

S&P Futures Indices *Methodology*

November 2024

Table of Contents

Introduction	2
Index Objective and Highlights	2
Index Family	2
Equity Futures Indices	2
Currency Futures Indices	2
Cryptocurrency Futures Indices	2
Supporting Documents	3
Index Construction	4
Roll Frequency Schedule	4
Calculation of Excess Return Index	5
Calculation of Total Return Index	6
Currency of Calculation and Additional Index Return Series	6
Index Governance	7
Index Committee	7
Index Policy	8
Announcements	8
Holiday Schedule	8
Contact Information	8
Index Dissemination	9
Tickers	9
Index Data	9
Web site	9
Appendix I	10
Calculation of Additional Indices	10
Appendix II	11
S&P 500 Futures Dynamic Participation Index	11
S&P 500 Futures Quanto USD-BRL Currency Adjusted Index (BRL)	12
Appendix III	13
Digital Assets Inherent Risks	13
Appendix IV	14
ESG Disclosures	14
Disclaimer	15
S&P Dow Jones Indices: S&P Futures Indices Methodology	0

Performance Disclosure/Back-Tested Data	15
Intellectual Property Notices/Disclaimer	16
ESG Indices Disclaimer	18

Introduction

Index Objective and Highlights

The S&P Futures Indices measure the performance of the nearest maturing equity, currency, and cryptocurrency futures contract. The indices roll at various frequencies, as defined in *Index Construction*. Each index calculates real-time, with excess return (ER) and total return (TR) versions available.¹

Index Family

Equity Futures Indices

- **S&P 500 Futures Index.** The index measures the performance of the nearest maturing quarterly E-mini S&P 500 futures contract (Symbol: ES) trading on CME.
- **S&P 500 Futures Index (0930-1600 ET) (USD) ER.** This index follows the same methodology as the S&P 500 Futures Index ER, with the exception of real-time calculation hours. For real-time calculation, the index follows the U.S. equity trading schedule, opening at 9:30 AM Eastern Time. The official final closing index levels will be the same as the S&P 500 Futures Index ER.
- **S&P 500 Futures (3 Day Roll) Index.** The index measures the performance of the nearest maturing quarterly E-mini S&P 500 futures contract (Symbol: ES) trading on CME with a three-day roll period.
- **S&P 500 Futures (3 Day Roll) TWAP (3:20-3:30 PM) Index.** The index measures the performance of the S&P 500 Futures (3 Day Roll) Index, using Time-Weighted Average Prices (TWAP) snapped during a window of 3:20-3:30PM.
- **Dow Jones Industrial Average Futures Index.** The index measures the performance of the nearest maturing quarterly E-mini Dow (\$5) futures contract (Symbol: YM) trading on CME.
- **S&P 500 Equal Weight Futures (USD) Index.** This index measures the performance of the nearest maturing quarterly E-mini S&P 500 Equal Weight futures contract (Symbol: EWF) trading on CME.

Currency Futures Indices

- **S&P U.S. Dollar Futures Index.** The index measures the performance of the nearest maturing quarterly U.S. Dollar futures contract (Symbol: DX) trading on ICE.
- **S&P Japanese Yen Futures Index.** The index measures the performance of the nearest maturing quarterly Japanese Yen futures contract (Symbol: JY) trading on CME.
- **S&P Australian Dollar Futures Index.** The index measures the performance of the nearest maturing quarterly Australian Dollar futures contract (Symbol: AD) trading on CME.
- **S&P Euro Futures Index.** The index measures the performance of the nearest maturing quarterly Euro futures contract (Symbol: EC) trading on CME.

Cryptocurrency Futures Indices

- **S&P Bitcoin Futures Daily Roll Index.** The index measures the return from a rolling long position in the two nearest maturing Bitcoin futures contracts (Symbol: BTC) trading on CME.

¹ Spot indices are available for the Cryptocurrency Futures Indices.

- **S&P Bitcoin Futures Index.** The index measures the performance of the nearest maturing monthly Bitcoin futures contract (Symbol: BTC) trading on CME.
- **S&P Ether Futures Index.** The index measures the performance of the nearest maturing monthly Ether futures contract (Symbol: HTE) trading on CME.
- **S&P Cryptocurrency MegaCap Futures Index.** The index measures the performance of holding long positions in the nearest maturing monthly Bitcoin and Ether futures contracts trading on CME.

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' Commodities Indices Policies & Practices Methodology	Commodities Indices Policies & Practices
S&P Dow Jones Indices' Commodity Index Mathematics Methodology	Commodity Index Mathematics 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.

Index Construction

Roll Frequency Schedule

Each ER and TR index is constructed from futures contracts and includes a provision for the replacement of the index futures contracts as the contracts approach maturity (also referred to as “rolling” or “the roll”).

Index	Roll Frequency
S&P 500 Futures Index	Quarterly
S&P 500 Futures Index (0930-1600 ET) (USD) ER	
S&P 500 Futures (3 Day Roll) Index	
Dow Jones Industrial Average Futures Index	
S&P U.S. Dollar Futures Index	
S&P 500 Equal Weight Futures Index (USD)	
S&P Japanese Yen Futures Index	
S&P Australian Dollar Futures Index	
S&P Euro Futures Index	
S&P Bitcoin Futures Daily Roll Index (USD)	
S&P Bitcoin Futures Index (USD)	Monthly ²
S&P Ether Futures Index (USD)	
S&P Cryptocurrency MegaCap Futures Index (USD)	

Equity and Currency Futures Indices. Except for the S&P 500 Futures (3-Day Roll) Index, the replacement for these indices occurs over a one-day rolling period every March, June, September, and December, effective after the close of trading five business days preceding the last trading date of the futures contract.

S&P 500 Futures (3 Day Roll) Index. The replacement occurs over a three-day roll period quarterly in March, June, September, and December, effective after the close of the 6th, 7th, and 8th business day³ preceding the last trading date of the futures contract. The indices roll quarterly and distribute the weights equally each day over a three-day roll period.

Date of the Roll Period	Current Roll Out Contract Weight	Roll In Contract Weight
Day 1	2/3	1/3
Day 2	1/3	2/3
Day 3	0	1

Cryptocurrency Futures Indices. Except for the S&P Bitcoin Futures Daily Roll Index, the replacement occurs over a five-day roll period every month, effective prior to the open of trading five business days preceding the last trading date of the futures contract. The last trading date of the Bitcoin and Ether futures contracts is the last Friday of the contract month. The indices roll monthly and distribute the weights 20% each day over a five-day roll period.

Date of the Roll Period	Current Roll Out Contract Weight	Roll In Contract Weight
Day 1	0.8	0.2
Day 2	0.6	0.4
Day 3	0.4	0.6
Day 4	0.2	0.8
Day 5	0	1

² Spot indices are available for the cryptocurrency futures indices and roll one day earlier than the ER and TR indices.

³ A business day is defined as a day when the CME is open for trading.

S&P Cryptocurrency MegaCap Futures Index. The index is designed to reflect the relative significance of each of the constituent cryptocurrencies to the underlying digital asset market. The market capitalization (or Dollar Weight) of the Bitcoin or Ether futures contract in the index is calculated as the product of the Contract Production Weights (CPWs) multiplied by the respective futures price. At each quarterly re-weighting, the new CPW of each designated constituent cryptocurrency futures contract is set to be the “Effective Coin Supply” of the respective underlying digital asset, determined as of the end of February, May, August, and November. The re-weighting is implemented over the regularly scheduled five-day roll period in March, June, September, and December (Quarterly Rolls).

For more information on Effective Coin Supply, please refer to the Effective Coin Supply and Glossary Sections of the S&P DJI Digital Assets Policies & Practices and Index Mathematics Methodology.

For more information on CPWs, please refer to the S&P GSCI Methodology, available at www.spglobal.com/spdji/.

S&P Bitcoin Futures Daily Roll Index. The contracts roll daily and is completed two days prior to the last trading date (t) of the current contract. On day $t-2$ at market close, the index is 0% in the expiring futures contract (Roll Out Contract, that expires two days later) and 100% in the next futures contract (Roll In Contract, which expires the subsequent month). The last trading date is the last Friday of the contract month. The daily roll percentage is determined on the day when the index is fully rolled from the first month contract to the second month contract and stays constant throughout the month regardless of limit disruption events.

Contract Roll Weights Calculation During Roll Period	First Nearby Contract Expiration	Roll Contract Expiration
Day 1	(1-1/N)	1/N
Day 2	(1-2/N)	2/N
Day 3	(1-3/N)	3/N
Day N*	0	1

Cryptocurrency Futures Indices Contract Calendar. The following table identifies the contracts included in the indices.

Trading Facility	Commodity	Ticker ⁽¹⁾	Designated Contract Expirations at Month Begin											
			1	2	3	4	5	6	7	8	9	10	11	12
CME	Bitcoin	BTC	F	G	H	J	K	M	N	Q	U	V	X	Z
CME	Ether	HTE	F	G	H	J	K	M	N	Q	U	V	X	Z

(1) Tickers are WMR RIC Codes.

For more information on Market Disruptions during the Roll Period, please refer to the Market Disruption Events and Holidays During Roll Period Section of the S&P DJI Commodities Policies & Practices Methodology.

Calculation of Excess Return Index

Excess return of each of the indices is calculated from the price change of the underlying futures contract.

For information on the calculation of the Excess Return index levels, please refer to the Price Weighted Indices section of the S&P Dow Jones Indices' Commodity Index Mathematics Methodology.

Calculation of Total Return Index

The methodology uses a business day count to calculate the interest rate of return instead of actual days.

For information on the calculation of the Total Return index levels, please refer to the Other Derived Indices section focusing on Total Return Index Calculation Using Business Day Counts of the S&P Dow Jones Indices' Commodity Index Mathematics Methodology.

The table below lists the total return indices and corresponding risk-free rate.

Index	Risk-Free Rate	Symbol
S&P 500 Futures Total Return Index	91-Day T-Bill Rate	TBR
S&P 500 Futures (Fed Funds) Total Return Index	Effective Fed Funds Rate	FFR
S&P 500 Futures (3 Day Roll) Total Return Index	91-Day T-Bill Rate	TBR
Dow Jones Industrial Average Futures Total Return Index	91-Day T-Bill Rate	TBR
DJIA Futures Index (Fed Funds) (USD) TR	Effective Fed Funds Rate	FFR
S&P 500 Equal Weight Futures (USD) Index (TR)	91-Day T-Bill Rate	TBR
S&P U.S. Dollar Futures Total Return Index	91-Day T-Bill Rate	TBR
S&P Japanese Yen Futures Total Return Index	91-Day T-Bill Rate	TBR
S&P Australian Dollar Futures Total Return Index	91-Day T-Bill Rate	TBR
S&P Euro Futures Total Return Index	91-Day T-Bill Rate	TBR
S&P Bitcoin Futures Daily Roll Index (USD) TR	91-Day T-Bill Rate	TBR
S&P Bitcoin Futures Index (USD) TR	91-Day T-Bill Rate	TBR
S&P Ether Futures Index (USD) TR	91-Day T-Bill Rate	TBR
S&P Cryptocurrency MegaCap Futures Index (USD) TR	91-Day T-Bill Rate	TBR

Currency of Calculation and Additional Index Return Series

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 the [S&P DJI Methodology & Regulatory Status Database](#).

For information on the calculation of different types of indices, 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/.

Index Governance

Index Committee

An S&P Dow Jones Indices Index Committee maintains the indices. The Index Committee may revise index policy covering rules for including currencies, the timing of rebalancing 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' Commodities Indices Policies & Practices Methodology.

Index Policy

Announcements

Rebalancing announcements, if needed, are made two days prior to the rebalancing date.

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

Holiday Schedule

The indices are calculated daily, throughout the calendar year. The indices follow the NYSE holiday schedule.

A complete holiday schedule for the year is available at www.spglobal.com/spdji/.

For information on Calculations and Pricing Disruptions, Market Disruption Events and Holidays During Roll Period, Expert Judgment, Data Hierarchy, Unexpected Exchange Closures and Error Corrections, please refer to S&P Dow Jones Indices' Commodities Indices Policies & Practices Methodology.

Contact Information

For 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 the [S&P DJI Methodology & Regulatory Status Database](#) for a complete list of indices covered by this document.

Index Name	BBG - Real Time	BBG	RIC	Launch Date	Base Date	Base Value
S&P 500 Futures Excess Return Index	SPXFP	--	.SPXFP	09/09/1997	08/02/2010	100
S&P 500 Futures Total Return Index	SPXFTR	--	.SPXFTR	09/09/1997	08/02/2010	100
S&P 500 Futures Index (0930-1600 ET) (USD) ER		SPXFPE	.SPXFPE	01/08/2024	12/30/2022	353
S&P 500 Futures Dynamic Participation Index (ER)	--	SP500FDP	.SP500FDP	10/20/2023	02/02/1999	1000
S&P 500 Futures (Fed Funds) Index (USD) TR	--	--	--	12/21/2020	09/09/1997	100
Dow Jones Industrial Average Futures Excess Return Index	DJIAFP	--	.DJIAFP	04/08/2015	06/14/2002	100
Dow Jones Industrial Average Futures Total Return Index	DJIAFTR	--	.DJIAFTR	04/08/2015	06/14/2002	100
S&P U.S. Dollar Futures Excess Return Index	SPUSDP	--	.SPUSDP	09/09/1997	08/02/2010	100
S&P 500 Equal Weight Futures Index (USD) ER	--	SPXEWFP	.SPXEWFP	05/06/2024	02/23/2024	100
S&P 500 Equal Weight Futures Index (USD) TR	--	SPXEWFT	.SPXEWFT	05/06/2024	02/23/2024	100
S&P U.S. Dollar Futures Total Return Index	SPUSDTR	--	.SPUSDTR	09/09/1997	08/02/2010	100
S&P Japanese Yen Futures Excess Return Index	SPJPYFP	--	.SPJPYFP	04/08/2015	03/10/1980	100
S&P Japanese Yen Futures Total Return Index	SPJPYFTR	--	.SPJPYFTR	04/08/2015	03/10/1980	100
S&P Australian Dollar Futures Excess Return Index	SPAUDFP	--	.SPAUDFP	04/08/2015	03/10/1987	100
S&P Australian Dollar Futures Total Return Index	SPAUDFTR	--	.SPAUDFTR	04/08/2015	03/10/1987	100
S&P Euro Futures Excess Return Index	SPEUFP	--	.SPEUFP	06/22/2015	06/07/1999	100
S&P Euro Futures Total Return Index	SPEUFTR	--	.SPEUFTR	06/22/2015	06/07/1999	100
S&P 500 Annual Dividend Futures 2023 Index	SPXADF3T	--	.SPXADF3T	09/21/2020	09/29/2017	100
S&P 500 Annual Dividend Futures 2024 Index	SPXADF4T	--	.SPXADF4T	01/10/2022	09/29/2017	100
S&P 500 Annual Dividend Futures 2025 Index	SPXADF5T	--	.SPXADF5T	10/24/2022	09/29/2017	100
S&P 500 Annual Dividend Futures 2026 Index	SPXADF6T	--	.SPXADF6T	10/24/2022	09/29/2017	100
S&P 500 Annual Dividend Futures 2027 Index	SPXADF7T	--	.SPXADF7T	10/24/2022	09/29/2017	100
S&P 500 Annual Dividend Futures 2028 Index	SPXADF8T	--	.SPXADF8T	10/24/2022	09/29/2017	100

Index Data

Daily index level data is 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

Calculation of Additional Indices

S&P 500 Futures KRW Hedged (Fed Funds) (3PM KST Rate) Index

The index is calculated in Korean won and hedged using the 3:00 PM Korean standard rate.

S&P 500 Annual Dividend Futures Index Family

Index Objective. The S&P 500 Annual Dividend Futures Indices are constructed from the corresponding year's S&P 500 annual dividend futures contract traded on the CME. The table below lists the indices, futures contracts, and corresponding contract symbols:

Index	Underlying Futures Contract	Symbol	Exchange
S&P 500 Annual Dividend Futures 2024 Index	S&P 500 Annual Dividend Index Futures – DEC 2024	SDAZ4	CME
S&P 500 Annual Dividend Futures 2025 Index	S&P 500 Annual Dividend Index Futures – DEC 2025	SDAZ5	CME
S&P 500 Annual Dividend Futures 2026 Index	S&P 500 Annual Dividend Index Futures – DEC 2026	SDAZ6	CME
S&P 500 Annual Dividend Futures 2027 Index	S&P 500 Annual Dividend Index Futures – DEC 2027	SDAZ7	CME
S&P 500 Annual Dividend Futures 2028 Index	S&P 500 Annual Dividend Index Futures – DEC 2028	SDAZ8	CME

Exchange abbreviations:

CME – Chicago Mercantile, Inc. or its successor.

Futures Roll. The indices do not roll.

Calculation of Spot Index. The spot return of each of the indices is calculated from the price change of the underlying futures contract. On any trading date, t , the level of each of the sub-indices is calculated as follows:

$$IndexSPOT_d = IndexSPOT_{d-1} * (1 + CDR_d)$$

where:

$IndexSPOT_{d-1}$ = The Spot Index level on the preceding business day, defined as any date on which the index is calculated.

CDR_d = The Contract Daily return, defined as:

$$CDR_d = \frac{DCRP_t}{DCRP_{t-1}} - 1$$

where:

$DCRP_t$ = The Daily Contract Reference Price of the futures contract.

Calculation of Index Total Return. The total return calculation follows the same calculation as the other total return indices, but uses the daily Effective Federal Funds Rate defined in the Overnight Fed Fund Rate Index Total Return Calculation section of the S&P Dow Jones Indices' Commodity Index Mathematics Methodology.

Calculation Shutdown. After each index's contract expires, the index ceases publication.

Appendix II

S&P 500 Futures Dynamic Participation Index

Index Objective. The index measures the performance of a strategy that dynamically applies leverage to the S&P 500 Futures Index ER when the index level at market close is below the trailing 10-day moving average.

Index Calculation. At the end of each trading day, the index compares the current S&P 500 Futures Excess Return index level to the 10-day moving average of the index level. The index applies a leverage multiple of 50 to the percentage difference in the current index level to the 10-day moving average, with the leverage capped at 100% and maximum total participation set to 200%.

Moving Average on date t : $MA_{(t)} = \frac{1}{10} \sum_{i=1}^{n=10} SP_{(t-i)}$

where:

SP = S&P 500 Futures excess return index level

Leverage on date t : $L_{(t)} = \text{Min} [LC, LM * \text{Max}(MA_{(t)} / SP_{(t)} - 1, 0)]$

where:

Leverage Cap (LC) = 100%

Leverage Multiplier (LM) = 50

Index Level on date t : $SP500LMR_{(t)} = SP500LMR_{(t-1)} * \{ 1 + SPR_{(t)} * [1 + L_{(t-1)}] \}$

where:

$SPR_t = SP_t / SP_{t-1} - 1$

Rebalancing. The index rebalances daily. Leverage is evaluated daily at the close of each trading day and effective prior to the open of the next trading day.

S&P 500 Futures Quanto USD-BRL Currency Adjusted Index (BRL)

Index Objective. The index measures the performance of the nearest maturing quarterly E-mini S&P 500 Futures contract (Symbol: ISP) trading on B3 with a three-day roll period. The index represents the return of the daily settlement price of underlying futures contract in Brazilian Reals (BRL) using the B3 exchange rate of BRL per USD (Symbol: BRL02REF=BMF).

Index Calculation. The quanto currency adjusted index calculates as follows:

$$Index\ ER_t = Index\ ER_{t-1} * \left(1 + \frac{S_t}{S_{t-1}} * \left(\frac{UF_t}{UF_{t-1}} - 1 \right) \right)$$

where:

$Index\ ER_t$ = Quanto currency-adjusted index level as of day t

UF_t = Underlying futures index level as of day t

S_t = USD/BRL spot rate as of day t

Calculation of Index Total Return. The total return index includes the reinvestment rate for the initial cash outlay between dates $t - 1$ and t and calculates as follows:

$$Index\ TR_t = Index\ ER_{t-1} + DIAR_{t-1}^{1/252}$$

where:

$DIAR_t$ = The daily CETIP interbank overnight rate (Symbol: BRCDICETIP=RR) as of day t

Roll Frequency Schedule. The replacement occurs over a three-day roll period quarterly in March, June, September, and December, effective after the close of the third, fourth, and fifth business day preceding the last trading date of the futures contract. The indices roll quarterly and distribute the weights equally each day over a three-day roll period.

Date of the Roll Period	Current Roll Out Contract Weight	Roll In Contract Weight
Day 1	2/3	1/3
Day 2	1/3	2/3
Day 3	0	1

Appendix III

Digital Assets Inherent Risks

Price Volatility

Digital assets have historically experienced significant intraday and long-term price swings.

Spot Markets

The spot markets through which cryptocurrencies trade are new and largely unregulated. Furthermore, many spot markets and over-the-counter market venues, do not provide the public with significant information regarding their ownership structure, management teams, corporate practices, or oversight of customer trading. As a result, the marketplace may lose confidence in, or may experience problems relating to, these venues. Spot markets may impose daily, weekly, monthly, or customer-specific transaction or withdrawal limits or suspend withdrawals entirely, rendering the exchange of bitcoin for fiat currency difficult or impossible. Participation in spot markets requires users to take on credit risk by transferring bitcoin from a personal account to a third party's account.

Market Adoption

It is possible that digital assets generally or any digital asset in particular will never be broadly adopted by either the retail or commercial marketplace, in which case, one or more digital assets may lose most, if not all, of its value.

Government Regulation

The regulatory framework of digital assets remains unclear and application of existing regulations and/or future restrictions by international, federal, and state authorities may have a significant impact on the value of digital assets.

Security

There have been significant incidents of digital asset theft and digital assets remain a potential target for hackers. Digital assets that are lost or stolen cannot be replaced, as transactions are irrevocable.

Other

Digital assets are susceptible to error and can be affected by forks, discontinuation, and/or suspension in trading.

Appendix IV

ESG Disclosures

EXPLANATION OF HOW ENVIRONMENTAL, SOCIAL & GOVERNANCE (ESG) FACTORS ARE REFLECTED IN THE KEY ELEMENTS OF THE BENCHMARK METHODOLOGY⁴		
1.	Name of the benchmark administrator.	S&P Dow Jones Indices LLC.
2.	Underlying asset class of the ESG benchmark.⁵	N/A
3.	Name of the S&P Dow Jones Indices benchmark or family of benchmarks.	S&P DJI Futures Indices Benchmark Statement
4.	Do any of the indices maintained by this methodology consider ESG factors?	No
Appendix latest update:		January 2021
Appendix first publication:		January 2021

⁴ 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].

⁵ 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 by 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. Also, the treatment of corporate actions in back-tested performance may differ from treatment for live indices due to limitations in replicating index management decisions. 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).

Intellectual Property Notices/Disclaimer

© 2024 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 should not be made in reliance on any of the statements 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.

ESG Indices Disclaimer

S&P DJI provides indices that seek to select, exclude, and/or weight index constituents based on, but not limited to, certain environmental, social or governance (ESG) indicators, or a combination of those indicators, including the following: environmental indicators (including the efficient use of natural resources, the production of waste, greenhouse gas emissions, or impact on biodiversity); social indicators (such as, inequality and investment in human capital); governance indicators (such as sound management structures, employee relations, remuneration of staff, tax compliance, respect for human rights, anti-corruption and anti-bribery matters), specific sustainability or values-related company involvement indicators (for example, production/distribution of controversial weapons, tobacco products, or thermal coal), or controversies monitoring (including research of media outlets to identify companies involved in ESG-related incidents).

S&P DJI ESG indices use ESG metrics and scores in the selection and/or weighting of index constituents. ESG scores or ratings seek to measure or evaluate a company's, or an asset's, performance with respect to environmental, social and corporate governance issues.

The ESG scores, ratings, and other data used in S&P DJI ESG indices is supplied directly or indirectly by third parties (note these parties can be independent affiliates of S&P Global or unaffiliated entities) so an S&P DJI ESG index's ability to reflect ESG factors depends on these third parties' data accuracy and availability.

ESG scores, ratings, and other data may be reported (meaning that the data is provided as disclosed by companies, or an asset, or as made publicly available), modelled (meaning that the data is derived using a proprietary modelling process with only proxies used in the creation of the data), or reported and modelled (meaning that the data is either a mix of reported and modelled data or is derived from the vendor using reported data /information in a proprietary scoring or determination process).

ESG scores, ratings, and other data, whether from an external and/or internal source, is based on a qualitative and judgmental assessment, especially in the absence of well-defined market standards, and due to the existence of multiple approaches and methodologies to assess ESG factors and considerations. An element of subjectivity and discretion is therefore inherent in any ESG score, rating, or other data and different ESG scoring, rating, and/or data sources may use different ESG assessment or estimation methodologies. Different persons (including ESG data ratings, or scoring providers, index administrators or users) may arrive at different conclusions regarding the sustainability or impact of a particular company, asset, or index.

Where an index uses ESG scores, ratings or other data supplied directly or indirectly by third parties, S&P DJI does not accept responsibility for the accuracy or completeness of such ESG scores, ratings, or data. No single clear, definitive test or framework (legal, regulatory, or otherwise) exists to determine 'ESG', 'sustainable', 'good governance', 'no adverse environmental, social and/or other impacts', or other equivalently labelled objectives. In the absence of well-defined market standards and due to the existence of multitude approaches, the exercise of judgment is necessary. Accordingly, different persons may classify the same investment, product and/or strategy differently regarding 'ESG', 'sustainable', 'good governance', 'no adverse environmental, social and/or other impacts', or other equivalently labelled

objectives. Furthermore, the legal and/or market position on what constitutes an 'ESG', 'sustainable', 'good governance', 'no adverse environmental, social and/or other impacts', or other equivalently labelled objectives may change over time, especially as further regulatory or industry rules and guidance are issued and the ESG sustainable finance framework becomes more sophisticated.

Prospective users of an S&P DJI ESG Index are encouraged to read the relevant index methodology and related disclosures carefully to determine whether the index is suitable for their potential use case or investment objective.