

# MSCI Risk Premia Indices

Adding to the Investment Tool Kit



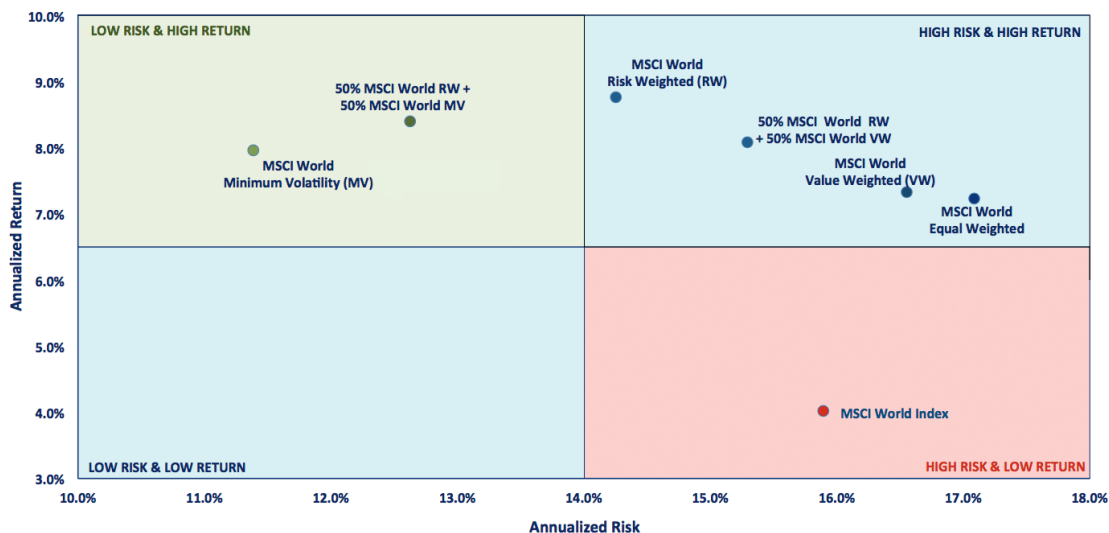
Traditionally, portfolio returns were attributed to passive market exposure (equity risk premium) captured through cap weighted indices and active portfolio management. More recently, however, investors have realized that many return components that were once considered added value (alpha) can be attributed to sources of systematic return (style and strategy risk premia) such as value, size, volatility, or momentum. Today, an array of systematic return components are widely accepted as risk premia (enhanced or alternative beta).

The MSCI Risk Premia Indices seek to reflect the performance characteristics of a range of investment styles and strategies using transparent and rules-based methodologies. Each MSCI Risk Premia Index is derived from the equity universe of a traditional market-cap weighted MSCI “parent index”.

## Risk Premia Indices in the Asset Allocation Process

A risk premia approach to asset allocation, or risk-based asset allocation, is an emerging trend among institutional investors. While asset allocation has traditionally been based on asset class groupings—typically equities, bonds and alternatives—the new framework is based on risk groupings such as growth, income, inflation, volatility, and liquidity. To the extent that institutional asset allocation processes gradually shift from asset classes to risk groupings, a shift from emphasizing diversification across managers in multiple alpha mandates to diversification across strategy betas in multiple index mandates may occur.

Historical Performance of MSCI Risk Premia Indices 1995 - 2011<sup>1</sup>



## Performance Characteristics

Over a 16-year period (1995-2011), many risk premia indices generated positive risk-adjusted returns and higher Sharpe ratios than the market. However, these returns show cyclicity—with periods of underperformance that can last several years.

Diversifying across strategies may help to carry a portfolio through the sometimes extended periods of underperformance that may occur for any single strategy. The chart above, for example, illustrates that over the period 1995–2011, a combination of a value-based with a risk-based strategy delivered a 4.1% annual return increase over the market with a slightly lower level of risk.

<sup>1</sup> Over the period 1995-2011 the cap weighted MSCI World Index in the lower right quadrant produced an annualized return of 4.0% with an annualized volatility of 15.9%. In comparison, MSCI Risk Premia Indices (and combinations) generated higher risk adjusted returns. The MSCI World Risk Weighted Index, for example, generated the highest risk-adjusted return over the period with an annualized return of 9.0% and an annualized volatility of 14.3%. The MSCI World Minimum Volatility Index produced a return of 8.0% with a much reduced volatility of 11.4%.

## MSCI Risk Weighted Indices

- Seek to emphasize stocks with lower historical return variance
- Have historically exhibited lower realized volatility relative to the MSCI parent index, while maintaining trading liquidity and investment capacity similar to the parent index

**Methodology:** Each constituent of an MSCI parent index is given a risk weighting, using the inverse of its historical variance based on three years of weekly security-level returns data.

## MSCI Minimum Volatility Indices

- Seek to capture the performance characteristics of a minimum variance strategy by optimizing a cap weighted MSCI parent index
- Have historically shown lower realized volatility and lower beta relative to the MSCI parent index, with a bias towards smaller, less volatile stocks and towards stocks with lower idiosyncratic risks

**Methodology:** Each MSCI Minimum Volatility Index targets the lowest return variance for a given covariance matrix of stock returns, applying constraints to maintain index investability and replicability. Constraints include maximum security weights, and active country, sector and volatility factor limits versus the parent index.

## MSCI GDP Weighted Indices

- Regional indices that seek to reflect the size of each country's economy (its GDP) rather than the size of its equity market as represented by the MSCI parent indices
- Tend to tilt the indices towards countries with relatively higher nominal GDP

**Methodology:** Each country in an MSCI GDP Weighted index is weighted based on the previous year's GDP data. Country weights are reset annually in May. Thereafter, the country weights fluctuate with changes in performance and market capitalization in the parent indices until the next rebalancing.

## MSCI High Dividend Yield Indices

- Seek to target companies in an MSCI parent index with high dividend yields and a record of sustainable and persistent dividend payments
- Capture the performance of high dividend-yielding stocks while maintaining index turnover characteristics similar to the parent index

**Methodology:** Each MSCI High Dividend Yield Index includes only the constituents of the parent index that have higher than average dividend yields, track records of consistent dividend payments, and a capacity to sustain dividend payouts into the future. The index is market cap weighted and rebalanced semi-annually in May and November.

## MSCI Value Weighted Indices

- Seek to overweight stocks with value characteristics and lower valuations relative to the parent index
- Offer a value tilt, while maintaining trading liquidity, investment capacity and turnover characteristics similar to the parent index

**Methodology:** Each constituent of an MSCI parent index is weighted on four fundamental accounting variables: sales, earnings, cash earnings and book value.

## MSCI Equal Weighted Indices

- Seek to remove the influence of market prices from an MSCI parent index at each quarterly rebalance
- Tend to overweight smaller cap index constituents relative to the parent index and are considered one approach to capturing the small cap premium

**Methodology:** Each index constituent is weighted equally at each rebalance date, effectively removing the influence of a constituent's price (high or low) from the index on the rebalance date.

## MSCI Factor Indices

- Optimize an MSCI parent index to capture relatively high exposure to a target style factor (e.g., value, earnings yield, momentum, low leverage, low volatility) with relatively low exposures to all other non-target factors
- Aim to capture performance that is similar to the parent index plus the target factor, maintaining index investability and replicability and minimizing tracking error relative to the parent index
- Available in 130/30 long-short and long-only versions

**Methodology:** Target factor exposure is set to 1 standard deviation above the parent index; all other non-target factor exposures are constrained to  $\pm 0.1$  standard deviations from the parent index. Suitable investability constraints are applied to minimize trading/shorting costs, limit stock specific risk and maintain low turnover and tracking error relative to the parent index. Each MSCI Factor Index is rebalanced/optimized monthly.

**Over 250 MSCI Risk Premia Indices—with constituent and index-level data—are available via two modules: Standard (large + mid cap) and IMI (large, mid + small cap).**