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Rising Rates: It's About the Portfolio

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After a year of strong equity market returns in 2017, with the fear meter hovering at all-time lows, unsuspecting investors received a shock at the end of January. The monthly payroll data seemed to indicate a spike in wage rates. Often, that can be a sign that inflation will soon be on the rise as the higher cost of labor may ultimately flow through to the prices of goods and services. Fittingly, sellers came out of the woodwork, and both equity and fixed income markets tumbled. Bond investors are particularly concerned that with the Federal Reserve now in a tightening cycle to keep inflation at bay, any unforeseen inflation could have a disastrous impact on bond portfolios as rates begin to rise in earnest. But is this really cause for concern for most investors? We asked this question five years ago as the Fed was just in the early stages of dialing back their massive purchases of Treasury and mortgage backed securities, much needed stimulus that helped the economy recover from the Credit Crisis. Back then, we thought we might be on the cusp of an extended period of rising rates. As we are still waiting for this rise to occur, it seems an appropriate time to revisit some historical data and the conclusions that we derived from that analysis. Our efforts, then and now, are to understand what can happen to bonds during a time of rising rates, but also to observe the impact on a diversified portfolio, which is a much more important data point for most investors.

Rising Rate Periods

At the core of investor concerns is that, all else equal, a bond's price will move inversely with movements in interest rates. The reason is that bonds have a fixed payout at maturity, and the current price of the bond must be set by the market to provide a total return that is commensurate with the current interest rate for that specific type of bond. Since most bonds also have a fixed interest payment (coupon) that can't be adjusted, the price of the bond is the only mechanism that can adjust as rates move higher to make it attractive to new buyers.

To assess the impact on a portfolio of a rising rate environment, we began by looking at the yield on the 10-year Treasury bond during the post-World War II era and selected all periods of rising rates that met the following criteria:

Duration in Months	>12
Absolute % Change in 10-Year Treasury Yield	>1.00%
Relative % Change in 10-Year Treasury Yield	>10.00%

We looked to capture sustained periods of rising rates that were significant enough in size that they would have a chance of making a lasting impact on the economy during that time. We felt that observing the performance of a variety of stock and bond instruments over those timeframes might give us some framework for the range of expectations of a similar environment in the future.

Applying the criteria above revealed eight periods of rising rates for our analysis:

Table 1: Rising Rate Periods

	Mar. '71 - Sept. '75	Dec. '76 - Sept. '81	May '83 - June '84	Jan. '87 - Mar. '89	Oct. '93 - Nov. '94	Oct. '98 - Jan. '00	June '03 - May '06	July '12 - Dec. '13
Months	54	57	13	26	13	15	35	17
Absolute Rate Change	2.72%	8.45%	3.18%	2.28%	2.63%	2.13%	1.78%	1.28%
Relative Rate Change	47.89%	123.00%	30.64%	32.20%	49.34%	47.02%	53.45%	79.01%

Source: Morningstar Direct & Board of Governors of the Federal Reserve System

Of the eight timeframes that we observed, two of them represent sustained multiyear periods of rising rates, and the others had a duration of less than 3 years before rates retreated. As we look at the two longer periods during the 1970s, the 1971-1975 period was characterized by a more gradual adjustment to rates, whereas the later period showed a steep increase in the Treasury yield from approximately 6.9% to 15.3%.

Portfolio Impact

Our next step was to look at the performance of a number of key market benchmarks during these periods of rising rates. We confined our study to U.S. benchmarks, and because there are a relatively small set of indexes that provide data going back to World War II, we selected 4 key indexes for the study: U.S. 30-Day Treasury Bills, U.S. Intermediate Term Treasury Bonds, U.S. Large Stocks (S&P 500 Index), and a benchmark of U.S. Small Stocks. In addition, we created a balanced portfolio of 60% U.S. Large Stocks and 40% U.S. Intermediate Term Treasuries for comparison. Table 2 shows the results of the study.

Table 2: Market Performance in Rising Rate Periods

Asset Class/Portfolio	Mar. '71 - Sept. '75	Dec. '76 - Sept. '81	May '83 - June '84	Jan. '87 - Mar. '89	Oct. '93 - Nov. '94	Oct. '98 - Jan. '00	June '03 - May '06	July '12 - Dec. '13
U.S. T-Bills (Cash)	5.86%	9.49%	9.29%	6.14%	3.64%	4.64%	2.22%	0.04%
U.S. Int Term Govt Bonds	4.49%	2.38%	2.74%	4.21%	-5.76%	-2.32%	0.50%	-2.53%
U.S. Large Stocks	-0.39%	7.06%	-0.86%	7.03%	0.08%	22.54%	11.50%	25.72%
U.S. Small Stocks	-4.61%	28.40%	-7.69%	4.80%	3.00%	39.50%	21.45%	39.27%
60% Lg. Stock / 40% Bond Portfolio	2.10%	5.36%	0.64%	6.66%	-2.27%	12.67%	7.11%	13.86%

Source: Morningstar Direct

Intuition would tell us that during a period of rising rates, our bond investments would not do very well. This was generally the case, but in five of the eight timeframes, we still saw bonds provide positive returns. For many of the periods, stocks provided good growth opportunities relative to bonds even as rates were rising. One common theme that we also expected was the underperformance of bonds relative to Treasury bills, a cash proxy. This behavior was consistent across all timeframes.

Although our intent was to focus on the impact of rising rates, it quickly became clear when studying the economics of each timeframe, that it was difficult to isolate the effects of interest rates alone. For example, in the early 70s, economic growth began to slow considerably. The same was true of 1974-1975. The late 70s period, by contrast, had high economic growth but also high inflation. Given the wide variety of economic circumstances present in this data, we found it helpful to look at the average returns over all eight sample periods and compare them to the entire data set from 1946 to 2017 as seen in Table 3 below.

Table 3: Long Run Averages

Index	Category	Average Jan 1946 – Dec 2017	Average All Rising Rate Periods	Difference
U.S. 30-Day T-Bill	Cash	4.00%	5.17%	1.17%
U.S. Interm Term Govt Treasury	Intermediate Bond	5.49%	0.46%	-5.03%
S&P 500 Index	Large Stock	11.02%	9.09%	-1.93%
U.S. Small Stocks	Small Stock	12.89%	15.52%	2.63%
60% Stock / 40% Bond Portfolio	Balanced Allocation	9.13%	5.77%	-3.36%

Source: Morningstar Direct

As we would expect, the intermediate term bond index did perform worse during the rising rate periods on average, but stocks generally performed quite well and small stocks showed better than average performance. The balanced portfolio showed performance that was lower in the rising rate periods, but still outperformed the average cash return by a good margin. In the more recent timeframes, stocks far outpaced cash and provided a more than adequate offset to the less than stellar bond performance.

One limitation of the study was the inability to incorporate other assets, such as global bonds, for which there was a smaller historical data set. However, we can look at global bond performance during the 1993-1994 period as an example for comparison. Here we find that the Barclays Global Treasury Index returned a positive 5.41% while the U.S. bond index was down 5.76%[1]. In recent years, we have been discussing the likelihood of U.S. rates going up, but just because rates in the U.S. may be increasing, it could be the case that other interest rates around the world are remaining stable or declining.

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During the 1993-1994 period, it would have been extremely helpful to have exposure to non-U.S. bonds or other types of bonds that may not move in lockstep with U.S. Treasuries. Just as we would diversify our stock exposure to reduce volatility and enhance return potential, we can and should do the same with bonds.

Why Do We Hold Bonds at All?

If we knew ahead of time whether or not interest rates were going to rise significantly, and in turn, whether that rise was going to be accompanied by an expansionary or recessionary environment, we might have some chance of knowing whether stocks or bonds were going to be the more attractive asset class and adjust our portfolios accordingly. Unfortunately, we never know this in advance. But the data above suggests that maintaining a balanced and diversified portfolio can be a great alternative for investors.

Since we know that over longer periods of time, cash should be an inferior investment to bonds and will not retain its purchasing power and stocks will fluctuate wildly in response to changes in the economic environment, bonds always have a place in the portfolio. Incorporating other types of bonds such as non-U.S. sovereign or emerging market bonds or even diversifying within the U.S. market by complementing a treasury portfolio with corporate bonds or municipals, where appropriate, can have a positive effect on portfolio risk and return in most environments. Most importantly, bonds have a beneficial impact on the psyche of the investor as they reduce volatility and make it easier to stay committed to a long-term strategy. As we assess the possibilities for 2018 and beyond, holding fast to the core portfolio principles of maintaining balance and diversification will continue to serve investors well as it has so many times throughout history.