

# MSCI Mexico Select Momentum Capped Index

July 2014



## 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 so that no security has a weight greater than 13% and the aggregate weight of securities with weights greater than 12% does not exceed 50%.

# 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 Real Estate Investment Trusts (REITs) 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 http://www.msci.com/products/indexes/strategy/factor/momentum/

## 2.3 Applying the Capping

In addition, the resulting set of constituents and weights is capped based on the following objectives:

- No security exceeds 13% of index weight
- The aggregate weight of all securities with weights above 12% does not exceed 50%

The Barra Optimizer 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



# 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 Monthly Index Reviews

A Monthly Index Review is applied as of the close of the last business day of each month other than May and November (where the Semi-Annual index Review is applied). At each Monthly Index Review the Index is recapped as per the methodology described in section 2.3.

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

## 3.3 Ongoing Event Related Changes

Corporate events applied in the Parent Index are applied simultaneously in the Index. For example, changes in number of shares and Foreign Inclusion Factors, as well as Price Adjustment Factors, are applied simultaneously in the Index. Deletions from the Parent Index are also simultaneously reflected in the Index.

In addition, the below table describes the specific impact on the Index of certain corporate events applied in the Parent Index:

Event Type	Examples	Impact	
Securities added to the Parent Index without a link to an existing constituent of the Index	IPO added to the Parent Index Security added to the Parent Index following country reclassification	Security will be considered for inclusion in the Index at the next Semi-Annual Index Review	
	Security added to the Parent Index following the August or February Quarterly Index Review		
Securities added to the Parent Index as a result of the acquisition of an existing constituent of the Index	Non Index constituent acquires Index constituent and is added to the Parent Index	Acquired security is removed from the Index and acquiring security will be considered for inclusion in the Index at the next Semi-Annual Index Review	



Securities added to the Parent Index and linked to an existing constituent of the Index	Index constituent spins off security that is added to the Parent Index Index constituent is converted into another security that is added to the Parent Index	Security is added to the Index with the same constraint factor <sup>1</sup> as the existing security of the Index to which it is linked
Mergers & Acquisitions between existing constituents where the remaining entity is included in the Parent Index	Index constituent acquires another Index constituent and remains in the Parent Index Index constituent merges with another Index constituent and is added to the Parent Index	Remaining entity is included in the Index with a constraint factor <sup>1</sup> that is the weighted average of the constraint factors of the two constituents prior to the event

When a security for which a change (addition, deletion or change in constraint factor) has been announced as part of an Index Review is suspended two business days prior to the effective date of the Index Review, the change is cancelled.

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<sup>&</sup>lt;sup>1</sup> Constraint factors are calculated for each Index constituent at each Index Review as the ratio of the security weight in the Index and the security weight in the Parent Index. They remain constant in between Index Reviews, except in cases of corporate events.



# 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 meanvariance optimizations
- One way transaction cost is set to 0.5%, which aims to achieve a balance between minimizing active risk and turnover



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<sup>1</sup>As of March 31, 2014, as reported on June 25, 2014, by eVestment, Lipper and Bloomberg

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