S&P Dow Jones Indices

A Division of S&P Global

S&P Japanese Indices Methodology

November 2023

Table of Contents

Introduction		3
	Index Objectives	3
	Partnership	3
	Highlights and Index Family	3
	Supporting Documents	4
Eligibility Crit	teria	5
	Index Universe	5
	Eligibility Factors	5
Index Constr	ruction	6
	Constituent Selection	6
	Sector Indices	6
	Constituent Weightings	7
	Index Calculations	7
Index Mainte	enance	8
	Rebalancing	8
	Timing of Changes	8
	Corporate Actions	9
	Currency of Calculation and Additional Index Return Series	9
	Base Dates and History Availability	9
Index Data		10
	Calculation Return Types	10
Index Gover	nance	11
	Index Committee	11
Index Policy		12
	Announcements	12
	Pro-forma Files	12
	Holiday Schedule	12
	Rebalancing	12
	Unexpected Exchange Closures	12
	Recalculation Policy	12
	Contact Information	13
Index Disser	nination	14

	Tickers	14
	Index Data	14
	Web site	14
Appendix I		15
	Methodology Changes	15
Appendix II		17
	ESG Disclosures	17
Disclaimer		18
	Performance Disclosure/Back-Tested Data	18
	Intellectual Property Notices/Disclaimer	19

Introduction

Index Objectives

The S&P Japanese Indices measure the performance of various segments of the Japanese equities market. The S&P Japan 500 consists of the S&P/TOPIX 150, the S&P Japan Mid Cap 100, and the S&P Japan Small Cap 250 indices.

The S&P Japan 500 Equal Weight Index has the same constituents as the capitalization weighted S&P Japan 500, but each company in the index is allocated a fixed weight of 0.20% at each quarterly rebalancing.

Partnership

S&P Dow Jones Indices and the Tokyo Stock Exchange together created the S&P/TOPIX 150, which is a real-time, float-adjusted market-cap weighted index. The index is one of seven headline indices that make up the S&P Global 1200.¹

Highlights and Index Family

The S&P Japan 500 constituents are leading companies from the Japanese equity markets and from each of the 11 sectors of the Global Industry Classification Standard (GICS[®]). Each stock is analyzed for size and liquidity.

The members of this family of indices include the S&P/TOPIX 150, the S&P Japan Mid Cap 100, the S&P Japan Small Cap 250, and equal weighted version of the S&P Japan 500.

S&P/TOPIX 150. The index includes highly liquid securities listed on the Tokyo Stock Exchange, selected from each major sector of the Tokyo market, covering the large-cap segment of the Japanese equities market.

S&P Japan Mid Cap 100. The index measures the performance of the mid-cap segment of the Japanese equities market. Index constituents are weighted by float-adjusted market capitalization.

S&P Japan Small Cap 250. The index is float-adjusted, covering the small-cap segment of the Japanese equities market. Index constituents are weighted by float-adjusted market capitalization.

S&P Japan 500 Equal Weight Index. The index has the same constituents with S&P Japan 500. Index constituents are equal weighted.

¹ For more information on the S&P/TOPIX 150 Index, please refer to the S&P/TOPIX 150 Methodology available at <u>http://www.spglobal.com/spdji/</u>.

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

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.

JPX is a trademark of Japan Exchange Group, Inc. and has been licensed for use by S&P Dow Jones Indices.

Eligibility Criteria

Index Universe

The index constituents are drawn from the S&P Japan BMI, which is a broad, rules-based universe of stocks representing the Japanese equity markets. Real Estate Investment Trusts (REITs) are not eligible for index inclusion.

For information on the S&P Japan BMI, please refer to the S&P Global BMI, S&P/IFCI Methodology located on our Web Site, <u>www.spglobal.com/spdji/</u>.

Eligibility Factors

Eligible Securities. All common and preferred shares (which are of an equity and not of a fixed income nature) are eligible for index inclusion. Convertible stock, bonds, warrants, rights, and preferred stock that provide a guaranteed fixed return are not eligible.

Domicile. The company must be established and traded in Japan. In addition, stocks must be listed on the Tokyo Stock Exchange in order to be eligible for the S&P/TOPIX 150.

Initial Public Offerings (IPOs). IPOs with at least six months of trading history are eligible.

Market Capitalization. The S&P Japan 500 is designed to include liquid investable stocks from the Japanese market. Market capitalization is a key criterion for stock selection. Stocks are included if they are large enough to meet the minimum ranking requirements for the representative segment within the Japanese market.

The market capitalization criterion for stock inclusion is based upon the daily average float-adjusted market capitalization of a security over the last three months. The stock price history (last three months as of the index rebalance reference date), latest available shares outstanding and the Investable Weight Factor (IWF) are the relevant variables for the calculation. The IWF is a variable that is primarily used to determine the available float of a security.

For more information on float-adjusted market capitalization, please see S&P Dow Jones Indices' Float Adjustment Methodology.

Investable Weight Factor (IWF). For the S&P Japan 500, stocks must have a minimum IWF of 0.5 to be eligible for initial index inclusion; however, an IWF at or above that level is not necessary for a stock to remain in an index.

Liquidity. For the S&P Japan 500, stocks must have a minimum liquidity ratio of at least 50% to be eligible for initial index inclusion, but a liquidity ratio at or above 0.5 is not required for a stock to remain in an index. Stock liquidity is measured by the ratio of 12-month value traded to average float-adjusted market capitalization as of the rebalancing reference date. Days traded are also analyzed to ensure ample liquidity.

Sector Classification. Stocks are classified according to GICS. For the S&P Japan 500 and the S&P/TOPIX 150, the index methodology attempts to maintain GICS sector balance, as measured by a comparison of each sector's weight in the respective index with its weight in the respective universe in order to ensure representative sector weightings. Therefore, S&P Dow Jones Indices aims to maintain GICS sector weights in the respective indices within a $\pm 3\%$ range from their weights in the S&P Japan BMI.

Index Construction

Constituent Selection

At each review, stocks in the eligible universe are ranked in descending order by their three-month average float-adjusted market capitalizations. The selection process is conducted first on the S&P Japan 500, followed by the S&P/TOPIX 150, and then the S&P Japan Mid Cap 100 using the two-way buffer selection steps described below. Stocks that are included in the S&P Japan 500, but excluded from the S&P/TOPIX 150 and S&P Japan Mid Cap 100, form the S&P Japan Small Cap 250.

Two-Way Buffer Selection Steps:

- 1. Stocks ranking higher or equal to the direct entry buffer threshold are included.
- 2. Stocks ranking lower than the direct removal buffer threshold are excluded.
- 3. Current constituents not included in the above steps but ranking higher or equal to the direct removal buffer threshold are included in order of the highest rank until the fixed count is achieved.
- 4. In cases where the fixed count is not achieved after the above steps, non-index constituents are selected in order of the highest rank to achieve the fixed count.

	FMC Buffer Thresholds		
Index	Direct Entry	Direct Removal	Count
S&P Japan 500	Rank higher or equal to 350	Rank lower than 650	500
S&P/TOPIX 150	Rank higher or equal to 80	Rank lower than 220	150
S&P Japan Mid Cap 100 ²	Rank higher or equal to 170	Rank lower than 330	100
S&P Japan Small Cap 250 Stocks included in the S&P Japan 500, but excluded from the S&P/TOPIX 150 and S&P Japan Mid Cap 100		250	

Sector Indices

S&P Dow Jones Indices assigns the index constituents of the S&P Japan 500 to a Sector Index based on the constituent's classification under the Global Industry Classification Standard (GICS[®]) as follows:

Sector Index	GICS Classifications (GICS Code)
Communication Services	Communication Services Sector (50)
Consumer Discretionary	Consumer Discretionary Sector (25)
Consumer Staples	Consumer Staples Sector (30)
Energy	Energy Sector (10)
Financials	Financials Sector (40)
Health Care	Health Care Sector (35)
Industrials	Industrials Sector (20)
Information Technology	Information Technology Sector (45)
Materials	Materials Sector (15)
Utilities	Utilities Sector (55)
Real Estate	Real Estate Sector (60)

For more information on the structure of GICS, please refer to the GICS methodology.

² Stocks dropped from the S&P/TOPIX 150 flow through to the S&P Japan Mid Cap 100 provided they are ranked higher than 330.

Constituent Weightings

S&P Japan 500. The index and its component sub-indices are float-adjusted market capitalization weighted.

S&P Japan 500 EWI. The index is equal weighted.

Index Calculations

The index is calculated by means of the divisor methodology used in all S&P Dow Jones Indices' equity indices.

Except for the S&P Japan 500 Equal Weight Index, for more information on the index calculation methodology, please refer to the Market Capitalization Indices section of S&P Dow Jones Indices' Index Mathematics Methodology.

For information on index calculations for the S&P Japan 500 Equal Weight Index, please refer to the Equal Weighted Indices section of S&P Dow Jones Indices' Index Mathematics Methodology.

Index Maintenance

Rebalancing

The S&P Japan 500 and its component indices, including the S&P Japan 500 EWI, are rebalanced quarterly to ensure adequate market capitalization and liquidity. Quarterly rebalancing changes take effect after the market close on the third Friday of March, June, September, and December. The rebalancing reference date is after the market close of the second to last Friday of February, May, August, and November.

For the S&P Japan 500 EWI, constituents' index shares are calculated using closing prices on the second Friday of the rebalancing month as the reference price. Index shares are calculated and assigned to each stock to arrive at the weights determined on the reference date. Since index shares are assigned based on prices prior to the rebalancing effective date, the actual weight of each stock at the rebalancing may differ from these weights due to market movements.

Timing of Changes

Additions. Except for spin-offs, index additions are made according to market size and liquidity, with a view to preserving sector representation in the index. For the S&P Japan 500 EWI, when a company is added to the index intra-quarter, it takes the weight of the company that it replaced. The one exception is when a company is removed from the index at a zero price. In such a case, the company's replacement is added to the index at the weight using the previous day's closing value, or the most immediate prior business day that the deleted company was not valued zero.

Except for replacements made during rebalancing months, reference data for replacements is as of after the close of the last business day of the previous month. For replacements made between the rebalancing reference date but before the rebalancing month end, reference data for replacements is as of the rebalancing reference date.

Spin-offs. The spin-off is added to all the indices of which the parent company is a constituent at a zero price at the market close of the day before the ex-date (with no divisor adjustment). If the spin-off is determined not to be eligible to remain in the index, it will be removed after at least one day of regular trading (with a divisor adjustment).

For the S&P Japan 500 EWI, if the spin-off is determined not to be eligible to remain in the index, the weight of the spin-off is added back to the parent company at the open on the effective date that the spin-off is removed.

For general information on spin-off treatments, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Deletions. Deletions can occur due to acquisitions, mergers and spin offs or due to bankruptcies or suspension.

Composition changes made to the S&P Japan 500 are applied to the S&P Japan 500 EWI simultaneously. The replacement is added to the S&P Japan 500 EWI at the weight using the previous day's closing value of the deleted company.

The removal of bankrupt companies from the S&P Japanese Indices differs from that of other S&P Dow Jones Indices, in that stocks are removed from the relevant index with a five-day notification period and are removed from the index at their last traded price.

Corporate Actions

Except for the S&P Japan 500 Equal Weight Index, for information on Corporate Actions, please refer to the Market Capitalization Indices section of S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

S&P Japan 500 Equal Weight Index. Please refer to the Equal Weighted Indices section of S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Currency of Calculation and Additional Index Return Series

The S&P Japan 500, S&P Japan Mid Cap 100, and S&P Japan Small Cap 250 are all calculated in Japanese yen. The S&P/TOPIX 150 and the S&P Japan 500 EWI are calculated in Japanese yen and U.S. dollars.

Daily index closing values are calculated in U.S. dollars using spot exchange rates take at 4:17 PM Sydney time, as supplied by WMR.

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 the <u>S&P DJI</u> <u>Methodology & Regulatory Status Database</u>.

For information on various index calculations, please refer to S&P Dow Jones Indices' Index Mathematics Methodology.

For the inputs necessary to calculate certain types of indices, including decrement, dynamic hedged, fair value, and risk control indices, please refer to the Parameters documents available at <u>www.spglobal.com/spdji/</u>.

Base Dates and History Availability

Index history availability, base dates, and base values are shown in the table below.

Index	Launch Date	First Value Date	Base Date	Base Value
S&P Japan 500	12/19/2006	12/30/1992	12/30/1997	1000
S&P Japan Mid Cap 100	10/02/2002	12/30/1992	12/30/1997	1000
S&P Japan Small Cap 250	10/02/2002	12/30/1992	12/30/1997	1000
S&P Japan 500 Equal Weight Index	01/04/2018	12/30/1997	12/30/1997	1000

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

An S&P Dow Jones Indices' Index Committee maintains the S&P Japan 500, S&P Japan Mid Cap 100, S&P Japan Small Cap 250 and S&P Japan 500 EWI. The Index Committee members are full-time professional members of S&P Dow Jones Indices' staff.

The S&P/JPX Index Committee maintains the S&P/TOPIX 150. The Index Committee is comprised of members from S&P Dow Jones Indices and the Tokyo Stock Exchange (TSE).

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

Additions and deletions to the S&P/TOPIX 150 are also posted on our Web site at <u>www.spglobal.com/spdji/</u> and our local language Web site at <u>www.spglobal.com/spdji/jp/</u>. Quarterly changes are announced before the ex-date through index pro-forma files.

Market-sensitive announcements, including the additions or deletions of stocks in an index, are normally made when markets are closed.

For more information, please refer to the Announcements section of S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Pro-forma Files

In addition to the corporate events file (.SDE), S&P Dow Jones Indices provides constituent pro-forma files each time the index rebalances. The pro-forma file is typically provided daily in advance of the rebalancing date and contains all constituents and their index shares effective for the upcoming rebalancing.

Please visit <u>www.spglobal.com/spdji/</u> for a complete schedule of rebalancing timelines and pro-forma delivery times.

Holiday Schedule

The S&P Japanese Indices are calculated on all Japanese trading days.

A complete holiday schedule for the year is available at S&P Dow Jones Indices' Web site at <u>www.spglobal.com/spdji/</u>.

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.

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

Index levels are available through S&P Dow Jones Indices' Web site at <u>www.spglobal.com/spdji/</u>, major quote vendors (see codes below), numerous investment-oriented Web sites, and various print and electronic media.

Tickers

The table below lists headline indices covered by this document. All versions of the below indices that may exist are also covered by this document. Please refer to the <u>S&P DJI Methodology & Regulatory</u> <u>Status Database</u> for a complete list of indices covered by this document.

Index (Price Return)	BBG	RIC
S&P Japan 500	SPJ500	.SPJ
S&P Japan Mid Cap 100	SPJMID	.SPJMID
S&P Japan Small Cap 250	SPJSML	.SPJSML
S&P Japan 500 Equal Weight	SPJEWJP	

Index Data

Daily constituent and index level are available via subscription.

For product information, please contact S&P Dow Jones Indices, <u>www.spglobal.com/spdji/en/contact-us</u>.

Web site

For more information, please refer to S&P Dow Jones Indices' Web site at <u>www.spglobal.com/spdji/</u> and our local language Web site at <u>www.spglobal.com/spdji/jp/</u>.

Appendix I

Methodology Changes

Methodology changes since January 1, 2015 are as follows:

Chango	Effective Date	Methodology Previous Updated	
Change Constituent Selection	(After Close) 12/17/2021	At each review, stocks in the eligible universe are ranked by their three-month average float-adjusted market capitalizations. If a current constituent ranks below the threshold rank detailed below, it is removed. The largest non- constituent that is ranked within the representative size segment is added as a replacement, provided all other eligibility factors are met. The removal rank thresholds are as follows: • S&P/TOPIX 150: Rank lower than 220 • S&P Japan Mid Cap 100: Rank lower than 330 • S&P Japan Small Cap 250: Rank lower than 650 The replacement rank thresholds are as follows: • S&P/TOPIX 150: Rank among the top 150 • S&P Japan Mid Cap 100: Rank between 151 and 250 (inclusive) • S&P Japan Small Cap 250: Rank between 251 and 500 (inclusive)	At each review, stocks in the eligible universe are ranked in descending order by their three-month average float- adjusted market capitalizations. The selection process is conducted first on the S&P Japan 500, followed by the S&P/TOPIX 150, and then the S&P Japan Mid Cap 100 using the two-way buffer selection steps described below. Stocks that are included in the S&P/TOPIX 150 and S&P Japan Mid Cap 100, form the S&P Japan Small Cap 250. <u>Two-Way Buffer Selection Steps:</u> 1. Stocks ranking higher or equal to the direct entry buffer threshold are included. 2. Stocks ranking lower than the direct removal buffer threshold are excluded. 3. Current constituents not included in the above steps but ranking higher or equal to the direct removal buffer threshold are included in order of the highest rank until the fixed count is achieved. 4. In cases where the fixed count is not achieved after the above steps, non- index constituents are selected in order of the highest rank to achieve the fixed count. The direct entry buffer thresholds are: S&P Japan 500: Rank higher or equal to 350 S&P/TOPIX 150: Rank higher or equal to 350 S&P/TOPIX 150: Rank higher or equal to 330 S&P Japan Mid Cap 100: Rank higher or equal to 170 The direct removal buffer thresholds are: S&P Japan Small Cap 250 is formed from the stocks included in the S&P Japan 500, but excluded from the S&P/TOPIX 150 and S&P Japan Mid Cap 100.

Change	Effective Date		dology
Change Rebalancing Reference Date	(After Close) 12/17/2021	Previous Except for the September rebalancing, the rebalancing reference date is after the market close of the last business day of the previous month. The rebalancing reference date for the September rebalancing is after the market close of the second to last Friday of August.	Updated The rebalancing reference date is after the market close of the second to last Friday of February, May, August, and November.
Constituent Selection	06/18/2021	At each review, stocks in the index universe are ranked by their three-month average float-adjusted market capitalizations.	At each review, stocks in the eligible universe are ranked by their three-month average float-adjusted market capitalizations.
Rebalancing Reference date	08/23/2019	The rebalancing reference date is the close of the last business day of the previous month.	Except for the September rebalancing, the rebalancing reference date is after the market close of the last business day of the previous month. The rebalancing reference date for the September rebalancing is after the market close of the second to last Friday of August.
Eligibility: S&P Japan 500 Communication Services Sector Index	09/21/2018	The index is comprised of the constituents of the S&P Japan 500 classified as part of the Telecommunication Services (GICS Code: 50).	The index is comprised of the constituents of the S&P Japan 500 classified as part of the Communication Services (GICS Code: 50).
Market Capitalization Screening	06/16/2017	Float-adjusted market capitalization, as of the market close on the reference day, is used in the index composition screening.	Three-month average float-adjusted market capitalization is used in the index composition screening.
Index Selection Buffers	06/16/2017		At each review, stocks in the index universe are ranked by their three-month average float-adjusted market capitalizations. If a current constituent ranks below the threshold rank detailed below, it is removed. The largest non- constituent that is ranked within the representative size segment is added as a replacement, provided all other eligibility factors are met. The removal rank thresholds are as follows: • S&P/TOPIX 150: Rank lower than 220 • S&P Japan Mid Cap 100: Rank lower
			 than 330 S&P Japan Small Cap 250: Rank lower than 650 The replacement rank thresholds are as
			 follows: S&P/TOPIX 150: Rank among the top 150 S&P Japan Mid Cap 100: between 151 and 250 (inclusive) S&P Japan Small Cap 250: Rank between 251 and 500 (inclusive)
Float Rate for New Additions	06/16/2017		For new index additions, a float rate of at least 50% is required.
GICS Sector Balance Criteria	06/16/2017		The index methodology aims to maintain GICS sector weights in the S&P Japan 500 and S&P/TOPIX 150 within a ±3% range from their respective weights in the S&P Japan BMI.



ESG Disclosures

=	EXPLANATION OF HOW ENVIRONMENTAL, SOCIAL & GOVERNANCE (ESG) FACTORS ARE REFLECTED IN THE KEY ELEMENTS OF THE BENCHMARK METHODOLOGY ³			
1.	1. Name of the benchmark administrator. S&P Dow Jones Indices LLC.			
2.	Underlying asset class of the ESG benchmark. ⁴	N/A		
3.	Name of the S&P Dow Jones Indices benchmark or family of benchmarks.	S&P DJI Equity Indices Benchmark Statement		
4.	Do any of the indices maintained by this methodology take into account ESG factors?	No		
Appendix latest update:		January 2021		
Appendix first publication:		January 2021		

³ The information contained in this Appendix is intended to meet the requirements of the European Union Commission Delegated Regulation (EU) 2020/1817 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the minimum content of the explanation of how environmental, social and governance factors are reflected in the benchmark methodology and the retained EU law in the UK [The Benchmarks (amendment and Transitional Provision) (EU Exit) Regulations 2019].

⁴ The 'underlying assets' are defined in European Union Commission Delegated Regulation (EU) 2020/1816 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the explanation in the benchmark statement of how environmental, social and governance factors are reflected in each benchmark provided and published.

Disclaimer

Performance Disclosure/Back-Tested Data

Where applicable, S&P Dow Jones Indices and its index-related affiliates ("S&P DJI") defines various dates to assist our clients in providing transparency. The First Value Date is the first day for which there is a calculated value (either live or back-tested) for a given index. The Base Date is the date at which the index is set to a fixed value for calculation purposes. The Launch Date designates the date when the values of an index are first considered live: index values provided for any date or time period prior to the index's Launch Date are considered back-tested. S&P DJI defines the Launch Date as the date by which the values of an index are known to have been released to the public, for example via the company's public website or its data feed to external parties. For Dow Jones-branded indices introduced prior to May 31, 2013, the Launch Date (which prior to May 31, 2013, was termed "Date of introduction") is set at a date upon which no further changes were permitted to be made to the index methodology, but that may have been prior to the Index's public release date.

Please refer to the methodology for the Index for more details about the index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations.

Information presented prior to an index's launch date is hypothetical back-tested performance, not actual performance, and is based on the index methodology in effect on the launch date. However, when creating back-tested history for periods of market anomalies or other periods that do not reflect the general current market environment, index methodology rules may be relaxed to capture a large enough universe of securities to simulate the target market the index is designed to measure or strategy the index is designed to capture. For example, market capitalization and liquidity thresholds may be reduced. In addition, forks have not been factored into the back-test data with respect to the S&P Cryptocurrency Indices. For the S&P Cryptocurrency Top 5 & 10 Equal Weight Indices, the custody element of the methodology and selection of index constituents with the benefit of hindsight and knowledge of factors that may have positively affected its performance, cannot account for all financial risk that may affect results and may be considered to reflect survivor/look ahead bias. Actual returns may differ significantly from, and be lower than, back-tested returns. Past performance is not an indication or guarantee of future results.

Typically, when S&P DJI creates back-tested index data, S&P DJI uses actual historical constituent-level data (e.g., historical price, market capitalization, and corporate action data) in its calculations. As ESG investing is still in early stages of development, certain datapoints used to calculate certain ESG indices may not be available for the entire desired period of back-tested history. The same data availability issue could be true for other indices as well. In cases when actual data is not available for all relevant historical periods, S&P DJI may employ a process of using "Backward Data Assumption" (or pulling back) of ESG data for the calculation of back-tested historical performance. "Backward Data Assumption" is a process that applies the earliest actual live data point available for an index constituent company to all prior historical instances in the index performance. For example, Backward Data Assumption inherently assumes that companies currently not involved in a specific business activity (also known as "product involvement") were never involved historically and similarly also assumes that companies currently involved in a specific business activity were involved historically too. The Backward Data Assumption allows the hypothetical back-test to be extended over more historical years than would be feasible using only actual data. For more information on "Backward Data Assumption" please refer to the FAQ. The methodology and factsheets of any index that employs backward assumption in the back-tested history will explicitly state so. The methodology will include an Appendix with a table setting forth the specific

data points and relevant time period for which backward projected data was used. Index returns shown do not represent the results of actual trading of investable assets/securities. S&P DJI maintains the index and calculates the index levels and performance shown or discussed but does not manage any assets.

Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the Index or investment funds that are intended to track the performance of the Index. The imposition of these fees and charges would cause actual and back-tested performance of the securities/fund to be lower than the Index performance shown. As a simple example, if an index returned 10% on a US \$100,000 investment for a 12-month period (or US \$10,000) and an actual asset-based fee of 1.5% was imposed at the end of the period on the investment plus accrued interest (or US \$1,650), the net return would be 8.35% (or US \$8,350) for the year. Over a three-year period, an annual 1.5% fee taken at year end with an assumed 10% return per year would result in a cumulative gross return of 33.10%, a total fee of US \$5,375, and a cumulative net return of 27.2% (or US \$27,200).

Intellectual Property Notices/Disclaimer

© 2023 S&P Dow Jones Indices. All rights reserved. S&P, S&P 500, SPX, SPY, The 500, US500, US 30, S&P 100, S&P COMPOSITE 1500, S&P 400, S&P MIDCAP 400, S&P 600, S&P SMALLCAP 600, S&P GIVI, GLOBAL TITANS, DIVIDEND ARISTOCRATS, Select Sector, S&P MAESTRO, S&P PRISM, S&P STRIDE, GICS, SPIVA, SPDR, INDEXOLOGY, iTraxx, iBoxx, ABX, ADBI, CDX, CMBX, MBX, MCDX, PRIMEX, HHPI, and SOVX are registered trademarks of S&P Global, Inc. ("S&P Global") or its affiliates. DOW JONES, DJIA, THE DOW and DOW JONES INDUSTRIAL AVERAGE are 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 DJI does not have the necessary licenses. Except for certain custom index calculation services, all information provided by S&P DJI is impersonal and not tailored to the needs of any person, entity, or group of persons. S&P DJI 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 DJI 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 DJI makes no assurance that investment products based on the index will accurately track index performance or provide positive investment returns. S&P DJI is not an investment advisor, commodity trading advisor, fiduciary, "promoter" (as defined in the Investment Company Act of 1940, as amended) or "expert" as enumerated within 15 U.S.C. § 77k(a), and S&P DJI 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. A decision to invest in any such investment set forth in this document. S&P DJI is not a tax advisor. Inclusion of a security, commodity, crypto currency, or other asset within an index is not a recommendation by S&P DJI to buy, sell, or hold such security, commodity, crypto currency, or other asset, nor is it considered to be investment or trading 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 DJI. The Content shall not be used for any unlawful or unauthorized purposes. S&P DJI 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" "WHERE IS" BASIS. S&P DOW JONES INDICES PARTIES DISCLAIMS 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.

Credit-related information and other analyses, including ratings, research and valuations are generally provided by licensors and/or affiliates of S&P Dow Jones Indices, including but not limited to S&P Global's other divisions such as S&P Global Market Intelligence. Any credit-related information and other related analyses and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. Any opinion, analyses and rating acknowledgement decisions are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P Dow Jones Indices does not assume any obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P DJI does not act as a fiduciary or an investment advisor. While S&P DJI has obtained information from sources it believes to be reliable, S&P DJI does not perform an audit or undertake independent verification of any information it receives. S&P DJI reserves the right to vary or discontinue any index at any time for regulatory or other reasons. Various factors, including external factors beyond S&P DJI's control might necessitate material changes to indices.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P Global Ratings reserves the right to assign, withdraw or suspend such acknowledgement at any time and in its sole discretion. S&P Dow Jones Indices, including S&P Global Ratings, disclaim any duty whatsoever arising out of the assignment, withdrawal, or suspension of an acknowledgement as well as any liability for any damage alleged to have been suffered on account thereof. Affiliates of S&P Dow Jones Indices LLC, including S&P Global Ratings, may receive compensation for its ratings and certain credit-related analyses, normally from issuers or underwriters of securities or from obligors. Such affiliates of S&P Dow Jones Indices LLC, including S&P Global Ratings, reserve the right to disseminate its opinions and analyses. Public ratings and analyses from S&P Global Ratings are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P Global Ratings publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

S&P Global keeps certain activities of its various divisions and business units separate from each other 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 nonpublic 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.

Some indices use the Global Industry Classification Standard (GICS[®]), which was developed by, and is the exclusive property and a trademark of, S&P Global and MSCI. Neither MSCI, S&P DJI 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 DJI, 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.

S&P Dow Jones Indices products are governed by the terms and conditions of the agreements under which they may be provided. A license is required from S&P Dow Jones Indices to display, create derivative works of and/or distribute any product or service that uses, is based upon and/or refers to any S&P Dow Jones Indices and/or index data.