S&P Dow Jones Indices

A Division of S&P Global

S&P 500 Futures Volatility Compass Indices
Methodology

September 2025

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Introduction

Index Objective and Highlights

The S&P 500 Futures Volatility Compass Indices measure the performance of a long-only, dynamically adjusted strategy that allocates to the E-mini S&P 500 futures contract. The indices target a specified volatility level by rebalancing intraday based on time-weighted average prices (TWAPs) that calculate during different daily time windows. The indices apply a trend signal derived from the delta of a hypothetical put spread and lever to achieve the target volatility. Certain indices include a transaction cost adjustment (TCA).

For more information on the S&P 500, please refer to the S&P U.S. Indices Methodology, available at www.spglobal.com/spdji.

Index Family

Index Name	Volatility Target ($voltgt$)	Maximum Leverage ($maxlev$)	Decrement Factor (DF)	Transaction Cost ($tcost$)
S&P 500 Futures 35% Volatility Compass Index (USD) ER	35%	500%	0%	0%
S&P 500 Futures 35% Volatility Compass 6% Decrement Index (USD) ER	35%	500%	6%	0%
S&P 500 Futures 35% Volatility Compass TCA 6% Decrement Index (USD) ER	35%	500%	6%	0.01%

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
S&P Dow Jones Indices' Index Mathematics Methodology	Index Mathematics Methodology
S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology	Equity Indices Policies & Practices

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

Index Calculation

For each index calculation day, the index calculates multiple times using intraday calculation windows. The index's closing level is the index level calculated at the end of the last intraday calculation window:

$$Index_t = Index_{t,last}$$

where:

$Index_t$ = The closing level of the index for day t

$Index_{t,last}$ = The intraday index level as of the end of the final calculation window for day t

For the index initialization calculation window, $Index_{t,h} = 100$. For every subsequent calculation window h[1], the intraday index level calculates as:

$$Index_{t,h} = Index_{t,h-1} \times \left[1 + W_{t,h-1} \times \left(\frac{FutIdx_{t,h}}{FutIdx_{t,h-1}} - 1\right) - tcost \times \left|W_{t,h} - W_{t,h-1}\right| - DF \times \frac{Act(h, h-1)}{360}\right]$$

where:

$Index_{t,h}$ = The intraday index level as of the end of calculation window h of day t

$FutIdx_{t,h}$ = The rolling futures index level as of the end of calculation window h of day t

$W_{t,h}$ = The actual exposure held in the rolling futures index as of the end of calculation window h of day t

$tcost$ = The transaction cost rate for the index

DF = The decrement factor for the index

$Act(h, h-1)$ = The number of calendar days between the dates associated with calculation window h and calculation window $h-1$

For the index initialization calculation window, the actual exposure held in the rolling futures index calculates as:

$$W_{t,h} = TW_{t,h}$$

For every subsequent calculation window h, the actual exposure held in the rolling futures index calculates as:

$$W_{t,h} = \max\left(W_{t,h-1} - maxchg, min\left(W_{t,h-1} + maxchg, TW_{t,h}\right)\right)$$

where:

$maxchg$ = The maximum allowed window-to-window weight change, set to 25%

$TW_{t,h}$ = The target exposure to be held in the rolling futures index as of the end of calculation window h of day t

[1] For any formula referencing intraday windows, whenever h refers to the first calculation window of day t, $h-1$ refers to the value as of the last window of day $t-1$.

The target exposure to be held in the rolling futures index as of the end of calculation window h of day t calculates as:

$$TW_{t,h} = \max\left(0, min\left(maxlev, \frac{voltgt}{SynVol_{t,h-1}} \times trnd_{t,h-1} \times VAF_{t,h}\right)\right)$$

where:

$maxlev$ = The maximum allowed leverage for the index

$voltgt$ = The target volatility level for the index

$SynVol_{t,h-1}$ = The volatility of the synthetic asset as of the end of calculation window $h-1$ of day t

$trnd_{t,h-1}$ = The trend overlay factor value as of the end of calculation window $h-1$ of day t

$VAF_{t,h}$ = The volatility adjustment factor value as of the end of calculation window h of day t

The volatility of the synthetic asset as of the end of calculation window h of day t calculates as:

$$SynVol_{t,h} = \max\left(SynVol_{t,h}^{5}, SynVol_{t,h}^{42}\right)$$

$$SynVol_{t,h}^{days} = \sqrt{\frac{252 \times 7}{days \times 7 - 1} \times \sum_{j=0}^{D} \sum_{k=0}^{M-1} SynRet_{t-j,h-k}^{2}}$$

$$SynRet_{t,h} = \ln\left(\frac{SA_{t,h}}{SA_{t,h-1}}\right)$$

where:

$SA_{t,h}$ = The value of the synthetic asset as of the end of calculation window h of day t

M = The number of intraday windows on a given day t

D = The number of days included such that the total number of observations of $SynRet_{t,h}$ equals $days \times 7$

If day t and calculation window h represent the calculation window that is 295 windows prior to the intraday index initialization window, then:

$$SA_{t,h} = 100$$

For every subsequent calculation window h, the value of the synthetic asset calculates as:

$$SA_{t,h} = SA_{t,h-1} \times \left[1 + \left(\frac{FutIdx_{t,h}}{FutIdx_{t,h-1}} - 1\right) \times trnd_{t,h-1}\right]$$

The trend overlay factor value calculates using a set of hypothetical options on the rolling futures index. The index is not linked to the actual value of any options; no options are traded by the index and the options are not index components.

For all calculation windows that are earlier than 295 windows prior to the intraday index initialization window, the trend overlay factor value calculates as:

$$trnd_{t,h} = N/A$$

For every subsequent calculation window h, the trend overlay factor value calculates as:

$$trnd_{t,h} = 1 + \sum_{i=1}^{294} \frac{Signal_{t,h}^{i}}{294}$$

$$Signal_{t,h}^{i} = TrndSig_{t,h}^{i,0.98} - TrndSig_{t,h}^{i,0.90}$$

$$TrndSig_{t,h}^{i,K} = \begin{cases} 0 & \text{if } i = 294 \text{ and } \dfrac{FutIdx_{t,h}}{\dfrac{FutIdx_{t,h-i}}{K}} > 1 \\ -1 & \text{if } i = 294 \text{ and } \dfrac{FutIdx_{t,h}}{\dfrac{FutIdx_{t,h-i}}{K}} \leq 1 \\ norm\left(d1_{t,h}^{i,K}\right) - 1 & \text{otherwise} \end{cases}$$

$$d1_{t,h}^{i,K} = \frac{\left(\ln\left(\dfrac{FutIdx_{t,h}}{\dfrac{FutIdx_{t,h-i}}{K}} \right) + 0.5 \times \left(FutVol_{t,h}\right)^2 \times \left(\dfrac{294-i}{252 \times 7}\right) \right)}{FutVol_{t,h} \times \sqrt{\dfrac{294-i}{252 \times 7}}}$$

where:

$FutVol_{t,h}$ = The volatility of the rolling futures index as of the end of calculation window h of day t

$norm(\cdot)$ = The standard normal cumulative distribution function

The volatility of the rolling futures index as of the end of calculation window h of day t calculates as:

$$FutVol_{t,h} = \max\left(FutVol_{t,h}^{5}, FutVol_{t,h}^{42}\right)$$

$$FutVol_{t,h}^{days} = \sqrt{\frac{252 \times 7}{days \times 7 - 1} \times \sum_{j=0}^{D} \sum_{k=0}^{M-1} FutRet_{t-j,h-k}^{2}}$$

$$FutRet_{t,h} = \ln\left(\frac{FutIdx_{t,h}}{FutIdx_{t,h-1}}\right)$$

where:

M = The number of intraday windows on a given day t

D = The number of days included such that the total number of observations of $FutRet_{t,h}$ equals $days \times 7$

If day t and calculation window h represent the calculation window that is 589 windows prior to the intraday index initialization window, then the rolling futures index level calculates as:

$$FutIdx_{t,h} = 100$$

For every subsequent calculation window h, the rolling futures index level calculates as:

$$FutIdx_{t,h} = \begin{cases} FutIdx_{t,h-1} \times \dfrac{FutPx_{t,h}}{FutPx_{t,h-1}} & \text{if day } t \text{ is not an index futures roll day} \\ FutIdx_{t,h-1} \times \dfrac{FutPx_{t,h}}{FutPx_{t,h-1}} & \text{if day } t \text{ is an index futures roll day and calculation window } h \text{ is the first window of the day} \\ FutIdx_{t,h-1} \times \dfrac{FutPx_{t,h}}{NewFutPx_{t,h-1}} & \text{if day } t \text{ is an index futures roll day and calculation window } h \text{ is the second window of the day} \\ FutIdx_{t,h-1} \times \dfrac{FutPx_{t,h}}{FutPx_{t,h-1}} & \text{if day } t \text{ is an index futures roll day and calculation window } h \text{ is after the second window of the day} \end{cases}$$

where:

$FutPx_{t,h}$ = The TWAP of the currently held E-mini S&P 500 Futures contract calculated over calculation window h of day t

$NewFutPx_{t,h-1}$ = The TWAP of the E-mini S&P 500 Futures contract that was rolled into calculated over calculation window $h-1$ of day t

For all calculation windows starting with the index initialization window until and including the calculation window that is 840 windows after the index initialization window, the volatility adjustment factor value calculates as:

$$VAF_{t,h} = 1$$

For every subsequent calculation window h, the volatility adjustment factor value calculates as:

$$VAF_{t,h} = \max\left(VAF_{t,h}^{intra}, VAF_{t,h}^{daily}\right)$$

$$VAF_{t,h}^{intra} = \min\left(1.3, max\left(1.0, \sqrt{max\left(0{,}2 \times \left(\frac{voltgt}{IntraVol_{t,h-1}}\right)^2 - 1\right)}\right)\right)$$

$$VAF_{t,h}^{daily} = \min\left(1.3, max\left(1.0, \sqrt{max\left(0{,}2 \times \left(\frac{voltgt}{DailyVol_{t-1}}\right)^2 - 1\right)}\right)\right)$$

$$IntraVol_{t,h} = \sqrt{\frac{252 \times 7}{21 \times 7 - 1} \times \sum_{j=0}^{D} \sum_{k=0}^{M-1} \left(IntraRet_{t-j,h-k} - \overline{IntraRet_{t,h}}\right)^2}$$

$$\overline{IntraRet_{t,h}} = \frac{1}{21 \times 7} \times \sum_{j=0}^{D} \sum_{k=0}^{M-1} IntraRet_{t-j,h-k}$$

$$IntraRet_{t,h} = \frac{Index_{t,h}}{Index_{t,h-1}} - 1$$

$$DailyVol_t = \sqrt{\frac{252}{120 - 1} \times \sum_{p=0}^{119} \left(DailyRet_{t-p} - \overline{DailyRet_t}\right)^2}$$

$$\overline{DailyRet_t} = \frac{1}{120} \times \sum_{p=0}^{119} DailyRet_{t-p}$$

$$DailyRet_t = \frac{Index_t}{Index_{t-1}} - 1$$

where:

M = The number of intraday windows on a given day t

D = The number of days included such that the total number of observations of $IntraRet_{t,h}$ equals 21×7

TWAP Calculations

All indices' futures contract TWAPs calculate using the quoted futures contracts' mid-prices.

The price of a futures contract for a given time-window h and interval k on day t calculates as:

$$FutPrice_{t,h}^{k} = \begin{cases} \frac{FutBidPrice_{t,h}^{k} + FutAskPrice_{t,h}^{k}}{2} & \text{if both } FutBidPrice_{t,h}^{k} \text{ and } FutAskPrice_{t,h}^{k} \text{ exist} \\ N/A & \text{otherwise} \end{cases}$$

where:

$FutBidPrice_{t,h}^{k}$ = Last quoted bid-price of the futures contract during interval k of time-window h on day t

$FutAskPrice_{t,h}^{k}$ = Last quoted ask-price of the futures contract during interval k of time-window h on day t

The TWAP of a futures contract for a given time-window h on day t calculates as:

$$FutTWAP_{t,h} = \frac{\sum_k \left(\delta_{t,h}^{k} \times FutPrice_{t,h}^{k}\right)}{\sum_k \delta_{t,h}^{k}}$$

where:

$\delta_{t,h}^{k}$ = 1 if $FutPrice_{t,h}^{k}$ is available, 0 otherwise

Index Maintenance

Rebalancing

The indices rebalance intraday at the end of each TWAP calculation window.

Futures Rolling Method

The index rolls out of the current active futures contract and into the next active futures contract four business days prior to the active futures contract expiry date quarterly in March, June, September, and December. The index rolls at the end of the first calculation window on the roll day if there was no disruption during that window. Otherwise, the roll is moved to the end of the next available non-disrupted window.

Calculation Windows

For each scheduled full trading day, the calculation windows are defined as follows:

Window (h)	Start Time	End Time	Interval	Time Zone
1	09:40:00	09:50:00	60 sec	U.S./Eastern
2	10:40:00	10:50:00	60 sec	U.S./Eastern
3	11:40:00	11:50:00	60 sec	U.S./Eastern
4	12:40:00	12:50:00	60 sec	U.S./Eastern
5	13:40:00	13:50:00	60 sec	U.S./Eastern
6	14:40:00	14:50:00	60 sec	U.S./Eastern
7*	16:00:00	16:00:00	N/A	U.S./Eastern

For any trading day scheduled as an early market close day (13:00 ET), the calculation windows are defined as follows:

Window (h)	Start Time	End Time	Interval	Time Zone
1	09:40:00	09:50:00	60 sec	U.S./Eastern
2	10:40:00	10:50:00	60 sec	U.S./Eastern
3	11:40:00	11:50:00	60 sec	U.S./Eastern
4*	13:00:00	13:00:00	N/A	U.S./Eastern

** For the seventh calculation window on full trading days and the fourth calculation window on early market close days, a TWAP does not calculate. Instead, the index uses the settlement price of the relevant futures contract.*

Market Disruptions

If the underlying futures experience an interruption, and there are no recorded prices during the relevant TWAP calculation window, the complete calculation window is considered disrupted and the index skips that window's rebalancing with no change in weight from the previous window.

In the event of a disruption occurring within a futures contract roll intraday window, the roll shifts to the next available non-disrupted window.

If the underlying futures experience a failure while calculating the futures TWAP over the calculation window where there is no valid quote each minute, the window is disrupted and the exposure adjusts only

by the $Executed\ Size$. $Executed\ Size$ calculates as the number of minutes with a level, divided by the total number of minutes in the calculation window, according to the process below:

- If there are no failures and if the calculation window is from 09:40:00 to 09:50:00 Eastern Time, there are 10 one-minute price observations during the window.
- For example, if a valid price is missing for an entire minute (e.g., there is not a single valid quoted mid-price within that minute), that minute is considered disrupted. If nine out of 10 minutes have valid quotes, the $Executed\ Size$ is defined as 9/10 = 90%.
- The actual exposure held in the rolling futures index as of the end of calculation window h calculates as:

$$W_{t,h}^{adj} = W_{t,h-1} + Executed\ Size \times \left(W_{t,h}^{expected} - W_{t,h-1}\right)$$

where:

$W_{t,h}^{expected}$ = Exposure the strategy would have rebalanced into assuming no disruptions, referred to as $W_{t,h}$

For further information on the impact of unavailable pricing on the TWAP calculation, please refer to the Pricing Types section of S&P Dow Jones Indices' Commodities Indices Policies & Practices Methodology.

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

Currency of Calculation and Additional Index Return Series

The index calculates in U.S. dollars.

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 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 Date and History Availability

The 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 500 Futures 35% Volatility Compass Index (USD) ER	09/05/2025	01/15/1998	12/29/2006	100
S&P 500 Futures 35% Volatility Compass 6% Decrement Index (USD) ER	09/05/2025	01/15/1998	12/29/2006	100
S&P 500 Futures 35% Volatility Compass TCA 6% Decrement Index (USD) ER	09/05/2025	01/15/1998	12/29/2006	100

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 index committee maintains the index. All committee members are full-time professional members of S&P Dow Jones Indices' staff. The Index Committee meets regularly. At each meeting, the 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 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 Equity Indices Policies & Practices Methodology.

Index Policy

Announcements

Announcements of the daily index values are made after the market close each day.

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

Holiday Schedule

The index calculates daily, throughout the calendar year, when the U.S. equity markets are open.

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 Commodities Indices Policies & Practices Methodology.

Recalculation Policy

Intraday index calculations are executed for some index versions whenever the index's primary exchanges are open. In case an issue arises during calculation, the index is restated, based on feasibility assessment by the index committee, for every reported intraday index level period following the issue.

Real-Time Calculation

Real-time, intraday, index calculations are executed for some versions of the index, whenever the index's primary exchanges are open. Real-time indices are not restated.

For information on Calculations and Pricing Disruptions, Expert Judgment and Data Hierarchy, please refer to S&P 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	BBG	RIC
S&P 500 Futures 35% Volatility Compass Index (USD) ER	--	--
S&P 500 Futures 35% Volatility Compass 6% Decrement Index (USD) ER	--	--
S&P 500 Futures 35% Volatility Compass TCA 6% Decrement Index (USD) ER	SPFVC6TD	.SPFVC6TD

Index Data

Daily constituent and index level 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*.

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).

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