

## Glossary

- **Policy Benchmark:** The benchmarks are rebalanced on a monthly basis and use the following indices to represent the relevant market sectors: Russell 3000, MSCI EAFE, MSCI Emerging Markets IMI (MSCI Emerging Markets prior to November 2012), Barclay's Aggregate (US and Non-US), Barclay's Emerging Market Bond, Barclay's High Yield, Barclay's T-Bill, and Barclay's TIPS. Equivalent indices from alternative providers can be specifically requested by the client.
  - **US Equity:** Historical returns for domestic equity are calculated using the MSCI USA IMI Index, which is similar to the Russell 3000. Both indices include a broad range of domestic companies including those with small, mid and large market capitalizations.
  - **Non-US Equity:** Historical returns for foreign equity are calculated using the MSCI ACWI x-USA IMI (US\$) Index. The index includes a broad range of companies domiciled outside of the United States in both developed and emerging countries, including those with small, mid and large market capitalizations. The index is stated in US Dollar terms, which includes the impact of currency fluctuations.
  - **Core Bonds:** Historical returns for core bonds are calculated using the Bloomberg Barclays US Aggregate Bond Index, which includes the debt from a broad range of investment-grade domestic issuers including corporations and government agencies.
  - **Risk:** The annualized standard deviation of returns. For example, a risk of 10% means that approximately two-thirds of the annual returns were within +/- 10% of the annualized return.
  - **Sharpe Ratio:** A risk adjusted return measure that quantifies the amount of excess return over cash was achieved per unit of risk taken.
  - **Beta:** The sensitivity of the portfolio's excess returns over cash versus the benchmark's returns over cash.
  - **Tracking Error:** A measure that quantifies how much the portfolio's monthly returns varied from those of the benchmark. It is the annualized standard deviation of active portfolio returns.
  - **Information Ratio:** A risk adjusted return measure similar to the Sharpe Ratio. It quantifies the amount of relative risk taken to achieve active returns.
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## Glossary (Cont.)

- **Upside Capture Ratio:** A measure of the portfolio's performance relative to the benchmark in months where benchmark returns are positive. A value of more than 100 indicates that the portfolio captured more of positive market performance.
  - **Downside Capture Ratio:** A measure of the portfolio's performance relative to the benchmark in months where benchmark returns are negative. A value of less than 100 indicates that the portfolio captured less of negative market performance.
  - **Capture Ratio:** A measure that combines the upside and downside ratios. A value above 100 indicates that the portfolio captured more of the upside when the benchmark had positive returns than it did downside when the benchmark had negative returns.
  - **Relative Return Attribution:** Breaks down the sources of relative return by asset class and between asset allocation and implementation.
    - **Asset Allocation:** The relative performance attributable to the active exposure to an asset class. If a portfolio has a heavier weight in an asset class that outperforms the policy benchmark, then the asset allocation effect will be positive.
    - **Implementation:** The relative performance attributable to the exposure within an asset class. This includes fund performance, mutual fund expenses and the effects of intra-month trading.
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