



INDEX METHODOLOGY

NASDAQ-100 INDEX®

NDX

INDEX DESCRIPTION

The NASDAQ-100 Index® is designed to measure the performance of 100 of the largest Nasdaq-listed non-financial companies.

SECURITY ELIGIBILITY CRITERIA

Eligible security types

Eligible security types generally include American Depositary Receipts (ADRs), common stocks, ordinary shares, tracking stocks, shares of beneficial interest, and limited partnership interests.

If the security is a depositary receipt representing a security of a non-U.S. issuer, then references to the “issuer” are references to the underlying security and the total shares outstanding is the actual depositary shares outstanding as reported by the depositary banks.

Multiple classes of securities

If an issuer has listed multiple security classes, all security classes are eligible, subject to meeting all other Security Eligibility Criteria.

Eligible exchanges

The issuer of the security’s primary U.S. listing must exclusively be listed on the Nasdaq Global Select Market or the Nasdaq Global Market.

Geographic eligibility

If the issuer of the security is organized under the laws of a jurisdiction outside the U.S., then such security must have listed options on a registered options market in the U.S. or be eligible for listed-options trading on a registered options market in the U.S.

Industry or sector eligibility

The security must be classified as a Non-Financial company (those companies that are classified under any Industry code other than 8000) according to the Industry Classification Benchmark (ICB), a product of FTSE International Limited licensed for this use.

Market capitalization eligibility

There is no market capitalization eligibility criterion.

Liquidity eligibility

Each security must have a minimum average daily trading volume of 200,000 shares (measured over the three calendar months ending with the month that includes the Reconstitution reference date).

Seasoning eligibility

The security must have traded for at least three full calendar months, not including the month of initial listing, on an eligible exchange, which includes Nasdaq (Nasdaq Global Select Market, Nasdaq Global Market, or Nasdaq Capital Market), NYSE, NYSE American or CBOE BZX. Eligibility is determined as of the constituent selection reference date, and includes that month.

Float eligibility criteria

There is no float eligibility criterion.

Other eligibility criteria

The issuer of the security generally may not currently be in bankruptcy proceedings.

The issuer of the security generally may not have entered into a definitive agreement or other arrangement that would make it ineligible for Index inclusion and where the transaction is imminent as determined by the Index Management Committee.

INDEX CALENDAR

Reconstitution schedule

Nasdaq selects constituents once annually in December.

Reconstitution reference dates

The Security Eligibility Criteria are applied using market data as of the end of October and total shares outstanding as of the end of November.

Reconstitution announcement dates

Index Reconstitutions are announced in early December.

Reconstitution effective dates

Index Reconstitutions become effective after the close of trading on the third Friday in December.

Rebalance schedule

The Index is rebalanced on a quarterly basis in March, June, September and December.

Rebalance reference dates

The Index Rebalance uses the Total Shares Outstanding ("TSO") and Last Sale Price ("LSP") of all Index Securities as of the prior month-end (February, May, August and November respectively).

Rebalance announcement dates

Index Rebalance changes are announced in early March, June, September and December.

Rebalance effective dates

Index Rebalance changes become effective after the close of trading on the third Friday in March, June, September and December.

Special rebalance schedule

A Special Rebalance may be conducted at any time based on the weighting restrictions described in the Index Rebalance Procedure if it is determined to be necessary to maintain the integrity of the Index.

CONSTITUENT SELECTION

Constituent selection process

A Reconstitution is conducted on an annual basis, at which time all eligible Issuers, ranked by market capitalization, are considered for Index inclusion based on the following order of criteria.

- The top 75 ranked Issuers will be selected for inclusion in the Index.
- Any other Issuers that were already members of the Index as of the Reconstitution reference date and are ranked within the top 100 are also selected for inclusion in the Index.
- In the event that fewer than 100 issuers pass the first two criteria, the remaining positions will first be filled, in rank order, by current index members that were in the top 100 at the previous Reconstitution but are ranked in positions 101-125 in the current Reconstitution.

- In the event that fewer than 100 issuers pass the first three criteria, the remaining positions will be filled, in rank order, by any issuers ranked in the top 100 that were not already members of the Index as of the Reference Date.

CONSTITUENT WEIGHTING

Constituent weighting scheme

The Index is a modified market capitalization-weighted index.

Constituent weighting process

Quarterly weight adjustment

NDX's quarterly weight adjustment employs a two-stage weight adjustment scheme according to issuer-level constraints.

Index Securities' initial weights are determined using up to two calculations of market capitalization: TSO-derived market capitalization and Index Share-derived market capitalization. TSO-derived market capitalization is defined as a security's Last Sale Price times its Total Shares Outstanding. Index Share-derived market capitalization is defined as a security's Last Sale Price times its updated Index Shares as of the prior month end. Both TSO-derived and Index Share-derived market capitalizations can be used to calculate TSO-derived and Index Share-derived initial index weights by dividing each Index Security's (TSO- or Index Share-derived) market capitalization by the aggregate (TSO- or Index Share-derived) market capitalization of all Index Securities.

When the Rebalance coincides with the Reconstitution, only TSO-derived initial weights are used. When the Rebalance does not coincide with the Reconstitution, Index Share-derived initial weights are used when doing so results in no weight adjustment; otherwise, TSO-derived weights are used in both stages of the weight adjustment procedure. Issuer weights are the aggregated weights of the issuers' respective Index Securities.

Stage 1

If no initial issuer weight exceeds 24%, initial weights are used as Stage 1 weights; otherwise, initial weights are adjusted to meet the following Stage 1 constraint, producing the Stage 1 weights:

- No issuer weight may exceed 20% of the index.

Stage 2

If the aggregate weight of the subset of issuers whose Stage 1 weights exceed 4.5% does not exceed 48%, Stage 1 weights are used as final weights; otherwise, Stage 1 weights are adjusted to meet the following Stage 2 constraint, producing the final weights:

- The aggregate weight of the subset of issuers whose Stage 1 weights exceed 4.5% is set to 40%.

Annual weight adjustment

NDX's annual weight adjustment employs a two-stage weight adjustment scheme according to security-level constraints.

Index Securities' initial weights are determined via the quarterly weight adjustment procedure.

Stage 1

If no initial security weight exceeds 15%, initial weights are used as Stage 1 weights; otherwise, initial weights are adjusted to meet the following Stage 1 constraint, producing the Stage 1 weights:

- No security weight may exceed 14% of the index.

Stage 2

If the aggregate weight of the subset of Index Securities with the five largest market capitalizations is less than 40%, Stage 1 weights are used as final weights; otherwise, Stage 1 weights are adjusted to meet the following constraints, producing the final weights:

- The aggregate weight of the subset of Index Securities with the five largest market capitalizations is set to 38.5%.
- No security with a market capitalization outside the largest five may have a final index weight exceeding the lesser of 4.4% or the final index weight of the Index Security ranked fifth by market capitalization.

For additional information about index weighting, see **Nasdaq Index Weight Adjustment Guidelines**.

INDEX MAINTENANCE

Deletion policy

If, at any time other than an Index Reconstitution, Nasdaq determines that an Index Security has or will undergo a fundamental alteration that would make it ineligible for Index inclusion, the Index Security is removed as soon as practicable.

Such alterations may include:

- A listings switch to an ineligible Index Exchange.
- Merger, acquisition, or other major corporate event that would adversely impact the integrity of the Index.
- If the security is reclassified as a Financial company (those companies that are classified under Industry code 8000).
- If the issuer has an adjusted market capitalization below 0.10% of the aggregate adjusted market capitalization of the Index for two consecutive month ends.

In the case of mergers and acquisitions, the effective date for the removal of an Index Issuer or security will be largely event-based, with the goal to remove the issuer or security as soon as completion of the acquisition or merger has been deemed highly probable. Notable events include, but are not limited to,

completion of various regulatory reviews, the conclusion of material lawsuits and/or shareholder and Board approvals.

If at the time of the removal of the Index Issuer or Security there is not sufficient time to provide advance notification of the replacement issuer or security so that both the removal and replacement can be effective on the same day, the Index Issuer or Security being removed will be retained and persisted in the Index calculations at its Last Sale Price until the effective date of the replacement issuer or security's entry to the Index.

Replacement policy

Securities may be added to the Index outside of the Index Reconstitution when there is a deletion. The Index Security (or all Index Securities under the same Issuer, if appropriate) is replaced as soon as practicable if the Issuer in its entirety is being deleted from the Index. The issuer with the largest market capitalization as of the prior month end which is not in the Index will replace the deleted Issuer.

For pending deletions set to occur soon after an Index Reconstitution and/or Index Rebalance Effective Date, Nasdaq may decide to remove the Index Security from the Index in conjunction with the Index Reconstitution and/or Index Rebalance Effective Date.

Corporate actions

In the periods between scheduled index reconstitution and rebalancing events, individual Index securities may be the subject to a variety of corporate actions and events that require maintenance and adjustments to the Index. With the exception(s) noted below, 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 "Market Cap Corporate Action Method."

At the quarterly rebalancing, no changes are made to the Index from the previous month end until the quarterly share change effective date, with the exception of corporate actions with an ex-date.

Corporate action exceptions

Spin-offs

- If the parent is an Index Security and there is a when-issued market for the spinco, the price of the parent is adjusted downward for the value of the spinco. The value of the spinco is calculated as the spin-off ratio multiplied by the when-issued Last Sale Price ("LSP") of the spinco. There is no adjustment to the Index Shares of the parent. This will result in a divisor adjustment. The spinco is not added to the Index.
- If there is no when-issued market for the spinco, then no price or Index Share adjustment is made to the Index Security. The spinco is not added to the Index.

Index share adjustments

For handling of changes in TSO greater than or equal to 10.0% arising from other corporate events, please refer to **Nasdaq Corporate Actions and Events Manual – Equities**.

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 Indexes are calculated Monday through Friday, except on days when the Nasdaq exchange is closed.

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 **Nasdaq Index Policies & Procedures: Calculation Manual – Equities & 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 Indexes are calculated during the trading day based on the Last Sale Price and are disseminated once per second from 09:30:01 to 17:16:00 ET. The closing value of the indexes may change up until 17:15:00 ET due to corrections to the Last Sale Price of the Index Securities.

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

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

A methodology document is created for all new Index Methodologies. The methodology document includes the following: Index Objective, Security Eligibility Criteria, Index Construction, Index Maintenance, Index Governance, Index Policy, and Index Dissemination.

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

See **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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