NASDAQ ALPHADEX® ASIA PACIFIC EX-JAPAN INDEX NQDXASPAXJP-

INDEX DESCRIPTION

The Nasdaq AlphaDEX® Asia Pacific Ex-Japan Index employs the AlphaDEX® security selection methodology to select and weight securities from the Nasdaq Developed Markets Asia Pacific Ex-Japan Index (NQDMASPAXJP). The Index is constructed by ranking securities in the Nasdaq Developed Markets Asia Pacific Ex-Japan Index separately on growth and value factors.

SECURITY ELIGIBILITY CRITERIA

Security universe

A security must be included in the Nasdaq Developed Markets Asia Pacific Ex-Japan Index (NQDMASPAXJP) as of the Reconstitution Reference Date. Please refer to the NQDMASPAXJP methodology for further information on its constituent selection.

Foreign ownership limit

A Korean security must not be at its foreign ownership limit.

Multiple classes of securities

One security per issuer is permitted. If an issuer has multiple listed security classes, the security with the highest median liquidity generally is considered for possible inclusion in the Index.

Market capitalization eligibility

A security's issuer must have a market capitalization greater than the mid-cap breakpoint (50th percentile), as determined by Nasdaq.

Liquidity eligibility

A security must have a trailing five-day average daily traded value of at least $500,000 (USD) for each of the 60 trading days leading up to and including the Reconstitution Reference Date.

Other eligibility criteria

If, at reconstitution, Nasdaq becomes aware that an issuer or security will soon undergo a fundamental change that makes it ineligible, Nasdaq will remove the security from consideration. This includes entering into a definitive merger or acquisition agreement or other pending arrangement that would make it ineligible for Index inclusion, or a filing of bankruptcy or similar protection from creditors.

INDEX CALENDAR

Reconstitution schedule

The Index Reconstitution is conducted semi-annually in April and October.

Reconstitution reference dates

Unless otherwise specified, the Security Eligibility Criteria and Constituent Selection and Weighting Process are applied using data as of the end of March and September, respectively.

Reconstitution announcement dates

Index Reconstitution changes are announced on the fourth (4th) business day of the Reconstitution month after market close.

Reconstitution effective dates

Index Reconstitution changes become effective at market open on the ninth (9th) business day of April and October.

Rebalance schedule

Index rebalances occur in conjunction with reconstitutions and follow the same schedule.

CONSTITUENT SELECTION

Constituent selection factors

Three growth factors used for ranking eligible securities:

- 3-, 6- and 12-month price appreciation

- sales to price ratio
- 1-year sales growth

Three value factors used for ranking eligible securities:

- book value to price ratio
- cash flow to price ratio
- return on assets

Constituent selection and weighting process

I. Nasdaq applies the security eligibility criteria to the components of the Nasdaq Developed Markets Asia Pacific Ex-Japan Index (NQDMASPAXJP) to arrive at the initial eligible universe. If fewer than 134 securities qualify, then those with the next largest consolidated market capitalization(s) below the midcap breakpoint are included in the ranking until there is a ranked pool of 134 securities.

II. Eligible securities are ranked on the sums of ranks for growth and value factors. A security must have data available for all growth factors to receive a growth rank and all value factors to receive a value rank.

III. Nasdaq classifies each security as either a value security or growth security. Securities classified as value securities are assigned their value rank and securities classified as growth securities are assigned their growth rank as their "Selection Scores."

IV. Based on the Selection Score, the 100 top-scoring securities comprise the "Selected Securities" universe.

V. The Selected Securities are then split into quintiles based on their Selection Scores. The top scoring quintile receives 5/15 (33.3%) of the portfolio weight and successive quintiles receive 4/15 (26.7%), 3/15 (20.0%), 2/15 (13.3%) and 1/15 (6.7%), respectively. Securities are equally weighted within each quintile.

VI. After weights are assigned, each security is tested in order of its Selection Score rank to check whether its assigned weight violates an Industry Classification Benchmark Industry ("Industry") or country weighting constraint. The Industry Classification Benchmark ("ICB") is a product of FTSE International Limited and has been licensed for use.

VII. Industry and country weights in the Index are capped at 15 percentage points above their respective weights in NQDMASPAXJP as of the Reconstitution Reference Date.

VIII. A Security fails the Industry/country constraint test when the sum of the security weight and the weight assigned to all higher ranked securities in its Industry/country is greater than the Industry/country constraint determined in step VII.

IX. A security that fails the Industry/country constraint test is lowered in rank to the highest rank in the next quintile. Securities previously lower in rank in the failing security's original quintile and the highest ranked security in the new quintile move up one rank. This results in a weighting change for the security that moves up to a higher quintile. The failing security is later retested for constraint violations with its new lower assigned weight in the order determined by its new rank.

X. Securities in the lowest quintile that fail a constraint test are removed from the portfolio and replaced by the highest scoring security not originally selected, subject to Industry/country constraints.

XI. The securities remaining in each of the five quintiles make up the final Index Securities.

Constituent weighting scheme

Nasdaq AlphaDEX® Indexes are modified equal-weighted indexes. For additional information about index weighting, see **Nasdaq Index Weight Calculations.**

INDEX MAINTENANCE

Deletion policy

If, at any time during the year other than the Index Reconstitution(s), an Index Security no longer meets the Eligibility Criteria, or is otherwise determined to have become ineligible for inclusion in the Index, it is removed from the Index. This includes circumstances where an Index Security is determined to be ineligible for continued inclusion in the Index due to bankruptcy, delisting, or a definitive agreement that would likely result in the security no longer being Index eligible. Please refer to **Nasdaq's Corporate Actions and Events Manual – Equities** for detailed handling of the aforementioned event types.

Replacement policy

Index Securities deleted at any time during the year other than the Index Reconstitution(s) are not replaced.

Corporate actions

In the interim periods between scheduled index reconstitution events, individual Index Securities may be subject to a variety of corporate actions and events that require maintenance and adjustments to the Index. Specific treatment of each type of corporate action or event is described in **Nasdaq Corporate Actions and Events Manual – Equities**, which is incorporated herein by reference.

In certain cases, corporate actions and events are handled according to the weighting scheme or other index construction techniques employed. Wherever alternate methods are described, the Index will follow the "Non-Market Cap Corporate Action Method."

Index share adjustments

Other than as a direct result of corporate actions, the Index does not normally experience share adjustments between scheduled Index Rebalance and Reconstitution events.

ADDITIONAL INFORMATION

Announcements

Nasdaq announces Index-related information via the Nasdaq Global Index Watch (GIW) website at http://indexes.nasdaqomx.com.

For more information on the general Index Announcement procedures, please refer to the **Nasdaq Index Methodology Guide**.

Holiday schedules

The Index is calculated Monday through Friday and does not close for holidays, as it is a Global Index.

Unexpected market closures

For information on Unexpected Market Closures, please refer to the **Nasdaq Index Methodology Guide**.

Calculation types

For information on the Index calculation types as well as the mathematical approach used to calculate the Index(es), please refer to the **Calculation Manual – Equities and Commodities**.

Recalculation and restatement policy

For information on the Recalculation and Restatement Policy, please refer to the **Nasdaq Index Recalculation Policy**.

Data sources

For information on data sources and the classification of dividends and associated tax rates, please refer to the **Nasdaq Index Methodology Guide**.

Contact information

For any questions regarding an Index, please contact the Nasdaq Index Client Services team at indexservices@nasdaq.com.

Index dissemination

Index values and weightings information are available through Nasdaq Global Index Watch (GIW) website at https://indexes.nasdaqomx.com/ as well as the Nasdaq Global Index FlexFile Delivery Service (GIFFD) and Global Index Dissemination Services (GIDS). Similar to the GIDS offerings, Genium Consolidated Feed (GCF) provides real-time Index values and weightings for the Nordic Indexes.

For more detailed information regarding Index Dissemination, see the **Nasdaq Index Methodology Guide**.

Index calculation and dissemination schedule

The Index Value is calculated five (5) days a week, Monday through Friday, starting by the earliest time zone (Asia/Tokyo) and closed by the latest time zone (America/New York).

Website

For further information, please refer to Nasdaq GIW website at https://indexes.nasdaqomx.com/.

FTP and dissemination service

Index values and weightings are available via FTP on the Nasdaq Global Indexes FlexFile Delivery Service (GIFFD). Index values are available via Nasdaq's Global Index Dissemination Services (GIDS).

GOVERNANCE

Index governance

All Nasdaq Indexes follow the same governance structure. For a detailed list of this information, please see the **Nasdaq Index Methodology Guide.**

Nasdaq Index Management Committee

The Nasdaq Index Management Committee approves all new Index Methodologies. This committee is comprised of full-time professional members of Nasdaq. The committee meets regularly, and reviews items including, but not limited to, pending corporate actions that may affect Index constituents, statistics comparing the composition of the indexes to the market, companies that are being considered as candidates for addition to an Index, and any significant market events.

For a detailed overview of the Index Management Committee, please see the **Nasdaq Index Methodology Guide**.

Internal reviews of methodology

For a detailed description on internal reviews of the Methodology, please see the **Nasdaq Index Methodology Guide**.

Communication with stakeholders and consultations

For a detailed description on Consultations and Communications with Stakeholders, please see the **Nasdaq Index Methodology Guide**.

Index cessation

Nasdaq has a documented procedure that is followed for Index Cessation that includes termination/retirement of an Index or Index Family.

For more information, please refer to the **Nasdaq Index Cessation Policy**.

Discretionary adjustment

This Index Methodology was created by Nasdaq to achieve the aforementioned objective of measuring the underlying purpose of each Index governed by this methodology document. Any deviations from this methodology are made in the sole judgment and discretion of Nasdaq so that the Index continues to achieve its objective.

For more information on potential adjustments including Calculation and Pricing Disruptions, Expert Judgment, and Unexpected Reconstitution/Rebalances, please refer to the **Nasdaq Index Methodology Guide**.

GLOSSARY OF TERMS AS USED IN THIS DOCUMENT

For the glossary of key terms, please refer to the **Nasdaq Index Methodology Guide.**

DISCLAIMER

Nasdaq may, from time to time, exercise reasonable discretion as it deems appropriate in order to ensure Index integrity, including but not limited to, quantitative inclusion criteria. Nasdaq may also, due to special circumstances, if deemed essential, apply discretionary adjustments to ensure and maintain the high quality of the index construction and calculation. Nasdaq does not guarantee that any Index accurately reflects future market performance.

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APPENDIX: METHODOLOGY CHANGE LOG

Effective Date	Methodology Section	Description or Summary of Changes
July 24, 2023	Security eligibility criteria: Foreign ownership limit	The methodology document was updated to clarify the foreign ownership limit screen for Korean securities.
July 24 2023	Index Description	The methodology document was updated to correct references from the Nasdaq Asia Pacific ex Japan Index (NQASAPXJP) to the Nasdaq Developed Markets Asia Pacific ex Japan Index (NQDMASAPXJP)
July 24 2023	Security Eligibility Criteria: Security Universe	The methodology document was updated to correct references from the Nasdaq Asia Pacific ex Japan Index (NQASAPXJP) to the Nasdaq Developed Markets Asia Pacific ex Japan Index (NQDMASAPXJP)
July 24 2023	Constituent Selection: Constituent selection and weighting process	The methodology document was updated to correct references from the Nasdaq Asia Pacific ex Japan Index (NQASAPXJP) to the Nasdaq Developed Markets Asia Pacific ex Japan Index (NQDMASAPXJP)