Editors' Letter

The Global Financial Crisis has focused renewed attention on risk measurement and risk management. Much of this attention has been directed towards tail risk. This issue of the *Alternative Investment Analysts Review* provides our readers with a selection of papers focused on tail risk and methods of measuring and managing tail risk.

The first paper, "Risk Parity for the Long Run," addresses one tail risk mitigating investment strategy that has garnered significant interest since the initial drawdowns of the global financial crisis – risk parity. Partridge and Croce provide an overview of risk parity and the financial theory underlying the strategy. They also provide an analysis of the performance of an ex-ante risk parity strategy and compare the strategy to a maximum Sharpe ratio portfolio.

In the second section, Altan Pazarbasi provides a review of literature on tail risk.

"Long-Term Investors, Tail Risk Hedging, and the Role of Global Macro in Instuitional Portfolios" was authored by CAIA member Andrew Rozanov. The paper discusses the growing interest in tail risk and the cost associated with tail risk hedging strategies. Rozanov focuses on global macro as an alternative to many costly tail risk strategies and argues that global macro may provide the best of both worlds – tail risk mitigation in bad times without the drag that most tail risk hedging programs provide in good times.

"A Comparison of Tail Risk Protection Strategies in the U.S. Market" provides an analysis of a wide variety of tail risk management strategies. The authors assess the effectiveness of each strategy based on the likelihood that the strategy provides the desired protection as well as the performance drag associated with the strategy. Ultimately, the authors find that the ideal strategy choice will depend on a particular investor's asset allocation preferences.

Authors Sebastian and Karacsony focus on tail risk management through low volatility equity investment and managed futures and global macro investments. While low volatility equity strategies have gained significant attention in recent years, the authors find evidence that questions their appropriateness as a solution for tail risk management. In contrast, the authors argue that managed futures and global macro provide significant tail risk control without over burdening an investor's portfolio.

Tail risk management is not just a hot catch phrase. It is an increasingly important topic for investment managers and analysts. It is particularly relevant to CAIA members and others involved with alternative investments as some of these strategies may expose investors to significant tail risk (e.g., merger arbitrage and convertible arbitrage). While much of the traditional investment world is caught up in a mean-variance framework (which tends to underestimate the magnitude of tail risk), those involved with alternative investments tend to have a better understanding and appreciation of the importance of non-normality and the left-tails of return distributions. Furthermore, as outlined in the research featured in this issue of AIAR, some alternative investment strategies inherently provide tail risk mitigation when added to a traditional portfolio (e.g., managed futures and global macro strategy). We hope that you find this issue informative, and we encourage your feedback and submissions. We hope that the New Year brings you good fortune both personally and professionally.

Sincerely,
Hossein Kazemi and Edward Szado
Editors, AIAR

Table of Contents

ABSTRACT: Financial theory suggests that a risk parity portfolio will be identical to the maximum Sharpe ratio portfolio if all assets have identical Sharpe ratios and equal cross-correlations with one another. This article shows that the first of these conditions may be true, but that the second is most likely not. While this implies that the risk parity portfolio will be slightly different from the maximum Sharpe ratio portfolio, the authors find that this difference was relatively minor in practice, even when considering an implementable Ex-Ante Risk Parity strategy.

No naïve strategy—Ex-Ante Risk Parity included—can rival the performance of portfolios formed with full knowledge of what assets will outperform in the near future. Over the long run, however, because the economic environment is continually in flux, risk parity presents itself as a potential strategy with which to approximate the optimal static portfolio because it provides equal risk exposure to assets that typically perform well in different economic environments.

ABSTRACT: This article provides a brief literature review of the evolution of tail risk measures, as well as research on tail dependency and documents a number of academic studies that assess tail risk and tail dependency of hedge fund returns.

ABSTRACT: This paper focuses on two related topics: The tension between the fundamental premise of long-term investing and the post-crisis pressure to mitigate tail risks; and new approaches to asset allocation and the potential role of global macro strategies in institutional portfolios.

The author argues that the current environment bodes extremely well for the future of hedge funds in general and global macro strategies in particular. If institutional investors begin to think less in terms of asset classes and more

AIAR STAFF

Hossein Kazemi
Edward Szado
Editors

Jeanne Miller
Copy Editor

Lynne Feldman
Marketing

Jason Vachula
Creative and Design

U.S.
+1 413 253 7373

Hong Kong
+852 3655 0598

Singapore
+65 6536 4241

Switzerland
+41 (0)22 548 07 82

U.K.
+44 (0)20 7887 6082

in terms of risk factors and risk premia, then the age-old distinction between "traditional" and "alternative" investments will increasingly become obsolete. More and more investors who perhaps have shunned hedge funds or were not allowed to invest in them, may well seek out those providers who can construct better growth engines for their portfolios, irrespective of where the underlying components may be sourced. In this context, global macro funds have the added advantage of being in a very small class of strategies that can offer investors "long volatility" and "long convexity" exposure in times of market dislocation and distress. This becomes even more compelling when one compares and contrasts them to dedicated tail-risk hedge funds.

ABSTRACT: Tail-risk protection strategies are those that hedge against loss when the equity markets experience a significant drawdown. This article surveys the historical performance of various tail-risk protection strategies. The analysis targets a specific level of drawdown protection and compares the allocation needed from each hedging strategy. It then analyzes the cost and the consistency of tail-risk protection strategies. It identifies a number of tail risk strategies that perform well along these measures.

ABSTRACT: High market volatility has driven the development of investment strategies advertised to deliver reduced risk without reduced return. The "low-volatility" equity anomaly (low-volatility stocks may have similar or greater returns than high-volatility stocks) is best exploited by investors as part of the toolkit of a broader active strategy. "Tail risk" strategies can provide protection in extreme market events, but their persistent negative carry (ongoing cost) make them unappealing to most investors (e.g., purchasing out-of-money puts). Managed futures and global macro hedge fund strategies have desirable downside risk protection characteristics combined with positive returns and alpha for their investors. Investors can increase their downside protection by allocating part of their hedge fund or opportunistic asset category to managed futures and global macro strategies

Call for Articles

Article submissions for future issues of *Alternative Investment Analyst Review* are actively invited. Articles should be approximately 15 pages, single spaced, and cover a topic of interest to CAIA members. Please **download the submission form** and include it with your article in an email to **AIAR@CAIA.org**.

Chosen pieces will be featured in future issues of AIAR, archived on **CAIA.org**, and promoted throughout the CAIA community.