Morningstar Indexes Corporate Actions Methodology

Morningstar Indexes Version Amber
December 2024

Contents

Introduction

Corporate Actions and Adjustments

To understand the operational and maintenance aspects of an index, it is imperative to know how adjustments are made for different kinds of corporate actions and index weighting schemes. This document outlines the corporate action policy that Morningstar Equity Indexes follows consistently and transparently.

Cash Distribution

Cash Dividend or Ordinary Cash Dividend is a distribution of a portion of a company's earnings to its shareholders at regular intervals, typically on a quarterly, semiannual, or annual basis, and quoted in per share amounts. For index calculation, it is not treated as a corporate action and thus affects total returns and net returns but not price returns.

Special Dividend is a nonrecurring distribution of company assets, usually in cash, to shareholders, and it is treated as a corporate action with price and divisor adjustments. These are irregular or one-time payments. From 1st August 2024 on, non-ordinary cash distributions greater than or equal to 5% of market price of the underlying security on the day when event is announced in "finalized" status will be recognized as special dividends[1]. This may include bonus dividends, irregular dividends, capital repayments termed as return of capital, and capital gain distributions etc. Non-ordinary dividends below 5% of the market price of the underlying security are treated as ordinary dividends.

Special dividends announced in "finalized" status will not be cancelled if the size of the special dividend becomes smaller than 5% after the announcement. Special dividends smaller than 5% announced as an ordinary dividend in "finalized" status will not be cancelled if the size of the special dividend becomes greater than or equal to 5% of market price of underlying security after the announcement.

Special dividends greater than or equal to 5% of market price subjected to withholding tax are treated as taxable special dividend[2]. Morningstar will apply taxes on special dividends only when company

[1] This treatment is applicable to special dividends effective on or after 1st August 2024. Prior to this date, non-ordinary dividends were only recognized as special until the third consecutive instance of that distribution, based on timing rather than amount. See the Methodology Update History for further details.
[2] This treatment is effective from August 1st, 2024. See the Methodology Update History for further details.

announces it as taxable. Taxes on special dividends will be reflected in the net return indexes at the open of the ex-date. This means the price adjustment factor (PAF) will be different for the net return variant using net special dividend versus the gross and price return variants using gross special dividend.

If a security is trading on more than one eligible exchange, then Morningstar uses the security's price for which the trading currency matches the declared dividend currency to compare against the 5% price threshold.

Ordinary cash dividends, regardless of size, are treated as ordinary dividend. Merger & acquisition prepayments and spin-off cash payments are treated as special dividends, regardless of size.

Capital Repayment is a distribution of cash to shareholders from a company's share capital or additional paid-in capital. It is generally nonrecurrent and treated like a special dividend. Refer to the special dividend price threshold treatment in the special dividend section. A return of capital can be treated as an ordinary cash dividend if it is declared in lieu of an ordinary cash dividend and the amount and frequency fit the historical pattern of an ordinary dividend.

Scrip Dividend is a dividend paid by the issue of new shares in lieu of cash. On occasion, shareholders can opt to receive dividends in shares rather than cash. Scrip dividends are always treated as cash dividends on the ex-date, and any share change due to a shareholder's election to receive shares will be adjusted according to the standard share change policy.

Exhibit 1 Capital Repayment Categories

Corporate Action	Divisor Change
Special Dividend	Yes
Capital Repayment	Yes

Source: Morningstar.

Treatment of ADR/GDR is handled by declaring the cash dividend in the local currency for the depositary receipts. If the ex-date is known in advance, the depositary bank usually provides an estimated dividend amount in the trading currency of ADR/GDR based on the exchange rate at that time.

Variations in the Treatment of Cash Dividends by Region

United Kingdom

Cash dividends in the U.K. are reported as net dividends, because U.K. dividends are taxed at the source from the company profits after corporation tax has already been paid. Net dividends are used for index calculation purposes.

Property income distributions (PIDs) are a kind of dividend Real Estate Investment Trusts (REITs) can issue and are taxed at a rate of 20%. REITs may declare that dividends are PIDs, ordinary dividends, or a combination of the two.

Switzerland

Ordinary cash dividends from Swiss companies are subject to withholding tax. Dividends declared from capital contribution reserves are not subject to any withholding tax.

Net Ordinary Dividend = Gross Dividend from Capital Contribution + Gross Dividend from Retained Earnings * (1 – tax rate)

Example

Company "VAT Group AG" announced a cash dividend of CHF 4.5. Half of this amount is from the retained earnings of the company and the remaining 2.25 is from the capital contribution reserves.
Net Ordinary Dividend = Gross Dividend from Capital Contribution + Gross Dividend from Retained Earnings * (1 – tax rate)
= 2.25 + 2.25 * (1-0.35) = 3.7125

Taiwan

If there is a known suspension in trading, the event is recognized on the date trading resumes. For example, a reverse split will be recognized after the stock resumes trading instead of the ex-date.

In Taiwan, companies are allowed to distribute cash dividends from retained earnings or capital & legal reserve. Dividends from capital & legal reserve are not subject to any withholding tax, whereas dividends from retained earnings are subject to withholding tax.

Net Dividend = Dividend from Capital & Legal Reserve + Dividend from Retained Earnings (1 – tax rate)

Example

Taiwanese company "PQR" announced a dividend from capital & legal reserve of TWD 15 and dividend from retained earnings of TWD 25.
Net Dividend = Dividend from Capital & Legal Reserve + Dividend from Retained Earnings (1 – tax rate)
= 15 + 25 * (1 – 0.21) = 15 + 19.75 = 34.75

Japan

Most Japanese companies declare their dividends after the ex-date. An estimated dividend amount is usually available before the ex-date which will be reinvested into the index on the ex-date. If the estimated dividend is not provided by the company, then Morningstar will evaluate on a case-by-case basis based on the available information. Once the dividend amount is announced, the difference between the estimated and actual dividend will be reinvested on the next business day following the reception date from the data sources without correcting the past index levels, using the post-ex-date dividend calculation methodology. Irregular dividends declared by Japanese companies are treated as ordinary dividends.

Korea

Most Korean companies declare their dividends after the ex-date. If an estimated dividend amount is available, Morningstar will reinvest the estimated dividend into the index on the ex-date. If the estimated dividend is not provided by the company, then Morningstar will evaluate on a case-by-case basis based on the available information. Once the dividend amount is announced, the difference between the estimated and actual dividend will be reinvested on the next business day following the reception date from the data sources without correcting the past index levels, 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 for six months post the ex-date.

Brazil

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

Turkey

REIT company distributions are treated as ordinary dividends but are not subject to withholding tax.

Australia

In Australia, profits are taxed only once at either the company or shareholder level. The "franking rate" tracks whether the tax was paid on a cash dividend or not. The dividend will be 0% franked when the taxes were not paid and 100% franked if the tax was paid at the company level. The franking rate can be between 0% and 100%.

Conduit Foreign Income (CFI) in Australia is foreign income received by a foreign resident via an Australian corporate tax entity. Tax relief for CFI ensures that income distributed to foreign owners is not taxed in Australia when distributed by the Australian corporate tax entity.

New Zealand

In New Zealand, ordinary cash dividends are subject to withholding tax at the individual investor level. To prevent double taxation, companies that have already paid tax on its profits (out of which dividends are distributed) distribute imputation credits to its resident shareholders to offset the withholding tax impact, whereas non-resident shareholders get supplementary dividends to offset withholding tax payable on imputed dividends. Dividend calculation for New Zealand companies must take into account the imputation rate provided by the company. The imputation rate provides information on how much tax has been paid at the corporate level.

For example, an imputation rate of 100% states that the dividend has been taxed 100% at the corporate level. An imputation rate of 0% states that the dividend has not been taxed at the corporate level, therefore shareholders are liable to pay withholding tax. The imputation rate can range anywhere from 0 to 100%.

The net dividend is calculated using the below formula:
Net Ordinary Dividend = Total Gross Ordinary Dividend *(1- tax rate)

Examples

Company "ABC Limited" announced an ordinary dividend of NZD 20 per share and fully imputed at 100%. Fully imputed dividends are considered as nontaxable for nonresident shareholders, hence 0% tax charged.

Net Ordinary Dividend = Total Gross Ordinary Dividend *(1 - tax rate) = 20 * (1 - 0) = 20

Company "XYZ Corporation Limited" announced an ordinary dividend of NZD 0.112 per share and partially imputed at 86%.
Supplementary dividend to be paid to nonresident shareholders of NZD 0.0169. Total gross dividend includes ordinary dividend and supplementary dividends to be paid to nonresident shareholders in case of partially imputed dividends.

Net Ordinary Dividend = Total Gross Ordinary Dividend *(1 - tax rate) = (0.112 + 0.0169) * (1 - 0.3) = 0.1289 * 0.7 = 0.09023

Mexico

Mexico has passed a reform legislation replacing the Income Tax Law, or ITL, with a new law. A transitory rule was imposed such that dividends paid from Capital Contribution Accounts and Net Tax Income Accounts, or CUFIN, through Dec. 31, 2013, will not be subject to withholding tax under the final reform.

Companies are required to maintain separate CUFIN accounts for earnings before and after Dec. 31, 2013. If a portion of the newly announced dividend originates from the earnings in the CUFIN account before Dec. 31, 2013, that portion of dividend is not subject to withholding tax. Dividends from REITs are subject to a different withholding tax rate.

Guernsey

Guernsey REIT companies following the UK REIT regime and declare dividends that are property income distributions (PID) are taxed at UK REIT Withholding tax rate.

Post Ex-Date Dividend Adjustment

Companies in Japan and South Korea typically do not confirm cash dividend amounts before the ex-dates. Korean companies do not usually provide dividend estimates before the ex-date, while Japanese companies typically provide an estimated dividend amount before the ex-date. The actual dividend amounts are confirmed by companies in both countries after the ex-date.

The difference in the amount recognized on the ex-date and the actual dividend amount announced by the company is realized using a dividend adjustment. This adjustment is applicable to Japanese and Korean companies listed in their home markets and overseas as depositary receipts (ADR/GDR). For depositary receipts, the final confirmed dividend amount announced by the depositary bank is used.

The adjustment, in terms of dividend points, is applied to affected indexes weekly at the close of the following Friday without restatement to past index levels. Dividend adjustments are announced one day in advance. If the following Friday is not a trading day, then it is applied on the next trading day. The dividend point adjustment is calculated using the following formula:

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

$$D_{dt} = Difference\ between\ the\ original\ and\ the\ confirmed\ dividend$$
$$S_{at} = Index\ Shares\ on\ ex - date$$
$$Divisor_t = Divisor\ on\ ex - date$$

The gross total return (TR) and net return (NR) versions of the dividend point adjustment are calculated. The TR and NR index dividend point adjustments are added to the price index levels on Friday for the calculation of the total return and net return indexes respectively. If there are multiple dividend adjustments to implement in an index, a separate index dividend point is calculated for each dividend adjustment and then the dividend points are aggregated for index level return calculations. If a negative dividend adjustment results in a negative index dividend for the day, then the gross and net total return series underperform the price return on the effective date.

Foreign Exchange Conversions for Dividends

When companies declare dividends in currencies other than their stock trading currency, the dividend is converted using the foreign exchange rate on the ex-date for regular cash dividends. For special dividends, the exchange rate on the day before the ex-date is used. For ADRs and GDRs, the dividend amount and currency provided by the depositary banks are generally used for calculations.

Multiple Dividend Distributions on a Single Day

When there are multiple cash dividends on a single day, they will be combined 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 by the Exchange

When companies declare a conditional dividend, it may still be recognized whether the event happens or not. Clients will be notified in advance.

Bonus Issues of Shares Not Entitled to Cash Dividend

There are times when bonus issues of shares may not be entitled to a dividend effective on a later date. The bonus issue will be applied on the ex-date and the dividend will be adjusted. The dividend amount will be decreased in order to adjust it over the new number of shares, which includes those from the bonus issue.

Total Return and Net Return Indexes

Gross and net return indexes are calculated for most indexes, and cash dividends are generally applied on the ex-date of the dividend. Net return indexes reflect the return to an investor where dividends are reinvested after the deduction of a withholding tax.

The withholding tax is the amount that is withheld by the company making a dividend payment that is to be paid to the taxation authorities. This refers to the tax that nonresidents are subject to when the country in which the company 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, but the withholding tax rates used by Morningstar do not reflect these reductions. Tax rates are sourced and verified with independent data sources. The current tax rate information can be found here.

Rights Offering

In a rights issue, shareholders of a company are issued rights to buy a specified number of additional shares at a specified price, a rights or subscription price, generally at a discount (in the money) within a fixed period, the subscription period. The right to additional shares is usually proportional to the number of shares held. Only the rights available to all shareholders are recognized.

Exhibit 2 Rights Offering Categories

Corporate Action	Divisor Change
Rights to Acquire New Underlying Shares	Yes

Source: Morningstar.

For all markets, price adjustments and share changes are applied at the opening of the rights ex-date using the calculation method below. If the rights are undersubscribed or oversubscribed
If the rights are undersubscribed or oversubscribed, the corresponding share adjustments are made at the next quarterly share rebalancing.

In the case of a rights offering where companies issue unlisted shares, or other asset types such as warrants, options, contingent value rights, convertible bonds, or any other index-ineligible securities, Morningstar does not recognize the rights-offering event and no changes are made to the shares and price of the index constituent on the ex-date.

In a rights offering in Korea, the subscription price is generally estimated and set at a discount to the current market price of the shares at the time the rights issue is announced. The final confirmed subscription price is typically announced after the rights ex-date. Morningstar Indexes will use the estimated rights subscription price based on available information prior to the rights ex-date to apply the treatment for the rights offering.

For rights offerings in India, where companies issue partly paid-up shares that are traded separately under a different identifier, Morningstar will adjust price of parent security on the ex-date. The corresponding share adjustments resulting from the conversion of partly paid-up shares to fully paid-up shares are made at the next quarterly share rebalancing.

When the new shares are not entitled to a forthcoming dividend in which the amount is known, the dividend treatment is as follows:

- × If the subscription price ≥ (market price – dividend), the subscription is considered at a premium and no adjustment is made.
- × If the subscription price < (market price – dividend), the subscription price is considered at a discount and an adjustment is made.

When the subscription price is known only after the ex-date, the share adjustment is made after the end of the subscription period (only if the rights are in the money when the terms are disclosed).

Rights Offering Calculation

If the subscription price is less than the stock closing price the day before the ex-date, then the rights offering is in the money. If the subscription price is greater than or equal to the closing price the day before the ex-date, then the rights offering is out of the money.

In some cases, a future dividend is announced in which the new shares are not entitled to. In this case, the rule will differ. The confirmed dividend amount will be added to the subscription price and the rule above will be applied.

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

Theoretical ExRight Price (TERP) =

$$\frac{(\text{Close Price}_{\text{ExDate}-1} * \text{CommonShareOutstanding}_{\text{PreCorpAction}} + (\text{Subscription value of the rights} + \text{Dividend}) * \text{Additional stock via Rights Issue})}{(\text{Total Shares Outstanding}_{\text{PostCorpAction}})}$$

$$\text{Price Adjustment Factor (PAF)} = \frac{\text{TERP}}{\text{Close Price}_{\text{ExDate}-1}}$$

$$\text{Open Price}_{\text{ExDate}} = \text{PAF} * \text{Close Price}_{\text{ExDate}-1}$$

$$\text{Share Adjustment Factor (SAF)} = \frac{\text{Number of shares declared in rights issue}}{\text{Number of total outstanding shares}_{\text{PreCorpAction}}} + 1$$

If the offer is in the money, the price and share adjustment will be applied. The share adjustment is carried out, on the ex-date, using the calculation below

If the offer is out of the money, then no action is taken since a rational investor would not subscribe to the rights issue. Any subsequent shares issued are made at the quarterly rebalancing.

Treatment for Equal-Weighted and Alternatively Weighted Indexes

A rights issue is treated as a market-capitalization-neutral event, that is, the change in the weight of the company is neutralized by applying an adjustment factor. The index divisor remains unchanged.

Spin-Off

When a parent company sells a business or division, this results in an independent company known as a spun-off entity. A spin-off is also called a demerger or divestiture.

Spin-offs can be categorized as follows:

Exhibit 3 Spin-Off Categories

Corporate Action	Treatment	Divisor Change
Spun-off entity is trading before the ex-date	Zero price spin-offs[4] treatment is not used. The price adjustment to the parent is calculated as the (price of the spin-off) * (spin-off ratio).	Yes
Spun-off entity starts trading on or after the ex-date	1. Spun-off entity is added to the index at an estimated price when it can be ascertained, otherwise it is added at a zero price. 2. It is removed from the index after at least two days of trading at the last traded price, and appropriate divisor adjustment is made.	Yes
	The price adjustment to the parent is calculated as the (price of the spin-off) * (spin-off ratio).	

Source: Morningstar.

The spun-off entity is not added to the index, and its weight is distributed proportionately across the rest of the index constituents.

In the case of a spinoff where companies issue unlisted shares, or other asset types such as warrants, options, contingent value rights, convertible bonds, or any other index-ineligible securities, Morningstar does not recognize the spin-off event, and no changes are made to the shares and price of the index constituent on the ex-date.

In certain instances, the spun-off security will be added to indexes using a nonzero price and applying a price adjustment to the parent.

4 Zero price spin-offs: The spun-off entity is added to all indexes 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 accompanying divisor change at this time.

Spun-Off Security Is an Existing Publicly Traded Entity (In Specie Distribution)

The in-specie distribution will be added to all indexes in which the parent is a constituent on the ex-date at the last traded market price. The distributed security will be added to indexes where the parent is a constituent using the parent's float and shares equal to the product of distribution ratio and the parent's total shares outstanding. If the distributed security is already an index member the distributed securities float will be adjusted to reflect the distribution from the parent constituent. Notice will be given for any instances that will not be handled using this methodology.

Treatment for Equal-Weighted and Alternatively Weighted Indexes

The above events are treated as a market-capitalization-neutral event, the spun-off entity is not added to the index, and its weight is distributed proportionately across the rest of the index constituents.

Mergers and Acquisitions

In a merger, two or more companies join to form a new entity. This is generally done by a mutual agreement or through a tender offer that can be structured in a wide variety of ways that involve cash, stock, or a combination of both. If two or more companies are in the same index, one company is identified as the target company and is deleted from the index. The acquirer may undergo a share, free float factor, or name change, depending on the terms of the agreement.

In an acquisition, a company buys most or all of the target company and assumes controlling interest. The acquisition could be funded through cash, stock, or a combination of both. An acquisition will result in the deletion of the target company, and the share and free float factor of the acquirer is changed, depending on the terms of the agreement. Generally, a target company is dropped from all indexes on or around the delisting date. A target company may be dropped earlier once the security can no longer be acquired.

M&A can be categorized as follows:

× Target company is in the index and the acquiring company is not.
× Target company is not in the index, but the acquiring company is.
× Target and acquiring companies are both in the index.

Exhibit 4 M&A Categories

Corporate Action	Details	Divisor Change
Merger	Implementation is determined on a case-by-case basis.	Yes
An acquisition is funded by cash. • Target company is dropped. • No change is made to the acquirer.	Only acquiring company is in the index.	Yes
	Only target company is in the index.	Yes
	Both acquiring company and target company are in the index.	Yes
An acquisition is funded by stock or stock and cash. • Target company is dropped. • Share change and a possible free float factor change is made for the acquirer.	Only acquiring company is in the index.	Yes
	Only target company is in the index	Yes
	Both acquiring company and target company are in the index.	Yes

Source: Morningstar.

There might be situations that require special treatment:

When an index constituent acquires another index constituent and the delisting of the target company is a few days before the acquisition effective date, adjustments for the acquirer would, typically, be made effective the same date as the deletion date. The target company is typically dropped at the closing price of the stock on the date of deletion. If the security gets suspended or halted before the announced effective deletion date, it is removed at the deal price. The deal price is generally the tender offer price for cash takeovers or a derived deal price for partial stock/all stock takeovers.

If the deal is subject to a shareholder election and target security is suspended or halted before the announced effective deletion date, it will be removed at the deal price from the perspective of a non-elective investor.

Clients will be notified if any price other than market close prices or deal prices are used to remove these stocks from Morningstar indexes.

In the case of a Merger & Acquisition event where companies issue unlisted shares, or other asset types such as warrants, options, contingent value rights, convertible bonds, or any other index-ineligible securities, Morningstar does not recognize this event, and no changes are made to the shares and price of the index constituent on the ex-date.

Treatment for Equal-Weighted and Alternatively Weighted Indexes

M&As are treated as market-capitalization-neutral events, that is, the change in the weight of the company is neutralized by applying an adjustment factor. The index divisor remains unchanged.

- If an index constituent is acquired by a non-constituent, the target company is removed with no replacement. The weight of this target company is redistributed among the remaining constituents in proportion to their weights.
- If an index constituent acquires a non-constituent of the index, the event is market-capitalization-neutral.

Splits and Reverse Splits

Splits and reverse splits refer to the redenomination of shares and does not result in a change to a company's market capitalization. The increase or decrease in shares is accompanied by a proportional change in price. It can be structured as follows:

- A stock split is an issue of new shares to shareholders in proportion of their current holding. The price per share is simultaneously reduced.
- A reverse stock split results in a reduction of existing shares and an increase in the price per share.

Exhibit 5 Splits and Reverse Splits Categories

Corporate Action	Divisor Change
Split/Reverse Split	No

Source: Morningstar.

Stock Distribution

Stock distribution is a type of share issuance in which a company distributes its own shares or shares of another company.

Exhibit 6 Stock Distribution

Corporate Action	Divisor Change
Paid in the form of shares only	No

Source: Morningstar.

In the case of a stock distribution where companies issue unlisted shares, or other asset types such as warrants, options, contingent value rights, convertible bonds, or any other index-ineligible securities, Morningstar does not recognize the stock dividend event, and no changes are made to the shares and price of the index constituent on the ex-date.

The distribution to shareholders of company A is made in shares of another company, B.

Exhibit 7 Stock Distribution Categories

Corporate Action	Divisor Change
Both A and B in the index	No
Only A in the index	Yes
Only B in the index	No

Source: Morningstar.

In case company A issues shares of company B that it already owns. If both A and B in the index, then this will result in update of free float factor of company B.

Bankruptcy and Financial Distress

Bankrupt securities are generally ineligible. Same-day removals for bankruptcies are not done. Announcements are made such that a minimum of one days' notice is given to clients.

A security that is trading on its usual or primary exchange is removed from the index at the price at the close of the day with a minimum of one days' notice. If the trading of a security is halted or it is delisted from its usual exchange, it is deleted at a zero price. For U.S. companies, the security will be removed at the over-the-counter or pink-sheet price if no primary exchange price is available. If no OTC or pink-sheet price is available, the security may be removed at a zero price.

Companies that have been placed under FDIC receivership are also dropped from all indexes according to the same rules.

Delisting

A security is delisted when it is removed from a tradeable exchange. Various reasons may cause delisting: corporate actions, failure to comply with the exchange's listing requirement, or a company may decide to be delisted.

A security is generally dropped from all Morningstar indexes on or around its expected delisting date. If the delisting is the result of a merger or acquisition, the target company may be dropped once an offer to acquire the security is considered as unconditional. The adjustment of weight for the acquirer, and the deletion of the target company from the index are carried out simultaneously.

The securities are removed at the primary exchange price, if it is available, or at a zero price if no primary exchange price is available. For U.S. companies, the security will be removed at the over-the-counter (OTC) or pink-sheet price if no primary exchange price is available. If no OTC or pink-sheet price is available, the security may be removed at a zero price.

Exhibit 8 Delisting Categories

Corporate Action	Divisor Change
Delisting	Yes

Source: Morningstar.

Stock Suspension

Suspended index constituents will be retained during the suspension period. The security is carried forward at the last traded price immediately before the suspension. If the suspension period goes beyond 60 business days and there is no known date it will resume trading, the suspended stock will be reviewed for possible index deletion.

Suspended stocks are tracked and reviewed for possible deletion on a case-by-case basis; typically, they are dropped at a zero price. To minimize turnover, if a stock is deleted, it will not be eligible for reinclusion in any index for six months following the deletion.

Summary

The treatment of corporate actions for the float market capitalization-weighted index family is summarized in the table below:

Exhibit 9 Market Capitalization-Weighted

Corporate Action	Market Cap Neutral	Divisor Change
Stock Spilt/Reverse Stock Split/ Stock Dividend/ Bonus Issue	Yes	No
Rights Offering/ Subscription Offer	No	Yes
Special Dividend	No	Yes
Spin-Off*	No	Yes
Merger and Acquisition	No	Yes
Delisting	No	Yes

*Weight of the spin-off security will be redistributed among all the existing constituents in the index.

Source: Morningstar.

The treatment of corporate actions for this non-float market capitalization-weighted index family is summarized in the table below:

Exhibit 10 Equal/Alternatively Weighted

Corporate Action	Market Cap Neutral	Divisor Change
Stock Spilt/Reverse Stock Split/ Stock Dividend/ Bonus Issue	Yes	No
Rights Offering/ Subscription Offer	Yes	No
Special Dividend	No	Yes
Spin-Off*	No	Yes
Merger and Acquisition#	No	Yes
Delisting	No	Yes

*Weight of the spin-off security will be redistributed among all the existing constituents in the index.
#Changes in Shares Outstanding and IWF is offset by adjusting the IWF factor of the acquirer to keep the market value of the acquirer constant.

Source: Morningstar.

Exchange Closures

× If an exchange fails to open because of unanticipated circumstances, the index uses the previous day's closing prices. However, if all exchanges in the index fail to open, index publishing may be called off for that day.

× If an exchange is forced to close early because of unanticipated circumstances, the closing price is calculated based on:
  × the closing prices published by the exchange, or
  × if no closing price is available, the last traded price before the close of the exchange.

× Treatment of any mandatory corporate actions and pricing is based on the guidance of the affected exchange.

× If a market is unexpectedly closed on the ex-date of market-driven corporate actions, they will be moved to the next trading date. Adds, drops, and share updates remain unchanged in this instance. If the market is closed the day before the effective date, market-driven actions are unaffected, but adds, drops, and share updates will be moved to the close of the next trading date. This is also the treatment taken if the market unexpectedly closes early the day before the effective date. If there is an unexpected early market closure on the corporate action effective date, market-driven actions take place at the open on the ex-date, and adds, drops, and share changes remain unaffected.

× If an exchange is closed or unexpectedly closes early the day before an index rebalancing effective date, corporate actions will be moved to the close of the next trading date. If the exchange is fully closed or closes early on the effective date, the actions are not affected as they are completed at close the day before the effective date.

Snap Announcements

The snap announcement driven corporate actions are generally made effective within two to five days of notice.

Share Issuance and Float Changes

Voluntary corporate action such as share issuance and float changes will not be implemented between rebalancing periods. All voluntary share change events, and float change events will be accumulated and implemented during rebalancing.

Version

Section	Description of Change	Update Date
Bankruptcy & Delisting	Updated language for bankruptcy treatment to remove the US securities with OTC price if available.	May 2023
Mergers and Acquisitions	Updated Suspended/halted target pricing methodology.	March 2024
Variations in the Treatment of Cash Dividends by Region	Updated country specific dividend collection for Switzerland, Taiwan, Mexico, New Zealand & Guernsey Dividend. Removed Canada dividend treatment.	June 2024
Special dividend Capital repayment	Updated the Special Dividend section. Under the new methodology, non-ordinary dividends will be recognized as special if they exceed 5% of the stock price. Previously, non-ordinary dividends were recognized as special until the third consecutive instance of that distribution, based on timing, not amount. This new methodology is effective from 1st August 2024 on.	July 2024
Rights Offering	Updated Korean rights offering treatment in Rights Offering section	October 2024
Rights Offering, Spin-off, Merger and Acquisitions, Stock distribution	Updated index treatment for the issuance of other asset types under the Rights Offering, Spin-off, Merger and Acquisitions and Stock distribution sections. Added index treatment for the Indian rights offering of partly paid-up shares under the Rights Offering section.	December 2024

About Morningstar Indexes

Morningstar® Indexes combine the science and art of indexing to give investors a clearer view into the world's financial markets. Our indexes are based on transparent, rules-based methodologies that are thoroughly back-tested and supported by original research. Covering all major asset classes, our indexes originate from the Morningstar Investment Research Ecosystem — our network of accomplished analysts and researchers working to interpret and improve the investment landscape. Clients such as exchange-traded fund providers and other asset management firms work with our team of experts to create distinct, investor-focused products based on our indexes. Morningstar Indexes also serve as a precise benchmarking resource.

Morningstar Index Methodology Committee

The Morningstar Index Methodology Committee oversees all new index development, index methodology changes, and cessation of indexes for any indexes where Morningstar owns the intellectual property. This committee is also charged with ensuring that indexes align with Morningstar Research principles and values. The group comprises members of the index team with index research, product development, product management, client service, index implementation, and operation expertise who provide the first layer of governance over index design and methodology.

Morningstar Index Operations Committee

The Morningstar Index Operations Committee governs the processes, systems, and exception handling of the day-to-day management of all live indexes, including index rebalancing and reconstitution, restatements, market classification, and contingency management. The committee oversees the annual review of index methodology (as required by U.K. and EU benchmark regulations, or BMR), ensuring that methodologies remain fit for purpose and continue to achieve their stated investment objectives. The group comprises members of the index team with data, operations, corporate actions, product development, index launch, client service, and index management experience who provide the first layer of governance over index operations.

Morningstar Index Oversight Committee

The Morningstar Index Oversight Committee is responsible for the index oversight function as per the requirements of the U.K. and European BMR, providing independent oversight of all aspects of the governance of benchmark administration as required by the relevant BMR. Its remit extends to all calculation and administration-related business activities of Morningstar Indexes, including administration of Morningstar-owned benchmarks as well as client-owned benchmarks and index calculation. The oversight function is part of the organizational structure of Morningstar but is separate and independent from the index business, index management, and the other index committees.

Contact the Indexes Team

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Any matter arising from undocumented events will be resolved at the discretion of the Morningstar Index Committee.