MSCI CORPORATE EVENTS METHODOLOGY

Guiding Principles and Methodology for Corporate Events Implementation in the MSCI Equity Indexes

August 2016

CONTENTS

1 Introduction 4
2 Mergers & Acquisitions (M&As) 7
2.1 Merger and acquisitions via mutual agreement 7
2.2 Tender offers 9
2.3 Acquisitions of Unlisted Securities 12
2.4 Partial tender offers and buyback offers 13
2.5 Conversions of Share Classes 14
2.6 Pro Forma Float Calculation for M&As 14
2.7 Spin-Offs 15
2.8 Historical Links and PAFs 17
3 Corporate Actions 19
3.1 Splits / Reverse Splits /Consolidations 19
3.2 Stock Dividends / Bonus Issues 19
3.3 Capital Repayments 21
3.4 Special Cash Dividends 21
3.5 Optional Dividends 22
3.6 Rights Issues 23
3.7 Redemptions 27
4 Other Events Resulting in Changes in Number of Shares and FIFs and/or DIFs 28
4.1 Share Placements and Offerings 28
4.2 Debt-to-Equity Swaps 32
5 Suspensions, Bankruptcies and Delistings 33
5.1 Suspensions 33
5.2 Bankruptcies 34

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

5.3 Delistings from primary exchange 34
6 IPOs and Other Early Inclusions 36
7 Share freeze 38
8 General Announcement Policy for Corporate Events 39
8.1 Client Announcements 39
8.2 Public Announcements 40
Appendix I: PAF Formulas and Definitions 43
Appendix II: Implementation Dates for Corporate Events 48
Appendix III: Clarification Regarding Effective Dates in Index email Announcements 49
Appendix IV: Corporate Events Occurring on Sundays 50
Appendix V: Guidelines Concerning Implementation of Partial Tender Offers 51
Appendix VI: Announcement Status and Timing 53
Appendix VII: Additional Corporate Events Rules Applying to the MSCI Global Investable Market Indexes 54

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

1 INTRODUCTION

This methodology book provides an exhaustive description of the rules and guidelines followed by MSCI for construction and maintenance of the MSCI Global Investable Market Indexes. Any exceptions to these rules are reviewed and approved by the MSCI Equity Index Committee and are publically announced in advance of the implementation.

This methodology book focuses on the implementation of corporate events affecting securities across all the MSCI Equity Indexes and products. While each MSCI Index has its own separate index construction and maintenance methodology, MSCI endeavors to develop and maintain a set of corporate event implementation rules that are as generic as possible and that can apply to any equity security included in the MSCI universe, regardless of the specific indexes or products the security may belong to. Unless otherwise stated, the policies and guidelines apply therefore to all securities in the MSCI universe.

MSCI strives to maintain all companies and securities in its Equity Indexes and products with the objective of reflecting, on a timely basis, the evolution of the underlying equity markets. In maintaining the MSCI Equity Indexes, MSCI adheres to the guiding principles set forth in the MSCI Equity Indexes Methodology Books, including the consistent application of its methodology over time, across regions, and for developed, emerging and frontier markets alike. Of particular relevance in the design and maintenance of MSCI's Corporate Events Methodology are the principles of replicability, consistency, continuity and minimizing turnover. These principles imply that the perspective of portfolios replicating the various indexes must systematically be taken into account in the implementation of each corporate event. In particular the consistency of approach should ensure that similar events should as much as possible be given the same treatment and hence facilitate predictability of changes. Also, no unnecessary turnover should result from the implementation of corporate events. Obviously, some corporate events are very complex with many considerations coming into play, and there is a fine balance to be found between potentially conflicting implications of the various objectives, for example, when the complete information is not available until after the event, or when the event involves companies trading in different time zones. In order to provide transparency and predictability to the marketplace in all cases, MSCI not only publishes general maintenance policies and detailed guidelines for the implementation of corporate events, but has also instituted a policy of announcing all changes to its Equity Indexes resulting from all corporate events in advance of implementing such changes.

When a corporate event affects securities from different size segments, countries or regions leading to several possible implementations, MSCI adopts the most global point of view to implement the event, provided that at least one security involved in the event is a constituent of the MSCI Indexes. For example, in the case of a cross-border merger, MSCI

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

uses the perspective minimizing the turnover of the MSCI ACWI for the event implementation decision. Similarly, in the case of an acquisition between different size segments, MSCI generally adopts an Investable Market Indexes (IMI) perspective.

MSCI reserves the right to use a different approach when appropriate. Any implementation decisions related to such cases are announced to clients prior to the change becoming effective in the MSCI Equity Indexes.

Changes resulting from corporate events involve many aspects, including additions, deletions, changes in number of shares (NOS), changes in industry classification, and changes in Foreign Inclusion Factors (FIFs) and/or Domestic Inclusion Factors (DIFs) as a result of updated free float estimates. As a general policy, changes resulting from corporate events are implemented in the MSCI Equity Indexes as they occur simultaneously with the event. In addition, changes in number of shares are consistently coordinated with changes in FIFs and/or DIFs to accurately reflect the investability of the underlying securities. Changes resulting from corporate events that could not be implemented on or near the effective dates, and where no Price Adjustment Factor (PAF) is necessary, are implemented at the following regularly scheduled Index Review. Examples of such corporate events include private placements and secondary offerings.

As outlined in the MSCI Index Calculation Methodology, the MSCI Equity Indexes are calculated using the Laspeyres' concept of a weighted arithmetic average together with the concept of chain-linking.

For certain corporate events, MSCI applies a PAF at the security level in order to neutralize (at least partially) the price movement due to the event and keep only the price performance in the index due to real market movement. This is done (as per the Laspeyres' concept) to enable comparison with the previous day's price. Consequently, for such events, changes in number of shares and FIF, if any, are reflected one day after the PAF is applied.

Overall, the corporate events methodology can be described in four broad categories:

- Mergers and Acquisitions (M&As) and Spin-offs
- Corporate Actions
- Other Events Resulting in Changes in Number of Shares and FIFs and/or DIFs
- Suspensions, Delistings and Bankruptcies

Certain specific aspects of MSCI's Corporate Events Methodology are treated in appendices at the end of this Methodology Book.

The policies and guidelines set forth apply in most corporate events cases. For corporate events not described in this Methodology Book or combinations of different types of

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

corporate events and other exceptional cases, MSCI reserves the right to determine the most appropriate implementation method and announces it prior to the changes becoming effective in the MSCI Equity Indexes.

Throughout this document, when there is country specific treatment, MSCI refers to the country of listing of the concerned securities. However, in the Optional Dividends section, MSCI refers to the country of classification of the concerned securities based on what the companies announce as a dividend.

In addition, in this document the following abbreviations apply: FIF: Foreign Inclusion Factor, DIF: Domestic Inclusion Factor, PAF: Price Adjustment Factor. For other terms, definitions and abbreviations, see Appendix I, entitled “PAF Formulas and Definitions” and Appendix II, entitled “Implementation Dates for Corporate Events”.

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

2 MERGERS & ACQUISITIONS (M&AS)

Mergers and acquisitions are the combination of two or more companies achieved through a mutual agreement or through a tender offer. They can be structured in a wide variety of ways with unique characteristics and complexities. In a merger, the merging entities cease to exist and a new entity is created, while in an acquisition, the acquiror takes over the controlling interest in the acquired company. In the large majority of cases, the target subsequently ceases to exist as an independent entity.

NOTE: If a previously announced merger or acquisition that resulted in a security deletion from an index is subsequently cancelled, the deleted security is not immediately reinstated in the index. The security will be reconsidered for index inclusion at the next regularly scheduled Index Review.

NOTE: For acquisitions involving cash only, MSCI will delay the implementation of the event when an MSCI announcement would be sent with less than approximately three hours' notification to clients.
For acquisitions involving stock (cash and stock or stock only) where delisting notices are announced with less than approximately one business day advance notification, MSCI delays the implementation and keeps the target in the index for one additional day.

2.1 MERGER AND ACQUISITIONS VIA MUTUAL AGREEMENT

2.1.1 IMPLEMENTATION TIMING

MSCI implements mergers and acquisitions executed via mutual agreement as of the close of the last trading day of the acquired entity or the merged entities. This occurs whether the securities involved in the event are index constituents or non-index constituents and under the assumption that all necessary information is available prior to the completion of the event and provided the liquidity of the relevant constituent(s) is not expected to be significantly reduced on the day of implementation. For M&As where the completion of the deal is conditional upon the resolution of pending shareholders' legal action, MSCI will wait until no legal action is pending before confirming the deletion of the target company.

2.1.2 DELETION PRICE

Target securities are deleted from the MSCI Indexes at their closing market prices.
When the target security in an acquisition has ceased trading prior to its deletion in the MSCI Indexes, MSCI will maintain the target security at its last traded price and subsequently delete the target security at a price that reflects the terms of the relevant deal. The terms,

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

for acquisitions that involve shares or a combination of cash and shares as consideration, will be calculated based on the terms of the acquisition and the market price of the acquirer.

2.1.3 ANNOUNCEMENT POLICY

For acquisitions executed via mutual agreement, MSCI will send an announcement with an "Undetermined" status with sufficient advance notification. An "Expected" announcement is sent with ten full business days of advance notification. A "Confirmed" announcement is sent at least two full business days before the effective date of the implementation.

In a situation where new information is made publicly available and captured by MSCI after the "Confirmed" announcement has been sent, and this information would change the outcome and/or the likelihood of the acquisition to occur, MSCI may proceed with the implementation as was announced as part of the "Confirmed" notification. This is notably relevant in the situation where a reversal of announced implementation would be provided with too short a notification period to clients.

2.1.4 US SPECIFIC TREATMENT

For US acquisitions (where the target has an MSCI country of classification of the USA), executed via mutual agreement and where only a shareholders' meeting approval is pending for deal completion, the resulting changes will be implemented in the MSCI Indexes as of the close of the shareholders' meeting date. Two full business days advance notification will be given for implementation.

For US acquisitions executed via mutual agreement, and where other regulatory approvals are still pending for deal completion, event implementation will occur with two full business days advance notification either:

- when the transaction is deemed unconditional based on the factors noted below
- or, if it is uncertain, when there is an official announcement pertaining to the completion of the transaction or to the delisting of the target security.

If the delisting notification is published late (for example, during the last trading day), MSCI will delay the event implementation and keep the target security in the index for one additional day or more in order to give clients sufficient advance notification.

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

The main factors (not in order of importance) MSCI considers when determining whether a transaction can be deemed unconditional are:

- the required level of acceptance at a general shareholders meeting
- the major shareholders' stated intention whether to vote in favor of the transaction
- the existence of pending regulatory approvals and legal actions
- expected delisting date
- the market perception of the transaction
- additional conditions for the offer to be completed
- pending legal and/or financing conditions

For US Acquisitions executed via agreement, MSCI sends an announcement with an "Undetermined" status with sufficient advance notification. A "Confirmed" announcement is sent at least two full business days before the effective date of the implementation.

2.1.5 CANADA SPECIFIC TREATMENT

For Canadian acquisitions (where the target has an MSCI country of classification of Canada), executed via mutual agreement

MSCI waits for the actual delisting notice provided by the stock exchanges to implement the deletions of securities. To enhance the announcement process, MSCI estimates an expected deletion date using the expected completion date of the event as announced in companies' press releases, if available. To estimate the expected deletion date, MSCI adds 3 business days to the announced expected event completion date. The expected deletion date from the MSCI indexes for the target company is announced with an "Expected" status and once the delisting date is announced by the Toronto Stock Exchange (TSX), it will be used to announce the event under a status of "Confirmed".

2.2 TENDER OFFERS

2.2.1 DEFINITION

Tender offers are offers to buy shares of a company, in many cases at a premium above the shares' market price for cash and/or stock, with the objective of taking control of the acquired company.

A tender offer may be a result of friendly negotiations or may be unsolicited and possibly hostile.

When an acquirer offers cash to acquire a target company in a tender offer there is no change made to the acquirer.

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

When an acquiror offers new shares to acquire a target company in a tender offer, the changes in NOS and FIF of the acquirer are implemented simultaneously with the deletion of the target. Pending NOS and/or free float changes, if any, are implemented simultaneously with the event. In addition, a size review may be performed for the acquirer security. For more information on size reviews, please refer to section 3.3.3.2 of the MSCI GIMI methodology.

2.2.2 FACTORS CONSIDERED TO ASSESS THE LIKELIHOOD OF TENDER OFFER SUCCESS

The main factors considered by MSCI when assessing the outcome of a tender offer (not in order of importance) are:

- the announcement of the offer as friendly or hostile
- a comparison of the offer price to the acquired security's market price
- the recommendation by the acquired company's board of directors
- the major shareholders' stated intention whether to tender their shares
- the required level of acceptance of shares tendered
- the existence of pending regulatory approvals and/or legal actions
- the market perception of the transaction, official preliminary results if any, and other additional conditions for the offer.

2.2.3 DELETION TIMING

In hostile tender offers, MSCI systematically waits for the results of the tender offer to be publicly announced before making any related changes to the MSCI Indexes.

In friendly tender offers, the acquired or merging security is deleted from the MSCI Indexes:

- At the end of the initial offer period, when the offer is likely to be successful and / or if the free float of the security is likely to be decreased below 0.15[1] (this rule is applicable even if the offer is extended), or
- If the offer's outcome is uncertain, after the results of the offer have been officially communicated and the security's free float has decreased below 0.15.

In certain cases, securities are deleted earlier or using a different date than the last offer day. For example:

- In the case of tender offers in the United Kingdom, a security is deleted two business days after the offer is declared unconditional in all respects.

[1] Except for Standard Index constituents, which are maintained if their float-adjusted market capitalizations after the event are above 2/3rds of 1.8 times one half of the Standard Index Interim Size-Segment Cut-off

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

- In the case of tender offers in Brazil, a security is deleted as of the close of the auction date as announced by the Bovespa Stock Exchange.
- In the case of tender offers in countries where the offer is automatically extended in case of a successful initial offer period, such as in Germany, for example, MSCI decides to wait for the end of the initial offer period. Such a decision is announced before the end of the initial offer period.

If a security is deleted from an index, the security is not reinstated immediately after its deletion even when the tender offer is subsequently declared unsuccessful and/or the free float of the security is not substantially reduced. The security will be reconsidered for index inclusion at the next regularly scheduled Index Review.

2.2.4 DELETION PRICE

MSCI uses market prices for implementation, unless stated otherwise. See section 2.1.2 for more details.

2.2.5 ANNOUNCEMENT POLICY

MSCI reflects hostile tender offers once they are launched using an "Undetermined" announcement status, except when the target has an MSCI country of classification of the USA, where hostile tender offers are reflected using an "Acknowledge" announcement status. Once the results of the hostile tender offer have been announced, MSCI will send a "Confirmed" announcement with two full business days of advance notification before implementing any changes.
For friendly tender offers, MSCI sends an announcement with an "Undetermined" status with sufficient advance notification. A "Confirmed" announcement is sent at least two full business days before the effective date of the implementation.
In a situation where new information is made publicly available and captured by MSCI after the "Confirmed" announcement has been sent, and this information would change the outcome and/or the likelihood of the acquisition to occur, MSCI may proceed with the implementation as was announced as part of the "Confirmed" notification. This is notably relevant in the situation where a reversal of announced implementation would be provided with too short a notification period to clients.

2.2.6 M&AS WITH SUSPENSION PERIODS

M&As that encompass a suspension period prior to the listing of the post-event entity are also implemented as of the close of the last trading day using market prices and prior to the suspension of the merging entities. During the suspension period, the merged entity is

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

maintained with a calculated price based on the market price of one of the merging entities and the terms of the transaction.

2.2.7 CROSS BORDER M&AS

Cross-border M&As involving companies trading in different countries or for which necessary information (such as confirmation of the date of completion, last regulatory approvals, etc.) is lacking prior to the event's completion, can be implemented as of the close of the first trading day of the post-event entity or can lead to delay the products delivery. In these cases, MSCI uses a calculated price for the acquired or merging entities, based on the terms of the transaction, the price of the acquiring or merged entity and the foreign exchange rates, if applicable. When this is not possible, MSCI carries forward the market price for the acquired or merging entities for one additional business day.

2.3 ACQUISITIONS OF UNLISTED SECURITIES

Changes to a security resulting from large acquisition of non-listed companies or assets are implemented at the next regularly scheduled Index Review following the completion of the event and listing of the newly issued shares.

2.3.1 ACQUISITIONS OF LISTED NON-INDEX CONSTITUENTS SECURITIES

Increases in a security's number of shares resulting from the acquisition of listed non-index constituent securities representing at least 5% of the security's number of shares are implemented as of the close of the last trading day of the acquired entity if all necessary information is available prior to the completion of the event or if such information is not available prior to the completion of the event, as soon as practicable following the completion of the event. Changes representing less than 5% of the security's number of shares are implemented at the next regularly scheduled Index Review following the completion of the event.

2.3.2 ACQUISITIONS OF INDEX CONSTITUENTS SECURITIES BY LISTED NON-INDEX CONSTITUENTS SECURITIES

Listed non-index constituents acquiring index constituents with newly issued shares or via exchange of shares are generally considered for immediate inclusion in the MSCI Indexes at the time of the event. For further details related to constituents of the MSCI Global Investable Market Indexes (GIMI), please refer to section 3.3.3.3 of the MSCI GIMI methodology.

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

2.4 PARTIAL TENDER OFFERS AND BUYBACK OFFERS

MSCI defines partial tender offers as the acquisitions of a predefined portion of a company's shares through shares and/or cash, or as share buy-backs that are carried out by means of an offer.

Share buy-backs that are only offered to shareholders that abstain and/or vote against an event are not considered an event as the buy-back is only open to select shareholders. No adjustment is applied to the security in such cases.

2.4.1 FIXED PRICE OFFER

For fixed price partial tender offers opened for a pre-determined period, where the offer price (or the terms) is announced prior to the acceptance period, a Price Adjustment Factor (PAF) is applied on the ex-date of the offer. In cases where the ex-date is not available, the PAF is applied on the first business day after the end of the offer.

Any changes in the number of shares and subsequent FIF and/or DIF changes are implemented, with sufficient advance notice, after the results of the offer have been officially communicated. MSCI implements changes in the number of shares and subsequent FIF and/or DIF changes with sufficient advance notice, after the results have been officially communicated, regardless whether or not the calculated PAF is 1.

Withholding taxes, if any, are considered in the calculation of the MSCI Net Daily Total Return (DTR) Indexes provided the PAF applied on the ex-date has a value different than 1 and that sufficient information is available publicly in advance. In such cases, MSCI reinvests a negative amount corresponding to the withholding tax in the MSCI Net DTR Indexes only. This negative reinvestment is reflected simultaneously with the PAF on the ex-date of the partial tender offer.

For further details on the MSCI policy on Partial Tender Offers, especially on the PAF, see Appendix V, entitled "Guidelines Concerning Implementation of Partial Tender Offers".

2.4.2 DUTCH AUCTION OFFER

For Dutch Auctions, where the offer price and the acquired number of shares are announced after the end of the offer, MSCI implements changes in the number of shares and subsequent FIF and/or DIF changes, with sufficient advance notice, after the results have been officially communicated, provided that the number of shares is above 5%.

No PAF is applied on the ex-date of the offer, as the offer price is unknown prior to the offer taking place. Changes in the number of shares less than 5% are implemented at the following regularly scheduled Index Review.

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

2.5 CONVERSIONS OF SHARE CLASSES

Conversions of a share class into another share class resulting in the deletion and/or addition of one or more classes of shares are implemented as of the close of the last trading day of the share class to be converted.

For China securities, conversions of China B shares into China H shares are implemented as of the close of the second trading day of the China H shares instead of the last trading day of the China B shares in order to provide enough advance notice for implementation considering that the B and H shares are listed on different exchanges.

Conversion of a non-index constituent share class or an unlisted line of shares which has an impact on index constituents are generally implemented as part of the next regularly scheduled Index Review following the completion of the event.

2.6 PRO FORMA FLOAT CALCULATION FOR M&AS

The post-event free float of an entity resulting from an M&A is estimated on a pro forma basis, unless the actual post-event free float is available prior to implementation. Resulting changes in FIFs and/or DIFs are implemented simultaneously. Pending float changes, if any, are implemented simultaneously with the event.

When subsequent public disclosure is made by the company, regarding the new shareholder structure following the event, and results in a significantly different free float estimation than that calculated at the time of the event, MSCI will update the FIFs and/or DIFs at the following regularly scheduled Index Review.

2.6.1 PRO FORMA FLOAT CALCULATIONS FOR M&AS

2.6.1.1 CASH M&A TRANSACTIONS

Cash M&A transactions have no impact on the free float of the securities of the acquiring company, as no new shares are issued.

2.6.1.2 STOCK-FOR-STOCK M&A TRANSACTIONS

In stock-for-stock M&A transactions, the pro forma free float of the securities of the acquiring or merged entity is calculated as a weighted average of the free float of the shares of the pre-event entities.

2.6.1.3 STOCK AND CASH M&A TRANSACTIONS

In M&A transactions involving cash and stock, the pro-forma free float of the securities of the acquiring or merged entity is calculated based on the information provided by the

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

company indicating which shareholders will be receiving newly issued shares. If this information is unavailable, then the resulting pro-forma free float is calculated as a weighted average of the free float of the shares of the pre merging entities.

2.6.2 PRO FORMA FLOAT CALCULATIONS FOR PARTIAL TENDER OFFERS

2.6.2.1 PARTIAL ACQUISITIONS

The post-event free float of a partially acquired security is reduced by an amount corresponding to the percentage of free float shares that are acquired.

2.6.2.2 SHARE BUY-BACKS

For share buy-backs carried out by means of an offer, MSCI assumes that all shareholders participate in the share buy-back on a pro rata basis, and as such, the post-event free float of the security does not change. When, based on publicly available information, there are shareholders that will not participate in the share buy-back, this information is taken into account to determine the post-event free float.

2.7 SPIN-OFFS

A spin-off is the distribution of shares in a wholly-owned or a partially-owned company to the parent company's existing shareholders. In some countries, spin-offs are referred to as demergers or unbundlings.

2.7.1 TREATMENT WHEN SPUN OFF TRADES ON EX-DATE

On the ex-date of a spin-off, a PAF is applied to the price of the security of the parent company. The PAF is calculated based on the terms of the transaction and the market price of the spun-off security. If the spun-off entity qualifies for inclusion, it is included as of the close of its first trading day.

In cases, where the distribution of the spun-off is subject to a withholding tax, MSCI reinvests a negative cash amount in the MSCI Net DTR Indexes on the ex-date.

In order to decide whether the spun-off entity qualifies for inclusion, the full company market capitalization of the spun-off entity is estimated by MSCI prior to the spin-off being effective. These estimates are based on public information provided by the parent company, including amongst others the spin-off prospectus, and estimates from brokers.

In cases of spin-offs of partially-owned companies, the post-event free float of the spun-off entity is calculated using a weighted average of the existing shares and the spun-off shares, each at their corresponding free float. Any resulting changes to FIFs and/or DIFs are implemented as of the close of the ex-date.

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

If the spun-off security is trading on a conditional basis or with an “as-if-and-when-issued” price instead of regular way on the ex-date, MSCI uses this “when-issued” price in its implementation of the spin off on the ex-date, for example in its PAF and its estimation of the market capitalization of the spun-off. In addition, MSCI may add the spun-off security in the MSCI Indexes, provided it qualifies for inclusion, using the “when-issued” prices and then the regular price.

When the distribution date or pay date of the spin-off is a few weeks away from the ex-date, shareholders do not receive the shares of the spun off entity on the ex-date, even if the spun off is trading on that day. In this situation, MSCI may decide to add a “detached” security in the MSCI Indexes until the distribution date. Further information on the use of a “detached” security is given in sub-section 2.6.2.

For further details on PAFs for spin-offs, see Appendix I, entitled “PAF Formulas and Definitions”.

2.7.2 SPUN-OFF NOT TRADING ON THE EX-DATE

When the spun-off security does not trade on the ex-date, a PAF is applied to the price of the parent entity and a "detached" security is created to avoid a drop in the free float-adjusted market capitalization of the parent entity, regardless of whether the spun-off security is added or not. The detached security is included in the MSCI Indexes as of the close of the ex-date and is maintained until the spun-off security begins trading. The value of the detached security is equal to the difference between the cum price and the ex price of the parent security.

The treatment of the spun off entity remains the same as under the section 2.6.1.

In certain cases where the spun off security is not trading on the ex-date and its market capitalization is estimated to be very small or there is a risk that the market price of the parent entity could potentially increase on the ex-date, the impact of the event on the parent security’s market capitalization may be considered as negligible. In those situations, as the detached security cannot have a negative value and to avoid neutralizing the performance of the parent entity on the ex-date of the event, MSCI may decide not to add the detached security. Instead, MSCI would apply a PAF of 1 to the market price of the parent entity on the ex-date of the event. In addition, the spun-off security, once it starts trading on the market, would not be included in the MSCI Indexes at the time of the event.

For further details on PAFs for spin-offs, see Appendix I, entitled “PAF Formulas and Definitions”.

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

2.8 HISTORICAL LINKS AND PAFS

2.8.1 MERGERS

In cases of mergers, MSCI links the price and volume history of one of the merging entities with the price of the newly merged entity.

The factors of continuation prevail with the merging entity, which will provide the price and volume history to the resulting entity. These factors of continuation include: relative market capitalization size, industry classification, domicile and previous index family status.

A PAF is applied on the first trading day of the merged entity to ensure that the price of the merged entity is comparable to the price of the merging entity. For mergers that encompass suspension periods, the PAF is applied on the first suspension day of the merged entity.

A PAF is required only when the terms of exchange are different from one for one. The PAF is based on the specific terms of the merger.

For further details on PAFs related to historical links, see Appendix I, entitled “PAF Formulas and Definitions”.

2.8.2 REVERSE SPINOFFS

In case of spinoff where the spun-off entity is a better continuation of the former parent entity, MSCI links the price history of the parent entity to the spun-off entity. Factors of continuation include: relative market capitalization size, industry classification, domicile and previous index family status.

When MSCI considers the spun-off entity as the continuation of the parent company, it is the spun-off entity which distributes the parent and therefore a PAF is applied to the market price of the spun-off security on the ex-date of the spin-off. The PAF is calculated based on the terms of the transaction and the market price of the parent company (considered to be the distributed asset).

When this occurs, MSCI will normally assign the market identifiers of the spun-off entity to the former parent entity on the ex-date of the event.

For further details on PAFs related to historical links, see Appendix I, entitled “PAF Formulas and Definitions”.

2.8.3 OTHER CASES

If appropriate, historical links to existing securities are also be made in cases of conversions of a share class into another share class.

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

For further details on PAFs related to historical links, see Appendix I, entitled “PAF Formulas and Definitions”.

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

3 CORPORATE ACTIONS

Corporate actions such as splits, stock dividends and rights issues, which affect the price of a security, require a price adjustment. PAFs are applied on the ex-date of the event to allow (as per the Laspeyres' concept) security prices to be comparable between the ex-date and the cum date. 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. Corporate actions that require a PAF are described below.

In general, corporate actions do not impact the free float of the securities because the distribution of new shares is carried out on a pro rata basis to all existing shareholders. Therefore, MSCI does not implement any pending number of shares and/or free float updates simultaneously with the event.

If a security does not trade for any reason on the ex-date of the corporate action, the event will be implemented on the day the security resumes trading.

For further details on PAF formulas for corporate actions, see Appendix I, entitled "PAF Formulas and Definitions".

3.1 SPLITS / REVERSE SPLITS /CONSOLIDATIONS

These events are characterized by a pro rata distribution of shares to shareholders, or a pro rata consolidation of shares held by existing shareholders. Market prices and number of shares of securities are adjusted accordingly. As no funds flow into or out of the company and its securities, the free float-adjusted market capitalization value remains unchanged.

3.2 STOCK DIVIDENDS / BONUS ISSUES

3.2.1 DISTRIBUTION OF NEW UNDERLYING SHARES

This event is characterized by a free distribution of new shares to existing shareholders on a pro rata basis. Market prices and number of shares of securities are adjusted accordingly. As no funds flow into or out of the company and its securities, the free float-adjusted market capitalization value remains unchanged.

In rare occasions, the shares distributed by the company are existing treasury shares. In such cases, the number of shares generally remains unchanged. However, depending on the size of the distribution, the free float of the company is reviewed and the FIF may be changed following the event. Pending NOS and/or float changes, if any, are not implemented simultaneously with the event.

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

In Taiwan, stock dividends can be distributed from capital surplus or retained earnings. The portion of stock dividends distributed from retained earnings is subject to the default withholding tax rate against the par value of each new share. The portion of stock dividends paid out of capital surplus is not subject to a withholding tax. In the event that stock dividends are distributed from retained earnings, to take into account this withholding tax in the MSCI Indexes, MSCI reinvests a negative amount corresponding to the withholding tax in the MSCI Net Daily Total Return (DTR) Indexes only. This negative reinvestment is reflected simultaneously with the PAF on the ex-date of the stock dividend. For more information about the treatment of withholding tax on Taiwanese stock dividends, please refer to the MSCI Index Calculation Methodology, Section 2: MSCI Daily Total Return (DTR) Index Methodology.

MSCI reserves the right to extend the treatment applicable for Taiwan stock dividends to other stock dividends with similar features in other countries.

In many cases, shares issued following stock dividends / bonus issues are entitled to forthcoming cash dividends paid by the company, however, in rare cases, the shares issued are not entitled to the forthcoming cash dividend. In cases where the shares issued are not entitled to the forthcoming dividend, if the cash dividend amount is known before the ex-date of the stock dividend and if the impact of the cash dividend is deemed significant, the market price of the security is adjusted with a PAF that takes into account the forthcoming cash dividend.

MSCI uses the gross amount of the cash dividend per share, as announced by the company, in the PAF calculation.

If the cash dividend amount is unknown at the time of the stock dividend's ex-date, then the market price of the security is adjusted with a PAF that does not take into account the forthcoming cash dividend (which is a PAF similar to the one applied in case of regular stock dividends).

3.2.2 DISTRIBUTION OF OTHER TYPES OF ASSETS

In the case of a distribution of other types of assets (e.g. bonds, warrants, preferred shares, shares in another company), the price of the underlying share is adjusted only when the value of the other asset is available on the ex-date. The number of underlying shares generally remains unchanged.

In case, the other asset distributed is unlisted or no market price of the other asset is available on the ex-date, MSCI applies a PAF of 1 on the ex-date.

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

3.3 CAPITAL REPAYMENTS

A capital repayment or a return of capital is characterized by a cash distribution from the company's share capital or capital surplus to its shareholders.

In the case of capital repayments that are deemed to be extraordinary compared to the dividend policy of the company or to the historical cash distributions, the price of the security is adjusted on the ex-date of the event. A Price Adjustment Factor (PAF) using the capital repayment amount is applied to the MSCI Price Indexes, the MSCI Gross DTR Indexes and the MSCI Net DTR Indexes.

Capital repayments, paid in lieu of a regular cash dividend or in line with the dividend policy of the company or with the historical cash distributions, are treated in the same manner as regular cash dividends paid out of retained earnings, and are therefore reinvested on their ex-date in the MSCI Daily Total Return (DTR) Indexes, regardless of their size. Provided that the capital repayment is not subject to withholding tax, the reinvestment in the DTR Indexes is free of withholding tax. For more information about the treatment of such "regular" capital repayments, please refer to MSCI Index Calculation Methodology, Section 2: MSCI Daily Total Return (DTR) Index Methodology.

In Taiwan, a cash distribution paid out of capital surplus is considered as regular unless specified by the company that the distribution is deemed to be extraordinary. The cash distribution is reinvested in the MSCI DTR Indexes. Regarding the withholding tax treatment, please refer to Sub-Section "Country Exceptions" under the Section "Withholding Tax" in the MSCI Index Calculation Methodology.

3.4 SPECIAL CASH DIVIDENDS

A special cash dividend is a distribution of cash made by a company to its shareholders. The funds are paid out of annual profits, capital and/or reserves.

Special cash dividends that are smaller than 5% of the cum market price of the underlying security are not adjusted on the ex-date, but are reinvested in the MSCI DTR Indexes.

Special dividends that are greater than or equal to 5% of the cum market price of the underlying security are adjusted on the ex-date. A Price Adjustment Factor (PAF) using the gross dividend amount is applied to the MSCI Price Indexes, the MSCI Gross DTR Indexes and the MSCI Net DTR Indexes.

For special cash dividends that are greater than or equal to 5% of the cum market price and subject to withholding taxes, MSCI reinvests a negative amount corresponding to the withholding tax in the MSCI Net DTR Indexes only. This negative amount is reflected simultaneously with the PAF on the ex-date of the special cash dividend. For more

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

information about the treatment of special dividends subject to withholding taxes, please refer to section 2.2.4 of the MSCI Index Calculation Methodology.

3.5 OPTIONAL DIVIDENDS

In the case of an optional dividend, the company offers shareholders the choice of receiving the dividend either in cash or in shares.

In the U.S., it is common practice that shareholders electing the cash option receive the dividend consideration in cash or shares, or some combination of cash and shares. In such cases, for dividend reinvestment purposes, MSCI assumes that investors elect the cash option, therefore the dividend is reinvested in the MSCI DTR Indexes and price adjustment is not necessary (if the dividend is less than 5% of the cum market price of the underlying security). In the event that shareholders electing the cash option receive the dividend distribution in shares, or a combination of cash and shares, MSCI will increase the number of shares accordingly after results have been officially communicated, with two full business days' notice.

In other countries, MSCI assumes that investors elect the default distribution.

When cash is the default option, MSCI reinvests the cash amount in the MSCI DTR Indexes on the ex-date and if some shareholders choose to take the stock option, when it is confirmed, the number of shares will be increased accordingly at the next regularly scheduled Index Review.

When stock is the default option, MSCI applies a Price Adjustment Factor (PAF) on the ex-date and increases the number of shares as of the close of the ex-date, similarly to a stock dividend. If some shareholders choose to take the cash option, when it is confirmed, the number of shares will be decreased accordingly at the next regularly scheduled Index Review. In such cases, the cash dividend amount option is not reinvested in the MSCI DTR Indexes, but is taken into account for the company's yield calculations.

If no default distribution is specified, MSCI assumes that investors elect the cash option and treats the dividend as a regular cash dividend in the MSCI DTR Indexes.

For optional dividends in Hong Kong and the Netherlands, in cases where stock is the default option, the stock ratio terms are not available prior to the ex-date, MSCI reinvests the cash option in the MSCI DTR Indexes.

Optional Dividends do not impact the free float of the securities because the distribution of new shares is assumed to be carried out on a pro rata basis to all existing shareholders.

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

3.6 RIGHTS ISSUES

In a rights issue, the company offers existing shareholders the right to purchase new shares, in many cases, at a cost below the current market price. Rights issues result in capital inflow, and increase both the number of shares and the free float-adjusted market capitalization of a security.

If a security does not trade for any reason on the ex-date of the rights issue, the event will be implemented on the day the security resumes trading.

MSCI applies a PAF to the market price of the security on the ex-date of a rights issue. The PAF applied depends on the market price of the security on the ex-date compared to the subscription price of the rights issue. The number of shares is increased as of the close of the ex-date, except for rights issues which are offered at a premium to the market price and which are not fully underwritten (see section 3.6.3 below). The decision whether or not to increase the number of shares of the security as of the close of the ex-date is announced and confirmed by MSCI before the ex-date based on current market prices, among other factors. In such cases, this decision will not be changed based on actual market prices on the ex-date.

For rights issues where the subscription price is not available prior to the ex-date of the event, MSCI applies a PAF of 1 on the ex-date of the event and waits for the results of the rights issue before implementing changes, if any, to the number of shares and / or FIF.

Most of the time, shares issued following rights issues are entitled to forthcoming dividends paid by the company, however, in certain cases, the shares issued are not entitled to the forthcoming dividend and the PAF applied to the security on the right issue's ex-date is different as explained below.

For rights issues made by Australian companies, it is a common practice for companies first to be suspended, then to release the rights issue terms, and then to announce when the company will resume trading. MSCI reflects the rights issue on the first day the securities of the company resume trading by adjusting the market prices and number of shares of securities, if the subscription price of the new shares is below the market price on that day (as described below under sections 3.6.1.1 and 3.6.2.1).

If the subscription price of the new shares is greater than the market price on the day the securities of the company resume trading, MSCI does not reflect the rights issue on that day (as described below under sections 3.6.1.2 and 3.6.2.2).

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

3.6.1 RIGHTS FOR NEW UNDERLYING SHARES WITH NORMAL DIVIDEND ENTITLEMENT

3.6.1.1 RIGHTS FOR NEW UNDERLYING SHARES (DISCOUNT TO MARKET PRICE)

A PAF is applied to the market price of the security on the ex-date of the rights issue if the subscription price of the new shares is below the market price on the ex-date.

3.6.1.2 RIGHTS FOR NEW UNDERLYING SHARES (PREMIUM TO MARKET PRICE)

If the subscription price of the new shares is greater than or equal to the market price on the ex-date, MSCI reflects the rights issue on the ex-date by applying a PAF of 1.

3.6.2 RIGHTS FOR NEW UNDERLYING SHARES NOT ENTITLED TO FORTHCOMING DIVIDEND

In the case of a rights issue where the new shares to be issued following the rights issue are not entitled to the forthcoming known dividend paid by the company, the market price of the security is adjusted with a PAF that takes into account the forthcoming dividend.

If the dividend amount is unknown at the time of the rights issue's ex-date, then the market price of the security is adjusted with a PAF that does not take into account the forthcoming dividend (which is a PAF similar to the one applied in case of rights issues where new shares are entitled to forthcoming dividend).

3.6.2.1 RIGHTS FOR NEW UNDERLYING SHARES NOT ENTITLED TO FORTHCOMING DIVIDEND (DISCOUNT TO MARKET PRICE)

A PAF is applied to the market price of the security on the ex-date of the rights issue if the subscription price of the new shares not entitled to the forthcoming dividend is below the market price on the ex-date minus the dividend per share, provided that the dividend amount is available. MSCI uses the gross amount of the dividend per share, as announced by the company, in the PAF calculation.

3.6.2.2 RIGHTS FOR NEW UNDERLYING SHARES NOT ENTITLED TO FORTHCOMING DIVIDEND (PREMIUM TO MARKET PRICE)

If the subscription price of the new shares not entitled to the forthcoming dividend is greater than or equal to the market price on the ex-date minus the dividend per share, MSCI reflects the rights issue on the ex-date by applying a PAF of 1.

For further details on PAF formulas, see Appendix I, entitled "PAF Formulas and Definitions".

For the dividend reinvestment in the MSCI Daily Total Return (DTR) Indexes on the dividend ex-date, MSCI reinvests the full dividend amount as announced by the company, using the

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

number of shares on the cum date which is the number of shares post-rights issue, according to the MSCI Index Calculation Methodology.

3.6.3 NUMBER OF SHARES, FIF AND/OR DIF CHANGES FOLLOWING RIGHTS FOR NEW UNDERLYING SHARES

In cases of rights of new underlying shares, the decision to increase or not increase the number of shares of the security as of the close of the ex-date is announced and confirmed by MSCI before the ex-date based on current market prices compared to the subscription price, among other factors. In such cases, this decision will generally not be changed based on actual market prices on the ex-date.

If the subscription price of the new shares is below the market price of the security at the time MSCI announces and confirms the implementation of a rights issue (rights issue offered at a discount to market price), the rights issue is assumed to be fully subscribed on a pro rata basis and the number of shares of the security is increased accordingly as of the close of the ex-date.

If the subscription price of the new shares is greater than or equal to the market price of the security at the time MSCI announces and confirms the implementation of a rights issue (rights issue offered at a premium to market price), the number of shares and the FIF and/or DIF of the security is not changed as of the close of the ex-date unless the rights issue is fully underwritten (see next paragraph). If the rights issue is not fully underwritten, any increase in the number of shares and potential changes in the FIF and/or DIF of the security are implemented after the results of the rights issue are made available, provided the number of shares increase is above 5%. Increases in the number of shares smaller than 5% are implemented at Index Review.

For rights issues which are fully underwritten, the securities' number of shares of the company making the right issue is increased as of the close of the ex-date, regardless if the rights issue is offered at a premium or discount to the market price.

For rights issues which are fully underwritten and are offered at a premium to market price, in case the underwriter is a government or a shareholder or group of shareholders of a strategic nature, the new shares issued following the rights issue are considered as non-free float and the securities' FIF and/or DIF of the company making the rights issue are adjusted at the time of the event. In case the underwriters are investment bankers and/or brokers, the new shares issued following the rights issue are considered on a pro rata basis.

For rights issues affecting a company with several classes of shares that are all index constituents and where they are all given the rights to subscribe to new shares for only one class of shares, MSCI reflects the change in the NOS and/or FIF/DIF at the time of the event.

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

For rights issues where one class of shares, not an index constituent, is given the right to subscribe to new shares of an index constituent class of shares, MSCI will defer the changes in NOS and/or in FIF/DIF coming from the non-index constituent class of shares to the next regularly scheduled Index Review following the completion of the event.

For example, a company with 2 classes of shares A and B, where A is an index constituent and B is not an index constituent, is doing a right issue where both A and B shares are given the right to subscribe to A shares only. MSCI implements the event by taking into consideration the rights given to holders of the A shares only. Changes in the NOS and/or FIF/DIF coming from the B shares holders participation in the rights issue will be implemented as part of the next regularly scheduled Index Review following the completion of the event.

3.6.4 RIGHTS FOR OTHER TYPES OF ASSETS

In the case of a rights issue entitling the purchase of assets other than the underlying share (e.g. bonds, warrants, preferred shares, shares in another company), the price of the underlying share is adjusted only if the other asset value or the value of the right is available on the ex-date. The number of underlying shares remains unchanged.

3.6.5 HIGHLY DILUTIVE OR LARGE RIGHTS ISSUES

MSCI defines highly dilutive or large rights Issues as rights issues with terms 5 for 1 or more or rights issues that trigger an upward size segment migration. The rights and subscription cash are added to the index for such rights issues.

If the rights trade on the ex-date, MSCI will use the market value for the price of the rights. Once the rights stop trading (at the end of the trading period), MSCI will carry forward the last traded market price of the rights and delete the rights using this last traded price as of the close of the pay-date (effective the next trading day).

However, if the rights do not trade, MSCI will use the intrinsic value for the price of the rights. Please refer to Appendix I for more details on the calculation of the intrinsic value of the rights.

The price of subscription cash will be equal to the subscription price of new shares in the rights issue.

Highly dilutive and large rights issues are implemented as below when the subscription price is below the market price:

- MSCI applies the PAF to the market price of the security on ex-date using the value of right.

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

- MSCI adds both the rights and subscription cash to the index as of the close of ex-date (effective next trading day).
- MSCI deletes both right and subscription cash from the index as of the close of pay-date (effective next trading day).
- MSCI increases NOS resulting from the rights issue as of the close of pay-date (effective next trading day).

MSCI defines pay-date as the first trading day of new shares resulting from the rights issue.

Rights and subscription cash are not added to the Index if the subscription price is equal to or above the market price at the time of confirming the event, even if the rights issue is fully underwritten. The changes in NOS and FIF, if any, are postponed to the pay-date and implemented after the results have been publicly communicated, but no earlier than the pay-date.

MSCI does not implement upward migrations within IMI resulting from rights issues at the time of the event but as per the above stated implementation. Migrations triggered by rights issues will be implemented on the cum date (ex-date -1) if all necessary information is publicly available with sufficient advance notice to allow MSCI to provide notice at least two business days prior to the migration becoming effective in the indexes. Otherwise, such migrations will coincide with the index review following the pay-date of the rights issue as per the regular index review rules as stated in the MSCI Global Investable Market Indexes methodology.

MSCI will cover only the securities belonging to IMI families as per the above implementation. For Micro cap constituents, MSCI applies a PAF to the market price of the security on ex-date using the value of rights if trading on ex-date and increases NOS as of close of ex-date.

3.7 REDEMPTIONS

Redemptions are characterized by a mandatory pro rata buy back of shares held by existing shareholders. The market price of the security is adjusted on the ex-date. The number of shares is decreased as of the close of the ex-date, accordingly. The post-event free float of the security does not change.

If the redemption is optional for the shareholders, MSCI treats the corporate event as a partial buyback. The market price of the security is adjusted on the ex-date similarly to partial tender offers (see Appendix V for details on the MSCI policy on Partial Tender Offers). The number of shares and free float of the security may change, whether the bought back shares are cancelled or kept as treasury by the company.

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

4 OTHER EVENTS RESULTING IN CHANGES IN NUMBER OF SHARES AND FIFS AND/OR DIFS

Changes in number of shares and subsequent FIF and/or DIF changes can also result from other events such as share placements and offerings, and debt-to-equity swaps.

4.1 SHARE PLACEMENTS AND OFFERINGS

MSCI differentiates between the following types of share placements and offerings:

- Primary equity offerings involve the issuance of new shares.
  - Public offering or public placement refers to issuance of new shares placed by underwriters to institutional or other non-strategic investors.
  - Primary private placements involves direct placement of new shares by one company to another company, an individual investor, or a group of investors. This direct placement of shares is generally accomplished without an underwriter.
- Secondary offerings or block sales do not involve issuance of new shares but involve the distribution of current shareholders' existing shares.

4.1.1 IMPLEMENTATION OF PRIMARY EQUITY OFFERINGS IN THE MSCI UNIVERSE

4.1.1.1 GENERAL TREATMENT

Changes in number of shares and FIF resulting from primary equity offerings representing at least 5% of the security's number of shares are implemented as of the close of the first trading day of the new shares, if all necessary information is available at that time. Otherwise, the event is implemented as soon as practicable after the relevant information is made available. Pending NOS and/or float changes, if any, are implemented simultaneously with the event.

Changes in number of shares and FIF resulting from primary equity offerings representing less than 5% of the security's number of shares are implemented at the next regularly scheduled Index Review following the completion of the event.

For securities included in the MSCI Micro Cap Indexes only, changes in Number of Shares (NOS) and FIF resulting from primary equity offerings representing at least 25% of the security's NOS are implemented as of the close of the first trading day of the new shares, if all necessary information is available at that time. Otherwise, these offerings are implemented as soon as practicable after the relevant information is made available.

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

Changes in NOS and FIF resulting from primary equity offerings representing less than 25% of the security's number of shares are implemented at the next regularly scheduled Index Review following the completion of the offering.

4.1.1.2 COUNTRY SPECIFICS

For US securities, increases in NOS and/or changes in FIF and/or DIF resulting from primary equity offerings representing at least 5% (25% for Micro Caps) of the security's number of shares are announced at the end of day they are priced through an SEC filing or a press release from the Company and implemented with two full business days advance notification.

For primary and secondary equity offerings priced simultaneously, both events are implemented with two full business days advance notification if either the primary or secondary equity offering represents at least 5% (25% for Micro Caps) of the security's number of shares.

For forward sale agreements, in which there is no issuance of new shares until the forward sale settlement, changes in the number of shares are generally implemented at the time of the next regularly scheduled Index Review following the forward sale settlement.

For Latin American and Canadian securities, increases in number of shares and changes in FIF and/or DIF resulting from primary equity offerings representing at least 5% (25% for Micro Caps) of the security's number of shares are implemented on the settlement date of the offering or shortly after, when such information is already publicly available. Generally, MSCI provides at least two business days advance notice before implementation.

Canadian securities that have simultaneous primary offering and private placement are implemented with two full business days notification, if the primary offering and the private placement combined represent at least 5% (25% for Micro Caps) of the security's number of shares.

For Canadian securities, increases in number of shares and changes in FIF and/or DIF resulting from offerings of subscription receipts are generally implemented at the next regularly scheduled Index Review following the conversion of subscription receipts into common shares. Normally, MSCI does not include subscription receipts in the number of shares outstanding of the security at the time of the offering because the conversion of subscription receipts is usually subject to the completion of transactions such as acquisitions of non-listed companies or assets.

For Australian securities, increases in number of shares and changes in FIF and/or DIF resulting from primary equity offerings representing at least 5% (25% for Micro Caps) of the security's number of shares are generally implemented as soon as the relevant Appendix 3B

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

filing is made publicly available by the company on the Australian Securities Exchange (ASX). The Appendix 3B form provides the relevant and precise information on any newly listed shares for Australian companies.

In Norway, repair issues or subsequent offerings are sometimes launched by companies to compensate shareholders that did not participate in a previous offering. In such cases, MSCI generally waits for the results of both the offering and the subsequent offering before implementing changes, if any. MSCI generally does not apply a Price Adjustment Factor (PAF) for repair issues in Norway.

4.1.2 IMPLEMENTATION OF BLOCK SALES AND SECONDARY OFFERINGS (OUTSIDE THE US)

4.1.2.1 GENERAL TREATMENT

Block sales and secondary offerings (outside the US) are treated the same way in the MSCI Indexes.

Changes due to block sales or secondary offerings (outside of the US) are reflected at the time of the event with 2 full business days advance notice provided the free float-adjusted market capitalization change (including NOS and/or float changes) is above USD 1 billion for Developed Markets countries and USD 500 million for Emerging Markets countries. MSCI computes the free float-adjusted market capitalization change (including NOS and/or float changes) using the closing market price and foreign exchange rate prior to the announcement of the event for block sales and secondary offerings (outside the US).

Events that do not meet the above conditions at the time of the event are considered for implementation at subsequent index reviews. Such cases will be subjected to the rules applicable for the index reviews in accordance with the section 3.2.4 of the MSCI GIMI methodology.

Pending NOS and/or float changes, if any, are implemented simultaneously with the event.

In cases, where the overallotment is fully exercised and completed simultaneously with the offering and the information is publicly disclosed, MSCI considers the overallotment size in assessing if the free float-adjusted market capitalization change (including updates) is above USD 1 billion for Developed Markets countries and USD 500 million for Emerging Markets countries to reflect changes immediately for secondary offerings (outside of the US).

Once the event is completed and provided that sufficient post-event information is publicly available, MSCI implements changes giving 2 full business days advance notice. If any uncertainty on the post-event free float information remains, MSCI may decide to postpone the event implementation to a next Index Review.

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

Block sales and secondary offerings (outside the US) that were not captured at the time of completion will be reflected at a following regularly scheduled Index Review.

Due to the nature of secondary offerings, being usually pre-announced by the company or company shareholders, MSCI generally announces changes due to secondary offerings (outside the US) with an undetermined or expected status and sends the confirmed only after the event is completed.

MSCI announces changes due to block sales (outside the US) as soon as possible after the event is announced as completed.

Changes due to block sales and secondary offerings (outside the US) not meeting the thresholds for immediate implementation will be communicated with an Index Review announcement.

4.1.2.2 COUNTRY SPECIFICS

For US securities, changes in FIF and/or DIF resulting from secondary offerings representing at least 5% (25% for Micro Caps) of the security's number of shares are announced at the end of day they are priced through an SEC filing or a press release from the Company and implemented with two full business days advance notification.

For US securities primary and secondary offerings treatments, please refer to Section 4.1.1.2 for more details.

For Latin American and Canadian securities, changes in FIF and/or DIF resulting from block sales or from secondary equity offerings are implemented on the settlement date of the offering or shortly after, when such information is already publicly available. Normally, MSCI provides at least two business days advance notice before implementation.

For Japanese securities, changes in FIF and/or DIF resulting from block sales or from secondary offerings are implemented as of the close of the settlement date, provided there is sufficient advance notice. Generally, Japanese companies confirm the settlement date simultaneously with the subscription price.

For Hong Kong and China securities listed on the Hong Kong Stock Exchange, changes in FIF and/or DIF resulting from block sales or secondary offerings where a Disclosure of Interests filing is expected to be received, are announced by MSCI only after the relevant filing is released on the Hong Kong Stock Exchange website. For block sales for which no Disclosure of Interests filing is expected or released, changes are generally announced when practicable and implemented with an Index Review.

For block sales and secondary offerings in India, as the ultimate beneficiaries of the transaction, which could be, based on past similar events from other Indian companies,

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

strategic, and in order to avoid potential reverse turnover, MSCI intends to monitor public disclosures for post-event shareholder information before implementing any changes. These events are generally implemented with an Index Review.

4.1.3 PRO FORMA FLOAT CALCULATION FOR SHARE PLACEMENTS AND OFFERINGS

In general, shares issued in equity offerings and secondary offerings are assumed to be issued to non-strategic investors. As such, the post-event free float is calculated on a pro forma basis assuming that all these shares are free float.

Shares issued in equity offerings, secondary offerings and private placements are considered on a case-by-case basis and the post-event free float is determined under the following assumptions: If the shares are issued to institutional or other non-strategic investors, they are considered as free float, and if issued to strategic investors, they are regarded as non-free float. If no information is available as to whom the shares are issued to, MSCI waits for post-event float information before announcing changes to the MSCI Indexes.

4.2 DEBT-TO-EQUITY SWAPS

Large debt-to-equity swaps involve the conversion of debt into equity originally not convertible at the time of issue. In this case, changes in numbers of shares and subsequent FIF and/or DIF changes are implemented as of the close of the first trading day of the newly issued shares, or shortly thereafter if all necessary information is available at the time of the swap. Pending NOS and/or float changes, if any, are implemented simultaneously with the event. Shares issued in debt-to-equity swaps are assumed to be issued to strategic investors, unless stated otherwise. As such, the post-event free float is calculated on a pro forma basis assuming that all these shares are non-free float.

Changes in numbers of shares and subsequent FIF and/or DIF changes due to conversions of convertible bonds or other convertible instruments, including periodical conversions of preferred stocks and small debt-to-equity swaps are implemented at the next regularly scheduled Index Review.

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

5 SUSPENSIONS, BANKRUPTCIES AND DELISTINGS

5.1 SUSPENSIONS

For securities that are suspended, MSCI carries forward the market price prior to the suspension during the suspension period.

Corporate events (with or without a PAF) occurring during a suspension period are implemented on the day the security resumes trading.

In case of technical suspension, either ordered by the stock exchange or requested by the company, where only a temporary freeze of the market price applies while there is still trading volume activity, corporate events without PAF, such as private placements and secondary offerings, are implemented on the effective date of the event, whereas corporate events with PAF are implemented on the day the technical suspension is lifted.

5.1.1 PROLONGED SUSPENSION

MSCI evaluates securities under prolonged suspension for deletion from the MSCI Equity Indexes on a monthly basis.

MSCI defines prolonged suspension as 50 business days[2] of suspension for constituents of the Global Investable Market Indexes (GIMI) and 100 business days for constituents of the Global Micro Cap Indexes[3].

MSCI evaluates and announces the implementation two working days prior to the effective date of the deletion. Deletions due to prolonged suspension are generally made effective as of the close of the last working day of the month. For the months of February, May, August and November, the deletions will be implemented together with the effective date of a regularly scheduled Index Review.

Securities suspended less than 50 or 100 days respectively at the evaluation date are instead evaluated for deletion in the following month, assuming the security remains suspended.

MSCI deletes securities that exceed the above thresholds regardless of the reasons for suspension, except for securities pending corporate events, as defined under the MSCI Corporate Events Methodology, which are kept in the Indexes. In general, MSCI does not consider “restructuring” as a corporate event unless further details are publicly disclosed,

[2] MSCI only considers Monday to Friday business days for the purpose of calculating the days of suspension, even if the security’s exchange is opened on Sunday.

[3] Where there is an overlap between size-segments, MSCI applies the larger size-segment for deletion after 50 business days of suspension.

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

except for domestic Chinese companies (including A, B and H shares) for which MSCI considers "restructuring" as a corporate event by default.

MSCI deletes securities under prolonged suspension using the lowest system unit (0.00001 of the security's price currency), also known as the lowest system price.

In the event that securities under prolonged suspension resume trading after they are announced for deletion from the MSCI Indexes, MSCI may amend the deletion decision provided the securities resume trading at least one day prior to the implementation date of the deletion.

Securities which are deleted from the MSCI Indexes due to prolonged suspension and subsequently resume trading are treated as new companies for the purpose of considering the security for addition to the Indexes at the following Index Review, as described in Sections 3.1.6 and 3.2.2 of the MSCI Global Investable Market Indexes Methodology.

5.2 BANKRUPTCIES

MSCI removes from the MSCI Equity Indexes as soon as possible companies that file for bankruptcy or protection from their creditors and/or are suspended and for which a return to normal business activity and trading is unlikely in the near future. MSCI treats in the same way companies that fail stock exchange listing requirements with announcements of delisting from the stock exchanges.

In cases where the company is still trading, MSCI deletes the company on the same day at its last trading price, if feasible, and sends an intraday announcement.

When the primary exchange price is not available, MSCI deletes securities at an over the counter or equivalent market price when such a price is available and deemed relevant. If no such price is available, the security will be deleted at the lowest system price.

If MSCI decides to delete a company at the lowest system price with more than one full business day advance notice, the company may be maintained in the MSCI Indexes at the lowest system price, instead of carrying forward its last trading price, until its deletion.

5.3 DELISTINGS FROM PRIMARY EXCHANGE

In some cases, companies may delist their shares on the primary exchange covered by MSCI but maintain a listing in a different country. In such cases, provided that the change of listing does not result in the company becoming ineligible in the MSCI Indexes, MSCI will change the price source to take the price from the other exchange. The country classification of that company is reviewed as part of the Index Review following the completion of the change of listing. However, depending on the countries concerned by this change of listing, being for

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

example between different regions, MSCI may decide to review the country classification at the time of event instead of the Index Review.

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

6 IPOS AND OTHER EARLY INCLUSIONS

In many cases, newly listed equity securities are considered for inclusion in the MSCI Equity Indexes at the time of the Index Reviews. However, in the case of certain MSCI Indexes (including the MSCI Global Investable Market Indexes), IPOs which are significant in size may be considered for an early inclusion (at the time of the event, i.e. outside of the Index Reviews), depending on the inclusion criteria applying to the relevant MSCI Indexes.

If the decision is made to include an IPO early, the inclusion will be implemented as of the close of the security's tenth day of trading. However, in certain cases, another date may be chosen for the inclusion to reduce turnover. For example, IPOs for which the effective date of inclusion is either 5 days before the effective date of a regularly scheduled Index Review or 3 days after, will be made effective to coincide with the Index Review.

For companies trading on a conditional basis (when-issued trading) prior to their unconditional trading, MSCI intends to assess the inclusion of the company in the MSCI Indexes on its first day of conditional trading.

Securities are also considered for early inclusion in other significant cases, including but not limited to those resulting from mergers and acquisitions giving rise to a large new company or a large primary or secondary public offering of an already listed security. Such cases are treated in the same way as IPOs of significant size.

For further details on the rules on IPOs and other early inclusions in the MSCI Equity Indexes, please refer to the methodology book of each MSCI Index since each MSCI Index has its own separate index construction and maintenance methodology. In the case of the MSCI Global Investable Market Indexes, please refer to the following sections of the MSCI Global Investable Market Indexes Methodology.

- Rules on early inclusions of IPOs and other early inclusions

  See Section "Corporate Events Affecting Non-Index Constituents"

- Rules on inclusion of new companies to the Market Investable Equity Universes (including IPOs that were not added earlier) at the Semi-Annual Index Reviews

  See Section "Updating the Market Investable Equity Universes"

- Rules on inclusion of new securities with a FIF lower than 0.15 (including IPOs that were not added earlier) at Semi-Annual Index Reviews

  See Section "Global Minimum Foreign Inclusion Factor Requirement"

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

- Rules on additions of significant new companies to the Standard Index (including large IPOs that were not added earlier) at Quarterly Index Reviews

  See Section "Quarterly Index Review of Addition of Companies Currently not constituents of the Investable Market Indexes"

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

7 SHARE FREEZE

During each Quarterly Index Review, a "share freeze" will be implemented. The share freeze will commence 5 business days prior to an Index Review effective date. Changes related to corporate events such as secondary offerings, private placements, and block sales that would require a NOS/FIF adjustment and have effective dates that occur within the share freeze period, will be cumulatively implemented on the effective date of the Index Review.

All M&A activity and corporate events which include stock splits, bonus issues/stock dividends, reverse splits or consolidations, rights offerings, share dividend payable events and the array of other 'market neutral' corporate events are implemented as per usual policy on their actual effective dates regardless of the share freeze. Deferred event implementation due to suspensions will also not be affected by the share freeze.

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

8 GENERAL ANNOUNCEMENT POLICY FOR CORPORATE EVENTS

8.1 CLIENT ANNOUNCEMENTS

All changes resulting from corporate events affecting constituents of the MSCI Equity Indexes are announced to clients prior to their implementation.

MSCI uses mainly three statuses to announce these changes: “undetermined”, “expected” and “confirmed”. The sequence of the announcements reflects the different stages of a corporate event implementation.

MSCI sends an announcement in “undetermined” status when the effective date is not yet known and/or certain aspects of the events are uncertain at least 3 weeks prior to the expected completion of the corporate event.

MSCI sends an announcement in “expected” status at least 10 business days prior to the effective date of corporate events to describe the implementation and changes that are intended to be made when the effective date is known and when the event is likely to be successful, provided that the necessary public information concerning the event is available. Note that announcements in “undetermined” or “expected” status are not final.

For example, in the situation where new public information would change the outcome and/or the likelihood of the corporate event to happen as anticipated, MSCI could revise its implementation and change its “expected” announcement to an “undetermined” announcement. Similarly, following new public information, MSCI can change an “undetermined” announcement to an “expected” announcement.

When the effective date is known and provided that all necessary public information concerning the event is available, MSCI sends an announcement in “confirmed” status at least 2 business days prior to the effective date.

For certain events, MSCI only sends “confirmed” announcements, especially due to insufficient or lack of publicly available information or late company disclosure.

In addition to the three statuses described above, in case a “confirmed” announcement needs to be amended, MSCI would send a “correction” announcement with a descriptive text announcement to provide details about the changes.

For an exhaustive list of statuses, please refer to the Appendix VI of the MSCI Corporate Events Methodology book.

The full list of all new and pending changes is delivered to clients on a daily basis, between 4:00 PM and 6:00 PM US Eastern Standard Time (EST) through the Advance Corporate Events (ACE) File.

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

In some cases, events are announced with a descriptive text during market hours for same or next day implementation. Announcements made by MSCI during market hours are linked to late company disclosure of corporate events or unexpected changes to previously announced corporate events.

When it is not feasible to provide approximately three hours' notice to clients before market closes, MSCI may delay the implementation of non-neutral corporate events effective on the next day. An intraday text announcement will be sent in such cases.

MSCI also sends text announcements for corporate events effective within the next 48 hours.

Early deletions of constituents due to bankruptcy or other significant cases are announced as soon as practicable prior to their implementation in the MSCI indexes.

A more descriptive text announcement are sent to clients for significant events according to the index specific announcement criteria as described in the respective MSCI Equity Indexes Methodology Books.

For MSCI Global Standard Index constituents, a more descriptive text announcement is sent to clients for significant events that meet any of the following criteria:

- Additions and deletions of constituents.
- Changes in free float-adjusted market capitalization equal to or larger than USD 5 billion, or with an impact of at least 1% of the constituent's underlying country index.

MSCI makes additional announcements for events that are complex in nature and for which additional clarification could be beneficial.

For corporate events for which a PAF formula utilizes the ex-price (such as rights issues, spin-offs, capital repayments, special dividends, etc.), MSCI calculates the PAF value using the opening market price on the ex-date of the event ("Opening PAF") and the PAF value using the closing market price of the stock on its ex-date ("Closing PAF"), and announces both via email to clients. The "Closing PAF" is used in the MSCI End of Day Indexes calculation.

For further details, see Appendix VI, entitled "Announcement Status and Timing".

8.2 PUBLIC ANNOUNCEMENTS

All additions and deletions of constituents of the MSCI Equity Indexes resulting from corporate events are publicly announced prior to their implementation.

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

Other changes resulting from corporate events that affect constituents of the MSCI Equity Indexes, such as changes in the Foreign Inclusion Factor (FIF) and/or in the number of shares of a constituent, are not publicly announced but are announced only to clients.

If warranted, MSCI reserves the right to make public announcements related to corporate events for special cases, such as the ineligibility of a security in the MSCI Equity Indexes.

The changes are typically announced at least two business days prior to events becoming effective in the indexes. Public announcements are a summary of the "confirmed" announcements that are made to clients. Public announcements are sent shortly before a "confirmed" client announcement is made.

MSCI posts the announcements on its web site, www.msci.com, and on Bloomberg page MSCN. In addition, announcements are posted on Reuters public pages MSCIA for MSCI Global Standard Index constituents and MSCI Domestic Standard Index constituents.

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

APPENDICES

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

APPENDIX I: PAF FORMULAS AND DEFINITIONS

Event Type	Comments	PAF = [Cum Price Formula] / [Ex Price Formula]
Capital Repayment		[P(t) + Cash] / [P(t)]
Consolidation		[Shares Issued] / [Shares Before]
Conversion	Exchange of Shares (PAF applied for historical link when terms are <> 1for 1)	[Other Asset Issued] / [Shares Before]
Merger	Exchange of Shares (PAF applied for historical link when terms are <> 1for 1)	[Other Asset Issued] / [Shares Before]
Merger	Exchange of Cash and Shares	[(P(t) * Other Asset Issued + Cash) / Shares Before] / [P(t)]
Partial Tender Offer	Exchange of Shares	If Premium > 20% and Estimated Gain per Share > 5% on t-1 then [(Other Asset P(t) * Other Asset Issued * Estimated Minimum Entitlement + (100 - Estimated Minimum Entitlement) * P(t)) / 100] / [P(t)] else PAF=1
Partial Tender Offer	Against Cash	If Premium > 20% and Estimated Gain per Share > 5% on t-1 then [(Estimated Minimum Entitlement * Offer Price + (100 - Estimated Minimum Entitlement) * P(t)) / 100] / [P(t)] else PAF=1
Reverse Split		[Shares Issued] / [Shares Before]
Redemption		[((Shares Before – Shares Acquired) * P(t) + Shares Acquired * Offer P) / Shares Before] / [P(t)]
Rights Issue	Right of New Underlying Shares	If Issue P is < P(t) then [(P(t) * (Shares Before + Shares Issued) – Shares Issued * Issue P) / Shares Before] / [P(t)] else PAF=1 or for highly dilutive or large rights issues If Issue P is < P(t) then [P(t) + Right P(t)] / [P(t)] else PAF=1

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

Event Type	Comments	PAF = [Cum Price Formula] / [Ex Price Formula]

Rights Issue	Right of New Underlying Shares Not Entitled to Forthcoming Dividend	If Forthcoming Gross Dividend is available and Issue P >= [P(t) – Forthcoming Gross Dividend] then PAF=1
		or
		if Forthcoming Gross Dividend is available and Issue P < [P(t) – Forthcoming Gross Dividend] then
		[(P(t) * (Shares Before + Shares Issued) – Shares Issued * Issue P – Shares Issued * Forthcoming Gross Dividend) / Shares Before] / [P(t)]
		or
		if Forthcoming Gross Dividend is not available and Issue P >= P(t) then PAF=1
		or
		if Forthcoming Gross Dividend is not available and Issue P < P(t) then
		[(P(t) * (Shares Before + Shares Issued) – Shares Issued * Issue P) / Shares Before] / [P(t)]

Rights Issue	Right of New Underlying Shares with Another Asset (bond, warrant, preferred, etc.) attached	If Right P(t) is available then [P(t) + Right per Share P(t)] / [P(t)] or if Other Asset P(t) is available and Issue P < [P(t) + (Other Asset Attached * Other Asset P(t)) / Shares Issued] then [((Shares Before + Shares Issued) * P(t) + Other Asset Attached * Other Asset P(t) - Shares Issued * Issue P) / Shares Before] / [P(t)] or if Other Asset P(t) is available and Issue P >= [P(t) + (Other Asset Attached * Other Asset P(t)) / Shares Issued] then PAF = 1 or if Other Asset P(t) is not available and Issue P < P(t) then [(P(t) * (Shares Before + Shares Issued) – Shares Issued * Issue P) / Shares Before] / [P(t)] or if Other Asset P(t) is not available and Issue P >= P(t) then PAF=1

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

Event Type	Comments	PAF = [Cum Price Formula] / [Ex Price Formula]

Rights Issue	Right of Another Type of Asset (bond, warrant, preferred, etc.)	If Other Asset P(t) is available and Issue P < Other Asset P(t) then
		[(P(t) * Shares Before + (Other Asset P(t) - Issue P) *
		Other Asset Issued) / Shares Before] / [P(t)]
		or
		if Other Asset P(t) is not available but Right P(t) is available then
		[P(t) + Right per Share P(t)] / [P(t)]
		or
		if Other Asset P(t) and Right P(t) are not available then PAF=1

Rights Issue	Right of Shares in Another Listed Security	If Issue P < Other Security P(t) then [P(t) + (Other Security P(t) - Issued P) * Other Security Shares Issued / Shares Before] / [P(t)] else PAF=1
Special Dividend	PAF is applied for special dividends when the impact of dividend on the price on the cum date is greater than or equal to 5%.	If impact of Special Div on P(t-1) >=5%, then [P(t) + Special Div] / [P(t)]
Spin-off	Spun-off traded on the ex-date	[P(t) + Spun Off P(t) * Spun Off Shares Issued / Shares Before] / [P(t)]
Spin-off	Spun-off NOT traded on the ex-date (creation of a 'detached' security)	[P(t-1)] / [P(t)]
Split		[Shares Issued] / [Shares Before]
Stock	Stock Dividend / Bonus / Scrip Issue / Stock	[Shares Issued + Shares Before] / [Shares Before]
Stock	Stock Dividend Not Entitled to Forthcoming Dividend	[[(Shares Issued + Shares Before) * P(t) - (Shares Issued * Forthcoming Gross Cash Dividend)] / Shares Before] / [P(t)]
Stock	Distribution of Another Type of Asset (bond, warrant, preferred, etc.)	If Other Asset P(t) is not available then PAF=1 else [(P(t) * Shares Before + Other Asset P(t) * Other Asset Issued) / Shares Before] / [P(t)]

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

Event Type	Comments	PAF = [Cum Price Formula] / [Ex Price Formula]

Stock	Distribution of New Underlying Shares with Warrants attached	If Other Asset P(t) is not available then
		[Shares Issued + Shares Before] / [Shares Before]
		else
		[(P(t) * (Shares Issued + Shares Before) + Other Asset P(t) * Other Asset Issued)/ Shares Before] / [P(t)]

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

Terms/abbreviations	Definitions
Cash	Amount shareholders are entitled to
Cum Date	Business Day prior to the ex-date
Estimated gain per share	{[(Offer price - P(t-1)) * estimated minimum entitlement] / P(t-1)} * 100
Estimated Minimum Entitlement	Minimum percentage of shareholders' holdings that will be accepted by the acquirer assuming all shareholders tender their shares, except for the acquirer and the shareholders who explicitly state that they will not participate in the partial tender offer.
Ex-Date	Day on which a security is traded without a previously declared dividend, distribution, or other right
Pay-date	First trading day of new shares resulting from the rights issue
Issue P	Issue price
Offer P	Offer price
Other Asset Issued	Number of other asset distributed (e.g. warrant, convertible bond)
Other Asset P(t)	Closing price of the other asset on the ex-date
P(t)	Closing price on the ex-date
P(t-1)	Closing price on the cum date (ex-date -1)
Premium	[(Offer price - P(t-1)) / P(t-1)] * 100
Right P(t)	Closing right price on the ex-date
Intrinsic value of Rights	[Closing price of security * Shares Issued - Issue P * Shares Issued)] / [Shares Before]
Shares Before	Number of shares shareholders need to hold before the event
Shares Issued	Number of shares distributed
Shares Acquired	Number of shares acquired
Forthcoming Gross Dividend	Gross dividend per share paid by the company following another event. In certain cases of rights issues and stock dividends, the newly issued shares are not entitled to the dividend which is ex after the rights issue / stock dividend ex-date.
Special Div	Amount shareholders are entitled to
Spun Off P(t)	Closing price of the spun off security on the ex-date
Spun Off Shares Issued	Number of spun off security shares distributed

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

APPENDIX II: IMPLEMENTATION DATES FOR CORPORATE EVENTS

MSCI uses several terms to specify the timing of corporate events implementation:

As of the close of date (t-1) indicates that the changes are implemented after the close on day t-1. For example, if a security is deleted as of the close of t-1, the security still appears in the index on the day t-1.

Effective date/Ex-date (t) indicates the date on which the changes are reflected. For example, if a security is deleted as of the close of t-1, the security no longer appears in the index on the effective date (t). It also indicates the date on which a security is traded without a previously declared dividend, distribution, or other right.

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

APPENDIX III: CLARIFICATION REGARDING EFFECTIVE DATES IN INDEX EMAIL ANNOUNCEMENTS

The effective date in header of the Index email announcement means that all related changes are reflected in the indexes as of the open of the specified date, unless indicated otherwise in the text of the announcement. This is the case for all changes (NOS, FIF, VIF, addition, deletion, etc.) implemented as part of corporate events or Index Reviews.

For events such as rights issues, stock dividends or splits, where PAFs are applied on the ex date (t), the effective date in the header of the Index email announcement represents the ex-date of the event (and not the effective date of the NOS changes associated to the event). The associated NOS changes are implemented as of the close of that date i.e “as of the close of t” (effective t+1).

All the details of the event implementation, including all the implementation dates (i.e. “as of the close of” date and effective date), are provided in the descriptive text, below the header.

For more details regarding "as of the close of", "ex-date" or "effective date", please refer to Appendix II entitled "Implementation Dates for Corporate Events" in the MSCI Corporate Events Methodology Book.

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

APPENDIX IV: CORPORATE EVENTS OCCURRING ON SUNDAYS

A selected list of MSCI Indexes is calculated on Sundays to reflect the performance of the markets open on this day. The Sunday index performances capture the price changes and reflect corporate events effective on these days. In case of corporate events occurring on Sundays and where a PAF is needed, the PAF is applied to the market price of the security on Sunday and Monday. If the security does not trade on Monday, the Sunday closing market price is carried forward to Monday, including the PAF.

Changes in the security's number of shares, FIFs and/or DIFs due to corporate events occurring on Sundays are implemented as of the close of Monday, regardless of whether the corporate event requires the application of a PAF on Sunday or not.

For details on the Sunday Index Calculation Methodology, refer to Appendix I of the MSCI Index Calculation Methodology.

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

APPENDIX V: GUIDELINES CONCERNING IMPLEMENTATION OF PARTIAL TENDER OFFERS

Summary

MSCI applies a PAF for partial tender offers on the ex-date when the following criteria are fulfilled:

- - The premium is greater than 20%, and
- - The estimated gain per share is greater than 5%.

If at least 1 of the 2 conditions is not met (i.e. premium is < 20% and/or estimated gain per share < 5%), MSCI applies a PAF of 1.

In cases where the ex-date is not available, the PAF is applied on the first business day after the end of the offer.

Changes in the NOS and/or FIF are implemented following the results of the offer regardless the PAF applied on the ex-date is 1 or not.

PAF formula in detail

If premium > 20% AND estimated gain per share > 5% on t-1 then

PAF = [(estimated minimum entitlement * offer price + (100 - estimated minimum entitlement) * P(t)) / 100] / [P(t)]

Else PAF = 1

Definitions

Premium in % = [(offer price - P(t-1)) / P(t-1)] * 100

Estimated gain per share in % = {[(offer price - P(t-1)) * estimated minimum entitlement] / P(t-1)} * 100

P(t-1) is the closing price on the cum date

P(t) is the closing price on the ex-date

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

Estimated minimum entitlement = "NOS sought by acquirer" / "NOS free to participate in the offer"

In other words, the estimated minimum entitlement is the minimum percentage of shareholders holdings that will be accepted by the acquiror assuming all shareholders tender their shares, except for the acquiror and the shareholders who explicitly state that they will not participate in the partial tender offer.

Example

A company is buying back 10% of its shares at an offer price of USD 90. One shareholder, owning 20% of the shares publicly declares that he will not participate in the offer. In addition, the company already owns 5% of treasury shares that will not participate in the offer. The closing market price on the cum date is USD 60 and the closing price on the ex-date is USD 55.

Based on the information available in this example, the estimated minimum entitlement, the premium and the estimated gain per share are calculated as follows:

Estimated minimum entitlement	10% / (100% - 20% - 5%) = 13.33%
Premium	(90-60) / 60 = 50%
Estimated gain per share	[(90-60) * 13.33%] / 60 = 6.66%

As the premium is above 20% and the estimated gain per share is above 5%, meaning both conditions are met, the PAF applied on the ex-date is calculated as follows:

[(13.33 * 90 + (100 – 13.33) * 55) / 100] / [55] = 1.085

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

APPENDIX VI: ANNOUNCEMENT STATUS AND TIMING

All changes resulting from corporate events affecting constituents of the MSCI Equity Indexes are announced prior to their implementation. The changes can have the following status:

Status	Description	Timing
Acknowledged	The "Acknowledged" status is used to indicate that MSCI is aware of an upcoming event. With this status, MSCI does not disclose any details of the treatment of the corporate event. The "Acknowledged" status is used for all corporate events (mergers, acquisitions, spin off, buybacks, block sales and conversions), except for corporate actions resulting in a price adjustment (stock, split, rights, etc.), where an "Expected" or "Undetermined" announcement is sent. For IPOs, a "Confirmed" announcement is sent.	As early as practicable.
Undetermined	The "Undetermined" status is used when the event is conditional upon uncertain events (e.g: the outcome of the tender offer is uncertain), or the effective date is not known. MSCI describes the event and how it intends to implement it if and when the event becomes effective.	Undetermined announcements are sent when there is some uncertainty that the event will take place.
Expected	MSCI sends an “expected” announcement to describe the implementation and changes that are intended to be made when the effective date is known and when MSCI considers that an event is likely to be successful, provided that the necessary public information concerning the event is available	Generally 10 business days before the effective date.
Confirmed	The "Confirmed" status is used when all details for the implementation of the security's change have been finalized.	Confirmed announcement is generally sent at least 2 days before the effective date.
Implemented	The "Implemented" status is used when the change has been implemented in the index.	The event remains in the Advance Corporate Events (ACE) file 2 days after its effective date.
Canceled	The "Canceled" status is used when a previously announced event does not occur.	As early as practicable.
Correction	The "Correction" status is used when a modification needs to be made to an event that was previously “Confirmed”.	As early as practicable.

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

APPENDIX VII: ADDITIONAL CORPORATE EVENTS RULES APPLYING TO THE MSCI GLOBAL INVESTABLE MARKET INDEXES

Corporate events can have different implications depending on the specificities for constructing and maintaining each MSCI Index. Such specificities, if any, are described in the respective methodology book of each MSCI Index.

Corporate events rules used for the maintenance of the MSCI Global Investable Market Indexes include the rules described in this methodology book as well as the rules described in Section 3 "Maintaining the MSCI Global Investable Market Indexes" of the MSCI Global Investable Market Indexes Methodology. Please refer to the following sections, among others, of the MSCI Global Investable Market Indexes Methodology.

- Changes in FIF, NOS and GICS due to corporate events

  See Section 3.3 (changes made at the time of the event) and Section 3.2 (changes made at Index Reviews)

- Size and style segment reviews due to corporate events

  See Section 3.3 (at the time of the event) as well as Sections 3.1 and 3.2 (at Index Reviews)

- Deletions of securities from the MSCI Global Investable Market Indexes due to corporate events

  See Section 3.3

- Announcement policy

  See Section 3.4

For details on rules for the treatment of IPOs in the MSCI Global Investable Market Indexes, see Section 6 of this methodology book "IPOs and Other Early Inclusions".

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

May 2013 updates:

Section 2.1.4.2: Dutch Auction offer

- update for changes in NOS less than 5%

Section 2.3: Conversion of share classes

- update of the paragraph

Section 3.2.1: Stock dividends: distribution of new underlying shares

- treatment of stock dividend of treasury shares

Section 3.3: Capital repayments

- clarification on tax treatment

Section 4.1.1.2: Share placements and offerings: country specifics

- update on forward sale agreements, Japanese secondary offerings and HK & China block sales

Section 4.3: Optional dividends

- update on treatment in countries ex-US

August 2013 updates:

Section 2.1.4.2: Dutch Auction offer

- wording

Section 2.3: Conversion of share classes

- wording

Section 3.2.1: Distribution of new underlying shares

- wording

Appendix III: Corporate Events occurring on Sundays

- removed mention of the treatment of Saturdays

November 2013 updates:

Section 2.1: Treatment of M&As in the MSCI Universe

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

- updates on page 6, 7, 8 and 9

Section 3.2: Stock Dividends

- update on page 15

Section 4.1.1: Implementation of Share Placements and Offerings in the MSCI Universe

- update on page 21 (+footnote) and page 22

Section 5: Suspensions, Delisting and Bankruptcies

- update page 24-25

Appendix V: Clarification Regarding Effective Dates in Index email Announcements

- updates

Appendix VI: Announcement Status and Timing

- update

February 2014 updates:

Section 2.3: Conversion of Share Classes

- treatment for China securities

Section 3.3: Capital Repayments

- update

Section 3.4: Special Cash Dividends

- update

May 2014 updates:

Section 2.1.4: Partial tender offers and buyback offers

- update

Section 4.1.1.2: Country specifics

- Treatment of primary and secondary equity offerings

Section 4.3: Optional Dividends

- Treatment for Hong Kong optional dividends

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

August 2014 updates:

Section 2.1: Treatment of M&As in the MSCI Universe

- update of the advance notice

Section 3.5: Optional Dividends

- treatment for the Netherlands

Section 5: Suspensions, Bankruptcies and Delisting

- update for Bankruptcies

Section 7.1: Client Announcements

- clarification of minimum advance notice for non-neutral events

Appendix I: PAF Formulas and Definitions

- update for very highly dilutive rights issue

Appendix III: Clarification Regarding Effective Dates in Index email Announcements

- update

November 2014 updates:

Section 2.1.3: Tender Offers

- clarification of deletion rules for existing constituents

Section 2.6.2: Reverse Spinoffs

- clarification of reverse spinoffs implementation

Section 3.6.3: Number of Shares, FIF and/or DIF Changes Following Rights for New Underlying Shares

- clarification for fully underwritten rights issues offered at a premium to market price

December 2014 update:

Section 2.1: Treatment of M&As in the MSCI Universe

- Canadian M&As

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

January 2015 updates:

Section 5: Suspensions, Bankruptcies and Delistings

- updates including treatment of prolonged suspensions

Section 3: Highly dilutive or large rights issues

- updates including new treatment of highly dilutive or large rights issues

February 2015 updates:

Section 4: Other events Resulting in Changes in Number of Shares and FIFs and/or DIFs

- updates including new treatment of block sales and secondary offerings (outside the US)

Section 3: Highly dilutive or large rights issues

- updates in treatment of highly dilutive or large rights issues

March 2015 update:

Section 4: Other events Resulting in Changes in Number of Shares and FIFs and/or DIFs

- clarification and updates including new treatment of block sales and secondary offerings (outside the US)

May 2015 update:

Section 2.5.1: Treatment when spun off trades on ex -date

- clarification for cases subject to withholding tax

August 2015 update:

Section 4.1.2.1 General Treatment

- clarification for block sales and secondary offerings not considered for immediate implementation

November 2015 update:

Section 1 Introduction

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

- clarification for country specific treatment

February 2016 update:

Section 2.1 Treatment of M&As in the MSCI Universe

- clarification of implementation criteria for M&As

May 2016 updates:

Section 2: Mergers & Acquisition (M&As)

- clarification for general treatment

Section 2.1: Merger and Acquisitions via Mutual Agreement

- treatment of US acquisitions via agreement
- general clarification

Section 2.2: Tender Offers

- treatment of US tender offers
- general clarification

Section 4.1.1.1: General Treatment

- treatment for US securities

Section 4.1.1.2: Country Specifics

- treatment for US securities

Section 4.1.2.2: Country Specifics

- treatment for US securities

August 2016 updates:

Section 4.1.1.2: Country Specifics

- clarification for Canadian offerings treatment

Section 8.1: Client Announcements

- clarification for general treatment

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

- advance notification for announcement in Undetermined status

Section 7: Share Freeze

- New section

© 2015 MSCI Inc. All rights reserved. Please refer to the disclaimer at the end of this document.

CONTACT US

clientservice@msci.com

AMERICAS

Americas	1 888 588 4567 *
Atlanta	+ 1 404 551 3212
Boston	+ 1 617 532 0920
Chicago	+ 1 312 675 0545
Monterrey	+ 52 81 1253 4020
New York	+ 1 212 804 3901
San Francisco	+ 1 415 836 8800
Sao Paulo	+ 55 11 3706 1360
Toronto	+ 1 416 628 1007

EUROPE, MIDDLE EAST & AFRICA

Cape Town	+ 27 21 673 0100
Frankfurt	+ 49 69 133 859 00
Geneva	+ 41 22 817 9777
London	+ 44 20 7618 2222
Milan	+ 39 02 5849 0415
Paris	0800 91 59 17 *

ASIA PACIFIC

China North	10800 852 1032 *
China South	10800 152 1032 *
Hong Kong	+ 852 2844 9333
Mumbai	+ 91 22 6784 9160
Seoul	00798 8521 3392 *
Singapore	800 852 3749 *
Sydney	+ 61 2 9033 9333
Taipei	008 0112 7513 *
Tokyo	+ 81 3 5290 1555

* = toll free

ABOUT MSCI

For more than 40 years, MSCI's research-based indexes and analytics have helped the world's leading investors build and manage better portfolios. Clients rely on our offerings for deeper insights into the drivers of performance and risk in their portfolios, broad asset class coverage and innovative research.

Our line of products and services includes indexes, analytical models, data, real estate benchmarks and ESG research.

MSCI serves 98 of the top 100 largest money managers, according to the most recent P&I ranking.

For more information, visit us at www.msci.com.

NOTICE AND DISCLAIMER

This document and all of the information contained in it, including without limitation all text, data, graphs, charts (collectively, the "Information") is the property of MSCI Inc. or its subsidiaries (collectively, "MSCI"), or MSCI's licensors, direct or indirect suppliers or any third party involved in making or compiling any Information (collectively, with MSCI, the "Information Providers") and is provided for informational purposes only. The Information may not be modified, reverse-engineered, reproduced or redisseminated in whole or in part without prior written permission from MSCI.

The Information may not be used to create derivative works or to verify or correct other data or information. For example (but without limitation), the Information may not be used to create indexes, databases, risk models, analytics, software, or in connection with the issuing, offering, sponsoring, managing or marketing of any securities, portfolios, financial products or other investment vehicles utilizing or based on, linked to, tracking or otherwise derived from the Information or any other MSCI data, information, products or services.

The user of the Information assumes the entire risk of any use it may make or permit to be made of the Information. NONE OF THE INFORMATION PROVIDERS MAKES ANY EXPRESS OR IMPLIED WARRANTIES OR REPRESENTATIONS WITH RESPECT TO THE INFORMATION (OR THE RESULTS TO BE OBTAINED BY THE USE THEREOF), AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, EACH INFORMATION PROVIDER EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES (INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF ORIGINALITY, ACCURACY, TIMELINESS, NON-INFRINGEMENT, COMPLETENESS, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) WITH RESPECT TO ANY OF THE INFORMATION.

Without limiting any of the foregoing and to the maximum extent permitted by applicable law, in no event shall any Information Provider have any liability regarding any of the Information for any direct, indirect, special, punitive, consequential (including lost profits) or any other damages even if notified of the possibility of such damages. The foregoing shall not exclude or limit any liability that may not by applicable law be excluded or limited, including without limitation (as applicable), any liability for death or personal injury to the extent that such injury results from the negligence or willful default of itself, its servants, agents or sub-contractors.

Information containing any historical information, data or analysis should not be taken as an indication or guarantee of any future performance, analysis, forecast or prediction. Past performance does not guarantee future results.

The Information should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. All Information is impersonal and not tailored to the needs of any person, entity or group of persons.

None of the Information constitutes an offer to sell (or a solicitation of an offer to buy), any security, financial product or other investment vehicle or any trading strategy.

It is not possible to invest directly in an index. Exposure to an asset class or trading strategy or other category represented by an index is only available through third party investable instruments (if any) based on that index. MSCI does not issue, sponsor, endorse, market, offer, review or otherwise express any opinion regarding any fund, ETF, derivative or other security, investment, financial product or trading strategy that is based on, linked to or seeks to provide an investment return related to the performance of any MSCI index (collectively, "Index Linked Investments"). MSCI makes no assurance that any Index Linked Investments will accurately track index performance or provide positive investment returns. MSCI Inc. is not an investment adviser or fiduciary and MSCI makes no representation regarding the advisability of investing in any Index Linked Investments.

Index returns do not represent the results of actual trading of investible assets/securities. MSCI maintains and calculates indexes, but does not manage actual assets. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the index or Index Linked Investments. The imposition of these fees and charges would cause the performance of an Index Linked Investment to be different than the MSCI index performance.

The Information may contain back tested data. Back-tested performance is not actual performance, but is hypothetical. There are frequently material differences between back tested performance results and actual results subsequently achieved by any investment strategy.

Constituents of MSCI equity indexes are listed companies, which are included in or excluded from the indexes according to the application of the relevant index methodologies. Accordingly, constituents in MSCI equity indexes may include MSCI Inc., clients of MSCI or suppliers to MSCI. Inclusion of a security within an MSCI index is not a recommendation by MSCI to buy, sell, or hold such security, nor is it considered to be investment advice.

Data and information produced by various affiliates of MSCI Inc., including MSCI ESG Research Inc. and Barra LLC, may be used in calculating certain MSCI indexes. More information can be found in the relevant index methodologies on www.msci.com.

MSCI receives compensation in connection with licensing its indexes to third parties. MSCI Inc.'s revenue includes fees based on assets in Index Linked Investments. Information can be found in MSCI Inc.'s company filings on the Investor Relations section of www.msci.com.

MSCI ESG Research Inc. is a Registered Investment Adviser under the Investment Advisers Act of 1940 and a subsidiary of MSCI Inc. Except with respect to any applicable products or services from MSCI ESG Research, neither MSCI nor any of its products or services recommends, endorses, approves or otherwise expresses any opinion regarding any issuer, securities, financial products or instruments or trading strategies and MSCI's products or services are not intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such. Issuers mentioned or included in any MSCI ESG Research materials may include MSCI Inc., clients of MSCI or suppliers to MSCI, and may also purchase research or other products or services from MSCI ESG Research. MSCI ESG Research materials, including materials utilized in any MSCI ESG Indexes or other products, have not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body.

Any use of or access to products, services or information of MSCI requires a license from MSCI. MSCI, Barra, RiskMetrics, IPD, FEA, InvestorForce, and other MSCI brands and product names are the trademarks, service marks, or registered trademarks of MSCI or its subsidiaries in the United States and other jurisdictions. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and Standard & Poor's. "Global Industry Classification Standard (GICS)" is a service mark of MSCI and Standard & Poor's.

© 2015 MSCI Inc. All rights reserved.