

# **MSCI ALL COLOMBIA LOCAL LISTED RISK WEIGHTED INDEX METHODOLOGY**

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## **1 INTRODUCTION**

The MSCI All Colombia Local Listed Risk Weighted Index (the “Index”) applies liquidity screening to the portion of the MSCI All Colombia Index (the “Parent Index”) that is listed on the Bolsa de Valores de Colombia. Each included security is then reweighted so that stocks with lower risk, calculated according to the MSCI Risk Weighted Indexes Methodology are given higher index weights.

## 2 CONSTRUCTING THE MSCI ALL COLOMBIA LOCAL LISTED RISK WEIGHTED INDEX

The MSCI All Colombia Local Listed Risk Weighted Index is constructed from the MSCI All Colombia Index. The Parent Index is constructed according to the MSCI All Market Indexes Methodology<sup>1</sup>. The following steps are applied at initial construction of the MSCI All Colombia Local Listed Risk Weighted Index:

- Screening for Local Listings
- Application of liquidity screening
- Application of the MSCI Risk Weighted Indexes Methodology

### 2.1 SCREENING FOR LOCAL LISTINGS

For all constituents of the Parent Index listed on an exchange outside Colombia, the securities are substituted with a listing of the same issuer that trades on the Bolsa de Valores de Colombia. Thereafter, only securities that trade on the Bolsa de Valores de Colombia are retained.

### 2.2 APPLICATION OF LIQUIDITY SCREENING

The following liquidity screens are applied sequentially to the securities included after applying the screen in section 2.1:

- Include all securities with 1-month Annualized Traded Value (ATV)<sup>2</sup> greater than or equal to USD 35,000,000
- Include all securities with 3-month Annualized Traded Value (ATV) greater than or equal to USD 35,000,000
- Include all securities with 6-month Annualized Traded Value (ATV) greater than or equal to USD 35,000,000

Securities for which any of the above parameters is missing are not eligible for inclusion in the Index.

The securities selected after the application of the above liquidity screens are weighted in the proportion of their weights to each other in the Parent Index to form the “MSCI All Colombia Local Listed Index”.

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<sup>1</sup> MSCI All Market Indexes Methodology at <https://www.msci.com/index-methodology>

<sup>2</sup> MSCI Index Calculation Methodology at <https://www.msci.com/index-methodology>

### **2.3 APPLICATION OF THE MSCI RISK WEIGHTED INDEXES METHODOLOGY**

In the final step, the MSCI Risk Weighted Indexes Methodology is applied, such that stocks with lower risk are given higher index weights.

The security level weight is computed as the ratio of the inverse of the security variance to the sum of the inverse of security variance of all constituent securities.

Please refer to the following link for further details on the MSCI Risk Weighted Indexes Methodology:

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

### 3 MAINTAINING THE MSCI ALL COLOMBIA LOCAL LISTED RISK WEIGHTED INDEX

#### 3.1 QUARTERLY INDEX REVIEWS

The Index is reviewed on a quarterly basis coinciding with the May and November Semi-Annual Index Reviews and the February and August Quarterly Index Reviews of the Parent Index. The pro forma Index is typically announced nine business days before the Index Review effective date.

At each Index Review, the constituents are selected from the pro forma Parent Index constituents as described in section 2.1.

For securities that are not currently a part of the Index, the liquidity thresholds are the same as the ones used at initial construction:

- Include all securities with 1-month Annualized Traded Value (ATV) greater than or equal to USD 35,000,000
- Include all securities with 3-month Annualized Traded Value (ATV) greater than or equal to USD 35,000,000
- Include all securities with 6-month Annualized Traded Value (ATV) greater than or equal to USD 35,000,000

For existing constituents of the Index, the liquidity thresholds are relaxed slightly, as described below, in order to reduce turnover:

- Include all securities with 1-month Annualized Traded Value (ATV) greater than or equal to USD 25,000,000
- Include all securities with 3-month Annualized Traded Value (ATV) greater than or equal to USD 25,000,000
- Include all securities with 6-month Annualized Traded Value (ATV) greater than or equal to USD 25,000,000

Securities for which any of the above parameters is missing are not eligible for inclusion in the index.

The securities selected after the application of the above liquidity screens are weighted in the proportion of their weights to each other in the pro forma Parent Index to form the pro forma “MSCI All Colombia Local Listed Index”.

The pro forma Index constituents are weighted according to the MSCI Risk Weighted Indexes Methodology as described in section 2.3.

### 3.2 ONGOING EVENT RELATED CHANGES

The general treatment of corporate events in the MSCI All Colombia Local Listed Risk Weighted 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.

Additionally, if the frequency of Index Reviews in the Parent Index is greater than the frequency of Index Reviews in the MSCI All Colombia Local Listed Risk Weighted Index, the changes made to the Parent Index during intermediate Index Reviews will be neutralized in the MSCI All Colombia Local Listed Risk Weighted Index.

The following section briefly describes the treatment of common corporate events within the MSCI All Colombia Local Listed Risk Weighted Index.

No new securities will be added (except where noted below) to the Index between Index Reviews. For cases where additions are noted below, securities will be added to the Index only if added to the parent index. Parent Index deletions will be reflected simultaneously.

EVENT TYPE	EVENT DETAILS
<b>New additions to the Parent Index</b>	A new security added to the parent index (such as IPO and other early inclusions) will not be added to the index.
<b>Spin-Offs</b>	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.
<b>Merger/Acquisition</b>	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.

**Changes in Security Characteristics**

A security will be removed from the Index if there are changes in its characteristics (country, sector, size segment, etc.) Reevaluation for 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: <https://www.msci.com/index-methodology>.

**The following sections have been modified since January 2016:**

## Section 2.2 – Application of liquidity screening

- Addition of “MSCI All Colombia Local Listed Index” methodology.

## Section 3.1 – Quarterly Index Reviews

- Addition of “MSCI All Colombia Local Listed Index” methodology.

**The following sections have been modified since February 2016:**

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

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