

Description

The S&P Economic Cycle Factor Rotator Index seeks to rotate its investment strategy across four distinct strategies based on the most recent economic data from the Chicago Fed National Activity Index, with a target volatility of 6%.

Index Attributes

Empirical evidence suggests that factor returns have been highly cyclical and sensitive to macroeconomic conditions historically. In addition, different factors might outperform their market-cap-weighted benchmarks during different macroeconomic conditions. The S&P Economic Cycle Factor Rotator Index seeks to measure one single factor at each point in time, according to the trend and strength of economic activity, as measured by the Chicago Fed National Activity Index, a coincident indicator. It aims to offer a way to express views for more tactically oriented investors by taking advantage of the cyclical nature and distinct behavior of individual factors.

Methodology Construction

The following methodology summary is provided for convenience purposes only. For complete details, please view the methodology document at <https://www.spglobal.com/spdji/en/documents/methodologies/methodology-sp-economic-cycle-factor-rotator-indices.pdf>.

- **Universe.** The indices included in the strategies are the S&P Momentum United States Daily Risk Control 6% Excess Return Index, S&P 500 Pure Value Daily Risk Control 6% Excess Return Index, S&P 500 Buyback FCF Daily Risk Control 6% Excess Return Index, and S&P 500 Low Volatility High Dividend Daily Risk Control 6% Excess Return Index. When constructing the four risk control subindices, the cash bond index was used rather than the bond futures index. The cash bond index was represented by the S&P U.S. Treasury Bond 5-7 Year Excess Return Index.

- **Allocation Algorithm.** For each month, k , we calculate the three-month average of CFNAI and the change of CFNAI over three months.

- If $3M\ Average(k) \geq 0$ and $3M\ Change(k) \geq 0$, then Equity Allocated Index (k) is Momentum
- If $3M\ Average(k) < 0$ and $3M\ Change(k) \geq 0$, then Equity Allocated Index (k) is Value
- If $3M\ Average(k) \geq 0$ and $3M\ Change(k) < 0$, then Equity Allocated Index (k) is Buyback
- If $3M\ Average(k) < 0$ and $3M\ Change(k) < 0$

- and $3M\ Average(k-1) < 0$ and $3M\ Change(k-1) \geq 0$, then Equity Allocated Index (k) is Value;
- else, Equity Allocated Index (k) is Low Vol High Dividend

- **Rotation Schedule.** The signal for which strategy will be used the following month will be announced three days prior to the end of the month and implemented on the first business day of the following month.

Quick Facts

WEIGHTING METHOD	N/A
REBALANCING FREQUENCY	Monthly
CALCULATION FREQUENCY	End of day
CALCULATION CURRENCIES	USD
LAUNCH DATE	August 16, 2016
FIRST VALUE DATE	August 1, 1995
REGULATORY AUTHORIZATION	European Union

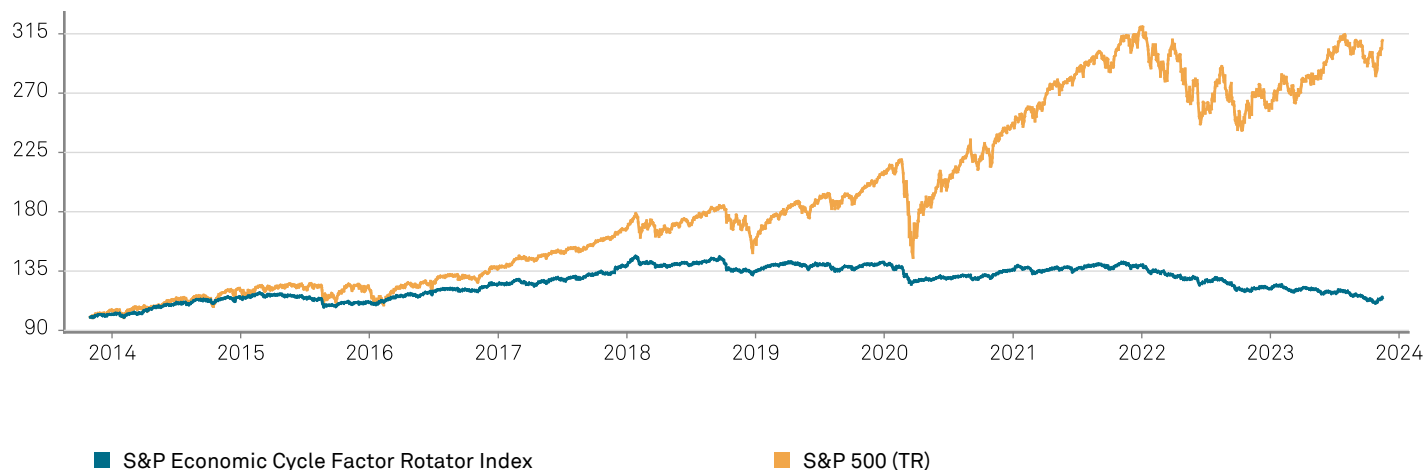
For more information, view the methodology document at <https://www.spglobal.com/spdji/en/documents/methodologies/methodology-sp-economic-cycle-factor-rotator-indices.pdf>.

All information for an index prior to its Launch Date is hypothetical back-tested, not actual performance, based on the index methodology in effect on 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. This back-tested data may have been created using a "Backward Data Assumption". For more information on "Backward Data Assumption" and back-testing in general, please see the Performance Disclosure at the end of this material.

Historical Performance

Depending on index launch date, all charts below may include back-tested data.

* Data has been re-based at 100



AS OF OCTOBER 31, 2023

Performance

INDEX LEVEL	RETURNS			ANNUALIZED RETURNS			
	1 MO	3 MOS	YTD	1 YR	3 YRS	5 YRS	10 YRS
Price Return							
313.45	-2.72%	-7.16%	-8.44%	-7.61%	-4.96%	-3.89%	1.08%
Excess Return							
406.16	-2.67%	-6.96%	-7.77%	-6.92%	-4.45%	-3.09%	2.08%
BENCHMARK* Total Return							
9,052.31	-2.1%	-8.25%	10.69%	10.14%	10.36%	11.01%	11.18%
BENCHMARK* Price Return							
4,193.8	-2.2%	-8.61%	9.23%	8.31%	8.65%	9.11%	9.09%
BENCHMARK* Net Total Return							
7,870.48	-2.13%	-8.36%	10.25%	9.59%	9.84%	10.44%	10.55%

* The index benchmark is the S&P 500

Calendar Year Performance

2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Price Return									
-12.72%	2.26%	-3.8%	5.03%	-2.51%	10.99%	12.11%	-2.81%	11.82%	10.89%
Excess Return									
-12.42%	2.74%	-3.23%	7.05%	-1.95%	12.65%	13.58%	-1.62%	13.12%	11.91%
BENCHMARK* Total Return									
-18.11%	28.71%	18.4%	31.49%	-4.38%	21.83%	11.96%	1.38%	13.69%	32.39%
BENCHMARK* Price Return									
-19.44%	26.89%	16.26%	28.88%	-6.24%	19.42%	9.54%	-0.73%	11.39%	29.6%
BENCHMARK* Net Total Return									
-18.51%	28.16%	17.75%	30.7%	-4.94%	21.1%	11.23%	0.75%	12.99%	31.55%

* The index benchmark is the S&P 500

Risk

ANNUALIZED RISK			ANNUALIZED RISK-ADJUSTED RETURNS		
3 YRS	5 YRS	10 YRS	3 YRS	5 YRS	10 YRS
Price Return					
7.13%	6.82%	6.61%	-0.7	-0.57	0.16
Excess Return					
7.12%	6.83%	6.65%	-0.62	-0.45	0.31
BENCHMARK* Total Return					
17.81%	18.69%	14.95%	0.58	0.59	0.75
BENCHMARK* Price Return					
17.8%	18.69%	14.93%	0.49	0.49	0.61
BENCHMARK* Net Total Return					
17.81%	18.69%	14.94%	0.55	0.56	0.71

Risk is defined as standard deviation calculated using monthly values.

* The index benchmark is the S&P 500

Tickers

	BLOOMBERG TICKER	REUTERS
Excess Return	SPECFR6T	.SPECFRT
Price Return	SPECFR6P	.SPECFR6P

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61 2 9255 9802

PERFORMANCE DISCLOSURE

Source: S&P Dow Jones Indices LLC.

The launch date of the S&P Economic Cycle Factor Rotator Index was August 16, 2016. The launch date of the S&P 500 was March 4, 1957.

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/en/. 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 <https://www.spglobal.com/spdji/en/education/article/faq-esg-back-testing-backward-data-assumption-overview/>. 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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