INDEX METHODOLOGY



MSCI MEXICO SELECT MOMENTUM CAPPED INDEX METHODOLOGY

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1 INTRODUCTION

The MSCI Mexico Select Momentum Capped Index aims to reflect the performance of an Equity Momentum strategy applied on the universe of Mexican Large Cap and Mid Cap companies, excluding Real Estate Investment Trusts (REITs). To do so, the MSCI Momentum Indexes methodology is applied on the MSCI Mexico ex REITs Index. To help diversification, the Index is then capped as per the MSCI 35/65 Indexes methodology which constrains the weight of the largest security at 35%, and the sum of the weights of the largest five securities at 65%, with a buffer of 5% applied on these limits at each index review.



2 CONSTRUCTING THE MSCI MEXICO SELECT MOMENTUM CAPPED INDEX

2.1 DEFINING THE APPLICABLE UNIVERSE

The applicable universe is the MSCI Mexico ex REITs Index (the "Parent Index"), which is constructed as the MSCI Mexico Index excluding securities of companies classified as Equity Real Estate Investment Trusts Industry and Mortgage Real Estate Investment Trusts Sub-Industry as per the Global Industry Classification Standard (GICS[®]).

2.2 APPLYING THE MSCI MOMENTUM INDEXES METHODOLOGY

The MSCI Momentum Indexes methodology is applied on the Parent Index.

For more information on the MSCI Momentum Index methodology, please refer to https://www.msci.com/index-methodology

2.3 APPLYING THE CAPPING

In addition, the resulting set of constituents and weights is capped based on the MSCI 35/65 Indexes methodology as described in section 4.6 in the MSCI Capped Indexes methodology book¹.

The Barra Optimizer² is utilized to perform the optimization function which is aimed at minimizing index turnover, tracking error and extreme deviation from the Parent Index. Appendix I details the optimization parameters

¹ <u>https://www.msci.com/index-methodology</u>

² A brief description of the Barra Optimizer can be found at

https://www.msci.com/documents/10199/242721/Barra Optimizer.pdf



3 MAINTAINING THE MSCI MEXICO SELECT MOMENTUM CAPPED INDEX

3.1 SEMI-ANNUAL INDEX REVIEWS

The Index is rebalanced as described in section 2 on a semi-annual basis, coinciding with the May and November Semi-Annual Index Reviews of the MSCI Global Investable Market Indexes.

The pro forma Index is announced nine business days before the effective date.

3.2 ONGOING EVENT RELATED CHANGES

The general treatment of corporate events in the MSCI Mexico Select Momentum Capped Indexes 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.

Additionally, if the frequency of Index Reviews in the Parent Index is greater than the frequency of Index Reviews in the MSCI Mexico Select Momentum Capped Index, the changes made to the Parent Index during intermediate Index Reviews will be neutralized in the MSCI Mexico Select Momentum Capped Index.

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

No new securities will be added (except where noted below) to the Index between Index Reviews. 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



Merger/Acquisition

Changes in Security Characteristics

continued inclusion in the Index will occur at the subsequent Index Review.

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.

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.

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 under the sections detailing the treatment of events in Capped Weighted and Non-Market Capitalization Weighted indexes.

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

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APPENDIX I: OPTIMIZATION PARAMETERS

The following parameters are used in the optimization process:

- The Parent Index is used as the benchmark
- The objective is to minimize tracking error to the Parent Index
- A diagonal covariance matrix is used with the same risk for each constituent (1) and zero for all off-diagonals
- The minimum weight of capped index constituents is set to the weight of the smallest constituent in the Parent Index. This avoids the situation where the optimized index holds a security with a very small weight
- The risk aversion parameter is set to default value of 0.0075, which is generally used in mean-variance optimizations
- One way transaction cost is set to 0.5%, which aims to achieve a balance between minimizing active risk and turnover



The following sections have been modified since July 2014:

Section 1: Addition of MSCI 35/65 Capped Indexes application

- Section 3.2: Deletion of previous Monthly Index Reviews section
- Section 2.3: Transition of Index to MSCI 35/65 Capped Indexes methodology

The following sections have been modified since May 2015:

Section 2.1: Excluded GICS Industry and Sub-Industry are updated to reflect changes to the GICS structure effective September 01, 2016

The following sections have been modified since August 2016:

• The details on the Corporate Events treatment are now included in Section 3.2.

The following sections have been modified since June 2017:

Section 2.3: Applying the Capping

• Updated link to the description of Barra Optimizer



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