Understanding the role of alternative risk premia

SEEKING TO EXPAND THE CONVENTIONAL ASSET ALLOCATION OPPORTUNITY SET, many investors are turning to alternative risk premia and their potential for differentiated return streams with low correlation to traditional markets. In this introduction to alternative risk premia, we define the concept and then highlight four categories of alternative risk premia that we have found to be historically persistent and potentially profitable. We examine the objective of each category and share our views on implementation options and challenges. Finally, we outline our beliefs about the importance of portfolio construction in the alternative risk premia space.

Defining alternative risk premia

Alternative risk premia are positive expected returns that exist either as compensation for taking risk or as a byproduct of behavioral biases. Setting aside the nomenclature for a moment, which is less familiar to some, the underlying concept is well known to most. For years, investors have been harvesting traditional premia, such as the equity risk premium and bond term premium. One hallmark of traditional risk premia is that they can be captured with long-only investments. But alternative risk premia require the use of long and short trades to capture their returns. They are harvested using rules-based, systematic investment processes.

A robust and well-diversified alternative risk premia portfolio can, by design, be market neutral and consequently may help mitigate the impact of market volatility while potentially delivering attractive returns.

Next we take a detailed look at four categories of alternative risk premia shown in Figure 1.

**Figure 1**

What are alternative risk premia?

| Trend | The trend of rising or falling asset prices is expected to continue in the near term |
| Carry | High-yielding assets are expected to outperform low-yielding assets |
| Convergence | Expensive assets are expected to fall and cheap assets are expected to rise |
| Equity style premia | Attractive value, momentum, and quality stocks tend to outperform |

Before investing, consider the risks that may impact your capital. Your investment may become worth more or less than at the time of the original investment. Please refer to the risk section at the end of the paper.
Trend
The trend group includes trades that seek to take advantage of persistence in an asset’s recent performance in the near term. The objective is to identify a trend in price action, go long assets that are rising, and go short assets that are falling. By identifying persistence, one can potentially extract a positive return from such a trade.

We consider trend to be a long-volatility trade type because when volatility increases, trends often emerge and strengthen. Consider the global financial crisis, for example. As assets moved sharply lower over an extended period, trend trades that were short the market would probably have done well. Because trend tends to perform well in high-volatility environments, it may exhibit a latent hedge characteristic — simply put, the potential to generate positive returns when other investments generate negative returns.

In terms of implementation, there are a wide variety of potential trades (our approach uses more than 90) across all major asset classes — equity, rates, currency, credit, and commodities, on a global basis. Positions can be established using exchange-traded futures and forwards.

Potential challenges for trend trades include price reversals and range-bound markets. By definition, price reversals represent a turn in trend, and trend models will usually miss these inflection points. Rangebound markets present a different challenge in that they are environments in which the trend is not persistent. As markets grind sideways, trend trades tend to incur small losses along the way because they will frequently go long or short, changing direction between the top and bottom of the range as they hit inflection points.

We think it is possible to mitigate these risks using risk-management models that attempt to identify market environments that are likely to be unprofitable, such as sideways markets for trend, and use confirmation, stop-loss, and reversal rules to help avoid them. We view this practice as informed risk management — a willingness to give up some upside to help avoid greater downside — rather than market timing.

Carry
The objective of carry is to capture a yield differential, which is the spread between high- and low-yielding assets. Positions are implemented by shorting the low yielder and using those proceeds to go long the high yielder. A common example of this strategy is currency carry.

We consider carry to be a short-volatility trade type. That is, carry may tend to do well in stable market environments when volatility is low. When volatility is low, relationships between high- and low-yielding assets tend to stay in place, so carry trades that are expected to be profitable when they are put on have a chance of being so when they are closed out.

As with trend trades, there are many carry trades across all major asset classes on a global basis. Within carry, there are opportunities to diversify exposures across three trade classifications that we define as:

- **Spread trades**, including our previous example of currency carry, as well as merger arbitrage, credit spreads, and cross-commodity carry;
- **Curve trades**, including dividend carry, term premia, and single-commodity carry; and
- **Volatility trades**, including implied-to-realized carry across global equities, global rates, currency, and commodities.
We think trades should be put on using a variety of tools, including futures, forwards, swaps, and physical securities. Factors that can create challenges for carry trades include regime changes, such as a central bank policy change, and rising volatility. We witnessed a striking example of regime change in 2015, when the Swiss National Bank unpegged its currency from the euro, sending the franc soaring and inflicting losses on currency-carry trades in the process. In general, volatility from any source tends to be destabilizing for carry trades.

To help mitigate these risks, carry models can be paired with conditional positioning filters — risk filters that are based on trend and volatility rules, and that seek to identify environments in which carry positions may struggle to generate positive returns. For example, if trend models identify negative momentum in carry trades, carry exposures can be reduced. The same holds true for volatility risk filters.

Convergence
The objective of this group is to potentially benefit from the convergence of expected returns between assets or markets. We consider these to be relative value trades, whereby one shorts an overvalued security and goes long an undervalued security, attempting to capture a premium as prices revert to normal levels.

Once again, the opportunity set is global and includes all major asset classes. The goal is to benefit from the convergence of expected returns between markets (e.g., long positions in markets that have an attractive profile, short positions in those with unattractive profiles). While we think the primary focus should be on identifying valuation disparities between markets, valuation can also be supplemented with technical, volatility, and macro indicators to drive positioning.

Timing and breadth can be challenges for convergence. Timing is a challenge because cheap assets, for example, can become cheaper and stay that way for longer than expected, as we witnessed in the global financial crisis. Breadth refers to a potential lack of sufficient short trades to pair with long trades, or vice versa. To help overcome these problems, the additional indicators mentioned above can be used in combination with valuation to alter positioning and potentially mitigate unprofitable periods for convergence trades.

Equity style premia
This group includes opportunities to capture the premia associated with four equity factors:

- **Momentum** refers to the directionality of underlying characteristics of stocks, such as earnings, rather than simple price trends.
- **Quality** can take many forms, such as investing in companies with low leverage over those that are heavily indebted.
- **Value** favors stocks underpriced on the basis of their fundamentals.
- **Low beta** represents a risk anomaly in which low-beta stocks outperform high-beta stocks, contrary to what academic theory would suggest.
The objective is to identify the securities with the greatest exposure to the desired factors. We think implementation should entail taking long and short positions in physical securities — specifically, long/short baskets of stocks built to maximize exposure to each style premium while seeking efficient implementation.

Challenges that can affect equity style premia include dilution, trading costs, and identification. Dilution refers to the risk that as one invests in more factors, the ability to isolate and harvest any one of them is reduced. Trading costs need to be managed closely since implementation requires large baskets of single-name securities that are traded systematically. Identification refers to the challenges of successfully screening for the securities with the greatest exposure to each factor. For example, which measure of “value” should be used?

We think the key to overcoming these challenges is to conduct an optimization process for each of the factors based on traditional equity statistics — for example, using a blend of measures to screen for the value factor, such as trailing and forward cash flow, earnings, book value, and revenue-based financial ratios.

**Figure 2** lists examples of the alternative risk premia in each of the four categories we have discussed.

**Figure 2**

**Alternative risk premia universe**

<table>
<thead>
<tr>
<th>Group</th>
<th>Trend</th>
<th>Carry</th>
<th>Convergence</th>
<th>Equity style premia</th>
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<tbody>
<tr>
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<td>Relative value</td>
<td>Risk anomaly, leverage aversion, Sharpe ratio</td>
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<tr>
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<td>Selling implied volatility</td>
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<td>Bond roll down/term premium</td>
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<td>Commodity carry</td>
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<tr>
<td></td>
<td>Currency carry</td>
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<td>Dividend carry</td>
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Portfolio construction considerations

We believe that rigorous portfolio construction is more important than ever in the current environment. In our view, simple diversification is a necessary but incomplete strategy, and backtests can conceal portfolio construction shortcomings. We believe that over time, alternative risk premia can deliver the risk and return profile that investors seek, but potential investors need to find the right asset manager to partner with. This is a market segment rife with naïve or simple portfolio construction strategies. We believe these passive approaches can conceal embedded risks and lead to a wide dispersion of results. We do not think these approaches will meet investors’ objectives over the long term.

We favor robust internal research and development, with underlying trades designed from the bottom up and managed to a certain expected return and risk profile. We believe in rigorous portfolio construction practices, dynamic diversification, and defensive risk management because these strategies are not immune to the difficulties that all portfolios face at some point in time. Portfolios need tools to help weather the storm, and that is where we spend our research and energy — on the development and implementation of customized filters and portfolio construction techniques to help mitigate downside risk.

In short, our approach seeks to ensure a robustness of specification when identifying and harvesting risk premia. Our objective is to provide substantive exposure to a cross-section of trades or risk premia that, when combined, can potentially deliver a better Sharpe ratio and a more stable risk profile.

Conclusion

We think alternative risk premia can provide an opportunity for attractive Sharpe ratios and reduced correlation to traditional asset classes. We believe it is important to consider the underlying construction of the approaches available, specifically to ensure that they apply robust portfolio construction, use a broad range of strategies, and have effective risk management. We would welcome the opportunity to share our extensive experience researching and building alternative risk premia strategies, and to discuss what we believe are the competitive advantages we have developed over time.
**RISKS**

**Credit Risk** — The value of fixed income securities may decline, or the issuer or guarantor of that security may fail to pay interest or principal when due. Credit risk generally increases with lower-rated fixed income securities.

**Currency Risk** — Investments in currencies, currency futures contracts, forward currency exchange contracts or similar instruments, as well as in securities that are denominated in foreign currency, are subject to the risk that the value of a particular currency will change in relation to one or more other currencies.

**Equity Market Risks** — Equity markets are subject to many factors, including economic conditions, government regulations, market sentiment, and local and international political events. In addition, the market value of fixed income securities will fluctuate in response to changes in interest rates, currency values, and the creditworthiness of the issuer.

**Foreign Markets Risk** (includes emerging markets) — Investments in foreign markets may present risks not typically associated with domestic markets. These risks may include changes in currency exchange rates; less-liquid markets and less available information; government supervision and controls; higher interest rates and issuers with increased social, economic, and political uncertainty; and greater price volatility. These risks may be greater in emerging markets, which may also feature higher inflation, greater price volatility, and less developed markets.

**Interest-Rate Risk** — Generally, the value of fixed income securities will change inversely with changes in interest rates. The risk that changes in interest rates will affect the value of investments will be greater for longer-term fixed income securities than for shorter-term fixed income securities.

**Manager Risk** — Investment performance depends on the portfolio management team and the team’s investment strategies. If the investment strategies do not perform as expected, if opportunities to implement those strategies do not arise, or if the team does not implement its investment strategies successfully, an investment portfolio may underperform or suffer significant losses.

**Leverage Risk** — Use of leverage exposes the portfolio to a higher degree of additional risk, including (i) greater losses from investments than would otherwise have been incurred; and (ii) margin calls that may force premature liquidations of investment positions.

**Prepayment Risk** — Pass-through instruments such as mortgage-related and asset-backed securities are subject to prepayment risk, which is the possibility that the principal of the loans underlying the securities may be prepaid at any time. Because of prepayment risk, the total return and maturity of asset-backed securities may be difficult to predict.

**Risks of Other Pools** — Investors in a fund that has invested in another fund will be subject to the same risks, in direct proportion to the amount of assets the first fund has invested in the second, as direct investors in that second fund.

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