

MSCI Custom Risk Weighted Indexes

An Approach to Combining Low Risk and Size Exposure

- The MSCI Risk Weighted Indexes are uniquely designed to reflect the low volatility and smaller size effect
- The indexes employ a simple yet effective method to overweight low risk and smaller market cap stocks
- The MSCI Risk Weighted Indexes can be replicated cost-effectively, used to benchmark low volatility managers, and in combination with other MSCI Factor Indexes
- The MSCI World Risk Weighted Top 200 Index Hedged to CAD is customized to contain a maximum of 200 stocks

Why Do Investors Use Risk Weighted Strategies?

- Reduction of portfolio risk by about 10% over the long-term, with less drawdown than the broad market
- Historically, these strategies have yielded higher risk-adjusted returns
- To gain exposure to smaller size stocks, mostly mid-caps, while maintaining a structural bias towards less volatile stocks

Key Characteristics of the MSCI Risk Weighted Indexes

- Effective and transparent risk reduction weighting via the inverse of realized variance
- Emphasis on low risk and smaller market cap stocks
- Number of constituents from the parent index is customizable (e.g., the top 200)
- Low annual index turnover
- High investability and replicability

Upside and Downside Capture

- The upside and downside capture ratios of a risk weighted index indicate how it has performed over periods of market strength and weakness relative to its parent index
- Since May 2003 through Dec 2014, the MSCI World Risk Weighted Top 200 Hedged to CAD captured 74% of the positive returns of its parent
- Over the same period, the MSCI World Risk Weighted Top 200 Hedged to CAD lost just 36% relative to the losses of the parent

Net Returns of the MSCI World Risk Weighted Top 200, the MSCI World Risk Weighted Top 200 Hedged to CAD and the MSCI World Indexes (CAD)

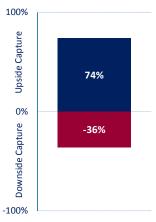
(May 2003 – Dec 2014)



MSCI World		MSCI World Risk Weighted Top 200 Hedged to CAD
6.69	8.94	9.74
10.91	8.62	8.94
0.61	1.04	1.09
0.00	2.25	3.05
0.00	7.95	8.04
	6.69 10.91 0.61 0.00	MSCI World Weighted Top 200 6.69 8.94 10.91 8.62 0.61 1.04 0.00 2.25

^{*} Annualized from May 2003 to December 2014

Upside & Downside Capture: MSCI World Risk Weighted Top 200 Hedged to CAD vs. MSCI World Index



msci.com



MSCI Customized Risk Weighted Hedged to CAD Methodology Highlights

Parameter	Methodology	Comments
Universe	All constituents of the market cap-weighted parent index are assigned a security-level risk weight and ranked so that stocks with lower risk have higher index weights; the top 200 securities with the highest weights are then selected	Approach obtains a targeted low volatility opportunity set
Variables	3-year historical variance	Objective measure that captures the variation of historical volatility
Weighting	The index first reweights every security in the parent index so that stocks with lower risk (based on their 3-year variance) are given higher risk weights. The final constituents of the MSCI World Risk Weighted Top 200 Index are determined by ranking these security level risk weights and taking the top 200 subset securities	Effective risk reduction weighting scheme
Hedging	Notionally "buy" the equity index portfolio and "sell" foreign currency forwards at the one-month forward rate, based on their market cap value in the MSCI World Risk Weighted Top 200 Index	Reflects the equity performance of the unhedged MSCI Risk Weighted Top 200 Index, while removing the impacts of currency fluctuations
Rebalancing	Semi-annual	Timely data updates, consistent with the MSCI rebalancing calendar

On Currency Hedging

- Currency fluctuations can substantially impact the performance and volatility of foreign equity indexes—both positively and negatively
- There may be periods in the investment cycle when investors are comfortable taking on both equity and currency risk; at other times, investors may wish to decouple the two by hedging exposure to foreign currencies
- In the short run, currency returns can be driven by an array of factors, including Central Bank decisions, changes in inflation, the balance of trade and crosscountry capital flows
- For example, from peak to trough (Jun 2001 to Dec 2002), the EUR/CAD exchange rate lost nearly 90% of its value (See chart.)

A Comparison of the MSCI Europe Index Returns in Local Currency vs. the EUR/CAD Currency (Jan 99 – Dec 14)



www.msci.com | clientservice@msci.com

The information contained herein (the "Information") may not be reproduced or redisseminated in whole or in part without prior written permission from MSCI. The Information may not be used to verify or correct other data, to create indexes, risk models, or analytics, or in connection with issuing, offering, sponsoring, managing or marketing any securities, portfolios, financial products or other investment vehicles. Historical data and analysis should not be taken as an indication or guarantee of any future performance, analysis, forecast or prediction. None of the Information or MSCI index or other product or service constitutes an offer to buy or sell, or a promotion or recommendation of, any security, financial instrument or product or trading strategy. Further, none of the Information or any MSCI index is intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such. The Information is provided "as is" and the user of the Information assumes the entire risk of any use it may make or permit to be made of the Information or NSCI INC. OR ANY OF ITS SUBSIDIARIES OR ITS OR THEIR DIRECT OR INDIRECT SUPPLIERS OR ANY THIRD PARTY INVOLVED IN THE MAKING OR COMPILING OF THE INFORMATION (EACH, AN "MSCI PARTY") MAKES ANY WARRANTIES OR REPRESENTATIONS AND, TO THE MAXIMUM EXTENT PERMITTED BY LAW, HOTH HEREBY EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. WITHOUT LIMITING ANY OF THE FOREGOING AND TO THE MAXIMUM EXTENT PERMITTED BY LAW, IN NO EVENT SHALL ANY OF THE MSCI PARTIES HAVE ANY LIABILITY REGARDING ANY OF THE MSCI PARTIES HAVE ANY LIABILITY REGARDING ANY OF THE MSCI PARTIES HAVE ANY LIABILITY REGARDING OF THE INFORMATION FOR ANY DIRECT, INDIRECT, SPECIAL, PUNITIVE, CONSEQUENTIAL (INCLUDING LOST PROFITS) OR ANY OTHER DAMAGES EVEN IF NOTIFIED OF THE POSSIBILITY OF SUCH DAMAGES. The foregoing shall not exclude or limit any liability that may not by a