NOMURA

Nomura Enterprise Value Allocation Index

EQUITY QUANTITATIVE RESEARCH (INDEX)

Index rulebook

Global Markets Research

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Research analysts

Japan index products

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The Nomura Enterprise Value Allocation Index is a market cap-weighted Japanese equity index (with individual stock weightings capped at 3%) comprising stocks in highly profitable companies that have taken proactive steps to improve shareholder returns, for example by making appropriate investments in physical and human capital.

A quantitative indicator based on factors such as profits, dividends, personnel expenses, capex, and R&D expenditure is used to select stocks for inclusion in the index, from a universe of all common stocks listed on Japanese stock exchanges.

Index characteristics

- The index comprises the top stocks (capped at 300) in terms of a quantitative indicator (total score) based on nine factors related to profitability and stakeholder returns.
- To ensure objectivity and accuracy in the selection of stocks for the index, factor values are calculated only on the basis of widely available actual financial data.
- To take investability into account, inclusion in the index of stocks with low market cap or low liquidity is restricted.
- The index is weighted by market cap, but individual stock weightings are capped at 3% to prevent excessive weighting towards large caps.
- Periodic reconfigurations of the index take place once a year.

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Contents

1. Periodic reconfigurations

1.1 Periodic reconfiguration date

The periodic reconfiguration date is 20 August each year (or the following business day if this is a non-business day), and the reconfiguration is carried out after the close of trading on the business day preceding the periodic reconfiguration date.

1.2 Periodic reconfiguration base date

Stocks to be included in the index following its periodic reconfiguration are selected on the basis of data as of the periodic reconfiguration base date, defined as the last business day of July each year.

1.3 Release of periodic reconfiguration data

As a general rule, an announcement will appear on our website at around 16:00 JST seven business days before a periodic reconfiguration, except in cases of unforeseen circumstances or when information cannot be confirmed until immediately beforehand.

2. Stock selection and index construction method

2.1 Stock selection universe

The universe of stocks eligible for inclusion in the index, which we refer to as the stock selection universe, includes the top 98% of all stocks listed on Japanese stock exchanges[1] in terms of free-float adjusted market cap as of 15 October in the year before the periodic reconfiguration base date (or the business day before this if 15 October is a non-business day; this is called the stock selection universe fixing date), out of all stocks listed on Japanese stock exchanges as of end-March in the year before the periodic reconfiguration base date. Of the stocks that were listed in or after April in the year before the periodic reconfiguration base date, those in approximately the top 85% in terms of free float-adjusted market cap and newly merged stocks are also included in the stock selection universe. Stocks that meet the following criteria as of the reconfiguration base date are excluded.

- Equities other than common stock

As a general rule, only common stock is included in the stock selection universe. However, exceptions to this rule will be made if necessary.

- Stocks assigned for delisting

Stocks designated as securities to be delisted are not included in the stock selection universe.

- Stocks on alert[2]

Stocks designated as securities on alert are not included in the stock selection universe.

- Stocks under supervision (examination) and stocks under supervision (confirmation)[3]

Stocks under supervision (examination) and stocks under supervision (confirmation) that are not included in the index immediately prior to the periodic reconfiguration are not included in the universe.

- Tender offer target companies[4]

Stocks that are the targets of tender offers may be removed from the stock selection universe if all of the following conditions are met:

(1) The offer close date falls between the stock selection universe fixing date and the periodic reconfiguration date;

(2) The company conducting the tender offer plans to acquire all the outstanding shares in the target company; and

(3) The company conducting the tender offer is planning to discuss acquiring all of the stock of the target company in exchange either for money or its own stock, and the target company has agreed to the offer.

- Listed investment trusts/REITs
- Foreign stocks

Stocks listed on foreign sections of Japanese exchanges or stocks regarded as overseas companies are excluded, even if these stocks are traded in the Japanese market.

- Other

[1] Tokyo Stock Exchange (1st Section, 2nd Section, Mothers, JASDAQ, TOKYO PRO Market), Nagoya Stock Exchange, Sapporo Securities Exchange, and Fukuoka Stock Exchange.

[2] This rule will apply to periodic reconfigurations from August 2016.

3 This rule will apply to periodic reconfigurations from August 2016.

4 This rule will apply to periodic reconfigurations from August 2016.

Latent stocks, warrants, and rights on them are excluded. The Bank of Japan is also excluded.

2.2 Calculation of total score

2.2.1 Financial indicators used in stock selection

From data available as of the periodic reconfiguration base date, actual financial data for the past three fiscal years is used, as defined below.

- Past three fiscal years
    - o Most recently completed fiscal year: fiscal year-end falls between April in the year before the periodic reconfiguration base date and March in the year of the periodic reconfiguration base date.
    - o Second most recently completed fiscal year: fiscal year-end falls in period covering 12 months before most recently completed fiscal year.
    - o Third most recently completed fiscal year: fiscal year-end falls in period covering 12 months before second most recently completed fiscal year.
- Accounting standards

The highest priority is given to data prepared in accordance with IFRS, followed by US GAAP (SEC), Japanese GAAP (consolidated), and Japanese GAAP (parent).

Where multiple financial indicators are available, the order of priority for accounting standards and financial indicators is as follows.

Order of priority for financial indicators A, B, and C:

IFRS financial indicator A > SEC financial indicator A > Japanese GAAP (consolidated) financial indicator A > IFRS financial indicator B > SEC financial indicator B > Japanese GAAP (consolidated) financial indicator B > IFRS financial indicator C > SEC financial indicator C > Japanese GAAP (consolidated) financial indicator C > Japanese GAAP (parent) financial indicator A > Japanese GAAP (parent) financial indicator B > Japanese GAAP (parent) financial indicator C

2.2.2 Score calculation universe

Using data as of the periodic index reconfiguration base date, stocks within the stock selection universe that meet the following criteria are eligible for inclusion in the score calculation universe.

Market cap criteria

(1) Among all listed Japanese stocks, we screen for the top 2,000 stocks in terms of average monthly trading value over the previous 12 months.

(2) From the stock selection universe, we select the top 1,000 stocks in terms of free-float adjusted market cap that meet criterion (1) above.

Creditworthiness criteria

- o Stocks for which data on operating profits[5], net profits, or equity capital[6] for any of the past three years is not available are excluded.
- o Stocks that have posted operating losses[7] in all of the past three fiscal years are excluded.
- o Stocks that have posted net losses[8] in all of the past three fiscal years are excluded.

[5] For stocks where operating profit data (overall operating profits for railway companies, net business profits for banks, business profits for insurance companies) is not available, we use recurring profits (pretax net profits for IFRS, net profits before taxes for US GAAP) or net profits, in that order.

[6] When shareholders' equity data is not available, total capital (total of the items in the equity capital section of the balance sheet) is used.

[7] Operating losses refers to negative operating profits. For stocks where operating profit data (overall operating profits for railway companies, net business profits for banks, business profits for insurance companies) is not available, we use recurring profits (pretax net profits for IFRS, net profits before taxes for US GAAP) or net profits, in that order.

- o Stocks with net liabilities[9] in any of the past three fiscal years are excluded.

2.2.3. Factor-based ranking score

We rank the stocks in the score calculation universe in terms of nine factors based on data for the past three years as of the periodic reconfiguration base date (we refer to these rankings hereafter as ranking scores). We set out the methods used to calculate the nine factors below. Ranking scores are treated as not applicable (NA) if data for all of the past three years is not available[10].

(1) Total net profits

Total net profits over the three years, ie, the total of values for the most recently completed fiscal year, the second most recently completed fiscal year, and the third most recently completed fiscal year[11] (same hereafter). The higher the value the higher the ranking.

(2) Return on assets (ROA)

Average ROA (profits/total assets) over the three years, ie, the average for the most recently completed fiscal year, the second most recently completed fiscal year, and the third most recently completed fiscal year, weighted at a ratio of 3-to-2-to-1, respectively (same hereafter).The order preference for the profit numerator is operating profits[12], recurring profits[13], then net profits. The higher the value the higher the ranking.

(3) Dividend on equity (DOE)

Average DOE (total dividends/shareholders' equity[14]) over the three years. When the total dividends numerator or shareholders' equity denominator is zero or negative, DOE is considered to be zero. The higher the value the higher the ranking.

(4) Total personnel expenses

Total personnel expenses (personnel expenses + labor expenses) over the three years. The higher the value the higher the ranking.

(5) Change in personnel expenses to sales ratio

The average ratio of the year-on-year change in total personnel expenses (personnel expenses + labor expenses) to sales over the three years[15]. The year-on-year change is the difference from the previous year’s value. Companies for which financial indicators based on the same accounting standards for the previous year and the current year are not available are excluded from the calculation. The higher the value the higher the ranking.

(6) Percentage change in number of employees

The average over the three years of the year-on-year percentage change in the number of employees, calculated by dividing the difference between the current year’s figure and the previous year’s figure, divided by the previous year’s figure. Companies for which financial indicators based on the same accounting standards for the previous year and the current year are not available are excluded from the calculation. The higher the value the higher the ranking.

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[8] Net losses is negative net profits.

[9] Net liabilities refer to negative shareholders' equity (ie, total net assets - (paid-in capital + stock acquisition rights + minority interests)). When shareholders’ equity data is not available, total capital (total of the items in the equity capital section of the balance sheet) is used.

[10] See 2.2.4 Calculation of total score for details of how we treat NA.

[11]. The average value for the other years is used if the value for one of the years cannot be used.

[12] Overall operating profits used for electric railway companies, net business profits used for banks, and business profits used for insurers.

[13] Pretax net profits used for IFRS data, net profits before adjustment for taxes, etc, used for SEC data.

[14] When shareholders' equity (ie, total net assets - (paid-in capital + stock acquisition rights + minority interests)) data is not available, total capital (total of the items in the equity capital section of the balance sheet) is used.

[15] When the sales numerator is zero or negative, this is excluded from the calculation.

(7) Total capex/R&D expenditure

Total capex[16] and R&D expenditure over the three years. If capex data is not available, property, plant, and equipment (current year) - property, plant, and equipment (previous year) + depreciation expenses (current year) can be used. The higher the value the higher the ranking.

(8) Total assets to capex/R&D expenditure ratio

The average over the three years of the ratio of total assets to capex/R&D expenditure (7) ((capex + R&D expenditure) / total assets). The higher the value the higher the ranking.

(9) Change in total assets to capex/R&D expenditure ratio

The average over the three years of the year-on-year change in the ratio of total assets to capex/R&D expenditure (8). The year-on-year change is the difference between the current year and the previous year. Companies for which financial indicators based on the same accounting standards for the previous year and the current year are not available are excluded from the calculation. The higher the value the higher the ranking.

Fig. 1: Nine factors

No.	Factor	Basis
1	Total net profits	3-year total
2	Return on assets (ROA)	3-year average
3	Dividend on equity (DOE)	3-year average
4	Total personnel expenses	3-year total
5	Change in personnel expenses to sales ratio	3-year average
6	Percentage change in number of employees	3-year average
7	Total capex/R&D expenditure	3-year total
8	Total assets to capex/R&D expenditure ratio	3-year average
9	Change in total assets to capex/R&D expenditure ratio	3-year average

Source: Nomura

2.2.4 Calculation of total score

A stock's total score is the average ranking score for the nine factors within the score calculation universe. A ranking score of NA is designated a value of 500[17].

2.3 Stock selection method

Stocks selected for the index are those in the top 300 in terms of total score, taking into account the rebalancing band as defined below, that also meet the liquidity criteria. However, if the number of stocks selected in this way is less than 100, an adjustment to secure an adequate number of stocks is carried out, as defined below.

(1) Rebalancing band[18]

1) The top 250 stocks in terms of total score are selected unconditionally.

2) Stocks that are ranked in the top 350 in terms of total score and are included in the index immediately before the periodic reconfiguration are selected in order of their total score until the total number of such stocks reaches 300[19].

[16] When accounting standards are on a nonconsolidated basis, we use capex (construction basis) for the current year.

[17] An approximation of the median ranking score.

[18] This rule will be applied from the August 2016 reconfiguration.

[19] If there are multiple stocks ranking 300th in terms of total score, the stock with the higher free float-adjusted market cap is selected.

3) If the number of stocks selected using methods (1) and (2) above is less than 300, stocks are selected in order of their total score until the total number reaches 300[18].

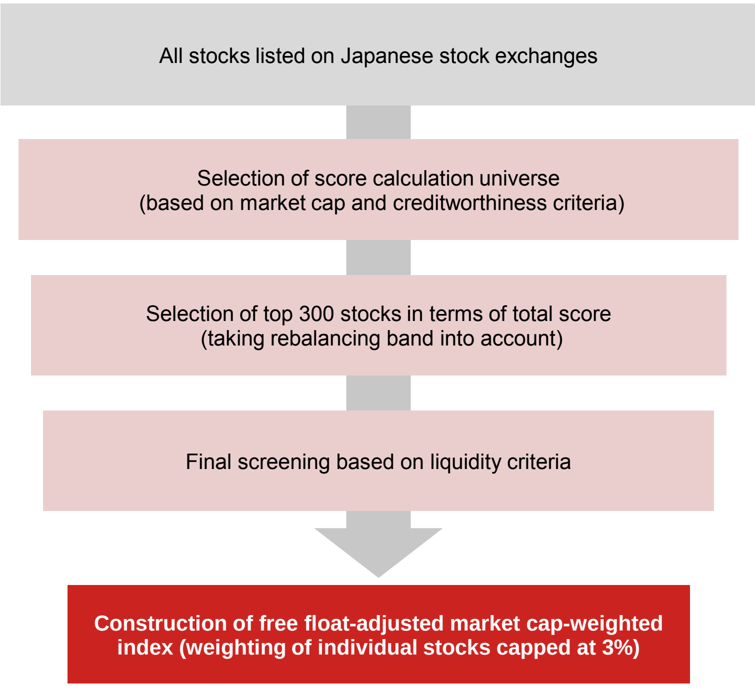
(2) Liquidity criteria

- Stocks are excluded from the index if the number of days in the past year when transactions were carried out (ie, the number of days on which trading value was not zero) is less than 200 (below, we refer to this as the business days criterion).
- Stocks are excluded from the index if total market turnover over the past year is less than ¥100bn (below, we refer to this as the market turnover criterion).

(3) Adjustment to ensure adequate number of stocks

If the number of stocks included in the index is less than 100, of the stocks in the top 400 in terms of total score that also meet the liquidity criteria (2), stocks are selected in order of total score until the number of selected stocks reaches 100.

Fig. 2: Index construction method



Source: Nomura

2.4 Index weightings for constituent stocks

2.4.1 Weightings and weighting cap for constituent stocks

The index weighting of each constituent stock is based on its free float-adjusted market cap[20] on the periodic reconfiguration base date. However, individual stock weightings are capped at 3%, with the excess allocated to other stocks in proportion to their free float-adjusted market cap.

2.4.2 Number of shares included in the index for index constituents and index inclusion ratio

The number of shares included in the index for each constituent stock and its index inclusion ratio (%) are calculated so that the index inclusion ratio is the same as the stock weighting as defined above, using data as of the periodic reconfiguration base date.

Market cap of stock *i* = index weighting of stock i x Σi (free float-adjusted market cap for stock *i*)

Number of shares in stock *i* included in index = market cap of stock i ÷ Nomura composite share price for stock *i*

Index inclusion ratio for stock *i* = number of shares in stock i included in index ÷ number of shares outstanding in stock i for index calculation purposes *i*

i indicates each index constituent, Σi indicates the sum for all index constituents.

o Nomura composite share price

The Nomura composite share price is the price on the exchange that is judged to have the most accurate price for the stock in question (ie, its primary exchange), based on the percentage of days on which the stock was traded and its trading volume over the previous 60 business days. As a general rule, the primary exchange is selected on a daily basis. The share price is selected according to the following order of precedence:

Contract price on selected exchange (see note) > standard price on selected exchange > Nomura composite share price on previous business day

Note: Priority is given to the special quotation price or continuous confirmed quotation price on the selected exchange if these are available.

[20] Free float-adjusted market cap of stock i = no. of shares out in stock i for index calculation purposes X closing value of Nomura composite share price for stock i X (1 - stable shareholding ratio). Stable shareholding ratios are estimated from the stable shareholding—the number of shares considered to be held on a stable basis, based on major shareholder data, the details of security holdings disclosed in securities filings, and information published by stock exchanges and companies (in company reports, prospectuses, etc). The number of shares outstanding for index calculation purposes is the number of shares out after taking into account changes in the number of shares in line with the timing of changes in capital structure under 4.2 Adjustments to base market capitalization.

3. Unscheduled reconfigurations

As a general rule, an announcement will appear on our website around two weeks before an unscheduled reconfiguration, except in cases of unforeseen circumstances or when information cannot be confirmed until immediately beforehand.

3.1 Response to mergers[21]

The rules set out below are followed in order to avoid temporary exclusions of companies from the index and maintain the consistency of stocks included in the index.

3.1.1. Mergers

When a stock is delisted because it is about to become a wholly owned subsidiary or be merged into another company, it will continue to be included in the index after its delisting but will be removed from the index on the day of the merger. Following its delisting, and until its removal from the index, the valuation of the stock that is about to become a wholly owned subsidiary or merged entity will be based on the market value of the company that will become the parent or the surviving company multiplied by the exchange or merger ratio. The index inclusion ratio of the parent or surviving company will be changed on the day of the merger (or the following business day if the merger takes place on a non-business day) to reflect the exchange or merger ratio.

3.1.2. Newly merged stocks

When an unlisted parent company assumes the operations of another company and becomes listed after a short period of time, the stock of the wholly owned subsidiary is removed from the index on the date of the parent company's listing. The price of the delisted subsidiary used is the price on the day before its delisting. The parent company is included in the index on the date of its new listing. However, if it is clear that the parent company will not be included in the index following the periodic reconfiguration, the wholly owned subsidiary will be excluded on the date of its delisting.

3.2 Removal of stocks

3.2.1. Designation as securities to be delisted[22]

Stocks designated as securities to be delisted will be removed from the index four business days later (or on the following business day if this is a non-business day). However, stocks that are listed on more than one market and have not been designated for delisting on one or more of the markets will not be removed.

3.2.2. Delisting

Stocks delisted for reasons other than those noted in 3.1 will be removed from the index on the delisting date.

3.2.3. Marked loss of eligibility for inclusion in stock selection universe

If there are grounds considered to disqualify a constituent stock from inclusion in the stock selection universe in 2.1, as defined below, the stock may be removed from the index following an official announcement by the company in question, the stock exchange, or a government/regulatory agency. However, if after its removal the grounds for removal cease to apply, it will no longer be deemed ineligible for inclusion in the stock selection universe at the time of the next periodic reconfiguration.

[21] This rule applies to changes from April 2002 onwards.

[22] This rule applies from 21 April 2010. Through 28 December 2001, stocks designated for delisting were removed on the date of the designation. Effective from 29 December 2001 through 23 August 2009, they were removed two business days after the date of designation for delisting, and from 24 August 2009 through 20 April 2010 they were removed three business days after the date of designation for delisting.

4. Index calculation

4.1 Index calculation method

4.1.1. Index base date, index base value, announcement date

The base date for the Nomura Enterprise Value Allocation Index is 17 August 2001, and the value of the index on the base date (its base value) is 10,000. The index will be launched on 15 April 2016.

4.1.2. Calculation of index market cap

Market cap of constituent stock *i* = Nomura composite share price for constituent stock *i* X number of shares included in index for stock *i*

Index market cap = Σ*i* (market cap of constituent stock *i*)

4.1.3 Calculation of index values

Base market capitalization is used in the calculations set out below in order to prevent index values from being affected by changes in market cap that are not due to fluctuations in market prices (for example, changes in market cap that are due to changes in capital structure and in index constituent stocks).

o Index excluding dividends

$$\text{Base market cap}_{\text{t}} = \text{index market cap}_{\text{t}-1} + \text{adjusted market cap}_{\text{t}}$$

$$\text{Return}_{\text{t}} = \frac{\text{index market capt}_{\text{t}}}{\text{base market cap}_{\text{t}}} - 1$$

$$\text{Index value}_{\text{t}} = \text{index value}_{\text{t}-1} \times \left(1 + \text{return}_{\text{t}}\right)$$

o Index including dividends

$$\text{Base market cap}_{\text{t}} = \text{index market cap}_{\text{t}-1} + \text{adjusted market cap}_{\text{t}} - \text{adjusted total dividends}_{\text{t}}$$

$$\text{Return}_{\text{t}} = \frac{\text{index market cap}_{\text{t}} + \text{total dividends}_{\text{t}}}{\text{base market cap}_{\text{t}}} - 1$$

$$\text{Index value}_{\text{t}} = \text{index value}_{\text{t}-1} \times \left(1 + \text{return}_{\text{t}}\right)$$

o Method for reflecting dividends

For the index including dividends, dividend data are reflected on the ex-dividend date. However, as the value of the dividend has not yet been determined on the ex-dividend date, the stock issuer's dividend forecast is used (if this is unavailable, the Toyo Keizai dividend forecast is used)[23]. In the event of a difference between the dividend forecast and the actual dividend, the base market capitalization is adjusted on the last business day of the month of the earnings announcement (if the earnings announcement is made on the last business day of the month, the base market capitalization is adjusted on the last business day of the following month). In addition, if dividend adjustment is required, the base market capitalization is adjusted on the last business day of the month in which this became clear (if the day in which this became clear is the last business day of the month, the base market capitalization is adjusted on the last business day of the following month).

[23] This rule applies to accounting periods ending end-December 2011 onwards. For periods before this, the actual dividend on the ex-dividend date is used.

4.2 Adjusting the base market capitalization

The base market capitalization is adjusted in the following way if there is a change in capital structure or in index constituent stocks. However, no adjustment is made to base market capitalization to reflect changes in capital structure that do not involve payment, such as stock splits, reverse stock splits, and changes in face value, as these do not affect market capitalization.

Fig. 3: Timing of adjustments resulting from changes in capital structure

	Type of change in capital structure	Adjustment date	Share price used
Stock replacement	Stock transfer, stock swap, merger	Date of listing change	Previous day's price
	Corporate divestiture (company/division spinoff)	Ex-rights date	Not used[24]
	Stock replacement	Replacement date	Previous day's price
Capital increase	Rights offering	Ex-rights date	Issue price
	Gratis allocation of stock acquisition rights	Ex-rights date	Exercise price
	Gratis allocation of treasury stock	Ex-rights date	Previous day's price
	Public offering	Business day following payment date (listing date of new shares when settlement is on issuance date)	Previous day's price
	Capital increase via third-party placement	Five business days after date of listing change	Previous day's price
	Conversion of preferred stock	Last business day of month in which number of converted shares becomes known	Previous day's price
	Conversion of CBs Exercise of stock acquisition rights	Last business day of month in which number of new shares for which rights were exercised becomes known	Previous day's price
	Corporate divestiture (new stock in continuing company)	Date of listing change	Previous day's price
Capital reduction	Retirement of treasury stock	Last business day of month following month of treasury stock retirement	Previous day's price
	Rights offering refusal	Last business day of month following month in which rights offering refusal is announced (or last business day of following month if announcement is within five business days of month-end)	Previous day's price
	Capital reduction with compensation	Effective date	Previous day's price
Other	Other adjustments	Other adjustments to the base market capitalization, if required, are made on the last business day of the month of the disclosure of the relevant information (or the last business day of the following month if the disclosure is made within five business days of the month-end)	Previous day's price

Source: Nomura

[24] In the case of a corporate divestiture (company/division spinoff), the base market capitalization is adjusted for the reduction in capital. The reduction in capital is defined as follows: (1) when the divesting entity does not announce the value of the divested division or of the shares of the divested (spun-off) company, capital is reduced by the amount by which the divesting entity's shareholders' equity is expected to be reduced, and (2) when the divesting entity does announce the value of the divested division or of the shares of the divested (spun-off) company, capital is reduced by the value of the division or the value of the divested company's shares multiplied by the total number of shares.

4.3 Index maintenance

Constituent stocks are also replaced in periodic and unscheduled reconfigurations and when necessary for other reasons. In addition, when the following changes in capital structure result in a change in the number of shares outstanding for index calculation purposes, the index inclusion ratio is changed so that number of shares in the stock that are included in the index does not change.

- Stock transfer, stock swap, merger[25]
- Rights offering
- Gratis allocation of stock acquisition rights
- Public offering
- Capital increase via third-party placement
- Conversion of preferred shares
- Conversion of CBs, exercise of stock acquisition rights
- Corporate divestiture (new stock in surviving company)
- Retirement of treasury stock
- Rights offering refusal
- Capital reduction with compensation
- Other adjustments

[25] When an index constituent becomes a wholly owned subsidiary (or merged company), the index inclusion ratio of the parent (or surviving company) is changed so that the total number of shares in the index remains the same as it was before, taking the exchange ratio (or merger ratio) into account.

5. Data publication services

Data for the Nomura Enterprise Value Allocation Index can be obtained via the following channels. [26]

Index values will be published in the following media:

Bloomberg	: NMRI
QUICK	: SNJPEVA/NRIJ
REUTERS	: .NEVA (excluding dividends), .NEVATR (including dividends)
Our website	http://qr.nomura.co.jp/jp/neva/index.html (Japanese only)

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While every effort is made to ensure that the information used in this report and all published information is based on reliable data, it should be noted that data may be changed or amended when necessary.

[26] Published data are all for reference only.

Policies with regard to NSC's indices

The below index-related policies are published on our website.

See the following link for details:

http://qr.nomura.co.jp/en/guides/index.html

- Index Calculation Policy
- Complaints Handling Policy
- Glossary (Equity)
- Index Governance Framework
- Conflicts of Interest Policy

Appendix A-1

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As at 31 December 2018.
**The Nomura Group as defined in the Disclaimer section at the end of this report.*
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Definition of Nomura Group's equity research rating system and sectors

The rating system is a relative system, indicating expected performance against a specific benchmark identified for each individual stock, subject to limited management discretion. An analyst’s target price is an assessment of the current intrinsic fair value of the stock based on an appropriate valuation methodology determined by the analyst. Valuation methodologies include, but are not limited to, discounted cash flow analysis, expected return on equity and multiple analysis. Analysts may also indicate expected absolute upside/downside relative to the stated target price, defined as (target price - current price)/current price.

STOCKS

A rating of **'Buy'**, indicates that the analyst expects the stock to outperform the Benchmark over the next 12 months. A rating of **'Neutral'**, indicates that the analyst expects the stock to perform in line with the Benchmark over the next 12 months. A rating of **'Reduce'**, indicates that the analyst expects the stock to underperform the Benchmark over the next 12 months. A rating of **'Suspended'**, indicates that the rating, target price and estimates have been suspended temporarily to comply with applicable regulations and/or firm policies. Securities and/or companies that are labelled as **'Not rated'** or shown as **'No rating'** are not in regular research coverage. Investors should not expect continuing or additional information from Nomura relating to such securities and/or companies. Benchmarks are as follows: **United States/Europe/Asia ex-Japan**: please see valuation methodologies for explanations of relevant benchmarks for stocks, which can be accessed at: http://go.nomuranow.com/research/globalresearchportal/pages/disclosures/disclosures.aspx; **Global Emerging Markets (ex-Asia)**: MSCI Emerging Markets ex-Asia, unless otherwise stated in the valuation methodology; **Japan:** Russell/Nomura Large Cap.

SECTORS

A **'Bullish'** stance, indicates that the analyst expects the sector to outperform the Benchmark during the next 12 months. A **'Neutral'** stance, indicates that the analyst expects the sector to perform in line with the Benchmark during the next 12 months. A **'Bearish'** stance, indicates that the analyst expects the sector to underperform the Benchmark during the next 12 months. Sectors that are labelled as **'Not rated'** or shown as **'N/A'** are not assigned ratings. Benchmarks are as follows: **United States:** S&P 500; **Europe:** Dow Jones STOXX 600; **Global Emerging Markets (ex-Asia):** MSCI Emerging Markets ex-Asia. **Japan/Asia ex-Japan:** Sector ratings are not assigned.

Target Price

A Target Price, if discussed, indicates the analyst's forecast for the share price with a 12-month time horizon, reflecting in part the analyst's estimates for the company's earnings. The achievement of any target price may be impeded by general market and macroeconomic trends, and by other risks related to the company or the market, and may not occur if the company's earnings differ from estimates.

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Transactions involving convertible bonds are subject to a sales commission of up to 1.08% of the transaction amount (or a commission of ¥4,320 if this would be less than ¥4,320). When convertible bonds are purchased via OTC transactions (including offerings), only the purchase price shall be paid, with no sales commission charged. However, Nomura Securities may charge a separate fee for OTC transactions, as agreed with the customer. Convertible bonds carry the risk of losses owing to factors such as interest rate fluctuations and price fluctuations in the underlying stock. In addition, convertible bonds denominated in foreign currencies also carry the risk of losses owing to factors such as foreign exchange rate fluctuations.

When bonds are purchased via public offerings, secondary distributions, or other OTC transactions with Nomura Securities, only the purchase price shall be paid, with no sales commission charged. Bonds carry the risk of losses, as prices fluctuate in line with changes in market interest rates. Bond prices may also fall below the invested principal as a result of such factors as changes in the management and financial circumstances of the issuer, or changes in third-party valuations of the bond in question. In addition, foreign currency-denominated bonds also carry the risk of losses owing to factors such as foreign exchange rate fluctuations.

When Japanese government bonds (JGBs) for individual investors are purchased via public offerings, only the purchase price shall be paid, with no sales commission charged. As a rule, JGBs for individual investors may not be sold in the first 12 months after issuance. When JGBs for individual investors are sold before maturity, an amount calculated via the following formula will be subtracted from the par value of the bond plus accrued interest: (1) for 10-year variable rate bonds, an amount equal to the two preceding coupon payments (before tax) x 0.79685 will be used, (2) for 5-year and 3-year fixed rate bonds, an amount equal to the two preceding coupon payments (before tax) x 0.79685 will be used.

When inflation-indexed JGBs are purchased via public offerings, secondary distributions (uridashi deals), or other OTC transactions with Nomura Securities, only the purchase price shall be paid, with no sales commission charged. Inflation-indexed JGBs carry the risk of losses, as prices fluctuate in line with changes in market interest rates and fluctuations in the nationwide consumer price index.The notional principal of inflation-indexed JGBs changes in line with the rate of change in nationwide CPI inflation from the time of its issuance. The amount of the coupon payment is calculated by multiplying the coupon rate by the notional principal at the time of payment. The maturity value is the amount of the notional principal when the issue becomes due. For JI17 and subsequent issues, the maturity value shall not undercut the face amount.

Purchases of investment trusts (and sales of some investment trusts) are subject to a purchase or sales fee of up to 5.4% of the transaction amount. Also, a direct cost that may be incurred when selling investment trusts is a fee of up to 2.0% of the unit price at the time of redemption. Indirect costs that may be incurred during the course of holding investment trusts include, for domestic investment trusts, an asset management fee (trust fee) of up to 5.4% (annualized basis) of the net assets in trust, as well as fees based on investment performance. Other indirect costs may also be incurred. For foreign investment trusts, indirect fees may be incurred during the course of holding such as investment company compensation.

Investment trusts invest mainly in securities such as Japanese and foreign equities and bonds, whose prices fluctuate. Investment trust unit prices fluctuate owing to price fluctuations in the underlying assets and to foreign exchange rate fluctuations. As such, investment trusts carry the risk of losses. Fees and risks vary by investment trust. Maximum applicable fees are subject to change; please thoroughly read the written materials provided, such as prospectuses or documents delivered before making a contract.

In interest rate swap transactions and USD/JPY basis swap transactions ("interest rate swap transactions, etc."), only the agreed transaction payments shall be made on the settlement dates. Some interest rate swap transactions, etc. may require pledging of margin collateral. In some of these cases, transaction payments may exceed the amount of collateral. There shall be no advance notification of required collateral value or collateral ratios as they vary depending on the transaction. Interest rate swap transactions, etc. carry the risk of losses owing to fluctuations in market prices in the interest rate, currency and other markets, as well as reference indices. Losses incurred as such may exceed the value of margin collateral, in which case margin calls may be triggered. In the event that both parties agree to enter a replacement (or termination) transaction, the interest rates received (paid) under the new arrangement may differ from those in the original arrangement, even if terms other than the interest rates are identical to those in the original transaction. Risks vary by transaction. Please thoroughly read the written materials provided, such as documents delivered before making a contract and disclosure statements.

In OTC transactions of credit default swaps (CDS), no sales commission will be charged. When entering into CDS transactions, the protection buyer will be required to pledge or entrust an agreed amount of margin collateral. In some of these cases, the transaction payments may exceed the amount of margin collateral. There shall be no advance notification of required collateral value or collateral ratios as they vary depending on the financial position of the protection buyer. CDS transactions carry the risk of losses owing to changes in the credit position of some or all of the referenced entities, and/or fluctuations of the interest rate market. The amount the protection buyer receives in the event that the CDS is triggered by a credit event may undercut the total amount of premiums that he/she has paid in the course of the transaction. Similarly, the amount the protection seller pays in the event of a credit event may exceed the total amount of premiums that he/she has received in the transaction. All other conditions being equal, the amount of premiums that the protection buyer pays and that received by the protection seller shall differ. In principle, CDS transactions will be limited to financial instruments business operators and qualified institutional investors.
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