

S&P Global BMI, S&P/IFCI *Methodology*

October 2019

Table of Contents

Introduction	3
Index Objective and Highlights	3
Related Indices	3
Index Family	3
Representation	4
Supporting Documents	4
Eligibility Criteria	5
Country Inclusion Criteria	5
Country Classification	5
Stock Level Inclusion Criteria	5
Components of the S&P Global Equity Indices	7
Subdividing into Size Benchmarks	7
The Cap Range Index Series	8
Style Benchmarks	9
Style Scores	10
Establishing Style Baskets	10
Style Index Construction	11
S&P Global Equity Indices Currency Hedged Index Series	11
Index Construction	12
Annual Reconstitution	12
Index Maintenance	14
Index Calculations	14
Currency of Calculation and Additional Index Return Series	14
Corporate Actions	15
Additions and Deletions	15
Other Adjustments	15
Index Divisors	15
Unforeseen Events	16
Base Dates	17
Index Data	19
Calculation Return Types	19

Index Governance	20
Index Committee	20
Index Policy	21
Announcements	21
Holiday Schedule	21
Rebalancing	21
Unexpected Exchange Closures	21
Recalculation Policy	21
Real-Time Calculation	21
Contact Information	21
Index Dissemination	22
Tickers	22
Index Data	22
Web site	22
Appendix A – Countries by Index	23
Appendix B – Related Indices	24
S&P BMI Russia (Capped)	24
S&P Italy LargeMidCap Capped	24
S&P Global LargeMidCap Commodity and Resources Index	24
S&P Pan Asia ex-JANZ Health Care 50	25
S&P Global BMI Gold Capped 20/45	25
S&P China A BMI	26
S&P China Ex-China A BMI	26
S&P China BMI	26
S&P Emerging LargeMidCap (Domestic China A Full Inclusion)	26
S&P Emerging LargeMidCap (China A Full Inclusion)	26
S&P EPAC ex-Korea LargeMidCap Equal Weight Index	26
S&P France LargeMidCap Equal Weight Index	27
S&P European Union BMI Index	27
S&P U.S. BMI Indices with S&P Global Market Intelligence Classifications	28
Appendix C – Methodology Changes	30
Disclaimer	33

Introduction

Index Objective and Highlights

The S&P Global BMI is a rules-based index that measures global stock market performance. The index covers all publicly listed equities with float-adjusted market values of US\$ 100 million or more and that meet minimum liquidity criteria measured by median daily value traded figures. The S&P Global BMI is made up of the S&P Developed BMI and the S&P Emerging BMI indices.

The S&P Global Equity Index series is represented by S&P Dow Jones Indices' three leading indices: (1) the S&P Global Broad Market Index (BMI), (2) the S&P/IFCI, and (3) the S&P Frontier BMI.

The S&P/IFCI, S&P Dow Jones Indices' leading investable, emerging market index, is a liquid and investable subset of the S&P Emerging BMI, with the addition of South Korea. While the S&P Global BMI and S&P Frontier BMI indices are designed as comprehensive benchmark indices, the S&P/IFCI indices are designed to be sufficiently investable to support index tracking portfolios. The S&P/IFCI has a long and established history going back to 1988.

All indices are float-adjusted market capitalization weighted indices and include security classifications for country, size, style, and industry.

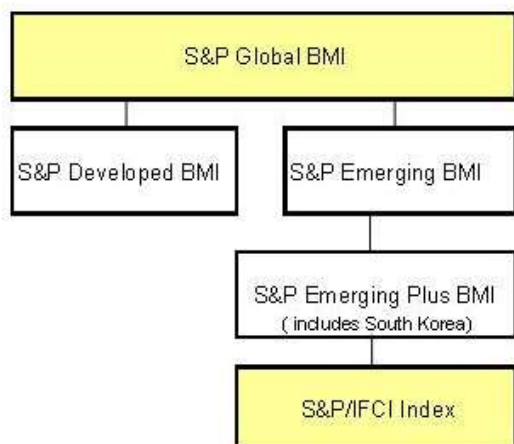
Related Indices

The S&P Frontier BMI. The index measures the performance of relatively small and illiquid markets, even by emerging market standards. The index includes 36 countries, with each country sub-index composed of the most liquid and investable publicly-listed eligible equities, with the objective of meeting 80% total market capitalization. Due to their small size, limited investability, and limited available information, frontier indices are calculated separately and are not included in the calculation of the S&P Global BMI Indices.

Please refer to the S&P Frontier Indices Methodology document for further information on the S&P Frontier BMI.

Index Family

The table below shows the main indices covered under this methodology.



In addition, stocks are classified within each country or region, generating sub-indices by size, industry and style.

Representation

The S&P Global BMI and S&P/IFCI are designed to include the most liquid and investable stocks in developed and emerging markets. Through security classifications all major regional, national, style, sector and size-based equity markets are fully represented.

Supporting Documents

This methodology is meant to be read in conjunction with supporting documents providing greater detail with respect to the policies, procedures and calculations described herein. References throughout the methodology direct the reader to the relevant supporting document for further information on a specific topic. The list of the main supplemental documents for this methodology and the hyperlinks to those documents is as follows:

Supporting Document	URL
S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology	Equity Indices Policies & Practices
S&P Dow Jones Indices' Index Mathematics Methodology	Index Mathematics Methodology
S&P Dow Jones Indices' Float Adjustment Methodology	Float Adjustment Methodology
S&P Dow Jones Indices' Global Industry Classification Standard (GICS) Methodology	GICS Methodology
S&P Dow Jones Indices' Country Classification Methodology	Country Classification Methodology

This methodology was created by S&P Dow Jones Indices to achieve the aforementioned objective of measuring the underlying interest of each index governed by this methodology document. Any changes to or deviations from this methodology are made in the sole judgment and discretion of S&P Dow Jones Indices so that the index continues to achieve its objective.

Eligibility Criteria

Country Inclusion Criteria

Securities issued by companies domiciled in countries classified as developed or emerging markets are eligible for inclusion in the S&P Global BMI. The S&P/IFCI indices include emerging market stocks and companies domiciled in South Korea. S&P Dow Jones Indices conducts a rigorous country classification process to evaluate the status of global markets.

Country Classification

S&P Dow Jones Indices uses a combination of quantitative criteria, along with the opinions and experiences of global investors, as a guide to classifying countries as developed, emerging or frontier markets.

For more information, please refer to the S&P Dow Jones Indices Country Classification Methodology.

Stock Level Inclusion Criteria

Companies domiciled in developed and emerging markets are eligible for inclusion if they meet the following requirements:

Market Capitalization. The S&P Global BMI covers all publicly listed equities with float-adjusted market capitalizations of at least US\$ 100 million for index addition. At the annual reconstitution, an index constituent is removed if its float-adjusted market capitalization falls below US\$ 75 million.

The S&P/IFCI requires that, at the annual reconstitution, a stock must have a minimum float-adjusted market capitalization of US\$ 200 million to be added to the index. During the annual reconstitution, index constituents that fall below US\$ 200 million, but have a float-adjusted market capitalization of at least US\$ 150 million, remain in the index.

Float-Adjustment. A stock's weight in an index is determined by its float-adjusted market capitalization.

Please refer to S&P Dow Jones Indices' Float Adjustment Methodology for a detailed description of float adjustment, foreign investment limits and S&P Dow Jones Indices' Investable Weight Factor (IWF).

Liquidity. At the annual reconstitution, the liquidity of each stock is evaluated using two median daily value traded metrics.

1. Stocks must have a minimum USD 12 month median value traded ratio (MVTR) to be eligible. The ratio is calculated by taking the USD median daily value traded (MDVT) amount for each of the 12 months preceding the rebalancing reference date, multiplying the monthly amount by the number of days that the stock traded during that month, and then dividing by its end-of-month float-adjusted market capitalization, also calculated in USD. The sum of the 12 monthly values is the MVTR for that stock. If a stock has traded for less than 12 months, the average of the available monthly values is taken and multiplied by 12.
2. Stocks must have a minimum US\$ MDVT over the six months prior to the rebalancing reference date to be eligible. If a stock has traded for less than six months, the MDVT amount for as long as the stock has been trading is used. The requirements vary based on a stock's country classification, whether emerging or developed. These requirements are summarized in the following table:

Region	12-Month MVTR (%)	6-Month MDVT (US\$M)
Emerging	10	.1
Developed	20	.25

Domicile. For information on Domiciles, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices document.

Eligible Securities. All investable primary market share classes are included in the S&P Global BMI & S&P/IFCI indices.

Ineligible Securities. The following shares are not eligible for inclusion in the S&P Global Equity Index Series:

- Fixed-dividend shares
- Investment trusts
- Unit trusts
- Mutual fund shares
- Business Development Companies (BDCs)
- Closed-end funds
- Convertible bonds
- Equity warrants
- Limited Partnerships
- Preferred (preferred stock that provides a guaranteed fixed return is not eligible)

Multiple Share Classes. All publicly listed multiple share class lines are eligible for index inclusion, subject to meeting the eligibility criteria and foreign investors may hold shares in the class. A separate IWF is calculated for each included share class. In the S&P Global BMI, classes with no float have no weight in the index. It is, however, included for the purpose of determining a company's total capitalization and, consequently, its assignment to either the LargeCap, MidCap or SmallCap indices.

For more information regarding the treatment of multiple share classes, please refer to Approach A within the Multiple Share Classes section of the S&P Dow Jones Indices' Equity Indices Policies & Practices document.

Initial Public Offerings (IPOs). IPO additions to the index take place quarterly. The criteria for inclusion of an IPO are the same as that used at the annual reconstitution of the S&P Global BMI. In addition, IPOs must have a trading history of at least three months as of the reference date. The reference date for IPO inclusions will be five weeks prior to the effective rebalancing date, and additions are effective at the open of Monday following the third Friday of March, June, September and December. Market cap and liquidity of IPOs are evaluated as of the reference date. Since an IPO will have traded less than a full year, the trading value data that is available is annualized to determine index eligibility.

Certain large IPOs may be eligible for fast track entry, subject to the following conditions:

- Only newly public IPOs and direct placement listings will be considered eligible for fast track entry. Formerly bankrupt companies that switch from Over-the-Counter Exchange ("OTC") or a non-covered exchange to a S&P Dow Jones Indices covered exchange are ineligible.
- Fast track IPO additions must meet a minimum float-adjusted market capitalization ("FMC") threshold of US\$ 2 billion, calculated using the shares offered (excluding over-allotment options) and the closing price on the first day of trading on an eligible exchange.¹ The threshold level is reviewed from time to time and updated as needed to assure consistency with market conditions.
- In addition, the IPO will need to meet all other applicable index eligibility rules except for the liquidity requirement. If all necessary public information is available, S&P Dow Jones Indices verifies that the fast track conditions have been met. Once S&P Dow Jones Indices announces that the IPO is eligible for fast track addition, it is added to the index with five business days lead time. At the discretion of the Index Committee, fast track IPO additions eligible to be added during a quarterly rebalancing freeze period may instead be added on the rebalancing effective date.

¹ WM/Reuters foreign exchange rates taken daily at 4:00 PM London Time are used in the calculation of the IPO's FMC for IPOs denominated in currencies other than U.S. dollars. Please refer to *Currency of Calculation and Additional Index Return Series* for more information about these rates.

Components of the S&P Global Equity Indices

The main components of the S&P Global Equity Indices are the S&P Global BMI, the S&P/IFCI and the S&P Frontier BMI. The S&P Global BMI indices are created on a country-by-country basis and all index-eligible countries are aggregated into their respective comprehensive index. The S&P Global BMI includes all developed and emerging markets; the S&P/IFCI is a purely emerging market index.

Company classification and sub-index definitions are based on a number of measures:

- Country classifications – developed and emerging
- Regions where countries are grouped in broader geographic regions
- Size based on large cap, mid cap and small cap
- Size based on capitalization ranges
- GICS sectors, industry groups, industries and sub-industries
- Style based on growth and value

All indices in the S&P Global Equity Indices follow a common naming convention:

S&P + [Geography] + [size descriptor] + [Style] + [GICS]

For example, large cap financial stocks in Canada would be “S&P Canada LargeCap Financials Index” and mid cap growth stocks across all developed markets would be “S&P Developed MidCap Growth Index.” The company type descriptor can be dropped if it is not needed, as in small cap stocks in Asia, “S&P Asian SmallCap Index.” Indices that cover all market cap ranges are designated as Broad Market Indices and use “BMI” as the size descriptor.

Subdividing into Size Benchmarks

For each country, S&P Dow Jones Indices calculates size benchmark indices. The indices consist of three basic components: LargeCap, MidCap, and SmallCap. The most widely used size benchmark indices are the S&P LargeMidCap and the S&P SmallCap indices. MidSmallCap indices have also been developed to provide additional variations of the size splits.

The splits are based on the cumulative market capitalization of each country. The companies are ranked by total market capitalization, which is considered to be a better reflection of the economic significance of the company in the economy; then float market cap is accumulated to 70% for large cap, the next 15% for mid cap and the final 15% for small cap indices. Where a company has multiple share classes, the share classes are combined to measure the company’s total market cap. The divisions are within countries; there are no restrictions on the break-points or the number of companies in each category.

The combination of the LargeCap and MidCap companies makes up the S&P LargeMidCap index, which represent 85% of the local market’s total available capital.

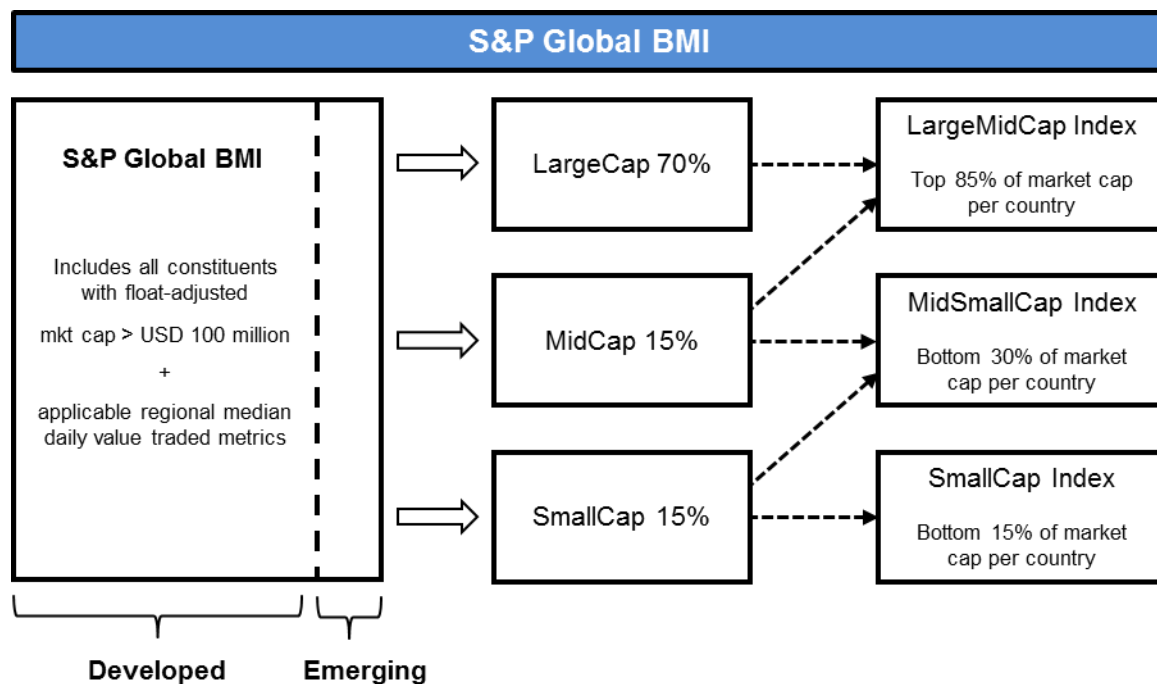
The remaining issues – that is the bottom 15% of the cumulative available capital from the same rank order – form the S&P SmallCap index.

The MidSmallCap indices result from the combination of the MidCap and SmallCap companies, representing the bottom 30% of the cumulative available capital.

The S&P/IFCI indices are also sub-divided into large, mid and small cap indices using the same 70/15/15% divisions used for the S&P Global BMI country indices. The S&P/IFCI Large, Mid, and SmallCap indices use the S&P Emerging BMI ranking to calculate the size splits.

The reference date for determining size classification is five weeks prior to the rebalancing effective date.

In order to minimize turnover, size buffer rules apply for current index constituents at the annual reconstitution. More details regarding these size buffers are found under *Index Construction*.



The Cap Range Index Series

Unlike the relative-size LargeCap, MidCap and SmallCap, the S&P Global BMI Cap Range Index series break down the world's stock markets according to absolute levels of total company market capitalization. Company assignments are made during the annual reconstitution and remain effective until the following index reconstitution. To reduce turnover, a security will remain within its existing cap range provided that, as of the reconstitution reference date, its total market capitalization remains within 3% of the threshold.

While Cap Range assignments remain unchanged until the following index reconstitution, major capital events can result in migrations. On a quarterly basis, companies may migrate to another range if a corporate activity such as a spin-off, merger, or similar event results in, for example, halving or doubling the total market capitalization of the affected company. However, price appreciation or depreciation does not give rise to a change in the Cap Range classification of a company.

Large/mid/small and cap range assignments are mutually exclusive and exhaustive.

The following table displays the list of Cap Range assignments for the S&P Global BMI Cap Range Index series. Other cap range indices are available on a custom basis.

Standard Cap Range Indices	
> US\$ 5B	US\$ 2B - 10B
< US\$ 3B	US\$ 1B - 5B
< US\$ 2B	US\$ 500M - 5B
< US\$ 1.5B	US\$ 500M - 2.5B
< US\$ 1.2B	
< US\$ 1B	

The reference date for determining a cap range is five weeks prior to the rebalancing effective date.

Style Benchmarks

The S&P Global BMI Style Indices uses three growth variables and four value variables to classify each stock in the universe as 100% growth, 100% value, or a mixture of both growth and value. This approach permits a stock to be classified, for example, as 60% growth and 40% value, for better securities classification and less index turnover by recognizing that companies may gradually move from one style to another over time.

Large cap and mid cap combined, and small cap alone, serve as the starting universes for growth and value indices in each country. Each country's BMI growth or value index is constructed by combining the stocks from the corresponding large, mid and small growth or value indices. Regional and global BMI and large, mid or small growth or value indices are constructed by combining the growth or value indices of the appropriate countries.

Rebalancing of the S&P Global BMI Style Indices takes place concurrently with the annual index reconstitution.

Growth Variables

- Five-year historical earnings per share growth rate calculated from a linear regression trend line.
- Five-year historical sales per share growth rate calculated from a linear regression trend line.
- Five-year average annual internal growth rate (IGR) defined as $(ROE) * (1 - \text{Payout Ratio})$. The five-year average IGR is the arithmetic average of the five most recent fiscal year values. Return on equity (ROE) is the ratio of net income less preferred dividends to shareholders' equity from the prior year. The payout ratio is the ratio of common stock dividends to the difference between net income and preferred dividends.

Data is based on the latest reported figures for each historical fiscal year.

Value Variables

- Book value per share to price.
- Sales per share to price.
- Cash flow per share to price.
- Dividend yield.

Data is based on the latest reported fiscal year, except for dividend yield, which is based on the indicated annual dividends per share by each company.

Style Scores

Raw values of the above variables are used to calculate a growth and value score for each stock. These raw values are then standardized by dividing the difference between each stock's raw score and the mean of the entire set by the standard deviation of the entire set. For each stock, the standardization of growth and value data is based on the assigned region of the stock. Some countries have a large enough sample size such that their scores are only measured relative to their own country, while other countries are grouped together to ensure a sufficient stock pool.

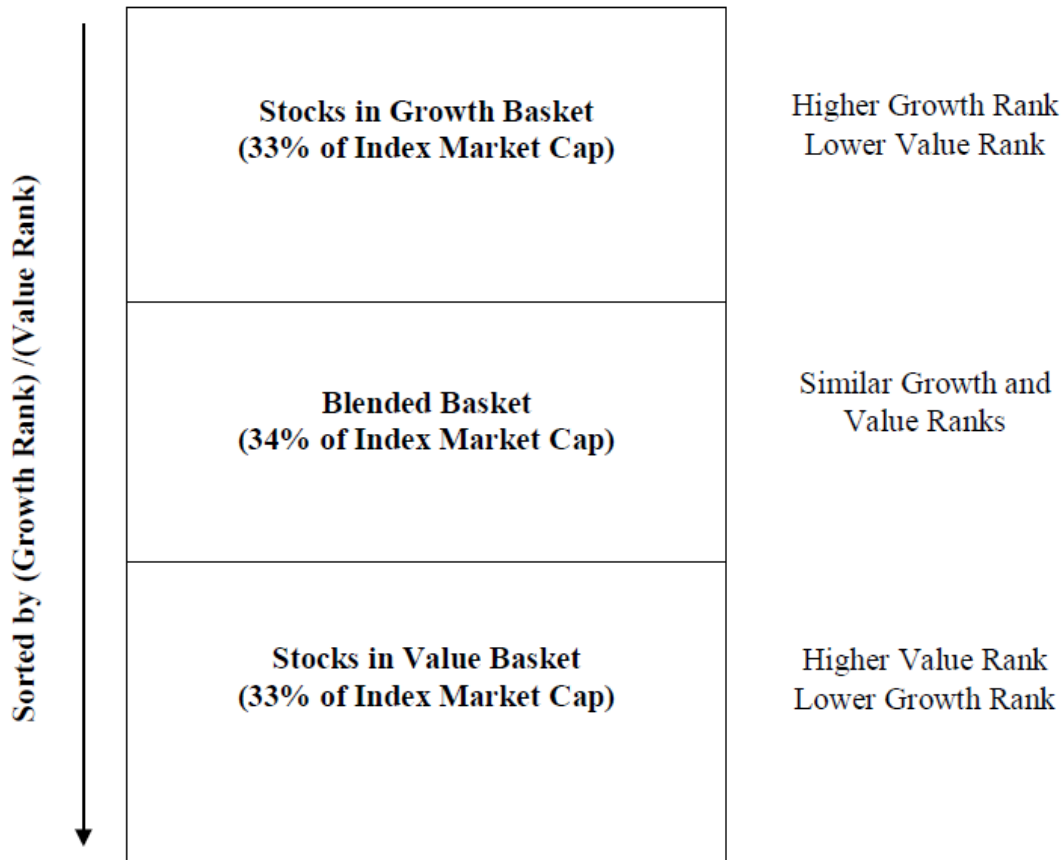
The following table displays the country-region associations.

Country	Region	Country	Region	Country	Region
Australia	Australia	India	India	South Korea	South Korea
New Zealand	Australia	Pakistan	India	Portugal	Spain
Brazil	Brazil	Indonesia	Indonesia	Spain	Spain
Chile	Brazil	Philippines	Indonesia	Denmark	Sweden
Colombia	Brazil	Taiwan	Indonesia	Finland	Sweden
Mexico	Brazil	Israel	Israel	Norway	Sweden
Peru	Brazil	Italy	Italy	Sweden	Sweden
Canada	Canada	Japan	Japan	Switzerland	Switzerland
China	China	Malaysia	Malaysia	Thailand	Thailand
Belgium	France	Netherlands	Netherlands	Egypt	Turkey
France	France	Czech Republic	Russia	Qatar	Turkey
Luxembourg	France	Hungary	Russia	Saudi Arabia	Turkey
Austria	Germany	Poland	Russia	Turkey	Turkey
Germany	Germany	Russia	Russia	UAE	Turkey
Greece	Greece	Singapore	Singapore	Kuwait	Turkey
Hong Kong	Hong Kong	South Africa	South Africa	Ireland	United Kingdom
		United States	United States	United Kingdom	United Kingdom

Establishing Style Baskets

Construction of the S&P Global BMI Style Indices Series begins with the determination of style baskets as detailed below:

1. Each stock is assigned a growth score and a value score based on the process described above.
2. Stocks within each region are ranked based on growth and value scores. A stock with a high Growth Score will have a higher Growth Rank, while a stock with a low Value Score will have a lower Value Rank.
3. The index constituents are then sorted in ascending order of the Growth Rank/Value Rank ratio. The stocks at the top of the list have a higher Growth Rank (or high Growth Score) and a lower Value Rank (and Value Score) and, therefore, exhibit pure growth characteristics. The stocks at the top of the list, comprising 33% of the total market capitalization of the index, are designated as the Growth basket.
4. The stocks at the bottom of the list have a higher Value Rank (and Value Score) and a lower Growth Rank (and Growth Score) and, therefore, exhibit pure value characteristics. The stocks at the bottom of the list, comprising 33% of the total market capitalization of the index, are designated as the Value basket.
5. The stocks in the middle of the list have neither pure growth nor pure value characteristics. The distribution of the index universe into style baskets is illustrated on the following page.



Style Index Construction

One of the design goals is to construct a Style index series that divides the complete market capitalization of each parent index approximately equally into growth and value indices, while limiting the number of stocks that overlap across both. This series is exhaustive (i.e., covering all stocks in the parent index universe), and uses the conventional, cost-efficient market capitalization-weighting scheme.

The Style baskets described above are natural starting points for construction of the Style indices. 100% of the market capitalization of a stock in the Value basket is assigned to the Value index, and 100% of the market capitalization of a stock in the Growth basket is assigned to the Growth index.

The middle 34% of market capitalization consists of stocks that have similar growth and value ranks. Their market capitalization is distributed among the Style indices based on their distances from the midpoint of the Growth basket and the midpoint of the Value basket. The midpoint of each Style region is calculated as the average of Value Scores and Growth Scores of stocks in the Style basket.

For more detail on the computation of each stock's style weights, please refer to the S&P U.S. Style Indices Methodology at www.spdji.com.

S&P Global Equity Indices Currency Hedged Index Series

The S&P Global Equity Indices Currency Hedged Series provides stock market returns for investors who hedge investments against foreign exchange fluctuations.

Please refer to S&P Dow Jones Indices' Index Mathematics Methodology for more details on currency hedged indices.

Index Construction

Annual Reconstitution

Index reconstitutions are done annually for the S&P Global BMI and the S&P/IFCI on a country by country basis. Data is as of the close of the last trading date in July and the reconstitution is effective at the open of Monday following the third Friday in September.

Share Classes. In the S&P Global BMI, a company's share class must have at least US\$ 100 million in available float-adjusted market cap. Additionally, each stock must meet the liquidity requirements as previously defined in *Eligibility Criteria*.

The S&P/IFCI requires that a company's share class have at least US\$ 200 million in available float-adjusted market cap. Additionally, each stock must meet the liquidity requirements as previously defined in *Eligibility Criteria*, and have fewer than four no-trades in each of the two consecutive quarters prior to the reconstitution.

Buffer Rules for Stock Inclusion. The following market capitalization and liquidity buffer rules are applied to the S&P Global BMI and S&P/IFCI during the annual reconstitution.

- **Market Capitalization.** See below for the rules that apply to each index.
 - **S&P Global BMI.** Current constituents with a float-adjusted market cap of at least US\$ 75 million remain in the index.
 - **S&P/IFCI.** Current constituents with a float-adjusted market cap of at least US\$ 150 million remain in the index.
- **Liquidity.** Current constituents of the S&P Global BMI and S&P/IFCI are removed if either of the liquidity measurement metrics fall below the thresholds in the table below:

Region	12-Month MVTR (%)	6-Month MDVT (US\$M)
Emerging	7	.07
Developed	14	.175

Stocks that either fail to achieve or fail to maintain their index membership are eligible for inclusion at the next index reconstitution.

Stock Classifications and Float Adjustment. Classification of stocks by size, cap range, GICS classification and style are all reviewed as part of the annual reconstitution process.

Size Categorization Buffer Rules. A three-percentage point buffer is maintained between the three size ranges (Large, Mid, Small) to minimize turnover. If a stock moves in its ranking within the three percentage point range where a size-split occurs, then that stock does not change its classification. The evaluation is done during the annual reconstitution.

Float Adjustment. Investable Weight Factors (IWF), which define the available float for a stock, are reviewed as part of the annual reconstitution process.

Foreign Investment Restrictions. Shares counts used in index calculations are reduced to reflect any limits or restrictions on investments by foreign investors or entities. These restrictions may be imposed by local governments on specific industries or all public securities. Restrictions may also be imposed on foreign investors by individual companies, as part of their internal bylaws.

Public Shares Available to Foreign Investors. If an individual stock's foreign investment limit is very stringent and the stock is in high demand among global investors, then frequently the amount available to foreign investors is quickly reached.

For the Philippines, UAE, Qatar, and Saudi Arabia, S&P Dow Jones Indices reviews not only the theoretical foreign investment limits applicable to companies (as calculated through S&P Dow Jones Indices' Investable Weight Factor (IWF)), but also the practical available limit (as defined by the known shares actually available to foreign investors). S&P Dow Jones Indices also reviews the practical available limit for companies in certain industries with foreign investment limits in South Korea and Taiwan.

If the practical available limit for an existing constituent falls below 5% then it will be removed from the index at the next quarterly rebalancing. A stock can be added only if the practical available limit is 10% or more. All stocks are reviewed for this at each rebalancing.

Please refer to S&P Dow Jones Indices' Float Adjustment Methodology for a detailed description of float adjustments, foreign investment limits, and S&P Dow Jones Indices' Investable Weight Factor (IWF).

Index Maintenance

Index Calculations

The indices are all calculated end-of-day, using the divisor methodology used in all S&P Dow Jones Indices' equity indices, and are calculated on all business days of the year (Monday through Friday). Index calculations include price-, total- and net- return series. Certain indices are also calculated in real time to support particular investment products.

Please refer to S&P Dow Jones Indices' Index Mathematics Methodology for more details on market-capitalization index calculations.

Each company's primary share listing is used to calculate index levels. A limited number of index constituents have ADRs, GDRs, or foreign ordinary shares that trade, and insufficiently liquid common stock in their "home" market. Pricing for these issues are based on the ADR, GDR, or foreign ordinary share in the currency of that listing market. In cases of multiple listings but no "home" listing, the issue with the majority of the value traded is used. Changes to the pricing sources are announced with as much notice as is reasonably possible.

Dividends are tabulated daily and included in the total return calculations of the indices based on their ex-dates. When local market practices for dividend announcements make ex-dates unavailable, dividend inclusion follows the local market practice. Dividends are reinvested on the ex-dividend date in order to calculate total returns, with alternative compounding periodicities available on a customized basis.

Returns-of-capital are treated as capital distribution and the index divisor is adjusted accordingly on the ex-date of the event. For spin-offs that include a cash distribution, the cash distribution is treated as a return of capital on the ex-date.

For information on the tax rates used in the calculation of net return indices, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices document.

Currency of Calculation and Additional Index Return Series

Indices are calculated in U.S. dollars, euros, British pounds, Japanese yen, Canadian dollars, Australian dollars, and relevant national currencies for the country indices.

WM/Reuters foreign exchange rates are taken daily at 04:00 PM London time, and used in the calculation of the indices. These mid-market fixings are calculated by The WM Company based on Reuters data and appear on Reuters pages WMRA.

In addition to the indices detailed in this methodology, additional return series versions of the indices may be available, including, but not limited to: currency, currency hedged, decrement, fair value, inverse, leveraged, and risk control versions. For a list of available indices, please refer to [S&P DJI's All Indices by Methodology Report](#).

For information on the calculation of different types of indices, please refer to S&P Dow Jones Indices' Index Mathematics Methodology.

Corporate Actions

For a detailed explanation of the treatment of Rights Offerings, Spin-Offs, Share and IWF Updates, Mergers & Acquisitions, Dividends, Stock Splits and Consolidation, Exchange Closures, Stock Suspensions, Currency, and Error Correction, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices document.

For actions resulting in no net change to the capitalization of the issue, the index divisor remains unchanged.

Additions and Deletions

The majority of additions and deletions occur as part of the annual reconstitution of the indices. Since these indices do not have a fixed number of constituents, additions and deletions are not linked to one-another.

Spin-Offs. Spin-offs from current index constituents are eligible for index inclusion and are included in the index on their ex-dates. Spin-offs are assigned the same size and style as the parent company at the time of the event. All spin-off sizes are evaluated at the next quarterly review.

For more on the treatment of spin-offs, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices document.

Other Deletions. Companies that fall below US\$ 25 million float-adjusted market capitalization are removed from the index. Evaluations are made quarterly using data from the reference date which is the last business day of the month prior to the effective rebalancing date. Deletions are effective at the open of Monday following the third Friday in March, June, September and December.

If a company's shares are no longer available or are no longer trading, the company is deleted from the index as soon as reasonably possible providing that five days' notice is given. In the event the information of delisting or bankruptcy becomes public after the fact, the stock may be removed with a one-day notice period.

Current China A-Share index constituents with a "Special Treatment" designation are removed with two to five business days' notice. Once a stock's "Special Treatment" designation is lifted, it will become eligible again for inclusion. A company may be removed from the index at the discretion of the Index Committee.

Other Adjustments

Large-Mid-Small Size Classification. If any company exceeds the 85% top-down, cumulative float, small cap threshold or the 70% top-down, mid-cap threshold in a country following a corporate event such as a merger or spin-off, the company migrates to the appropriate size classification at the next quarterly rebalancing ex-date.

Reclassification of a company's size does not cause a reclassification of other companies in the same country or market.

Cap Range Index Reassignment. Any company where the total market capitalization between price reference dates is doubled or halved as a result of a corporate action is reassigned to its correct Cap Range at the next quarterly rebalancing. The price reference date for cap range index reassignment is five weeks prior to the rebalancing effective date.

Index Divisors

Some corporate actions, such as stock splits and stock dividends, require simple changes in the common shares outstanding and the stock prices of the companies in the index. Other corporate actions, such as

share issuances, change the market value of an index and require a divisor adjustment to prevent the value of the index from changing.

Adjusting the divisor for a change in market value leaves the value of the index unaffected by the corporate action and assures that the index reflects the market rather than corporate actions. Divisor adjustments are made after the close of trading and after the calculation of the closing value of the index.

Corporate actions resulting in no net change to the capitalization of an issue have no effect on the index divisor. Index divisors are adjusted for special dividends, non-cash corporate distributions, and changes in shares outstanding including buy-backs and secondary issuance. Share changes are subject to the 5% rule. Other corporate actions that result in changes to the divisor include spin-offs and installment calls on partly paid issues.

Ordinary dividends do not require divisor adjustments.

Other distributions of non-equity instruments, such as warrants and convertible bonds that cannot, by definition, be included in the index, decrease the divisor based on their cash value at the ex-date. If a cash value can be determined for these instruments on the ex-date, they are treated as a return of capital.

The table below summarizes the index maintenance adjustments and indicates when a divisor adjustment is required.

Corporate Actions and the Effect on the Divisor

Event	Adjustment Factor	Divisor Adjustment Required?
Cash dividend	Applied only to total return indices	No
Special cash dividend	Dividend from non- operating income; price adjustment needed	Yes
Stock dividend and/or split	Shares are multiplied by and price is divided by the split factor.	No
Stock dividend from class A shares into existing class B shares, both of which are included in the index	Adjustment for price of A; adjustment for shares in B	Yes
Stock dividend of different class, same company and is not included in the index	Price adjustment	Yes
Reverse split	Adjustment for price and shares	No
Rights offering	Adjustment for price and shares	Yes
Rights offering for a new line	Adjustment for price	Yes
Spin off	Adjustment for price	Yes
New share issuance	Adjustment for shares	Yes
Reduction of capital	Share adjustment	Yes
New addition to index	Share adjustment	Yes
Deletion from index	Share adjustment	Yes
Merger (acquisition by index company for stock)	Share increase	Yes
Warrant conversion into shares	Share increase	Yes

Please refer to S&P Dow Jones Indices' Index Mathematics Methodology for more detail on the treatment of corporate actions in index calculation, and S&P Dow Jones Indices' Equity Indices Policies & Practices document for more information on S&P Dow Jones Indices' treatment of corporate actions in general.

Unforeseen Events

S&P Dow Jones Indices retains the sole authority and final discretion regarding all index activity. In all cases, the index treatments for corporate actions are communicated through the Corporate Events file (.SDE) and/or special announcements delivered to all clients.

Base Dates

S&P Global BMI (date format, dd/mm/yyyy)

DEVELOPED MARKETS	Base Date = 100	Date of Inclusion into Composite	Date of Exclusion
Australia	Dec-92	01/07/1989	-
Austria	Dec-92	01/07/1989	-
Belgium	Dec-92	01/07/1989	-
Canada	Dec-92	01/07/1989	-
Denmark	Dec-92	01/07/1989	-
Finland	Dec-92	01/07/1989	-
France	Dec-92	01/07/1989	-
Germany	Dec-92	01/07/1989	-
Hong Kong	Dec-92	01/07/1989	-
Ireland	Dec-92	01/07/1989	-
Israel ⁵	Dec-97	20/09/2010	-
Italy	Dec-92	01/07/1989	-
Japan	Dec-92	01/07/1989	-
Luxembourg	Sep-05	03/10/2005	-
Netherlands	Dec-92	01/07/1989	-
New Zealand	Dec-92	01/07/1989	-
Norway	Dec-92	01/07/1989	-
Portugal	Dec-97	01/07/1998	-
Singapore	Dec-92	01/07/1989	-
South Korea	Dec-97	02/07/2001	-
Spain	Dec-92	01/07/1989	-
Sweden	Dec-92	01/07/1989	-
Switzerland	Dec-92	01/07/1989	-
United Kingdom	Dec-92	01/07/1989	-
United States	Dec-92	01/07/1989	-
Czech Republic ⁸	Dec-97	02/07/2001	01/07/2004
Iceland ⁹	Jun-02	01/07/2002	01/12/2008
Hungary ¹⁰	Dec-97	01/07/2003	01/07/2004
Malaysia	Dec-92	01/07/1989	01/07/1998

EMERGING MARKETS	Base Date = 100	Date of Inclusion into Composite	Date of Exclusion
Brazil	Dec-97	01/01/1995	-
Chile	Dec-97	01/01/1995	-
China ²	Dec-97	01/01/1995	-
Colombia ³	Dec-97	19/09/2011	-
Czech Republic ⁸	Dec-97	01/07/2004	-
Greece ⁴	Dec-97	22/09/2014	-
Egypt	Dec-97	01/01/1995	-
Hungary ¹⁰	Dec-97	01/07/2004	-
India	Dec-97	01/01/1995	-
Indonesia	Dec-97	01/01/1995	-
Kuwait	Dec 06	09/23/2019	-
Malaysia	Dec-92	01/07/1998	-
Mexico	Dec-97	01/01/1995	-
Pakistan ⁶	-	18/09/2017	-
Peru	Dec-97	01/01/1995	-
Philippines	Dec-97	01/01/1995	-
Poland	Dec-97	01/01/1995	-
Qatar	-	22/09/2014	-
Russia	Dec-97	01/01/1995	-
Saudi Arabia ⁷	-	03/18/2019	-
South Africa	Dec-97	01/01/1995	-
Taiwan	Dec-97	01/01/1995	-
Thailand	Dec-97	01/01/1995	-
Turkey	Dec-97	01/01/1995	-
UAE	-	22/09/2014	-
Argentina	Dec-97	01/01/1995	21/09/2009
Czech Republic ⁸	Dec-97	01/01/1995	02/07/2001
Hungary ¹⁰	Dec-97	01/01/1995	01/07/2003
Israel ⁵	Dec-97	01/01/1995	20/09/2010
Jordan	Dec-97	01/01/1995	01/11/2008
Nigeria	Nov-01	03/12/2001	01/11/2008
Portugal	Dec-97	01/01/1995	01/07/1998
Slovenia ¹¹	Sep-02	01/10/2007	03/11/2008
South Korea	Dec-97	01/01/1995	02/07/2001
Venezuela	Dec-97	01/01/1995	12/04/2007
Morocco	Dec-97	01/01/1995	21/09/2015

² Prior to September 23, 2019, only overseas share listings of mainland Chinese companies such as H shares, red chips, China DRs, and U.S.-listed China stocks were eligible. On September 23, 2019, China A-Shares that trade through the Northbound Trading Segment of the Shanghai-Hong Kong or the Shenzhen-Hong Kong Stock Connect Program (excluding ChiNext stocks) became eligible using a specified float-adjusted market capitalization percentage of 25% in consideration of the foreign investment limit for Chinese companies.

³ Colombia was assigned emerging market status in January 1995 through January 2008. It was then reassigned to frontier market status until September 2011, when it was promoted from frontier market back to emerging market status.

⁴ Greece was initially assigned emerging market status until January 1999 when it was promoted to developed market status. In September 2014, the country was reassigned emerging market status, which is where it currently resides.

⁵ Israel was promoted from emerging market to developed market status in September 2010.

⁶ Pakistan was initially assigned emerging market status until January 2008 when it was changed to Frontier. In September 2017, the country was reassigned emerging market status, which is where it currently resides.

⁷ Saudi Arabia was initially a stand-alone market. In March 2019, it was promoted to emerging market status. Eligible stocks are included using a specified float-adjustment market capitalization percentage of 50% in March 2019 and 100% beginning in September 2019.

⁸ The Czech Republic was initially assigned emerging market status until July 2001 when it was promoted to developed market status. In July 2004, the country was reassigned emerging market status, which is where it currently resides.

⁹ Iceland was removed from the S&P Global BMI indices effective December 1, 2008 following the delisting of most local securities.

¹⁰ Hungary was initially assigned emerging market status until July 2003 when it was promoted to developed market status. In July 2004, the country was reassigned emerging market status, which is where it currently resides.

¹¹ Slovenia was initially assigned emerging market status until July 2003, when it was promoted to developed market status. In October 2007 it was reassigned emerging market status until November 2008, and was then assigned to Frontier market status where it now resides.

Base Dates (cont'd)

S&P/IFCI Index	Base Period	Date of Inclusion into Composite	Date of Exclusion
Brazil	Dec-88	Dec-88	-
Chile	Dec-88	Dec-88	-
China	Dec-92	Oct-95	-
Colombia ¹²	Feb-91	Sep-11	-
Czech Republic	Dec-93	Jan-96	-
Egypt	Feb-97	Nov-97	-
Greece ¹³	Sep-14	Sep-14	-
Hungary	Dec-92	Apr-94	-
India	Nov-92	Nov-92	-
Indonesia	Sep-90	Sep-90	-
Korea	Jan-92	Jan-92	-
Kuwait	Dec-06	Sep-19	-
Malaysia ¹⁴	Dec-88	Dec-88	-
Mexico	Dec-88	Dec-88	-
Morocco	Feb-97	Nov-97	Sep-15
Pakistan ¹⁵	Sep-17	Sep-17	-
Peru	Dec-92	Jan-94	-
Philippines	Dec-88	Dec-88	-
Poland	Dec-92	Apr-94	-
Qatar	Sep-14	Sep-14	-
Russia	Feb-97	Nov-97	-
Saudi Arabia ¹⁶	Mar-19	Mar-19	-
South Africa	Dec-92	Apr-95	-
Taiwan	Jan-91	Jan-91	-
Thailand	Dec-88	Dec-88	-
Turkey	Aug-89	Aug-89	-
Argentina	Dec-88	Dec-88	Sep-09
UAE	Sep-14	Sep-14	-
Israel ¹⁷	Dec-96	Nov-97	Sep-10
Jordan	Dec-88	Dec-88	Nov-01
Pakistan ¹⁵	Mar-91	Mar-91	Nov-01
Portugal	Dec-88	Dec-88	May-99
Slovak Republic	Feb-97	Nov-97	Nov-01
Sri Lanka	Dec-92	Jan-94	Nov-01
Venezuela	Jan-90	Jan-90	Nov-01
Zimbabwe	Jun-93	Apr-94	Nov-01

¹² Colombia was assigned emerging market status in February 1991 through November 2001. It was then reassigned to frontier market status until September 2011, when it was promoted from frontier market back to emerging market status.

¹³ Greece was initially assigned emerging market status and included in the S&P IFCI until May 2001 when it was promoted to developed market status. In September 2014, the country was reassigned emerging market status, which is where it currently resides.

¹⁴ Malaysia was excluded from the S&P/IFCI for a period from October 1998 through October 1999.

¹⁵ Pakistan was initially assigned emerging market status until November 2001 when it was changed to Frontier. In September 2017, the country was reassigned emerging market status, which is where it currently resides.

¹⁶ Saudi Arabia was initially a stand-alone market. In March 2019, it was promoted to emerging market status. Eligible stocks are included using a specified float-adjustment market capitalization percentage of 50% in March 2019 and 100% beginning in September 2019.

¹⁷ Israel was promoted from emerging market to developed market status in September 2010.

Index Data

Calculation Return Types

S&P Dow Jones Indices calculates multiple return types which vary based on the treatment of regular cash dividends. The classification of regular cash dividends is determined by S&P Dow Jones Indices.

- Price Return (PR) versions are calculated without adjustments for regular cash dividends.
- Gross Total Return (TR) versions reinvest regular cash dividends at the close on the ex-date without consideration for withholding taxes.
- Net Total Return (NTR) versions, if available, reinvest regular cash dividends at the close on the ex-date after the deduction of applicable withholding taxes.

In the event there are no regular cash dividends on the ex-date, the daily performance of all three indices will be identical.

For a complete list of indices available, please refer to the daily index levels file (“.SDL”).

For more information on the classification of regular versus special cash dividends as well as the tax rates used in the calculation of net return, please refer to S&P Dow Jones Indices’ Equity Indices Policies & Practices Methodology.

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

Index Governance

Index Committee

The indices are maintained by an Index Committee. The Index Committee meets regularly. All committee members are full-time professional members of S&P Dow Jones Indices' staff. At each meeting, the Index Committee may review pending corporate actions that may affect index constituents, statistics comparing the composition of the indices to the market, companies that are being considered as candidates for addition to an index, and any significant market events. In addition, the Index Committee may revise index policy covering rules for selecting companies, treatment of dividends, share counts or other matters.

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

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

In addition to the daily governance of indices and maintenance of index methodologies, at least once within any 12-month period, the Index Committee reviews the methodology to ensure the indices continue to achieve the stated objectives, and that the data and methodology remain effective. In certain instances, S&P Dow Jones Indices may publish a consultation inviting comments from external parties.

For information on Quality Assurance and Internal Reviews of Methodology, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Index Policy

Announcements

All additions, deletions, share and Investable Weight Factor (IWF) changes are normally announced two-to-five days ahead of the effective date. Quarterly changes are also announced two-to-five days before the effective date.

Pro-forma index constituent files are sent to clients two weeks before the annual reconstitution. The pro-forma files, though not final, provide clients ample time to view all the upcoming changes.

All index announcements are available via S&P Dow Jones Indices' Web site at www.spdji.com.

Holiday Schedule

The indices are calculated on all business days of the year. S&P Dow Jones Indices publishes a calendar of holidays annually during the fourth quarter.

Rebalancing

The Index Committee may change the date of a given rebalancing for reasons including market holidays occurring on or around the scheduled rebalancing date. Any such change will be announced with proper advance notice where possible.

Unexpected Exchange Closures

For information on Unexpected Exchange Closures, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Recalculation Policy

For information on the recalculation policy please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Real-Time Calculation

Real-time indices are not restated.

For information on Calculations and Pricing Disruptions, Expert Judgment and Data Hierarchy, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Contact Information

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

Index Dissemination

Tickers

The table below lists the Bloomberg tickers for the headline indices, and some of the main regional indices, covered by this document. All versions of the below indices that may exist are also covered by this document. Please refer to [S&P DJI's All Indices by Methodology Report](#) for a complete list of indices covered by this document.

Index	Price	Total Return
S&P Global BMI (USD)	SBBMGLU	STBMGLU
S&P/IFCI (USD)	IDRICOPD	IDRICOTD
S&P Developed BMI (USD)	SBBMWDU	STBMWDU
S&P Emerging BMI (USD)	SCRTEM	STBMEMU
S&P Developed BMI Ex-US (USD)	SCRTWU	STBMWUU
S&P EPAC BMI (USD)	SCRTEP	STBMEPU
S&P Europe BMI (USD)	SCRTEU	STBMEUU
S&P Asia Pacific BMI (USD)	SCRTAP	STBMAPU
S&P Asia Pacific Emerging BMI (USD)	SCRTAE	STBMAEU
S&P Latin America BMI (USD)	SCRTLA	STBMLAU

Index Data

Daily constituent and index level data are available via subscription.

For product information, please contact S&P Dow Jones Indices, www.spdji.com/contact-us.

Web site

For further information, please refer to S&P Dow Jones Indices' Web site at www.spdji.com.

Appendix A – Countries by Index

S&P HEADLINE INDICES

COUNTRY	S&P Global BMI	S&P Developed BMI	S&P Emerging BMI	S&P Emerging BMI Plus	S&P/IFCI
Australia	•	•			
Austria	•	•			
Belgium	•	•			
Brazil	•		•	•	•
Canada	•	•			
Chile	•		•	•	•
China	•		•	•	•
Colombia	•		•	•	•
Czech Republic	•		•	•	•
Denmark	•	•			
Egypt	•		•	•	•
Finland	•	•			
France	•	•			
Germany	•	•			
Greece	•		•	•	•
Hong Kong	•	•			
Hungary	•		•	•	•
India	•		•	•	•
Indonesia	•		•	•	•
Ireland	•	•			
Israel	•	•			
Italy	•	•			
Japan	•	•			
Korea	•	•		•	•
Kuwait	•		•	•	•
Luxembourg	•	•			
Malaysia	•		•	•	•
Mexico	•		•	•	•
Netherlands	•	•			
New Zealand	•	•			
Norway	•	•			
Pakistan	•		•	•	•
Peru	•		•	•	•
Philippines	•		•	•	•
Poland	•		•	•	•
Portugal	•	•			
Qatar	•		•	•	•
Russia	•		•	•	•
Saudi Arabia	•		•	•	•
Singapore	•	•			
South Africa	•		•	•	•
Spain	•	•			
Sweden	•	•			
Switzerland	•	•			
Taiwan	•		•	•	•
Thailand	•		•	•	•
Turkey	•		•	•	•
UAE	•		•	•	•
United Kingdom	•	•			
United States	•	•			
Total	50	25	25	26	26

Appendix B – Related Indices

S&P BMI Russia (Capped)

The S&P BMI Russia (Capped) Index is constructed using the S&P BMI Russia Index with additional capping rules applied. The capping occurs quarterly, in line with the S&P BMI Russia Index rebalancing. The index is capped using a 5/20/45 method, where no single stock can have a weight greater than 20%, and the cumulative sum of all stocks with a weight greater than 5% cannot breach 45%. The price reference date for capping is the Wednesday prior to the second Friday of each rebalancing month.

S&P Italy LargeMidCap Capped

The S&P Italy LargeMidCap Capped Index is composed of the large- and mid-cap segments of the S&P Italy BMI, and includes stocks representing the top 85% of float-adjusted market capitalization within the S&P Italy BMI. The index is capped quarterly, in line with the S&P BMI rebalancing. The weight of an individual stock in the index is capped at 9%, and the cumulative sum of all the stocks with weights greater than 5% cannot breach 40%. The price reference date for capping is the Wednesday prior to the second Friday of each rebalancing month.

S&P Global LargeMidCap Commodity and Resources Index

The S&P Global LargeMidCap Commodity and Resources Index measures the performance of large- and mid-cap constituents from the S&P Global BMI that fall into three different natural resources buckets: Energy, Materials, and Agriculture. The constituents included in each bucket of the index are classified by Global Industry Classification Standard (GICS) sub-industries. Below are the specific sub-industries for each bucket:

- **Energy Bucket:** Integrated Oil & Gas, Oil & Gas Exploration & Production, Coal & Consumable Fuels.
- **Materials Bucket:** Aluminum, Diversified Metals & Mining, Gold, Silver, Precious Metals & Minerals, Copper.
- **Agriculture Bucket:** Agricultural Products, Fertilizers & Agricultural Chemicals, Forest Products.

Each bucket is capped at 33.33%, effective after the close of the third Friday of each March, June, September, and December. The price reference date for capping is the Wednesday prior to the second Friday of each rebalancing month.

In general, constituents are only added or deleted at the annual reconstitution. However, constituents removed from the underlying index due to a merger or GICS sector change are also removed from the index simultaneously. Similarly, constituents in the S&P Global BMI that change to an eligible GICS sector are added to the index simultaneously. IPOs that are added to the S&P Global BMI at a quarterly rebalancing and that have an eligible GICS sector are also added to the index simultaneously. With the exception of spin-offs classified as part of an eligible GICS sector, spin-off companies are added to the index at a zero price on the ex-date and are dropped from the index after the first day of regular way trading, provided the drop event has been announced at least two days prior to the drop date. Spin-off companies classified as part of an eligible GICS sector are added to the index using the same AWF as the parent company.

S&P Pan Asia ex-JANZ Health Care 50

The S&P Pan Asia ex-JANZ Health Care 50 measures the performance of the largest companies from the GICS health care sector from developed and emerging Asia-Pacific countries excluding Japan, Australia and New Zealand.

The index consists of the largest 50 companies by float-adjusted market capitalization from the S&P Pan Asia BMI Health Care Index, excluding companies domiciled in Japan, Australia and New Zealand. The index is weighted by modified market capitalization with companies in the index subject to the following weight limits:

- A single company's weight cannot exceed 10%.
- The sum of all companies with weights greater than 5% cannot exceed 40%.

The index is reconstituted annually, effective after the close of the third Friday in September, using a reference date of the last business day of August. The reference date for prices used for stock weight capping is the Wednesday prior to the second Friday of September. In order to reduce turnover, a buffer rule is applied to the constituent selection process. The constituent selection process is as follows:

1. All companies ranked in the top 40 by float-adjusted market capitalization (whether a current constituent or not) are automatically selected for index inclusion.
2. Any current constituent companies remaining within the top 60 are then re-selected for index inclusion, in order by rank, until the 50 company target count has been reached.
3. If after Step 2 the target company count still has not been reached, the highest ranking non-constituents are selected until 50 companies are included.

In addition to the annual reconstitution, the index is reweighted effective after the close of the third Friday in March. The reference date for prices used in the reweighting is the Wednesday prior to the second Friday in March.

In general, constituents are only added or deleted at the annual reconstitution. Constituents removed from the underlying index due to a merger or GICS sector change are also removed from the index simultaneously. Spin-off companies are added to the index at a zero price on the ex-date and are dropped from the index after the first day of regular way trading, provided the drop event has been announced at least two days prior to the drop date.

The index is calculated in Hong Kong dollars and history is available from September 17, 2010.

S&P Global BMI Gold Capped 20/45

The S&P Global BMI Gold Capped 20/45 measures the constituents of the S&P Global BMI that are part of the GICS Gold sub-industry (15104030). The index is capped quarterly, in line with the S&P BMI rebalancing. The weight of an individual stock in the index is capped at 20%, and the cumulative sum of all the stocks with weights greater than 4.5% cannot breach 45%. The price reference date for capping is the Wednesday prior to the second Friday of each rebalancing month.

In general, constituents are only added or deleted at the annual reconstitution. However, constituents removed from the underlying index due to a merger or GICS sub-industry change are also removed from the index simultaneously. Similarly, constituents in the S&P Global BMI that change to an eligible GICS sub-industry are added to the index simultaneously. IPOs that are added to the S&P Global BMI at a quarterly rebalancing and that have an eligible GICS sub-industry are also added to the index simultaneously. With the exception of spin-offs classified as part of the GICS Gold sub-industry, spin-off companies are added to the index at a zero price on the ex-date and are dropped from the index after the first day of regular way trading, provided the drop event has been announced at least two days prior to

the drop date. Spin-off companies classified as part of the GICS Gold sub-industry are added to the index using the same AWF as the parent company.

For more information on the capping methodology, please refer to the Capped Market Capitalization section of S&P Dow Jones Indices' Index Mathematics Methodology.

S&P China A BMI

The index measures the performance of China A-Shares (excluding stocks listed on the ChiNext board of the Shenzhen Stock Exchange and the STAR Market board of the Shanghai Stock Exchange) meeting the inclusion criteria of the S&P Global BMI that are available to foreign investors through the Northbound Trading Segments of the Shanghai-Hong Kong Stock Connect and Shenzhen-Hong Kong Stock Connect Programs. China A-Shares designated with an "ST" or "*ST" label are ineligible for inclusion. The IWF for stocks in the index is reduced to 25% of the float rate, after applying the foreign ownership limit of 30%.

S&P China Ex-China A BMI

The index measures the performance of the investable universe of Chinese stocks available to international investors (B, H, Red Chips, P Chips and Chinese securities listed in the U.S., Singapore or any other global exchange venue).

S&P China BMI

The index is a combination of the S&P China Ex-China A BMI and S&P China A BMI, and represents the integrated investment universe of Chinese companies (A, B, H, Red Chips, P Chips and Chinese securities listed in the U.S., Singapore or any other global exchange venue). The IWF for A-share stocks is reduced to 25% of the float rate, after applying the foreign ownership limit of 30%.

S&P Emerging LargeMidCap (Domestic China A Full Inclusion)

The index includes large- and mid-cap stocks (excluding China A-Shares) from the S&P Emerging BMI. In addition, the index includes all China A-Shares from the S&P China A BMI Domestic Index. Large-, mid- and small-cap size classifications for all China domiciled companies are calculated as a single country rather than utilizing separate size classifications for A-Shares and offshore listed companies.

S&P Emerging LargeMidCap (China A Full Inclusion)

The S&P Emerging LargeMidCap (China A Full Inclusion) includes large- and mid-cap stocks (excluding China A-Shares) from the S&P Emerging BMI. In addition, the index includes all China A-shares from the S&P China A BMI Domestic Index. The IWFs for Chinese companies incorporate a degree of freedom (DOF) that applies to foreign investors. Large-, mid- and small-cap size classifications for all China domiciled companies are calculated as a single country rather than utilizing separate size classifications for A-shares and offshore listed companies.

Please refer to S&P Dow Jones Indices' Float Adjustment Methodology for more information on DOFs.

S&P EPAC ex-Korea LargeMidCap Equal Weight Index

The S&P EPAC ex-Korea LargeMidCap Equal Weight Index measures the equal weighted performance of large- and mid-cap companies from the S&P EPAC ex-Korea BMI (the "underlying index"). Company changes are incorporated in the index as and when they are made in the underlying index. The index is re-weighted quarterly, in line with the S&P Global BMI rebalancing. The reference date for prices used in the weighting process is the close of the Wednesday prior to the second Friday of the rebalancing month.

S&P France LargeMidCap Equal Weight Index

The S&P France LargeMidCap Equal Weight Index measures the performance of large- and mid-cap companies from the S&P France BMI (the “underlying index”) using an equally-weighted scheme. Company changes are incorporated in the index as and when they are made in the underlying index. The index is re-weighted quarterly, in line with the S&P Global BMI rebalancing. The reference date for prices used in the weighting process is the close of the Wednesday prior to the second Friday of the rebalancing month.

For more information on the index calculation methodology, please refer to the Equal Weighted Indices section of S&P Dow Jones Indices’ Index Mathematics Methodology.

S&P European Union BMI Index

The S&P European Union BMI Index measures the performance of the constituents from the countries of the S&P Global BMI that are part of the European Union, using a float-adjusted market capitalization weighting scheme.

The index is rebalanced quarterly, effective prior to the open of the Monday following the third Friday of March, June, September, and December in line with the S&P Global BMI rebalancing.

Index Eligibility. Constituents of the following countries are eligible for index inclusion.

Country	Region
Austria	Developed
Belgium	Developed
Denmark	Developed
Finland	Developed
France	Developed
Germany	Developed
Ireland	Developed
Italy	Developed
Luxembourg	Developed
Netherlands	Developed
Spain	Developed
Sweden	Developed
United Kingdom	Developed
Czech Republic	Emerging
Greece	Emerging
Portugal	Emerging
Hungary	Emerging
Poland	Emerging

Source: https://europa.eu/european-union/about-eu/countries_en#tab-0-1.

At each rebalancing, if a country decides to enter or exit the European Union, the reference date to include or exclude it from the index is the third Friday of the month previous to the effective rebalancing date.

S&P U.S. BMI Indices with S&P Global Market Intelligence Classifications

These indices measure the constituents of the S&P United States BMI that fall under the GICS Banks Industry group and/or under certain regional and industry classifications defined by S&P Global Market Intelligence. The indices are weighted by float-adjusted market capitalization.

For more information on the regional and industry classifications by S&P Global Market Intelligence please refer to <https://www.spglobal.com/marketintelligence>.

GICS Reclassification. GICS classification is reviewed on a monthly basis, and constituents whose classification become ineligible are deleted from the relevant index at the time the reclassification occurs for the underlying index.

For more information on GICS, please refer to S&P Dow Jones Indices' Global Industry Classification Standard (GICS) Methodology.

Index Series. The index series include:

- **S&P U.S. BMI Banks - Midwest Region Index.** The index measures the constituents of the S&P United States BMI that are part of the GICS Banks industry group (4010) and fall within the Midwest region of the U.S. as defined by S&P Global Market Intelligence.
- **S&P U.S. BMI Banks - Mid-Atlantic Region Index.** The index measures the constituents of the S&P United States BMI that are part of the GICS Banks industry group (4010) and fall within the Mid-Atlantic region of the U.S. as defined by S&P Global Market Intelligence.
- **S&P U.S. BMI Banks - New England Region Index.** The index measures the constituents of the S&P United States BMI that are part of the GICS Banks industry group (4010) and fall within the New England region of the U.S. as defined by S&P Global Market Intelligence.
- **S&P U.S. BMI Banks - Southeast Region Index.** The index measures the constituents of the S&P United States BMI that are part of the GICS Banks industry group (4010) and fall within the Southeast region of the U.S. as defined by S&P Global Market Intelligence.
- **S&P U.S. BMI Banks - Southwest Region Index.** The index measures the constituents of the S&P United States BMI that are part of the GICS Banks industry group (4010) and fall within the Southwest region of the U.S. as defined by S&P Global Market Intelligence.
- **S&P U.S. BMI Banks - Western Region Index.** The index measures the constituents of the S&P United States BMI that are part of the GICS Banks industry group (4010) and fall within the Western region of the U.S. as defined by S&P Global Market Intelligence.
- **S&P U.S. Specialty Finance Index.** The index measures the constituents of both the S&P United States BMI and the S&P BDC Index¹⁸ that are defined by S&P Global Market Intelligence as Specialty Finance, excluding those constituents within the GICS Mortgage REITs sub-industry (40204010).
- **S&P U.S. Financial Technology Index.** The index measures the constituents of the S&P United States BMI that are defined by S&P Global Market Intelligence as Financial Technology or Payments.

Rebalancing. The indices rebalance quarterly effective prior to the open of the Monday following the third Friday in March, June, September, and December. The reference date for determining regional and industry classifications as defined by S&P Global Market Intelligence is the last business day of the month prior to the effective rebalancing date.

¹⁸ Please refer to the S&P BDC Index Methodology available at www.spdji.com for details on this index.

Index Additions. With the exception of spin-offs, additions to the indices are made only at the quarterly rebalancing. Spin-offs from current index constituents are added to the index on the same effective date. Spin-offs added to the index are evaluated for eligibility at the subsequent rebalancing.

For more on the treatment of spin-offs, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Index Deletions. Constituents removed from the underlying index are removed from the relevant index simultaneously.

Corporate Actions. For a detailed explanation of the treatment of Rights Offerings, Spin-Offs, Share and IWF Updates, Mergers & Acquisitions, Dividends, Stock Splits and Consolidation, Exchange Closures, Stock Suspensions, Currency, and Error Correction, please refer to *S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology*.

For actions resulting in no net change to the capitalization of the issue, the index divisor remains unchanged.

Appendix C – Methodology Changes

Methodology changes since January 1, 2015 are as follows:

Change	Effective Date (After Close)	Methodology	
		Previous	Updated
Name Change	09/20/2019	S&P Emerging + China A LargeMidCap	S&P Emerging LargeMidCap (China A Full Inclusion)
Name Change	09/20/2019	S&P Emerging + China A Domestic LargeMidCap	S&P Emerging LargeMidCap (Domestic China A Full Inclusion)
Inclusion of Kuwait	09/20/2019	--	Kuwait is included with an Emerging Market status.
Eligibility of China A-Shares	09/20/2019	China A-Shares are not eligible. Only overseas share listings of mainland Chinese companies such as H shares, red chips, China DRs, and U.S.-listed Chinese stocks are eligible.	China A-Shares that trade through the Northbound Trading Segment of the Shanghai-Hong Kong or the Shenzhen-Hong Kong Stock Connect Program (excluding ChiNext stocks) are eligible using a specified float-adjusted market capitalization percentage of 25% in consideration of the foreign investment limits for Chinese companies.
Reference Date for Sizing and Cap Range	09/20/2019	<p>The reference date for determining size classification is the last trading day of the month prior to the rebalancing month.</p> <p>The reference date for determining a cap range is the last trading day of the month prior to the rebalancing month.</p> <p>Cap Range Index Reassignment. Any company where the total market capitalization between price reference dates is doubled or halved as a result of a corporate action is reassigned to its correct Cap Range at the next quarterly rebalancing. The price reference date for cap range index reassignment is the last trading day of the month prior to the rebalancing month.</p>	<p>The reference date for determining size classification is five weeks prior to the rebalancing effective date.</p> <p>The reference date for determining a cap range is five weeks prior to the rebalancing effective date.</p> <p>Cap Range Index Reassignment. Any company where the total market capitalization between price reference dates is doubled or halved as a result of a corporate action is reassigned to its correct Cap Range at the next quarterly rebalancing. The price reference date for cap range index reassignment is five weeks prior to the rebalancing effective date.</p>
Public Shares Available to Foreign Investors	06/21/2019	<p>If an individual stock's foreign investment limit is very stringent and the stock is in high demand among global investors, then frequently the amount available to foreign investors is quickly reached.</p> <p>For the UAE, Qatar, and Saudi Arabia, S&P Dow Jones Indices reviews not only the theoretical foreign investment limits applicable to companies (as calculated through S&P Dow Jones Indices' Investable Weight Factor (IWF)), but also the practical available limit (as defined by the known shares actually available to foreign investors).</p> <p>If the practical available limit for an existing constituent falls below 5% then it will be removed from the index at the next quarterly rebalancing. A stock can be added only if the practical available limit is 10% or more. All stocks are reviewed for this at each rebalancing.</p>	<p>If an individual stock's foreign investment limit is very stringent and the stock is in high demand among global investors, then frequently the amount available to foreign investors is quickly reached.</p> <p>For the Philippines, UAE, Qatar, and Saudi Arabia, S&P Dow Jones Indices reviews not only the theoretical foreign investment limits applicable to companies (as calculated through S&P Dow Jones Indices' Investable Weight Factor (IWF)), but also the practical available limit (as defined by the known shares actually available to foreign investors). S&P Dow Jones Indices also reviews the practical available limit for companies in certain industries with foreign investment limits in South Korea and Taiwan.</p> <p>If the practical available limit for an existing constituent falls below 5% then it will be removed from the index at the next quarterly rebalancing. A stock can be added only if the practical available limit is 10% or more. All stocks are reviewed for this at each rebalancing.</p>

Change	Effective Date (After Close)	Previous	Methodology Updated
IPO Fast Track Eligibility	04/30/2019	To allow for the immediate inclusion or “fast track” of significantly sized IPOs, the IPO must be among the top five companies within its country based on its estimated FMC.	<p>Certain large IPOs may be eligible for fast track entry, subject to the following conditions:</p> <ul style="list-style-type: none"> • Only newly public IPOs and direct placement listings will be considered eligible for fast track entry. Formerly bankrupt companies that switch from Over-the-Counter Exchange (“OTC”) or a non-covered exchange to a S&P Dow Jones Indices covered exchange are ineligible. • Fast track IPO additions must meet a minimum float-adjusted market capitalization (“FMC”) threshold of US\$ 2 billion, calculated using the shares offered (excluding over-allotment options) and the closing price on the first day of trading on an eligible exchange. The threshold level is reviewed from time to time and updated as needed to assure consistency with market conditions. • In addition, the IPO will need to meet all other applicable index eligibility rules except for the liquidity requirement. If all necessary public information is available, S&P Dow Jones Indices verifies that the fast track conditions have been met. Once S&P Dow Jones Indices announces that the IPO is eligible for fast track addition, it is added to the index with five business days lead time. At the discretion of the Index Committee, fast track IPO additions eligible to be added during a quarterly rebalancing freeze period may instead be added on the rebalancing effective date.
Inclusion of Saudi Arabia	03/15/2019	--	Saudi Arabia was initially a stand-alone market. In March 2019, it was promoted to emerging market status. Eligible stocks are included using a specified float-adjustment market capitalization percentage of 50% in March 2019 and 100% beginning in September 2019.
Trading History Requirement for Initial Public Offerings (IPOs)	06/15/2018	--	IPOs must have a trading history of at least three months as of the rebalancing reference date.
Name Change: S&P Emerging + China A Domestic LargeMidCap	03/09/2018	The index name was S&P Emerging + China A LargeMidCap.	The index name is S&P Emerging + China A Domestic LargeMidCap.
Liquidity Rule for Global BMI and IFCI Composite	09/15/2017	Stocks must have a cumulative annual value traded of at least \$50M (\$35M for continued inclusion).	<p>Stocks must meet two separate liquidity requirements: 12-month median value traded ratio (MVTR) and six-month median daily value traded (MDVT). In addition, the liquidity rules differ for Emerging and Developed markets.</p> <ul style="list-style-type: none"> • Emerging Markets. Minimum MTVR of 10% (7% for continued inclusion). Minimum MDVT of \$.1M (\$.07M for continued inclusion). • Developed Markets. Minimum MTVR of 20% (14% for continued inclusion). Minimum MDVT of \$.25M (\$.175M for continued inclusion).

Change	Effective Date (After Close)	Previous	Methodology Updated
Constituent Selection for Style Indices	09/16/2016	<ul style="list-style-type: none"> • Stocks with growth scores above the average growth score, and value scores below the average value score, are selected as the growth basket. • Stocks with value scores above the average value score, and growth scores below the average growth score, are selected as the value basket. • Stocks that do not fit either of the above criteria are assigned proportional growth and value weights by comparing a stock's growth and value scores to the average score and determining which style it is closer to. 	<ul style="list-style-type: none"> • Stocks are ranked according to their growth and value scores relative to their relative regional universe, and then sorted in ascending order by the ratio of Growth Rank/Value Rank. As measured by total market capitalization, the top 33% is selected as the growth basket. • Using the above framework, as measured by total market capitalization, the bottom 33% is selected as the value basket. • The remaining stocks are selected as a blended basket, with its weight divided between growth and value based on their distances from the midpoint for each style score within each basket.

Disclaimer

Copyright © 2019 S&P Dow Jones Indices LLC. All rights reserved. STANDARD & POOR'S, S&P, S&P 500, S&P 500 LOW VOLATILITY INDEX, S&P 100, S&P COMPOSITE 1500, S&P MIDCAP 400, S&P SMALLCAP 600, S&P GIVI, GLOBAL TITANS, DIVIDEND ARISTOCRATS, S&P TARGET DATE INDICES, GICS, SPIVA, SPDR and INDEXOLOGY are registered trademarks of Standard & Poor's Financial Services LLC ("S&P"). DOW JONES, DJ, DJIA and DOW JONES INDUSTRIAL AVERAGE are registered trademarks of Dow Jones Trademark Holdings LLC ("Dow Jones"). These trademarks together with others have been licensed to S&P Dow Jones Indices LLC. Redistribution or reproduction in whole or in part are prohibited without written permission of S&P Dow Jones Indices LLC. This document does not constitute an offer of services in jurisdictions where S&P Dow Jones Indices LLC, S&P, Dow Jones or their respective affiliates (collectively "S&P Dow Jones Indices") do not have the necessary licenses. Except for certain custom index calculation services, all information provided by S&P Dow Jones Indices is impersonal and not tailored to the needs of any person, entity or group of persons. S&P Dow Jones Indices receives compensation in connection with licensing its indices to third parties and providing custom calculation services. Past performance of an index is not an indication or guarantee of future results.

It is not possible to invest directly in an index. Exposure to an asset class represented by an index may be available through investable instruments based on that index. S&P Dow Jones Indices does not sponsor, endorse, sell, promote or manage any investment fund or other investment vehicle that is offered by third parties and that seeks to provide an investment return based on the performance of any index. S&P Dow Jones Indices makes no assurance that investment products based on the index will accurately track index performance or provide positive investment returns. S&P Dow Jones Indices LLC is not an investment advisor, and S&P Dow Jones Indices makes no representation regarding the advisability of investing in any such investment fund or other investment vehicle. A decision to invest in any such investment fund or other investment vehicle should not be made in reliance on any of the statements set forth in this document. Prospective investors are advised to make an investment in any such fund or other vehicle only after carefully considering the risks associated with investing in such funds, as detailed in an offering memorandum or similar document that is prepared by or on behalf of the issuer of the investment fund or other investment product or vehicle. S&P Dow Jones Indices LLC is not a tax advisor. A tax advisor should be consulted to evaluate the impact of any tax-exempt securities on portfolios and the tax consequences of making any particular investment decision. Inclusion of a security within an index is not a recommendation by S&P Dow Jones Indices to buy, sell, or hold such security, nor is it considered to be investment advice.

These materials have been prepared solely for informational purposes based upon information generally available to the public and from sources believed to be reliable. No content contained in these materials (including index data, ratings, credit-related analyses and data, research, valuations, model, software or other application or output therefrom) or any part thereof ("Content") may be modified, reverse-engineered, reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of S&P Dow Jones Indices. The Content shall not be used for any unlawful or unauthorized purposes. S&P Dow Jones Indices and its third-party data providers and licensors (collectively "S&P Dow Jones Indices Parties") do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Dow Jones Indices Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content. THE CONTENT IS PROVIDED ON AN "AS IS" BASIS. S&P DOW JONES INDICES PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Dow Jones Indices Parties be

liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the Content even if advised of the possibility of such damages.

S&P Global keeps certain activities of its various divisions and business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain divisions and business units of S&P Global may have information that is not available to other business units. S&P Global has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

In addition, S&P Dow Jones Indices provides a wide range of services to, or relating to, many organizations, including issuers of securities, investment advisers, broker-dealers, investment banks, other financial institutions and financial intermediaries, and accordingly may receive fees or other economic benefits from those organizations, including organizations whose securities or services they may recommend, rate, include in model portfolios, evaluate or otherwise address.

The Global Industry Classification Standard (GICS®) was developed by and is the exclusive property and a trademark of S&P and MSCI. Neither MSCI, S&P nor any other party involved in making or compiling any GICS classifications makes any express or implied warranties or representations with respect to such standard or classification (or the results to be obtained by the use thereof), and all such parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any of such standard or classification. Without limiting any of the foregoing, in no event shall MSCI, S&P, any of their affiliates or any third party involved in making or compiling any GICS classifications have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.