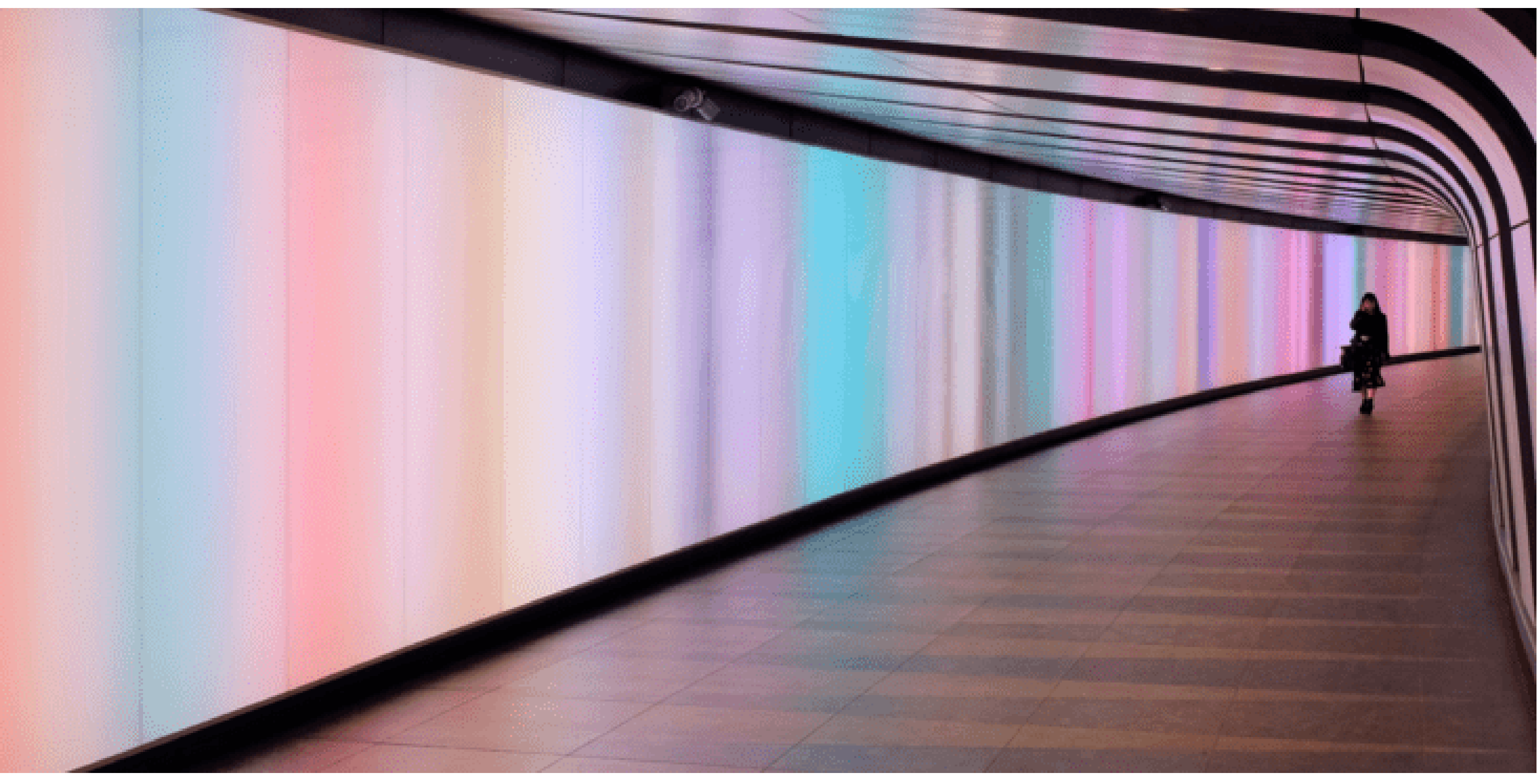
The S&P 500 Dynamic Intraday TCA Index

The Next Generation of Volatility Management Is Here



More than 10 years of advancements in risk control index technology and the growth of volume in the S&P 500® ecosystem helped shape the next generation of risk control. The S&P 500 Dynamic Intraday TCA Index ("S&P 500 Dynamic Intraday Index" or the "Index") is designed to measure exposure to the S&P 500 while applying a trend-following mechanism and intraday volatility control. The Index employs 13 observation windows throughout the trading day to adapt to changing market conditions as it seeks a more stable volatility experience compared to traditional risk control indices.

S&P Dow Jones Indices

A Division of S&P Global

Why Use the S&P 500?

With more than 65 years of live index history, the S&P 500 is widely regarded as the best single gauge of U.S. large-cap equities. Its constituents span all 11 GICS® sectors and cover approximately 80% of U.S. equity market capitalization. The 500™ supports a large and robust trading ecosystem, including index futures and options, which generated USD 271 trillion in index equivalent trading volume in 2022.

How Does the S&P 500 Dynamic Intraday Index Work?

The S&P 500 Dynamic Intraday Index aims to measure exposure to the S&P 500 with controlled volatility by utilizing S&P 500 futures contracts via E-mini S&P 500 Futures. The S&P 500 Dynamic Intraday Index adjusts its allocation to S&P 500 E-Mini Futures based on observations of intraday price movements. Trend signals guide rebalancing to help the index respond to market movements while seeking to maintain its **15% volatility target**.

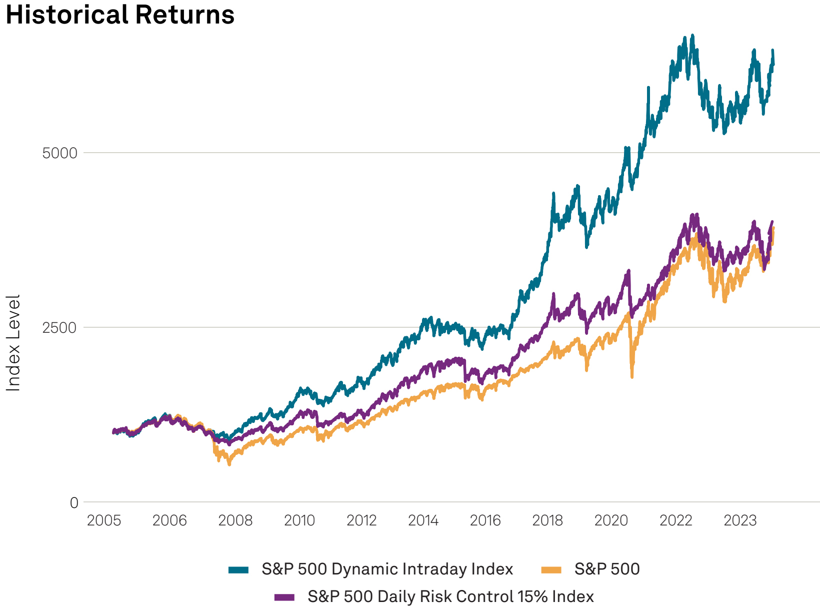
Key Characteristics

- Responsive volatility control
- 15% volatility target allows for higher potential S&P 500 exposure
- Rebalanced up to 13 times/day
- More stable volatility versus traditional risk control indices, historically

Historical Returns versus Traditional Risk Control

The S&P 500 Dynamic Intraday Index's cumulative returns versus traditional risk control indices are higher due to the more frequent rebalancing.

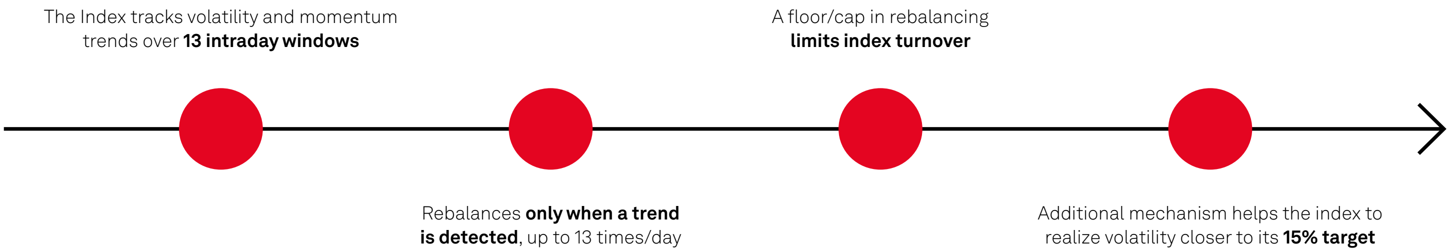
Historical Returns



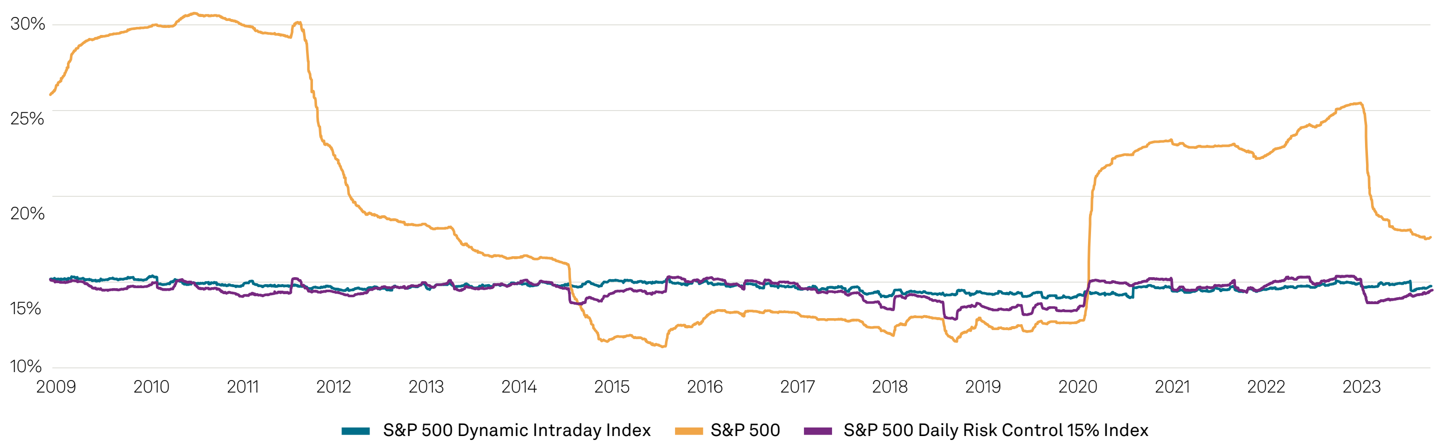
Year	S&P 500 Dynamic Intraday Index	S&P 500	S&P 500 Daily Risk Control 15% Index
2011	1.88%	-0.02%	-3.61%
2012	15.31%	13.41%	10.35%
2013	36.97%	29.60%	39.12%
2014	6.02%	11.39%	11.21%
2015	-4.51%	-0.73%	-6.02%
2016	8.75%	9.54%	9.00%
2017	45.76%	19.42%	32.18%
2018	-2.13%	-6.24%	-5.95%
2019	28.26%	28.88%	23.15%
2020	18.41%	16.26%	3.71%
2021	14.09%	26.89%	27.12%
2022	-14.76%	-19.44%	-15.94%
2023	19.86%	24.23%	17.44%

Source: S&P Dow Jones Indices LLC. Data from Dec. 30, 2005, to Dec. 29, 2023. Index performance based on excess return in USD. The S&P 500 Dynamic Intraday TCA Index was launched Aug. 14, 2023. The S&P 500 Daily Risk Control 15% Index was launched Sept. 9, 2009. All data prior to index launch date is back-tested hypothetical data. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

How Do the Index Volatility Mechanisms Work?

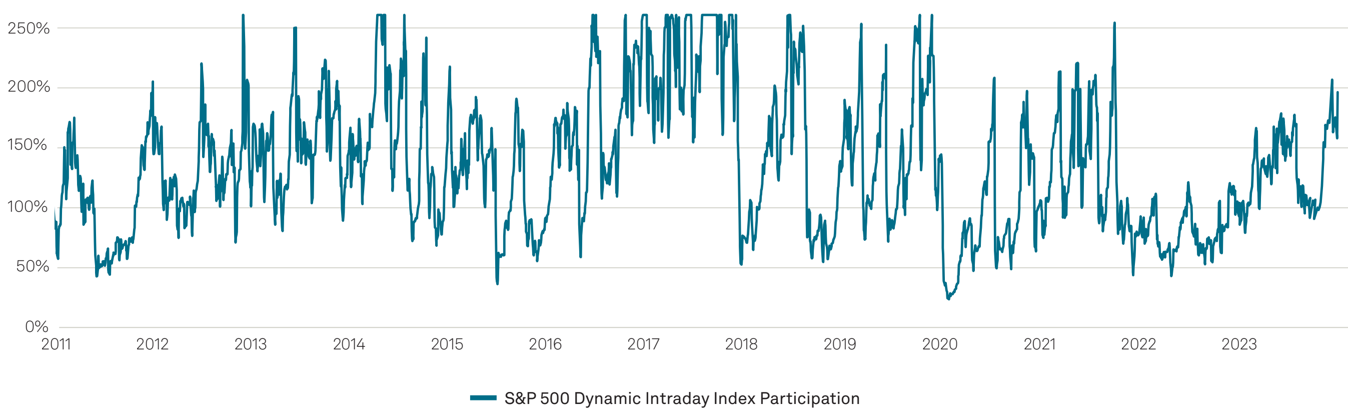


Rolling Three-Year Volatility



Data from Dec. 30, 2005, to Dec. 29, 2023.

Historical Allocation to the S&P 500



Average Exposure: 125% | Leverage Cap: 250%

Source: S&P Dow Jones Indices LLC. Data from Dec. 30, 2005, to Dec. 29, 2023. Index performance based on excess return in USD. The S&P 500 Dynamic Intraday TCA Index was launched Aug. 14, 2023. The S&P 500 Daily Risk Control 15% Index was launched Sept. 9, 2009. All data prior to index launch date is back-tested hypothetical data. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

Performance Disclosure/Back-tested Data

The S&P 500 Dynamic Intraday TCA Index was launched August 14, 2023. The S&P 500 Daily Risk Control 15% Index was launched September 9, 2009. All information presented prior to an index's Launch Date is hypothetical (back-tested), not actual performance, and is based on the index methodology in effect on the index 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. Complete index methodology details are available at www.spglobal.com/spdji. 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.

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. Back-tested performance is for use with institutions only; not for use with retail investors. S&P Dow Jones Indices 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 Dow Jones Indices 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.

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 S&P DJI's 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 Dow Jones Indices maintains the index and calculates the index levels and performance shown or discussed but does not manage actual 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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