



INDEX METHODOLOGY

NASDAQ US SMART SECTOR™ INDEXES

**NQSSBA™, NQSSFB™, NQSSOG™, NQSSPH™,
NQSSRE™, NQSSSE™, NQSSTR™**

INDEX DESCRIPTION

The Nasdaq US Smart Sector Index Family is designed to deliver exposure to the top factor-ranked securities across the following classifications.

Nasdaq US Smart Banks™ Index (NQSSBA™)

Consists of the 30 to 50 top factor-ranked securities from US Bank companies.

Nasdaq US Smart Food & Beverage™ Index (NQSSFB™)

Consists of the 30 to 50 top factor-ranked securities from US Food & Beverage companies.

Nasdaq US Smart Oil & Gas™ Index (NQSSOG™)

Consists of the 30 to 50 top factor-ranked securities from US Oil & Gas companies.

Nasdaq US Smart Pharmaceuticals™ Index (NQSSPH™)

Consists of the 30 to 50 top factor-ranked securities from US Pharmaceutical and Biotechnology companies.

Nasdaq US Smart Retail™ Index (NQSSRE™)

Consists of the 30 to 50 top factor-ranked securities from US Retail companies.

Nasdaq US Smart Semiconductor™ Index (NQSSSE™)

Consists of the 30 to 50 top factor-ranked securities from US Semiconductor companies.

Nasdaq US Smart Transportation™ Index (NQSSTR™)

Consists of the 30 to 50 top factor-ranked securities from US Transportation companies.

SECURITY ELIGIBILITY CRITERIA

Index inclusion

A security must be included in the Nasdaq US Benchmark Index (NQUSB) as of the Index Reconstitution Reference Date. Please refer to that methodology for further information on its constituent selection.

Multiple securities per issuer

One security per issuer is permitted. If an issuer has multiple otherwise-eligible securities, one of which is an Index Security as of the Reconstitution Reference Date, only that security may be eligible; otherwise, only the security with the highest three-month average daily traded value may be eligible.

Industries and sectors

Securities within each US Smart Sector index must be classified under the Subsector(s) indicated below. Securities are classified according to the Industry Classification Benchmark (ICB), a product of FTSE International Limited that is used under license.

NQSSBA

30101010 Banks

NQSSFB

45101010 Brewers
45101015 Distillers and Vintners
45101020 Soft Drinks
45102010 Farming, Fishing, Ranching and Plantations
45102020 Food Products
45102030 Fruit and Grain Processing
45102035 Sugar

NQSSOG

60101000 Integrated Oil and Gas
60101010 Oil: Crude Producers
60101015 Offshore Drilling and Other Services
60101020 Oil Refining and Marketing
60101030 Oil Equipment and Services
60101035 Pipelines

NQSSPH

20103015 Pharmaceuticals

20103010 Biotechnology

NQSSRE

40201010 Education Services
40201020 Funeral Parlours and Cemetery
40201030 Printing and Copying Services
40201040 Rental and Leasing Services: Consumer
40201050 Storage Facilities
40201070 Consumer Services: Misc.
40401010 Diversified Retailers
40401020 Apparel Retailers
40401025 Home Improvement Retailers
40401030 Specialty Retailers
45201010 Food Retailers and Wholesalers
45201015 Drug Retailers

NQSSSE

10102010 Semiconductors
10102020 Production Technology Equipment

NQSSTR

40101010 Auto Services
40101015 Tires
40101020 Automobiles
40101025 Auto Parts
40501010 Airlines
50206010 Trucking
50206015 Commercial Vehicles and Parts
50206020 Railroads
50206025 Railroad Equipment
50206030 Marine Transportation
50206040 Delivery Services
50206050 Commercial Vehicle-Equipment Leasing
50206060 Transportation Services

Float

At least 20% of a security's total shares outstanding must be publicly available for trading (float shares).

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, or other events as described in Section 3 of **Corporate Actions and Events Manual – Equities**.

INDEX CALENDAR

Reconstitution schedule

The Index Reconstitution is conducted semi-annually in March and September by applying the Constituent Selection Process to all securities meeting the applicable Security Eligibility Criteria.

Reconstitution reference dates

The Security Eligibility Criteria and Constituent Selection Process are applied using market data as of the last trading day of February and August with the exception of income, return on assets (ROA), cash flows, and book values, which are based on market data from the last trading day of December and June.

Reconstitution announcement dates

Index Reconstitutions are announced in early March and September.

Reconstitution effective dates

Index Reconstitutions become effective at market open on the first trading day following the third Friday in March and September.

Rebalance schedule

The Index is rebalanced in conjunction with the Reconstitution by applying the Constituent Weighting Process. The Rebalance Reference Dates, Announcement Dates, and Effective Dates are the same as those of the Index Reconstitution.

Holiday schedule

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

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.

CONSTITUENT SELECTION

Constituent selection process

All securities that meet the applicable Security Eligibility Criteria are considered for inclusion in the Index. The selection of Index Securities is conducted according to the following multi-stage process:

Stage 1

Select securities with at least 2.5 billion USD company market capitalization and at least 5 million USD three-month average daily traded value by default. If fewer than 30 securities qualify, the following process applies:

1. Select the 30 largest securities by company market capitalization, each with at least 5 million USD three-month average daily traded value.
2. If the count remains below 30, add the most liquid securities as determined by their descending three-month average daily traded value, not previously included, until 30 securities are selected.

Securities with missing values are retained but ranked last.

Stage 2

Rank the selected securities from Stage 1 based on the aggregate of the following four Factor Scores in ascending order to determine their Final Factor Scores:

1. Profit Score is the ranking based on gross income or net income (applicable only for NQSSBA) in descending order. Securities with missing or negative values are retained but ranked last.
2. ROA Score is the ranking based on return on asset in descending order. Securities with missing or negative values are retained but ranked last.
3. Momentum Score is the ranking based on the average of 3 months, 6 months, 9 months and 12 months USD price returns in descending order. Securities with a negative average return over these periods or with missing values for any of these periods are retained but ranked last.
4. Value Score is the ranking based on cash flow (defined as operating cash flow minus stock-option expense) or book value (applicable only for NQSSBA) in descending order. This Factor Score is given limited weight by being multiplied by 0.01 and may serve as a tiebreaker. If the stock-option expense is missing for a security, it is set to \$0. Securities with missing or negative cash flow or book value are retained but ranked last.

A lower Final Factor Score indicates a more favorable ranking.

Stage 3

Select the securities from Stage 2 that either have Final Factor Scores of 30 or lower, or rank among the top 75% with Final Factor Scores not exceeding 50. This ensures the Index consists of 30 to 50 Index Securities.

CONSTITUENT WEIGHTING

Constituent weighting scheme

The Index is a modified factor-weighted index.

Constituent weighting process

Determination of initial weights

NQSSBA

Each Index Security's initial index weight is calculated by dividing its book value by the sum of book values of all Index Securities. Any security with a missing or negative book value is assigned a book value of \$0.

NQSSFB, NQSSOG, NQSSPH, NQSSRE, NQSSSE, NQSSTR

Each Index Security's initial index weight is calculated by dividing its cash flows (defined as operating cash flow minus stock-option expense) by the sum of the cash flows of all Index Securities. Any security with a missing or negative cash flow is assigned a cash flow of \$0.

Application of weight constraints

Each Index undergoes a three-stage weight adjustment process using the initial weights established above to determine the final Index Security weights.

Stage 1

Initial Index weights are adjusted to meet the following Stage 1 constraint, producing the Stage 1 weights:

- No Index Security weight may exceed 8%.

Stage 2

Stage 1 weights are adjusted to meet the following Stage 2 constraints, producing the Stage 2 weights:

- For an Index Security whose initial weight is among the five highest, its Stage 1 weight is maintained.
- For all other Index Securities, no weight may exceed 4%.

Stage 3

Stage 2 weights are adjusted to meet the following Stage 3 constraint, producing the final weights:

- No Index Security weight may be less than 0.5%.

For additional information about index weighting, refer to **Nasdaq Index Weight Calculations**.

INDEX MAINTENANCE

Deletion policy

If, at any time other than an Index Reconstitution, Nasdaq becomes aware that an Index Security has become ineligible for continued inclusion, it is removed from the Index(es) as soon as practicable. This includes events such as filing bankruptcy or similar protection from creditors, delisting, or other arrangements, including mergers and acquisitions. Refer to the **Corporate Actions and Events Manual – Equities** for further information.

Replacement policy

Index Securities are not replaced between Index Reconstitutions.

Corporate actions

In the interim periods between scheduled index reconstitution events, individual Index securities may be the 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 “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**.

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

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

All Nasdaq Indexes are managed by the governance committee structure and have transparent governance, oversight, and accountability procedures for the Index determination process. For further details on the Index Methodology and Governance overlay, 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**.

APPENDIX A: METHODOLOGY CHANGE LOG

Effective date	Methodology section	Description or summary of changes
March 20, 2023	Index description	The maximum number of securities allowed for all Indexes in the Index Family is set to 50.
March 20, 2023	Security eligibility: Industries and sectors	The industry eligibility for NQSSPH is expanded to include Biotechnology.
March 20, 2023	Index calendar: Reconstitution schedule	The Index Reconstitution schedule is changed to semi-annually. Reconstitution reference, announcement and effective dates are changed accordingly.
March 20, 2023	Index calendar: Rebalance schedule	The Index Rebalance schedule is changed to semi-annually. Rebalance reference, announcement and effective dates are changed accordingly.
March 20, 2023	Constituent selection: Constituent selection process	Ranking of eligible securities is changed to factor ranking. A default constituent selection process is introduced with a minimum company market capitalization and liquidity criteria. An alternative selection process is introduced and is applied only when the default process in Stage 1 returns less than 30 securities. The selected Stage 1 securities are ranked by four Factor Scores: Profit Score, ROA Score, Momentum Score and Value Score. A new process of selecting the top 75% by Final Factor Scores is applied while maintaining 30 to 50 Index Securities.
March 20, 2023	Constituent weighting: Constituent weighting process	The initial index weight calculation is changed to be based on security cash flows for all Indexes, except for the Banks Index (NQSSBA), which is based on security book values.
March 20, 2023	Constituent weighting: Constituent weighting process	The minimum Index Security weight is set to 0.5%.

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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