



Index Review

Index Review Data in Client Files

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Comparison Report File Overview

1. Definition

The Comparison Reports are designed to detail the changes to the MSCI Indices resulting from the regular Index Reviews. These reports are distributed on the announcement date of the Index Reviews generally scheduled at least 10 business days before the implementation date.

Each product typically has its own set of Comparison Reports. For example the Global Investable Market Indices are split into four different Comparison Report sets:

- The MSCI Global Standard Indices for Developed Markets
- The MSCI Global Standard Indices for Emerging Markets
- The MSCI Global Small Cap and MSCI Micro Cap Indices for Developed Markets
- The MSCI Global Small Cap Indices for Emerging Markets

Other MSCI Indices such as the MSCI Global Value and Growth Indices, the MSCI Frontier Market Indices, the MSCI Global Islamic Indices, the MSCI Euro and MSCI Pan-Euro Indices, the MSCI US Equity Indices, the MSCI US REIT Index, as well as the MSCI China A Indices have their own respective set of Comparison Reports.

2. Types of Reports

For each index family two types of Comparison Reports are typically provided:

- The Comparison Report
- The Refreshed Comparison Report

2.1 Comparison Report

This report provides a snapshot of the pro forma index as of the Index Review cutoff date and intends to show the sole impact of the Index Review. In particular, the report can be used to identify all additions to and deletions from the indices, as well as all changes in asset level information such as changes in Foreign Inclusion Factors (FIF), Number of Shares (NOS) and Foreign Ownership Limits (FOL), regardless of size or index impact.

The Comparison Report provides the basis for the analysis for the other files and materials.

2.2 Refreshed Comparison Report

This report provides the same information as the Comparison Report, but as of the business day prior to the Index Review announcement date. The report shows the impact of the Index Review adjusted by any corporate events implemented between the Index Review cutoff date and the day prior to the

announcement date. It also includes corporate events announced between the Index Review cutoff date and the announcement date and implemented coinciding with the Index Review implementation date.

The Refreshed Comparison Report is provided for information purposes only.

3. Schedule of Delivery

The Comparison Report and Refreshed Comparison Report files become available on the MSCI web site shortly after 11.00 pm CET / 5.00 pm EST on the Index Review announcement date. The reports can be accessed on the subscriber sections for each respective product using the client passwords and login names distributed by e-mail approximately one week prior to the Index Review announcement date.

File Format and Fields Description

1. Standardized File Format

The Comparison Report files are currently available on the subscriber sections of the MSCI web site in ASCII text and XML format.

2. Fields Description

The fields provide information that helps the user to understand all of the effects of a regular Index Review. The fields in the Comparison Reports reflect the characteristics of the security before the change of the Index Review is effective as “Current”, and after the change is effective as “Pro forma”. As an example, see below the detailed descriptions 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.

MSCI Global Standard Indices Comparison Reports Field Description

#	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; 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

#	Field Name	Field Description
		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: http://www.iso15022.org/MIC/homepageMIC.html
#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 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 (USD mm)	The market capitalization of the security used in the calculation of the pro forma MSCI 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 Shares	The security's pro forma shares outstanding, used in calculating the market capitalization 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 Group Name	Pro forma Global Industry Classification Standard Industry 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 (USD mm)	The market capitalization of the security used in the calculation of the current MSCI Global Standard Indices. Includes the effect of the current Foreign Inclusion Factor (FIF) and the current shares outstanding.

#	Field Name	Field Description
		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 Shares	The security's current shares outstanding used in calculating the market capitalization of 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". 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.
#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.

3. Blank Fields

Depending on the status of a security, certain fields may be blank in the Comparison Reports.

For example, for additions to the index ("I" in field 9) all the "Current" fields will be blank (fields 22 through 27). On the other hand, in case of deletions from the index, all the "Pro forma" fields will be blank (fields 13 through 19).

Advance Corporate Events Files Overview

1. Definition

The Advance Corporate Events File (ACE File) is designed to communicate essential information relating to MSCI Index constituents' changes and provide a clear picture of MSCI's treatment of all future changes in the MSCI Equity Indices in advance of their implementation. The ACE File includes all pending changes as well as changes that were implemented within the past 2 business days. Events will be displayed in the file from the day MSCI acknowledges them and up to 2 business days following the date of implementation.

All security level changes resulting from corporate events, regardless of size or index impact, and from Quarterly Index Reviews will be included in the ACE File. The types of changes to be communicated in the file include corporate events (acquisitions, mergers, spin-offs, etc.), corporate actions (splits, stock dividends, rights issues, etc.), FIF/DIF/LIF/FOL changes, Quarterly Index Review (QIR), Semi-Annual Index Review (SAIR), GICS Changes and others.

2. Schedule of Delivery

The ACE files are delivered on a daily basis to clients. However, the changes resulting from Index Reviews will generally be populated on the next business day following the Index Review Announcements.

3. ACE files at Index Reviews

As described above the Comparison Report is as of a specific date and is not updated post the Index Review announcement, i.e., the Comparison Report gives a static view of the Index Review results.

By contrast, the ACE files provide an updated view of all changes resulting from the Index Review adjusted by corporate events from day following the Index Review announcement date up to the effective date of the Index Review, i.e., the ACE files give a dynamic view of the Index Review results.

MSCI will adjust the Index Review changes in the ACE files in order to reflect the impact resulting from a corporate event if an index constituent has changes announced following an Index Review and a corporate event occurring between the Index Review announcement date and the Index Review effective date. In that case, the "QIR" line in the ACE files, showing the Index Reviews changes, will have a status changed from "Confirmed" to "Correction".

The data shown in the ACE files for Index Reviews may be different than the ones in the Refreshed Comparison Reports due to corporate events being implemented between the time the Refreshed Reports are generated (one day before the Index Review Announcement date) and the time the ACE files are distributed to all clients (one day after the Index Review Announcement date).

For more details, please refer to the Advance Corporate Events User Guide available upon request to MSCI Client Service Team.

Pro Forma Fields Population in MSCI End of Day Security Files

MSCI Index pro forma data allow the calculation of pro forma weights and market capitalization using pro forma inclusion factors and pro forma number of shares resulting from the Quarterly Index Review (QIR) and Semi-Annual Index Review (SAIR). Pro forma fields (e.g. Pro Forma FIF, Pro Forma Standard Index Family Flag, Pro Forma Number of Shares) are populated from the day following the index rebalancing announcement until the day prior to its effective date. Note that pro forma fields are populated for early files (e.g. D15P_EARLY) starting the second day following the index rebalancing announcement date. They are blanked outside of this period. If corporate events are effective between the announcement date and the effective date of the QIR or SAIR, the pro forma fields will reflect corporate events once they are effective in the MSCI Index.

For corporate events effective on the same day as the QIR or SAIR and requiring a Price Adjustment Factor (PAF), the pro forma fields will not be updated. Please note that for corporate events not requiring a PAF and effective on the same day as the QIR or SAIR, the pro forma fields will reflect corporate events as soon as the relevant changes are announced by MSCI with a status "confirmed". For more details, please refer to the MSCI Global Equity Index Products Technical Documentation – Appendix IV and to the MSCI Advance Corporate Events File user guide.

Client Service Information is Available 24 Hours a Day

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MSCI Inc. is a leading provider of investment decision support tools to investors globally, including asset managers, banks, hedge funds and pension funds. MSCI products and services include indices, portfolio risk and performance analytics, and governance tools.

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 multi-asset 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