The outlook for protracted zero interest rate policy with historically low long-term interest rates means fixed income markets offer both lower returns and less equity diversification potential. Together, these pose unique challenges to the traditional 60/40 portfolio. The loss of bond ballast, or the ability for bonds to offset equities in downturns, is an important, but often overlooked, consequence of the Fed’s promise to hold rates at zero for the foreseeable future.

Easy answers entail tough tradeoffs. Increasing exposure to credit may help solve for low levels of yield but comes at the cost of exacerbating the equity diversification problem. Doing nothing at all still results in a riskier overall portfolio of debt and equity, as the sensitivity of rates to falling stocks stands at about half its historical norm.

For investors unwilling or unable to handle the rise in overall portfolio risk, we investigate several potential solutions for solving the fixed income diversification problem. Without action, we may be at risk of investing without a parachute.

Highlights

- Market returns in September and October 2020 illustrate the more limited ballast provided by fixed income against equity downturns. At its peak, the S&P 500 dropped 8% during September while 10-year US Treasury yields barely moved—and bonds repeated this lack of performance during the COVID sell-off in October. This loss of bond ballast highlights the potential future of the asset class in the renewed ultra-low rate environment.

- Credit performance fared even worse in September 2020, highlighting the trade-off for investors increasing credit exposure to maintain income. Credit spreads widened +45 bps for high yield, while investment grade held in better by widening only +8 bps, partly reflecting the ongoing Fed support.

- The Fed moved to operationalize its shift to Flexible Average Inflation Targeting (FAIT). The main impact was to solidify expectations for an even longer period of zero interest rates with forecasts for zero rate policy extending out to 2023.

- The Fed policy change underscores that the structural changes we outlined in Part I of Investing Without a Parachute remain long lasting and not temporary. The problem for fixed income is not going away. In fact, the Fed is fighting inflation “from below” hoping to push it up—creating a potential headwind for bond returns.

- There are limited alternatives to replace this historical performance to traditional fixed income. Gold is an unreliable hedge to equities. And though Treasury Inflation-Protected Securities (TIPS) can work for inflationary scenarios, they likely won’t when the shock is deflationary. Furthermore, TIPS lack the liquidity of nominal Treasuries, which can meaningfully alter their expected return profiles even if inflation does surface.

- That leaves an investigation into replacing the ballast lost from fixed income to an unlikely place—equities. Altering the structure of an equity allocation can take many forms, but we focus in on defensive equity strategies, and how when combined with defensive credit strategies, can improve portfolio outcomes relative to other potential solutions.
What happened to the parachute?

In Part I of Investing Without a Parachute we argued that because both long-term and short-term interest rates were close to their effective lower bounds, or the level where rates are so low that they cannot drop that much further, bonds have lost a significant portion of their potential to diversify equities. This lower bound limits the magnitude that bond prices can appreciate when equity prices drop. This change in prospective fixed income return behavior requires a rethinking of the role of bonds in a 60/40 portfolio.

The historical viability of the 60/40 portfolio was supported by a unique set of market forces that led to highly successful bond returns and negative correlations. High inflation risk premia, investors’ persistently overstated inflation and growth expectations, aggressive inflation fighting actions of central banks, and globalization providing demand for US government debt (amongst a host of other structural factors) supported the return behavior of fixed income over the past four decades.

The result? A positively skewed, negatively correlated asset class to equities—where bond yields fell aggressively to counterbalance a recession and other shocks to the equity market.

September 2020: A hard landing

The September 2020 sell-off in equity markets provides the first case study on the potential future of fixed income returns. The month illustrates how different the bond market behaves today relative to how we might have expected based on history—even as recent as the start of the year.

Treasury bond returns over the month were about half of what a similar magnitude equity sell-off would have implied based on the longer run history of rate/equity return relationships. Even though bond yields still fell (the correlation of stock and bond returns is still negative), the strength of that relationship is lower (the beta is lower).

A simple proposition for why the degree of responsiveness is lower is the proximity to the zero-lower bound. Though policy rates in other countries have gone negative, policy makers at the Federal Reserve have repeatedly highlighted their belief that for the US, the effective lower bound of interest rates is zero. So, with less room to fall, interest rates will likely respond less to equity market declines going forward.

By our estimates, the beta of 10-year and 30-year US Treasury yields stand at about half of their long-term averages. In the shorter end of the yield curve (less than 5-year maturities), the beta is effectively zero, as these rates already reflect the expectations that the Fed will maintain an extended period of zero interest rates until at least 2023.

Evaluating other possible parachutes:

Gold, TIPS, and “bond-like” stocks

An initial response to the loss of ballast from fixed income is to simply look for replacements to fixed income. Gold, TIPS, and defensive “bond-like” stocks frequently come up as alternatives.

All that glitters is…

As an alternative to fixed income, gold appears to benefit from its strong inverse relation to real interest rates (Figure 1). A declining real interest rate environment leads to less opportunity cost from holding gold (or alternatively less attractive yields in holding bonds as a store of value vs. gold). Gold also gains attractiveness as a currency and inflation hedge. This particularly appeals in an era of expansive fiscal and monetary policy stretching the bounds of historical precedent of both developed market indebtedness and monetary financing.

Figure 1: Gold prices surge as real rates collapse

However, with limited ability of nominal interest rates to decline due to policy cuts, further increases in gold prices may be limited due to cuts in policy rates. Of course, real interest rates reflect realized inflation and as a result are not bound by zero. It is possible that rising inflation may produce further declines in real interest rates and support gold prices—leading to some diversification properties.

However, absent increases in inflation, the ability of gold to provide equity diversification may be more challenged given its current valuations and today’s substantially negative real interest rate levels.
Finally, as exhibited most clearly in September and October 2020, gold has a quite variable track record of diversification to equities. Unlike the more reliable negative stock/bond correlation, we have seen many periods of positive stock/gold correlation (Figure 2).

Most worryingly, in larger equity sell offs of more than 5%, gold’s correlation to equities averages a positive 24%—certainly not the hedge investors are expecting. In fact, over the past 6 recessions, gold exhibited strongly negative correlations to equities in only the recessions of 1990 and 2001 (Figure 3).

**Figure 2: Gold lacks bonds’ reliable diversification properties**

Stock/gold and stock/bond 5-year rolling correlation

![Graph showing stock/gold and stock/bond 5-year rolling correlation](image)


**Figure 3: Gold’s diversification potential for stocks during recessions has been mixed**

<table>
<thead>
<tr>
<th>Recessionary periods</th>
<th>Gold &amp; S&amp;P 500 return correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec 07 – Jun 09</td>
<td>-0.01</td>
</tr>
<tr>
<td>Mar 01 – Nov 01</td>
<td>-0.34</td>
</tr>
<tr>
<td>Jul 90 – Mar 91</td>
<td>-0.47</td>
</tr>
<tr>
<td>Jul 81 – Nov 82</td>
<td>+0.59</td>
</tr>
<tr>
<td>Jan 80 – Jul 80</td>
<td>+0.67</td>
</tr>
<tr>
<td>Nov 73 – March 75</td>
<td>+0.08</td>
</tr>
</tbody>
</table>

Source: Bloomberg, as of 10/30/2020. Recessionary period defined as two quarters of negative GDP growth by the National Bureau of Economic Research (NBER). Gold and S&P 500 Index return correlation based on historical monthly total returns.

Gold is also a commodity, and like many commodities, it has developed a high correlation to the Chinese economy—in particular when China uses debt to fuel economic growth (Figure 4). This expansion and contraction in the credit fueled growth in China has also been a key driver of cyclical stocks. The correlation of gold to this source of cyclical may undermine its ability to act as an equity hedge in future recessionary periods.

**Are we near a TIPSing point?**

Today’s era of fiscal monetary coordination raises the possibility of future inflation. We remain more sanguine in the near term to any inflation consequences from the current combination of fiscal and monetary expansion in the face of COVID challenges. However, the prospect of longer-run inflation acceleration raises the interest in TIPS as an additional tool for diversification.

Periods of rising inflation have posed the biggest challenge to the benefits of the 60/40 portfolio. During the past 20 years, the Fed’s success at creating falling inflation had been key to providing those bond diversification benefits. But the market also consistently over-estimated the expected level of inflation relative to realized, adding to bond returns.
However, today's bond markets offer very different forward-looking perspectives. Today, bond prices reflect expectations for secular stagnation, persistent low inflation and low (and even negative) compensation for inflation term premia (Figure 5).

**Figure 5: Secular stagnation is now reflected in the term structure of interest rates**
5-Year interest rate expectations in 5 years time

The bond market recognizes and agrees that the Fed is fighting inflation from below. That means historical performance characteristics of TIPS may be very poor guides to their future performance. Nevertheless, the best environments for TIPS to provide offsets to equities will likely be in rising inflation environments.

Yet, most modern equity market shocks have reflected confidence shocks and declining inflation. In such environments, TIPS have the same limited benefits to offset equity risk as nominal bonds, but cost more (in terms of lower income) due to the cost of the inflation protection. TIPS are also less liquid than Treasuries which means their return may be influenced by investor supply/demand and not necessarily the underlying inflation economics.

**A stock by any other name...**

Other possibilities for alternatives to bonds may include "bond-like" equities. Yet as much as high-quality dividend paying stocks, utilities stocks, or REITs may have bond-like characteristics such as higher income or lower beta, at the most critical time of equity drawdowns, they still behave more like stocks than bonds.

That results in equity correlation when you can least tolerate it, undermining the use of bond-like stocks as a fixed income replacement (Figure 6).

**Figure 6: “Bond-like” stocks behave like... stocks**
Performance metrics of dividend stocks, utilities, and REITs

<table>
<thead>
<tr>
<th></th>
<th>Dividend stocks</th>
<th>Utilities</th>
<th>REITs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correlation with S&amp;P 500</td>
<td>+0.87</td>
<td>+0.42</td>
<td>+0.57</td>
</tr>
<tr>
<td>Beta to S&amp;P 500</td>
<td>+0.81</td>
<td>+0.43</td>
<td>+0.72</td>
</tr>
<tr>
<td>Correlation when S&amp;P 500 declines more than 5%</td>
<td>+0.70</td>
<td>+0.52</td>
<td>+0.66</td>
</tr>
</tbody>
</table>


**So... are we just going to jump anyway?**

Based on our previous analysis, it appears that none of these three options alone offer a durable alternative to the traditional bond ballast against equity market downturns.

**It’s time to build a new parachute**

Instead of finding a different asset class to plug in for bonds, we highlight how alternative approaches to both the equity and fixed income allocation may help generate the ballast missing from bonds.
Building a new parachute

In Part I of Investing Without a Parachute, we described our liquid alternatives solution—moving from a 60/40 to a 60/20/20 portfolio where a portion of the fixed income for ballast moves to a liquid alternative ballast solution. At the core of our liquid alternative ballast is a concept we call “defensive alpha.” The basis for this approach is isolating an idiosyncratic risk source of returns that tends to be highest when equity markets are falling.

This approach to producing alternative ballast exploits three key structural characteristics of financial markets:

1. Dispersion tends to rise when equity markets are falling
2. Leverage tends to increase dispersion
3. Credit insights matter more to stock valuations when equity markets are falling

The first two structural components are critical insights when considering pure alpha–based investment strategies. That is, the defensive and diversifying properties of the alternative ballast strategy arise not from techniques that rely on timing and directionality for their diversification, but rather on the ability to profit from idiosyncratic differences in specific returns across a broad universe of companies.

Our long/short strategies isolate beta and factor exposures leaving idiosyncratic sources of return that tend to be highest in down markets. While long/short strategies can be thought of as a standalone product, we prefer to think of them as one of many techniques in a broader investment solution that can produce unique risk and return profiles.

The third structural element applies to both long/short and long-only investment contexts, making it available as a source of insight for solving the 60/40 problem. This element highlights that equity market participants focus on the credit perspective—which emphasize measures of financial health and stability over growth metrics such as earnings—in down markets more than in up markets.

It also suggests that a strategy of using credit insights to identify defensive equity portfolios, or equity portfolios that outperform in down markets, can extend our notion of “defensive alpha” into defensive beta. Most importantly, it can be used as a key component in a larger asset allocation.

Figure 7 highlights the cumulative returns of equity portfolios broken up into quintiles based on different degrees of credit risk. As you can see, portfolios with decreasing credit risk exhibit incrementally greater historical return per unit of risk. Figure 8 shows the same portfolios by risk-adjusted return (Sharpe ratio), and highlights that the portfolios with the lowest credit risk also exhibit the most favorable risk/return tradeoff.

### Figure 7: Credit risk perspective identifies distinct equity risk profiles

Quintile equity portfolios based on credit risk

![Credit risk perspective identifies distinct equity risk profiles](image)

Source: BlackRock, Bloomberg, as of 8/14/2020. Returns stratify all US exchange traded stocks with greater than $1bn market cap into quintile portfolios based on credit risk. Low represents the lowest credit risk quintile and high represents highest credit risk quintile. Constituent portfolios are equally weighted, rebalanced daily without accounting for t-costs. Since lower credit risk constituent portfolios generally exhibit less risk than high credit risk portfolios, portfolio risk is normalized across each quintile so that each portfolio takes approximately equal levels of risk based on trailing 6 month realized risk. All quintile portfolios risk scaled to match trailing risk of the S&P 500.

### Figure 8: Sharpe ratios by credit risk portfolio

<table>
<thead>
<tr>
<th>Portfolio by credit risk</th>
<th>Sharpe ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0.72</td>
</tr>
<tr>
<td>Q2</td>
<td>0.61</td>
</tr>
<tr>
<td>Q3</td>
<td>0.50</td>
</tr>
<tr>
<td>Q4</td>
<td>0.48</td>
</tr>
<tr>
<td>High</td>
<td>0.24</td>
</tr>
<tr>
<td>Low-High</td>
<td>1.00</td>
</tr>
<tr>
<td>S&amp;P 500 Index</td>
<td>0.55</td>
</tr>
</tbody>
</table>

Source: BlackRock, Bloomberg, as of 8/14/2020. Sharpe ratio is a measure of risk-adjusted returns. Sharpe ratio calculations assume a risk free rate of 0.0%.

Many other approaches already exist that seek to identify this type of defensive equity performance, such as dividend or minimum volatility strategies. One potential advantage we see in utilizing a credit lens for determining defensive portfolio constituents is that, unlike looking at past historical data, a credit lens can provide a forward-looking view into what determines a defensive equity allocation.

This may lead to better performance as the portfolio characteristics can more rapidly adapt to the perception of risk informed by the credit lens.
Putting it all together:
Defensive equity + Defensive credit

Taking a more defensive approach to the equity allocation creates yet additional opportunities to optimize the portfolio for today’s challenged fixed income environment. As a more defensively positioned equity portfolio can result in less severe drawdowns and higher Sharpe ratios, we can revisit the fixed income portion of the portfolio. With today’s fixed income offering both less protection and less income, a defensive equity strategy means more room to shift that equity risk into the bond allocation.

The typical approach to improving bond returns involves taking on more credit risk, which only considers the impact on the fixed income side of the portfolio. This higher return benefit from fixed income is offset by the loss of diversification and greater downside risks during equity drawdowns.

However, a defensive equity allocation leaves room for a higher allocation to credit risk to generate income, potentially making up for the loss in expected return from equities. And like the defensive approach in equities, higher return can be achieved by adding credit in a defensive manner without sacrificing the downside protection in the overall portfolio.

Figure 9 illustrates some historical results based on our credit informed process for creating defensive-oriented portfolios. The defensive equity portfolio is composed of US stocks with strong fundamentals based on credit-related metrics. Similarly, the defensive credit portfolio is composed of corporate bonds that exhibit strong balance sheet, cash flow, and other measures used to identify credits that may outperform in challenged markets.

Based on monthly returns since 2005, we can see that a typical 60/40 portfolio of S&P 500 and the Barclays US Aggregate Bond Index achieves the lowest average return of 7.80% and a Sharpe ratio of 0.88. As we move from this baseline comparison (reading right across the table), we see the impact on portfolio risk and return statistics as we adjust our 60/40 portfolios.

By adding credit to the fixed income portfolio (30% US investment grade and 10% US high yield) we increase the average return to 8.48%, but at the expense of lower Sharpe ratio, higher equity beta, and larger drawdowns.

Consider next the impact of substituting defensive equity for S&P 500 exposure. This portfolio exhibits higher returns, better Sharpe ratios, and smaller drawdowns.

Finally, by combining both defensive equity and defensive credit we can achieve the best portfolio characteristics—highest Sharpe ratio with the lowest average drawdown of 4.52%.

These returns are based on past performance. Looking forward, we should expect lower risk-adjusted returns from fixed income. Higher quality credit returns exhibit half or more of their returns due to the interest rate component. Without the benefit of large Fed rate reductions and unrealistically steep yield curves, we expect Sharpe ratios for these rate exposures will be much lower going forward.

The implication for 60/40 portfolios suggests an even greater correlation with equities in sell-offs—especially in credit portfolios that prioritize income over diversification by moving down in quality and liquidity as they chase yield.

Our results suggest that a potentially better strategy is one that doesn’t replace fixed income, but one which increases defensiveness on both sides of the 60/40 portfolio. Looking historically, such a strategy showed 2.3% more return on an annual basis, but with only a 0.9% increase in risk, while maintaining a similar equity beta with lower drawdowns during stock declines.

Figure 9: 60/40 Portfolio Comparisons
Portfolio statistics (Jan 2005 – Sept 2020)

<table>
<thead>
<tr>
<th></th>
<th>60% Equity / 40% Bonds</th>
<th>60% Equity / 40% Credit</th>
<th>60% Defensive Equity / 40% Credit</th>
<th>60% Defensive Equity / 40% Defensive Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annualized return</td>
<td>7.80%</td>
<td>8.48%</td>
<td>10.11%</td>
<td>10.13%</td>
</tr>
<tr>
<td>Annualized volatility</td>
<td>8.91%</td>
<td>10.39%</td>
<td>9.95%</td>
<td>9.81%</td>
</tr>
<tr>
<td>Sharpe ratio</td>
<td>0.88</td>
<td>0.82</td>
<td>1.02</td>
<td>1.03</td>
</tr>
<tr>
<td>Beta to equity</td>
<td>0.60</td>
<td>0.70</td>
<td>0.60</td>
<td>0.63</td>
</tr>
<tr>
<td>Avg return when equity declines &gt;5%</td>
<td>-4.69%</td>
<td>-5.48%</td>
<td>-4.64%</td>
<td>-4.52%</td>
</tr>
</tbody>
</table>

Source: Bloomberg, as of 9/30/2020. “Equity” represented by the S&P 500 Index. “Bonds” represented by the Bloomberg Barclays US Aggregate Bond Index. “Credit” represented by 30% Bloomberg Barclays US Corporate Bond Index and 10% Bloomberg Barclays US High Yield Index. “Defensive Credit” represented by a hypothetical corporate bond portfolio with securities screened based on BlackRock’s proprietary probably of default estimate along with fundamental, sentiment, and relative value issuer information. “Defensive Equity” represented by lowest quintile portfolio formed based on credit risk, with equity risk scaled to match trailing risk of the S&P 500 Index. All portfolios rebalanced monthly with no transaction costs.
Conclusion

The loss of the ballast from fixed income presents significant challenges to investors. For nearly 40 years, fixed income provided a reliable source of diversification while at the same time added income and contributed positively to realized returns.

Increasingly, fixed income return and correlation headwinds may require that investors replace the lost defensiveness of bonds by adding defensiveness to equities, credit, and alternatives.

Going forward, fixed income likely offers less returns, and with little room for rates to fall further, less ballast against equity declines. Today’s portfolios require much more diversified approaches to solving this challenge.

A greater role for gold, TIPS, and bond-like stocks may help to partially meet this challenge. However, bonds cannot be so easily replaced. In our view, looking at alternative approaches can have a much greater impact.

Pairing defensive equity and credit strategies can help weave together the investment parachute that bonds once provided. By limiting drawdowns in both sides of the portfolio—these types of strategies may result in a more durable and resilient asset allocation that is better positioned for the current investment environment.

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