

S&P Dow Jones Indices

A Division of **S&P Global**

S&P/ASX 200 Style Indices *Methodology*

September 2022

Table of Contents

Introduction	3
Index Objective and Highlights	3
Supporting Documents	3
Eligibility Criteria	4
Index Universe	4
Index Construction	5
Evaluating Growth and Value at the Company Level	5
Establishing Style Baskets	6
Growth and Value Indices	7
Index Calculation	8
Index Maintenance	9
Rebalancing	9
Index Changes for Style Indices	9
Currency of Calculation and Additional Index Return Series	10
Base Dates	10
Index Data	11
Calculation Return Types	11
Index Governance	12
Index Committee	12
Index Policy	13
Announcements	13
Pro-forma Files	13
Holiday Schedule	13
Rebalancing	13
Unexpected Exchange Closures	13
Recalculation Policy	13
Real-Time Calculation	14
Contact Information	14
Index Dissemination	15
Tickers	15
Index Data	15
Web site	15

Appendix I		16
	Calculating Distances from Pure Growth Regions	16
Appendix II		17
	Methodology Changes	17
Appendix III		18
	EU Required ESG Disclosures	18
Disclaimer		19
	Performance Disclosure/Back-Tested Data	19
	Intellectual Property Notices/Disclaimer	20

Introduction

Index Objective and Highlights

The S&P/ASX 200 Style Indices measure the performance of constituents of the S&P/ASX 200 (the “Parent Index”) fully or partially categorized as either growth or value stocks, as determined by Style Scores for each security. The indices are float-adjusted market capitalization weighted.

The index series divides the complete market capitalization of the parent index approximately equally into growth and value indices. Stocks that do not fall into Style baskets have their market caps distributed between the growth and value indices.

Please refer to the S&P/ASX Indices Methodology for information on the S&P/ASX 200.

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.

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Eligibility Criteria

Index Universe

At each rebalancing, constituents of the S&P/ASX 200 Style Indices are derived from the parent index.

Index Construction

Evaluating Growth and Value at the Company Level

Style Factors. The Style indices measure growth and value along two separate dimensions, with three factors each used to measure growth and value. The list of factors used is outlined in the table below.

Growth Factors	Value Factors
Three-Year Earnings per Share Growth Rate*	Book Value to Price Ratio
Three-Year Sales per Share Growth Rate**	Earnings to Price Ratio
Momentum (12-Month % Price Change)	Sales to Price Ratio

* 3 year EPS growth = $EPS_t / \text{average}(EPS_{t-1}, EPS_{t-2}, EPS_{t-3}) - 1$

** 3 year SPS growth = $SPS_t / \text{average}(SPS_{t-1}, SPS_{t-2}, SPS_{t-3}) - 1$

When earnings from three years prior are not available, then earnings from two prior years are used. When earnings from two years prior are not available, then the Earnings per Share Growth Rate is not used in the calculation of the Growth Score.

When sales from three years prior are not available, then sales from two prior years are used. When sales from two years prior are not available, then the Sales per Share Growth Rate is not used in the calculation of the Growth Score.

When there is insufficient trading history to calculate 12-Month Momentum, then the 9-Month history is used. If a 9-Month history is also unavailable, then Momentum is not used in the calculation of the Growth Score.

When Book Value to Price Ratio is not available, it is not used in the calculation of Value Score.

When Earnings to Price Ratio is not available, it is not used in the calculation of Value Score.

When Sales to Price Ratio is not available, it is not used in the calculation of Value Score.

Style Scores. Raw values for each of the above factors are calculated for each company in the S&P/ASX 300. The raw values are first winsorized to the 90th percentile and then standardized by dividing the difference between each company's raw score and the mean of the entire set by the standard deviation of the entire set.

A Growth Score for each company is computed as the average of the standardized values of the three growth factors. In case only two growth factors are available for a company then the Growth Score is calculated as the average of the two standardized growth factors. When fewer than two growth factors are available then the company's Growth Score will be equal to the GICS average Growth Score.

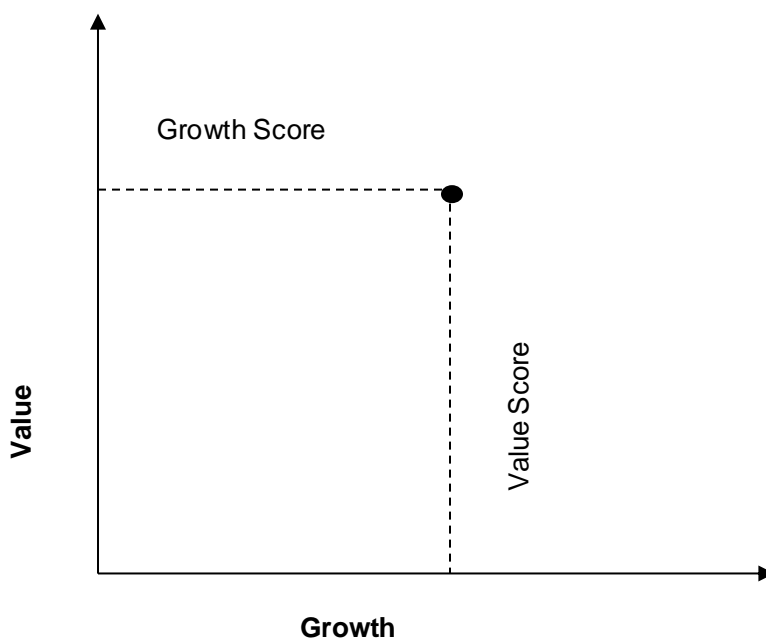
A Value Score for each company is computed as the average of the standardized values of the three value factors. In case only two value factors are available for a company then the Value Score is calculated as the average of the two standardized value factors. When fewer than two value factors are available then the company's Value Score will be equal to the GICS average Value Score.

At the end of this step each company has a Growth Score and a Value Score, as shown below, with growth and value being measured along separate dimensions.

When fewer than two style factors are available, the level of the GICS average used for the respective Growth or Value score is determined using the following process:

1. If there are a minimum of 10 stocks from the same GICS Sub-industry in the S&P/ASX 300 universe, then the GICS Sub-industry average score is used.
2. If this criterion is failed, but there is a minimum of 10 stocks from the same GICS Industry in the S&P/ASX 300 universe, then the GICS Industry average score is used.
3. If this criterion is failed, but there is a minimum of 10 stocks from the same GICS Industry Group in the S&P/ASX 300 universe, then the GICS Industry Group average score is used.
4. If this criterion is failed, but there is more than one stock from the same GICS Sector in the S&P/ASX 300 universe, then the GICS Sector average score is used.
5. If there is only one stock in the GICS Sector and it is missing Growth/Value scores, the S&P/ASX 300 universe average score is used.

Exhibit 1: Measuring Growth and Value Along Separate Dimensions



For Stock X,

$G_{i,x}$ = Standardized value of Growth Factor i for stock X, $i=1$ to 3.

$V_{j,x}$ = Standardized value of Value Factor j for stock X, $j=1$ to 3.

SG_X = Growth Score of X = $1/3(G_{1,x} + G_{2,x} + G_{3,x})$.

SV_X = Value Score of X = $1/3(V_{1,x} + V_{2,x} + V_{3,x})$.

Establishing Style Baskets

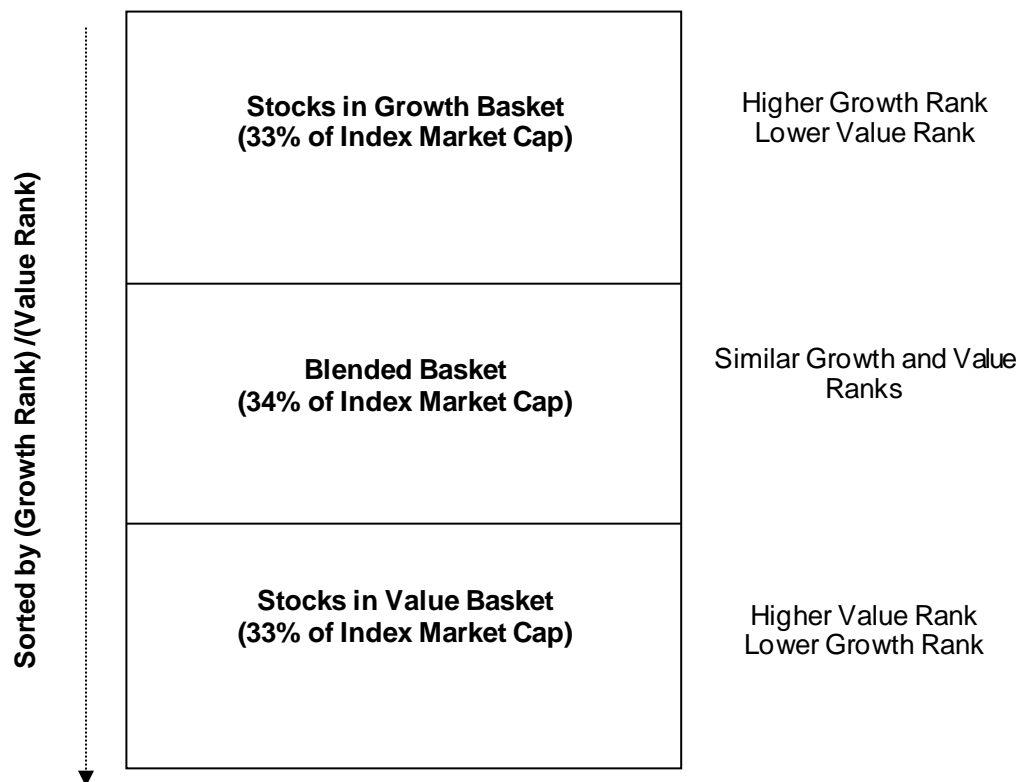
Companies in the parent index are ranked based on growth and value scores. A company with a high Growth Score would have a higher Growth Rank, while a company with a low Value Score would have a lower Value Rank. For example, the constituent with the highest Value Score would have a Value Rank of 1, while the constituent with the lowest Value Score would have a Value Rank of 200.

The index constituents are then sorted in ascending order of Growth Rank/Value Rank ratio. The companies at the top of the list have a higher Growth Rank (or high Growth Score) and a lower Value Rank (or low Value Score), and, therefore, exhibit pure growth characteristics. The companies at the top of the list, comprising 33% of the total index market capitalization, are designated as the Growth basket.

The companies 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 companies at the bottom of the list, comprising 33% of the total index market capitalization, are designated as the Value basket.

Companies 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 below.

Exhibit 2: Style Baskets



Growth and Value Indices

As described earlier, one of the design goals is to construct a Style index series that divides the complete market capitalization of the parent index approximately equally into growth and value indices while limiting the number of stocks that overlap across both. This series is to be exhaustive (i.e., covering all stocks in the parent index universe) and is float market capitalization weighted.

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

The median 34% of the complete float market capitalization of the parent index (i.e., the Blended Basket) consists of companies that have similar growth and value ranks. These similarly ranked companies' market capitalization is distributed among the Style indices based on the companies' respective distances from the midpoint of the Growth basket and the midpoint of the Value basket, as detailed below. The midpoint of each Style region is calculated as the average of Value Scores and Growth Scores of companies in the Style basket.

For Company X,

$W_{V,X}$ = Percent of Float Market Capitalization of Company X in the Value Index.

$W_{G,X}$ = Percent of Float Market Capitalization of Company X in the Growth Index.

$$W_{V,X} = D_{G,X} / (D_{G,X} + D_{V,X}).$$

$$W_{G,X} = D_{V,X} / (D_{G,X} + D_{V,X}).$$

$$W_{V,X} + W_{G,X} = 1.$$

where $D_{G,X}$ and $D_{V,X}$ represent the distances of Company X from the midpoint of each Style basket.

The algorithm for computation of $D_{G,X}$ and $D_{V,X}$ is shown in Appendix I.

Further, from the practical point of view of constructing easily replicable baskets, it is essential to avoid very small fractions of a stock's market capitalization being in a particular Style index. Therefore, the weights are rounded as follows:

If $W_{V,X} \geq 0.8$, $W_{V,X} = 1.0$ and $W_{G,X} = 0$.

If $W_{G,X} \geq 0.8$, $W_{G,X} = 1.0$ and $W_{V,X} = 0$.

Based on back-test results, the total market capitalization is approximately equally divided between the growth and value indices. No mathematical procedure is employed to force equal market capitalization for the growth and value indices, since price movements of constituent stocks would result in inequality immediately following any reconstitution.

It is also worth noting that the assignment of the market capitalization of stocks not in Style baskets to growth and value indices allows graduated moves and avoids the churning of stocks between indices at each reconstitution. Furthermore, this procedure results in only 34% of the market capitalization of the parent index being distributed across both growth and indices, thus limiting the overlap area, and keeping the Style indices manageably narrow.

Index Calculation

The indices calculate following S&P Dow Jones Indices' non-market capitalization-weighted, divisor-based index methodology.

Please refer to S&P Dow Jones Indices' Index Mathematics Methodology for further information on the calculation of market capitalization and non-market capitalization weighted indices.

Index Maintenance

Rebalancing

The indices rebalance annually, effective after the close on the third Friday of December. The reference date for data used in calculating the growth and value expressions is after the close of the second to last Friday of November.

Style Scores, float market-capitalization weights, growth, and value midpoint averages are reset annually at the rebalancing.

Other changes to the indices are made on an as-needed basis as per the guidelines of the parent index. Changes in response to corporate actions and market developments can be made at any time. Constituent changes are typically announced for the underlying index two-to-five days before they are scheduled to be implemented.

Please refer to the S&P/ASX Indices Methodology for information on standard index maintenance for the S&P/ASX200.

Index Changes for Style Indices

Parent Index Action	Adjustment Made to the Style Index	Divisor Adjustment Required?
Constituent Change	<p>If the constituent being dropped is a member of the Style index, it is removed from the index.</p> <p>S&P Dow Jones Indices will announce the W_v and W_G for the replacement stock via the daily index files. If W_v is non-zero, the stock is added to the Value index. If W_G is non-zero, the stock is added to the Growth index. The replacement stock can therefore be added to both Growth and Value indices, or to only one of them.</p> <p>W_v and W_G for the new stock are calculated using GICS averages for stocks outside the S&P/ASX 300 other than spin-offs, and retain their old values for inter-index moves.</p>	Yes
Share Changes Between Quarterly Share Adjustments	Share count follows the parent index's share count.	Yes
Quarterly Share Changes	Share count follows the parent index's share count. In addition, new W_v and W_G for all constituent stocks change at the December rebalancing. These will be pre-announced in a manner similar to that of quarterly share changes.	Yes
Spin-Off	Index Membership follows the parent index's guidelines for index membership. The child stock is assigned the same W_v and W_G as the parent stock.	No

Please refer to the S&P/ASX Indices Methodology for the treatment of other corporate actions in the S&P/ASX200.

For general information on corporate actions, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Currency of Calculation and Additional Index Return Series

The indices are calculated in Australian and U.S. dollars.

Daily index closing values are calculated in U.S. dollars using spot exchange rates taken at 4:17 PM Sydney Time as supplied by Refinitiv.

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

For information on the index calculation, 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 www.spglobal.com/spdji.

Base Dates

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/ASX 200 Growth	10/06/2017	12/17/2004	12/17/2004	1000
S&P/ASX 200 Value	10/06/2017	12/17/2004	12/17/2004	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.

Dividend franking credits are not included in the total return calculations.

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 the S&P/ASX Equity Indices Committee. S&P Dow Jones Indices' chairs the Index Committee, which is comprised of five voting members representing both S&P Dow Jones Indices and the Australian Securities Exchange.

The Index Committee meets regularly to review market developments and convenes as needed to address major corporate actions. At each meeting, the Committee reviews pending corporate actions that may affect index constituents, statistics comparing the composition of the index to the market, companies that are being considered as candidates for addition to the indices, 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.

Market-sensitive announcements, including index constituent additions or deletions, are normally made outside of trading hours.

Index methodology is constantly under review for best practices, and any changes are announced well ahead of time via the Web site and email to all clients.

For more information on S&P Dow Jones Indices' announcements, please refer to the Announcement Policy.

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 as well as their corresponding weights and index shares, effective for the upcoming rebalancing. Since index shares are assigned based on prices prior to the rebalancing, the actual weight of each stock at the rebalancing differs from these weights due to market movements.

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

Holiday Schedule

The index is calculated daily, throughout the calendar year. The only days the index is not calculated are on days when the ASX is officially closed.

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

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, intra-day, index calculations are executed for certain indices whenever the ASX is officially open and trading. 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

Index levels are available through S&P Dow Jones Indices' Web site at www.spglobal.com/spdji, 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 [S&P DJI Methodology & Regulatory Status Database](#) for a complete list of indices covered by this document.

Index	Return Type	Bloomberg
S&P/ASX 200 Growth	Price Return	SPAX2GUP
S&P/ASX 200 Value	Price Return	SPAX2VUP

Index Data

Daily stock level and index data are available via subscription.

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

Web site

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

Appendix I

Calculating Distances from Pure Growth Regions

First, the midpoints of the Growth and Value baskets are determined.

AV_G	=	Average of Growth scores of Value basket members
AV_V	=	Average of Value scores of Value basket members
AG_G	=	Average of Growth scores of Growth basket members
AG_V	=	Average of Value scores of Growth basket members

These four variables are calculated once a year at the annual rebalancing.

For each Stock, X , that does not belong to either style basket, $D_{G,X}$ and $D_{V,X}$ are the distances from the Growth basket and the Value basket. As detailed in the chapter *Index Construction*, the stock's Growth and Value scores are SG_X and SV_X .

Calculation of $D_{G,X}$

If ($SG_X \geq AG_G$),

$$D_{G,X} = |SV_X - AG_V|$$

Else if ($SV_X \leq AG_V$),

$$D_{G,X} = |AG_G - SG_X|$$

Else,

$$D_{G,X} = \sqrt{(SV_X - AG_V)^2 + (AG_G - SG_X)^2}$$

Calculation of $D_{V,X}$

If ($SV_X \geq AV_V$),

$$D_{V,X} = |SG_X - AV_G|$$

Else if ($SG_X \leq AV_G$),

$$D_{V,X} = |AV_V - SV_X|$$

Else,

$$D_{V,X} = \sqrt{(SV_X - AV_V)^2 + (AV_G - SG_X)^2}$$

Appendix II

Methodology Changes

Change	Effective Date (After Close)	Previous	Methodology Updated
Rebalancing Reference Date	09/17/2021	The reference date for data used in calculating the growth and value expressions is after the close of the last trading date of November.	The reference date for data used in calculating the growth and value expressions is after the close of the second to last Friday of November.

Appendix III

EU Required ESG Disclosures

EXPLANATION OF HOW ENVIRONMENTAL, SOCIAL & GOVERNANCE (ESG) FACTORS ARE REFLECTED IN THE KEY ELEMENTS OF THE BENCHMARK METHODOLOGY¹	
1.	Name of the benchmark administrator. S&P Dow Jones Indices LLC.
2.	Underlying asset class of the ESG benchmark.² 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	

¹ 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.

² 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 was not considered; the back-test history is based on the index constituents that meet the custody element as of the Launch Date. Back-tested performance reflects application of an index 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).

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