Advance Corporate Events File

Advance Corporate Events (ACE) File User Guide

November 2009

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Section 1: Advance Corporate Events File Overview

1.1 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 Barra'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 Barra 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), Global Industry Classification Standards (GICS) changes and others.

The major events affecting the index are also announced via Option e-mails, supplementing the information communicated in the ACE File.

The file is available to all daily MSCI Direct Delivery and Full Data Vendor clients of MSCI Core and Core VG Plus Modules, MSCI Small Cap Modules, MSCI Islamic Core Plus and Islamic Small Cap Plus EM Modules, MSCI US Equity Modules and MSCI China A Equity Modules.

1.2 Schedule of Delivery

The ACE File is generally delivered daily between 5:30 PM and 6:00 PM US Eastern Time (ET). The file will be delivered to all MSCI Direct Delivery and Full Data Vendor clients via the same delivery method as the daily security and index packages.

Should the file delivery be delayed significantly, MSCI Barra would inform clients via e-mail announcement around 6:00 PM US Eastern Time (ET).

1.3 Updates/Corrections during Market hours

In exceptional cases, some events may be announced during market hours for same or next day implementation. These cases are usually linked to late company disclosure of corporate events or unexpected changes to previously announced corporate events. Announcements made by MSCI Barra during market hours will be communicated through Options e-mail announcements, and will be reflected in the ACE File when it is next distributed on that day.

Section 2: File Format and Fields Description

2.1 Standardized File Format

MSCI Barra has created a standard file format for all deliveries of this product: MSCI Core and Core VG Plus Modules, MSCI Small Cap Modules, MSCI Islamic Core Plus and Islamic Small Cap Plus EM Modules, MSCI US Equity Modules and MSCI China A Equity Modules. The format of the file will be consistent for all deliveries: fields not relevant to a specific delivery will be blanked out from the file. Please note that MSCI Barra reserves the right to change these formats and fields as we make enhancements to our products and methodology. All changes to the file formats will be announced before any changes take place.

For a general classification of the fields in the ACE File please see the table below.

Columns	Data Specific to
#1 through # 41	Universal fields relevant to all Equity Indices.
# 42 through # 49	Developed, Emerging Markets and Asia Pacific Equity Indices.
# 50 through # 51	Global Small Cap Equity Indices.
# 52 through # 59	US Equity Equity Indices.
# 60 through # 69	Value and Growth for US Equity Indices and Global Small Cap Equity Indices; and Standard Index Inclusion Factors for Global Standard Equity Indices.
# 70 through # 75	Value and Growth for Developed, Emerging Markets and Asia Pacific Equity Indices and Islamic Factors for Islamic Equity Indices.

2.2 Fields Description

The Advance Corporate Events File is distributed in ASCII text and MSCI XML formats. The fields provide information that will assist the user to anticipate the effects of a corporate event. These fields will reflect the characteristics of the security before the change is effective as "Current", and after the change is effective as "New". As an example, see below the detailed descriptions for each field in the MSCI Core VG Plus Modules.

#	Field Name	Field Description
#1	Status	ACKNOWLEGED, UNDETERMINED, EXPECTED, CONFIRMED, IMPLEMENTED, CANCELED, CORRECTION depending on the timing of the event; always populated. For more information please refer to MSCI General Announcement Policy for Corporate Events and Appendix V: Announcement Status and Timing, both in the MSCI Corporate Events Methodology Book.
#2	Event ID	Numeric key to identify unique events; always populated.
#3	Effective Date	Date the security's change is effective in the index; may be blanked. In some exceptional cases, such as rights issues, stock dividends, splits and spin-offs, the effective date represents the ex-date of the event. A Price Adjustment Factor (PAF) is applied on the ex-date (effective date), and the number of shares is changed as of the close of the effective date.

#	Field Name	Field Description
#4	Last updated date	Last date the change data was updated on; always populated. Data displayed in the ACE File is as of this date and it is only updated when an event changes its status following MSCI's General Announcement Policy for Corporate Events.
#5	First entry date	Initial date the data was entered into the file; always populated.
#6	Current country	Two digit ISO country code before the change; may be blanked.
#7	New country	Two digit ISO country code after the change; may be blanked.
#8	Current security name	Company name before change; may be blanked.
#9	New security name	Company name after change; may be blanked.
#10	MSCI Security code	Unique identifier assigned by MSCI Barra; always populated.
#11	MSCI Timeseries code	Unique identifier assigned by MSCI Barra; always populated.
#12	Sedol	Security identifier, available on a best-effort basis; may be blanked (or TBD: to be determined)
#13	Isin	Security identifier, available on a best-effort basis; may be blanked (or TBD: to be determined)
#14	Reserved	Blanked
#15	Bloomberg Ticker	Security identifier, available on a best-effort basis; may be blanked (or TBD: to be determined)
#16	Reserved	Blanked
#17	Event type	Type of corporate event or security's change, e.g.: merger, acquisition, spin-off, private placement, etc. For a complete list of Corporate Event Types please refer to Section 3 of this document; always populated.
#18	Event description	Detailed information concerning the event, e.g.: Acquisition for stock and conversion of shares.
#19	Correction comment	Only in the event of correction, detailed description of what is corrected, e.g.: Correction due to change in effective date by the company; will be blanked if no correction.
#20	Terms	Terms of a corporate event, e.g.: For a Stock Dividend of 1 new share per every share held, the terms are S 1 : 1; may be blanked.
#21	Text announcement flag	1 if additional Option e-mail Announcement has been made, otherwise 0; may be blanked.
#22	Current Index number of shares	Security number of shares used to calculate the Index Market Capitalization and the initial weight before the effective date; may be blanked.
#23	New Index number of shares	Security number of shares used to calculate the Index Market Capitalization and the initial weight on the effective date; may be blanked. After the effective date, this data item will remain unchanged in the file. The index number of shares used to calculate the Index Market Capitalization and the weight on the day following the effective date can be found in the Daily Main Security file on the effective date, column # 33 Number of Shares (Next Day Index), or in this file in column #25 New Closing Number of Shares.
#24	Current Closing number of shares	Security number of shares used to calculate valuation rations before the effective date; may be blanked.
#25	New Closing number of shares	Security number of shares used to calculate valuation ratios on the effective date. It also represents the index number of shares to be used to calculate the Index Market Capitalization and the initial weight on the day following the effective date (as explained in Column #23); may be blanked.

#	Field Name	Field Description
#26	PAF Formula	Formula used to calculate the Price Adjustment Factor (PAF); may be blanked. For additional information regarding PAF Formulas and Definitions refer to Appendix I of the MSCI Corporate Events Methodology book.
#27	PAF	PAF as of the close of the effective date (when price is available to calculate final PAF upon implementation); may be blanked.
#28	Current ISO currency symbol	ISO currency symbol of price before change; may be blanked.
#29	New ISO currency symbol	ISO currency symbol of price after change; may be blanked.
#30	Current GICS sub-industry code	GICS Sub-Industry Code before change; may be blanked.
#31	New GICS sub-industry code	GICS Sub-Industry Code after change; may be blanked.
#32	Current GICS sub-industry name	GICS Sub-Industry name before change; may be blanked.
#33	New GICS sub-industry name	GICS Sub-Industry name after change; may be blanked.
#34	Current FIF	Foreign Inclusion Factor before change; may be blanked.
#35	New FIF	Foreign Inclusion Factor after change; may be blanked.
#36	Current DIF	Domestic Inclusion Factor before change; may be blanked.
#37	New DIF	Domestic Inclusion Factor after change; may be blanked.
#38	Current LIF	Limited Inclusion Factor before change; may be blanked.
#39	New LIF	Limited Inclusion Factor after change; may be blanked.
#40	Current FOL	Foreign Ownership Limit before change; may be blanked.
#41	New FOL	Foreign Ownership Limit after change; may be blanked.
#42	Current Standard inclusion flag	1 indicates inclusion in the MSCI Global Standard Indices before change; otherwise 0 or blanked.
#43	New Standard inclusion flag	1 indicates inclusion in the MSCI Global Standard Indices after change; otherwise 0 or blanked.
#44	Current Asia Apex Index Incl flag	1 indicates inclusion in the MSCI Asia Apex 50 Indices before change; otherwise 0 or blanked.
#45	New Asia Apex Index Incl flag	1 indicates inclusion in the MSCI Asia Apex 50 Indices after change; otherwise 0 or blanked.
#46	Current Standard Dom Incl Flag	1 indicates inclusion in the MSCI Domestic Indices before change; otherwise 0 or blanked.
#47	New Standard Dom Incl Flag	1 indicates inclusion in the MSCI Domestic Indices after change; otherwise 0 or blanked.
#48	Current Large Dom Inclusion Flag	1 indicates inclusion in the MSCI Large Cap Domestic before change; otherwise 0 or blanked.
#49	New Large Dom Inclusion Flag	1 indicates inclusion in the MSCI Large Cap Domestic after change; otherwise 0 or blanked.
#50	Current Mid Dom Inclusion Flag	1 indicates inclusion in the MSCI Mid Cap Domestic before change; otherwise 0 or blanked.
#51	New Mid Dom Inclusion Flag	1 indicates inclusion in the MSCI Mid Cap Domestic after change; otherwise 0 or blanked.
#52	Current Large inclusion flag	1 indicates inclusion in the MSCI Large Cap Index before change; otherwise 0 or blanked.
#53	New Large inclusion flag	1 indicates inclusion in the MSCI Large Cap Index after change; otherwise 0 or blanked.
#54	Current Mid inclusion flag	1 indicates inclusion in the MSCI Mid Cap Index before change; otherwise 0 or blanked.

#	Field Name	Field Description
#55	New Mid inclusion flag	1 indicates inclusion in the MSCI Mid Cap Index after change; otherwise 0 or blanked.
#56	Reserved	Blanked
#57	Reserved	Blanked
#58	Reserved	Blanked
#59	Reserved	Blanked
#60	Current Std Index Inclusion Fact	Current Standard Index Inclusion Factor - Index inclusion factor, before change. It is currently set to 1 for all constituents of the MSCI Global Standard Indices and for all constituents of the MSCI GCC Domestic Standard Indices; otherwise 0 or blanked.
#61	New Std Index Inclusion Fact	New Standard Index Inclusion Factor- Index inclusion factor, after change. It is currently set to 1 for all constituents of the MSCI Global Standard Indices and for all constituents of the MSCI GCC Domestic Standard Indices; otherwise 0 or blanked.
#62	Reserved	Blanked
#63	Reserved	Blanked
#64	Reserved	Blanked
#65	Reserved	Blanked
#66	Reserved	Blanked
#67	Reserved	Blanked
#68	Current Group Entity Code	Group Entity Code, before change. MSCI Identifier shared among equity securities of companies belonging to a single group according to a relationship based on their controlling stakes in the context of the UCITS III directive, and used in the calculation of the MSCI 10/40 index series; may be blanked.
#69	New Group Entity Code	Group Entity Code, after change; may be blanked.
#70	Value Z-score	Average Value Z-Score for the MSCI Global Standard Value Indices; may be blanked.
#71	Growth Z-score	Average Growth Z-Score for the MSCI Global Standard Growth Indices; may be blanked.
#72	Current Value Incl Factor	Value Inclusion Factor of the MSCI Global Standard Value Indices, before change; may be blanked.
#73	New Value Inclusion Factor	Value Inclusion Factor of the MSCI Global Standard Value Indices, after change; may be blanked.
#74	Current Growth Incl Factor	Growth Inclusion Factor of the MSCI Global Standard Growth Indices, before change; may be blanked.
#75	New Growth Incl Factor	Growth Inclusion Factor of the MSCI Global Standard Growth Indices, after change; may be blanked.
#76	Reserved	Blanked
#77	Reserved	Blanked
#78	Reserved	Blanked
#79	Reserved	Blanked
#80	Reserved	Blanked
#81	Reserved	Blanked
#82	Reserved	Blanked

2.3 Blank Fields

Depending on the Status of the event, certain fields can be blanked in the ACE File.

For events with a status of "Acknowledged", the effective date and all "Current" and "New" Fields (starting from field #19) will be blanked.

For events with a status of "Undetermined", "Expected" or "Confirmed", if the security is being deleted from the MSCI Equity Indices its "Current" fields will be populated and its "New" fields will be blanked. In some other cases, if a security is being added to the MSCI Indices its "Current" fields can be blanked, and its "New" fields will be populated. For additions, if the identifiers of the new security are not available at the time the event is changed to a status of "Undetermined", "Expected" or "Confirmed" the identifiers fields will also be blanked.

Section 3: Corporate Event Types

These are the types of corporate events that will be addressed in column #17 of the Advance Corporate Events File:

Event Type	Definition
ACQ	Acquisition
BANKR	Bankruptcy
BLK_SALE	Block Sale
BUYBCK	Buy Back
CAP_REPAY	Capital Repayment
CONSOL	Consolidation
CONV	Conversion
CORR	Correction
CTYREC	Country Reclassification
DELIST	Delisting
EXCCHG	Stock Exchange/Currency Change
FOL	FOL Change
GICS	GICS Classification Change
IPO	Initial Public Offering
MERGE	Merger
NAME	Name Change
NEW_ISS	New Issue
OTHER	Other
PART ACQ	Partial Acquisition
PRIV_PL	Private Placement
PUB_OFF	Public Offering
PUB_OFF_P	Public Offering, Priority to Shareholders
QIR	Quarterly Index Review

RED	Redemption
RSPLIT	Reverse Split
RTS	Rights Issue
SEC_OFF	Secondary Offering
SPEC_DIV	Special Dividend
SPIN	Spin Off
SPLIT	Split
STK_DIV	Stock Dividend

Section 4: Understanding Data in the ACE Files

4.1 Corporate Event Changes

Level changes for index constituents resulting from corporate events, regardless of size or index impact, will be included in the ACE File. The file will provide a clear snapshot of all changes affecting a security by displaying the effective date of the changes, security codes of the affected security and "Current" and "New" fields indicating changes in the number of shares, FIF/DIF, GICS, etc. In most cases, company changes will be easy to understand using this system.

See the following examples to understand how the ACE File displays corporate events with Price Adjustment Factors (PAFs) applied on the ex date and how each field can be used in the calculation of the security's Index Market Capitalization.

Please note that as stated in the MSCI Corporate Events Methodology book, corporate events such as splits, stock dividends and rights issues, which affect the price of a security, require a price adjustment. In general, the PAF is applied on the ex-date of the event to allow security prices to be comparable between the ex-date and the cum-date (as per the Laspeyres' concept). To do so, MSCI adjusts for the value of the right and/or the value of the special assets that are distributed and the changes in number of shares and FIF, if any, are reflected as of the close of the ex-date.

Please note that the formulas used to calculate the Index Market Capitalization presented in these examples are only for the purpose of demonstrating how to interpret information in the ACE File. For the complete formulas used to calculate the Index Market Capitalization refer to the MSCI Index Calculation Methodology book. For additional information regarding PAF Formulas and Definitions refer to Appendix I of the MSCI Corporate Events Methodology book.

Example of a Stock Dividend:

Extract of relevant fields from ACE File of February 17, 2009.

1	3	17	18	20	22	23	24	25	26	27	34	35
Status	Effective Date	Event type	Event description	Terms	Current Index number of shares	New Index number of shares	Current Closing number of shares	New Closing number of shares	PAF Formula	PAF	Current FIF	New FIF
CONFIRMED	20090218	STK_DIV	Stock dividend / Bonus	S 1 : 4	12019000	12019000	12019000	15023750	[4 + 1] / [4]	1.25	1	1

Interpretation of Data:

- (#18) Stock Dividend of 1 new share for every 4 shares held, with an ex-date of February 18, 2009.
- (#20) Terms: S 1 : 4
- (#26) PAF Formula: [4+1] / [4]
- (#27) PAF: 1.25 (this number will only be available upon implementation of the event, not before)
- As per MSCI Corporate Events Methodology book, MSCI Barra applies a PAF on February 18, 2009 and increases the number of shares as of the close of February 18, 2009 (effective February 19, 2009).
- **(#22) Current Index Number of Shares:** Will be used to calculate the security's Index Market Capitalization and initial weight on February 17, 2009.
- **(#23) New Index Number of Shares:** Will be used to calculate the security's Index Market Capitalization and initial weight on February 18, 2009.
- **(#24) Current Closing Number of Shares:** Will be used to calculate valuation ratios on February 17, 2009.
- **(#25) New Closing Number of Shares:** Will be used to calculate valuation ratios on February 18, 2009. This number also represents the Index Number of Shares on February 19, 2009 (also found in Column #33 Number of Shares (Next Day Index) of the Daily Main Security file of February 18, 2009) and will be used to calculate the Index Market Capitalization and initial weight on that date and going forward.

Example of Index Calculation:

(IndexAdjustedMarketCap = IndexNumberofShares*PricePerShare*InclusionFactor*PAF)

	Calculation Day	Index Number of Shares	Price per Share (USD)	FIF	PAF	Index Market Capitalization (USD)
	17-Feb-09	12019000	10	1	1	120190000
Ex Date →	**18-Feb-09**	**12019000**	**8**	**1**	**1.25**	**120190000**
	19-Feb-09	15023750	8	1	1	120190000

Example of a Rights Issue:

Extract of relevant fields from ACE File of February 18, 2009.

1	3	17	18	20	22	23	24	25	26	27	34	35
Status	Effective Date	Event type	Event description	Terms	Current Index number of shares	New Index number of shares	Current Closing number of shares	New Closing number of shares	PAF Formula	PAF	Current FIF	New FIF
CONFIRMED	20090219	RTS	Right of new underlying shares	R 1 : 2 @ USD 3	2823272605	2823272605	2823272605	4234908908	IF 3 < P(t-1) THEN [P(t-1)] / [(2 * P(t-1) + 3) / (2 + 1)] ELSE 1	1.09	1	1

Interpretation of Data:

- (#18) Rights Issue to subscribe 1 new share for every 2 shares held at a subscription price of USD 3 per share, with an ex date of February 19, 2009.
- (#20) Terms: R 1 : 2 @ USD 3
- (#26) PAF Formula: IF 3 < P(t-1) THEN [P(t-1)] / [(2 * P(t-1) + 3) / (2 + 1)] ELSE 1
- (#27) PAF: 1.09 (this number will only be available upon implementation of the event, not before)
- P (t-1) – Cum Price: USD 4
- P (t) – Ex Price: USD 3.66
- If the subscription price of the new shares is below the cum market price, the rights issue is generally assumed to be fully subscribed on a pro rata basis.
- Since USD 3 < USD 4, MSCI Barra applies a PAF of 1.09 on February 19, 2009 and increases the number of shares as of the close of February 19, 2009 (effective February 20, 2009). If the market price before the event P (t-1) would have been lower than USD 3, a PAF of 1 would have been applied.
- **(#22) Current Index Number of Shares:** Will be used to calculate the security's Index Market Capitalization and initial weight on February 18, 2009.
- **(#23) New Index Number of Shares:** Will be used to calculate the security's Index Market Capitalization and initial weight on February 19, 2009.
- **(#24) Current Closing Number of Shares:** Will be used to calculate valuation ratios on February 18, 2009.
- **(#25) New Closing Number of Shares:** Will be used to calculate valuation ratios on February 19, 2009. This number also represents the Index Number of Shares on February 20, 2009 (also found in Column #33 Number of Shares (Next Day Index) of the Daily Main Security file of February 19, 2009) and will be used to calculate the Index Market Capitalization and initial weight on that date and going forward

Example of Index Calculation:

(IndexAdjustedMarketCap = IndexNumberofShares*PricePerShare*InclusionFactor*PAF)

	Calculation Day	Index Number of Shares	Price per Share (USD)	FIF	PAF	Index Market Capitalization (USD)
	18-Feb-09	2823272605	4	1	1	11293090420
Ex Date →	**19-Feb-09**	**2823272605**	**3.66**	**1**	**1.09**	**11293090420**
	20-Feb-09	4234908908	3.66	1	1	15499766603

Example of a Merger:

Extract of relevant fields from ACE File of March 25, 2009.

1	2	8	9	17	18	20	22	23	24	25	26	27
Status	Effective Date	Current security name	New security name	Event type	Event description	Terms	Current Index number of shares	New Index number of shares	Current Closing number of shares	New Closing number of shares	PAF Formula	PAF
Confirmed	20090326	Company A		MERGE	Merger - Shares		385535116		385535116			
Confirmed	20090326	Company B		MERGE	Merger - Shares		329648786		329648786			
Confirmed	20090326		Company C	MERGE	Merger - Shares	Merger 0.117 Company C : 1 Company B		652493162		76341700	[0.117] / [1]	0.117

34	35	42	43	52	53
Current FIF	New FIF	Current Standard Inclusion Flag	New Standard Inclusion Flag	Current Large Inclusion Flag	New Large Inclusion Flag
0.85		1	0	1	0
0.8		1	0	1	0
	0.9		1		1

Interpretation of Data:

- (#18) Merger between Company A and Company B to create Company C effective on March 26, 2009.
- Company A and B will be deleted from the Index on the effective date, and simultaneously Company C will be added.

- As per MSCI Corporate Events Methodology book, MSCI typically links the price history of one of the merging entities (Company A or B) with the price of the newly merged entity (Company C). A PAF is applied on the first trading day of the merged entity (Company C) to ensure that the price of the merged entity is comparable to the price of the merging entity (Company A or B). A PAF is required only when the terms of the exchange are different from one for one. The PAF is based on the specific terms of the merger between the linked securities. In this case, Company C's price history will be linked to Company B, the PAF will be applied on the effective date to Company C using the terms of the exchange of shares.
- (#23) To apply the PAF, MSCI Barra uses a calculated number for the Index Number of Shares on the effective date (March 26, 2009) to keep the Index Market Capitalization comparable between both securities. The calculated number of shares is derived by dividing the New Closing Number of shares by the PAF (652,493,162 = 76,341,700 / 0.117)
- (#20) Terms: Merger 0.117 Company C : 1 Company B
- (#26) PAF Formula: [0.117] / [1]
- (#27) PAF: 0.117 (this number will only be available upon implementation of the event, not before)
- **(#22) Current Index Number of Shares:** Will be used to calculate company B's Index Market Capitalization and initial weight on March 25, 2009.
- **(#23) New Index Number of Shares:** Will be used to calculate company C's Index Market Capitalization and initial weight on March 26, 2009.
- **(#24) Current Closing Number of Shares:** Will be used to calculate the valuation ratios for company B on March 25, 2009.
- **(#25) New Closing Number of Shares:** Will be used to calculate valuation ratios for company B on March 26, 2009. This number also represents the Index Number of Shares on March 27, 2009 (also found in Column #33 Number of Shares (Next Day Index) of the Daily Main Security file of March 26, 2009) and will be used to calculate the Index Market Capitalization and initial weight on that date and going forward.

Example of Index Calculation:

(IndexAdjustedMarketCap = IndexNumberofShares*PricePerShare*InclusionFactor*PAF)

	Calculation Day	Security	Index Number of Shares	Price per Share (USD)	FIF	PAF	Index Market Capitalization (USD)
	25-Mar-09	Company B	329648786	4	0.8	1	1054876115
Effective Date →	**26-Mar-09**	**Company C**	**652493162**	**35**	**0.9**	**0.117**	**2404763549**
	27-Mar-09	Company C	76341700	35	0.9	1	2404763550

- If the Index Number of Shares on March 26, 2009 is not adjusted by the terms, it will result in an understatement of Company C's Index Market Capitalization on

March 26, 2009, making the Index Market Capitalization non comparable between the linked securities. See the calculation below:

$$(IndexAdjustedMarketCap = IndexNumberofShares*PricePerShare*InclusionFactor*PAF)$$

	Calculation Day	Security	Index Number of Shares	Price per Share (USD)	FIF	PAF	Index Market Capitalization (USD)
	25-Mar-09	Company B	329648786	4	0.8	1	1054876115
Effective Date →	**26-Mar-09**	**Company C**	**76341700**	**35**	**0.9**	**0.117**	**281357335**
	27-Mar-09	Company C	76341700	35	0.9	1	2404763550

See the following examples to understand how the ACE File displays other common types of corporate events and how each field can be used in the calculation of the security's Index Market Capitalization. Please note that the formulas used to calculate the Index Market Capitalization presented in these examples are only for the purpose of demonstrating how to interpret information in the ACE File, for the complete formulas used to calculate the Index Market Capitalization refer to the MSCI Index Calculation Methodology book.

Example of a Public Offering:

Extract of relevant fields from ACE File of February 24, 2009.

1	3	17	18	20	22	23	24	25	34	35
Status	Effective Date	Event type	Event description	Terms	Current Index number of shares	New Index number of shares	Current Closing number of shares	New Closing number of shares	Current FIF	New FIF
CONFIRMED	20090225	PUB_OFF	Public offer to institutions	Publpl 77,000,000 @ CAD 4.55 (+UPDATE)	161905000	243617945	161905000	243617945	0.7	0.8

Interpretation of Data:

- (#18) Public Offering of 77,000,000 shares effective on February 25, 2009.
- The number of shares and the FIF are increased as of the close of February 24, 2009 (effective on February 25, 2009).
- **(#22) Current Index Number of Shares:** Will be used to calculate the security's Index Market Capitalization and initial weight on February 24, 2009.
- **(#23) New Index Number of Shares:** Will be used to calculate the security's Index Market Capitalization and initial weight on February 25, 2009.
- **(#24) Current Closing Number of Shares:** Will be used to calculate valuation ratios on February 24, 2009.
- **(#25) New Closing Number of Shares:** Will be used to calculate valuation ratios on February 25, 2009. This number also represents the Index Number of Shares on February 26, 2009 (also found in Column #33 Number of Shares (Next Day Index) of the Daily Main Security file of February 25, 2009) and will be used to calculate the Index Market Capitalization and initial weight on that date and going forward.

Example of Index Calculation:

(IndexAdjustedMarketCap = IndexNumberofShares*PricePerShare*InclusionFactor*PAF)

	Calculation Day	Index Number of Shares	Price per Share (USD)	FIF	PAF	Index Market Capitalization (USD)
	24-Feb-09	161905000	10	0.7	1	1133335000
Effective Date →	**25-Feb-09**	**243617945**	**10**	**0.8**	**1**	**1948943560**
	26-Feb-09	243617945	10	0.8	1	1948943560

Example of an Acquisition:

Extract of relevant fields from ACE File of February 24, 2009.

1	2	8	9	17	18
Status	Effective Date	Current security name	New security name	Event type	Event description
Confirmed	20090225	Company A		ACQ	Acquisition of Company A for Stock. Last trading day of A is February 25, 2009.
Confirmed	20090225	Company B	Company B	ACQ	Acquisition of Company A for Stock. Last trading day of A is February 25, 2009.

22	23	24	25	34	35	42	43	52	53
Current Index number of shares	New Index number of shares	Current Closing number of shares	New Closing number of shares	Current FIF	New FIF	Current Standard Inclusion Flag	New Standard Inclusion Flag	Current Large Inclusion Flag	New Large Inclusion Flag
385535116		385535116		0.85		1	0	1	0
329648786	529648786	329648786	529648786	0.8	0.9	1	1	1	1

Interpretation of Data:

- (#18) Company B is acquiring Company A for stock. The last trading day of Company A will be February 24, 2009.
- As per MSCI Corporate Events Methodology book, MSCI implements mergers and acquisitions as of the close of the last trading day of the acquired entity or merging entities (last offer day for tender offers), regardless of the status of the securities (index constituents or non-index constituents) involved in the event. MSCI uses market prices for implementation.
- Company A will be deleted from the Index as of the close of February 24, 2009 (effective on February 25, 2009).
- The number of shares and the FIF of Company B will be increased as of the close of February 24, 2009 (effective on February 25, 2009).
- **(#22) Current Index Number of Shares:** Will be used to calculate Companies A and B's Index Market Capitalization and initial weight on February 24, 2009.
- **(#23) New Index Number of Shares:** Will be used to calculate Company B's Index Market Capitalization and initial weight on February 25, 2009.
- **(#24) Current Closing Number of Shares:** Will be used to calculate valuation ratios of Companies A and B on February 24, 2009.

- **(#25) New Closing Number of Shares:** Will be used to calculate valuation ratios of Company B on February 25, 2009. This number also represents the Index Number of Shares on February 26, 2009 (also found in Column #33 Number of Shares (Next Day Index) of the Daily Main Security file of February 25, 2009) and will be used to calculate the Index Market Capitalization and initial weight on that date and going forward.

Example of Index Calculation:

(IndexAdjustedMarketCap = IndexNumberofShares*PricePerShare*InclusionFactor*PAF)

	Calculation Day	Security	Index Number of Shares	Price per Share (USD)	FIF	Index Market Capitalization (USD)
	24-Feb-09	Company A	385535116	9	0.85	2949343637
	24-Feb-09	Company B	329648786	12	0.8	**3164628346**
Effective Date →	**25-Feb-09**	**Company B**	**529648786**	**12**	**0.9**	**5720206889**
	26-Feb-09	Company B	529648786	12	0.9	5720206889

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Please refer to the disclaimer at the end of this document.   RV1009

4.2 Index Review Changes

4.2.1   Semi-Annual and Quarterly Index Reviews (SAIRs and QIRs)

The results of the SAIRs and QIRs are announced at least two weeks in advance of their effective date as of the close of the last business day of May and November for SAIRs, and February and August for QIRs. The changes resulting from the Index Reviews will be available in the ACE File starting from the first business day following the official announcement of results.

Please see the example below for SAIR and QIR Changes.

Example of how a Quarterly Index Review is reflected in the ACE File:

1	3	4	17	18	22	23	24	25	34	35
Status	Effective Date	Last updated date	Event type	Event description	Current Index number of shares	New Index number of shares	Current Closing number of shares	New Closing number of shares	Current FIF	New FIF
CONFIRMED	20090302	20090212	QIR	Semi-Annual / Quarterly Index Review	325336000	326068000	325336000	326068000	0.9	0.8

Extract of the most relevant fields for a Quarterly Index Review change from ACE File of February 12, 2009.

- Change in the Number of Shares and Foreign Inclusion Factor (FIF) to be implemented as part of the QIR on March 2, 2009.
- The number of shares is increased and the Foreign Inclusion Factor (FIF) is decreased as of the close of February 27, 2009 (effective March 2, 2009).
- If the QIR results are announced on February 11, 2009, the changes will be available in the ACE Files on February 12, 2009 (Last updated date column).

4.2.2 Corrections to Semi-Annual and Quarterly Index Reviews following a Corporate Event

Since MSCI Barra announces the results of the SAIR and QIR in advance, there may be a corporate event affecting a constituent with changes announced for the SAIR/QIR that is effective between the announcement date and the effective date of the SAIR/QIR. In this case, MSCI Barra will correct the SAIR/QIR changes to reflect also the changes resulting from the corporate event.

If no corporate events are effective between the announcement date and the effective date of a SAIR/QIR, no corrections will be implemented.

See the following examples for SAIR and QIR changes and corrections.

Example of how a Correction to the Quarterly Index Review following a Public Offering is reflected in the ACE File (event's effective date is before the QIR effective date):

- The following Public Offering is effective between the announcement of results and the QIR effective date. As a result, the changes reflected in the previous example of a QIR will be updated to reflect the implementation of the Public Offering.

Extract of relevant fields of Public Offering from Ace File

1	3	4	17	18	20	22	23	24	25	34	35
Status	Effective Date	Last updated date	Event type	Event description	Terms	Current Index number of shares	New Index number of shares	Current Closing number of shares	New Closing number of shares	Current FIF	New FIF
CONFIRMED	20090225	20090220	PUB_OFF	Public offer to institutions	Publpl 77,000,000 @ CAD 4.55 (+UPDATE)	325336000	402506000	325336000	402506000	0.9	0.95

- The Public Offering is effective prior to the QIR effective date. Therefore, the correction to the QIR changes will include the changes implemented in the Public Offering and the "Current" and "New" fields will be updated. See the example below for how the updated QIR changes will look in the ACE File.

Extract of relevant fields of Corrected QIR change

1	3	4	17	18	19	22	23	24	25	34	35
Status	Effective Date	Last updated date	Event type	Event description	Correction comment	Current Index number of shares	New Index number of shares	Current Closing number of shares	New Closing number of shares	Current FIF	New FIF
CORRECTION	20090302	20090220	QIR	Semi-Annual / Quarterly Index Review	Correction of the February 2009 Quarterly Index Review following Public Offering.	402506000	40250600	402506000	402506000	0.95	0.95

Example of how a Correction to the Quarterly Index Review following a Public Offering is reflected in the ACE File (event's effective date coincides with the QIR effective date):

- The following Public Offering has an effective date coinciding with the QIR effective date. As a result, the changes reflected in the previous example of a QIR will be updated to reflect the implementation of the Public Offering.

Extract of relevant fields of Public Offering from Ace File

1	3	4	17	18	20	22	23	24	25	34	35
Status	Effective Date	Last updated date	Event type	Event description	Terms	Current Index number of shares	New Index number of shares	Current Closing number of shares	New Closing number of shares	Current FIF	New FIF
CONFIRMED	20090302	20090225	PUB_OFF	Public offer to institutions	PubIpl 77,000,000 @ CAD 4.55 (+UPDATE)	325336000	402506000	325336000	402506000	0.9	0.95

- The Public Offering is effective on the QIR effective date. Therefore, the correction to the QIR changes will reflect the same changes implemented in the Public Offering and only the "New" fields will be updated. See the example below for how the updated QIR changes will look in the ACE File.

Extract of relevant fields of Corrected QIR change

1	3	4	17	18	19	22	23	24	25	34	35
Status	Effective Date	Last updated date	Event type	Event description	Correction comment	Current Index number of shares	New Index number of shares	Current Closing number of shares	New Closing number of shares	Current FIF	New FIF
CORRECTION	20090302	20090225	QIR	Semi-Annual / Quarterly Index Review	Correction of the February 2009 Quarterly Index Review following Public Offering.	325336000	402506000	325336000	402506000	0.9	0.95

Example of how a Correction to the Quarterly Index Review following a Stock Dividend is reflected in the ACE File (event's effective date is before the QIR effective date):

- The following Stock Dividend is effective between the announcement of results and the QIR effective date. As a result the changes reflected in the previous example of a QIR will be adjusted to reflect the implementation of the Stock Dividend.

Extract of relevant fields of Stock Dividend from Ace File

1	3	4	17	18	20	22	23	24	25	26	27	34	35
Status	Effective Date	Last updated date	Event type	Event description	Terms	Current Index number of shares	New Index number of shares	Current Closing number of shares	New Closing number of shares	PAF Formula	PAF	Current FIF	New FIF
CONFIRMED	20090225	20090220	STK_DIV	Stock dividend / Bonus	S 1 : 1	325336000	325336000	32536000	650672000	[1 + 1] / [1]	2	0.9	0.9

- The Stock Dividend has an effective date prior to the QIR date. Therefore, the correction to the QIR will adjust the changes announced for the QIR by the terms of the stock dividend. The "Current" and "New" fields will be updated. See the example below for the updated QIR changes.

Extract of relevant fields of Corrected QIR change

1	3	4	17	18	19	22	23	24	25	34	35
Status	Effective Date	Last updated date	Event type	Event description	Correction comment	Current Index number of shares	New Index number of shares	Current Closing number of shares	New Closing number of shares	Current FIF	New FIF
CORRECTION	20090302	20090220	QIR	Semi-Annual / Quarterly Index Review	Correction of the February 2009 Quarterly Index Review following Stock Dividend.	650672000	652136000	650672000	652136000	0.9	0.8

Example of how a Correction to the Quarterly Index Review following a Stock Dividend is reflected in the ACE File (event's effective date coincides with the QIR effective date):

- The following Stock Dividend has an ex-date coinciding with the QIR effective date. As stated in the MSCI Corporate Events Methodology book, corporate events such as stock dividends require a price adjustment factor (PAF); the PAF is applied on the ex-date and the number of shares is increased as of the close of the ex-date.

Extract of relevant fields of Stock Dividend from Ace File

1	3	4	17	18	20	22	23	24	25	26	27	34	35
Status	Effective Date	Last updated date	Event type	Event description	Terms	Current Index number of shares	New Index number of shares	Current Closing number of shares	New Closing number of shares	PAF Formula	PAF	Current FIF	New FIF
CONFIRMED	20090225	20090220	STK_DIV	Stock dividend / Bonus	S 1 : 1	325336000	326068000	32536000	652136000	[1 + 1] / [1]	2	0.9	0.8

- Since the Stock Dividend is effective on the QIR effective date, on the effective date a PAF will be applied to the price of the security, and the QIR changes will already be effective on this date, as a result no correction will be necessary to the QIR.
- The number of shares will change as of the close of the effective date. The new number of shares resulting from the stock dividend will be based on the shares resulting from the QIR adjusted by the terms of the stock dividend. The "New Index Number of Shares" (#23) reflects the QIR number of shares and the "New Closing Number of shares" (#25) reflects the stock dividend number of shares.

4.3 Global Industry Classification Standards (GICS) Changes

MSCI Barra announces GICS changes twice a month, the first announcement being made on the first US business day of the month and the second one being made at least ten US business days prior to the last US business day of the month.

All GICS changes announced in a given month will be implemented as of the close of the last US business day of the month.

All GICS changes will be available in the ACE File starting from the first business day following the official announcement of the changes. See the example below.

1	3	17	22	23	24	25	30	31	32	33
Status	Effective Date	Event type	Current Index number of shares	New Index number of shares	Current Closing number of shares	New Closing number of shares	Current GICS sub-industry code	New GICS sub-industry code	Current GICS sub-industry name	New GICS sub-industry name
CONFIRMED	20090302	GICS	74431993	74431993	74431993	74431993	25201050	25201040	Housewares & Specialties	Household Appliances

- GICS change effective on March 2, 2009.

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