Factoring in Changing Market Conditions

S&P Japan Economic Cycle Factor Rotator Index (JPY)

While factor risk premia are well-established tools for altering the risk/return characteristics of a portfolio, knowing which factor is best suited for a particular environment can prove challenging. Enter the S&P Japan Economic Cycle Factor Rotator Index (JPY), a rules-based factor rotation strategy designed to adapt to changing market conditions based on key market signals.

How Does the Index Work?

1. Uses data from Tankan and ESRI Indexes of Business Conditions Coincident Diffusion Index to identify business cycle (Contraction, Expansion, Unclear Trend).
2. Selects an equity-factor strategy component based on Tankan signals on a quarterly basis and adjusts the selection based on ESRI signal monthly.
3. Applies a risk control overlay, adjusting exposure to 10-year Japanese Government bonds and an equity component to maintain 6% target volatility.

What Are the Potential Benefits?

1. Upside Participation in Japanese Equities
2. Downside Protection Relative to the S&P Japan 500
3. Higher Sharpe Ratio
4. Constant Risk Level by Design
5. Diversification

Which Factor and When?

<table>
<thead>
<tr>
<th>ECONOMIC CYCLE</th>
<th>FACTOR</th>
<th>EQUITY FACTOR STRATEGY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contraction</td>
<td>Low Volatility</td>
<td>S&amp;P Japan 500 Low Volatility Index (SPJ5LVJP)</td>
</tr>
<tr>
<td>Expansion</td>
<td>Value</td>
<td>S&amp;P Enhanced Value Japan LargeMidCap Index (SEVJXJP)</td>
</tr>
<tr>
<td>Unclear Trend</td>
<td>Buyback</td>
<td>S&amp;P Japan 500 Buyback FCF Index (SPJBFJP)</td>
</tr>
</tbody>
</table>

Index by the Numbers

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>S&amp;P JAPAN ECONOMIC CYCLE FACTOR ROTATOR INDEX (JPY)</th>
<th>S&amp;P 10-YEAR JGB FUTURES EXCESS RETURN INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Return (%)</td>
<td>4.07</td>
<td>2.13</td>
</tr>
<tr>
<td>Volatility (%)</td>
<td>6.08</td>
<td>17.88</td>
</tr>
<tr>
<td>Sharpe Ratio</td>
<td>0.67</td>
<td>0.11</td>
</tr>
<tr>
<td>Maximum Drawdown (%)</td>
<td>-14.84</td>
<td>-59.98</td>
</tr>
<tr>
<td>Correlation</td>
<td>1.00</td>
<td>0.78</td>
</tr>
</tbody>
</table>

Meet the Index Family

JAPAN FACTOR ROTATOR INDICES

- S&P Japan Economic Cycle Factor Rotator Index (JPY) (SPJECF6P)
- S&P Japan Beta-Neutral Economic Cycle Factor Rotator Index (JPY) (SPJECFBN)

U.S. FACTOR ROTATOR INDICES

- S&P Economic Cycle Factor Rotator Index (SPECFR6P)
- S&P Economic Cycle Factor Rotator (Cash Bond) Index (USD) (SPECFR6B)
- S&P Economic Cycle Factor Rotator Dynamic Long/Short Index (USD) ER (SPECFM6P)

EUROPEAN FACTOR ROTATOR INDICES

- S&P Europe 350 Economic Cycle Factor Rotator Index (EUR) (SPEECF6P)

Source: S&P Dow Jones Indices LLC. Data from April 1, 2004, to June 30, 2019. Performance of the S&P Japan 500 is based on price returns in JPY. Performance of the S&P Japan Economic Cycle Factor Rotator Index and the S&P 10-Year JGB Futures Index is based on excess returns in JPY. Past performance is no guarantee of future results. Table is provided for illustrative purposes and reflects hypothetical historical 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 wwwspdji.com.

PERFORMANCE DISCLOSURE

The S&P Japan Economic Cycle Factor Rotator Index (UPY) was launched on August 16, 2016. The S&P Japan 500 was launched on December 19, 2006. The S&P 10-Year JGB Futures Excess Return Index was launched on October 24, 2011. 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 date 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.

It is not possible to invest directly in an Index, and Index returns shown do not represent the results of actual trading of investable securities or other assets. S&P Dow Jones Indices maintains indices and calculates index levels and performance, but does not manage actual assets. Consequently, Index returns do not reflect any expenses or sales charges an investor would pay to purchase or hold securities underlying an Index or any investment fund or product intended to track the performance of the Index. The imposition of these expenses and charges would cause actual and back-tested performance of the securities or investment fund/product to be lower than the Index performance shown.

Back-tested returns. S&P Dow Jones Indices may show performance returns by applying an Index’s methodology to historical data to produce “back-tested” (hypothetical) returns for periods prior to the Launch date of the Index. A limitation of back-tested information is that it reflects the application of the Index methodology and selection of Index constituents in hindsight. No theoretical approach can completely account for the impact of decisions that might have been made during the actual operation of an index; for example, there are numerous factors related to the equities (or fixed income, or commodities) markets in general which cannot be, and have not been, accounted for in the preparation of back-tested Index information.

GENERAL DISCLAIMER

Copyright © 2019 by S&P Dow Jones Indices LLC. All rights reserved. Redistribution, reproduction and/or photocopying in whole or in part are prohibited without written permission. Standard & Poor’s and S&P are registered trademarks of Standard & Poor’s Financial Services LLC, a division of S&P Global (“S&P”); Dow Jones is a registered trademark of Dow Jones Trademark Holdings LLC (“Dow Jones”); and these trademarks have been licensed for use by S&P Dow Jones Indices LLC, S&P Dow Jones Indices LLC, Dow Jones, S&P and their respective affiliates (“S&P Dow Jones Indices”) makes no representation or warranty, express or implied, as to the ability of any index to accurately represent the asset class or market sector that it purports to represent and S&P Dow Jones Indices shall have no liability for any errors, omissions, or interruptions of any index or the data included therein. Past performance of an index is not an indication of future results. This document does not constitute an offer of any services. All information provided by S&P Dow Jones Indices is general in nature and not tailored to the needs of any person, entity or group of persons. S&P Dow Jones Indices receives compensation in connection with licensing its indices to third parties. 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 offered by third parties that are based on that index. S&P Dow Jones Indices does not sponsor, endorse, sell, promote or manage any investment fund or other investment product or vehicle that seeks to provide an investment return based on the performance of any Index. S&P Dow Jones Indices LLC is not an investment or tax advisor. S&P Dow Jones Indices makes no representation regarding the advisability of investing in any such investment fund or other investment product or vehicle. A tax advisor should be consulted to evaluate the impact of any tax-exempt securities on portfolios and the tax consequences of making any particular investment decision.

spdji.com