

Rogerscasey

Asset Allocation

Assumptions

Our Beta Research Group is responsible for developing our asset class assumptions. Risk and return assumptions are created both on a passive and active management basis. Our assumptions are reviewed regularly as needed and at a minimum annually. In addition to deriving assumptions for existing asset classes, the Beta Research Group is continually reviewing return assumptions and considering new asset classes.

Our process begins with an examination of historical performance of various asset classes and the economic environments. Returns on various asset classes are available on an absolute basis and relative to one another with respect to different interest rate and inflation environments. Our analysis of historical periods includes different timeframes; absolute, rolling and exponentially-weighted rolling returns; standard deviations; and correlations. An assessment is made of the current market environment and qualitative judgment is overlaid on the historical data to develop a set of long-term equilibrium assumptions. The forecasts are made in both real and nominal terms and are derived through a stochastic simulation involving differing inflation scenarios. These assumptions are “stress-tested” over shorter time frames.

Resources

Headed by Cynthia Steer, Chief Research Strategist, the Beta Research Group of five specialists is dedicated to identifying, assessing, and recommending Beta exposure for all client portfolios. They focus on asset allocation, asset/liability analysis, and capital markets and are specifically responsible for managing the following items:

- Defining strategic asset classes
- Formulating long, intermediate, and short-term views on strategic asset classes
- Anticipating macro investment themes
- Formulating capital markets assumptions
- Developing annual research agenda

Beta Research Group

Cynthia Steer, Managing Director, Head of Beta Research

John Ross, Managing Director

Thomas Karoly, FSA, FCIA, Director

Srivasta Kilambi, Associate Director

Amy Bills, Senior Analyst

Process

Over the years, Rogerscasey has developed the quantitative and technical skills necessary to provide asset allocation analysis for the institutional marketplace. We believe that our qualitative capabilities, including the recognition that historical relationships and/or valuation anomalies may not portend into the future, set us apart. We believe this is of particular importance given the current deflationary environment with expected inflation in 3-5 years and

the growing recognition that sovereign risk may change many investment program assumptions. The landscape is much different today than 10-20 years ago and successful investors will need to be adaptive with qualitative judgment to be successful. We also think that liquidity is an integral part of the asset allocation decision-making process, and we spend considerable time on this discussion. Some illustration of our work is included here.

Broad asset allocation and asset/liability analysis draws extensively on our Beta Research specialists. This team develops asset class definitions and assumptions for both public and private asset classes, reviews multiple time horizons, and analyzes possible outcomes in a range of economic scenarios. Our specialists explore various classifications of risk and return, determining which is most appropriate, and develop an asset allocation policy that meets the institution's objectives, maximizing return potential while minimizing the risk of falling short. Our philosophical approach is to capture cash flow characteristics in sufficient detail that we have confidence in projecting asset metrics such as nominal market values, real market values, spending dollars and purchasing power of assets. Each step of the process is interactive with the client.

Manager Search Process

At Rogerscasey we are not “couch potatoes.” We are constantly evolving and testing ourselves and communicating our findings to our clients. We have seasoned professionals in all asset classes who are responsible for assessing the marketplace and the managers and conducting our manager due diligence process, which is herewith described. We also believe in manager diversification whether it is domicile, size of AUM, or professional backgrounds.

Manager Evaluation Overview

Consistent with our philosophy, past performance is not a good indicator of future success. As such, we do not rely on quantitative screens to narrow the universe of investment strategies; instead, we conduct bottom-up grassroots research to construct a universe of investment strategies that we recommend to our clients. Given the bottom-up nature of our manager evaluation process, we begin the research with a face-to-face meeting with asset managers. The information provided by the asset managers via EQuest forms the base of information that we rely on in our evaluation of asset managers.

Data Collection

We supplement manager-provided information with other publically available information, historical portfolio holdings (typically, we collect five years worth of monthly portfolio holdings), historical monthly investment returns, back-test data, and information provided by the manager such as SAS 70 reports, audited financial statements, GIPS compliance verification letters and recent SEC audit letters.

Manager Research Resources

Rogerscasey has 12 dedicated Alpha Investment Research analysts charged with conducting primary manager evaluations. They draw research support from three additional research analysts from the Global Portfolio Solutions Group to monitor Buy and Qualified rated managers in our client programs. Prior to our restructuring of the research group in the Fall of 2008, the research analysts were grouped along the lines of following asset classes: U.S. Equity, non-U.S. Equity, Global Fixed Income, Hedge Funds, Private Equity, Real Estate and Hard Assets. Subsequent to the restructuring of the research group, the peer review of the asset manager ratings have been taking place at the Alpha Investment Research Group level. The Groups are composed of the following specialists:

Alpha Investment Research

Alan Kosan, *Managing Director*
Chris Thompson, CFA, *Managing Director*
Moustapha Abounadi, *Director*
Patrick Chrysler, CFA, *Director*
Charles Colfer, CFA, ASA, *Director*
Linda McDonald, *Director*
Donna Rosequist, *Director*
Ryan Dembinsky, *Associate Director*
Tomas Kukla, *Associate Director*
Mallika Nair, *Associate Director*
Joshua Goldberg, *Senior Analyst*
Carrie Yang, *Senior Analyst*

Global Portfolio Solutions

Soonyong Park, CFA, CPA, *Managing Director*
Arman Gevorgyan, CFA, *Director*
David Stewart, *Associate Director*
Amy Orr, *Associate*
Mike Evans, *Analyst*

Interviews

An initial face-to-face meeting in our office is typically followed by an onsite due diligence meeting in the asset manager's office. It is not unusual at all for us to conduct multiple face-to-face meetings in our office before moving onto the next stage of our research process. During onsite due diligence meetings we conduct an in-depth review of the investment processes through interviews with portfolio managers, research analysts and traders; in addition, we conduct an operational review by interviewing compliance officers and middle and back office personnel; finally, we meet with chief investment officers and chief executive officers to assess the overall investment and firm culture at asset management organizations.

The research analysts are responsible for setting up the initial face-to-face meetings as well as the follow-up due diligence meetings. We have 12 Alpha Investment Research analysts who conduct primary manager evaluations. They draw research support from five additional research analysts from the Global Portfolio Solutions Group to monitor Buy and Qualified rated managers in our client programs. It should be noted that onsite due diligence analyses are conducted only on those firms that look promising and have passed our initial qualitative review. Like the initial face-to-face meetings, we may conduct multiple onsite due diligence meetings before forming an opinion on an asset manager and his investment strategy. We do not mandate the length of time necessary to complete the manager evaluation process. We rely on the research analysts' investment experience and professional judgment to discern the appropriate level of due diligence and analysis to support a final rating on an investment strategy. Notwithstanding, research analysts cannot assign a final rating solely based on face-to-face meetings in our office. Onsite due diligence must have been conducted prior to arriving at a final rating for an investment strategy.

Manager Evaluation & Selection

Our 12 Alpha Investment Research specialists are responsible for manager evaluations across all asset classes. Our research analysts rely on our proprietary Manager Research & Ranking, MR², process in their evaluation of investment strategies. We developed MR² ten years ago to ensure consistency in manager evaluation across asset classes and research analysts. It forms the foundation of our manager research process. MR² defines 50 success and risk factors within 10 categories. Four of these categories relate to the firm's organization, and six to the investment process.

Each manager/fund will be evaluated and scored based on these factors:

Organizational Issues

Organizational
Structure/Culture
Business Management
Stability
Business Risk Management

Investment Process

Investment Philosophy
Collecting and Refining
Information
Portfolio Construction

People
Trading
Validation

Multiple research analysts generally participate in the manager evaluation process; however, the assignment of the final rating rests with the lead analyst who began the evaluation process. The rating does not become final until peer-reviewed by the broader asset class research team. Given his extensive knowledge of investment strategies and asset managers, Soonyong Park, the Head of Global Portfolio Solutions, also participates in the ratings review meetings.

Value-Added

Rogerscasey tracks the ability of its proprietary manager evaluation process to add value to a client's program. The following chart indicates, over certain time periods, the over or under performance of the firm's Buy-rated investment managers. While this clearly indicates the firm's ability to pick managers who outperform their benchmarks, the most compelling conclusion comes in the average value added statistic. This indicates that this group of managers, if held in a client portfolio, over these time periods would have generated **nearly 144 basis points in excess return** over the benchmark

