Time to Abandon Long Duration Treasuries?

Summary

- US Treasury yields are hovering around all-time lows across the curve
- With yields this low, the return risk appears to be skewed to the downside
- Japanese government bonds may provide some forward-looking insight
- Despite their low yields, we still believe long duration US Treasury bonds can be a valuable part of any diversified portfolio

Assessing the Damage

As we are thinking about the economic and financial market fallout from COVID-19 our focus tends to be on our own employment, gyrations in stock markets and the broader impact to our own wealth. Thankfully, central banks and governments from around the world have stepped in to provide an array of supports, ranging from injecting liquidity into financial markets to forgivable small business loans to simply providing a cash stipend to citizens that fall below a certain income threshold. While none of these are likely to keep unemployment from rising and pre-empting a recession, they will go a long way in helping to limit the long-term damage while the economy functions under heavy constraints.

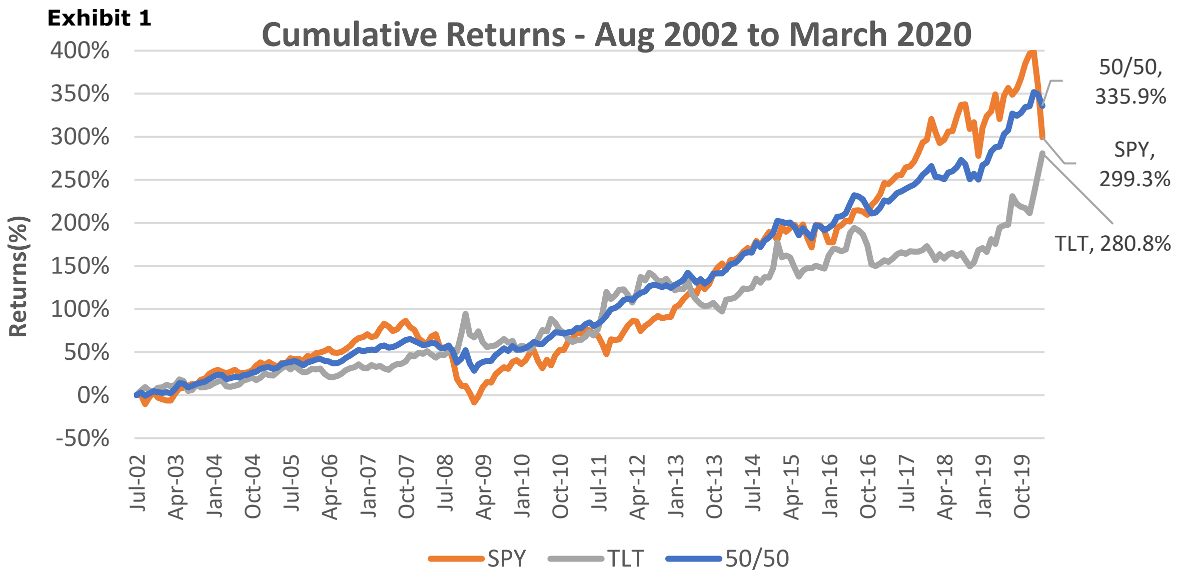
Crises often cause us to scrutinize our portfolio performance, causing us to ask whether it was within our range of expectations. The good news is the impact we see in our daily lives doesn't necessarily have to translate to our financial goals, at least not to the same extent. Building truly resilient portfolios helps limit damage during these periods and can allow us to emerge in good financial health as we move through various stages of a market cycle. And that resiliency starts with ensuring we have real diversification. For the vast majority of us it means having a material amount of risk exposure to assets that behave differently than stocks. And, importantly, that differentiated behavior should be able to hold up during times of crisis. Enter the beautifully mundane world of U.S. Treasury bonds.

US Treasuries - Not Just for the Conservative Investor

Treasury bonds are often thought of as exposure for investors who are de-risking and approaching the decumulation phase of their lives. Whether we are collecting a full income stream from our nest egg or simply wanting to bring down the overall volatility of our portfolio, Treasuries have historically been more common for the later-stage investor. But what about as part of a strategic asset allocation for a growth-stage investors? And, if that answer may have been yes historically, does that still hold true now with yields at historic lows? The ability to avoid cratering drawdowns allows wealth to compound more effectively over time, as we will see in the examples below. And exposure to assets such as long duration Treasury bonds can play an integral role in that effort for any investor regardless of age.

With yields low, expected returns are low. However, yield does not equal return unless you were to buy a bond at issuance and hold it to maturity, assuming there is no default. Instead, most of us have bond exposure through portfolios, whether they be mutual funds, ETFs or managed accounts. A long-duration Treasury fund will systematically sell aging bonds and buy newer issuances in order to stay within its long duration guidelines. These long duration Treasury funds can often realize volatilities similar to equity funds.

Let's look at Exhibit 1 below, a simple example using the SPDR® S&P 500 ETF (SPY), the iShares 20+ Year Treasury Bond ETF (TLT) and a 50/50 combination starting in August 2002, the first full month of data for TLT:



Aug 2002 - Mar 2020	SPY	TLT	50/50
Annualized Return	8.2%	7.9%	8.7%
Annualized Risk (Volatility)	14.4%	13.2%	7.9%
Ratio of Return to Risk	0.6	0.6	1.1
Maximum Drawdown	-50.8%	-21.8%	-22.2%
Correlation of SPY to TLT	-0.3		

As the table shows, both SPY and TLT had relatively similar volatilities and returns over this period, though their biggest losses were markedly different during this timeframe. Importantly, because economic conditions tend to affect each differently the two tend to move independently as reflected in the negative correlation. Naively putting them together in equal weights and rebalancing monthly would have resulted in slightly better returns - the Power of Compounding! - with significantly less risk. The 50/50 also maintained a reasonable drawdown profile, nearly 30% shallower than the SPY alone.

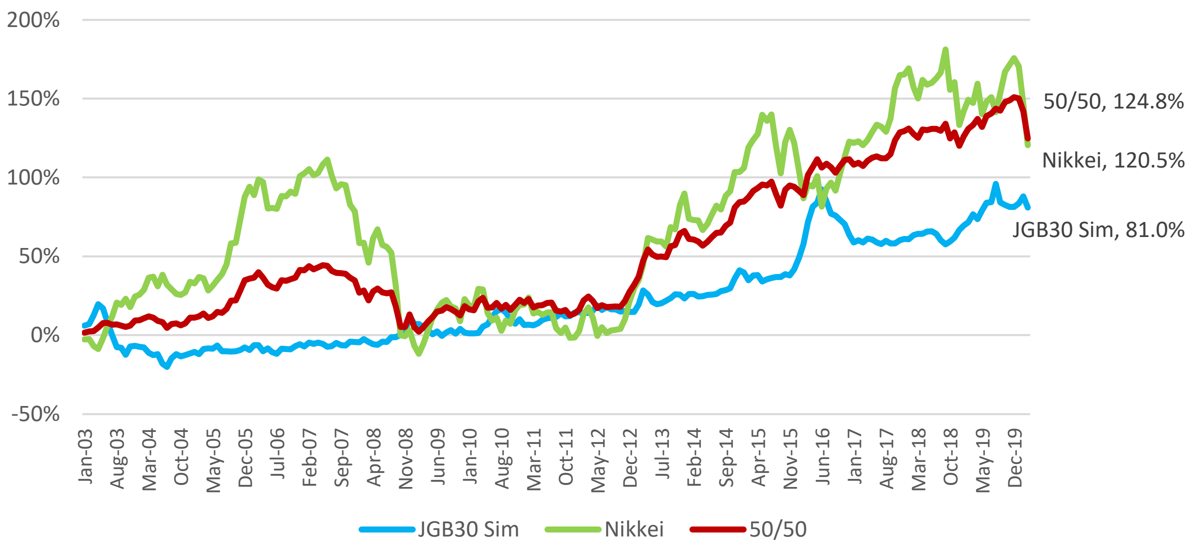
At the beginning of 2002 the US 20 Year Treasury Bond had a yield of 5.7% and a 30 Year Treasury Bond had a yield of 5.5%. To approximate roughly TLT may have been, let's take the average of 5.6% and call it the Long Bond yield at that time. At the end of March 2020, the Long Bond yield was 1.4%. As bond yields fall, prices rise and vice versa. This is why TLT returned approximately 8% during a period when the starting yield was 5.5%.

So, the question then becomes, with the Long Bond yield at 1.4% - and presumably limited room for it to fall further – can long duration Treasury exposure still be a valuable part of our portfolios?

The Japan Experience

In January 2003, the Japanese Government Bond (JGB) 30yr yield fell below 1.5% for the first time its history as global markets were still dealing with the aftermath of 9/11, corporate accounting scandals and an impending war in the Middle East. Lacking a historical return series for 30yr JGBs, we have simulated this return stream based on the coupon at the start of each month and the price change due to interest rate changes, assuming a constant 30yr maturity. This gives us a reasonable performance approximation, which we'll call JGB30 Sim. In Exhibit 2 we show a similar table and graph as we did in Exhibit 1 using the Nikkei to represent Japanese stocks, the JGB30 Sim and a 50/50 blend.

Exhibit 2



Jan 03 - Mar 20	Nikkei	JGB30 Sim	50/50
Annualized Return	4.7%	3.5%	4.8%
Annualized Risk (Volatility)	18.6%	9.5%	9.1%
Ratio of Return to Risk	0.25	0.37	0.53
Maximum Drawdown	-58.3%	-33.2%	-29.2%
Correlation of Nikkei to JGBs	-0.3		

As the table shows, the Nikkei performed modestly better than the JGB30 Sim over this period, but with twice as much volatility while subjecting investors to a maximum loss of nearly -60%. Because the JGB30 Sim realized less volatility than the Nikkei its impact isn't quite the same as that of TLT paired with SPY. However, the -0.3 correlation – and still a

decent risk contribution – allowed a 50/50 blend of the two to again be superior to holding one or the other in isolation. And the increased consistency of the 50/50 allowed returns to compound more effectively – and likely reduce investor stress - by limiting the damage from cratering losses.

What's Happening Behind the Numbers?

US and Japanese bonds are considered two of the highest quality, safest assets to own, which is why they hold up well during crises. Investors seeking safety flock to them driving prices up and yields down as they present very little risk of default. It can be said that the drop in yield is telling us something, that the bond market is concerned that growth may stagnate for some period of time. Low yields – i.e. cheaper borrowing costs - can lead to increased inflationary pressures and eventually result in sharp increases in interest rates – a challenging environment for bonds. However, as we've seen from the Japanese economy, it can be *deflation* that becomes a more relevant economic threat. More conservative consumption patterns can emerge post-crisis – in this case the late 80's Japanese real estate and credit bubble - and become generational, reducing economic growth expectations and allowing yields to stay lower for longer. Whether the US follows a similar pattern to Japan remains to be seen.

Looking Ahead

As crises pass and economies heal, it is normal to see bond yields rise and prices fall. If you are an investor that can predict when these shifts happen, that is a valuable skill that may be rewarded with superior investment returns. For most investors, however, it is a well-built strategic asset allocation that serves as the foundation to a more consistently performing portfolio over time. Once we've established that asset allocation, a simple rebalancing strategy can allow us to maintain our diversification by trimming the outperforming assets and buying the underperformers.

As we continue to deal with the ongoing COVID-19 crisis and subsequent fallout, we must prioritize the health and well-being of ourselves, our families and our fellow citizens first. Together, we will get through this crisis. However, it is serving as a significant test to the resiliency of our portfolios with affects not seen in some cases since the Great Depression. And no one knows precisely when it will end. Despite yields being so low, we still believe holding long duration Treasuries in a diversified portfolio makes sense and take some comfort in the Japan experience, even if that isn't the condition we'd all want our economy to be in. When faced with uncertainty, having exposure to diversifying assets like long duration Treasury bonds, regardless of our outlook, can allow us to more effectively compound wealth over time.

Disclosures

Past performance does not guarantee future results; 50/50 performance shown in Exhibit 1 is hypothetical only and does not represent performance of an actual portfolio; All performance shown in Exhibit 2 is hypothetical only and does not represent performance of an actual portfolio. JGB 30yr yield data has been sourced from the Japan Ministry of Finance, Nikkei performance has been sourced from Bloomberg. The views and opinions expressed in this paper are solely those of Stagecoach Investment Consulting, LLC and do not represent a recommendation to buy or sell any security.