Index Calculation and Maintenance

Calculation of the Price and Total Return Indexes
The Index is calculated on a Price Return and Gross Total Return basis. The current Index level is calculated by dividing the current modified Index market capitalization by the Index divisor. The divisor is determined off of the initial capitalization base of the Index and the base level. The divisor is updated as a result of corporate actions and composition changes.

The Gross Total Return calculation incorporates regular cash dividends paid in the underlying constituents and reinvests those distributions into the Index at the open of the dividend ex-date.

Index Formula

The Index is calculated using the following formula:

\[ I_t = \frac{\sum_{i=1}^{N} Q_{i,t} M_{i,t} C_{i,t}}{DIV} \]

Where:

- \( t \) day of calculation
- \( N \) number of constituent equities in Index
- \( Q_{i,t} \) number of shares of equity \( i \) on day \( t \)
- \( M_{i,t} \) multiplier of equity \( i \) (always assumed to be 1 for this Index)
- \( C_{i,t} \) price of equity \( i \) on day \( t \)
- \( DIV \) current Index divisor on day \( t \)

For the total return version of the Index, the Index divisor is adjusted on the morning of each Index constituent’s ex-date to take into account the reinvestment of the related dividend.

Calculation of Currency and Currency Hedged Indexes
Currency Indexes are those which have index levels computed to be in a currency that differs from the base currency of the initial index. For example, if the base currency of an index is in USD, a secondary index computed in CAD is considered the CAD Currency Index.

The computation of the Currency Index is effectively the base currency index level multiplied by the spot rate between the base index currency and the currency of the Currency Index:

\[ \text{Currency Index} = (\text{Local Total Index}) \times (\text{Currency Spot Rate}) \]
Currency Hedged Indexes are calculated by hedging the index value balance at the beginning of the period using rolling one-month forward contracts. Adjustment to the amount hedged is made monthly.

The amount of foreign exchange forward contracts sold is determined as of the Hedging Reference Date, which currently is the business day prior to the end of the given month. On that reference date, the rebalance forward amounts and currency weights are set. An adjustment factor to account for the next day’s (i.e. last business day of the month) performance of the currency hedged index is used in the calculation of the hedge return.

The cumulative average of the daily weighted forward return will be used to calculate the hedge return on a daily basis.

The Currency Hedged Index is equivalent to the aforementioned Hedged Index level, and the calculation below further explains the incorporation of the adjustment factor in the Hedged index level.

*Returns, adjustments, and index levels are computed as follows:*

\[
\text{Currency Return} = \left( \frac{\text{Ending Spot Rate}}{\text{Beginning Spot Rate}} \right) - 1
\]

\[
\text{Unhedged Return} = (1 + \text{Local Total Return}) \times (1 + \text{Currency Return}) - 1
\]

\[
\text{Currency Return on Unhedged Local Total Return} = (\text{Currency Return}) \times (1 + \text{Local Total Return})
\]

\[
\text{Forward Return} = \left( \frac{\text{Beginning One - Month Forward Rate}}{\text{Beginning Spot Rate}} \right) - 1
\]

\[
\text{Hedge Return} = \text{Hedge Ratio} \times (\text{Forward Return} - \text{Currency Return})
\]

\[
\text{Hedged Index Return} = \text{Local Total Return} + \text{Currency Return on Unhedged Local Total Return} + \text{Hedge Return}
\]

The Currency Hedged Index is equivalent to the Hedged Index level, and the calculation below further explains the incorporation of the adjustment factor in the Hedged index level.

\[
\text{Adjustment Factor} = \left( \frac{\text{Hedged Index as of Reference Date}}{\text{Hedged Index as of Rebalance Date}} \right)
\]
**Currency Hedged Index Level** = Hedged Index as of Rebalance Date * 

\[
\left( \frac{\text{Currency Index}}{\text{Currency Index as of Rebalance Date}} \right) + (\text{Hedged Index Return} \times \text{Adjustment Factor})
\]

**Hedged Index Level** = Beginning Hedged Index Level * (1 + Hedged Index Return)

**Corporate Actions**

**General**
The Index may be adjusted in order to maintain the continuity of the Index level and the composition. Adjustments take place in reaction to events that occur with constituents in order to mitigate or eliminate the effect of that event on the Index’s performance.

**Removal of constituents**
Any stock deleted from the Index as a result of a corporate action such as a merger, acquisition, spin-off, delisting or bankruptcy is generally not replaced by any new stock, unless the total amount of redistributable weight removed on a given day from the Index due to such actions totals 50 basis points or more and the action is in line with the Enhanced Redistribution process described above. In other cases, the Enhanced Redistribution methodology may be used (see above). Otherwise, the total number of stocks in the Index is reduced by one when a company is deleted. In certain circumstances, another company may be added into the Index as a result of the pending removal of a current constituent. This action typically would be taken only as a result of a certain type of corporate action, such as an acquisition where part of the merger proceeds is paid in the stock of another company.

In the event of a delisting due to bankruptcy or cancellation of listing (below), the delisted security usually will be deleted at either the last traded price or a zero price. If a company is removed from the Index, the divisor will be adjusted to maintain the Index level.

**Mergers and Acquisitions**
*Merger or acquisition between members of the Index:* In the event a merger or acquisition occurs between members of the Index, the acquired company is deleted and its market capitalization moves to the acquiring company’s stock, according to the merger terms and depending on the portion of proceeds paid in the stock of the acquirer. In the case where the terms of the acquisition are 100% cash, the acquired company is removed from the Index, with no other impact to the Index, unless the weight of the acquired company exceeds the threshold for the Enhanced Redistribution policy, in which case that method of distribution is used. In the case where terms are partial cash, partial stock, the value of each method is handled separately, as appropriate for the terms of the deal and the distribution of the acquired company.
Merger or acquisition between a member and a non-member: A non-member is defined as a company that is not a current constituent of the Index. A merger or acquisition between one member of the Index and one non-member can take two forms:

(1) The acquiring company is a member of the Index and the acquired company is not. The acquiring company’s shares will be adjusted at the next rebalance.

(2) The acquiring company is not a member, but the acquired company is a member. The acquired company is removed from the Index and the acquiring company may be considered for inclusion at the next rebalance. As outlined above in Section 2, in certain situations, the acquiring company may be added to the Index, should it meet general universe requirements. These actions would be announced at least two trading days ahead of the effective date where feasible and otherwise as soon as possible, as determined by the Index Committee and the Calculation Agent.

Suspensions and company distress
Upon a company filing for bankruptcy, an announcement will be made to remove the security from the Index effective for the next trading day where feasible and otherwise as soon as possible, as determined by the Index Committee and the Calculation Agent. If the stock is trading on an over-the-counter (OTC) market, the last trade or price on that market is utilized as the deletion price on that day.

If the stock does not trade between the bankruptcy announcement and the next rebalance effective date, the stock may be deleted from the Index in that rebalance with a presumed market value of $0.00.

Price sources
In the event that the trading in shares is suspended or halted, the last price reported by the security’s primary exchange during regular daytime trading will be used to calculate the Index. Depending on the particular situation, the security may be valued at a price of $0 for purposes of Index calculation and/or reflecting a corporate action in the Index. This would be applicable for certain extreme cases such as a company bankruptcy or severe distress.

Split-up/spin off
The closing price of the Index constituent is adjusted by the value of the spin-off. By default spun-off companies which trade on eligible exchanges will be added to the Index at the time of the event. The Index Committee reserves the right to be able not to add spun-off companies into the Index. As in any other addition, these actions would be announced at least two trading days ahead of effectiveness where feasible and otherwise as soon as possible as determined by the Index Committee and the Calculation Agent.

Dividends
Distinction ordinary and special dividend
The price return Index will be adjusted for dividends that are special in nature, typically through a price adjustment and corresponding divisor change. The spot price of the underlying security usually will be adjusted after market close of the day prior to the ex-date.
To decide whether a dividend should be considered a special dividend, the index calculation agent will use the following criteria:

a) The declaration by a company of a dividend additional to those dividends declared as part of the company’s normal results and dividend reporting cycle; merely an adjustment to the timing of the declaration of a company’s expected dividend would not be considered as a special dividend circumstance; or

b) The identification of an element of a dividend paid in line with a company’s normal results and dividend reporting cycle as an element that is additional to the company’s normal payment.

For the purpose of clarification, the index calculation agent will not make adjustment for the following situations, specifically in the Price Return index:

1. Payment of ordinary dividends, irrespective of how they are financed;
2. Issue of redeemable shares or any other entitlement in lieu of an ordinary dividend; or
3. Unexpected increase or decrease, resumption or cessation, or change in frequency to an ordinary dividend.

**Rights issues and other rights**

In the event of a rights issue, the price is adjusted for the value of the right before the open on the ex-date, and the shares are increased according to the terms of the offering. The adjustment assumes that the rights offering is fully subscribed. The amount of the price adjustment is determined from the terms of the rights issue, including the subscription price, and the price of the underlying security. The index calculation agent shall only enact adjustments if the rights represent a positive value, or are in-the-money, or alternatively, represent or can be converted into a tangible cash value.

**Bonus issues, stock splits and reverse stock splits**

For bonus issues, stock splits and reverse stock splits, the number of shares included in the Index will be adjusted in accordance with the ratio given in the corporate action. Since the event won’t change the value of the company included in the Index, the divisor will not be changed because of this.

**Changes in number of shares**

Changes in the number of shares outstanding, typically due to share repurchases, tenders, or offerings, will not be reflected in the Index until the next review unless the change is related to a specific corporate action, such as a merger, acquisition, or spin-off.

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