Beyond Your Typical Sector Strategy: The S&P 500® Sector Rotator Index

The S&P 500 Sector Rotator Index takes sector rotation to the next level, using a blend of time-tested approaches that capture undervalued sectors with the highest relative value and momentum at any given point in time. Using value and momentum investing principles to determine sector allocation removes the need to accurately predict the phase of the business cycle and instead focuses on the relative attributes of the individual sectors.

1. Value and momentum investing

<table>
<thead>
<tr>
<th>Value Investing:</th>
<th>Momentum Investing:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A building block of portfolio construction, value investing is designed to provide exposure to stocks that are fundamentally sound, but less expensive than their peers based on certain financial metrics.</td>
<td>Based on the financial theory that stocks showing significant relative market outperformance will continue to do so, this widely followed strategy calls for exposure to stocks that have had a higher relative price appreciation than their peers.</td>
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</table>

The index is designed to rotate sector allocations based on favorable characteristics regardless of the economic environments.

2. How the index is constructed

Starting with the 11 S&P 500 GICS® sectors:

<table>
<thead>
<tr>
<th>Consumer Disc.</th>
<th>Consumer Staples</th>
<th>Energy</th>
<th>Financials</th>
<th>Health Care</th>
<th>Industrials</th>
<th>Information Technology</th>
<th>Materials</th>
<th>Real Estate</th>
<th>Comms. Services</th>
<th>Utilities</th>
</tr>
</thead>
</table>

The sectors are then ranked by their average value ratio z-score for the past 10 years using three metrics: price/book, price/sales, and price/earnings.

The top 5 sectors with the highest value score are selected and are then ranked by their momentum score.

The top 3 sectors with the highest momentum score are selected.

The sectors are then equally weighted.

3. Exploring the risk control framework

The index employs an embedded risk management feature utilizing S&P DJI’s Risk Control 2.0 strategy.

When volatility goes ↑ – The Risk Control actively reduces the equity component and increases the treasury weight, seeking to protect from steep drawdowns.

When volatility goes ↓ – The Risk Control “turns off” to allow for higher equity exposure, increasing potential upside in rising equity markets.

4. How has the index performed?

Historically, the S&P 500 Sector Rotator Index has exhibited strong performance over long time horizons.

Annualized Return (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>1-Year</th>
<th>3-Year</th>
<th>5-Year</th>
<th>7-Year</th>
<th>10-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.6</td>
<td>4.6</td>
<td>5.5</td>
<td>6.4</td>
<td></td>
</tr>
</tbody>
</table>

Source: S&P Dow Jones Indices LLC. Data as of December 31, 2018. 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.
About S&P Dow Jones Indices

S&P Dow Jones Indices is the largest global resource for essential index-based concepts, data and research, and home to iconic financial market indicators, such as the S&P 500® and the Dow Jones Industrial Average®. More assets are invested in products based on our indices than products based on indices from any other provider in the world. Since Charles Dow invented the first index in 1884, S&P DJI has been innovating and developing indices across the spectrum of asset classes helping to define the way investors measure and trade the markets.

S&P Dow Jones Indices is a division of S&P Global (NYSE: SPGI), which provides essential intelligence for individuals, companies, and governments to make decisions with confidence. For more information, visit spdji.com.

Performance Disclosure

The S&P 500 Sector Rotator Daily RC2 5% Index was launched October 19, 2018. All information presented prior to this Launch date is back-tested. Back-tested performance is not actual performance, but is hypothetical (see below). The back-tested calculations are based on the same methodology that was in effect on the Launch date. The Launch data designates the date upon which the values of an index are first considered live, which S&P Dow Jones Indices considers to be 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 Web site or its datafeed to external parties.

Past performance of an Index, whether actual or back-tested, is no guarantee of future results. Performance shown does not necessarily correspond to the entire available history of an Index. For details about any Index of S&P Dow Jones Indices, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations, please refer to the methodology paper for that Index available at www.spdji.com or www.spindices.com.

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