

Index Review User Guide

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Introduction

The MSCI Global Investable Market Indices are maintained with the objective of reflecting the evolution of the underlying equity markets and segments on a timely basis.

In particular, the Index Reviews involve¹:

- Semi-Annual Index Review (SAIRs) in May and November of the Size-Segment and Global Value and Growth Indices, which include:
 - Updating the indices on the basis of a fully refreshed Equity Universe
 - Taking buffer rules into consideration for migration of securities across size and style segments
 - Updating Foreign Inclusion Factors (FIFs) and Number of Shares (NOS)
- Quarterly Index Reviews (QIRs) in February and August of the Size-Segment Indices aimed at:
 - Including significant new eligible securities (such as IPOs which were not eligible for earlier inclusion) in the index
 - Allowing for significant moves of companies within the Size Segment Indices, using wider buffers than in the SAIR
 - o Reflecting the impact of significant market events on FIFs and updating NOS

¹ More information on the index reviews can be found in the MSCI Global Investable Market Indices Methodology

Index Subscriber Information

Subscribers to MSCI data have the option to receive index announcements via email, which notify them, amongst other things, when the results of Index Reviews will be announced. The client Index Review announcement contains the user name and password, which is activated at a specific time and date. Once subscribers log into the subscriber site, subscribers will see information similar to the below (note that there are separate subscriber sites for DM Standard Indices, EM Standard Indices, DM Small Cap Indices, EM Small Cap Indices etc). The example below is for the MSCI Developed Market (DM) Standard Indices:

Standard Index Review ~
Standard History Analysis Technical Communications
 Index Review Files and Materials FAQ Index Review User Guide Index Review Data in Clients' Files
Select Previous Index Reviews: May 2013 Semi-Annual Index Review
Semi-Annual Index Review
DM Comparison Reports of the Current and Pro Forma Constituents
DM comparison report with data as of April 17, 2013 - ZIP* / TXT
DM comparison report with data as of May 14, 2013 (refreshed) - ZIP* / TXT
* To open the xml file in Excel: put the xml and the xsd files in the same folder and open the xml file in Excel. Use t an XML table" option to open correctly in Excel.
MSCI Global Summary MSCI Global Investable Market Indices May 2013 The document contains an in-depth analysis of the Index Review
Index turnover for DM indices
Composite / Country Reports These reports provide a concise overview and analysis of the major changes in the index weights of each compos and country.
May 2013 SAIR DM Composite Reports Book
May 2013 SAIR DM Country Reports Book
Withholding tax changes applied to the MSCI Net DTR Indices
DM list of securities with withholding tax changes - PDF / TXT

Additional Reports Provided to MSCI clients on the MSCI Subscriber Sites

1. Comparison Report

The report provides a snapshot of the pro forma index as of the Index Review cutoff date and incorporates all the changes resulting from the Index Review. The report provides the basis for the analysis of all the other Index Review files and materials.

2. Refreshed Comparison Report

This is the updated snapshot of the pro forma index as of the day prior to the Index Review announcement date. The report reflects all corporate events implemented between the Index Review cutoff date and the day prior to the announcement date and shows updated price and market capitalization data.

3. MSCI Global Summary

This document contains an in-depth analysis of the Index Review including the following:

- Index Performance
- Methodology highlights
- Analysis of the Index Review for the MSCI Global Investable Market Indices:
 - o Changes in Market Size-Segment Cutoffs
 - o Changes at regional and country levels
 - Additions and deletions
 - o Index turnover
- MSCI Global Value and Growth Indices only during Semi-Annual Index Reviews
- MSCI China A Indices
- MSCI Global Islamic Indices
- Index turnover resulting from the index review

4. Index Turnover

The report provides One-Way Index Turnover for country and selected regional Indices for each Index Review of the current year.

5. Composite Reports (for selected regions)

- Compares Pro forma Indices vs. Current Indices
- Top weight changes, additions and deletions from the MSCI Regional indices
- Market Capitalization Structure, GICS Composition and largest index weights
- Summary by country

6. Country Reports

- Compares Pro forma vs. Current Indices
- Top weight changes, additions to and deletions from the MSCI Country Indices
- Market Capitalization structure, GICS Composition and largest index weights

Calculation of a Pro forma Security Weight Using the Comparison Report File

The Index Review data is available in either XML or ASCII text format. The text file is delimited and may be opened easily in Microsoft Excel or similar programs. A key is located in the appendix to this document.

The following steps need to be followed in order to create a pro forma index using the XML file²:

1. Country/Region

• Country – Filter for desired countries

2. Size Segment Index

- For Large Cap indices Filter for "1" under "Pro forma Large Cap"
- For Mid Cap indices Filter for "1" under "Pro forma Mid Cap"
- For Standard Indices Copy-paste Large Cap indices and Mid Cap indices into a separate worksheet

3. Determining Proforma Weights

 $\left(\frac{Pro\ forma\ IndexMarketCap\ USDMM}{\sum\ Pro\ forma\ IndexMarketCap\ USDMM}
ight) imes 100$

4. Additions and Removals

To determine which securities should be added or removed from the index please filter the changes using the "Family Change Status" Column where:

I – New addition to MSCI indices

O – Removal from MSCI indices

Blank – no change for an existing underlying security

² Please note that the weights are based on prices as of the cutoff date, and are not necessarily indicative of what the weights will be on the rebalance date. For more detailed information, please refer to the Advance Corporate Event file.

Appendix: Comparison Reports Field Description

The table below shows detailed description for each field in the MSCI Global Standard Indices Developed Markets Comparison Report.

Please note that each Index has specific characteristics and hence its Comparison Report may have some differences in the reported fields, e.g., Comparison reports for the MSCI Global Value and Growth Indices include Value Inclusion Factors (VIF) and Growth Inclusion Factors (GIF). However, the general logic of each Comparison Report remains the same.

#	Field Name	Field Description				
#1	Cty Code	ISO Country Symbol: Two digit alphabetic code for country classification; always populated				
#2	Country	Name of the country (corresponds to the name of the country index); always populated				
#3	MSCI Security Code	Unique identifier assigned by MSCI. The MSCI Security Code is a unique id at one point in time. Note that the MSCI Security Code is completely unique to a security and never recycled. The type of share is incorporated into the code. For example, if company X has both A and B shares, they would be identified by the MSCI codes 1000101 and 1000102, in which the first five digits represent the company and the last two digits represent the type of shares; always populated				
#4	MSCI Timeseries Code	Unique identifier assigned by MSCI which serves as a mechanism to keep an accurate time series for a security. In the case of mergers or significant restructuring, sometimes a new MSCI code is assigned to the security in order to reflect the new share class accurately. However, if the historical price series is relevant, the Timeseries code for the security will not change in order to link the security's history over time. The Timeseries code links a security over time to its related entities (i.e., JP Morgan TSID links to JP Morgan Chase). The MSCI Time Series Code tracks the price performance of an equity instrument and can be linked to more than one security (or MSCI Security Code); always populated				
#5	Sedol	Available on a best-effort basis; may be blanked. SEDOL stands for Stock Exchange Daily Official List, a code used by the London Stock Exchange to identify foreign stocks, especially those that are not actively traded in the U.S. and do not have a CUSIP number. Note that sedols are not available for detached securities.				
#6	Bloomberg Code	Bloomberg Ticker, available on a best-effort basis; may be blanked.				
#7	MIC	Market Identification Code – This International Standard (ISO 10383) specifies a universal method of identifying exchanges, trading platforms and regulated or non-regulated markets as sources of prices and related information in order to facilitate automated processing. MIC for today's calculation date; it is populated for all securities, on a best effort basis; may be blanked. The list of MIC is available at: <u>http://www.iso15022.org/MIC/homepageMIC.html</u>				
#8	Security Name	Security name; always populated				
#9	Family Change Status	Type of change: I = Added to the MSCI Global Standard Indices O = Removed from the MSCI Global Standard Indices; Otherwise blanked.				
#10	Security Change Status	Type of change: F = Change in FIF S = Change in Number of Shares				

MSCI Global Standard Indices Comparison Reports Field Description

#	Field Name	Field Description				
		G = Change in GICS				
		L = Change in FOL				
		I = Change in LIF;				
		Blanked if no change.				
#11	Pro forma Large Flag	Securities that have a "1" in this column are included in the Large Cap size segment of the				
		pro forma MSCI Global Standard Indices; otherwise "0".				
#12	Pro forma Mid Flag	Securities that have a "1" in this column are included in the Mid Cap size segment of the				
		pro forma MSCI Global Standard Indices; otherwise "0".				
#13	Pro forma Market Cap	The market capitalization of the security used in the calculation of the pro forma MSCI				
	(USD mm)	Global Standard Indices.				
		Includes the effect of the pro forma Foreign Inclusion Factor (FIF) and the pro forma				
		shares outstanding.				
		Blanked for securities that are not included in the pro forma MSCI Global Standard Indices.				
#14	Pro forma FIF	The security's pro forma Foreign Inclusion Factor (FIF), which is used to adjust the				
		constituent's market capitalization for free float and other investment restrictions.				
		Blanked for securities that are not included in the pro forma MSCI Global Standard Indices.				
#15	Pro forma Number of	The security's pro forma shares outstanding, used in calculating the market capitalization				
	Shares	of the security in the pro forma MSCI Global Standard Indices .				
		Blanked for securities that are not included in the pro forma MSCI Global Standard Indices.				
#16	Pro forma FOL	The pro forma Foreign Ownership Limit for the security. If none exists, this column will				
		show a "1".				
		Blanked for securities that are not included in the pro forma MSCI Global Standard Indices.				
#17	Pro forma LIF	The pro forma Limited Investability Factor. If none exists, this column will show a "1".				
		Blanked for securities that are not included in the pro forma MSCI Global Standard Indices.				
#18	Pro forma GICS Code	Pro forma Global Industry Classification Standard code. Blanked for securities that are not included in the pro forma MSCI Global Standard Indices.				
#19	Pro forma GICS Industry	Pro forma Global Industry Classification Standard Industry Group name.				
	Group Name	Blanked for securities that are not included in the pro forma MSCI Global Standard Indices.				
#20	Current Large Flag	Securities that have a "1" in this column are included in the Large Cap size segment of the				
		current MSCI Global Standard Indices; otherwise "0".				
#21	Current Mid Flag	Securities that have a "1" in this column are included in the Mid Cap size segment of the				
		current MSCI Global Standard Indices; otherwise "0".				
#22	Current Market Cap	The market capitalization of the security used in the calculation of the current MSCI Global				
	(USD mm)	Standard Indices.				
		Includes the effect of the current Foreign Inclusion Factor (FIF) and the current shares				
		outstanding.				
		Blanked for securities that are not included in the current MSCI Global Standard Indices.				
#23	Current FIF	The security's current Foreign Inclusion Factor (FIF), which is used to adjust the				
		constituent's market capitalization for free float and other investment restrictions.				
		Blanked for securities that are not included in the current MSCI Global Standard Indices.				
#24	Current Number of	The security's current shares outstanding used in calculating the market capitalization of				
	Shares	the security in the current MSCI Global Standard Indices.				
		Blanked for securities that are not included in the current MSCI Global Standard Indices.				
#25	Current FOL	The current Foreign Ownership Limit for the security. If none exists, this column will show				
		a "1". Disclored for a constitution that a constrained of the the constraint MCCL Clarked Chan devid to disc.				
		Blanked for securities that are not included in the current MSCI Global Standard Indices.				
#26	Current LIF	The current Limited Investability Factor. If none exists, this column will show a "1".				
		Blanked for securities that are not included in the current MSCI Global Standard Indices.				

#	Field Name	Field Description
#27	Current GICS Code	Current Global Industry Classification Standard code. Blanked for securities that are not included in the current MSCI Global Standard Indices.
#28	Local Price	Closing security price in local currency; always populated.
#29	FX Rate (vs USD)	4pm London time snapshot from WM/Reuters; always populated
#30	Pro forma Company Full Mcap (USD mm)	Aggregated market capitalization of all listed and unlisted securities of a company. This field shows the full company market capitalization as of the cutoff date of the Index Review in both Comparison Report and Refreshed Comparison Report. This market cap is used to determine the Market Size-Segment Cutoffs at the time of the Index Review. Blanked for securities that are not included in the pro forma MSCI Global Standard Indices.

Client Service Information is Available 24 Hours a Day

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The company's flagship product offerings are: the MSCI indices with close to USD 7 trillion estimated to be benchmarked to them on a worldwide basis¹; Barra multiasset class factor models, portfolio risk and performance analytics; RiskMetrics multi-asset class market and credit risk analytics; IPD real estate information, indices and analytics; MSCI ESG (environmental, social and governance) Research screening, analysis and ratings; ISS governance research and outsourced proxy voting and reporting services; and FEA valuation models and risk management software for the energy and commodities markets. MSCI is headquartered in New York, with research and commercial offices around the world.

¹ As of September 30, 2012, as published by eVestment, Lipper and Bloomberg on January 31, 2013