CAIA Viewpoint

Additional Risk Products: Trading ARPs

The full article may be accessed here.

Central Issue of the Paper

Investment banks offer access to both academic alternative risk premia (ARPs) and trading ARPs. Both include several distinct strategies, yet much heterogeneity exists within the same ARP strategies. This is in part, due to the many implementation choices available. Investors need to understand the risk and return characteristics of investable ARP products and how they may be similar or dissimilar to those factors that are well documented in the academic literature. In "An introduction to Alternative Risk Premia" Guillaume Monarcha surveys a wide range of ARP strategies available to investors and investigates their properties.

Approach Employed by Paper

The first part of the paper reviews the academic literature on factors and ARPs and then the choices available during seven steps of operational implementation of the strategies. The implementation aspect is often over-looked in academic studies. The author then contrasts trading ARPs with academic ARPs. Academic ARPs broadly include value, momentum, low risk (beta volatility), carry and quality. Trading ARP categories include short volatility, volatility carry, mean reversion, trend following, absolute momentum and directional, among others. Products classified as academic ARPs are those designed to capture factor risk premia well documented in academic studies. Those classified as trading risk premia in this study are those that are rule-based quantitative strategies, often designed to mimic hedge funds returns.

The second part of the paper is empirical. The author examines more than 350 investable ARP indices and reports the frequency of strategies in the sample, statistical characteristics and correlations among the strategies' returns. ARPs are typically classified according to strategy, asset class and geographical focus. In this study ARPs are classified according to strategy or factor (10 academic ARPs and 11 trading ARPs) and five asset classes, resulting in 21 * 5 = 105 possible classifications.

Findings of the Paper

In the sample of 350 ARP indices, the author finds that about half can be classified as academic and about half as trading ARPs. Both classifications are concentrated in equities, (46.3%) with the remaining distributed across FX (18.2%), credit (5.4%) rates (15.3%) and commodities (14.8%). The most frequently occurring academic factors are carry (15.3%), value (9.9%) and momentum (7.1%). The most frequently occurring trading factors are short volatility (15.1%), trend (12.1%), and carry (9.1%).

Results indicate that on average ARPs tend to deliver absolute returns, but many ARP strategies are sensitive to the market environment yet less sensitive than pure equities and hedge fund strategies. On average the risk-return ratios for ARP products are better than those of hedge funds and equities. Their average return and return volatility are like bonds.

The average results do not apply to all ARP strategies however due to the significant heterogeneity across and even within strategies. Equity quality risk premia indices, for example have information ratios ranging from 0.06 to 1.34. Considering strategy averages, commodity ARPs have the highest information ratios followed by interest rate premia. The detailed results highlight the importance of diversification across funds within an ARP strategy to reduce the concentration of model risk, and highlight the importance of using appropriate risk management tools to address the non-normality of these strategies' returns.