Equity Indices Policies & Practices

Methodology

December 2020

S&P Dow Jones Indices: Index Methodology
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Introduction

Overview

S&P Dow Jones Indices’ (S&P DJI) equity indices adhere to the general policies and practices covering corporate action treatment, index applications, pricing guidelines, market disruptions, recalculations, and other policies outlined below.

However, please note that local market practices may take precedence over general S&P DJI policies & practices in some instances, so there are exceptions and/or special rules pertaining to those markets. If an index methodology specifies a different approach than the general approach stated within this policy document, the rules stated in the index methodology take precedence. To the extent possible, the implementation and timing is the same across all S&P DJI’s branded equity indices. For specific information on the policies and practices governing an index, please refer to the respective index methodology.

Corporate Action Treatment by Index Categorization

S&P DJI’s index calculation and corporate action treatments vary according to the categorization of the indices. At a broad level, indices are defined into two categorizations: Market Capitalization Weighted and Non-Market Capitalization Weighted Indices.

A majority of S&P DJI’s equity indices are market capitalization weighted and float-adjusted, where each stock’s weight in the index is proportional to its float-adjusted market value. S&P DJI also offers capped versions of market capitalization weighted indices, where single index constituents or defined groups of index constituents, such as sector or geographical groups, are confined to a maximum weight. The default treatment in this document assumes a market capitalization weighted index.

Non-market capitalization weighted indices include those that are not weighted by float-adjusted market capitalization and generally are not affected by notional market capitalization changes resulting from corporate actions. Examples include indices that apply equal weighting, factor weighting such as dividend yield or volatility, strategic tilts, thematic weighting, price weighting, or other alternative weighting schemes.
Additions and Deletions

Additions 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 certain indices with a fixed number of constituents, whenever there is a deletion from an index, a 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 rebalancing dates. In general, IPOs and direct listings must meet the index eligibility criteria, and in certain cases, large offerings may qualify for fast track entry.

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 & 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.
Mandatory Events

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 DJI’s 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 DJI’s index analysts and reviewed on a case by case basis. 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 DJI.

If the primary exchange suspends or halts an M&A target security prior to the S&P DJI’s announced effective deletion date, S&P DJI will remove the security at the market close price or the deal price, whichever is lower if the merger is all cash. S&P DJI 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 DJI’s deletion date. If any other pricing mechanism is used that deviates from this policy, S&P DJI 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 DJI.

All M&A driven changes to S&P DJI’s 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. An M&A driven share/Investable Weight Factor (IWF) change does not need to meet any minimum threshold requirement for implementation. This helps minimize turnover in indices. In certain situations, at S&P DJI’s discretion, de minimis M&A share changes may be accumulated and implemented with the quarterly share rebalancing. M&A share changes for an index company acquiring a privately held company or a non-index company that does not trade on a major exchange in the U.S. are implemented at the next quarterly rebalancing. For mergers involving shareholder elections, S&P DJI will generally use the default election terms to increase the shares of the acquirer. Please refer to the Share and IWF Updates section for further information on timing of share changes.

S&P DJI believes turnover in index membership should be avoided when possible. An otherwise eligible addition is generally not 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.

Reverse Mergers/Takeovers

Acquisitions for shares of a public company by a private company that will then list, also known as reverse takeovers, will generally be implemented via a change of the company/stock name, and all other identifiers of the target of the acquisition and current index constituent. These events are generally triggered by a reorganization of the acquiring company’s capitalization. In order to align all attributes of the newly listed company to the former entity, S&P DJI might apply a split event to the number of shares and share price of the parent according to the terms of the takeover.

Tendered Shares. In certain markets, tendered shares may be replaced with a tradable tendered share class on the same stock exchange. S&P DJI 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 DJI 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 are updated if necessary.

Spin-Offs

Treatment of Spin-Offs in Market Capitalization Indices

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 the eligibility 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 DJI 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 DJI may determine not to add the ineligible security to the parent’s indices due to de minimis 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. 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 to represent the value of the spin-off received. The indicative or estimated price for the spin-off security is usually calculated using the difference between the parent’s close price the night before the ex-date and the opening price of the parent on the ex-date. Any difference in calculation due to subsequent corporate actions on the parent or spin-off security will be communicated to clients through the usual channels. 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 DJI 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 DJI 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 DJI to hold the place (weight) of the assets distributed, but not yet received by index clients. A temporary placeholder security may be used by S&P DJI 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 DJI 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 holding companies often have a reverse split accompany 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 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.

4. **India.** Indian spin-offs often list several weeks, and in some cases months, after the ex-date. In such cases, S&P DJI will apply an indicative or estimated price for the spin-off entity based on the difference between the parent’s close price the night before the ex-date and the opening price of the parent on the ex-date until the spin-off security lists and begins trading. If the spin-off entity does not trade for 20 consecutive trading days after listing, S&P DJI may decide to remove the spin-off security at a zero price.

### Treatment of Spin-Offs in Certain Non-Market Capitalization Indices

For most non-market capitalization 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 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 advance 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 objective 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 non-market capitalization weighted index or (2) the spun-off stock inherits the weight of the parent in an non-market capitalization 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 objective of the index while the spun-off does not meet such requirements, the weight of the spun-off company is added back to the parent stock’s weight in an non-market capitalization equal weighted index.

Non-market capitalization 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.

### Non-Market Capitalization 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.

### Return Calculation for a Spun-off Stock on the Close of the Ex-Date

Where a stock is included at a zero price and then trades, its return on the day is mathematically infinite. S&P DJI 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 DJI 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.

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 DJI 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 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 the example calculations below.

S&P DJI’s Calculation of Rights Offerings

**Step 1: In/Out-of-the-Money Determination:**

<table>
<thead>
<tr>
<th>Condition</th>
<th>In-the-money</th>
<th>Out-of-the-money</th>
</tr>
</thead>
<tbody>
<tr>
<td>The subscription price &lt; the stock closing price on the day before the ex-date</td>
<td>If the subscription price &lt; the stock closing price on the day before the ex-date, then the rights offering is in-the-money.</td>
<td></td>
</tr>
<tr>
<td>The subscription price ≥ the stock closing price on the day before the ex-date</td>
<td>If the subscription price ≥ the stock closing price on the day before the ex-date, then the rights offering is out-of-the-money.</td>
<td></td>
</tr>
</tbody>
</table>

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 DJI 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:

<table>
<thead>
<tr>
<th>Condition</th>
<th>In-the-money</th>
<th>Out-of-the-money</th>
</tr>
</thead>
<tbody>
<tr>
<td>The subscription price + dividend &lt; the stock closing price on the day before the ex-date</td>
<td>If the subscription price + dividend &lt; the stock closing price on the day before the ex-date, then the rights offering is in-the-money.</td>
<td></td>
</tr>
<tr>
<td>The subscription price + dividend ≥ the stock closing price on the day before the ex-date</td>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>

**Step 2: Application of Price & Share Adjustment on the Ex-Date for in-the-money Rights Offerings:**

S&P DJI’s 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:

\[
\text{Value of the Rights} = \left(\frac{\text{Market Value of the Stock} - (\text{Subscription Price} + \text{Dividend})}{\text{Number of Rights required to purchase 1 share} + 1}\right)
\]

Price Adjustment Factor = \(\frac{\text{Market Value of the Stock} - \text{Value of the Rights}}{\text{Market Value of the Stock}}\)

Adjusted Price or Theoretical Ex-Rights Price (TERP) = \(\text{Market Value of the Stock} \times \text{Price Adjustment Factor}\)

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

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.

\[
\begin{align*}
\text{Value of Rights} & = \left\{\frac{3.34 - (1.5 + 0)}{(5/7) + 1}\right\} = \text{GBP 1.07333333} \\
\text{Price Adjustment Factor} & = \left\{\frac{3.34 - 1.07333333}{3.34}\right\} = \text{0.67864271} \\
\text{Adjusted Price or TERP} & = 3.34 \times 0.67864271 = \text{GBP 2.26666667}
\end{align*}
\]

OR

\[
\begin{align*}
\text{Adjusted Price or TERP} & = 3.34 - 1.07333333 = \text{GBP 2.26666667}
\end{align*}
\]

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.

\[
\begin{align*}
\text{Value of Rights} & = \left\{\frac{3.34 - (1.5 + 0)}{(5/7) + 1}\right\} = \text{GBP 0.78166667} \\
\text{Price Adjustment Factor} & = \left\{\frac{3.34 - 0.78166667}{3.34}\right\} = \text{0.76596806} \\
\text{Adjusted Price or TERP} & = 3.34 \times 0.76596806 = \text{GBP 2.55833333}
\end{align*}
\]

OR

\[
\begin{align*}
\text{Adjusted Price or TERP} & = 3.34 - 0.78166667 = \text{GBP 2.55833333}
\end{align*}
\]

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.

\[
\begin{align*}
\text{Value of Rights} & = \left\{\frac{3.34 - (1.5 + 0.5)}{(5/7) + 1}\right\} = \text{GBP 0.78166667} \\
\text{Price Adjustment Factor} & = \left\{\frac{3.34 - 0.78166667}{3.34}\right\} = \text{0.76596806} \\
\text{Adjusted Price or TERP} & = 3.34 \times 0.76596806 = \text{GBP 2.55833333}
\end{align*}
\]

OR

\[
\begin{align*}
\text{Adjusted Price or TERP} & = 3.34 - 0.78166667 = \text{GBP 2.55833333}
\end{align*}
\]

\[1\] 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 made at the quarterly rebalancing.

Non-Market Capitalization Weighted Indices

When a stock in an equal weighted non-market capitalization 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). 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 also follow the non-market capitalization weighted methodology. For such indices, in the event of a rights offering, the treatment is exactly the same as the one for equal weighted non-market capitalization 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, Partly Paid Shares, Convertible Bonds, and Other Ineligible Securities & Share Types

Securities such as warrants, options, partly paid shares 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 DJI 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 DJI 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 DJI 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 DJI 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.

Exceptions:

Subscription Price is unknown until after the Ex-Date. In certain markets, the subscription price is not known on the ex-date, and is sometimes provided well after the ex-date. In Singapore, 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 DJI reserves the right to alter the general treatment with sufficient notice to clients.
**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 the stock is suspended during the accelerated stage of the offer, the ex-date is taken as the date that trading resumes. 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 DJI 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 considered a non-mandatory event and will be applied after the end of the subscription period where the event meets the requirements for accelerated implementation (refer to the *Non-Mandatory Share & Investable Weight Factor (IWF) Updates* section). Share changes that do not meet the criteria for accelerated implementation are implemented at the quarterly rebalancing.
Non-Mandatory Share and Investable Weight Factor (IWF) Updates

Certain mandatory actions, such as M&A driven share/IWF changes, stock splits, and mandatory distributions, are not subject to a minimum threshold for implementation. Material share/IWF changes resulting from certain non-mandatory corporate actions follow the accelerated implementation rule defined below with sufficient advance notification. Non-material share/IWF changes are implemented quarterly. The accelerated implementation rule is intended to reduce turnover intra-quarter while also enhancing opportunities for index trackers to take advantage of non-mandatory material liquidity events. 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.

Accelerated Implementation Rule

1. **Public offerings.** Public offerings of new company-issued shares and/or existing shares offered by selling shareholders, including block sales and spot secondaries, will be eligible for accelerated implementation treatment if the size of the event meets the materiality threshold criteria:
   a. At least US $150 million\(^2\), and
   b. At least 5%\(^3\) of the pre-event total shares.

   In addition to the materiality threshold, public offerings must satisfy the following conditions:
   - Be underwritten.
   - Have a publicly available prospectus, offering document, or prospectus summary filed with the relevant authorities.
   - Have a publicly available confirmation from an official source that the offering has been completed.

   For public offerings that involve a concurrent combination of new company shares and existing shares offered by selling shareholders, both events are implemented if either of the public offerings represent at least 5% of total shares and US $150 million. Any concurrent share repurchase by the affected company will also be included in the implementation.

2. **Dutch Auctions, Self-tender offer buybacks, and Split-off exchange offers.** These non-mandatory corporate action types will be eligible for accelerated implementation treatment regardless of size once their results are publicly announced and verified by S&P DJI.

Exception to the Accelerated Implementation Rule

For non-mandatory corporate actions subject to the accelerated implementation rule with a size of at least US $1 billion\(^4\), S&P DJI will apply the share change, and any resulting IWF change, using the latest share and ownership information publicly available at the time of the announcement, even if the

\(^2\) Calculated using the offering (subscription) price per share and the number of shares offered (excluding any overallotment). When the offering price is announced in a non-US currency, it will be converted into USD using the WM/Reuters 4PM spot rate on the day prior to the pricing date.

\(^3\) Measured as the pre-event total share outstanding for that share class.

\(^4\) Calculated using the offering (subscription) price per share and the number of shares offered (excluding any overallotment). When the offering price is announced in a non-US currency, it will be converted into USD using the WM/Reuters 4PM spot rate on the day prior to the pricing date.
offering size is below the 5% threshold. This exception ensures that very large events are recognized in a timely manner using the latest available information.

All non-mandatory events not covered by the accelerated implementation rule (including but not limited to private placements, acquisition of private companies, and conversion of non-index share lines) will be implemented quarterly coinciding with the third Friday of the third month in each calendar quarter. In addition, events that were not implemented under the accelerated implementation rule but were found to have been eligible, (e.g. due to lack of publicly available information at the time of the event) are implemented as part of a quarterly rebalancing.

Announcement Policy

For accelerated implementation, S&P DJI will provide two (2) business days’ notice for all non-U.S. listed stocks, and one (1) business days’ notice for all U.S. listed stocks. For U.S. listed stocks, accelerated implementation events with a size of at least US $1 billion, an announcement is sent intraday once the details are confirmed by S&P DJI, in order to provide additional notification.

IWF Updates

Accelerated implementation for events less than US $1 billion will include an adjustment to the company’s IWF only to the extent that such an IWF change helps the new float share total mimic the shares available in the offering. To minimize unnecessary turnover, these IWF changes do not need to meet any minimum threshold requirement for implementation. Any IWF change resulting in an IWF of 0.96 or greater is rounded up to 1.00 at the next annual IWF review.

For accelerated implementation of events of at least US $1 billion, any change in a company’s IWF will include the latest share and ownership information publicly available at the time of the announcement. Any IWF change resulting in an IWF of 0.96 or greater is rounded up to 1.00.

IWF changes will only be made at the quarterly review if the change represents at least 5% of total current shares outstanding and is related to a single corporate action that did not qualify for the accelerated implementation rule.

Quarterly share change events resulting from the conversion of derivative securities, acquisitions of private companies, or acquisitions of non-index companies that do not trade on a major exchange are considered to be available to investors unless there is explicit information stating that the new owner is a strategic holder.

Other than the situations described above, please note that IWF changes are only made at the annual IWF review.

For more information on IWF updates, please refer to S&P Dow Jones Indices’ Float Adjustment Methodology.

Share Updates

For some markets, when total shares outstanding increase by at least 5%, but the new share issuance is to a strategic or major shareholder, it implies that there is no change in float- adjusted shares. However, in such instances, S&P DJI will apply the share 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.

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5 For Australian stocks S&P DJI will provide two (2) business days’ notice from the day the Appendix 2A (formerly Appendix 3B) is filed. If the Appendix 2A is filed at or after the end of the day, accelerated changes will be implemented at the earliest on the next trading day.
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.

Exceptions:

- **Subscription Receipts/Forward Sales Agreements.** Any non-fully paid or non-fully settled offering such as subscription receipts in Canada and forward sales agreements in the U.S. are not eligible for accelerated implementation. Share updates resulting from completion of subscription receipts terms or the settlement of forward sale agreements are updated at a future quarterly share rebalance.

- **Foreign Ownership Limit Adjustments.** In certain markets such as India and Thailand, foreign ownership limit adjustments that result in IWF changes are implemented with the quarterly rebalancing even if there is no change in shares outstanding.

- **India.** In India, non-mandatory events that otherwise qualify for accelerated implementation will not be implemented until the updated shareholder information is available, due to the tendency for such events to be made to strategic holders.

*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’ Additional 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 is 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, and rights offerings), and the accelerated implementation rule is suspended. The suspension includes all changes that qualify for accelerated implementation and would typically be announced or effective during the share/IWF freeze period. At the end of the freeze period all suspended changes will be announced on the third Friday of the rebalancing month and implemented five business days after the quarterly rebalancing effective date.

In general, companies that are the target of cash M&A events, and publicly available guidance indicates the event is expected to close by quarter end, may have their share count frozen at their current level for rebalancing purposes.
Certain Share Types and Designations

Multiple Share Classes

Companies issue multiple share classes in some instances. The treatment of multiple share classes of stock varies across S&P DJI’s indices depending on local market custom and conditions. S&P DJI includes all publicly listed multiple share class lines separately in its float-adjusted market capitalization (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.

Exception:

Berkshire Hathaway Inc. Due to turnover and liquidity concerns, Berkshire Hathaway Inc. (NYSE:BRK.B) is an exception to the Multiple Share Classes rule. S&P DJI will continue to consolidate the share count for this company under the B share class line.

Designated Listings

For companies with multiple share classes of common stock, S&P DJI 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 DJI 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 DJI 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 depository receipts (NVDR) are generally designated as Secondary Listings.

S&P DJI 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 DJI reserves the right to review and update the Designated Listing more frequently based on market conditions.

For purposes of index selection, S&P DJI 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.

Exception:

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.

Note: Non-market capitalization 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 non-market capitalization weighted indices, please refer to the respective index’s methodology document available at www.spdji.com.

Depositary Receipt Shares

Depositary Receipt (DR) shares outstanding, 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.

Brazil Units

Brazil units are securities issued and traded on the São Paulo Stock Exchange representing a combination of Ordinary and Preferred shares issued by companies in Brazil. For index purposes, shares outstanding for Units are derived by dividing the total number of outstanding ordinary and preferred shares by the Units ratio, which is the total number of securities that the Unit contains. The IWF for Units is calculated using float figures at the company level, based on the total holdings of ordinary and preferred shares per shareholder. For companies in Brazil that have listed Units, the Units are normally used for index inclusion rather than its Ordinary or Preferred listed stocks.
Dividends, Stock Splits, and Consolidations

Dividends

Ordinary Dividend. An ordinary dividend is a distribution of a portion of a company's earnings to its shareholders. Ordinary 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, an ordinary 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 ordinary 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 DJI 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 DJI. Treatment is as follows:

- Hybrid Dividends Considered Ordinary Dividends. S&P DJI applies the full amount of the dividend on the ex-date (using the cash equivalent amount), and then increases the shares either on the payable date (if the final distribution ratio is announced by the company at least one business day prior to the payable date) or at the next quarterly share rebalancing, regardless of whether the share increase is at least 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 either on the payable date (if the final distribution ratio is announced by the company at least one business day prior to the payable date) or at the next quarterly share rebalancing, regardless of whether the share increase is at least 5%.

In certain instances, S&P DJI 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 DJI 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 DJI 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 at least 5% 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 DJI’s 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* section 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 DJI may choose to recognize the dividend on the date S&P DJI becomes aware of the amount. S&P DJI 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: an ordinary 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.

\[ \text{Dividend} = \text{GBP 0.031} + \text{GBP} \{0.015 \times (1-0.2)} \] = \text{GBP 0.043}
Taiwan. When there is a suspension in trading that S&P DJI 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 DJI 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. 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 interim dividends or dividends with a record date at fiscal year-end, the estimate is calculated as the previous year’s dividend amount in the same period adjusted for any split/bonus issues. If no dividend was paid in the same period of 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 DJI reinvests the difference between the estimated and confirmed dividend amount using the Post Ex-Date Dividend calculation methodology (see below). A negative dividend adjustment will be applied if the estimated dividend has not been confirmed by the company six months after the ex-date.

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

Turkey. Distributions from REIT companies are treated as ordinary dividends, but are not subject to withholding tax.

Australia.

- **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.

**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 DJI 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 DJI 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:

\[
\text{Index Dividend Point Adjustment} = \frac{D_{dt} \times S_{at}}{\text{Divisor}_t}
\]

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.
- \( \text{Divisor}_t \) = 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 DJI 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 regular cash dividends on a single day, S&P DJI 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 DJI 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 DJI 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 DJI’s 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. The withholding tax rates used by S&P DJI do not reflect any such reduction from tax treaties. Tax rate data is reviewed annually by S&P DJI. Tax rates are sourced and verified with independent data sources, including but not limited to the Worldwide Corporate Tax Guide published annually by Ernst & Young. With sufficient notice to clients, SP DJI will update WHT rates outside of the annual review when it becomes aware of a change in a rate.

**Stock Split and Consolidation**

**Stock Split.** A stock split is a corporate action that 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. The terms imply the same action; the only difference is in the way the terms are quoted.

For example, 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.** A consolidation is the 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).

**Certain Eligibility Criteria for Dividend Focused Indices**

**Dividend Payment Types.** For index eligibility, selection, and weighting purposes of some indices, S&P DJI only considers cash dividend payments declared as regular by the paying company. Cash dividend payments declared as special by the paying company, including recurring special cash dividends, are not considered. Please refer to the relevant index methodology for additional details.

**Unique Payment Types.** Dividends paid in non-traditional payment types (such as cryptocurrencies or digital securities) will generally not be recognized in S&P DJI Indices.

**Monthly Review for Ongoing Eligibility in Dividend Focused Indices**

S&P Dow Jones Dividend Indices’ constituents are reviewed on a monthly basis for ongoing eligibility.

Unless stated otherwise in the relevant index methodology, S&P DJI will use one of the following approaches when conducting the monthly review to determine whether an index constituent will remain in a dividend index following an announcement concerning the company’s dividend program.

At the discretion of S&P DJI, an index constituent may be removed effective prior to the open of the first business day of the following month, if:

**Approach A:**
- A scheduled dividend payment is omitted, or;
- A company announces that it will cease paying dividends for an undetermined period;
• A company announces a reduced dividend amount and S&P DJI determines that it will no longer qualify for the index at the subsequent reconstitution as a result.

Approach B:
• A company announces that it will cease paying dividends for an undetermined period;
• A company announces a reduced dividend amount and S&P DJI determines that it will no longer qualify for the index at the subsequent reconstitution as a result.

Approach C:
• A scheduled dividend payment is omitted;
• A company announces that it will cease paying dividends for an undetermined period;

The determination of ongoing eligibility and qualifying for the index at the subsequent reconstitution is at the discretion of the Index Committee.

Where a company postpones or defers a scheduled dividend payment, but does not cancel it, S&P DJI will generally take no action until the company makes a further announcement, or the index undergoes a rebalancing, whichever occurs sooner.

For Approach B, companies that omit a single scheduled dividend payment will have their revised (reduced) total annual dividend amount reviewed for continuing eligibility. In the case of companies that typically pay a single dividend annually, omission may result in a zero dividend being recorded in the reference period for the subsequent rebalance.

The review of ongoing eligibility is conducted based on information publicly announced by the company up to and including the 21st of the month (in February, this date will be the 18th). Any index changes are effective prior to the open of the first business day of the following month and will be announced with five business days’ notice.
Summary of Corporate Action Treatment by Index Weighting Type

The tables in the following pages detail the general corporate action treatment by index weighting type. For more information on the specific treatment within an index family, please refer to that index methodology. For complete details on index math calculations please refer to S&P Dow Jones Indices’ Index Mathematics Methodology, available at [www.spdji.com](http://www.spdji.com).

**Market Capitalization Indices**

- Market capitalization indices – where constituent weights are determined by float-adjusted market capitalization.
- Capped market capitalization indices – where single index constituents or defined groups of index constituents, such as sector or geographical groups, are confined to a maximum index weight. All corporate actions for capped market capitalization indices affect the index in the same manner as in market cap weighted indices.

<table>
<thead>
<tr>
<th>Corporate Action</th>
<th>Addition</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Addition/Deletion</td>
<td>Addition</td>
<td>Companies are added at the float (capped float) market capitalization weight. For capped indices, refer to the index methodology for details on the capping factor applied to intra-rebalancing additions. The net change to the index market capitalization causes a divisor adjustment.</td>
</tr>
<tr>
<td>Change in shares outstanding</td>
<td>Deletion</td>
<td>The weights of all stocks in the index will proportionally change. Relative weights will stay the same. The index divisor will change due to the net change in the index market capitalization.</td>
</tr>
<tr>
<td>Split/Reverse Split</td>
<td>Increasing (decreasing) the shares outstanding increases (decreases) the market capitalization of the index. The change to the index market capitalization causes a divisor adjustment.</td>
<td></td>
</tr>
<tr>
<td>Spin-off</td>
<td>Shares outstanding are adjusted by split ratio. Stock price is adjusted by split ratio. There is no change to the index market capitalization and no divisor adjustment.</td>
<td></td>
</tr>
</tbody>
</table>

For specific eligibility rules and treatment of spin-offs, refer to the individual index methodology for specific eligibility rules and treatment of spin-offs.

<table>
<thead>
<tr>
<th>Corporate Action</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in IWF</td>
<td>Increasing (decreasing) the IWF increases (decreases) the market capitalization of the index. A net change to the index market capitalization causes a divisor adjustment.</td>
</tr>
<tr>
<td>Ordinary dividend</td>
<td>When a company pays an ordinary cash dividend, also referred to as a regular cash dividend, the index does not make any adjustments to the price or shares of the stock. As a result there are no divisor adjustments to the index. Ordinary dividends are reinvested across the index and accounted for in the Total Return index calculations. Additional details on the Total Return calculation can be found in S&amp;P Dow Jones Indices Index Mathematics Methodology.</td>
</tr>
<tr>
<td>Special dividend</td>
<td>The stock price is adjusted by the amount of the dividend. The net change to the index market capitalization causes a divisor adjustment.</td>
</tr>
<tr>
<td>Rights offering</td>
<td>All rights offerings that are in the money on the ex-date are applied under the assumption the rights are fully subscribed. The stock price is adjusted by the value of the rights and the shares outstanding are increased by the rights ratio. The net change in market capitalization causes a divisor adjustment.</td>
</tr>
</tbody>
</table>
Non-Market Capitalization Indices (excluding price weighted and equal weighted indices)

A non-market capitalization weighted index (also referred to as a non-market cap or modified market cap index) is one where index constituents have a weight defined by a factor other than market capitalization. Between index rebalancings, corporate actions generally have no effect on index weights. Examples include indices weighted by factor scores, dividend yield, inverse volatility, strategic tilts, thematic weighting, or other alternative weighting schemes.

<table>
<thead>
<tr>
<th>Corporate Action</th>
<th>Treatment</th>
</tr>
</thead>
</table>
| Company Addition/Deletion | **Addition**  
Most non-market capitalization weighted indices do not add companies between rebalancings. Refer to the index methodology for further details on intra-rebalancing additions.  
**Deletion**  
The weights of all stocks in the index will proportionately change but relative weights will stay the same. The index divisor will change due to the net change in the index market capitalization. |
| Change in shares outstanding | Shares outstanding changes are offset by an adjustment factor (AWF). There is no change to the index market capitalization and no divisor adjustment. |
| Split/Reverse Split | Shares outstanding are adjusted by split ratio. Stock price is adjusted by split ratio. There is no change to the index market capitalization and no divisor adjustment. |
| Spin-off | The spin-off is added to the index on the ex-date at a price of zero. The spin-off index shares are based on the spin-off ratio. On the ex-date the spin-off will have the same attributes and capping adjustment factor (AWF) as its parent company, and will remain in the index for at least one trading day. As a result, there will be no change to the index divisor on the ex-date.  
If the spin-off is ineligible for continued inclusion, it will be removed after the ex-date. The weight of the spin-off being deleted is reinvested across all the index components proportionately such that the relative weights of all index components are unchanged. The net change in index market capitalization will cause a divisor change.  
*Please refer to the individual index methodology for specific eligibility rules and treatment of spin-offs.* |
| Change in IWF | IWF changes are offset by an adjustment factor (AWF). There is no change to the index market capitalization and no divisor adjustment. |
| Ordinary dividend | When a company pays an ordinary cash dividend, also referred to as a regular cash dividend, the index does not make any adjustments to the price or shares of the stock. As a result there are no divisor adjustments to the index. Ordinary dividends are reinvested across the index and accounted for in the Total Return index calculations. Additional details on the Total Return calculation can be found in S&P Dow Jones Indices Index Mathematics Methodology. |
| Special dividend | The stock price is adjusted by the amount of the dividend. The net change to the index market capitalization causes a divisor adjustment. |
| Rights offering | All rights offerings that are in the money on the ex-date are applied under the assumption the rights are fully subscribed. The stock price is adjusted by the value of the rights and the shares outstanding are increased by the rights ratio. The change in price and shares is offset by an adjustment factor (AWF) to keep the index market capitalization (stock weight) unchanged. There is no change to the index market capitalization and no divisor adjustment. |
Price Weighted Indices

In a price-weighted index, such as the Dow Jones Industrial Average, constituent weights are determined solely by the prices of the constituent stocks. Shares outstanding are set to a uniform number throughout the index. Indices using this methodology will adjust the index divisor for any price impacting corporate action on one of its member stocks; this includes price adjustments, special dividends, stock splits, and rights offerings. The index divisor will also adjust in the event of an addition to or deletion from the index.

<table>
<thead>
<tr>
<th>Corporate Action</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Addition/Deletion</td>
<td>Fixed Component Count Index Treatment (Stock Replacements)</td>
</tr>
<tr>
<td></td>
<td>A company is added to the index at a weight determined by the price of the added stock relative to all other index constituents. The net difference between the prices of the added and deleted stocks will cause a divisor adjustment.</td>
</tr>
<tr>
<td></td>
<td><strong>Addition Only</strong></td>
</tr>
<tr>
<td></td>
<td>A stock is added to the index at a weight determined by the price of the added stock relative to all other index constituents. The net change to the index market capitalization (sum of the index constituent prices) resulting from the addition causes a divisor adjustment.</td>
</tr>
<tr>
<td></td>
<td><strong>Deletion Only</strong></td>
</tr>
<tr>
<td></td>
<td>The weights of all stocks in the index will proportionally change but relative weights will stay the same. The index divisor will change due to the net change in the index market capitalization.</td>
</tr>
<tr>
<td>Change in shares outstanding</td>
<td>All shares outstanding are assigned a constant value (shares = 1). Shares outstanding changes due to corporate actions or other events are not applicable.</td>
</tr>
<tr>
<td>Split/Reverse Split</td>
<td>Stock price is adjusted by split ratio. Shares outstanding are not adjusted by the split ratio. There is a change to the index market capitalization due to the price adjustment causing a divisor adjustment.</td>
</tr>
<tr>
<td>Spin-off</td>
<td>The price of the parent company is adjusted to the Price of the Parent Company minus (the Price of the Spun-off Company/Share Exchange Ratio). The index divisor adjusts simultaneously.</td>
</tr>
<tr>
<td></td>
<td>(<em>Please refer to the individual index methodology for specific eligibility rules and treatment of spin-offs.</em></td>
</tr>
<tr>
<td>Change in IWF</td>
<td>All IWFs are assigned a constant value (IWF = 1). IWF changes due to corporate actions or other events are not applicable.</td>
</tr>
<tr>
<td>Ordinary dividend</td>
<td>When a company pays an ordinary cash dividend, also referred to as a regular cash dividend, the index does not make any adjustments to the price or shares of the stock. As a result there are no divisor adjustments to the index. Ordinary dividends are reinvested across the index and accounted for in the Total Return index calculations. Additional details on the Total Return calculation can be found in S&amp;P Dow Jones Indices Index Mathematics Methodology.</td>
</tr>
<tr>
<td>Special dividend</td>
<td>The stock price is adjusted by the amount of the dividend. The net change to the index market capitalization causes a divisor adjustment.</td>
</tr>
<tr>
<td>Rights offering</td>
<td>All rights offerings that are in the money on the ex-date are applied under the assumption the rights are fully subscribed. The stock price is adjusted by the value of the rights. The index market capitalization changes due to the price adjustment causing a divisor adjustment.</td>
</tr>
</tbody>
</table>
Equal Weighted Indices

An equal weighted index is one where every stock, or company, has the same weight in the index at the relevant rebalancing date, and a portfolio that tracks the index will invest an equal dollar amount in each applicable instrument. Therefore, when stocks are added or deleted, either the new stock must assume the actual weight of the old stock or the entire index must be rebalanced. However, this is not always the case and may vary by index family.

<table>
<thead>
<tr>
<th>Corporate Action</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Addition/Deletion</td>
<td>Fixed Component Count Index Treatment (Stock Replacements)</td>
</tr>
<tr>
<td></td>
<td>The company entering the index goes in at the weight of the company coming out. If a company is being removed at a price of 0.00, the replacement goes in at the weight of the deleted company at the close on the day before the effective date. If more than one company is being replaced in the index on a single date, the replacements are added in the order specified in the client announcement. There will be change in index market capitalization and no divisor change for stock replacements except where a company is removed at a price of zero as noted above.</td>
</tr>
<tr>
<td></td>
<td><strong>Addition Only</strong></td>
</tr>
<tr>
<td></td>
<td>Most non-fixed count equal weight indices do not add companies between rebalances. Please refer to the index methodology for further details.</td>
</tr>
<tr>
<td></td>
<td><strong>Deletion Only</strong></td>
</tr>
<tr>
<td></td>
<td>The weights of all stocks in the index will proportionately change, due to the absolute change in the number of index constituents. Relative weights will stay the same. The index divisor will change due to the net change in the index market capitalization.</td>
</tr>
<tr>
<td>Change in shares outstanding</td>
<td>Shares outstanding changes are offset by an adjustment factor (AWF). There is no change to the index market capitalization and no divisor adjustment.</td>
</tr>
<tr>
<td>Split/Reverse Split</td>
<td>Shares outstanding are adjusted by split ratio. Stock price is adjusted by split ratio. There is no change to the index market capitalization and no divisor adjustment.</td>
</tr>
<tr>
<td>Spin-off</td>
<td>The spin-off is added to the index on the ex-date at a price of zero. The spin-off index shares are based on the spin-off ratio. On the ex-date the spin-off will have the same attributes and capping adjustment factor (AWF) as its parent company and will remain in the index for at least one trading day. As a result, there will be no change to the index divisor on the ex-date. If the spin-off is ineligible for continued inclusion, it will be removed after the ex-date. In most equal weight indices the weight of the spin-off is re-invested back into the parent stock on the deletion date. There will be no divisor adjustment in this case. Please refer to the individual index methodology for specific eligibility rules and treatment of spin-offs.</td>
</tr>
<tr>
<td>Change in IWF</td>
<td>IWF changes are offset by an adjustment factor (AWF). There is no change to the index market capitalization and no divisor adjustment.</td>
</tr>
<tr>
<td>Ordinary dividend</td>
<td>When a company pays an ordinary cash dividend, also referred to as a regular cash dividend, the index does not make any adjustments to the price or shares of the stock. As a result there are no divisor adjustments to the index. Ordinary dividends are reinvested across the index and accounted for in the Total Return index calculations. Additional details on the Total Return calculation can be found in S&amp;P Dow Jones Indices Index Mathematics Methodology.</td>
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<td>Special dividend</td>
<td>The stock price is adjusted by the amount of the dividend. The net change to the index market capitalization causes a divisor adjustment.</td>
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<tr>
<td>Rights offering</td>
<td>All rights offerings that are in the money on the ex-date are applied under the assumption the rights are fully subscribed. The stock price is adjusted by the value of the rights and the shares outstanding are increased by the rights ratio. The change in price and shares is offset by an adjustment factor (AWF) to keep the index market capitalization (stock weight) unchanged. There is no change to the index market capitalization and no divisor adjustment.</td>
</tr>
</tbody>
</table>
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 DJI 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 DJI’ branded indices.

- Same day removals for bankruptcies are not done. 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 DJI’ announcement is published on Monday evening, with the removal on Tuesday after the market close.

- 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, for the duration of the suspension period, S&P DJI carries forward the last available official closing price. 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 DJI 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 actions or that have announced information regarding the date when the stock will resume trading will generally not be deleted from indices. S&P DJI does not consider restructuring as a corporate action 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 actions and will not be deleted from indices until the stock trades again. S&P DJI 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 DJI announced that the stock will be deleted, the S&P DJI 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. Any change in status that occurs less than two days before the rebalancing effective date will be reviewed by the index committee.
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. Suspended stocks that are removed from indices will then become eligible again for index inclusion beginning with the subsequent September, December, March, and June rebalancings, respectively. For example, a stock that is deleted from an index at the September rebalancing would be eligible for index inclusion beginning with the subsequent March 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. Index committee discretion can be used when determining whether or when to implement a corporate action for a suspended stock.

**Sanctions**

Some sanctions programs are comprehensive in nature, and block the government or include broad-based trade restrictions, while others selectively target specific individuals and entities. Because sanctions can be either comprehensive or selective, S&P DJI reviews sanctions on a case-by-case basis. Depending on the circumstance, countries or specific securities may be impacted by sanctions. Generally, S&P DJI will treat sanctions using the perspective of a U.S. and/or European Union (EU) based investor. Specific securities impacted by sanctions may result in deletion from indices if the impacted security is a current index constituent, blocking the addition of a non-constituent security to an index or freezing the current shares/IWF/GICS of a security for the duration of the sanctions. In all cases, S&P DJI’s treatment is announced to clients when new sanctions are imposed or removed with index implications.
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 DJI), 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, operational headquarters location, and primary stock exchange listing are the principal factors determining country of domicile. Other factors considered include the geographic breakdown of revenue and assets, ownership information, location of officers, directors and employees, investor perception, and other factors deemed to be relevant by the Index Committee.

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.

Domiciles of Convenience:

- 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 DJI has seen companies 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 DJI's Index Committee does reserve the right to review companies on a case-by-case basis. Domicile is reviewed on an as-needed basis.
Controls on the Repatriation of Foreign Capital

A government, central bank, or monetary authority can impose controls or restrictions on the repatriation of foreign capital that make it difficult or even impossible to trade securities listed in that market. Moreover, a market can temporarily exhibit other trading constraints, such as insufficient foreign exchange liquidity. If a market institutes capital controls, or experiences other structural trading constraints, S&P Dow Jones Indices will assess the impact and duration of the situation, and may take one or more of the following actions:

1. Continue to maintain the stocks listed in the affected market in accordance with standard ongoing maintenance procedures.

2. Retain the stocks listed in the affected market, but freeze all potential changes until further notice (e.g. shares, float, index shares, adds/drops).

3. Drop the stocks listed in the affected market.

4. Utilize only depository receipts and/or cross-listings for representation of the affected market, if possible, which in some cases may require a switch of the listing included in an index.

S&P DJI will provide advanced notice if it elects to drop stocks or switch the listing due to capital controls or other trading constraints. Stocks may be removed at a zero or minimal price at the Index Committee’s discretion, in recognition of the constraints faced by investors.

Once the capital controls or trading constraints are lifted and/or remedied, S&P DJI may reevaluate the status of the affected country using S&P Dow Jones Indices’ Country Classification Methodology. Any decisions will be communicated to clients as soon as possible through the normal channels.

For more information, please refer to S&P Dow Jones Indices’ Country Classification Methodology.
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 DJI is dependent on the exchanges to provide guidance in the event of an unexpected exchange closure. S&P DJI’s decisions are 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 DJI 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 DJI 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 DJI 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 DJI 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 DJI 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 DJI will treat the day as an unscheduled market holiday.

(ii) If a market disruption occurs intraday, S&P DJI 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 DJI 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 DJI 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.

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**Full Market Unexpected Closure**

<table>
<thead>
<tr>
<th>Full Day</th>
<th>After Market Opens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate Action Effective Date</td>
<td>Corporate Action Effective Date</td>
</tr>
<tr>
<td>↓  ↓</td>
<td>↓  ↓</td>
</tr>
<tr>
<td>All market driven actions (splits, bonuses, rights, cash dividends, spin-offs, etc.) are moved to the next trading date.</td>
<td>All market driven actions (splits, bonuses, rights, cash dividends, spin-offs, etc.) are moved to the close of the next trading date and use the closing prices of that day.</td>
</tr>
<tr>
<td>Adds and drops to the index and share/IWF updates remain unchanged</td>
<td>Adds and drops to the index and share/IWF updates remain unchanged</td>
</tr>
<tr>
<td>Day Before Corporate Action Effective Date</td>
<td>Day Before Corporate Action Effective Date</td>
</tr>
<tr>
<td>↓  ↓</td>
<td>↓  ↓</td>
</tr>
<tr>
<td>All market driven actions scheduled for the open of the next day are unaffected by an exchange closure.</td>
<td>Add 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.</td>
</tr>
</tbody>
</table>

---
**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.

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

<table>
<thead>
<tr>
<th>Prior to 3:00 PM ET</th>
<th>↔</th>
<th>After 3:00 PM ET</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Corporate Action Effective Date</strong></td>
<td>↔</td>
<td><strong>Corporate Action Effective Date</strong></td>
</tr>
<tr>
<td><strong>All market driven actions (splits, bonuses, rights, cash dividends, spin-offs, etc.) take place at the open on the ex-date.</strong></td>
<td>↔</td>
<td><strong>All market driven actions scheduled for the open of the next day are unaffected by an exchange closure.</strong></td>
</tr>
<tr>
<td><strong>Adds and drops to the index and share/IWF updates remain unchanged</strong></td>
<td>↔</td>
<td><strong>Adds and drops to the index and share/IWF updates events remain unchanged.</strong></td>
</tr>
</tbody>
</table>

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 DJI will generally shift corporate actions, including adds, drops, and share/IWF changes.

Rebalancing

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

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.
Index Recalculation Policy

S&P DJI reserves the right to recalculate an index at its discretion in the event one of the following occurs:

1. Incorrect or revised closing price of one or more constituent securities;
2. Missed or misapplied corporate action;
3. Late announcement of a corporate action;
4. Incorrect calculation or data entry error;
5. Incorrect application of an index methodology, as described below in Index Methodology Event.

A general description of how these events are handled 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 a recalculation is considered when making any such decision.

In the event one of the following recalculation events is discovered within two trading days of its occurrence, generally the index is recalculated. In the event any such recalculation event is discovered beyond the two trading day period, the applicable Index Committee shall decide whether the index should be recalculated.

<table>
<thead>
<tr>
<th>Recalculation Events</th>
<th>Treatment In S&amp;P DJI’s Branded Indices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closing Price</td>
<td>Incorrect constituent closing prices are generally corrected and reposted.</td>
</tr>
<tr>
<td>Missed or Misapplied Corporate Action</td>
<td>Missed or misapplied corporate actions are corrected &amp; reposted.</td>
</tr>
<tr>
<td>Late Announcement of a Corporate Action</td>
<td>Divisor Impact: Divisor-impacting information is corrected and reposted.</td>
</tr>
<tr>
<td></td>
<td>No Divisor Impact: Late information, including regular cash dividends, that does not impact the index divisor are applied at the earliest opportunity when S&amp;P DJI becomes aware of the event.</td>
</tr>
<tr>
<td></td>
<td>For late announced or canceled dividends, S&amp;P DJI may elect to use a Post Ex-date Dividend Adjustment in certain instances. See the Post Ex-date Dividend Adjustment section for further information.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>Incorrect Calculation or Data Entry Error</td>
<td>Incorrect calculations or data entry mistakes caused by S&amp;P DJI are corrected and impacted indices are recalculated.</td>
</tr>
</tbody>
</table>
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 DJI that was caused by the incorrect application of an index methodology and results in the incorrect composition and/or weighting of index constituents. The committee has final discretion but generally considers 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 or retained in an index, or the constituent weightings in the index were incorrectly assigned, 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 DJI in advance of the effective date (e.g. pro-forma files).
  - The change would result in greater than de minimis performance impact and is consistent with index usage.

- If an incorrect application of the methodology for determining index composition or weighting is discovered after the action has been announced by S&P DJI, but prior to the effective date of the action, S&P DJI reserves the right to rescind the action and restate it using corrected data.

In the event S&P DJI 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 DJI-licensed entities) are notified of the recalculation and alerted when files have been successfully reposted.

S&P DJI calculates real-time (intraday) values for some of its indices. In the event there is an error with a real-time calculation or a restatement of end-of-day values for one of these indices, S&P DJI will not recompute intraday values for the impacted time period.

S&P DJI 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.

End-of-Month Global Fundamental Data – Recalculation Policy

S&P DJI calculates and distributes End-of-Month (“EOM”) Global Fundamental Data for various indices, and reserves the right to recalculate and repost the EOM files at its discretion should either of the following events occur:

1. Incorrect underlying data point used in the calculation
2. Incorrect application of index methodology or missed methodology event

In the event one of the recalculation events is discovered within one month of its occurrence and impacts only the latest files produced, the Index Manager may, at their discretion, recalculate and repost the EOM files without involving the Index Committee. In the event any such recalculation event is discovered
Beyond the one month period and/or impacts files beyond the latest files produced, the applicable Index Committee shall decide whether the data will be recalculated and files reposted.

In the event S&P DJI chooses to recalculate Global Fundamental Data, it shall do so within a reasonable timeframe following the detection and review of the issue. If it is determined that the data 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 DJI-licensed entities) are notified of the recalculation and alerted when files have been successfully reposted.
Index Governance

Index Committee

Indices are governed by an Index Committee. Most committees are comprised of full-time professional members of S&P DJI 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 policies 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 DJI 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 DJI’s 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 DJI 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 DJI’s 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 DJI communicates and consults with stakeholders through various channels using press releases, index announcements, emails and the distribution of data files. In addition, S&P DJI has a designated client experience team available to respond to inquiries.

When a material change to an index methodology is considered, S&P DJI 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 DJI 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 DJI 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 resulting from a consultation are announced on our web site.

Substantive changes to methodology documents not resulting from consultations will also be announced. S&P DJI will generally not issue an announcement for minor edits to methodology documents that it deems not substantive, such as clarifications and format edits that are not related to any kind of methodological change.

Occasionally, S&P DJI may hold client meetings, conference calls, or 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 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.

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 DJI 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 DJI. 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 action is restricted to domestic investors only, it is not recognized in the global indices.
Special Index Variations

S&P DJI 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.

Child Indices

S&P DJI calculates and maintains a number of sub-indices ("Child Index" or "Child Indices") derived from a larger or broader index ("Parent Index" or "Parent Indices"). A Child Index provides a further breakdown of individual constituents within a Parent Index based on a specific attribute, such as a specific sector, country, or geographic region. The actual composition of each Child Index is a subset of the respective Parent Index, with the weights of the Child Index constituents relative to their weights in the Parent Index. Therefore, a change to a Parent Index's composition causes a simultaneous change to the composition of the relevant Child Index.

A Child Index can be viewed as a building block of the Parent Index, which helps users better understand the overall performance of the Parent Index. In certain cases, Child Indices range from broad, well diversified benchmarks to very narrow, concentrated baskets. S&P DJI may choose to publish these Child Indices for a variety of purposes including performance attribution.

Child Indices are eligible to be calculated and published each trading day in end-of-day files provided the current composition of the Parent Index includes the specific attribute. For example, if a particular GICS sector is not represented in the Parent Index on trading day (t), then no Child Index for that sector is calculated and published by S&P DJI on trading day (t). However, if that sector is represented within the Parent Index following a future rebalancing or reconstitution, S&P DJI will calculate and publish the applicable Child Index in end-of-day files.

As the constituents of a Parent Index change over time, there may be periods where an eligible Child Index is active or inactive, and is thereby added to or removed from end-of-day files. If a Child Index is added on trading day (t), the Child Index level is set to a predefined value (e.g. 100.00 or 1000.00) on trading day (t-1), and subsequently appears in end-of-day files on trading day (t). If a Child Index is removed, the relevant Child Index no longer appears in the end-of-day files, but remains eligible for inclusion in the future. The calculation and publication of Child Indices is an automated process, dependent on whether the applicable attribute appears in the Parent Index; accordingly, S&P DJI does not provide advance notice on the addition to or removal of Child Indices from end-of-day files.

Measuring the performance of an index requires a continuous and uninterrupted time series. Each reactivation instance of a Child Index signifies a new time series, and any historical data prior to that reactivation date should be treated as a separate time series.

Index Terminations

S&P DJI may determine that an index should be discontinued. Reasons for an index termination could include:

- Fewer than the required number of securities are available for inclusion in an index, such as with size or GICS market segment based indices
- An index duplicates another S&P DJI index
- Data required for an index is no longer available or no longer reliable

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6 Note the calculation of Child Indices does not follow the termination process described here. Child Indices are only calculated when the particular attribute is present in the parent index.
• Market conditions, regulations, or potential index constituents have changed, rendering the index unlikely to achieve its stated objective
• Declining investor use or interest

All proposals to discontinue an index are assessed to determine any potential impact on the market. S&P DJI may, at its discretion, consult with market participants regarding an index termination.

If the data on a discontinued index is provided to clients at the time of termination, S&P DJI may suggest possible appropriate alternative S&P DJI indices. Index terminations will be announced in advance, and vendors will be notified. Index levels and related data on a discontinued index are retained by S&P DJI.

If financial product issuers or investment managers choose to use an S&P DJI index, regardless of index family, as the basis of an index-linked financial product or an investment fund, they should consider the potential need to terminate or modify the terms of a financial product resulting from the termination of the calculation of the index.

Indices discontinued due to size or GICS segment may resume calculation if sufficient securities become eligible in the future.

Calculations and Pricing Disruptions

Special Open Quotation (SOQ)

The special opening quotation ("SOQ") is calculated using the same methodology as the underlying index except that the price used for each index constituent is the open price at which the security first trades upon the opening of the exchange on a given trading day.

For more information on SOQ calculation, please refer to S&P Dow Jones Indices’ Index Mathematics Methodology.

Real-time Index Calculation

For certain indices, S&P DJI calculates intraday index calculations using real-time exchange traded prices. S&P DJI does not calculate with each traded price, but rather, calculates on a pre-determined fixed interval (e.g. every 5 seconds). At each fixed interval, the index is computed with the latest real-time pricing for each underlying security included in the index. If a new price is not available since the last real-time calculation, the calculation will leverage the last available traded price provided by the exchange. In the absence of a real-time traded price for a given security, the calculation will leverage the prior days' closing price adjusted for corporate actions.

S&P DJI also maintains price thresholds for real-time securities and indices to prevent unusually large price movements or incorrect price adjustments to adversely impact index calculations.

• Security Level: In the event a security price breaches a threshold, the system will generate alerts and temporarily hold the last price prior to the breach. For index calculations, a held security will continue to be included in the calculation but the calculation will use the last accepted price prior to the breach. Once the held price is confirmed or falls back within the acceptable tolerance, the latest real-time price for this security will be used for index calculations.

• Index Level: In the event an index calculation breaches a threshold, the system will generate alerts and temporarily hold the last index value prior to the breach. While the index is held, the last held index value will be distributed as defined by the set dissemination frequency. Once the held index value is confirmed or falls back within the acceptable tolerance, index calculations will resume with the latest market data.

S&P DJI seeks to minimize any disruptions to its index calculations. In the event there is a disruption in intraday calculations, S&P DJI will not recalculate the impacted period.
End-of-Day-Calculations (EOD)

S&P DJI leverages exchange provided prices for official end-of-day index calculations. For each exchange, S&P DJI will use the relevant price (e.g. last trade, auction, VWAP, official close) as defined in the S&P Dow Jones Indices’ Global Equity Close Prices guide available on www.spindices.com. These prices are validated by index analysts prior to distribution of official index levels and files. S&P DJI performs secondary checks to determine if an exchange modifies the official price used by S&P DJI. In situations when there is an amended price, S&P DJI generally recalculates and reposts all affected files. Please refer to the Recalculation Policy section of this document for further information.

U.S. Securities. Official EOD calculations are based on each stock’s primary market closing price. 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.

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 DJI’s Web site at www.spdji.com indicating any changes to the prices used in index calculations.

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

All Other Securities. Real-time calculations of equity indices incorporating securities other than Indian securities use prices obtained from ICE or Refinitiv. If the primary vendor used by S&P DJI experiences a disruption or failure, S&P DJI will switch to the alternate vendor. Real-time calculated and published values will be disrupted until the vendor switch is implemented. If an exchange suffers a failure or interruption, real-time calculations for indices including relevant securities will be impacted until the issue is resolved. During such disruption events, S&P DJI will continue to calculate and publish index values with the latest available prices. This may result in indices flat-lining (e.g. no change in value) in a complete outage or partially updating in the event some constituent securities are not impacted by the disruption. In extreme circumstances, S&P DJI 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 DJI’s Index Committees may exercise Expert Judgment when the situation calls for the interpretation of data in calculating and maintaining an S&P DJI Index. S&P DJI maintains internal records of the use of Expert Judgment and the rationale for any such use. To the extent applicable to equity indices, Expert
Judgment refers to S&P DJI’s 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 DJI’s 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 pricing data is generally 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, if 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, RAPID’s, 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.

**Features** (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 DJI 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”.

**Terms**

**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-dividend.

**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 DJI

S&P DJI strives to use standardized terms in all 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:

<table>
<thead>
<tr>
<th>COMMONLY USED TERM</th>
<th>INTERCHANGEABLE TERMS USED/MEANING OF THE TERM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted Price</td>
<td>TERP (Theoretical Ex-Rights Price); Ex-Rights Price, Theoretical Open Price, Next Day Open Price</td>
</tr>
<tr>
<td>Dividend Disadvantage, Dividend Difference</td>
<td>Future dividend amount that new shares are \textit{not} entitled to</td>
</tr>
<tr>
<td>Expiration Date</td>
<td>Renunciation Date</td>
</tr>
<tr>
<td>Market Value of the Stock</td>
<td>Cum Price or Cum Rights Price. This is the closing price on the day before the rights ex-date</td>
</tr>
<tr>
<td>Non-Renounceable</td>
<td>Non-Tradable, Non-Transferable, Open Offer (in the UK)</td>
</tr>
<tr>
<td>Price Adjustment Factor (PAF)</td>
<td>Dilution Factor</td>
</tr>
<tr>
<td>Renounceable</td>
<td>Tradable, Transferable</td>
</tr>
<tr>
<td>Rights Offering – broad term used to describe all kinds of rights (renounceable and non-renounceable)</td>
<td>Entitlement Offer (used in Australia for non-renounceable rights); Open Offer (used in UK for non-renounceable rights)</td>
</tr>
<tr>
<td>Subscription Price</td>
<td>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)</td>
</tr>
<tr>
<td>Underwritten</td>
<td>Guaranteed (in North America)</td>
</tr>
<tr>
<td>Value of the Rights</td>
<td>Price Adjustment, Price Adjustment Amount, Implied Rights Value</td>
</tr>
</tbody>
</table>

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. 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.

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 DJI’s 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.

Foreign Ownership Limit (FOL). 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.

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 can be listed or unlisted 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-shares 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.

**Public Offering.** This is the issuance of shares to the public following an initial public offering. Public 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 DJI 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:

<table>
<thead>
<tr>
<th>Change</th>
<th>Effective Date (After Close)</th>
<th>Previous Methodology</th>
<th>Updated Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment of Korean Interim Dividends</td>
<td>12/04/2020</td>
<td>For companies that do not provide estimates but have a historical pattern of paying dividends with a record date at fiscal year-end, the estimate is calculated as the previous year’s dividend amount adjusted for any split/bonus issues.</td>
<td>For companies that do not provide estimates but have a historical pattern of paying interim dividends or dividends with a record date at fiscal year-end, the estimate is calculated as the previous year’s dividend amount in the same period adjusted for any split/bonus issues.</td>
</tr>
<tr>
<td>Timing of Certain Non-Mandatory Events</td>
<td>03/27/20</td>
<td>Confirmed share changes that are at least 5% of the total shares outstanding are implemented weekly. Total shares outstanding (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. Share changes 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).</td>
<td>Material share/IWF changes resulting from non-mandatory actions follow the accelerated implementation rule with sufficient advance notification, and share/IWF changes deemed non-material are implemented quarterly. During the share/IWF freeze period, shares and IWFs are not changed except for mandatory corporate action events (such as merger activity, stock splits, and rights offerings), and the accelerated implementation rule is suspended. The suspension includes all changes that qualify for accelerated implementation and would typically be announced or effective during the share/IWF freeze period. At the end of the freeze period all suspended changes will be announced on the third Friday of the rebalancing month, and implemented five business days after the quarterly rebalancing effective date.</td>
</tr>
<tr>
<td>Treatment of Canadian Dividends</td>
<td>03/15/2019</td>
<td>S&amp;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.</td>
<td>S&amp;P DJI 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.</td>
</tr>
<tr>
<td>Treatment of Korean Dividends</td>
<td>12/21/2018</td>
<td>The majority of dividends in Korea are not announced prior to their ex-date. S&amp;P DJI recognizes these dividends after they have been confirmed by the company.</td>
<td>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 with a record date at fiscal year-end, 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 of 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&amp;P DJI reinvests the difference between the estimated and confirmed dividend amount using the Post Ex-Date Dividend calculation methodology. A negative dividend adjustment will be applied if the estimated dividend has not been confirmed by the company six months after the ex-date.</td>
</tr>
<tr>
<td>Change</td>
<td>Effective Date (After Close)</td>
<td>Previous Methodology</td>
<td>Updated Methodology</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------</td>
<td>----------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Treatment of Renounceable Rights Offers for Australian Stocks</td>
<td>08/24/2018</td>
<td>Adjust the stock price on the ex-date. Add the rights class to the index with a share count based on the offer ratio at the Theoretical Ex-Rights Price (TERP) minus the Subscription Price. When the rights class converts to fully paid ordinary shares, drop the rights class and increase the shares of the stock at the last traded price.</td>
<td>S&amp;P DJI 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.</td>
</tr>
<tr>
<td>Special Dividends for Australian Stocks</td>
<td>08/24/2018</td>
<td>If a company announces that a dividend being paid is a special dividend, it is treated as a special dividend. 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.</td>
<td>S&amp;P DJI will consider special dividends as non-ordinary in nature.</td>
</tr>
<tr>
<td>Dividend Elimination, Suspension, Reduction, or Omission</td>
<td>07/31/2018</td>
<td>--</td>
<td>If S&amp;P DJI determines that an index constituent has eliminated or suspended its dividend, omitted a payment or reduced its calendar year dividend amount such that it will no longer qualify for the index at the subsequent reconstitution, it will be removed from the index effective prior to the open of trading on the first business day of the following month.</td>
</tr>
<tr>
<td>Weekly share change announcement</td>
<td>04/30/2018</td>
<td>There is no weekly share change announcement on the second Friday of a rebalancing month.</td>
<td>There is no weekly share change announcement on the first and second Fridays of a rebalancing month.</td>
</tr>
<tr>
<td>Merger related IWF change</td>
<td>01/19/2018</td>
<td>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.</td>
<td>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.</td>
</tr>
<tr>
<td>Tendered share lines</td>
<td>01/19/2018</td>
<td>S&amp;P DJI did not switch to tendered share lines in some markets when certain conditions were met.</td>
<td>In certain markets, tendered shares may be replaced with a tradable tendered share class on the same stock exchange. S&amp;P DJI 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.</td>
</tr>
<tr>
<td>Designated Listing</td>
<td>01/19/2018</td>
<td>--</td>
<td>For companies with multiple share classes of equity stock, S&amp;P DJI 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.</td>
</tr>
<tr>
<td>Share Updates – S&amp;P/TSX Canadian Indices</td>
<td>12/15/2017</td>
<td>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&amp;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%.</td>
<td>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.</td>
</tr>
<tr>
<td>Bankruptcies – Pricing for U.S. listed securities</td>
<td>07/31/2017</td>
<td>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.</td>
<td>If a U.S. listed stock moves from its primary exchange to the OTC market prior to its 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.</td>
</tr>
<tr>
<td>Change</td>
<td>Effective Date (After Close)</td>
<td>Previous Methodology</td>
<td>Updated Methodology</td>
</tr>
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<td>--------</td>
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</tr>
<tr>
<td><strong>Market Disruption</strong> – U.S. exchange has an unexpected closure</td>
<td>03/21/2017</td>
<td>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.</td>
<td>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.</td>
</tr>
<tr>
<td><strong>Market Disruption</strong> – Rebalancing: U.S.</td>
<td>03/21/2017</td>
<td>If an exchange is fully or partially closed on the day prior to an index rebalancing effective date, S&amp;P DJI will generally shift corporate actions, including adds, drops, and share/IWF changes.</td>
<td>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.</td>
</tr>
<tr>
<td><strong>Market Disruption</strong> – Rebalancing: Non-U.S.</td>
<td>03/21/2017</td>
<td>If an exchange is fully or partially closed on the day prior to an index rebalancing effective date, S&amp;P DJI will generally shift corporate actions, including adds, drops, and share/IWF changes.</td>
<td>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&amp;P DJI will generally shift corporate actions, including adds, drops, and share/IWF changes.</td>
</tr>
<tr>
<td><strong>Market Disruption</strong> – calculation of the Special Open Quotation (SOQ): U.S.</td>
<td>03/21/2017</td>
<td>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.</td>
<td>For U.S. markets: If the exchange is unable to provide official opening prices, the official closing prices will be utilized and determined based on SEC Rule 123C as outlined in the Unexpected Exchange Closures chapter.</td>
</tr>
<tr>
<td><strong>Market Disruption</strong> – calculation of the Special Open Quotation (SOQ): Non-U.S.</td>
<td>03/21/2017</td>
<td>--</td>
<td>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.</td>
</tr>
<tr>
<td>Change</td>
<td>Effective Date (After Close)</td>
<td>Previous</td>
<td>Methodology</td>
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</tr>
<tr>
<td>Treatment of suspended stocks in calculation of the Special Open Quotation (SOQ)</td>
<td>09/21/2017</td>
<td></td>
<td>For stocks that are suspended from trading on an exchange but are still in indices, S&amp;P DJI 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.</td>
</tr>
<tr>
<td>Removal of spin-off that doesn't trade</td>
<td>03/21/2017</td>
<td></td>
<td>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. 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.</td>
</tr>
<tr>
<td>Intra-day Calculation for U.S. Securities</td>
<td>12/02/2016</td>
<td>Prices used for the calculation of real-time index values are based on those from the primary exchanges.</td>
<td>Prices used for the calculation of real-time index values are based on those from the &quot;Consolidated Tape&quot;.</td>
</tr>
<tr>
<td>Correction Dividends for ADRs/GDRs</td>
<td>09/16/2016</td>
<td>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.</td>
<td>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.</td>
</tr>
<tr>
<td>Long-Term Stock suspensions</td>
<td>07/29/2016</td>
<td>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.</td>
<td>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.</td>
</tr>
<tr>
<td>Share/IWF freeze</td>
<td>07/29/2016</td>
<td>A &quot;share freeze&quot; is implemented during each quarterly rebalancing. The timing is between 12 business days before and three business days after the quarterly rebalancing effective date.</td>
<td>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.</td>
</tr>
<tr>
<td>Treatment of U.S. transferable rights offerings</td>
<td>07/29/2016</td>
<td>For U.S. transferable rights, S&amp;P DJI 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&amp;P DJI 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.</td>
<td>S&amp;P DJI will no longer use when issued pricing for U.S. transferable rights offerings.</td>
</tr>
<tr>
<td>Spin-off Treatment when the spin-off is an existing publicly traded company</td>
<td>07/29/2016</td>
<td>If the spun-off company is already trading regular way, S&amp;P DJI 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).</td>
<td>S&amp;P DJI 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.</td>
</tr>
<tr>
<td>Change</td>
<td>Effective Date (After Close)</td>
<td>Previous</td>
<td>Methodology</td>
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<tr>
<td>Clarify when S&amp;P DJI considers a non-ordinary dividend to be ordinary for index purposes</td>
<td>07/29/2016</td>
<td>“Special dividends” are those dividends that are outside of the normal payment pattern established historically by the corporation.</td>
<td>S&amp;P DJI 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.</td>
</tr>
<tr>
<td>Enhancement to dividend treatment of Japanese and Korean companies</td>
<td>12/31/2015</td>
<td>S&amp;P DJI recognizes Korean dividends on the payable date. For Japanese companies, S&amp;P DJI recognizes estimated dividend amount on the ex-date, with no index adjustment for dividend amount differences between the estimated and the confirmed amounts.</td>
<td>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.</td>
</tr>
<tr>
<td>Clarification of spin-off policy and treatment in modified market capitalization weighted indices (excluding equal weighted indices)</td>
<td>09/30/2015</td>
<td>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.</td>
<td>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 spin-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.</td>
</tr>
<tr>
<td>Rules regarding multiple share class lines</td>
<td>09/18/2015</td>
<td>In S&amp;P DJI’s 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.</td>
<td>There will no longer be consolidated lines in the S&amp;P DJI 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.</td>
</tr>
<tr>
<td>Clarification on recurring returns of capital and multiple dividend distributions with different withholding tax requirements</td>
<td>03/31/2015</td>
<td>--</td>
<td>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.</td>
</tr>
</tbody>
</table>
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