

Frequently Asked Questions

JPX/S&P CAPEX & Human Capital Index

INDEX DESIGN

- 1. What is the JPX/S&P CAPEX & Human Capital Index?** The JPX/S&P CAPEX & Human Capital Index is designed to measure the performance of leading companies in the Japanese equity market in terms of capital expenditures (CAPEX) growth and efficiency and investments in human capital. CAPEX efficiency and growth are captured through a quantitative measure based on published numbers in public filings, while the human capital metric is captured through scoring available from RobecoSAM.
- 2. Why was the JPX/S&P CAPEX & Human Capital Index created?** The Bank of Japan announced its interest in companies that are "proactively making investment in physical and human capital."¹ In collaboration with RobecoSAM, S&P Dow Jones Indices and Japan Exchange Group (JPX) have created this index intended to meet the Bank of Japan's index requirements.²
- 3. What makes the JPX/S&P CAPEX & Human Capital Index unique?** The index combines two measures—one qualitative and another quantitative—into a single metric that seeks to measure the growth and efficiency of physical and human capital investment. For physical capital, both spending growth and efficiency are considered, meaning firms that spend wastefully are less likely to be included. For human capital, RobecoSAM provides company scores, which include three criteria: Human Capital Development, Talent Attraction & Retention, and Labor Practice Indicators and Human Rights. This means that a firm may not score well if wage increase is the only consideration in their human capital investment, for example.
- 4. How is the CAPEX and Research & Development (R&D) expense growth ratio calculated?** For non-financial companies that reported R&D expenses in the past three fiscal years, three-year CAPEX and R&D expense growth is calculated. For all financial companies and non-financial companies that did not report R&D expenses in the past three fiscal years, only three-year CAPEX growth is calculated.
- 5. How is the CAPEX Revenue Effect calculated?** The CAPEX Revenue Effect is calculated as a company's latest revenue divided by its cumulative CAPEX in the three most recent fiscal years.
- 6. What is the Human Capital Score?** The Human Capital Score, obtained from RobecoSAM, includes the scores of the three criteria in the RobecoSAM methodology that are used for

¹ See announcement at www.boj.or.jp/en/announcements/release_2015/k151218a.pdf.

² See "[Detailed Rules on Eligibility Criteria for Indices regarding Purchases of ETFs to Support Firms Proactively Investing in Physical and Human Capital.](#)"

the Corporate Sustainability Assessment (CSA).³ All three criteria include data that are publicly disclosed, as well as data provided directly from companies that participate in the CSA. These criteria are assessed for all industries and include Human Capital Development, Talent Attraction & Retention, Labor Practice Indicators, and Human Rights. Each of the three human capital criteria are relatively ranked and given a score between 0 and 100. Each score is then equally weighted to obtain an overall Human Capital score between 0 and 100.

- 7. Who computes the Human Capital Scores?** RobecoSAM AG provides the Human Capital Scores that are used to compile the index. RobecoSAM is a sustainability asset management and research company that has unique expertise in sustainability analysis. RobecoSAM gathers data through interactive questionnaires. Supporting documentation is also studied and then compared with a media and stakeholder analysis. This analysis is coupled with feedback flow between sustainability analysts and the assessed companies, and process assurance is provided by Deloitte on an annual basis to ensure the quality of data.⁴ Due to the highly detailed methodology used to convert this information into scores, expert judgment is limited, despite the qualitative nature of the information. “Expert judgment” refers to the exercise of subjective discretion with respect to the use of data in determining an input. Expert judgment includes extrapolating values from prior or related transactions, and adjusting values for factors that might influence the quality of data.

More information about RobecoSAM can be found at www.robecosam.com.

INDEX CONSTRUCTION

- 1. How is the JPX/S&P CAPEX & Human Capital Index designed? How are stocks selected?** The JPX/S&P CAPEX & Human Capital Index is constructed from the universe of constituents of the Tokyo Stock Price Index (TOPIX) on an annual basis.⁵ For a security to be eligible for inclusion in the index, it must, on the rebalancing reference date, satisfy four eligibility criteria.

At the annual rebalancing, scores based on CAPEX and R&D growth, CAPEX Revenue Effect, and Human Capital are calculated for each security that satisfies eligibility criteria. Securities are ranked based on the composite of their CAPEX and Human Capital Scores. The top 180 stocks (whether a current constituent or not) based on the composite scores are selected for index inclusion. If a current index constituent is among the top 220 in the ranking, it remains in the index. If not, the stock is deleted and the next stock with the highest score that is not an index constituent is added until the target stock count of 200 is achieved.

- 2. What are the filters applied to the eligible universe? Why are they applied?** To be eligible for inclusion in the JPX/S&P CAPEX & Human Capital Index, the security must satisfy liquidity, creditworthiness, profitability, and low beta criteria. The liquidity criterion is applied to increase the marketability of the index. It requires securities to be actively trading for more than 200 trading days with total value traded above 100 billion Japanese yen in the past calendar year. The creditworthiness criterion is applied so that the index constituents do not include firms that

³ See "[RobecoSAM 2015 Corporate Sustainability Assessment - Annual Scoring and Methodology Review](#)." September 2015. RobecoSAM.

⁴ See www.sustainability-indices.com/images/independent-assurance-report-by-deloitte-AG-to-robecosam-ag-2015.pdf.pdf.

⁵ The TOPIX is calculated and published by the Tokyo Stock Exchange (TSE). For more information please refer to www.jpx.co.jp/english/.

demonstrate weak creditworthiness in light of their financial conditions. A security is excluded if a firm's total liabilities exceed total assets, or if its operating income or net income were negative in any of the past three fiscal years. The profitability criterion requires firms to be profitable based on their three-year average operating income and net income. Finally, after applying the liquidity, creditworthiness and profitability criteria, securities are sorted by their betas and the 30% of the stocks with the highest betas are eliminated. Thus, there is an explicit bet against beta. Academic and practitioner research suggests that within an asset class, lottery-seeking and leverage-constrained market participants may overpay for high-volatility assets, thereby creating an opportunity for market participants willing to take a longer-term view and the other side of the trade.⁶

- 3. How is the weight of a stock determined in the index?** Each company is weighted by the product of its float-adjusted market capitalization and its composite CAPEX and Human Capital Score. Companies with higher scores or larger market cap would receive higher weights. The individual stock weight is capped at 5%.
- 4. How often is the index rebalanced and what are the rules around reconstitution?** The index is reconstituted annually after the close of the third Friday of September. The rebalancing reference date for fundamental data is after the close of the last trading day of August. The composition and pricing reference date for components displayed during the pro-forma announcement period is typically five business days prior to the rebalancing effective date. In addition to the annual reconstitution, the index also undergoes a semiannual review and reweight after the close of the third Friday of March.

INDEX DATA AND LICENSING

- 1. How often is the index calculated?** The index is calculated on a daily and real-time basis.
- 2. How much history is available?** History is available from Sept. 16, 2005. The index was launched on April 27, 2016. All data prior to the launch date is back-tested.
- 3. How can I access data for these indices?** Index levels are available on Bloomberg and Reuters. Additional data for the indices is available via S&P DJI's FTP feed. The FTP feed provides four daily files: index levels, opening and closing component stock-level data and weights, and daily corporate actions. Files including index-level fundamentals are available on a monthly basis.
- 4. Where can I obtain more information about the JPX/S&P CAPEX & Human Capital Index?** Historical and current monthly index information, including a factsheet and index methodology, is available at www.spdji.com. The constituents and weightings as of last rebalancing or index launch date are visible under the "additional info" tab on the Japanese language index page. Other information, such as historical and current constituents and weightings, are available by subscription only. For more information, please contact index.services@spglobal.com.

⁶ Blitz, David and van Vliet, Pim, The Volatility Effect: Lower Risk Without Lower Return (July 4, 2007). Journal of Portfolio Management, pp. 102-113, Fall 2007; ERIM Report Series Reference No. ERS-2007-044-F&A. <http://ssrn.com/abstract=980865>

5. Where can I get the Human Capital Scores? The Human Capital Scores of the current constituents are available for purchase through S&P DJI.

6. Do I need a license from S&P DJI in order to use the index and its data? Yes, in order to access, receive, use, and/or distribute the index or any related data, you will be required to enter into a subscription, license, and/or distribution agreement with S&P DJI. Questions regarding licensing the indices can be addressed to:

Yoshiyuki Makino at

yoshiyuki.makino@spglobal.com, +81-3-4550-8563

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Yoshiyuki Makino at

yoshiyuki.makino@spglobal.com, +81-3-4550-8563

8. How much does the index cost for subscription and usage? Pricing information requests can be addressed to:

Yoshiyuki Makino at

yoshiyuki.makino@spglobal.com, +81-3-4550-8563

9. Will S&P DJI calculate customized versions of the index? Yes, custom indices can be developed and distributed at an additional cost. Custom index requests can also be addressed to:

Yoshiyuki Makino at

yoshiyuki.makino@spglobal.com, +81-3-4550-8563

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