



INDEX METHODOLOGY

NASDAQ NORDEA SMARTBETA INDEXES

NQNDDI- (DIVIDEND)

NQNDMO- (MOMENTUM)

NQNDVO- (VOLATILITY)

NQNDMV- (MOMENTUM VOLATILITY)

NQNDDV- (DIVIDEND VOLATILITY)

NQNDDM- (DIVIDEND MOMENTUM)

INDEX DESCRIPTION

The Nasdaq Nordea SmartBeta Indexes aim to provide exposure to a specific factor or multiple factors, including dividends, momentum and volatility.

Nasdaq and Nordea Bank AB have jointly designed the selection criteria and rebalancing rules for the Indexes. Nasdaq is responsible for the methodology, calculation, dissemination, and administration of the Indexes.

SECURITY ELIGIBILITY CRITERIA

Parent index

To be eligible for inclusion in any of the Nasdaq Nordea SmartBeta Indexes, a security must be included in the OMX Stockholm All-Share Index. Please refer to that methodology for further information.

Multiple classes of securities

If a company has listed multiple security classes, only the security class with the highest turnover, calculated as the minimum value of three- or twelve-month average daily traded volumes (3mADTV and 12mADTV), is eligible for inclusion in the Index.

- 3mADTV = The three-calendar-month average daily traded volume in SEK up to and including the month of the Index Reconstitution Reference Date.
- 12mADTV = The twelve-calendar-month average daily traded volume in SEK up to and including the month of the Index Reconstitution Reference Date.

Liquidity eligibility

The security must have a minimum average daily traded volume of 5 Million SEK based on the minimum of 3mADTV or 12mADTV for each security.

Seasoning eligibility

The security must be listed on Nasdaq Stockholm AB for at least twelve (12) full calendar months up to and including the month of the Index Reconstitution Reference Date.

Other eligibility criteria

The Issuer of a security not already in the Index as of the Index Reconstitution Reference Date ("non-Index Security") may not have entered into a definitive agreement or other arrangement that would likely result in the non-Index Security becoming ineligible.

The Issuer of a security already in the Index as of the Index Reconstitution Reference Date ("Index Security") that has entered into a definitive agreement or other arrangement that would likely result in the Index Security becoming ineligible soon after the Index Reconstitution Effective Date may be removed from the Index in conjunction with the Index Reconstitution.

INDEX CALENDAR

Reconstitution schedule

Nasdaq selects constituents quarterly in March, June, September and December to determine the Index Securities as of the Index Reconstitution Effective Date.

Reconstitution reference dates

The March Reconstitution is conducted using data as of the end of January.

The June Reconstitution is conducted using data as of the end of April.

The September Reconstitution is conducted using data as of the end of July.

The December Reconstitution is conducted using data as of the end of October.

Reconstitution announcement dates

Index Reconstitution changes are announced at least five (5) days before the Index Reconstitution Effective Dates in March, June, September and December.

Reconstitution effective dates

Index Reconstitution changes become effective over five trading days (Roll Period) prior to the first trading day in March, June, September and December. Refer to Appendix B for more information on Roll Period procedure.

Rebalance schedule

The Index is rebalanced quarterly in conjunction with the Index Reconstitution in March, June, September and December.

Rebalance reference dates

The Index Rebalance uses closing prices as of the day prior to the Index Rebalance Effective Date.

Rebalance announcement dates

Index Rebalance changes are announced in conjunction with the Index Reconstitution announcements.

Rebalance effective dates

Index Rebalance changes become effective at market open on the first trading day in March, June, September and December (in conjunction with the end of the Index Reconstitution Roll Period).

CONSTITUENT SELECTION

Constituent selection process

Eligible securities are selected for each Index using a two-stage approach, wherein the first stage comprises a liquidity screening and the second stage is a ranking based on the designated factor(s).

Stage 1 Liquidity screen

Eligible securities are ranked in descending order by the minimum of 3mADTV or 12mADTV for each security. The top 120 securities are considered for inclusion in the indexes.

Stage 2 Designated Factor(s) screen by index

Nasdaq Nordea SmartBeta Dividend Index (NQNDDI-)

Eligible securities from stage 1 are ranked in order by 12-month dividend yield. The 30 securities with the highest dividend yield are selected for the Index. See Appendix A for more information about the calculation of dividend yield.

Nasdaq Nordea SmartBeta Momentum Index (NQNDMO-)

Eligible securities from stage 1 are ranked in order by 12-month momentum. The 30 securities with the highest momentum are selected for the Index. See Appendix A for more information about the calculation of momentum.

Nasdaq Nordea SmartBeta Volatility Index (NQNDVO-)

Eligible securities from stage 1 are ranked in order by 12-month realized volatility. The 30 securities with the lowest realized volatility are selected for the Index. See Appendix A for more information about the calculation of realized volatility.

Nasdaq Nordea SmartBeta Momentum Volatility Index (NQNDMV-)

Eligible securities from stage 1 are ranked in order by 12-month momentum. The 50 securities with the highest momentum are then ranked by realized volatility. The 30 securities with the lowest realized volatility are selected for the Index.

Nasdaq Nordea SmartBeta Dividend Volatility Index (NQNDDV-)

Eligible securities from stage 1 are ranked in order by 12-month dividend yield. The 50 securities with the highest dividend yield are then ranked by realized volatility. The 30 securities with the lowest realized volatility are selected for the Index.

Nasdaq Nordea SmartBeta Dividend Momentum Index (NQNDDM-)

Eligible securities from stage 1 are ranked in order by 12-month dividend yield. The 50 securities with the highest dividend yield are then ranked by momentum. The 30 securities with the highest momentum are selected for the Index.

CONSTITUENT WEIGHTING

Constituent weighting scheme

The Indexes are equal-weighted indexes.

Constituent weighting process

The Indexes each employ an equal weighting scheme: all Index Securities have equal index 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 as noted in the “Mergers and Acquisitions (M&A)” section of the **Corporate Actions and Events Manual – Nordic, Baltic, and SmartBeta Equities**.

Such fundamental alterations include but are not limited to a listings switch to an ineligible Index Exchange, an acquiring company acquires at least 90% of outstanding shares, merger, or other major corporate event that would otherwise adversely impact the integrity of the Index.

On the last trading day before the Effective Date of the deletion of an Index Security, other than due to bankruptcy, the calculation of the Index Value for that Index Security shall be based on LSP. On the Effective Date of the deletion, the Index Security will be removed at LSP. For more information on the handling of bankrupt securities please refer to the “Bankruptcy” section of the **Corporate Actions and Events Manual – Nordic, Baltic, and SmartBeta Equities**.

Replacement policy

Removed securities are not replaced except, under certain conditions, when the removed Index Security is involved in a merger. Please refer to the “Mergers & Acquisitions (M&A)” section of the **Corporate Actions and Events Manual – Nordic, Baltic, and SmartBeta Equities** for further information.

Corporate actions

Information on corporate actions handling can be found in the **Corporate Actions and Events Manual – Nordic, Baltic, and SmartBeta Equities**.

Unless otherwise noted and where possible, corporate actions are announced approximately two (2) days in advance.

The Indexes follow a “Non-Market Cap Corporate Action Method for Indexes that Review Index Shares on a Periodic Basis”.

Index share adjustments

The Indexes follow Index Share adjustments based on “Indexes that Review Index Shares on a Daily Basis”. Please refer to the “Index Share Adjustments” section of the **Nasdaq Corporate Actions and Events Manual – Nordic, Baltic, and SmartBeta Equities** for further information.

APPENDIX A: FACTOR RANKING

General Definitions

t = Reconstitution reference date

$p_{i,s}$ = Price of the Index Security (i) as of s

$p_{i,s-1}$ = Price of the Index Security (i) as of s-1

n_i = Number of actual trading days for security (i) in the trailing one year period relative to t

$Ret_{i,s}$ = Daily return for Index Security (i) on a trading day (s)

$\overline{Ret}_{i,t}$ = Average daily return for Index Security (i)

$j_{i,s}$ = Corporate action adjustment factor to adjust $p_{i,t}$

$d_{i,s}$ = Dividend amount in SEK for Index Security (i) on day s

s = a trading day for security (i) between reconstitution reference date (t) and the trailing one year period relative to (t)

Security Daily Return

$$Ret_{i,s} = \frac{p_{i,s}}{(p_{i,s-1} - d_{i,s}) \times j_{i,s}}$$

$$\overline{Ret}_{i,t} = \frac{1}{n_i} \sum_{k=1}^{n_i} Ret_{i,k}$$

Dividend Yield

$$y_{i,t} = \frac{D_{i,t}^{1Y}}{p_{i,t}}$$

$y_{i,t}$ = One year dividend yield for Index Security (i) as of t

$D_{i,t}^{1Y}$ = sum of all dividend amounts, excluding extra cash, in SEK for Index Security(i) distributed in the one year period from the Reconstitution reference date t (including t). Dividend amounts are adjusted for possible stock-splits, Rights and Spin-offs. If dividend payments are not distributed exactly “evenly” over the one calendar year (i.e. does not fall on the same day and month each year), Nasdaq will, at its discretion, allocate payments to the appropriate period in order to take a full cycle into account.

Momentum

$$M_{i,t} = \prod_{k=1}^{n_i} (1 + Ret_{i,k})$$

$M_{i,t}$ = Momentum for Index Security (i) as of index reconstitution reference date (t)

Realized Volatility

$$\sigma_{i,t} = \left(\frac{1}{n_i} \sum_{k=1}^{n_i} (Ret_{i,k} - \overline{Ret}_{i,t})^2 \right)^{1/2}$$

$\sigma_{i,t}$ = Volatility for Index Security (i) as of index reconstitution reference date (t)

APPENDIX B: ROLL PROCEDURE

1. Any replacements in the Index, meaning new Index Securities entering the index ("New Index Securities") by replacing existing Index Securities ("Old Index Securities"), will be rolled into the Index over the Roll Period (consisting of five (5) consecutive Roll Days), replacing the Old Index Securities with an approximately evenly distributed amount each Roll Day.
2. The sum of the market value of the Index Securities that are sold on each Roll Day is equally distributed among the New Index Securities, i.e. the amount of each New Index Security is determined so that the market value of each New Index Security, on each Roll Day, is equal and sums up to the same market value as for the Index Securities that are sold that day.
3. At close of the last Roll Day in a Roll Period, each remaining Index Security is assigned the weight of $1/n$ (equally weighted), where n is the total number of Index Securities on the first trading day after rebalancing.

Definitions

IS_i^{old} = Index shares of current Index security(i) that is supposed to be deleted from the index as a result of quarterly reconstitution

n^{old} = number of current Index security(i) that is supposed to be deleted from the index as a result of quarterly reconstitution

t_k = defines the Roll Period with k varying from 1 to 5 referring to each roll day.

t_0 = The day before roll starts.

$MCAP^{out}$ = Market Cap of the securities that are moving out as a result of quarterly reconstitution

IS_i^{new} = Index shares of New Index security(i) that is supposed to be added to the index as a result of quarterly reconstitution

n^{new} = number of new Index security(i) that is supposed to be added to the index as a result of quarterly reconstitution

P_{i,t_k}^{old} = Closing Price of the current index security deleted from the index as of Roll day t_k

P_{i,t_k}^{new} = Closing Price of the new index security added to the index as of Roll day t_k

p_{i,t_5} = closing price of Index Security i on Roll Day t_5

n^{index} = number of Index securities after the roll have been completed

IS_i^5 = Index shares of security (i) at the close of roll day t_5 after the inclusion of new securities and exclusion of old index securities

ROLL PERIOD = The term “Roll Period” shall mean, in respect of each Index, a period of five (5) consecutive Scheduled Index Trading Days during each of which Nasdaq Stockholm is open for trading starting (and including) on the fifth (5th) Scheduled Index Trading Day prior to the first Scheduled Index Trading Day of December, March, June and September, respectively.

ROLL DAY = A “Roll Day” is a Scheduled Index Trading Day in the Roll Period during which Nasdaq Stockholm is open for trading.

Schematic Overview of the Roll

$$IS_i^{old}(t_k) = Round \left[\left(IS_i^{old}(t_{k-1}) - 0.2 \times IS_i^{old}(t_0) \right), 0 \right]$$

$$MCAP^{out}(t_k) = \sum_{i=1}^{n^{old}} (0.2 \times IS_i^{old}(t_{k-1}) \times P_{i,t_k}^{old})$$

The Total Index Market Cap sold each Roll Day equals the Total Index Market Cap bought on that Roll Day (with the exception of the small change in Market Cap due to roundings)

$$MCAP^{out}(t_k) = MCAP^{in}(t_k)$$

$$IS_i^{new}(t_k) = IS_i^{new}(t_{k-1}) + Round \left[\frac{MCAP^{in}(t_k)}{n^{new} \times P_{i,t_k}^{new}}, 0 \right]$$

The total market cap of the index as of roll day t_5 is calculated as,

$$MCAP^{index}(t_5) = \sum_{i=1}^{n^{index}} (IS_i^5 \times p_{i,t_5})$$

At the end (immediately after close of business) of the last Roll Day t_5 in the Roll Period, the Index is equally weighted and the index Shares of all Index Securities, i , included in the Index is set to,

$$IS_i(t_5) = \text{Round} \left[\frac{MCAP^{index}(t_5)}{n^{index} \times p_{i,t_5}}, 0 \right]$$

De-listings in the Roll Period:

- If an Index Security that is not in the set of Old or New Index Securities is delisted: At the time of delisting the Market Cap value of that particular Index Security is evenly distributed to the remaining Index Securities that are not in the set of Old or New Index Securities. The roll process is not affected.
- If an Index Security that is in the set of Old Index Securities is delisted: At the time of delisting the Market Cap value of that particular Index Security is added to the $MCAP^{in}(t_k)$ value above and the $MCAP^{out}(t_k)$ value as of this day excludes that Index Security in the calculation. This means that the remaining Market Cap value of the delisted Index Security is re-invested evenly in the set of New Index Securities at the time of de-listing.
- If a New Index Security is delisted and the delisting is unknown before the Roll Period starts: At the time of delisting the Market Cap value of that particular New Index Security is added to the $MCAP^{in}(t_k)$ value above and the new value in the calculation of $IS_i^{new}(t_k)$ is reduced by 1. This means that the remaining Market Cap value of the delisted Index Security is re-invested evenly in the set of New Index Securities at the time of de-listing. If all the New Index Securities are delisted then the Market Cap Value needs to be (evenly) re-invested in the remaining Index Securities that are not in the set of Old Index Securities

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

Index calculation and dissemination schedule

The Index is calculated during the trading day and is disseminated once per second from 09:00:10 to 17:35:00 local time (Central European Time or Central European Summer Time, dependent on the month of the year).

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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