

## S&P GIVI<sup>®</sup> Japan and Major Single Factors Q2 2019 Review

### S&P GIVI JAPAN PERFORMANCE

The [S&P GIVI \(Global Intrinsic Value Index\) Japan](#) underperformed its benchmark index, the [S&P Japan BMI](#), by 1.27% in Q2 2019.<sup>1</sup> Since its launch in March 2012, the S&P GIVI Japan has outperformed its benchmark index by 0.41% per year, with a tracking error of 2.52%.

In Q2 2019, the Japanese equity market, as measured by the S&P Japan BMI, fell 2.22% after the strong gains earlier this year. This quarter was largely under the sway of global economic and political issues. The market optimism seen in the previous quarter persisted in the beginning of Q2, contributing to a positive April. However, the sudden escalation of the U.S.-China trade dispute in May put a stop to the market's advances. While the G20 summit resumed the trade talks between both sides, uncertainties loom over the global market.

At the start of new Reiwa era, the better-than-expected economic growth in the first quarter of 2019 was the biggest positive surprise. Amid a rosy corporate earnings season, investors were concerned about the potential effects of consumption tax increases. In addition, threats from the U.S. of an anti-Huawei campaign and increasing tariffs on Chinese and Mexican goods brewed worries over Japanese exports and factory output, especially in the electronic and automobile industries. According to the Bank of Japan's Tankan survey, sentiment among Japanese manufacturers sank further in June 2019, which suggested a slowdown in external demand.

Similar to Q1 2019, Communication Services and Information Technology continued to lead the market. The laggards were the Utilities, Consumer Staples, Health Care, and Financials sectors.

The underperformance of the S&P GIVI Japan against the benchmark in Q2 2019 was mainly attributed to the selection effect rather than allocation effect within sectors, especially in Industrials and Consumer Discretionary. For the quarter, the low beta and intrinsic value legs underperformed the benchmark by 0.94% and 0.56%, respectively.

#### Contributors:

Izzy Wang, Market Commentary, Analyst, Strategy & Volatility Indices, [izzy.wang@spglobal.com](mailto:izzy.wang@spglobal.com)

Tianyin Cheng, Market Commentary, Director, Strategy & Volatility Indices, [tianyin.cheng@spglobal.com](mailto:tianyin.cheng@spglobal.com)

*S&P Dow Jones Indices' Market Attributes<sup>®</sup> series provides market commentary highlighting developments across various asset classes.*

<sup>1</sup> The S&P GIVI Japan is a strategy index constructed from the S&P Japan BMI, which serves as its benchmark index. The tracking error between the S&P GIVI Japan and its benchmark represents the difference between the strategy returns and the benchmark returns, reflecting the risk associated with the exposure to certain factors. Tracking error is the annualized standard deviations of monthly excess returns. It is not possible to invest directly in an index.

Exhibit 1: S&P GIVI Japan Live Performance and Attributes							
PERFORMANCE AS OF JUNE 30, 2019	GROSS TOTAL RETURN (%)				RETURN IN EXCESS OF THE S&P JAPAN BMI (%)		
	S&P GIVI JAPAN	S&P INTRINSIC VALUE WEIGHTED JAPAN INDEX	S&P LOW BETA JAPAN INDEX	S&P JAPAN BMI	S&P GIVI JAPAN	S&P INTRINSIC VALUE WEIGHTED JAPAN INDEX	S&P LOW BETA JAPAN INDEX
Q2 2019	-3.49	-2.77	-3.15	-2.22	-1.27	-0.56	-0.94
Q1 2019	5.36	6.79	6.62	7.80	-2.43	-1.01	-1.17
2019 H1	1.69	3.83	3.26	5.41	-3.72	-1.58	-2.14
Since March 2012 (Annualized)	11.35	10.65	11.75	10.94	0.41	-0.29	0.81
PERFORMANCE SINCE LAUNCH (ANNUALIZED AGAINST THE S&P JAPAN BMI)							
Volatility (%)	15.21	17.05	14.80	16.44	-	-	-
Return/Volatility	0.75	0.62	0.79	0.67	-	-	-
Tracking Error (%)	2.52	1.92	2.97	-	-	-	-
Alpha (%)	1.17	-0.53	1.80	-	-	-	-
Beta	0.92	1.03	0.89	-	-	-	-

Source: S&P Dow Jones Indices LLC. Index performance is based on total returns in JPY. Data from March 31, 2012, to June 30, 2019. Past performance is no guarantee of future results. Table 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. Notes: Tracking error is the annualized standard deviations of monthly excess returns, relative to the primary and secondary benchmarks. Alpha and beta are defined by the regression equation  $R_{i,t} = \alpha + \beta \cdot RBMI_{i,t} + \epsilon_t$ ; where  $R_{i,t}$  is the index return series and  $RBMI_{i,t}$  is the benchmark index return series.

## Performance of Single Factors in the Japanese Market

We examined the returns of five common single factors in the Japanese equity market that have demonstrated the ability to earn a persistent premium over long periods of time: low volatility, value, quality, momentum, and buyback. The returns of these factors are represented by the performance of our systematic rules-based indices.

- Low volatility: Represented by the [S&P Japan 500 Low Volatility Index](#).
- Value: Represented by the [S&P Enhanced Value Japan LargeMidCap Index](#).
- Momentum: Represented by the [S&P Momentum Japan LargeMidCap](#).
- Quality: Represented by the [S&P Quality Japan LargeMidCap](#).
- Buyback: Represented by [S&P Japan 500 Buyback Index](#).

The outcome this quarter was essentially a continuation of Q1 2019. The market remained defensive, as quality was the best performer and the only factor that beat the benchmark (by 2.5%). Low volatility, value, and buybacks were among the worst and underperformed the benchmark by 2.56%, 2.02%, and 1.98%, respectively.

With Communication Services and Information Technology continuing to thrive, it was difficult for factors underweighting the two sectors, such as low volatility and value, to perform well. Meanwhile, overweighting in Communication Services significantly favored the quality factor. The slight underperformance of momentum against the benchmark can be attributed to the factor's overweight in Utilities—the worst-performing sector this quarter.

At the beginning of 2019, factors in Japan started to behave differently from those in global markets. While low volatility led U.S. and Europe in the first half of 2019, it posted the lowest performance in Japan. In contrast to the U.S., the Japanese Financials sector couldn't manage to recover under the pressure of ultra-low interest rates, which may partially explain the difference, given low volatility's heavy allocation to that sector.

Over the long term, defensive factors remained strong. In terms of absolute return, quality overtook low volatility and became the best-performing factor over the 3-, 5-, and 10-year horizons. Nevertheless, low volatility maintained its leading position in terms of risk-adjusted return thanks to its low-risk nature. The momentum and buyback factors underperformed mainly because cyclical stocks have been widely sold over the past few years.

Exhibit 2: Performance of the Five Factors in Japan						
PERIOD	S&P JAPAN 500 LOW VOLATILITY INDEX	S&P ENHANCED VALUE JAPAN LARGEMIDCAP INDEX	S&P QUALITY JAPAN LARGEMIDCAP	S&P MOMENTUM JAPAN LARGEMIDCAP	S&P JAPAN 500 BUYBACK INDEX	S&P JAPAN BMI
<b>CUMULATIVE RETURN (%)</b>						
1-Month	0.70	3.26	2.53	1.06	1.45	2.71
2-Month	-2.92	-5.69	-2.76	-2.07	-4.71	-3.97
3-Month	-4.77	-4.24	0.28	-2.55	-4.20	-2.22
YTD	0.61	1.02	7.90	4.19	0.57	5.41
<b>ANNUAL RETURN (%)</b>						
1-Year	-6.46	-9.10	-6.94	-12.18	-14.73	-7.77
3-Year	8.99	13.91	11.44	2.99	6.82	10.02
5-Year	8.73	5.14	8.84	3.54	5.24	6.46
10-Year	9.70	7.92	10.00	6.13	7.48	7.63
<b>ANNUAL VOLATILITY (%)</b>						
3-Year	10.34	16.62	13.44	13.52	13.66	12.99
5-Year	11.72	19.92	15.45	15.12	15.98	15.14
10-Year	12.64	20.20	16.05	17.58	16.38	16.72
<b>ANNUAL RETURN/ANNUAL VOLATILITY</b>						
3-Year	0.87	0.84	0.85	0.22	0.50	0.77
5-Year	0.74	0.26	0.57	0.23	0.33	0.43
10-Year	0.77	0.39	0.62	0.35	0.46	0.46
<b>12-MONTH MAXIMUM DRAWDOWN (%)</b>						
10-Year	-12.94	-33.22	-19.22	-22.96	-22.06	-22.70

Source: S&P Dow Jones Indices LLC. Index performance based on total returns in JPY. Data from June 30, 2009, to June 30, 2019. Past performance is no guarantee of future results. Table 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.

## APPENDIX

Exhibit 3: Performance of Smart Beta Indices and Benchmarks in Japan

PERIOD	SMART BETA INDICES IN JAPAN				BENCHMARKS IN JAPAN					
	S&P GIVI JAPAN	FTSE RAFI JAPAN INDEX	MSCI JAPAN VALUE WEIGHTED INDEX	MSCI JAPAN MINIMUM VOLATILITY INDEX	JPX-NIKKEI INDEX 400	MSCI JAPAN INDEX	NIKKEI 225	TOPIX	MSCI JAPAN IMI	S&P JAPAN BMI
<b>CUMULATIVE RETURNS (%)</b>										
1-Month	1.85	3.13	3.04	1.12	2.90	2.97	3.52	2.76	2.74	2.71
2-Month	-3.73	-4.40	-4.33	-2.10	-3.74	-3.59	-4.19	-3.94	-3.82	-3.97
3-Month	-3.49	-2.89	-2.67	-3.74	-2.28	-1.64	0.57	-2.35	-1.96	-2.22
YTD	1.69	3.29	3.83	1.47	5.70	6.02	7.50	5.21	5.75	5.41
<b>ANNUAL RETURN (%)</b>										
1-Year	-9.21	-7.90	-7.10	-5.42	-7.51	-6.46	-2.56	-8.23	-7.48	-7.77
3-Year	8.75	11.12	11.17	7.39	9.56	10.22	13.17	9.99	10.05	10.02
5-Year	6.64	6.05	5.71	7.89	6.07	6.12	9.05	6.44	6.44	6.46
10-Year	8.31	7.16	7.50	8.26	7.79	7.29	9.93	7.49	7.63	7.63
<b>ANNUAL VOLATILITY (%)</b>										
3-Year	11.79	14.23	14.35	9.59	13.00	12.99	14.28	13.09	12.91	12.99
5-Year	13.78	16.87	17.17	11.55	15.37	15.62	16.09	15.38	15.19	15.14
10-Year	15.25	18.39	18.23	13.02	16.39	17.16	17.79	16.85	16.78	16.72
<b>ANNUAL RETURN/ANNUAL VOLATILITY</b>										
3-Year	0.74	0.78	0.78	0.77	0.73	0.79	0.92	0.76	0.78	0.77
5-Year	0.48	0.36	0.33	0.68	0.39	0.39	0.56	0.42	0.42	0.43
10-Year	0.54	0.39	0.41	0.63	0.48	0.42	0.56	0.44	0.45	0.46
<b>12-MONTH MAXIMUM DRAWDOWN (%)</b>										
10-Year	-21.01	-27.84	-29.06	-14.40	-23.22	-24.71	-22.90	-23.34	-22.96	-22.70

Source: S&P Dow Jones Indices LLC, MSCI, FTSE, TSE. Performance based on total return in JPY. Data from June 30, 2009, to June 30, 2019. Past performance is no guarantee of future results. Table 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.

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The S&P GIVI Japan was launched March 19, 2012. The S&P Intrinsic Value Weighted Japan Index and S&P Low Beta Japan Index were launched May 8, 2014. The S&P Japan 500 Low Volatility Index was launched June 8, 2015. The S&P Enhanced Value Japan LargeMidCap Index was launched April 27, 2015. The S&P Quality Japan LargeMidCap was launched June 8, 2014. The S&P Momentum Japan LargeMidCap was launched November 18, 2014. The S&P Japan 500 Buyback Index was launched October 17, 2014. All information presented prior to an index's Launch Date is hypothetical (back-tested), not actual performance. The back-test calculations are based on the same methodology that was 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. Complete index methodology details are available at [www.spdji.com](http://www.spdji.com). Past performance of the Index is not an indication of future results. Prospective application of the methodology used to construct the Index may not result in performance commensurate with the back-test returns shown.

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The back-test period does not necessarily correspond to the entire available history of the Index. Please refer to the methodology paper for the Index, available at [www.spdji.com](http://www.spdji.com) 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.

Another limitation of using back-tested information is that the back-tested calculation is generally prepared with the benefit of hindsight. Back-tested information reflects the application of the index methodology and selection of index constituents in hindsight. No hypothetical record can completely account for the impact of financial risk in actual trading. For example, there are numerous factors related to the equities, fixed income, or commodities markets in general which cannot be, and have not been accounted for in the preparation of the index information set forth, all of which can affect actual performance.

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