolios. We believe allocations to this stabilization strategy must be permanent strategic allocations in order to achieve results, because no one knows when the next equity downdraft will occur. It's important to always wear seatbelts when our cars are on the road!

Conclusion – publicly traded bonds aren't reliable portfolio stabilizers...

While "bonds offset stocks" is a popular narrative, the actual risk-free asset co-movement with equity isn't nearly as strongly oppositional as institutional investors might expect or require. The poor portfolio hedging ability of bonds has been masked by the secular bull market in fixed income over the last 40 years - which is now over. Our belief is a permanent allocation to a volatility-based equity stabilization strategy provides a reliable counterbalance to equities for institutional investors needing that stability to meet their goals.

...Nor attractive income producers for now

Institutional investors could also benefit from replacing a portion of their publicly traded bond portfolio with private debt opportunities such as commercial mortgage loans and private investment grade debt. We believe these can offer more stability than publicly traded bonds, while providing significantly higher yields.

Combining volatility-based stabilization of the equity portfolio with private approaches to part of the debt portfolio can be a win-win combination for many institutional investors.

About Securian Asset Management, Inc.

As part of a financially stable mutual company, we focus on the long-term and seek to execute consistently for our clients. Our asset management business has been built with a risk and liability management focus, coming from our long, successful history investing for our parent company's general account. We stay true to our purpose, our values and our St. Paul roots, while being innovative and nimble to help prepare our clients to meet their investment objectives from a position of strength.

1. <https://www.macrotrends.net/2016/10-year-treasury-bond-rate-yield-chart>

2. <https://www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/TextView.aspx?data=yield>

3. eVestment

Sources: Bloomberg, Macrotrends, U.S. Department of Treasury, eVestment Research Management

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Benchmark Descriptions: The S&P 500® Index consists of 500 large cap common stocks which together represent approximately 80% of the total U.S. stock market. It is a float-adjusted market-weighted index (stock price times float-adjusted shares outstanding), with each stock affecting the index in proportion to its market value. The ICE BofA 10+ Year Treasury Index is a subset of the Bank of America Merrill Lynch Treasury Master Index. The index measures the total return performance of U.S. Treasury bonds with an outstanding par that is greater than or equal to \$25 million. The maturity range of these securities is greater than ten years.

Sources: Bloomberg and Securian Asset Management, Inc.

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