

Index Methodology Guide for the FactSet Japan New Growth Infrastructure Index™

Version 1.0 – February 11, 2022

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Index Introduction and Objective

1.1 Index Overview

The FactSet Japan New Growth Infrastructure Index is an equity benchmark designed to track the performance of infrastructure-related Japanese companies. The index primarily includes companies in communication, transportation and logistics, social and health services, energy, and utilities industries.

The FactSet Japan New Growth Infrastructure Index is a free float-adjusted market capitalization weighted index reconstituted and rebalanced annually.

The FactSet Japan New Growth Infrastructure Index is calculated and maintained by Solactive AG based on a methodology developed by FactSet. It is calculated on a price, total and net total return basis in Japanese Yen (JPY). The index is calculated continuously, and on an end-of-day basis, from Monday to Friday from 1:00 a.m. to 10:50 p.m. CET (Central European Time). Index values are distributed via various data channels and market data vendors, including the price marketing services of Boerse Stuttgart AG. End-of-day price and total return values of the index may also be obtained from FactSet upon request.

Whenever possible, constituent changes to the index are announced five business days before becoming effective.

1.2 Inception Date and Base Value

The Index Inception Date was October 28, 2016, with a base value of 1000.00. The inception date refers to when the first back-tested index value was calculated. The back test is based on a similar methodology used to calculate the index when it was officially launched on February 11, 2022.

1.3 Index Valuation Days

Index Valuation Days are business days, Monday to Friday where the Tokyo Stock Exchange is opened for trading.

1.4 Commencement Date

The index commencement date was February 11, 2022. Commencement date refers to when the index was officially launched with continuous and end-of-day calculations.

1.5 Reconstitution and Rebalance Schedule

The index is reconstituted and rebalanced annually after the close of the 4th Friday of October each year (“Reconstitution Day” and “Rebalance Day”).

If any of the existing or new index components is not trading on Reconstitution Day/Rebalance Day due to an exchange holiday, the reconstitution/rebalance is moved to the next Japan business day.

The data used to reconstitute and rebalance the index is as of the close of the 2nd Friday of October (“Selection Day”). Subsequent adjustment to the index composition may be made to account for corporate actions that occur between the Selection Day and the Reconstitution Day or Rebalance Day.

Index Construction

2.1 Constituent Selection and Weighting Schema

1. Select all common stocks primarily listed in Tokyo Stock Exchange and JASDAQ.
2. Select securities with total market capitalization greater than or equal to ¥50 Billion JPY, and minimum three-month Average Daily Trading Value (ADTV) of ¥200 Million JPY.

Existing constituents may remain in the index if their total market capitalization is greater than or equal to ¥40 Billion JPY, and three-month ADTV is greater than ¥160 Million JPY.

3. Select securities that are classified to one of the following 129 industries as defined by RBICS Focus Level 6:

Category	RBICS L6 ID	RBICS L6 Name
Communication	601015101510	Asia (Excluding China) Wireless Services
Communication	601015151510	Asia (Excluding China) Wireline Services
Communication	601010552010	Asia Excluding China Mixed Telecommunications
Communication	551515351010	Carrier Core (Backbone) Equipment
Communication	551515352010	Carrier Edge Network Management Equipment
Communication	551515401010	Cellular Site Equipment
Communication	552010201010	Colocation and Data Center Services
Communication	601010301015	Data Transport Carrier Services
Communication	601010151010	Diversified Satellite Services
Communication	601010351010	Enhanced Telecommunications Services Software
Communication	551515401510	Fixed Microwave Systems Equipment
Communication	551515352015	General Carrier Edge (Access) Equipment
Communication	551515251010	General Communications Equipment
Communication	601010401010	General Communications Services
Communication	552020101010	General Enterprise and Technology Consulting
Communication	552020251510	General Infrastructure and Network Consulting
Communication	551515301510	Global Positioning Systems (GPS) Manufacturing
Communication	601010201015	International Mobile Satellite Services
Communication	601010101010	Mixed International Telecommunications Services
Communication	601015102510	Multiregion Wireless Services
Communication	601015152510	Multiregion Wireline Services
Communication	552020252010	Network Design and Implementation Consulting
Communication	601010301020	Other Carrier Services
Communication	551020401015	Other Communications Semiconductors
Communication	551515402010	Other Core Infrastructure Equipment
Communication	551515452010	Other Mobile Equipment

Communication	551515302010	Other Satellite Equipment
Communication	601010351015	Other Telecommunications Industry Software
Communication	551515353010	Other Wide Area Networking (WAN) Equipment
Communication	551515251510	Other Wireless Equipment
Communication	601010551010	Pan-Asia/Pacific Mixed Telecommunications Services
Communication	601015151525	Pan-Asia/Pacific Wireline Services
Communication	601010301025	Tandem Interconnection Services
Communication	401525101030	Telecommunications Construction
Communication	601010351020	Telecommunications Customer Relationship Software
Communication	601010351025	Telecommunications Operations Support Software
Communication	551515201510	Wireless and Wi-Fi Equipment
Communication	601010401510	Wireless Infrastructure Services
Communication	551515202010	Wireline Equipment
Energy & Utilities	251510101025	Asia/Pacific CNG and LNG Distributors
Energy & Utilities	251515101015	Asia/Pacific Natural Gas Pipeline and Storage
Energy & Utilities	251510103025	Asia/Pacific Propane and LPG Marketing and Dist.
Energy & Utilities	651015101015	Asia/Pacific Water Utilities
Energy & Utilities	401015101510	Backup, Emergency and Standby Power Products
Energy & Utilities	401015101550	Battery Charging Equipment Manufacturing
Energy & Utilities	451010101510	Biodiesel Fuel Manufacturing
Energy & Utilities	251510101010	CNG and LNG Distributors
Energy & Utilities	502010151010	Consumer Batteries Manufacturing
Energy & Utilities	401015201010	Diversified Power Generation Equipment Makers
Energy & Utilities	401015101545	Electric Vehicle Batteries Manufacturing
Energy & Utilities	201515351010	Electric Vehicle Charging Stations
Energy & Utilities	451010101515	Ethanol Fuel Manufacturing
Energy & Utilities	401015201510	Fuel Cell Equipment and Technology Providers
Energy & Utilities	451010101520	Gasification Alternative Fuel Manufacturing
Energy & Utilities	401015101535	Heavy-Duty Industrial Batteries Manufacturing
Energy & Utilities	401015201535	Hydroelectric Power Generation Equipment Providers
Energy & Utilities	451010101545	Hydrogen Fuel Manufacturing
Energy & Utilities	451010151525	Hydrogen Gas Manufacturing
Energy & Utilities	251515101010	International Natural Gas Pipeline and Storage
Energy & Utilities	451020303015	Lithium Compounds Manufacturing
Energy & Utilities	451525101040	Lithium Ore Mining
Energy & Utilities	251510101510	LPG, Propane and Other Distributors
Energy & Utilities	401015101540	Military Batteries Manufacturing
Energy & Utilities	401015101520	Mixed Heavy-Duty and High-End Batteries Makers
Energy & Utilities	401015201515	Mixed Renewable Energy Generation Manufacturing
Energy & Utilities	651010601010	Multinational Transmission, Dist., and Storage
Energy & Utilities	651015201010	Multi-National Water Utilities

Energy & Utilities	451010101530	Other Alternative Fuel Manufacturers
Energy & Utilities	651010452030	Other Asia/Pacific Biomass Wholesale Power
Energy & Utilities	651010452035	Other Asia/Pacific Decentralized Wholesale Power
Energy & Utilities	651010452040	Other Asia/Pacific Geothermal Wholesale Power
Energy & Utilities	651010452045	Other Asia/Pacific Hydroelectric Wholesale Power
Energy & Utilities	651010452010	Other Asia/Pacific Mixed Alt. Wholesale Power
Energy & Utilities	651010452025	Other Asia/Pacific Mixed Trad. Wholesale Power
Energy & Utilities	651010452060	Other Asia/Pacific Nuclear Wholesale Power
Energy & Utilities	651010452050	Other Asia/Pacific Solar Wholesale Power
Energy & Utilities	651010452055	Other Asia/Pacific Wind Wholesale Power
Energy & Utilities	251515151010	Other Pipeline and Energy Storage Services
Energy & Utilities	401015201520	Photovoltaic and Solar Cells and Systems Providers
Energy & Utilities	401015201020	Power Transmission and Distribution Products
Energy & Utilities	251510103010	Propane and LPG Marketing and Distribution
Energy & Utilities	401015201525	Smart Grid Technology and Smart Meter Products
Energy & Utilities	401015101555	Traditional Car Batteries Manufacturing
Energy & Utilities	451535101525	Utilities Pipes and Pipe Fittings Manufacturing
Energy & Utilities	401020101040	Utility Meter Manufacturing
Energy & Utilities	401015201530	Wind Energy Equipment Manufacturing
Social & Health Services	101025101010	Diversified General Waste Collection
Social & Health Services	101025151010	Diversified Hazardous Materials Disposal
Social & Health Services	351510151010	Diversified Healthcare Business Management
Social & Health Services	351510201010	Diversified Healthcare Distributors
Social & Health Services	351515251010	Diversified Patient Care
Social & Health Services	502510101010	Educational Support Services
Social & Health Services	101025151510	Electronic Waste Services
Social & Health Services	101025101510	Garbage Services
Social & Health Services	351515101010	General and Acute Hospitals
Social & Health Services	351515151010	General Clinical Laboratories
Social & Health Services	101025152510	Hazardous/Industrial Waste Disposal
Social & Health Services	351515201510	Home Healthcare
Social & Health Services	101025102010	Landfill Services
Social & Health Services	401020101025	Liquid and Water Purification/Filtration Products
Social & Health Services	451510202520	Metal Recycling Providers
Social & Health Services	502510101015	Multi-Age Educational Services
Social & Health Services	351515151515	Multi-Type Diagnostic Patient Care
Social & Health Services	351515101510	Other Hospitals
Social & Health Services	351515202010	Other Long-Term Care Facilities
Social & Health Services	451510202530	Other Metal Processing and Recycling Providers
Social & Health Services	101025201010	Other Waste Services
Social & Health Services	502510101020	Primary and Secondary Education

Social & Health Services	101025102510	Recycling Services
Social & Health Services	351515202510	Skilled Nursing Facility (Nursing Home)
Social & Health Services	101025303510	Wastewater Residual Management
Social & Health Services	101025251010	Wastewater Treatment Services
Transportation & Logistics	401510101025	Air Transport Infrastructure and Support Providers
Transportation & Logistics	401510101015	Airport/Flight Support Infrastructure Operators
Transportation & Logistics	202010151020	Alternative Energy Car Manufacturers
Transportation & Logistics	551515301010	Asset Tracking GPS Systems Manufacturing
Transportation & Logistics	401010101040	Autonomous Drone Manufacturers
Transportation & Logistics	401515101010	Express Couriers
Transportation & Logistics	401515151010	General Delivery and Logistics Providers
Transportation & Logistics	401515201010	Logistics and Supply Chain Service Providers
Transportation & Logistics	401020151015	Material Handling/Conveyor Equipment Manufacturing
Transportation & Logistics	401510201520	Multi-Size Trucking Road Transportation
Transportation & Logistics	202010151010	Multi-Type Car Manufacturers
Transportation & Logistics	451535101520	Public Infrastructure Components Manufacturing
Transportation & Logistics	551510102010	RFID Asset Tracking Equipment Manufacturing
Transportation & Logistics	401510201530	Road Transportation Infrastructure and Support
Transportation & Logistics	401510101535	Shipping Infrastructure and Services (Ports)
Transportation & Logistics	401510201535	Toll Road Operators
Transportation & Logistics	401525101035	Transportation Construction

4. For companies that remain after Step 3 above, apply ESG screening to remove companies that are at risk of violating the United Nations Global Compact (UNGC) as defined by having TruValue SDG Adjusted Insight Scores of 25 or lower, or identified to be producers of weapons and firearms, thermal coal, or tobacco, defined as deriving 10% or more of their revenues from each of the 3 aforementioned product categories.
5. Within each RBICS Focus Level 6, rank the securities by their float-adjusted market capitalization from highest to lowest and select the top 1 ranked security.
6. Rank remaining securities by their float-adjusted market capitalization within each category from highest to lowest. Select up to top 10 ranked securities.

If the index contains less than 40 securities, then include securities that are ranked 11th and lower from all 4 categories, starting from the security with the largest float-adjusted market capitalization until the index reaches 40 constituents.
7. Weight the securities by their free float-adjusted market capitalization. Individual security weights are capped at 8%, and excess weights are redistributed proportionally among remaining uncapped securities. If this leads to additional security weights exceeding 8%, the redistribution process is repeated iteratively until no security weight exceeds 8%.

Additionally, aggregated weight of each category is capped at 30% and excess weights are redistributed proportionally among remaining uncapped categories.

In addition to the above selection schema, FactSet may at its discretion and in consultation with index licensee, modify one or more selection criterion to ensure relevant and timely capture of the theme. Whenever possible, any modifications shall be announced 60 days prior to annual Reconstitution Day.

2.2 Index Return Formulas

The price, total and net total returns levels of the index are calculated using the following formulas.

$$I_{(t)} = \frac{\sum_{i=1}^n S_{i(t)} \times P_{i(t)}}{D_{(t)}}$$

where:

$I_{(t)}$ = Index value on Index Valuation Day (t)

$D_{(t)}$ = Divisor on Index Valuation Day (t)

n = Number of stocks in the index

$P_{i(t)}$ = Closing price of stock (i) on Index Valuation Day (t)

$S_{i(t)}$ = Number of allocated shares of stock (i) on Index Valuation Day (t)

and on Inception Date, where (t) = 0, the initial divisor is calculated as follows:

$$D_{(0)} = \frac{\sum_{i=1}^n S_{i(0)} \times P_{i(0)}}{I_{(0)}}$$

where:

$I_{(0)}$ = Price Returns Index value on Index Inception Date

$D_{(0)}$ = Divisor on Index Inception Date

n = Number of stocks in the index on Index Inception Date

$P_{i(0)}$ = Price of stock (i) on Index Inception Date

$S_{i(0)}$ = Number of allocated shares of stock (i) on Index Inception Date

Allocated shares (“S”) are the number of shares required for each constituent such that all constituents are free float-adjusted market capitalization weighted. Allocated shares (“S”) would be adjusted accordingly to account for Corporate Actions.

Net total return is calculated to account for the effect of tax withholding on dividends by adjusting dividend taken out due to tax payment.

2.3 Index Divisor Adjustments

From time to time, the index divisor is adjusted to account for corporate actions that could distort index value and continuity using the following formula:

$$D_{(t+1)} = D_{(t)} \times \frac{\sum_{i=1}^n AS_{i(t+1)} \times AP_{i(t+1)}}{\sum_{i=1}^n S_{i(t)} \times P_{i(t)}}$$

where:

- $D_{(t+1)}$ = Divisor for Index Valuation Day (t+1) after CA and rebal adjustment
 $D_{(t)}$ = Divisor for Index Valuation Day (t)
 $AP_{i(t+1)}$ = Adjusted price of stock (i) calculated for open on Index Valuation Day (t+1) after CA adjustment
 $P_{i(t)}$ = Closing price of stock (i) on Index Valuation Day (t)
 $S_{i(t)}$ = Number of allocated shares of stock (i) on Index Valuation Day (t)
 $AS_{i(t+1)}$ = Adjusted number of allocated shares of stock (i) for open on Index Valuation Day (t+1) after CA adjustment.

Divisor adjustments are generally implemented on the date the corporate action becomes effective, such that for example, the ex-dividend date rather than the payment date is used to time the divisor adjustment.

Find below a detailed calculation for AP, AS, and S in case of corporate actions and rebalancing.

$AP_{i(t)}$ = Adjusted price of stock (i) is determined for the open on Index Valuation Day (t) shall mean:

- If index constituent opens ex-date in respect of the corporate action, then $AP_{i(t)}$ is determined as per Corporate Action Adjustment Section.
- Otherwise

$$AP_{i(t)} = P_{i(t-1)}$$

$S_{i(t)}$ = Number of allocated shares of stock (i) on Index Valuation date (t) is determined as

$$S_{i(t)} = AS_{i(t)}$$

$AS_{i(t)}$ = Adjusted number of allocated shares of stock (i) for open on Index Valuation Day (t) after CA adjustment is determined as:

- If such day opens immediately following the Rebalancing Day (t-1) and if:
 - index constituent opens ex-date in respect to corporate action, then $AS_{i(t)}$ is determined as per Corporate Action Adjustment Section with $S_{i(t-1)}$ replace with:

$$S_{i(t-1)} = \frac{I_{(t-1)} \times Weight_{i(t-1)}}{P_{i(t-1)}}$$

- index constituent does not opens ex-date in respect to corporate action, then $AS_{i(t)}$ is determined as:

$$AS_{i(t)} = \frac{I_{(t-1)} \times Weight_{i(t-1)}}{P_{i(t-1)}}$$

- On any other day:

- index constituent opens ex-date in respect to corporate action, then $AS_{i(t)}$ is determined as per Corporate Action Adjustment Section
- Otherwise:

$$AS_{i(t)} = S_{i(t-1)}$$

where $Weight_{i(t-1)}$ is determined as per Section 2.1.

2.4 Corporate Action Adjustments

Special Cash Dividend:

$$AP_{i,t} = P_{i,t-1} - D_{i,t}$$

Where

t = Index Valuation Date (t) is ex-date for corporate action.

D_{i,t} = Dividend amount corresponding to stock (i) with ex-date (t).

Spin-off Adjustment

If an index constituent (i.e. the parent company) distributes part of its business into a spun-off company, the spun-off company will be added to the Index according to the transaction terms on the ex-date.

The parent company will remain in the Index with unchanged calculation parameters. The spun-off company will remain in the Index until the next ordinary rebalancing.

The spun-off company will be added to the Index with an open price of zero on ex-date.

If the spun-off company does not start to trade on the effective date (i.e. ex-date), a theoretical price for the spun-off company will be implemented (**see the equation below**) as a fixed price until it commences trading, from which time official prices will be used.

$$P_{f(t)} = [P_{i(t-1)} - AP_{i(t)}] \times ShareRatio_{i(t)}$$

Where

$P_{i(t-1)}$ = Closing price of Parent Company on Index Valuation Date (t-1).

$AP_{i(t)}$ = Open price of Parent Company on Index Valuation Date (t).

$P_{f(t)}$ = Price of Spun-off Company on Index Valuation Date (t).

Rights Issue Adjustment

$$AP_{j,t} = \frac{P_{j,t-1} + C_{j,t} \times \text{Share Ratio}_{j,t}}{1 + \text{Share Ratio}_{j,t}}$$
$$AS_{j,t} = S_{j,t-1} \times (1 + \text{Share Ratio}_{j,t})$$

Where

$C_{j,t}$ = Official tender price.

Stock Splits Adjustment

$$AP_{j,t} = \frac{P_{j,t-1}}{\text{Share Ratio}_{j,t}}$$
$$AS_{j,t} = S_{j,t-1} \times \text{Share Ratio}_{j,t}$$

Stock distribution

$$AP_{j,t} = P_{j,t-1} \times \frac{1}{1 + \text{Share Ratio}_{j,t}}$$
$$AS_{j,t} = S_{j,t-1} \times (1 + \text{Share Ratio}_{j,t})$$

Index Maintenance

Constituent changes may occur between review periods due to corporate events that disqualify their eligibility for index inclusion. Adjustments to corporate events are described below:

3.1 Corporate Actions – Delisting

A constituent is removed immediately after being delisted from its primary markets.

3.2 Corporate Actions – Merger or Acquisition

If a merger or acquisition results in one constituent acquiring another, the acquiring company remains a constituent, and the acquired company is removed. If a non-constituent acquires a constituent, the acquired constituent is removed. If a constituent acquires a non-constituent, the acquiring constituent remains a constituent.

3.3 Corporate Actions – Spin-off

If a constituent spins or splits off a portion of its business, both the spun-off company and the parent company (the entity representing the existing constituent) will be kept in the index, and be considered for removal from the index at the next Reconstitution or Rebalance Day should they fail to meet the eligibility criteria in Section 2.1.

3.4 Corporate Actions – Bankruptcy

If a constituent is delisted after bankruptcy, it will be removed immediately with a price of 0 from the index.

Index Calculation and Data Correction

4.1 Index Calculation

Price, Total Return, and Net Total Return values for the FactSet Japan Mid & Small Cap Leaders Index are calculated by Solactive AG. The price, total and net total return values are calculated on a continuous and end-of-day basis by using the trading price for each component in the index from relevant exchanges and markets. Index values are rounded to 2 decimal places and divisors are rounded to 6 decimal places.

If trading in a stock is suspended prior to the market opening, the stock's adjusted closing price from the previous day will be used in the index calculation until trading commences. If trading in a stock is suspended while the relevant market is open, the official closing price published by relevant exchange for that stock will be used for all subsequent index calculations until trading resumes.

In case of exceptional market conditions disrupting normal closing auction, or causing official closing prices not being available, Solactive and FactSet reserve the right to utilize other prices in the calculation of the official closing level.

4.2 Data Correction

Incorrect index constituent data, corporate action data, or index divisors will be corrected upon detection. If such errors are discovered within five days of occurrence, they will be corrected retroactively on the day of discovery. If discovered after five days, corrective actions will be decided based on the errors' significance and feasibility of a correction.

4.3 Decision Making in Undocumented Events

A FactSet Index Committee consisting of select employees of FactSet Research Systems Inc. is responsible for amending rules as documented in the Index Methodology Guide due to undocumented or extraordinary events.

Additional Information

5.1 Contact Information

FactSet Research Systems Inc.
One Sansome St. Floor 19
San Francisco, CA 94104
Tel.: 1.415.645.0967 Fax: 1.415.645.0901
Contact: GoIndexing@factset.com

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