S&P Dow Jones Indices

A Division of S&P Global

Equity Indices Policies & Practices
Methodology

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Table of Contents

Introduction

This document covers corporate action treatment, per S&P Dow Jones Indices' equity indices policies and practices. To understand and successfully use indices for investment analysis, it is important to know how adjustments are made, when different kinds of corporate actions occur, and S&P Dow Jones Indices' treatment of these events. The goal is to provide transparency and offer consistency in the global treatment of corporate actions, to the greatest extent possible. Please note, however, that local market practices may dominate major decisions, so S&P Dow Jones Indices has general approaches with exceptions and/or special rules that pertain to certain markets. To the extent possible, the implementation and timing is the same across all S&P Dow Jones Indices' branded indices.

Additions and Deletions

Addition and deletions of securities to indices can occur for a number of reasons. For indices that do not have a fixed number of constituents, additions and deletions are not linked to one another. For indices with a fixed number of constituents, whenever there is a deletion from an index, a pre-approved replacement is added to the index, preferably on the same day. In other instances, indices can have a fixed number of constituents at each rebalancing with the constituent count fluctuating between rebalancings. In these situations, if an index has a targeted constituent count of 30 or less and more than 10% of the constituent count between rebalancing dates is removed from the index due to mergers, acquisitions, takeovers, delistings, bankruptcies, or other reasons that warrant ineligibility, the index will be reviewed by the Index Committee to determine when replacement securities will be added to the index.

Initial Public Offerings (IPOs) and Direct Listings. IPO and direct listing additions to indices typically take place on the quarterly share rebalancing dates. Please refer to individual index methodologies for IPO inclusion criteria.

Delistings. A security is generally dropped from all the indices it is a constituent of on or around its expected delisting date. Securities removed from an index due to voluntary delisting or failure to meet the exchange listing requirements, are removed at the primary exchange price, if available, or at a zero price if no primary exchange price is available. For U.S. listed securities, non-bankrupt securities are removed at the OTC or pink sheet price if no primary exchange price is available. If no OTC or pink sheet price is available, the security can be removed at a zero price at the discretion of the Index Committee.

Please refer to Mergers and Acquisitions for information on delistings due to M&A events.

Note: Every index methodology has its own guidelines and thresholds for determining additions and deletions, and the timing of these actions. Please refer to the respective individual index methodology for further clarity on the timing of changes to the given index.

Mergers & Acquisitions

Merger & acquisition (M&A) activity often results in adds/drops to index membership and weight changes for constituents. The goal of M&A treatment in S&P Dow Jones Indices' branded indices is to mimic the actual experience of index clients on a best efforts basis. All M&A events are tracked by S&P Dow Jones Indices' index analysts and reviewed on a case by case basis. Clients are notified well in advance regarding treatment. An M&A target company is generally dropped from all indices on or around its expected delisting date. In certain instances, the target company may be dropped before its delisting date once an offer to acquire the security has been deemed unconditional.

Generally, deletions are made using the closing price of the security on the deletion date. Deletions might be made using the deal price in certain markets. The deal price could be the tender offer price for cash takeovers or a derived deal price for partial stock/all stock takeovers. Clients are notified if any price other than market close prices or deal prices are used to drop stocks from S&P Dow Jones Indices.

If the primary exchange suspends or halts an M&A target security prior to the S&P Dow Jones Indices' announced effective deletion date, S&P Dow Jones Indices will remove the security at the market close price or the deal price, whichever is lower if the merger is all cash. S&P Dow Jones Indices will synthetically derive a price for the suspended security using the deal ratio terms if the acquirer is issuing stock as part of the merger. This synthetically derived price is used to calculate the index until the S&P Dow Jones Indices' deletion date. If any other pricing mechanism is used that deviates from this policy, S&P Dow Jones Indices will make an announcement describing the alternative method to be used. The final decision regarding the pricing method is at the discretion of S&P Dow Jones Indices.

All M&A driven changes to S&P Dow Jones Indices' branded indices are implemented with one to five business days' notice on a best efforts basis. Any share issuance for the acquirer is implemented to coincide with the drop event for the target. A M&A driven share/IWF change does not need to meet any minimum threshold requirement for implementation. This helps minimize turnover in indices. Any merger related IWF change that results in an IWF of 0.96 or greater is rounded up to 1.00 at the next annual IWF review. In certain situations, at S&P Dow Jones Indices' discretion, de minimis merger and acquisition share changes may be accumulated and implemented with the quarterly share rebalancing. M&A share changes may be implemented weekly for an index company acquiring a privately held company or a non-index company that does not trade on a major exchange. Please refer to the *Share and IWF Updates* chapter for further information on timing of share changes.

S&P Dow Jones Indices believes turnover in index membership should be avoided when possible. At the discretion of the index committee, an otherwise eligible addition may not be added to indices at a rebalancing if the company is the target of a confirmed M&A event. Current index constituents are generally not deleted at a rebalancing solely for the reason of being the target of a pending acquisition.

Tendered Shares. In certain markets, tendered shares may be replaced with a tradable tendered share class on the same stock exchange. S&P Dow Jones Indices will consider replacing the common share line with the tendered share class in indices once a minimum acceptance ratio of 75% has been reached and subject to the announcement of a further acceptance period.

If S&P Dow Jones Indices decides to replace the common share line with the tendered line, an announcement will be issued with one to five business days' notice with a replacement effective date timed to occur during the subsequent acceptance period. No changes will be made to the tendered shares outstanding, IWF, divisor, or index weighting. Identifiers will be updated as appropriate.

Spin-Offs

As a general policy, a spin-off security is added to all indices where the parent security is a constituent, at a zero price at the market close of the day before the ex-date (with no divisor adjustment). The spin-off security will remain in the parent's indices if it meets all necessary criteria.

If a spin-off security is determined to be ineligible to remain in the index, it will be removed after at least one day of regular way trading (with a divisor adjustment). In certain instances, S&P Dow Jones Indices may decide to add the spin-off security to indices using a non-zero price and applying a price adjustment to the parent. In certain other instances, S&P Dow Jones Indices may determine not to add the ineligible security to the parent's indices due to de minimus value or lack of information on value of the spin-off security.

If there is a gap between the ex-date and distribution date (or payable date), or if the spin-off security does not trade regular way on the ex-date, the spin-off security is kept in all indices in which the parent is a constituent until the spin-off security begins trading regular way. At the discretion of the Index Committee, an indicative or estimated price may be used for the spin-off entity in place of a zero price until the spin-off security begins trading. If the spin-off entity does not trade for 20 consecutive trading days after the ex-date and there is no guidance issued for when trading may begin, S&P Dow Jones Indices may decide to remove the spin-off security at a zero price with advance notice given to clients.

Index composition changes involving the parent or spin-off company, including attribute changes, such as a change in its Global Industry Classification Standard (GICS®) classification, are implemented after the spin-off entity has traded regular way for at least one day.

1. **Spin-off Security is a New Entity.** The spin-off security will be added to all parent indices on the ex-date.
2. **Spin-off Security is an Existing Publicly Traded Entity (In Specie Distribution).** S&P Dow Jones Indices will add the in specie distribution to all indices in which the parent is a constituent on the ex-date at a zero price and will mimic the price of the existing publicly traded entity on the close of the ex-date. The distribution will be represented by a temporary placeholder security, which is a non-tradeable security created by S&P Dow Jones Indices to hold the place (weight) of the assets distributed, but not yet received by index clients. A temporary placeholder security is used discretionarily by S&P Dow Jones Indices to enhance an index client's ability to replicate an index. The temporary placeholder security will be added to indices in which the parent is a constituent using the parent's IWF and using shares equal to the distribution ratio times the parent's total shares outstanding. The placeholder security will be priced to match the price of the existing publicly traded entity. The existing publicly traded security will be added and/or up-weighted to reflect the distribution on the same date that the temporary placeholder security is removed from indices, if applicable. In certain instances, S&P Dow Jones Indices may decide to apply a price adjustment to the parent and not add a temporary placeholder security. In all cases, advance notice of treatment is given to clients.
3. **South Korea.** In South Korea, a holding company often has a reverse split accompanying a spin-off of its operating entity. As a general index implementation policy for spin-offs accompanied by reverse splits in South Korea, a spin-off is made effective on the day the spun-off company starts to trade. The valuation of the spun-off company is calculated as the market capitalization of the parent company before the spin-off event multiplied by the spin-off ratio.

Treatment of Spin-Offs in Certain Equal Weighted and Modified Market Cap Weighted Indices

S&P Dow Jones Indices defines a modified market cap weighted index as one where the final weight of an index component is derived with some consideration of the actual market capitalization of the company; but the constituents' market capitalizations are re-defined to be values that will achieve the user-defined weighting at each rebalancing, which may result in the redistribution of weights across constituents.

For most modified market cap weighted and equal weighted indices, both the parent and spin-off company generally remain in the index until the next index rebalancing. The spin-off company is added to the index at a zero price at the close of the day before the ex-date. No price adjustment is applied to the parent and there is no divisor change. All indices undergo a full review with the next rebalancing.

However, if

(i) the next index rebalancing is more than three months away, and

(ii) either the parent company or the spin-off company is clearly not eligible for the particular index

then,

the spin-off company is reviewed on a case-by-case basis by the Index Committee and the appropriate treatment will be announced to clients in advance. In such cases, and when achievable, clients are provided with one to five business days' notice to drop either the parent or child company (as applicable in the situation) in a market situation where regular-way trading is available for both the parent and child.

- If a decision is made to keep the spun-off company and drop the parent, because of a determination that the spun-off company is within the theme of the index while the parent no longer meets such requirements, the weight of the parent stock is (1) distributed proportionately across the rest of the index for a modified market cap weighted index or (2) added to the spun-off stock's weight in an equal weighted index.
- Alternately, if a decision is made to drop the spun-off company and keep the parent, because it has been determined that the parent company is within the theme of the index while the spun-off does not meet such requirements, the weight of the spun-off company is (1) distributed proportionately across the rest of the index for a modified market cap weighted index or (2) added back to the parent stock's weight in an equal weighted index.

Affected Indices. All modified market cap weighted (including dividend yield weighted) and equal weighted indices.

Modified market cap weighted and equal weighted indices based on another fixed count index whose adds and drops follow the parent index exactly (for example, the S&P 500 Equal Weighted Index) will continue to follow the add/drop policy of the parent as outlined in the following section.

Equal Weighted Indices Based on a Fixed Count Parent Index. The spun-off company is added to the index at a zero price at the market close of the day before the ex-date with no divisor adjustment. If the spun-off company is replacing a dropped company in the parent index, on the effective date of the deletion, first the weight of the spun-off company is redistributed to the parent company, and then the weight of the deleted company is redistributed to the spun-off company. If the spun-off company is replacing the parent company, the weight of the parent is redistributed to the spun-off company on the effective date of the deletion. If the spun-off company will be dropped from the parent index, the weight of the spun-off company is redistributed back to the parent company.

Refer to the respective individual index methodology documents for more information on the specific treatment for a particular index.

What If Scenarios:

Q: What if there is a spin-off in a fixed count index?

***A**: Indices with a fixed number of stocks will carry an extra stock for at least one day.*

Q: What if, for example, the parent is a constituent of the S&P Global Water Index and the spun-off company does not fall in the "water" category?

***A**: The spun-off company will still be added in the S&P Global Water Index at a zero price for at least one day.*

Q: What if the spun-off company doesn't trade for a few days or weeks?

***A**: In general, the spun-off company is held in the index at a zero price until trading begins. If the spin-off entity does not trade for 20 consecutive trading days after the ex-date and there is no guidance issued for when trading may begin, S&P Dow Jones Indices may decide to remove the spin-off security at a zero price with advance notice given to clients.*

Q: What if the spun-off entity trades on an ineligible exchange?

***A**: This will depend on the market and Index Committee decision. For certain markets, it might be decided not to add the spun-off company to the index and either apply a price adjustment for the parent or not recognize the spin-off at all. For U.S. OTC markets, the spun-off company will likely be added for one day and then be removed once price discovery is known. Decisions will be made on a case-by-case basis and announced to clients with ample lead time, when possible.*

Q: Will there be infinite returns reported in data files for the spun-off stock on the close of the ex-date if it is added at a zero price at the close on the day prior to the ex-date and dropped at the market price at the close of the ex-date? How will the return of the parent be treated?

***A**: Where a stock is included at a zero price and then trades, its return on the day is mathematically infinite. S&P Dow Jones Indices adjusts the % returns field in the constituent (.SDC) files to make it zero for the day. Similarly, since the closing price of the parent is not being adjusted downward as of the next day's open to account for the spin-off, the return on the parent for that day could be understated. S&P Dow Jones Indices calculates the return on the parent stock on that day by dividing the sum of the total closing index market cap of the parent stock and the spun-off stock by the closing index market cap of the parent stock on the day prior to spin-off. This gives a total return on the combined position of the parent and spun-off stock, and since the return on the spun-off stock is treated as zero for the day, this ensures that the single stock returns presented can be aggregated into the total index return.*

Q: What happens if the spun-off company trades in a different country from the parent? The spun-off company could be trading in a different currency, a different time zone and belong to a different country index as well.

***A**: At the discretion of the relevant Index Committee, the spun-off company may still be added at a zero price to all indices in which the parent entity is a constituent, and be removed from those indices after it trades regular way for at least one day.*

Share and IWF Updates

Certain mandatory events such as M&A driven share/IWF changes, stock splits, and mandatory distributions are not subject to a minimum threshold for implementation. Non-mandatory share/IWF changes follow the **5% rule** below which is standard across most S&P Dow Jones' branded indices. This rule is intended to reduce unnecessary turnover by aggregating smaller share changes and implementing them with the next quarterly rebalancing. In certain instances, local market practices may relax these rules so please refer to the respective individual index methodology for any deviations from this policy.

5% Rule. Confirmed share changes that are at least 5% of the total shares outstanding are implemented weekly. Total shares outstanding and not float-adjusted shares are used to determine whether the share change meets this 5% threshold. The 5% rule applies to share changes only. IWF changes are only considered if a share change meets the 5% threshold.

Changes to an index constituent's total shares outstanding of at least 5% are applied weekly and are announced after the market close on Fridays for implementation after the close of trading the following Friday (i.e. one week later). Examples of such changes include public offerings (also known as secondary offerings or follow-on offerings), tender offers, Dutch auctions, exchange offers, bought deal equity offerings, prospectus offerings, company stock repurchases, private placements, redemptions, exercise of options, warrants, conversion of derivative securities, at-the-market stock offerings, and acquisitions of private companies or non-index companies that do not trade on a major exchange. If an exchange holiday/closure falls on a Friday, the weekly share change announcement will be made the day before the exchange holiday/closure, and the implementation date will remain after the close of trading the following Friday (i.e. one week later).

If a change in total shares outstanding of at least 5% causes a company's IWF to change by at least five (5) percentage points, the IWF is updated at the same time as the share change. IWF changes resulting from partial tender offers are considered on a case-by- case basis.

For some markets, when total shares outstanding increase by more than 5%, but the new share issuance is directed to a strategic or major shareholder, it implies that there is no change in float- adjusted shares. However, in such instances, S&P Dow Jones Indices will implement a total shares outstanding change and resulting IWF change regardless of whether the float change is greater than or equal to 5%.

For companies with multiple share class lines, the 5% share change threshold is based on each individual multiple share class line rather than total company shares.

Changes to share counts that total less than 5% of total shares are accumulated and made quarterly on the third Friday of March, June, September and December.

Please note that IWF changes are only made at the annual IWF review unless a change is prompted by a mandatory event such as M&A activity, a 5% share change event as described above, or meets one of the exceptions noted below.

<u>Exceptions:</u>

1. U.S. Markets:
    a. For the S&P Composite 1500, share/IWF changes of 5% or more due to public offerings (also known as placements or secondary offerings) are made effective at the open of the next day under certain conditions. S&P Composite 1500 secondary offerings by selling

shareholders are recognized the next day if certain conditions are met, or weekly via an IWF change if the secondary offering is at least 5% of total shares outstanding.

   b. For non-S&P Composite 1500 indices, share/IWF changes of 5% or more are implemented weekly. For a more detailed description, please refer to the S&P U.S. Indices Methodology available at *www.spdji.com*.

2. In certain markets (such as India and Thailand), degrees of freedom adjustments that result in IWF changes are implemented with the quarterly rebalancing even if there is no change in shares outstanding.

3. For share reviews involving Australian and Japanese companies, please refer to the S&P/ASX Australian Indices Methodology and S&P Japanese Indices Methodology, respectively. These methodologies are available at *www.spdji.com*.

Note: For equal weighted or indices using modified market capitalization weighting schemes, shares and/or IWF updates are only effective for the underlying shares or IWF. The stocks' alternative weight factor (AWF) is generally modified to counteract the underlying shares/IWF change, so that index shares remain unchanged until the index is fully updated at its next scheduled rebalancing. Please refer to the respective individual index methodologies to confirm if an index follows this rule.

Rebalancing Guidelines – Share/IWF Freeze

A share/IWF freeze period is implemented during each quarterly rebalancing. The freeze period begins after the market close on the Tuesday prior to the second Friday of each rebalancing month (i.e. March, June, September, and December) and ends after the market close on the third Friday of the rebalancing month. Pro-forma files are normally released after the market close on the second Friday, one week prior to the rebalancing effective date. In September, preliminary share and float data are released on the first Friday of the month. However, the share freeze period for September follows the same schedule as the other three quarterly share freeze periods. For illustration purposes, if rebalancing pro-forma files are scheduled to be released on Friday, March 13, the share/IWF freeze period will begin after the close of trading on Tuesday, March 10 and will end after the close of trading the following Friday, March 20 (i.e. the third Friday of the rebalancing month).

During the share/IWF freeze period, shares and IWFs are not changed except for mandatory corporate action events (such as merger activity, stock splits, rights offerings).

Exception:

Share/IWF changes for S&P Composite 1500 constituents resulting from secondary public offerings that would otherwise be eligible for next day implementation are instead collected during the freeze period and added to the weekly share change announcement on the third Friday of the rebalancing month for implementation the following Friday night. There is no weekly share change announcement on the second Friday of a rebalancing month.

Multiple Share Classes

Companies issue multiple share classes in some instances. The treatment of multiple share classes of stock varies across S&P Dow Jones Indices' indices depending on local market custom and conditions. S&P Dow Jones Indices includes all publicly listed multiple share class lines separately in its float market cap (FMC) weighted indices subject to liquidity and float criteria currently in place for each index. Index membership eligibility for a company with multiple share class lines is based on the total market capitalization of the company. The decision to include each publicly listed line is evaluated line by line; the weight of each line will only reflect its own float, not the combined float of all company lines. It is possible that one listed share class line may be included in an index while a second listed share class line of the same company is excluded. Unlisted share class lines are not combined with any other listed share class lines, but these unlisted share class lines are included in the calculation of the company's total market capitalization. A company's total market capitalization is used to determine its assignment to either large-cap, mid-cap or small-cap indices.

Once a listed share class line is added to an index, it may be retained in the index even though it may appear to violate certain addition criteria. Listed share class line deletions are at the discretion of the governing Index Committee.

For companies that issue a second publicly traded share class to index share class holders, the newly issued share class line will be considered for inclusion if the event is mandatory and the market capitalization of the distributed class is not considered to be de minimis.

Designated Listing. For companies with multiple share classes of common stock, S&P Dow Jones Indices determines the share class with both the highest one-year trading liquidity (as defined by Median Daily Value Traded) and largest float-adjusted market capitalization as the Designated Listing. All other share classes are referred to as Secondary Listings. When the liquidity and market capitalization indicators are in conflict, S&P Dow Jones Indices analyzes the relative differences between the two values placing a greater importance on liquidity.

Once established, the Designated Listing is only changed if both the liquidity and market capitalization of a Secondary Listing exceed the liquidity and market capitalization of the Designated Listing by more than 20 percent. If only one measure exceeds 20 percent, S&P Dow Jones Indices analyzes the data as described above to determine if the Designated Listing should be changed. Otherwise, the Designated Listing remains unchanged.

For those companies having depository receipts or shares listed on an exchange outside of the country of domicile (including inter-listed stocks), the Designated Listing is generally the one listed on the exchange in the country of domicile. Non-voting depositary receipts (NVDR) are generally designated as Secondary Listings.

S&P Dow Jones Indices reviews Designated Listings on an annual basis and any changes are implemented after the close of the third Friday of September. The last trading day in July is used as the reference date for the liquidity and market capitalization data. If less than one year of trading data is available as of the reference date, then all available data is used. S&P Dow Jones Indices reserves the right to review and update the Designated Listing more frequently based on market conditions.

For purposes of index selection, S&P Dow Jones Indices utilizes one of the following approaches when more than one listing of equity stock outstanding is available. Changes to a Designated Listing within a given index are only made at a regularly scheduled rebalancing as defined in the applicable Index Methodology. Any deviations from the rules below are described in individual Index Methodology documents.

A. All publicly listed multiple share class lines are eligible for index inclusion, subject to meeting the eligibility criteria detailed in the respective Index Methodology.

B. Each company is represented once by the Designated Listing.

C. Each company is represented once by the listing with the highest dividend yield, subject to meeting the eligibility criteria detailed in the respective Index Methodology. In the event multiple lines meet the eligibility criteria and have similar dividend yields, the Designated Listing is selected.

<u>Exception:</u>

The class A shares of Chinese companies as well as the class A shares of Filipino companies will not be selected as the Designated Listing due to foreign ownership restrictions. In these cases, an alternative listing will be considered the Designated Listing.

<u>Note:</u> Alternatively weighted indices that follow the composition of an S&P Dow Jones FMC index utilize the same composition as the parent index.

For information on the treatment of multiple share classes for alternatively weighted indices, please refer to the respective index's methodology document available at www.spdji.com.

Depositary Receipt Shares

Depositary Receipt (DR) shares, including American Depositary Receipts (ADRs) and Global Depositary Receipts (GDRs), are derived by multiplying the DR ratio by the underlying shares represented by the DR.

Dividends, Stock Splits and Consolidation

Dividends

Regular Dividend. A regular dividend is a distribution of a portion of a company's earnings to its shareholders. Regular dividends typically follow a quarterly, semi-annual or annual cycle and are most often quoted in terms of the payment amount each share receives (dividends per share). For index calculation purposes, a regular dividend will only have an effect on the Total Return (TR) and Net Total Return (NTR) indices and not on Price Return indices.

Special Dividends. Special dividends are defined as those dividends that are outside of the normal payment pattern established historically by the corporation. Whether a dividend is funded from operating earnings or from other sources of cash does not affect the determination of whether it is a special dividend. Special dividends are typically larger than regular dividends and are quoted in terms of the payment amount each share receives (dividends per share). Generally speaking, there are no patterns for these events and they may simply be one-time payments. Special dividends are treated as corporate actions with price and divisor adjustments. For index calculation purposes, a special dividend results in a stock's price being adjusted (reduced) by the payment amount at the opening of the effective date.

S&P Dow Jones Indices will generally consider the third consecutive instance of a non-ordinary dividend (in terms of timing, not amount) to be ordinary for index purposes as this third consecutive payment will generally be considered to be part of the normal payment pattern established by the company.

Special dividends usually have the following characteristics: The company describes it as a "special," "extra," "irregular," "return of capital" "distribution from reserves", or some other similar term in the dividend announcement. Dividend payments not subject to a withholding tax are usually an indication that the dividend should be treated as special; however, large and out-of- pattern payments are still considered as "special" even if they are subject to a withholding tax.

When an ordinary dividend is increased or decreased, it is still ordinary, not special.

When a return of capital is declared in lieu of an ordinary cash dividend and fits the historical pattern of an ordinary dividend in amount and frequency, it is treated as an ordinary cash dividend. For example, many Swiss companies distribute a return of capital in lieu of ordinary dividends.

When a dividend is paid the first time, it is ordinary unless the company's release specifically states otherwise.

Return of Capital. A return of capital is a cash distribution of a portion of a company's share capital or capital surplus. As it is not paid out of net income or retained earnings, it is generally not subject to withholding tax. For index calculation purposes, a return of capital is considered a special dividend. However, when a return of capital is declared in lieu of an ordinary cash dividend and fits the historical pattern of an ordinary dividend in amount and frequency, it is treated as an ordinary cash dividend.

Hybrid Dividends. Hybrid dividends, payable in cash & stock, can be considered as regular or special dividends by S&P Dow Jones Indices. Treatment is as follows:

- **Hybrid Dividends Considered Regular Dividends.** S&P Dow Jones Indices applies the full amount of the dividend on the ex-date (using the cash equivalent amount), and then increases the shares on the payable date regardless of whether the share increase is greater than 5%.

- **Hybrid Dividends Considered Special Dividends.** A price adjustment is applied for the full amount of the dividend after the close of trading on the day before the ex-date, and a share increase is made on the payable date regardless of whether the share increase is greater than 5%.

In certain instances, S&P Dow Jones Indices may decide to add a temporary placeholder security to represent the stock portion of the hybrid dividend when deemed necessary to enhance the replicability of the index and to reduce unnecessary turnover. In such cases, S&P Dow Jones Indices will announce the treatment details with one to five business days' notice.

Scrip Dividend. A scrip dividend is a dividend paid by the issue of new shares in lieu of cash. A company may offer its shareholders the choice of receiving a dividend in shares (scrip dividend) rather than cash. The share option is typically listed as the default option for the shareholders who do not make an election. Only the distribution received under the cash option is subject to dividend withholding tax.

S&P Dow Jones Indices treats scrip dividends as cash dividends on the ex-date. Any share change due to a shareholder's election to receive shares will be subject to the standard policy on share changes – a share change of 5% or more will be implemented intra-quarter while share changes of less than 5% will be accumulated for quarterly implementation.

Dividend Treatments for ADRs and GDRs. For most American Depository Receipts (ADRs) and Global Depository Receipts (GDRs), cash dividends are declared in the local currency. While the dividend ex-date for an ADR/GDR is known ahead of time, the depositary bank usually provides only an estimated dividend amount in the trading currency of the ADR/GDR based on the foreign exchange rates at that time. The final dividend amount calculated using the latest forex rates is not available until closer to the payable date. S&P Dow Jones Indices' branded indices use the dividend treatment outlined below:

(i) If the dividend is quoted ex by the exchange, this amount is used on the dividend ex-date.

(ii) If the dividend is not quoted ex by the exchange, the dividend is not generally recognized for index purposes. An exception is Japanese and Korean ADR dividends which are generally not quoted ex by the exchange but are recognized on a future date if the depository bank issues a final dividend notice. See the *Post Ex-date Dividend Adjustment s*ection for further information on this exception.

(iii) For certain Russian GDRs, the information regarding the dividend amount and ex-date is available only after the ex-date has passed. In these instances, S&P Dow Jones Indices may choose to recognize the dividend on the date S&P Dow Jones Indices becomes aware of the amount. S&P Dow Jones Indices does not wait for the payable date, which could be months away in some instances.

Regional Variations in the Treatment of Cash Dividends

UK. Cash dividends reported in the UK are net dividends, which is the amount used for index calculation purposes. UK dividends are taxed at the source – from company profits after corporation tax has already been paid.

Property Income Distributions (PIDs): PIDs are a special kind of dividend related to Real Estate Investment Trusts (REITs) and are taxed at a rate of 20%. REITs might declare dividends that are solely PIDs, solely ordinary dividends or a combination of the two.

Example: Company A declares a dividend consisting of two components: a regular dividend of GBP 0.031 and a PID component of GBP 0.015 taxed at a rate of 20%. So, for index calculation purposes, the dividend amount for Company A is GBP 0.043.

$$Dividend = GBP\ 0.031 + GBP\ \{0.015 * (1-0.2)\} = GBP\ 0.043$$

Taiwan. When there is a suspension in trading that S&P Dow Jones Indices is aware of, the event is recognized on the date trading resumes.

Examples:

(1) The reverse split for 2887.TW was recognized on February 3, 2010, the pay date after the stock came out of its trading suspension instead of January 19, 2010, which was the ex-date.

(2) The return of capital with the reverse split for 2412.TW was recognized on February 8, 2010, the pay date, after the stock resumed trading instead of its ex-date January 21, 2010.

Japan. The majority of dividends in Japan are provided in estimated amounts on their ex-date. If an estimated dividend is provided, the estimated dividend is reinvested into the index on the ex-date. For companies that do not provide estimates but have a historical pattern of paying dividends, the estimate is calculated as the previous year's dividend amount adjusted for any split/bonus issues. If no dividend was paid in the same period the prior year and an estimated dividend is not available, no dividend amount is reinvested on the ex-date. Once the company announces the actual dividend amount, S&P Dow Jones Indices reinvests the difference between the estimated and confirmed dividend amount using the *Post Ex-Date Dividend* calculation methodology (see below).

Irregular distributions declared by Japanese companies, including memorial dividends, returns of capital and special dividends are generally treated as ordinary dividends.

Korea. The majority of dividends in Korea are not announced prior to their ex-date. S&P Dow Jones Indices recognizes these dividends after they have been confirmed by the company. Please see the *Post EX-Date Dividend* calculation methodology below.

Canada. S&P/TSX Canadian Indices have a minimum 4% of price threshold to recognize a dividend as special; For example, if the dividend is over 4% of the price of the stock, it is deemed to be a return of capital and the price of the underlying security is reduced by the dividend amount prior to the ex-date.

In Canadian markets, income trusts sometimes pay special dividends. The mandate in their charter is to distribute all excess cash to unit holders. Periodically, they distribute this extra cash via a small special dividend, often with the same payment schedule (ex-date, record date, pay date) as a regular dividend. S&P Dow Jones Indices' treatment is to add them together and treat it as a regular dividend.

Brazil. Interest on Capital is generally recognized as a cash dividend, but is subject to a different withholding tax rate than an ordinary cash dividend.

Turkey. Distributions from REIT companies are treated as cash dividends, but unlike cash dividends they are subject to a zero withholding tax rate.

Australia. If a company announces that a dividend being paid is a special dividend, it is treated as a special dividend with a price adjustment. Where a company does NOT announce it as a special dividend, but the ASX or vendors do, the treatment will still match that announced by the company. It is uncommon for ASX listed stocks to repeatedly pay special dividends in patterns that resemble regular dividends.

- **Franking.** Australia has a tax structure where profits are only taxed once at either the company level or shareholder level; i.e., Australian companies pay out profits as dividends either before or after tax. The "franking rate" is what tracks whether or not the tax was already paid on the cash dividend. If the tax was already paid at the company level, then the dividend amount is fully franked (100% franked). If taxes were not paid on the cash distribution, then the dividend is 0% franked. Note that the franking rate can also be in between 0% and 100%.
- **Conduit Foreign Income (CFI).** CFI is foreign income received by a foreign resident via an Australian corporate tax entity. The tax relief for CFI ensures that those amounts are not taxed in Australia when distributed by the Australian corporate tax entity to its foreign owners. The Conduit Foreign Income removes any withholding tax liability for non-resident shareholders in relation to the CFI component of dividends received.

Franking Credit Adjusted Total Return Indices. Additional total return indices are available for a number of S&P/ASX Indices that adjust for the tax effect of franking credits attached to cash dividends. The indices utilize tax rates relevant to two segments of investors: one version incorporates a 0% tax rate relevant for tax-exempt investors and a second version uses a 15% tax rate relevant for superannuation funds. The franking credits attached to both regular and special cash dividends are included in the respective calculations.

To calculate the gross dividend points reinvested in the Franking Credit Adjusted Total Return Indices:

*Grossed-up Dividend = [As Reported Dividend * (1-% Franked) + (As Reported Dividend * (% Franked/1 – Company Tax Rate))]*

The Net Tax Effect of the franking credit is then calculated based on the investor tax rate (i.e. 0% for tax-exempt investors and 15% for superannuation funds).

*Net Tax Effect = [Grossed-up Dividend * (1 – Investor Tax Rate)] – As Reported Dividend*

The Net Tax Effect of each dividend is then multiplied by the index shares of that company to calculate the gross dividend market capitalization.

*Gross Dividend Market Cap = Net Tax Effect * Index Shares*

These are then summed for all dividends going ex on that date and converted to dividend points by dividing by the index divisor

Gross Dividend Points = Sum of Gross Dividend Market Caps / Index Divisor

Franking Credit Adjusted Annual Total Return Indices. This index series accrues a pool of gross dividend points on a daily basis and reinvests them across the index annually after the end of the financial year. Reinvestment occurs at market close on the first trading day after June 30th. The gross dividend points are derived by taking the value of the gross dividend market capitalization (less the as reported dividend market capitalization) and dividing it by the index divisor effective on the ex-date of the respective dividend.

Franking Credit Adjusted Daily Total Return Indices. Rather than allowing a separate accrual of gross dividend points, this index series reinvests the gross dividend amount across the index at the close of the ex-date on a daily basis.

Post Ex-date Dividend Adjustment

Companies in Japan and South Korea do not typically confirm cash dividend amounts prior to the ex-dates. Estimated dividends are usually available for Japanese companies ahead of the dividend ex-date, and it is generally accepted to recognize the estimated amount on the ex-date. Korean companies do not usually provide an estimate for dividends. For both countries, actual dividend amounts are confirmed by the companies several weeks after the ex-date.

S&P Dow Jones Indices determines the difference between the dividend amount recognized on the original ex-date and the confirmed dividend amount announced by the company. This dividend adjustment is applicable to Japanese and Korean companies listed in their home markets and overseas as depositary receipts (ADR/GDR). For Japanese and Korean depositary receipts (ADR/GDR), S&P Dow Jones Indices uses the final confirmed dividend amount announced by the depositary bank.

An adjustment in terms of dividend points is applied to the affected indices weekly at the close of the following Friday without restatement to past index levels. Any dividend adjustment applied on Friday is announced one day in advance. If the following Friday is not a trading day, the dividend adjustment is applied on the next trading day. The dividend point adjustment for a particular index is calculated using the following formula:

$$Index\ Dividend\ Point\ Adjustment = (D_{dt} * S_{at}) / Divisor_t$$

where:

D_{dt} = Difference between the original and the confirmed dividend amount; foreign exchange conversion, if applicable, is based on the exchange rate on the ex-date.

S_{at} = Index shares on the ex-date.

$Divisor_t$ = Index divisor on the ex-date.

The gross total return (TR) and net total return (NTR) versions of the dividend point adjustment are calculated. The TR index dividend point adjustment, which may be positive or negative, is added to the price index level on Friday for the calculation of the total return index that day. Similarly, the NTR index dividend point adjustment is used for the calculation of net total return. If there are multiple dividend adjustments to implement in an index, a separate index dividend point is calculated for each dividend adjustment. The index dividend points are then aggregated for the calculation of return index levels. In the event that a negative dividend adjustment results in an overall negative index dividend for the day, the gross and net total return series underperform the price return on the effective date that the dividend adjustment is applied.

Exception: If a stock is not part of an index on the original dividend ex-date or the dividend adjustment implementation date, there is no dividend adjustment for that stock in that index. For indices formed by attributes applied to the headline composition, if a stock has an attribute change between the original ex-date and the dividend adjustment effective date but remains in the headline index throughout the period, any dividend adjustment attributable to that stock would be applied to the headline index but not to the attribute indices.

Foreign Exchange Conversions for Dividends

When companies declare dividends in currencies other than their stock trading currency, the following rules are used for the dividend currency conversion:

- The dividend is converted using the forex rate on the ex-date for regular cash dividends. Special dividends are converted using the forex rate on the day prior to the ex-date (or two days prior for Asia Pacific). Please refer to individual index methodology documents to check which foreign exchange rates are used for index calculation purposes.
- For ADRs and GDRs, the dividend amount and currency provided by the depositary banks are generally used for index calculation.

S&P Dow Jones Indices reserve the right to make exceptions to this policy and apply a dividend amount in an alternative currency announced by the company.

Multiple Dividend Distributions on a Single Day

When there are multiple cash dividends on a single day, S&P Dow Jones Indices will combine them into a single amount for implementation. If the different dividends or multiple components of a single dividend are subject to different dividend withholding taxes, the standard withholding tax rate for the country will be used and the gross dividend amount may be adjusted accordingly.

Dividend Not Quoted Ex by the Exchange

At times, when companies declare a conditional dividend (contingent upon some event taking place (e.g. a merger, Board approval, etc.), S&P Dow Jones Indices might still decide to recognize it. In such cases, clients will be notified in advance.

Bonus Issues of Shares Not Entitled To Cash Dividend

In certain global markets there have been cases where bonus issues of shares are not entitled to a dividend effective at a later date.

Treatment is as follows:

- Apply the bonus issue on the ex-date
- Adjust the dividend effective at a later date accordingly (i.e. decrease the dividend amount in order to adjust it over the new number of shares including those resulting from the bonus issue).

Total Return and Net Return Indices

Gross and net total return indices are calculated for most S&P Dow Jones Indices' branded indices. Cash dividends are generally applied on the ex-date of the dividend (market exceptions are noted in this document).

Net return indices reflect the return to an investor where dividends are reinvested after the deduction of a withholding tax.

Withholding Tax. This is the amount withheld by the company making a dividend payment, to be paid to the taxation authorities. In the context of S&P Dow Jones Indices' branded indices, this refers to the tax that non-residents are subject to, when the country in which the company paying the dividends is incorporated is not where the shareholder resides. In most countries, domestic shareholders are not required to pay this tax. Tax treaties between countries may reduce the amount of withholding tax required. Data on tax rates are reviewed annually by S&P Dow Jones Indices. They are sourced and verified with independent data sources, including but not limited to the Worldwide Corporate Tax Guide published annually by Ernst & Young.

Stock Split and Consolidation

Stock Split. A stock split is a corporate event which increases the number of a company's shares, while simultaneously reducing its per share price, such that the market capitalization of the company remains the same before and after the event.

Stock splits are quoted in terms of shares received to shares held.

The shares of a company are increased (multiplied) by the stock split adjustment factor (greater than one), while the price is decreased (divided) by this same factor.

In a 5-for-1 stock split the adjustment factor is 5, so the shares outstanding is multiplied by 5 while the price is divided by 5.

Stock Dividend. Stock dividends work exactly like stock splits, except these are quoted in terms of the percentage of shares received to those held.

A 5% stock dividend is the same as a 1.05-for-1 stock split with an adjustment factor of 1.05.

Bonus Issue. A bonus issue is quoted in terms of shares received to shares held, like stock splits, or quoted in percentages like stock dividends.

Stock splits, stock dividends and bonus issues are similar terms. They essentially imply the same action; the only difference is in the way the terms are quoted.

So, a 1-for-20 bonus issue is the same as a 21:20 stock split, which is the same as a 5% stock dividend.

Consolidation. This is the exact opposite of a stock split. In a consolidation, the shares of a company are decreased while its per-share-price is increased by the adjustment factor (less than one). Also like a stock split, the overall market capitalization of the company remains unchanged by this event. Also referred to as a “Reverse Stock Split”.

Reverse splits are quoted in terms of shares received to shares held.

The shares of a company are decreased (multiplied) by the adjustment factor, while the price is increased (divided) by this same amount. The adjustment factor for a reverse split is determined just like in a stock split (shares received/shares held).

Rights Offerings (or "Rights Issues")

A rights issue is an event in which existing shareholders are given the right to buy a specified number of additional shares from a company, at a specified price ('rights' or 'subscription' price), within a specified time ('subscription period'). Only rights available to all shareholders are recognized.

For all markets (Developed, Emerging, and Frontier), irrespective of whether the rights are renounceable and/or fully underwritten, S&P Dow Jones Indices implements the following treatment:

- Price adjustments are applied at the opening of the rights ex-date as per the calculations shown below.
- Share changes are also applied at the full rights ratio at the opening of the rights ex-date.
- If the rights are undersubscribed or oversubscribed, the corresponding share adjustments are made at the next quarterly share rebalancing, if the change is less than 5%. If the change in shares is greater than 5%, these changes might be made sooner, at S&P Dow Jones Indices' discretion, to coincide with a future weekly share change.
- If the new shares are not entitled to a future dividend, which has been announced and where the amount is known, the price adjustment calculation will reflect the dividend (the dividend amount will be added to the subscription price). This applies to both ordinary and special dividends. Please see calculations shown below.

S&P Dow Jones Indices' Calculation of Rights Offerings

STEP 1: **Determine if the rights offering is in-the-money or out-of-the-money**:

If the subscription price < the stock closing price on the day before the ex-date, then the rights offering is in-the-money

If the subscription price ≥ the stock closing price on the day before the ex-date, then the rights offering is out-of-the-money

Note > In several cases with rights offerings, the new shares are not entitled to a future dividend. If a future dividend is announced by the day before the ex-date of the rights, the dividend amount has been confirmed and S&P Dow Jones Indices is certain that the newly created shares as a result of the rights offering are not entitled to the dividend, the following rule are used to determine if a rights is in-the-money or not:

If the subscription price + dividend < the stock closing price on the day before the ex-date, then the rights offering is in-the-money

If the subscription price + dividend ≥ the stock closing price on the day before the ex-date, then the rights offering is out-of-the-money

STEP 2: **If the rights offering is in-the-money, apply the price and share adjustment on the ex-date:**

S&P Dow Jones Indices' practice is to only recognize rights that are in-the-money. The assumption is that main clients are long-only indexers and, as rational investors, they will exercise any rights that are in-the-money to mimic the index and keep tracking error minimized. Indexers will not exercise issues that are out-of-the-money, as they are trading at a premium to the current market price.

For rights offering in-the-money, the share adjustment is made irrespective of whether it is greater or less than 5% (since it is a corporate action driven event). The price adjustment is always applied on the ex-date using the following calculation:

Price adjustment calculation:

Value of the Rights = {Market Value of the Stock – (Subscription Price + Dividend[1])}/ (Number of Rights required to purchase 1 share + 1)

Price Adjustment Factor = (Market Value of the Stock - Value of the Rights)/ Market Value of the Stock

Adjusted Price or Theoretical Ex-Rights Price (TERP) = Market Value of the Stock * Price Adjustment Factor = Market Value of the Stock – Value of the Rights

Note > that the Market Value of the Stock is the previous day's closing price (previous day to the rights ex-date). This is also referred to as Cum Rights Price in some markets.

Examples:

Example 1: SP AUSNET (SPN.AX). For SPN.AX's (May 2009) rights offer, the full AU$ 0.05927 distribution (AU$0.04603 cash dividend + AU$ 0.01324 capital return) was used in the TERP calculation of SPN.AX. This amount was added to the SPN.AX rights subscription price of AU$ 0.78. The cash dividend and capital return on the dividend ex-distribution date was not diluted.

Example 2: A 7:5 rights offering (i.e., the right to buy seven new shares for every five shares owned) at a subscription price GBP 1.50 and the market value of the stock on previous day's close is GBP 3.34; no future dividend has been announced.

Value of Rights = {3.34 – (1.5 + 0)}/ {(5/7) + 1} = GBP 1.07333333

Price Adjustment Factor = (3.34 – 1.07333)/ 3.34 = 0.67864271

Adjusted Price or TERP = 3.34 * 0.67864271 = GBP 2.26666667

OR

Adjusted Price or TERP = 3.34 – 1.07333333 = GBP 2.26666667

Example 3: A 7:5 rights offering at a subscription price of GBP 1.50 and the market value of the stock on previous day's close is GBP 3.34; a future dividend for the amount GBP 0.50 is declared, but the new shares are not entitled to this dividend.

Value of Rights = {3.34 – (1.5 + 0.5)}/ {(5/7) + 1} = GBP 0.78166667

Price Adjustment Factor = (3.34 – 0.78166667)/ 3.34 = 0.76596806

Adjusted Price or TERP = 3.34 * 0.76596806= GBP 2.5583333

OR

Adjusted Price or TERP = 3.34 – 0.78166667 = GBP 2.5583333

[1] If there is no upcoming dividend or newly added shares are entitled to a future dividend, the "Dividend" amount in the formula is zero. If the new shares are not entitled to the dividend, the dividend amount is added to the subscription price. This applies to regular and special dividends.

If the rights offering is out-of-the-money, then no action is undertaken to match the corporate action for index purposes, as a rational investor would not subscribe to the rights issue. This is valid even if the issue is underwritten or guaranteed rights offering. Any subsequent shares issued are classified as a placement, for index management purposes, and adjusted after the end of the subscription period, during the weekly share updates, if the share change is greater than 5%. For share changes less than 5%, the adjustment is made at the quarterly rebalancing.

Equal Weighted and Modified Market Cap Weighted Indices

When a stock trading in an equal weighted index has a rights or open offering, there are no market cap changes between the close and adjusted close files (i.e., the weight of the company stays the same, per the index methodology). So, either the IWF or the AWF will be adjusted to offset any potential market cap changes, bringing the security back to its weight before the rights offering. Certain Strategy indices follow the modified market cap weighted methodology. For such indices, in the event of a rights offering, the treatment is exactly the same as the one for equal weighted indices. The price adjustment is accompanied by an index shares change so that the company's weight remains the same as its weight before the rights offering. No divisor adjustment is made.

Refer to the respective individual index methodology for more information on the specific treatment for a particular index.

Warrants, Options, Convertible Bonds, Other Ineligible Securities & Share Types

Securities such as warrants, options, or convertible bonds are not eligible for equity indices. In certain instances, if the derivative security is anticipated to trade on a local exchange, it may temporarily be added to indices to discover value and then removed. In other instances, if all the information to calculate the price adjustment for the derivative security is available, S&P Dow Jones Indices may choose to implement a price adjustment to the parent on the ex-date. If information is not available to value the ineligible security, S&P Dow Jones Indices may choose not to recognize the event. Any share increase associated with the derivative security, where applicable, is done at a later time, when information is available and has been reviewed.

If S&P Dow Jones Indices decides to temporarily add the ineligible security to indices and the ineligible security does not trade for 20 consecutive trading days after the ex-date, S&P Dow Jones Indices may decide to remove the security at a zero price with advance notice given to clients.

In instances where the terms specify that the type of shares or financial instruments being offered are of a different nature than the current shares outstanding for a particular company's stock, a price adjustment may be implemented on the rights ex-date with a share increase at a later time, in line with the treatment detailed above. Clients will be notified of such treatment in advance.

<u>Exceptions:</u>

Subscription Price is Unknown until after the Ex-Date. In certain markets, the subscription price is not known on the ex-date and sometimes provided well after the ex-date has passed. In Singapore, for example, in some instances, a subscription price range is provided, instead of a fixed subscription price, and there is no definite subscription price at the market close of the day before the rights ex-date. Similar cases have come up in Chile and other emerging markets. In the U.S., there have been instances where the subscription price and ratio were not known until the ex-date had passed. In all such cases, these are treated as a book build/placement issue and a share change is applied to the full extent of the rights ratio at the opening of the first business day following the expiration date. The share change is applied only if the rights are in the money when the terms are disclosed. No price adjustment is made.

Other. In instances where high profile banks or companies are involved, or the Government is underwriting shares, S&P Dow Jones Indices reserve the right to alter the general treatment with sufficient notice to clients.

Country Specific

Australia. For this market, S&P Dow Jones Indices follows the local practice for renounceable and non-renounceable accelerated and traditional rights offerings as described below.

(i) Renounceable Rights (Traditional)

- Adjust the headline stock price on the ex-date.
- Add the rights class to the index with new shares at the Theoretical Ex-Rights Price (TERP) of the headline stock *minus* the Subscription Price.
- When the rights class converts to fully paid ordinary shares, drop the rights class and increase the shares in the headline stock at the last trade price.

(ii) Renounceable Rights (Accelerated)

Institutional investors are able to renounce the offer during the trading halt and the entitlement is then sold through a bookbuild process. There is no additional stock line created. It is essentially treated the same as a non-renounceable accelerated offer.

- Price adjustment – on the ex-date.
- Share change – on the ex-date applying the rights ratio/terms.

(iii) Non-Renounceable Rights (Traditional) – Less frequent in the Australian markets

- Price adjustment – on the ex-date.
- Share change – on the ex-date applying the rights ratio/terms.

(iv) Non-Renounceable Rights (Accelerated) – The most common type of rights offerings seen in Australia

- Trading halts when the rights offering is announced.
- There is an institutional and retail component of the rights. Institutional investors typically have one day during the trading halt to exercise their rights. Retail investors are given an extended period of time.
- Ex-date is the date that trading resumes.
- Price adjustment – on the ex-date.
- Share change – applied on the ex-date applying the rights ratio/terms.

Accelerated Rights Offering: Accelerated Rights may come in two parts "institutional" (accelerated) and "retail" (traditional). For all purposes, the index is adjusted on the ex-date at the full rights ratio. If there is an over allocation in the index, a share adjustment is made to bring shares back into line at the next quarterly share rebalancing. Current treatment is as follows:

- Known Price: If the subscription price is known in advance, price and shares are adjusted on the ex-date.
- Unknown Price: If the price is determined in a bookbuild or some other facility and released after the ex-date, this is treated as a placement (secondary offering). Shares increase at the full ratio, with one to five business days' notice, with no price adjustment.

UK Open Offers. Open Offers are a type of UK equity placing where existing shareholders are offered the opportunity to buy shares at a discounted rate to the market price. These rights are non-renounceable. Open offers are often accompanied by an equity placing available to all investors at the same discounted price preferentially available to existing shareholders. Both events are normally announced on the ex-date of the open offer.

S&P Dow Jones Indices recognizes that there is no additional value to being a shareholder prior to the offer, as there is equal value available to other market participants.

The treatment of UK Open Offers is to not apply a price adjustment for such transactions. The share change is applied after the end of the subscription period as part of the weekly share changes (refer to the *Share & IWF Updates* chapter), if the share change is greater than 5%. For share changes less than 5%, the adjustment is made at the quarterly rebalancing.

Treatment of Corporate Actions on Exchange Holidays

Price Adjusting Corporate Actions

Price-adjusting corporate actions such as splits, bonuses, rights, spin-offs, and special dividends with effective dates that fall on an exchange holiday are generally implemented on the next trading day. If an exchange declares a trading holiday with little advanced notice, S&P Dow Jones Indices may implement the corporate actions on that date. In such a scenario, the adjusted closing prices are used for index calculation rather than the previous trading day's closing prices.

Non-Price Adjusting Corporate Actions

Share and IWF changes, adds to and drops from the index, changes of attributes such as country of domicile and GICS classification, etc. are allowed on an exchange holiday. These events take effect before the open of the effective date. Therefore, any trading required would have been completed by the close of the trading day before the effective date.

Bankruptcies & Stock Suspensions

Bankruptcies

Bankrupt securities are considered ineligible. The removal of a bankrupt security is done at the same time with the same closing price in all S&P Dow Jones Indices' branded indices.

- Announcements are made such that a minimum of one day's notice is given to clients. For example, if the bankruptcy filing is on Monday, S&P Dow Jones Indices' announcement is published on Monday evening, with the removal on Tuesday after the market close.
- Same day removals for bankruptcies are not done.
- If the security is trading on its primary exchange at the close of the day it is removed, that price is used. If the security is halted on or delisted from its primary exchange, a price of zero is used.
    - **Exception for U.S. listed securities.** If a U.S. listed stock moves from its primary exchange to the OTC market prior to it index deletion date, OTC prices (including Special Opening Quotations if applicable) are used to price the stock for index purposes from the time of the exchange move until its index delisting date regardless of the reason for the exchange move (including bankruptcies, voluntary delistings and non-compliance issues). If a stock moves to OTC, but does not trade on OTC prior to its index deletion date, the stock is removed at a zero price.
- **FDIC Receivership.** This refers to the process by which the Federal Deposit Insurance Corporation (in the U.S.) takes over the operations of a failed banking institution and arranges for the liquidation of its assets. Companies that have been placed in FDIC receivership are dropped from all indices at the earliest reasonable date using the rules stated above.

Long-Term Stock Suspensions

For suspended stocks, S&P Dow Jones Indices carries forward the last available official closing price prior to the suspension during the suspension period. Stocks under long-term suspensions are reviewed on a periodic basis. Suspended stocks that exceed a threshold of 60 business days, based on the designated listing exchange trading days, are reviewed for possible index deletion. The suspension review evaluation date to determine a potential index deletion is the last business day of February, May, August and November. Stocks that reach a suspension period of 60 days or more, as of the evaluation date, are subject to index deletion. S&P Dow Jones Indices will provide advanced notice that a stock will be removed at a zero price at the next rebalancing following the quarterly suspension evaluation date.

As part of the suspension review, stocks with pending corporate events or that have announced any information regarding the date when the stock will resume trading will generally not be deleted from indices. S&P Dow Jones Indices does not consider restructuring as a corporate event unless further information is disclosed, except for Chinese domestic companies. Restructuring events for Chinese domestic companies (including A, B & H shares) are recognized as corporate events and will not be deleted from indices until the stock trades again. S&P Dow Jones Indices freezes the index shares for suspended stocks across any index rebalancings during the suspension period.

Stocks suspended for less than 60 business days, as of the quarterly suspension evaluation date, are reviewed for deletion at the following quarterly suspension evaluation date. In the event that a stock resumes trading after S&P Dow Jones Indices announced that the stock will be deleted, the S&P Dow Jones Index Committee may revise the deletion decision provided the stock resumes trading at least two business days prior to implementation of the stock's deletion.

In order to minimize turnover, any stock deleted from an index due to the 60 day suspension rule will not be eligible for re-inclusion in any index for six months following its deletion even if the stock begins trading again. Stocks under long-term suspension that exceed the threshold of 60 business days will be deleted at the March, June, September and December rebalancings. Deleted suspended stocks will then become eligible again for index inclusion beginning with the subsequent September, December, March, and June rebalancings, respectively. The table below summarizes the deletion and re-eligibility timetables.

Deletion	Re-eligible for Index Inclusion
March rebalancing	September rebalancing
June rebalancing	December rebalancing
September rebalancing	March rebalancing
December rebalancing	June rebalancing

Any exceptions to these rules will be announced in advance of the implementation.

Short-Term Stock Suspensions

If it is known in advance that the stock will be suspended from trading, corporate actions (even if quoted ex by the exchange) are not recognized until trading resumes. However, if prior information is not available for a stock being suspended and if a corporate action has been recognized for that day, the market driven actions will be implemented for the ex-date and the adjusted prices carried until trading resumes.

Domiciles

Investors often allocate their portfolios on a country-by-country basis. Company domicile assignments are important to companies and investors because they determine how companies are perceived by investors and what companies are considered their peers. Also, certain countries may place restrictions on foreign investors' holdings.

Traditionally index providers (including S&P Dow Jones Indices), analysts and investors had relied on incorporation or registration as the primary determinant of a company's domicile. Incorporation determines a company's tax status, the legal structure it follows, and its corporate structure and governance. Difficulties arise when a company uses its domicile for purposes other than simple legal registration, such as minimizing its taxes or adjusting shareholder rights. This often leads to incorporation/registrations in domiciles of convenience such as Bermuda, the Cayman Islands, Channel Islands, etc. See below for a list of domiciles of convenience.

Domicile determination becomes more complex when companies in emerging or frontier markets which seek developed market legal and tax systems (e.g. Chinese companies incorporated in Hong Kong or Bermuda). When a domicile of convenience is chosen, additional information for domicile determination is considered.

Policy

The incorporation and/or registration is the primary factor which determines country of domicile. Other factors that may be considered include operational headquarters location, primary stock exchange listing, the geographic breakdown of revenue and assets, ownership information, location of officers, directors and employees, investor perception and other factors deemed to be relevant.

All final domicile determinations are subject to review by the Index Committee, if needed. Please note, that while a company is assigned a country of domicile based on this policy, individual index methodologies may have other criteria that would exclude it from a headline country index. Please refer to the respective index methodology document for such additional criteria.

This review includes exceptions for China, Russia and Israel. A large number of companies based in China are incorporated and/or listed and traded in other places such as Hong Kong, Singapore, Bermuda (incorporation) or the U.S. (listings) because the Chinese equity markets are not completely open to global investors. These companies have been, and will continue to be, considered Chinese. Numerous Russian companies are similarly incorporated and traded in London, though headquartered in Russia. Israeli companies are sometimes listed on NASDAQ and incorporated in domiciles of convenience.

<u>Domiciles of Convenience</u>:

- Bermuda
- Channel Islands (as in British Channel)
- Gibraltar
- Islands in the Caribbean (Anguilla, Antigua and Barbuda, Aruba, Bahamas, Barbados, British Virgin Islands, Cayman Islands, Dominica, the Dominican Republic, Grenada, Haiti, Jamaica, Montserrat, Navassa Island, Netherlands Antilles, Puerto Rico, St. Barthlemy, St. Kitts and Nevis, St. Lucia, St. Martin, St. Vincent and Grenadines, Trinidad and Tobago, Turks and Caicos, the Virgin Islands)
- Isle of Man

- Luxembourg
- Liberia
- Panama

S&P Dow Jones Indices has seen companies being reincorporated in certain European countries such as Cyprus, Ireland, the Netherlands and Switzerland for tax purposes. These European countries are not included in the "domiciles of convenience" list; however other mentioned factors are considered before determining a country of domicile in such cases.

Note that some of the domiciles of convenience have domestic stock exchanges, and a company can therefore be placed in one of these countries if it is incorporated/ registered there.

Domicile determination is generally applied to new index additions or when a company announces a change in incorporation or registration. However, S&P Dow Jones Indices' Index Committee does reserve the right to review companies on a case-by-case basis. Domicile is reviewed on an as-needed basis.

Unexpected Exchange Closures

An unexpected market/exchange closure is when a market/exchange fully or partially fails to open or trading is temporarily halted. This can apply to a single exchange or to a market as a whole, when all of the primary exchanges are closed and/or not trading. Unexpected market/exchange closures are usually due to unforeseen circumstances, such as natural disasters, inclement weather, outages, or other events.

U.S. Securities

To a large degree, S&P Dow Jones Indices is dependent on the exchanges to provide guidance in the event of an unexpected exchange closure. S&P Dow Jones Indices' decision making is dependent on exchange guidance regarding pricing and mandatory corporate actions.

SEC Rule 123C-Equities provides closing contingency procedures for determining an official closing price for listed securities if the exchange is unable to conduct a closing transaction in one or more securities due to a system or technical issue.

3:00 PM ET is the deadline for an exchange to determine its plan of action regarding an outage scenario. As such, S&P Dow Jones Indices also uses 3:00 PM ET as the cutoff.

Full Market Disruptions. If all major exchanges fail to open or unexpectedly halt trading intraday due to unforeseen circumstances, such as natural disasters, inclement weather, outages, or other events, S&P Dow Jones Indices will take the following actions:

- Market Disruption Prior to Open of Trading:
    - (i) If all exchanges indicate that trading will not open for a given day, S&P Dow Jones Indices will treat the day as an unscheduled market holiday. The decision will be communicated to clients as soon as possible through the normal channels. Indices containing multiple markets will be calculated as normal, provided that at least one market is open that day. Indices which only contain closed markets will not be calculated.
    - (ii) If exchanges indicate that trading, although delayed, will open for a given day, S&P Dow Jones Indices will begin index calculation when the exchanges open.
- Market Disruption Intraday:
    - (i) If exchanges indicate that trading will not resume for a given day, index levels will be calculated using prices determined by the exchanges based on SEC Rule 123C. Intraday index values will continue to use the last traded composite price until the primary exchange publishes Official Closing Prices.

International Securities

International exchanges do not have the same secondary exchange default capabilities as U.S. exchanges. In the event of an unexpected exchange closure, S&P Dow Jones Indices uses the following guidelines:

(i) If an unexpected exchange closure occurs prior to the open of trading and it is indicated that trading will not open for a given day, S&P Dow Jones Indices will treat the day as an unscheduled market holiday.

(ii) If a market disruption occurs intraday, S&P Dow Jones Indices will wait for the impacted exchange to publish a list of closing prices, which will then be used to calculate the closing index values. If no list is published, the last trade for each security before the interruption is used to calculate the index closing value. If no trades were reported for a security, the previous closing price, adjusted for corporate actions, is used for index calculation.

Please refer to the *Index Policy* chapter for more details.

Treatment of Corporate Actions

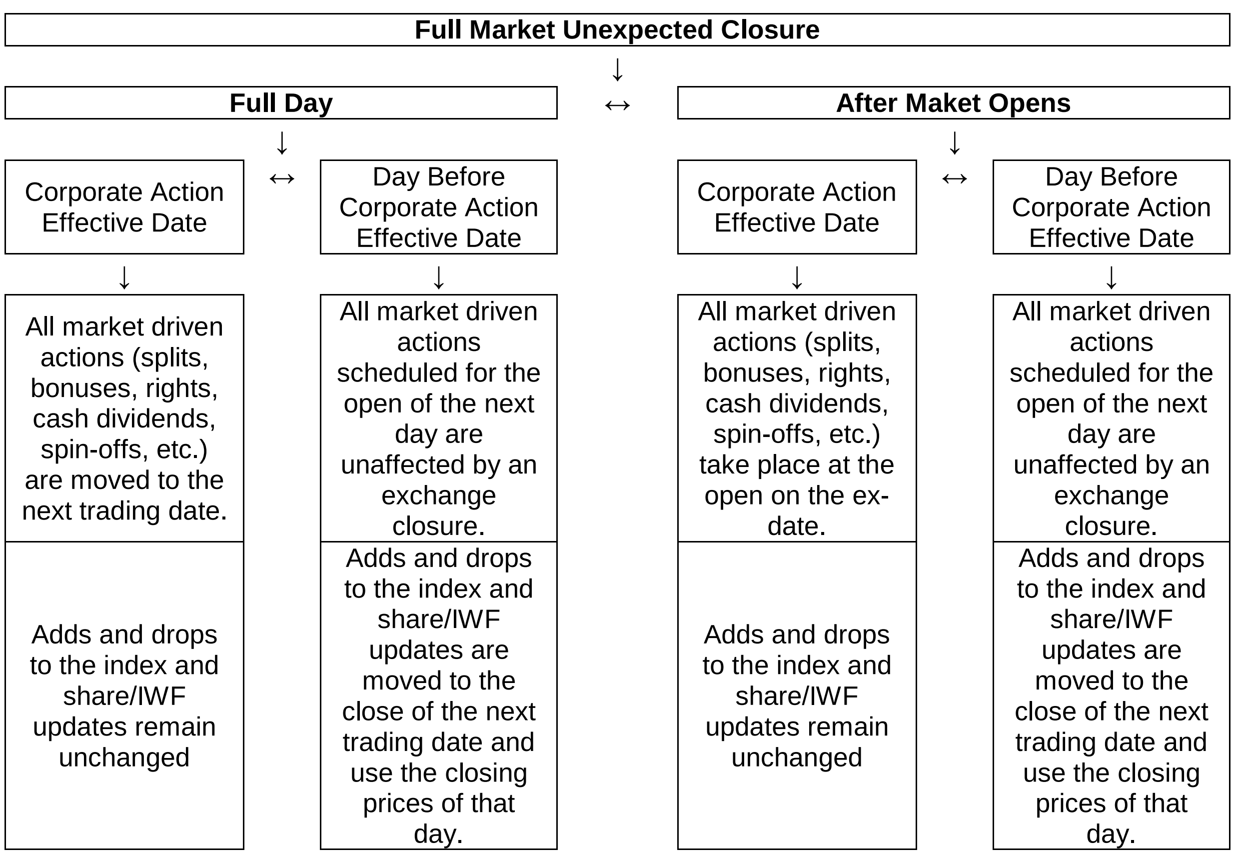
S&P Dow Jones Indices will take the following steps regarding corporate actions in an effort to provide a replicable index:

In the event of an unexpected full market closure:

(i) Full-day closure occurring on the corporate action effective date: All market driven actions (splits, bonuses, rights, cash dividends, spin-offs, etc.) are moved to the next trading date. This involves the reposting of all affected files of each index that contains the impacted stocks. However, the exchange's lead is followed in such situations. If the exchange moves the corporate action ex-date, S&P Dow Jones Indices does the same. Adds and drops to the index and share/IWF updates remain unchanged, since trading was completed at the close on the day before the effective date.

(ii) Unexpected early market closure occurring on the corporate action effective date: When all exchanges in a market are forced to close early, all market driven actions (splits, bonuses, rights, cash dividends, spin-offs, etc.) take place at the open on the ex-date. Adds and drops to the index and share/IWF updates remain unchanged, since trading was completed at the close on the day before the effective date.

(iii) Full-day or unexpected early market closure occurring on the day before the corporate action effective date: Adds and drops to the index and share/IWF updates are moved to the close of the next trading date and use the closing prices of that day. All market driven actions scheduled for the open of the next day are unaffected by an exchange closure on the day before the ex-date.



U.S. Markets. In the event of an unexpected exchange closure where at least one other exchange is operating normally:

(i) If the impacted exchange has an unexpected closure <u>prior to 3:00 PM ET and is not expected to reopen before 3:00 PM ET</u>, events will not be moved. Corporate actions, including adds and drops to the index and share/IWF events remain unchanged. All index changes will be implemented using prices determined by the exchanges based on SEC Rule 123C.

(ii) In the event at least one exchange has an unexpected closure after 3:00 PM ET, all adds and drops to an index, and share/IWF changes scheduled to be implemented at the close on that day will be moved to the close of the next trading date. This includes actions involving stocks whose primary exchange is unaffected by the outage. Closing prices are determined by the exchanges based on SEC Rule 123C.

U.S. Exchange Unexpected Closure (at least one, but not all)

Prior to 3:00 PM ET		**After 3:00 PM ET**	
Corporate Action Effective Date	Day Before Corporate Action Effective Date	Corporate Action Effective Date	Day Before Corporate Action Effective Date
All market driven actions (splits, bonuses, rights, cash dividends, spin-offs, etc.) take place at the open on the ex-date.	All market driven actions scheduled for the open of the next day are unaffected by an exchange closure.	All market driven actions (splits, bonuses, rights, cash dividends, spin-offs, etc.) take place at the open on the ex-date.	All market driven actions scheduled for the open of the next day are unaffected by an exchange closure.
Adds and drops to the index and share/IWF updates remain unchanged	Adds and drops to the index and share/IWF updates events remain unchanged.	Adds and drops to the index and share/IWF updates remain unchanged	Adds and drops to an index, and share/IWF changes scheduled to be implemented at the close on that day events will be moved to the close of the next trading date. This includes actions involving U.S. stocks whose primary exchange is unaffected by the outage.

For global indices, the effective date of corporate actions, including adds, drops, and share/IWF updates, remain unchanged for the markets not impacted by unexpected closure.

Rebalancing

If an exchange is fully closed or has an unexpected early market closure on the effective date and an index rebalancing is scheduled for the opening of the effective date, all the rebalancing related adds, drops, and share/IWF changes take place as scheduled since trading will have been completed at the close on the day before the effective date.

If an exchange is fully closed or has an unexpected early market closure and closing prices are not available on the day prior to an index rebalancing effective date, S&P Dow Jones Indices will generally shift corporate actions, including adds, drops, and share/IWF changes.

Rebalancing		
	↓	
Rebalancing Effective Date	↔	Day Before Rebalancing Effective Date
↓		↓
All rebalancing related adds, drops, and share/IWF changes take place as scheduled		Corporate actions, including adds, drops, and share/IWF changes will be moved to the close of the next trading date.

U.S. markets. If at least one exchange has an unexpected closure after 3:00 PM ET, all adds and drops to an index, and share/IWF changes scheduled to be implemented at the close on that day will be moved to the close of the next trading date. This includes actions involving stocks whose primary exchange is unaffected by the outage. Closing prices are determined by the exchanges based on SEC Rule 123C.

The rebalancing treatment listed above is the general policy. The Index Committee will review each situation on a case-by-case basis and the appropriate treatment will be announced in advance to clients.

Recalculation Policy for S&P Dow Jones Indices' Branded Indices

S&P Dow Jones Indices reserves the right to recalculate an index at its discretion in the event one of the following issues has occurred:

1. Incorrect or revised closing price of one or more constituent securities;
2. Missed corporate event;
3. Incorrect application of corporate action or index methodology;
4. Late announcement of a corporate event;
5. Incorrect calculation or data entry error.

A general description of how these events are handed is provided in the table below.

The decision to recalculate an index is made at the discretion of the applicable Index Manager and/or Index Committee, as set forth herein. The potential market impact or disruption resulting from the potential recalculation is considered when making any such decision.

Recalculation Events that may be Made by an Index Manager without Involving the Index Committee. In the event one of the following recalculation events is discovered within two trading days of its occurrence, the Index Manager may, at his/her discretion, recalculate the index without involving the Index Committee. In the event any such recalculation event is discovered beyond such two trading day period, the applicable Index Committee shall decide whether the index should be recalculated.

Recalculation Events	Treatment In S&P Dow Jones Indices' Branded Indices
Closing Price	Incorrect constituent closing prices are generally corrected and reposted.
Missed Corporate Event or Misapplied Corporate Action	Missed corporate action events are corrected & reposted.
Late Announcement	<u>Divisor Impact:</u> Divisor-impacting information is corrected and reposted. <u>No Divisor Impact:</u> Late information, including regular cash dividends, that does not impact the index divisor are applied at the earliest opportunity when S&P Dow Jones Indices becomes aware of the event. Stock splits, bonus issues or stock dividends and reverse stock splits are applied on the correct ex-date. If these are announced on the same day (either that this is taking place or that a previously announced event is being postponed or cancelled), they are applied on the correct ex-date and files are not reposted. Same day corporate actions are included in the current day files, so previous day files are not reposted. If these are announced after the ex-date, then it is applied on the correct ex-date and files are regenerated and reposted.
Incorrect calculation or data entry error	Incorrect calculations or data entry mistakes caused by S&P Dow Jones Indices are corrected and impacted indices are recalculated.

Index Methodology Event. The Index Committee shall determine whether or not to recalculate an index in the event an error is discovered by S&P Dow Jones Indices that was caused by the incorrect application of an index methodology and results in the incorrect composition and/or weighting of index constituents in accordance with the following guidelines:

- In the event the Index Committee discovers a constituent that does not meet index eligibility and selection criteria for a given index as documented in the index's methodology, and was therefore incorrectly added to or deleted from the index, or the constituent weightings in the index were incorrectly assigned, then the Index Committee may decide to amend the constituents or weighting of the index in line with the index methodology proactively (as opposed to retroactively) on a future date, providing reasonable advance notice from the announcement date to the effective date. The Index Committee will generally not alter the index composition and/or weightings of constituents retroactively except in accordance with the following guidelines:
    - The addition of a constituent that does not meet the index objective as defined in the index methodology (e.g. adding a stock that is not Shariah-compliant to a Shariah index).
    - The changes made differ from those that were announced by S&P Dow Jones Indices in advance of the effective date (e.g. pro-forma files).
- If an incorrect application of the methodology for determining index composition or weighting is discovered after the action has been announced by S&P Dow Jones Indices, but prior to the effective date of the action, S&P Dow Jones Indices reserves the right to rescind the action and restate it using corrected data. S&P Dow Jones Indices will generally restate the action if the inconsistency is discovered within two trading days of the action becoming effective.

In the event S&P Dow Jones Indices chooses to recalculate an index, it shall do so within a reasonable timeframe following the detection and review of the issue. If it is determined that an index will be recalculated, the following steps will be taken upon completion of the recalculation:

- All impacted files are regenerated and reposted.
- All clients (i.e. S&P Dow Jones Indices-licensed entities) are notified of the recalculation and alerted when files have been successfully reposted.

S&P Dow Jones Indices applies the recalculation rules set forth herein to its branded indices and markets (developed, emerging and frontier). Any decisions that differ from the stated rules will be reviewed by the Index Committee and announced accordingly.

Common Identifiers. Incorrect identifiers are generally corrected on the same day such an error is detected and will be included in the next regularly scheduled file delivery.

Index Governance

Index Committee

Indices are maintained by an Index Committee. Most committees are comprised of full-time professional members of S&P Dow Jones Indices' staff, with the exception of some co-branded indices, which may include committee members from external companies or exchanges. Please refer to individual index methodology documents for information on index committees with external index committee members. At each meeting, the Index Committee may review pending corporate actions that may affect index constituents, statistics comparing the composition of the indices to the market, companies that are being considered as candidates for addition to an index, and any significant market events. In addition, the Index Committee may revise index policy covering rules for selecting companies, treatment of dividends, share counts, or other matters.

Questions of interpretation or possible exceptions to rules are considered by the Index Committee responsible for the indices in question.

S&P Dow Jones Indices considers information about changes to its indices and related matters to be potentially market moving and material. Therefore, all Index Committee discussions are confidential.

S&P Dow Jones Indices' Index Committees reserve the right to make exceptions in the treatment if the need arises. In any scenario where the treatment differs from the general rules stated in this document, clients will receive sufficient notice, whenever possible.

Quality Assurance

S&P Dow Jones Indices maintains quality assurance processes and procedures for the calculation and maintenance of its indices that include a regularly scheduled meeting to review incidents or errors, if any, that occurred during the previous week and identify causes, determine repetitive issues and evaluate whether any long-term changes are necessary (e.g. a change in process). Incidents and errors are tracked through S&P Dow Jones Indices' internal system and significant matters are escalated, requiring, at times, an ad hoc meeting of the same group.

Internal Reviews of Methodology

Annual Review Process. In addition to its daily governance of indices and maintenance of index methodologies, at least once within any 12-month period, the Index Committee reviews each index methodology to ensure the indices continue to achieve the stated objectives, and that the data and methodology remain effective. The annual review process includes the gathering of information on the appropriateness, representativeness, and effectiveness of the index methodology from colleagues responsible for commercializing the indices. In the case that an index methodology is reviewed off cycle from the annual review, the Index Committee reserves the right to cancel the annual review if the requested review covers all the relevant issues.

Communication with Stakeholders and Consultations. S&P Dow Jones Indices communicates and consults with stakeholders through various channels using press releases, index announcements, emails and the distribution of data files. In addition, S&P Dow Jones Indices has a designated client service team available to respond to inquiries.

When a material change to an index methodology is considered, S&P Dow Jones Indices publishes a consultation inviting comments from external parties. A material change alters the index objective or changes the methodology in a way that affects the likelihood that the index will achieve its objective.

Examples of methodology changes that could impact the index objective include altering rules determining the index universe, the selection of its constituents, or the weighting of its constituents. Consultations are posted on the Web site at *www.spdji.com*, and feedback is accepted only during the posted timeframe. Under normal circumstances, the consultation period is open for a minimum of 30 days from publication. In instances where a material change is deemed to be time sensitive, S&P Dow Jones Indices may determine that a shorter consultation period is required. Time sensitive changes are those that may require consideration or implementation within a shorter timeframe, and where the full consultation time period is not possible. Prior to the Index Committee's final review, S&P Dow Jones Indices will consider the issues and may request clarifications from respondents as part of that review. All feedback from consultations is reviewed and considered before a final decision is made by the Index Committee. Any changes to an index methodology are announced on the Web site.

Occasionally, S&P Dow Jones Indices may hold face-to-face meetings, conference calls, or hold meetings such as Advisory Panels.

Complaints Procedure. For any inquiry, comment, or complaint regarding the indices governed by this methodology, a Client Services Form can be found at *http://us.spindices.com/feedback/client-services*.

Index Policy

Announcements

All index constituents are evaluated daily for data needed to calculate index levels and returns. All events affecting the daily index calculation are typically announced in advance via the Index Corporate Events report (.SDE), delivered daily via ftp to all clients. Any unusual treatment of a corporate action or short notice of an event may be communicated via email to clients.

Announcements of additions and deletions for headline equity indices are generally made shortly after market close.

Press releases are posted on the Web site, *www.spdji.com*, and are released to major news services.

Index methodology is constantly under review for best practices, and any changes are announced well ahead of time via the Web site and email to all clients.

For reposting guidelines due to late announcements or analyst errors, please refer to the Recalculation Policy for S&P Dow Jones Indices' Branded Indices chapter.

Pro-forma Files

In addition to the corporate events file (.SDE), S&P Dow Jones Indices provides constituent pro-forma files for many indices at the time of rebalancing. The pro-forma file is typically provided daily in advance of the rebalancing date and contains all constituents and their corresponding weights and index shares effective for the upcoming rebalancing. Since index shares are assigned based on prices prior to the rebalancing, the actual weight of each stock at the rebalancing will differ from these weights due to market movements.

Please visit www.spdji.com for a complete schedule of rebalancing timelines and pro-forma delivery times.

Holiday Schedule

The indices are calculated daily, throughout the calendar year. The only days an index is not calculated are on days when all exchanges where an index's constituents are listed are officially closed. Any exceptions to this are noted in the respective index's methodology document.

A complete index holiday schedule for the year is available at www.spdji.com.

Exchange Rate

WM/Reuters foreign exchange rates are taken daily at 04:00 PM London time and used in the calculation of most indices at S&P Dow Jones Indices. These mid-market fixings are calculated by the WM Company based on Reuter's data and appear on Reuters pages WMRA. Indices not using the WM/Reuters exchange rate indicate the exchange rate, if any, used in their respective methodology document.

Corporate Actions Applicable to Domestic Investors Only

In general, if a corporate event is restricted to domestic investors only, it is not recognized in the global indices.

Special Index Variations

S&P Dow Jones Indices may calculate separate versions of S&P- or Dow Jones-branded indices which may be tailored in a variety of ways such as the exclusion of certain constituents or sectors, different rebalancing schedules, weighting schemes, currencies of calculation, or tax rates. In such cases, the index follows the methodology of the parent index except where otherwise noted.

Calculations and Pricing Disruptions

Special Open Quotation (SOQ)

Prices used for the calculation of the SOQ are based on the official opening prices of the individual constituents of the index as set by their primary exchange.

- **U.S. Markets.** If the exchange is unable to provide official opening prices, the official closing prices utilized are determined based on SEC Rule 123C as outlined in the *Unexpected Exchange Closures* chapter.
- **Non-U.S. Markets.** If the exchange is unable to provide official opening prices, the official closing prices are utilized. If the exchange is unable to provide official opening or closing prices, the previous closing price adjusted for corporate actions is used in the calculation of the SOQ.

For stocks that are suspended from trading on an exchange but are still in indices, S&P Dow Jones Indices will synthetically derive an SOQ for the suspended security using the deal ratio terms and the opening price of the acquiring company if the acquirer is issuing stock as part of the merger. If the acquirer is paying cash only, the lower of the previous official close price and the cash amount are used in the calculation of the SOQ.

Real-time Index Calculation

Prices used for the calculation of real-time index values are based on the “Consolidated Tape”. The “Consolidated Tape” is an aggregation of trades for each security over all regional exchanges and trading venues and includes the primary exchange. If there is a failure or interruption on one or more exchanges, real-time calculations will continue as long as the “Consolidated Tape” is operational.

Prices used for the calculation of official closing index values are based on the official closing prices of the individual constituents of the index as set by their primary exchange. If an interruption is not resolved prior to the market close, official closing prices will be determined based on SEC Rule 123C as outlined in the *Unexpected Exchange Closures* chapter.

A notice is published on S&P Dow Jones Indices’ Web site at *www.spdji.com* indicating any changes to the prices used in index calculations.

In extreme circumstances, S&P Dow Jones Indices may decide to delay index adjustments or not publish an index.

Canadian Securities. Real-time calculations of the S&P/TSX indices and other S&P Dow Jones Indices equity indices incorporating Canadian stocks use prices obtained directly from the TSX. If the TSX suffers a failure or interruption, real-time calculations are halted until the TSX confirms that trading and price dissemination has resumed.

If the interruption is not resolved before the market close and the TSX publishes a list of closing prices, those prices are used to calculate the closing value of the indices. If no list is published, the last trade for each security before the interruption is used to calculate the closing value of the index. If no trades were reported for a security, the previous close adjusted for corporate actions is used for index calculation.

In extreme circumstances, S&P Dow Jones Indices may decide to delay index adjustments or not publish an index.

Indian Securities. Real-time calculations of the S&P BSE Indices are calculated by the BSE and use prices obtained directly from the BSE. If the BSE suffers a failure or interruption, real-time calculations are halted until the BSE confirms that trading and price dissemination has resumed.

If the interruption is not resolved before the market close and the BSE publishes a list of closing prices, those prices are used to calculate the closing value of the indices. If no list is published, the last trade for each security before the interruption is used to calculate the closing value of the index. If no trades were reported for a security, the previous close adjusted for corporate actions is used for index calculation.

In extreme circumstances, S&P Dow Jones Indices may decide to delay index adjustments or not publish an index.

All Other Securities. Real-time calculations of equity indices incorporating securities other than Canadian and Indian securities use prices obtained from IDC and Thomson Reuters. If the relevant exchange suffers a failure or interruption, real-time calculations are halted until the exchange confirms that trading and price dissemination has resumed.

If the interruption is not resolved before the market close and the exchange publishes a list of closing prices, those prices are used to calculate the closing value of the indices. If no list is published, the last trade for each security before the interruption is used to calculate the closing value of the index. If no trades were reported for a security, the previous close adjusted for corporate actions is used for index calculation.

In extreme circumstances, S&P Dow Jones Indices may decide to delay index adjustments or not publish an index.

Other Adjustments

In cases where there is no achievable market price for a stock being deleted, it can be removed at a zero or minimal price at the Index Committee's discretion, in recognition of the constraints faced by investors in trading bankrupt or suspended stocks.

Expert Judgment

S&P Dow Jones Indices' Index Committees may exercise Expert Judgment when the situation calls for the interpretation of data in calculating and maintaining an S&P Dow Jones Indices' Index. S&P Dow Jones Indices maintains internal records of the use of Expert Judgment and the rationale for any such use. Expert Judgment specifically and exclusively refers to S&P Dow Jones Indices' exercise of discretion with respect to its use of data in determining an index in the following context: Expert Judgment includes extrapolating data from prior or related transactions, adjusting data for factors that might influence the quality of data such as market events or impairment of a buyer or seller's credit quality, or weighing firm bids or offers greater than a particular concluded transaction. Other areas of discretion, such as methodology changes, are not, for the purposes of this document, considered Expert Judgment.

Discretion

S&P Dow Jones Indices' Index Committees may apply discretion to make decisions that differ from the index methodology in certain circumstances, including to avoid unnecessary turnover, excessive index changes or adjustments, or possible market disruption.

Data Hierarchy and Data Sources

Data Hierarchy. Data used for the indices governed by this methodology may include:

a) Completed transaction data are used in these indices in the vast majority of cases; and/or

b) For certain corporate actions, theoretical prices may be derived using the existing security price and the specifics of the corporate action.

Data Sources. The primary source for data is the exchange upon which the underlying security is traded (either directly from the applicable exchange or via a third party data vendor).

Contact Information

For questions regarding an index, please contact: index_services@spglobal.com.

Appendix I – Definitions and Terms

Rights Offering Terms and Definitions

Rights Offering. An event in which existing shareholders are given the right to buy a specified number of additional shares from a company, at a specified price ('rights' or 'subscription' price), within a specified time ('subscription period'). A rights issue is offered to all existing shareholders individually and may be accepted in full, accepted in part or rejected. A right to a share is generally issued as a ratio to shares held (e.g. 1:3 rights issue, meaning a right to buy one new share for every three shares owned).

Rights issues may be underwritten. The role of the underwriter is to guarantee that the company will raise a minimum amount of capital. Typical terms of an underwriting require the underwriter to subscribe to any shares offered to, but not taken up by, shareholders. Underwriters and sub-underwriters may be governments, financial institutions, stockbrokers, major shareholders of the company, or any other party.

Open Offering. Open offers have been most commonly recognized in the UK. These are a type of UK equity placing where existing shareholders are offered the opportunity to buy shares at a discounted rate to the market price. This is almost always accompanied by an equity placing available to all investors. Open offers are 'non-renounceable'. Shareholders must either take up the offer or let them lapse. Once the offer has expired, it no longer exists. The shareholders have an entitlement, rather than a tradable right, to subscribe to new shares. For this reason, an open offer is sometimes referred to as an entitlement issue. Any entitlement that is not taken up simply expires. Open offers are not transferable (tradable) on the open market. As in the case of rights, open offer issues may or may not be underwritten.

Renounceable Rights Offering. The rights issued to an existing shareholder are transferable on the open market, and are able to be sold separately from the share to other investors during the life of the right. Renounceable rights are referred to as "transferable" in the U.S. or "tradable" in other markets. All three of these terms – renounceable, transferable and tradable – are used interchangeably throughout this document.

Non-Renounceable Rights Offering. The rights issued as part of the offering cannot be traded. Shareholders must either take up the rights or let them lapse upon expiration. Once the rights have expired, they no longer exist. Also referred to as "non-transferable" or "non-tradable".

Accelerated Rights/Entitlement Offering. This is most commonly used in Australia, but is also gaining popularity in Singapore and the UK. This type of rights offering grants the issuer quick access to capital markets without disadvantaging smaller investors. The institutional component of the offer is conducted during a trading halt and the company generally resumes trading on an ex-rights/entitlement basis within three to five trading days. Retail investors generally have two to three weeks to decide to take up the offer. Also known as Jumbo's, RAPIDS, and AREO's.

Features (some or all of the following features may be present):

- The stock is suspended when the rights offering is announced.
- The offer made to institutional holders typically occurs before retail holders – institutional investors are asked to subscribe on the same day vs. retail investors, who are given more time to consider the issues (usually within two weeks of the original offering).
- The offer can be conducted on a renounceable or non-renounceable basis.
- A capital raising announcement may be combined with the offering.

Pro-rata Accelerated Institutional, Tradable Retail Entitlement Offering. This type of entitlement offering grants the issuer quick access to capital markets. It comprises an accelerated institutional entitlement offer and a tradable retail entitlement offer. The institutional component of the offer is conducted as an AREO (see above); retail investors have the option to sell their entitlement on the open market, take up the offer or let their entitlement lapse. This is also known as a PAITREO.

<u>Features</u> (some or all of the following features may be present):

- The stock is suspended when the entitlement offering is announced.
- The offer made to institutional holders is conducted as an Accelerated Rights/Entitlement Offering during the trading halt period. Any renounced right/entitlements are sold through a book building process.
- The offer made to retail holders is conducted as a Renounceable Rights/Entitlement Offering whereby the right/entitlements are tradable.

Poison Pill Rights. These are commonly seen in U.S. markets. This is a defensive strategy used by companies faced with a hostile takeover. The target company issues rights to existing shareholders to acquire a large number of common shares. These rights can be exercised if anyone acquires more than a set amount of the target company's stock. This dilutes the percentage of the target owned by the bidder, and makes it more expensive to acquire control of the target.

S&P Dow Jones Indices does not recognize poison pill rights.

In-the-Money. If the rights or open offer price represents a discount to the price of the stock following the close of trading on the day before the ex-date, then the offer is said to be "in-the-money".

Out-of-the-Money. If the rights or open offer price is greater than or equal to the stock price on the day before the ex-date, then the offer is said to be "out-of-the-money".

<u>Terms</u>

Ex-Date. The starting date where a security is traded without the previously declared dividend. After the ex-date, a stock is said to trade ex-dvidend.

Ex-Rights. The shares no longer have the rights offering attached to them.

Expiration Date. The end of the subscription period; the last day that the rights can be exercised. This is also known as the “renunciation date” in some markets.

Record Date. The date that is used to determine the holders who are entitled to the offering.

Subscription Period. The period during which it is possible to exercise the right by paying the subscription price. Also, renounceable rights are available for trading during the subscription period. When the subscription period ends (on the “expiration date”), those rights not yet subscribed will expire at zero value.

Subscription Price. Also known as the “offer price” or “rights price”. This is the price at which existing shareholders can purchase the new shares.

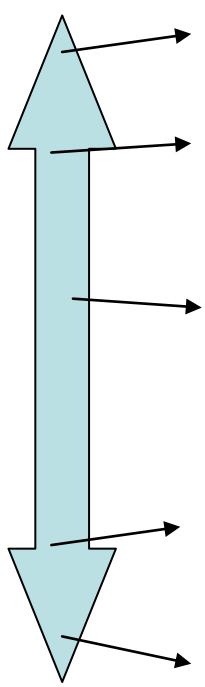
Theoretical Ex-Rights Price (TERP). This is the theoretical price of a stock after a new rights issue. This is also referred to as the “Adjusted Price” throughout this document.

Terms Used Interchangeably across S&P Dow Jones Indices

S&P Dow Jones Indices is attempting to standardize terms used in documents. However, due to local market terminologies, analysts might come across different regions or groups using different terms to describe the same item. Here is a list of commonly used terms and their synonyms:

COMMONLY USED TERM	INTERCHANGEABLE TERMS USED/MEANING OF THE TERM
Adjusted Price	TERP (Theoretical Ex-Rights Price); Ex-Rights Price, Theoretical Open Price, Next Day Open Price
Dividend Disadvantage, Dividend Difference	Future dividend amount that new shares are *not* entitled to
Expiration Date	Renunciation Date
Market Value of the Stock	Cum Price or Cum Rights Price. This is the closing price on the day before the rights ex-date
Non-Renounceable	Non-Tradable, Non-Transferable, Open Offer (in the UK)
Price Adjustment Factor (PAF)	Dilution Factor
Renounceable	Tradable, Transferable
Rights Offering – broad term used to describe all kinds of rights (renounceable and non-renounceable)	Entitlement Offer (used in Australia for non-renounceable rights); Open Offer (used in UK for non-renounceable rights)
Subscription Price	Offer Price, Rights Price (please note that in Australian indices, the price at which the additional rights line is added to the index for renounceable rights is referred to as the “Rights Price”), Application Money (in Australia)
Underwritten	Guaranteed (in North America)
Value of the Rights	Price Adjustment, Price Adjustment Amount, Implied Rights Value

Life Cycle of a Rights Offering



Ex-date-1: At the close of the market, registered shareholders are entitled to participate in the rights offering

Ex-date: At the market open, the stock is trading ‘excluding’ the right. In most markets, the subscription period usually begins on the rights ex-date.

Subscription period: At any time in the subscription period, it is possible to exercise the right by paying the subscription price. Also, renounceable rights are available for trading during the subscription period.

Expiration date: The end of the subscription period. If subscription payments have not been made by this time, the right lapses.

Expiration date +1: Shareholders who have subscribed to the offering are entitled to the new shares issued.

Spin-Off Terms and Definitions

Spin-Off. When a corporation divests a subsidiary or division to create a new, independent company. The spun-off company takes assets, intellectual property, technology, and/or existing products from the parent organization and forms its own private or publicly listed company. Shares of the new organization are distributed to the equity shareholders of the parent organization, at a ratio established by the parent, to keep or sell at their discretion. The new company formed by this divestiture is called the "spun-off" entity. Spin-offs may also be referred to as "demergers".

Zero Price Spin-Off. For index implementation, a spun-off entity is added to all indices of which the parent is a constituent, at a zero price at the market close of the day before the ex-date. There is no divisor change. All key attributes of the spun-off company are the same as the parent's at the time of addition.

Carve-out. This is also referred to as a "partial spin-off". In the case of a carve-out, the parent company sells a minority stake in a subsidiary to the public through an IPO.

Split-Off. In a split-off, the existing shareholders of the parent company must relinquish their shares in the parent company to receive shares in the subsidiary. The key difference between a spin-off and a split-off is that, in the case of the latter, the shareholders need to act – either opt in for the split-off and give up their shares in the parent company to receive shares in the subsidiary, or do nothing and keep the shares of the parent company. In a spin-off, existing shareholders in the parent company do not need to trade or take any action (unless they choose to). They automatically receive shares in the subsidiary.

When-Issued Trading. When-issued trading is the trading of securities that takes place before the securities are issued. When-issued markets, a short form of "when, as, and if issued", are active in price discovery for new securities. The term refers to a conditional security that is authorized for issuance, but not yet actually issued. All "when issued" transactions occur on an "if and when" basis and are settled if and when the actual security is issued.

Regular Way Trading. Trading after a security has been issued.

In-Specie. This term is Latin for "in its actual form" and is used often in spin-off related discussions. It implies that the distribution of an asset will be in its actual form rather than in cash or other forms. In-Specie distribution is made when cash is not readily available and allocating the physical asset is the better alternative. A stock dividend is an example of an in-specie distribution.

Spin-off Ratio. This is the ratio of new shares in the spun-off entity to the existing shares in the parent company. For instance a 2:3 (or 2 per 3) spin-off ratio implies that existing shareholders will receive two shares in the spun-off entity for every three shares they hold of the parent company. Also referred to as the "Distribution Ratio".

Distribution Date. In the context of a spin-off, this is the date on which the spun-off entity shares are distributed. This is sometimes referred to as the "payable date".

Ex-Distribution Date. The date on which the parent security is first traded without the right to receive the distribution. Shareholders who own the parent security prior to the ex-date will receive shares in the spun-off entity. Investors who purchase the parent stock on or after the ex-date will not receive shares in the spun-off entity. In most, but not all, cases the ex-distribution date will be the day after the payable date.

Record Date. The date that is used to determine the holders who are entitled to a distribution or offering.

Settlement Date. The date that the securities must be delivered and paid for to complete a transaction.

Mergers & Acquisitions Terms and Definitions

Acquisition. An acquisition is an event in which a company buys most, if not all, of the target company in order to assume control. The acquisition could be done via a cash offer, stock swap or a combination of both. For the purposes of S&P Dow Jones Indices' branded indices, an acquisition will result in the deletion of the target company, as well as a possible share issuance and IWF change to the acquirer, if the purchase was funded with acquirer shares.

At-the-market Offerings. This is a registered offering of securities by a publicly traded issuer periodically over time at the prevailing market price. This is done through a placement agent or designated broker-dealer. The issuer has control over when the securities are sold, the amount sold, and the minimum price at which they may be sold. The issuer may stop the offering at any time. The broker-dealer is paid a commission on the securities sold.

Bankruptcy. A legally declared inability or impairment of ability of an individual or organization to pay their creditors. Bankrupt companies will typically be delisted by the exchange on which their shares are traded.

Book building. This is a price-discovery process wherein an underwriter accepts and records investor demand for shares and the price they are willing to pay. This information is, then, used by the underwriter to determine an issue price when the book building is closed.

Bought Deal Equity Offering. A new share issuance by a company which is taken up in its entirety, usually by a few underwriters, to be resold later to investors. Shares are offered to underwriters at a discounted price and payment is made up front.

Cash Offer. Shareholders of the target company are offered cash by the acquirer for the stocks they own in the target company.

Degree of Freedom (DOF). The statutory limit restricting foreign ownership in a given company.

Delisting. This refers to the removal of a listed security from the exchange on which it trades. The security is removed from the exchange because the company is not in compliance with the listing requirements of the exchange. Delisting could be a voluntary action taken by the company or involuntary. This typically occurs when a company has become private after a merger/acquisition, declares bankruptcy or no longer satisfies the listing rules of the stock exchange.

Dutch Auction. This is also referred to as the "descending price auction" or "clock auction". The bidding process starts with a high asking price which is then lowered until a participant accepts the auctioneer's price or a pre-determined minimum acceptable price set by the seller. In the U.S., Treasury Bills (T-Bills) are sold through this process. The Treasury accepts higher bids first and continues to accept progressively lower bids until an issue is completely sold. IPOs may also be sold through Dutch Auction.

Exchange offers. An exchange offer takes place when a company exchanges its securities for a different series that it has issued or for securities of another company (as seen with split-offs). This should not be confused with the conversion of preferred stocks or bonds to common stock.

FDIC Receivership. In the U.S., this is the process by which the Federal Deposit Insurance Corporation takes over the operations of a failed banking institution and arranges for the liquidation of its assets.

Float-Adjusted Shares. Total number of shares held by the public and available for trading. These are the shares outstanding adjusted for any restricted shares or strategic holdings.

Initial Public Offering (IPO). A privately held company or unit selling stock to the public for the first time. Typically IPOs are issued by smaller companies in a bid to raise capital for expansion; however, larger privately owned firms can also enter the IPO market if they seek to trade publicly.

Investable Weight Factor (IWF). The percentage of shares outstanding that is readily available to investors for a given company. Investors who own shares with the intention of maintaining control are said to be investors of a "strategic" nature and are not included in the IWF calculation.

Merger. A merger is the combination of two (or more) companies into one larger company, involving a stock swap and/or cash payment to the shareholders of the target company. If both companies are in an S&P Dow Jones' index, one company, identified as the "target company", is deleted from the index, and the acquirer or surviving company may see a share, IWF and name change, depending on the terms of the deal.

Multiple share classes. Companies might choose to issue multiple classes of common stock, such as Class A and Class B shares. For example, Berkshire Hathaway Inc. has two classes of common stock designated Class A and Class B. Generally one class of shares will have more voting rights and/or conversion privileges compared to the other. These shares are listed and priced separately.

For Chinese companies, multiple share classes may include:

- **A-Shares**. These are shares in companies incorporated in mainland China. A-shares are issued in China, governed by Chinese law, trade in the local currency and are listed on the local Shanghai or Shenzhen stock exchanges. Only Chinese nationals and select Qualified Foreign Institutional Investors (QFII) are allowed to trade A-shares.
- **B-Shares.** These are local shares issued by companies in mainland China, quoted in Hong Kong dollars (on the Shenzhen exchange) and U.S. dollars (on the Shanghai exchange), and available to foreigners and certain classes of domestic investors.
- **H-Shares.** These trade in Hong Kong in Hong Kong dollars. The companies are registered in mainland China.
- **N-Shares.** These are shares of Chinese companies listed in the U.S. (as ADRs). These trade in U.S. dollars and follow the GAAP accounting system. Similarly, L-Shares, J-Shares and S-hares are Chinese companies listed on the London Stock Exchange, Tokyo Stock Exchange and Singapore Exchange, respectively.

Private Placement. This involves direct placement of new shares to a select group of investors. Private placement of shares does not have to be registered with the Securities and Exchange Commission (in the U.S.) and is done without any underwriters being involved.

Prospectus Offering. A means by which companies raise capital by selling shares to underwriters at a pre-determined price. The underwriters act on a "best efforts" basis and assume no risk if the stock cannot be sold. A prospectus offering will list the number of shares, selling price, commission rate, optional overallotment (also called a "greenshoe") and a closing date.

Recapitalization. A change in the company's capital structure which often involves altering the asset allocation between equity and debt.

Restricted Shares. These are shares acquired in unregistered, private sales from the issuer to the investors. Investors generally receive these shares through private placement offerings, as consideration in mergers, and employee incentive or compensation plans. A holding period is associated with these shares. In the U.S., the sale of restricted shares requires a filing with the SEC (Securities and Exchange Commission) in most cases. These shares are also referred to as "Unregistered Shares".

Reverse Takeover. This is the acquisition of a publicly traded company by a privately held company. A private company might choose to go public using this route over an IPO, to bypass the complex process involved with an initial public offering.

Scrip Offer. This term is commonly used in some markets to refer to an all-stock takeover offer. The acquirer offers its shares to the target company shareholders as the consideration instead of cash.

Secondary Offering. This is the issuance of shares to the public after an initial public offering has already been made. Secondary offerings can take one of the following forms: (a) the company can issue new shares to the public, thereby increasing the shares outstanding of the issuing company and diluting the ownership of existing shareholders; or (b) existing shareholders might sell a portion of their holdings and reduce their stake in the company. The latter does not increase the shares outstanding as no "new" shares are issued. Underwriters are usually involved in the process of placing these existing shares to the public.

Share Placement. The issuance of new shares for sale to the public. The term is used interchangeably with "secondary offering" in many markets.

Share Repurchase/Buyback. Companies buy a portion of their outstanding shares to reduce the number of shares on the market. These repurchased shares could either be retired by the company or retained as treasury stock, to be reissued at a later date. S&P Dow Jones Indices does not make any price adjustments for offers at a premium.

Shares Outstanding. This is the total number of shares issued by a company that is currently held by investors. Shares that have been repurchased by the company are not considered outstanding.

Tender Offers. These are offers made by a prospective acquirer to purchase shares of a company, usually at a premium to the market price. Cash or other securities may be offered to the target company's shareholders. Tender offers might be friendly or hostile. A friendly offer is when the bidder informs the company's board of directors of its intent; and if the board approves they would recommend that the shareholders accept the offer. A hostile offer is when the target company's management is either not informed in advance or unwilling to accept the offer, yet the bidder continues to pursue it.

The term "partial tender offer" refers to an invitation for tenders for less than all of the outstanding shares of the target company. This is done by specifying a maximum number of shares that will be accepted.

Tracking Stock. This is a type of common stock that tracks the financial performance of a specific business or operating unit, instead of the company as a whole. Tracking stocks trade as separate securities. A tracking stock typically has limited or no voting rights. Companies with diversified operations might choose to issue tracking stocks in addition to their traditional common stock. Also known as "targeted" stock.

Treasury Stock. These are shares issued by a company that have been reacquired by the issuing company. These are held by the company and can be reissued at any point of time in the future. These shares do not pay dividends and have no voting rights. In general, Treasury stock is not included in the shares outstanding calculations. However, certain regions do include treasury shares.

Appendix II – Methodology Changes

Methodology changes since January 1, 2015 are as follows:

Change	Effective Date (After Close)	Methodology Previous	Methodology Updated
Merger related IWF change	01/19/2018	A merger related IWF change resulting in an IWF of 0.96 or greater is rounded up to 1.00 on the merger effective date.	A merger related IWF change that results in an IWF of 0.96 or greater is rounded up to 1.00 at the next annual IWF review.
Tendered share lines	01/19/2018	S&P Dow Jones Indices did not switch to tendered share lines in some markets when certain conditions were met.	In certain markets, tendered shares may be replaced with a tradable tendered share class on the same stock exchange. S&P Dow Jones Indices will consider replacing the common share line with the tendered share class in indices once a minimum acceptance ratio of 75% has been reached and subject to the announcement of a further acceptance period.
Designated Listing	01/19/2018	--	For companies with multiple share classes of equity stock, S&P Dow Jones Indices determines the share class having both the highest one-year trading liquidity (as defined by Median Daily Value Traded) and largest float adjusted market capitalization as the Designated Listing. All other share classes are referred to as Secondary Listings for index purposes.
Share Updates – S&P/TSX Canadian Indices	12/15/2017	Share updates are made at the first practical date when the relative weight impact is estimated to be at least 0.05% on the S&P/TSX Composite. At the Quarterly Review, there is a complete share update for the index (in March, June, September, and December). This update includes all cumulative changes to shares outstanding, during the quarter, that have affected the capitalization of Index Securities by less than a relative index weight of 0.05%.	Shares outstanding are updated on a weekly basis if the changes are 5% or more of the total share count. Share changes are announced on Fridays for implementation after the close of trading the following Friday. If a change in shares outstanding of at least 5% causes a company's IWF to change by at least 5%, the IWF is updated at the same time as the share change. Changes of less than 5% of the total shares are accumulated and made quarterly on the third Friday of March, June, September and December.
Bankruptcies – Pricing for U.S. listed securities	07/31/2017	If the security is trading on its primary exchange at the close of the day it is removed, that price is used. If the security is halted on or delisted from its primary exchange, a price of zero is used.	If a U.S. listed stock moves from its primary exchange to the OTC market prior to it index deletion date, OTC prices (including Special Opening Quotations if applicable) are used to price the stock for index purposes from the time of the exchange move until its index delisting date regardless of the reason for the exchange move (including bankruptcies, voluntary delistings and non-compliance issues). If a stock moves to OTC, but does not trade on OTC prior to its index deletion date, the stock is removed at a zero price.

Change	Effective Date (After Close)	Methodology	
		Previous	Updated
Market Disruption – U.S. exchange has an unexpected closure	03/21/2017	In the event of an unexpected single exchange closure (U.S. Securities): (i) In the event a single U.S. exchange has an unexpected closure, events will not be moved. Corporate actions, including adds and drops to the index and share/IWF updates remain unchanged. The transaction will be implemented using prices determined by the exchanges based on SEC Rule 123C hierarchy.	For U.S. Markets: In the event of an unexpected exchange closure where at least one other exchange is operating normally: (i) If the impacted exchange has an unexpected closure prior to 3:00 PM ET and is not expected to reopen before 3:00 PM ET, events will not be moved. Corporate actions, including adds and drops to the index and share/IWF events remain unchanged. All index changes will be implemented using prices determined by the exchanges based on SEC Rule 123C. (ii) In the event at least one exchange has an unexpected closure after 3:00 PM ET, all adds and drops to an index, and share/IWF changes scheduled to be implemented at the close on that day will be moved to the close of the next trading date. This includes actions involving stocks whose primary exchange is unaffected by the outage. Closing prices are determined by the exchanges based on SEC Rule 123C.
Market Disruption – Rebalancing: U.S.	03/21/2017	If an exchange is fully or partially closed on the day prior to an index rebalancing effective date, S&P Dow Jones Indices will generally shift corporate actions, including adds, drops, and share/IWF changes.	For U.S. markets: If at least one exchange has an unexpected closure after 3:00 PM ET, all adds and drops to an index, and share/IWF changes scheduled to be implemented at the close on that day will be moved to the close of the next trading date. This includes actions involving stocks whose primary exchange is unaffected by the outage. Closing prices are determined by the exchanges based on SEC Rule 123C.
Market Disruption – Rebalancing: Non-U.S.	03/21/2017	If an exchange is fully or partially closed on the day prior to an index rebalancing effective date, S&P Dow Jones Indices will generally shift corporate actions, including adds, drops, and share/IWF changes.	If an exchange is fully closed or has an unexpected early market closure and closing prices are not available on the day prior to an index rebalancing effective date, S&P Dow Jones Indices will generally shift corporate actions, including adds, drops, and share/IWF changes.

Change	Effective Date (After Close)	Methodology Previous	Updated
Market Disruption – calculation of the Special Open Quotation (SOQ): U.S.	03/21/2017	U.S. Securities. Prices used for the calculation of the Special Open Quotation (SOQ) are based on the official opening prices of the individual constituents of the index as set by their primary exchange. If an opening price is not received for a security, the previous closing price adjusted for corporate actions is used in the calculation of the SOQ. If the exchange is unable to provide official opening prices, the opening price as reported on the "Consolidated Tape" is used. If an opening price is not available on the "Consolidated Tape" for a security, the previous closing price adjusted for corporate actions is used in the calculation of the SOQ.	For U.S. markets: If the exchange is unable to provide official opening prices, the official closing prices will utilized and determined based on SEC Rule 123C as outlined in the *Unexpected Exchange Closures* chapter.
Market Disruption – calculation of the Special Open Quotation (SOQ): Non-U.S.	03/21/2017	--	For non-U.S. markets: If the exchange is unable to provide official opening prices, the official closing prices are utilized. If the exchange is unable to provide official opening or closing prices, the previous closing price adjusted for corporate actions is used in the calculation of the SOQ.
Treatment of suspended stocks in calculation of the Special Open Quotation (SOQ)	03/21/2017	--	For stocks that are suspended from trading on an exchange but are still in indices, S&P Dow Jones Indices will synthetically derive an SOQ for the suspended security using the deal ratio terms and the opening price of the acquiring company if the acquirer is issuing stock as part of the merger. If the acquirer is paying cash only, the lower price of the previous official close price and the cash amount will be used in the calculation of the SOQ.
Removal of spin-off that doesn't trade	03/21/2017	If there is a gap between the ex-date and distribution date (or payable date), or if the spin-off security does not trade regular way on the ex-date, the spin-off security is kept in all indices in which the parent is a constituent until the spin-off security begins trading regular way. At the discretion of the Index Committee, an indicative or estimated price may be used for the spin-off entity in place of a zero price until the spin-off security begins trading.	If there is a gap between the ex-date and distribution date (or payable date), or if the spin-off security does not trade regular way on the ex-date, the spin-off security is kept in all indices in which the parent is a constituent until the spin-off security begins trading regular way. At the discretion of the Index Committee, an indicative or estimated price may be used for the spin-off entity in place of a zero price until the spin-off security begins trading. If the spin-off entity does not trade for 20 consecutive trading days after the ex-date and there is no guidance issued for when trading may begin, S&P Dow Jones Indices may decide to remove the spin-off security at a zero price with advance notice given to clients.
Intra-day Calculation for U.S. Securities	12/02/2016	Prices used for the calculation of real-time index values are based on those from the primary exchanges.	Prices used for the calculation of real-time index values are based on those from the "Consolidated Tape".
Correction Dividends for ADRs/GDRs	09/16/2016	For Japanese and Korean ADRs/GDRs, if the dividend is not quoted ex by the exchange, the dividend is not generally recognized for index purposes.	Japanese and Korean ADR dividends which are generally not quoted ex by the exchange will be recognized on a future date if the depository bank issues a final dividend notice.

Change	Effective Date (After Close)	Methodology: Previous	Methodology: Updated
Long-Term Stock suspensions	07/29/2016	Suspended stocks are reviewed for possible deletion after five trading days for Developed Markets, 10 trading days for Emerging Markets, and 20 trading days for Frontier Markets. This review is conducted independently of rebalancing schedules.	Stocks under long-term suspensions are reviewed on a periodic basis. Suspended stocks that exceed a threshold of 60 business days, based on the designated listing exchange trading days, are reviewed for possible index deletion.
Share/IWF freeze	07/29/2016	A "share freeze" is implemented during each quarterly rebalancing. The timing is between 12 business days before and three business days after the quarterly rebalancing effective date.	A share/IWF freeze period is implemented during each quarterly rebalancing. The freeze period begins after the market close on the Tuesday prior to the second Friday of each rebalancing month (i.e. March, June, September, and December) and ends after the market close on the third Friday of the rebalancing month.
Treatment of U.S. transferable rights offerings	07/29/2016	For U.S. transferable rights, S&P Dow Jones Indices uses the when-issued trading price for the rights line to determine the price adjustment amount. The value of the right is determined by using the market value of the right, if available. S&P Dow Jones Indices uses the when-issued price of the rights trading line and subtracts that amount times the ratio from the underlying to get the new price of the underlying. If there is no market value available, the value of the rights as discussed earlier in this document is calculated.	SP Dow Jones Indices will no longer use when issued pricing for U.S. transferable rights offerings.
Spin-off Treatment when the spin-off is an existing publicly traded company	07/29/2016	If the spun-off company is already trading regular way, S&P Dow Jones Indices will not use a zero price treatment. The price adjustment to the parent is calculated as the (price of the spin-off) * (ratio of the spin-off shares to the parent shares).	S&P Dow Jones Indices will add the in-specie distribution to all indices in which the parent is a constituent on the ex-date. The distributed security will remain in the parent's indices until it has completed at least one day of regular way trading and will remain in indices through the distribution date if the distribution date is later than the ex-date. The distribution will be represented by a temporary placeholder security.
Clarify when S&P Dow Jones Indices considers a non-ordinary dividend to be ordinary for index purposes	07/29/2016	"Special dividends" are those dividends that are outside of the normal payment pattern established historically by the corporation.	S&P Dow Jones Indices will generally consider the third consecutive instance of a non-ordinary dividend (in terms of timing, not amount) to be ordinary for index purposes as this third consecutive payment will generally be considered to be part of the normal payment pattern established by the company.
Enhancement to dividend treatment of Japanese and Korean companies	12/31/2015	S&P Dow Jones Indices recognizes Korean dividends on the payable date. For Japanese companies, S&P Dow Jones Indices recognizes estimated dividend amount on the ex- date, with no index adjustment for dividend amount differences between the estimated and the confirmed amounts.	The dividend treatment of Japanese and Korean companies accounts for differences between the dividend amount recognized on the original ex-date and the final amount confirmed by the company. The dividend adjustment is applied to affected indices on a weekly basis without restatement of historical index levels.

Change	Effective Date (After Close)	Methodology Previous	Updated
Clarification of spin-off policy and treatment in modified market capitalization weighted indices (excluding equal weighted indices)	09/30/2015	The closing price of when-issued trading is used for adding an eligible spun-off company to indices and for the calculation of the price adjustment to the parent company.	Zero price spin-off is the standard index treatment for spin-offs unless an eligible spun-off company is already trading regular way. The spun-off company is added to all the indices of which the parent is a constituent, at a zero price at the market close of the day before the ex-date (with no divisor adjustment). For modified market capitalization weighted indices, if the parent or the spun-off entity is removed from indices post spin-off, the standard treatment is to reinvest the weight in the indices unless stated otherwise in the individual index methodology.
Rules regarding multiple share class lines	09/18/2015	In S&P Dow Jones Indices' U.S. indices, companies that have more than one class of common stock outstanding are represented only once. The stock price is based on one class, usually the most liquid class, and the share count is based on the total shares outstanding of all classes.	There will no longer be consolidated lines in the S&P Dow Jones Indices' branded Float Market Cap (FMC) indices. Instead, all multiple share class companies that have listed share class lines will be adjusted for shares and float such that each share class line will only represent that line's shares and float. The decision to include each publicly listed line is evaluated individually. All multiple share class companies that have an unlisted class line will also be adjusted.
Clarification on recurring returns of capital and multiple dividend distributions with different withholding tax requirements	03/31/2015	--	When a return of capital is declared in lieu of an ordinary cash dividend and fits the historical pattern of an ordinary dividend in amount and frequency, it is treated as an ordinary cash dividend. If the different dividends or multiple components of a single dividend are subject to different dividend withholding taxes, the standard withholding tax rate for the country will be used and the gross dividend amount may be adjusted accordingly.

Disclaimer

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