Risk on, risk off, or risk uncertain?

Hedge and higher interest rate environment
Hedge strategies and widening opportunity sets

NOVEMBER 2018
Summary

“You’re gonna need a bigger boat…”

The 1975 summer blockbuster Jaws allegorically brings to mind current market sentiment. Yes, things appear to remain relatively tranquil on the surface. But just below…cue the John Williams score…concerns over increased volatility, macroeconomic risks, recession and the potential impact of rising rates all pose legitimate threats. Much like the beleaguered residents of Amity Island—investors remain cautious, and indeed may be looking for bigger, or at the very least better, boats. Perhaps “risk uncertain” crafts more suitably constructed to attempt to withstand any metaphorical Great White macro risks circling just under the market waters. This issue focuses on hedge strategies.

- In our view, there are many risk-mitigating alternatives strategies that offer a ‘risk uncertain’ solution. These are strategies constructed not only of equity beta and bond beta, but built using a good amount of alpha as well.

- Historical data show long short equity hedge strategies, for example, have fared well on average in historical rising rate environments.

- Current Opportunity Set: Event Driven—Merger Arbitrage. Tailwinds for the strategy include corporate tax cuts, cash repatriation, high CEO confidence, and strong credit markets.

- Current Opportunity Set: Relative Value—Fixed Income. With interest rates starting to rise we see duration risk coming into focus for fixed income investors. We view relative value fixed income strategies, such as long/short credit, being well-positioned given their shorter duration portfolios intended to capture alpha from rising sector dispersion.

Today’s “risk uncertain” markets present an evolution of challenges for investors. The post-2008 massive expansion of central bank balance sheets around the developed world—one of the most dominant market-shaping forces over the last decade—is beginning to reverse. We see this in the US and in other developed economies as well. Markets have seen increased volatility and threat of increased inflation. Earnings growth looks like it may be slowing somewhat. In addition, macroeconomic concerns—including geopolitical hot spots, growing political uncertainty in Europe and the threat of trade wars—all pose legitimate concerns for market stability.

In particular, the recent drawdowns in equity markets may be especially concerning. These declines are happening in the face of rising interest rates. Historically, if investors sought to manage equity volatility, they could do so by using core fixed income. Now, overweight in core fixed income carries its own risk, because of heightened sensitivity to rising rates.

Bottom line—investors have expressed concerns about what to do with their equity allocations, especially given current valuations and rising volatility. They are also concerned about fixed income allocations due to rising rates. These are risks they are seeking to mitigate. We will examine some hedge strategies to illustrate why increased allocations to alternatives may be a viable option against today’s uncertainties. In other words, a “suitable boat”.

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Hedge and higher interest rate environments

To bring the risk management point home, let’s examine a hedge strategy that actually embraces a bit of equity beta—specifically, long/short equity hedge strategies—against equities and bonds during rising rate periods over the past 25 years.

This comparison is easier to digest than alternatives that attempt to be completely agnostic to equity or fixed income beta. These strategies directly focus on the current evolution toward rising rates, as central banks around the globe are showing signs of heading toward more normalized monetary policy.

Looking back over the last 25 years, six periods experienced rising rates. Each of those periods has been isolated and then averaged so that we may compare the performance of long/short hedge strategies (HFRI Equity Hedge Index), global equities (MSCI World Index), and global fixed income (Bloomberg Barclays Agg Index). Additionally, the HFRI Equity Hedge—Alpha Index provides a measure of how much unique value—alpha—was provided by the long/short strategies.

In Exhibit A we can see that both the performance and standard deviation of long/short hedge strategies have compared favorably to stocks and bonds during periods of rising rates. In fact they have provided return that is nearly on par with equities and better than bonds. In terms of volatility, the results are significant as well. Long/short hedge strategies’ volatility measured on par with bonds and nearly half that of equities.

### Exhibit A: Annualized Returns and Std Deviation in six rising rate periods—in USD

<table>
<thead>
<tr>
<th>Period</th>
<th>Annualized Returns (USD)</th>
<th>Annualized Std. Deviation (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/1/1993–12/31/1994</td>
<td>0.9%</td>
<td>5.7%</td>
</tr>
<tr>
<td>10/1/1998–1/31/2000</td>
<td>20.3%</td>
<td>10.8%</td>
</tr>
<tr>
<td>6/1/2003–6/30/2006</td>
<td>0.6%</td>
<td>5.7%</td>
</tr>
<tr>
<td>1/1/2009–4/30/2010</td>
<td>11.0%</td>
<td>7.9%</td>
</tr>
<tr>
<td>8/1/2012–1/31/2014</td>
<td>2.7%</td>
<td>4.4%</td>
</tr>
<tr>
<td>8/1/2016–6/30/2018</td>
<td>2.3%</td>
<td>3.4%</td>
</tr>
</tbody>
</table>

Source: Morningstar, HFR, MSCI, Bloomberg. Important data provider notices and terms available at www.franklintempletondatasources.com. HFRI Equity Hedge–Alpha is calculated against the MSCI World Index. Alpha is a mathematical value indicating an investment’s excess return relative to a benchmark. Measures a manager’s value added relative to a passive strategy, independent of the market movement. Past performance is not indicative or a guarantee of future results. Indexes are unmanaged and one cannot invest directly in an index. They do not reflect any fees, expenses or sales charges. Unlike most asset class indexes, HFR Index returns reflect fees and expenses.

*Rising rate environments are defined as a minimum 100 bps increase in at least one portion of the yield curve (2-Year, 5-Year, and 10-Year Treasury Constant Maturity Rates) lasting at least one year, over the last 25 years as of June 30, 2018. If peaks and troughs are on different dates, the date with two out of the three Treasury rates meeting that criteria is picked.
We can also see that historically long short equity strategies have indeed provided some level of performance—return and risk—that is different from equities and fixed income. Additionally, HFRI helps us confirm that a significant amount of performance has come from a different source than equity beta. HFRI Equity Hedge Alpha Index applies the technical measure of alpha for our comparison and highlights that we are seeing an alternative return stream.

Two other statistics reinforce that it was not just a different experience, but a better risk & return experience—Sharpe Ratio and Sortino Ratio. Sharpe Ratio helps us compare returns to all volatility, and Sortino Ratio helps us compare returns to only negative volatility—suggesting that investors may not mind positive volatility. So, if we see a higher Sharpe Ratio it means overall volatility was better rewarded while a higher Sortino indicates a negative volatility was better rewarded.

In Exhibit B, the alternative risk and return experience of long/short equity hedge strategies becomes even clearer as we evaluate similar averaging for

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The Sortino ratio addresses a shortcoming of using standard deviation as a measure of risk. Standard deviation punishes a manager equally for volatility on the downside—that is returns that are sharply negative, versus volatility on the upside—or returns that are sharply positive. Certainly most clients don’t mind performance spikes to the upside. The Sortino ratio captures how often this is occurring. Like most ratios, the higher the Sortino ratio the better.

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**LONG/SHORT EQUITY HEDGE STRATEGIES HAVE SHOWN A SMOOTHER RIDE COMPARED TO GLOBAL EQUITIES AND GLOBAL FIXED INCOME**

Exhibit B: Sharpe and Sortino Ratios in six rising rate periods—in USD

September 30, 1993–June 30, 2018

<table>
<thead>
<tr>
<th></th>
<th>HFRI Equity Hedge</th>
<th>MSCI World</th>
<th>Bloomberg Barclays Global Aggregate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Sharpe Ratio (USD)</td>
<td>6%</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Average Sortino Ratio (USD)</td>
<td>4%</td>
<td>3%</td>
<td>2%</td>
</tr>
</tbody>
</table>

**Six Period Detail**

10/1/1993–12/31/1994

| Sharpe Ratio | 0.30 | 0.14 | -1.25 |
| Sortino Ratio | 0.49 | -1.39 | 0.20 |


| Sharpe Ratio | 3.48 | 1.78 | -1.90 |
| Sortino Ratio | 15.89 | -1.83 | 3.70 |


| Sharpe Ratio | 1.69 | 1.79 | 0.19 |
| Sortino Ratio | 3.11 | 0.29 | 3.60 |

1/1/2009–4/30/2010

| Sharpe Ratio | 2.60 | 1.19 | 0.66 |
| Sortino Ratio | 8.73 | 1.00 | 2.06 |

8/1/2012–1/31/2014

| Sharpe Ratio | 2.66 | 2.29 | -0.02 |
| Sortino Ratio | 7.04 | -0.02 | 5.15 |

8/1/2016–6/30/2018

| Sharpe Ratio | 2.32 | 1.86 | -0.39 |
| Sortino Ratio | 4.52 | -0.47 | 3.31 |

Source: Morningstar, HFRI, MSCI, Bloomberg. Important data provider notices and terms available at www.franklintempletondatasources.com. Past performance is not indicative or a guarantee of future results. Indexes are unmanaged and one cannot invest directly in an index. They do not reflect any fees, expenses or sales charges. Unlike most asset class indexes, HFRI Index returns reflect fees and expenses.

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these ratios. Both ratios demonstrate that the risk to return tradeoff has been better for both total volatility and particularly when just focused on negative volatility. In clear terms, we see that a smoother ride would have been provided in this case by this alternative hedge strategy.

When are they in favor?
Opportunity set is key to alternatives. What we mean is that when there are more possible trades or investments then there is more chance of capturing alpha. So why do we see this beneficial relationship with long/short hedge strategies in a rising interest rate environment?

As central bank rates move higher, often we will see a wider variation of the specific interest rates that are applied to certain sectors, companies, or sovereign debt. For the vast majority of the past 10 years, as interest rates globally have been artificially suppressed, less economically sound companies or countries have been able to survive on a very low cost of financing. This was part of the central bankers’ intent as they sought to stabilize equity and bond markets.

This dynamic started to change in mid-December 2015 when the US Federal Reserve began hiking rates and, subsequently, other central banks like the Bank of Canada followed its lead. The result: a wider gap between companies that have a higher debt-to-equity ratio and, say, technology firms that have a lot of cash and don’t mind if rates rise.

As a result we have seen a higher dispersion in the performance of winning sectors versus others; such as utilities and other high debt-to-equity industries. So the separation of performance influenced by the impact of higher interest rates creates an alpha opportunity.

In addition to the impact from rates on equity and fixed income, higher volatility in the major currency markets of the world also has an impact on sectors in terms of revenue growth, and whether they are importers or exporters.

Hedge strategies with widening opportunity sets
Currently, we have seen notable expanded opportunity sets for three other hedge strategies: Event Driven, Relative Value and Global Macro. We explain for Event Driven and Relative Value in some detail next.

Event driven—merger arbitrage
It’s a ripe environment for mergers in the media industry, as well as a broadly more favorable outlook on vertical mergers. Tailwinds for corporate activity also persist, including corporate tax cuts, cash repatriation, high CEO confidence, and strong credit markets. The most significant headwind is the potential for a trade war between the US and China.

In favor or out of favor
You will often hear one asset class or strategy is in favor and another is out of favor. With alternatives the comparison may be unfair—and particularly with hedge strategies.

How do we define alternative investments? In the most fundamental sense, we consider alternatives as investments that act differently. Yes, there are a broad array of strategies typically characterized as alternatives—hedge funds, private equity, real estate—to name a handful. And there are an equally broad number of definitions. But in the simplest of terms, regardless of the idiosyncratic strategy employed, alternatives are investments whose performance and return drivers are different from the traditional markets we know. They are different from equities and fixed income—they are literally ‘alternative’. As such their return streams should derive from something other than beta—or exposure—to traditional markets. They may trade in traditional markets, but directionally the performance should include alpha, which isn’t tethered to equity and fixed income patterns.

So, when equity markets do nothing but go up, equity beta is the driver. Almost by definition alternatives should not do as well. Similarly, when equities and fixed income are challenged, alternative investments may be providing a better experience. In this way, historically, some alternatives have demonstrated beneficial risk and return characteristics in periods of higher rates and volatile markets. So, when investors wish to dial down their portfolio risk, alternatives may provide a solution.

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We also view technology as a significant factor influencing deal flow. In particular, changes in the semiconductor space, where companies seek to get ahead of the technology curve via acquisition of smaller start-ups versus developing innovation in-house, may drive activity. This is evident in the biotechnology sector as well. Large biotechnology and pharmaceutical companies are outsourcing research and development. Their focus is strictly on marketing, sales and distribution. Smaller companies have been creating new and novel therapies. The little firms have been ushering these treatments from infancy through the approval process, before ultimately getting scooped up by one of the big guys near the end. We describe this as “serial acquisition”. Every few years the large biotech companies have been buying one or two small drug companies, feeding their ever expanding sales and marketing machines.

So-called “industrial policy” is a potential headwind to future M&A. This refers to the political considerations that are increasingly coming to the fore as business and commerce evolves globally. Governments around the world—in the interest of national security—have been increasingly sensitive to businesses sharing critical technologies. This is not just the US and China, but includes Canada, Germany, Australia and the UK as well. Naturally, political considerations supersede the economic attractiveness of a given deal. Still, the added risk associated with industrial policy is not necessarily all bad for hedge fund strategies. The increased uncertainty may widen spreads significantly, creating a more attractive risk/reward opportunity set.

**US ECONOMIC GROWTH POST GFC: SLOW BUT STEADY**

**Exhibit D: US Nominal GDP SAAR**
Nominal CAGR = 3.99%, Real CAGR = 2.025
As of June 30, 2018

Source: Bloomberg, As of June 30, 2018

Volume ($tn) Deal Count (rhs)

Source: Bloomberg as of 08/31/18. Global M&A transactions over $500mm from January to August. Please see Important Disclaimers and Disclosures at the end of this presentation, which provide detailed information regarding information presented herein and form an integral part hereof. Past performance information presented herein is not indicative or a guarantee of future results.
SIGNIFICANT DISPERSION IN GROWTH BY STATE: OPPORTUNITY FOR ALPHA CAPTURE?

Exhibit E: 2010 to 2017 GDP growth CAGR by state (%)  
As of Dec 31, 2017

GDP Growth %

Only 16 states grew faster than the national average


Relative value—fixed income

As we discussed, with interest rates starting to rise we see duration risk coming into focus for fixed income investors. We view relative value fixed income strategies, such as long/short credit, being well-positioned given their shorter duration portfolios to capture alpha from rising sector dispersion.

Since the Great Financial Crisis (GFC) growth in the US has progressed at a steady, albeit unremarkable, rate of about 2% (Exhibit D).

But this growth is not uniform. If we look at the components of the growth, that is deconstruct it at the state level, you see tremendous variation around the mean (Exhibit E).

Viewing the data from this perspective, we see that only 16 US states have either met or exceeded the national average of GDP growth since the crisis. Four have had negative growth for the entirety of the recovery.

So the US economy is not homogenous, and in fact GDP growth is rather dispersed. Tax changes probably amplify this dispersion.

Our takeaway is that when hedge managers look at fixed income investments in the US, they consider where those issuers do business. Not in terms of where they are headquartered, but where the underlying commerce takes place. The disparity in state growth rates may impact these companies very differently, ultimately creating opportunity for relative value fixed income hedge managers to capture alpha or seek different returns.

Conclusion

There are three main allocations in portfolios: equity, fixed income and alternatives. How much and when to shift allocations is a key component of risk management. There is significant uncertainty going forward: Can global growth sustain? Will there be a de-coupling between the US and the world? How will trade tensions between the US and China resolve? Whatever the results, in this type of evolving environment, understanding those investments that can act differently can potentially be a powerful tool to manage to your desired outcome.

An increased allocation to alternatives may help buffer a portfolio for risks. The levels of exposure to equity and fixed income markets need to be understood as well as their source of performance. In the case of hedge strategies, their potential for a widening opportunity set helps signal when to expect them to be particularly useful. Depending upon an investor’s objective, alternatives can potentially benefit from things like volatility, sector rotation, asset class dispersion, and de-coupled global growth. They can help diversify a portfolio and manage risk to improve the ride.
Franklin Templeton Thinks: Alternative Views highlights our alternative investment teams’ insights about the opportunities and risks in the current market environment. Each issue spotlights our experts’ thinking on different macro forces, and particular sector views that drive our investment process.

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