

MSCI USA Momentum Top 50 Select Index Methodology

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1 Introduction

The MSCI USA Momentum Top 50 Select Index (the “Index”) aims to represent the performance of an equity momentum strategy applied on the MSCI USA Index (the “Parent Index”). The Index is constructed by selecting the 50 securities from the Parent Index with the highest Momentum Scores¹. The constituents are then weighted based on the Momentum Score and their weight in the Parent Index. Further, to avoid concentration, each Global Industry Classification Standard (GICS®)² sector in the index is capped at 50%, while each issuer is capped at 5%.

¹ These momentum scores are not defined in the same way as in the MSCI Momentum Indexes. In particular, only one performance period is assessed in the current index, and no risk-adjustment of the momentum value takes place.

² GICS, the global industry classification standard jointly developed by MSCI Inc. and S&P Global.

2 Constructing the MSCI USA Momentum Top 50 Select Index Methodology

2.1 DEFINING THE PARENT INDEX

The Parent Index for the MSCI USA Momentum Top 50 Select Index is the MSCI USA Index (the “Parent Index”).

2.2 SECURITY SELECTION

2.2.1 DETERMINATION OF MOMENTUM VALUE

The Momentum value for each security is calculated using the 6-month local price performance of the security.

$$\text{Momentum Value} = ((P_{T-1} / P_{T-7}) - 1) - (\text{Local Risk-free rate})$$

Where,

P_{T-1} = Security Local Price one month prior to the rebalancing date (T)

P_{T-7} = Security Local Price seven months prior to the rebalancing date (T)

The price performance is computed excluding recent 1-month. The momentum value is not computed if 6-month Price Momentum is not available and in the absence of a Momentum value, security is not considered for inclusion in the Index.

The risk-free rate used is the 3-month T-Bill rate.

2.2.2 CALCULATING THE MOMENTUM SCORE

The Momentum Value is then standardized by calculating the z-scores to compute the standardized momentum Z-score (Z).

The Momentum Z-score is then winsorized at +/- 3 i.e. the Z-scores above 3 are capped at 3 and Z-scores below -3 are capped at -3.

The Momentum Score is then computed from the Momentum Z-Score as follows:

$$\text{Momentum Score} = \begin{cases} 1 + Z, & Z > 0 \\ (1 - Z)^{-1}, & Z < 0 \end{cases}$$

2.2.3 SELECTING CONSTITUENT SECURITIES

At each index review all existing constituents of the Parent Index are ranked in the descending order of their unwinsorized Momentum Z-score. If multiple securities have the same unwinsorized Momentum Z-score, then the security having a higher weight in the Parent Index is given a higher rank. The top 50 securities are selected for inclusion in the index.

2.3 WEIGHTING SCHEME

All eligible securities are weighted by the product of their market capitalization weight in the MSCI USA Index and their corresponding Momentum Score.

Momentum Weight = Momentum Score * Market Capitalization Weight

These momentum weights are then normalized to 100.

2.3.1 SECTOR AND ISSUER CAPPING

To avoid concentration, each GICS sector in the index is capped at 50%, while each issuer is capped at 5%, in accordance with the MSCI Capped Indexes Methodology³. The excess weight due to sector capping is allocated to the other sectors in proportion to their weight prior to such capping. The excess weight due to issuer capping is allocated to other issuers within the same sector in proportion to their weight prior to such capping.

³ Please refer to the MSCI Capped Indexes methodology at www.msci.com/index-methodology

3 Maintaining the MSCI USA Momentum Top 50 Select Index

3.1 QUARTERLY INDEX REVIEWS

The MSCI USA Momentum Top 50 Select Index is reviewed on a quarterly basis to coincide with the regular Semi-Annual and Quarterly Index Reviews of the MSCI Global Investable Market Indexes. The changes are implemented as of the close of the last business day of February, May, August and November. The pro forma Index is in general announced nine business days before the effective date.

3.1.1 BUFFER RULES

To reduce Index turnover and enhance the Index stability, buffer rules are applied at 50% of the number of securities selected.

The Index targets 50 securities and the buffers are applied between rank 26 and 75. The securities in the MSCI USA Index with a Momentum Rank at or above 25 will be added to the Index on a priority basis. Existing constituents that have a Momentum rank between 26 and 75 are then successively added until the number of securities in the Index reaches 50. If the number of securities is below 50 after this step, the remaining securities in the MSCI USA Index with the highest Momentum rank are added until the number of securities in the Index reaches 50.

3.2 ONGOING EVENT RELATED CHANGES

The general treatment of corporate events in the MSCI USA Momentum Top 50 Select Index aims to minimize turnover outside of Index Reviews. The methodology aims to appropriately represent an investor's participation in an event based on relevant deal terms and pre-event weighting of the index constituents that are involved. Further, changes in index market capitalization that occur as a result of corporate event implementation will be offset by a corresponding change in the Variable Weighting Factor (VWF) of the constituent.

The following section briefly describes the treatment of common corporate events within the MSCI Momentum Indexes.

No new securities will be added (except where noted below) to the Index between Index Reviews. Only the securities added to the Parent Index at the time of event are eligible for addition to the Index. Parent Index deletions will be reflected simultaneously.

EVENT TYPE

EVENT DETAILS

New additions to the Parent Index

A new security added to the parent index (such as IPO and other early inclusions) will not be added to the index.

Spin-Offs

All securities created as a result of the spin-off of an existing Index constituent will be added to the Index at the time of event implementation. Reevaluation for continued inclusion in the Index will occur at the subsequent Index Review.

Merger/Acquisition

For Mergers and Acquisitions, the acquirer's post event weight will account for the proportionate amount of shares involved in deal consideration, while cash proceeds will be invested across the Index.

For Mergers and Acquisitions, if an existing index constituent is acquired by a non-index constituent, the existing constituent will be deleted from the index and the acquiring non-constituent will not be added to the index.

Changes in Security Characteristics

A security will continue to be an index constituent if there are changes in characteristics (country, sector, size segment, etc.) Reevaluation for continued inclusion in the index will occur at the subsequent index Review.

Further detail and illustration regarding specific treatment of corporate events relevant to this index can be found in the MSCI Corporate Events Methodology book.

The MSCI Corporate Events methodology book is available at:
<https://www.msci.com/index-methodology>

Contact us

clientservice@msci.com

AMERICAS

Americas	1 888 588 4567 *
Atlanta	+ 1 404 551 3212
Boston	+ 1 617 532 0920
Chicago	+ 1 312 675 0545
Monterrey	+ 52 81 1253 4020
New York	+ 1 212 804 3901
San Francisco	+ 1 415 836 8800
Sao Paulo	+ 55 11 3706 1360
Toronto	+ 1 416 628 1007

EUROPE, MIDDLE EAST & AFRICA

Cape Town	+ 27 21 673 0100
Frankfurt	+ 49 69 133 859 00
Geneva	+ 41 22 817 9777
London	+ 44 20 7618 2222
Milan	+ 39 02 5849 0415
Paris	0800 91 59 17 *

ASIA PACIFIC

China North	10800 852 1032 *
China South	10800 152 1032 *
Hong Kong	+ 852 2844 9333
Mumbai	+ 91 22 6784 9160
Seoul	00798 8521 3392 *
Singapore	800 852 3749 *
Sydney	+ 61 2 9033 9333
Taipei	008 0112 7513 *
Thailand	0018 0015 6207 7181 *
Tokyo	+ 81 3 5290 1555

* = toll free

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