

# **O'Shares Europe Quality Dividend Index**

## **Rules and Methodology**

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## TABLE OF CONTENTS

I. General Description.....	3
II. The Index Committee.....	3
III. Index Value at Inception.....	3
IV. Eligibility Criteria for S-Network Benchmark Indexes.....	3
V. Selection and Weighting Methodologies.....	4
VI. Roles of Parties in the Annual Reconstitutions.....	5
VII. Ongoing Maintenance.....	5
VIII. Calculation and Adjustments.....	7
IX. Calculation of Intraday Index Values.....	9
X. Dissemination.....	10
XI. Data Correction Policy.....	10
XII. Review Schedule.....	10

# The O'Shares Europe Quality Dividend Index Rule Book

## *I. General Description*

The O'Shares Europe Quality Dividend Index (Ticker: OEURX) is a rules-based index.

OEURX uses as its universe of eligible stocks the S-Network Europe Equity 500 Index (Ticker: SNE500), which is a compilation of the 500 largest stocks (by market capitalization) classified as Europe. All stocks included in the SNE500 are screened for free float and average daily trading volume.

OEURX will exclude companies (although their ADRs or GDRs may still be considered) whose country of listing, domicile or incorporation imposes trading costs, idiosyncratic dividend policies, transferability restrictions, or other impediments that could diminish the portfolio performance.

## *II. The Index Committee*

The O'Shares Europe Quality Dividend Index Committee ("The Committee") will be composed of not less than three members. The Committee Chairman will have extensive experience in and expertise in financial markets and stock market characteristics. Two of the members will have some expertise in at least one of the above-named sectors.

The Index Committee's role is to ensure that the Methodology is correctly applied. The Committee will be responsible for maintaining a comprehensive list of companies that are principally engaged in one of the business segments in accordance with this Methodology, and the list will form the O'Shares Europe Quality Dividend Index universe of stocks.

Impartial selection criteria will then be applied to these stocks to determine whether or not they should be included in the index.

The Committee will then review the stocks to be included in the O'Shares Europe Quality Dividend Index and shall reject any stock that does not meet the Methodology's overall standards for risk and sound business practice.

The Committee will meet at least twice a year, either in person or via teleconference, to discuss index issues and organize the annual or special reconstitution or quarterly rebalancing.

The composition of the Committee may from time to time be changed to reflect changes in market conditions.

## *III. Index Value at Inception*

The O'Shares Europe Quality Dividend Index variants have values of 1000 on their inception dates.

## *IV. Eligibility Criteria for S-Network Benchmark Indexes*

The S-Network Europe 500 Index (SNE500) includes the 500 largest European companies as measured by market capitalization. Data used for rebalancings and reconstitutions is derived on the last trading day of the month prior. Companies with R-score (three-month average daily trading volume (in thousands) divided by float-adjusted market capitalization (in millions)) of

less than 100% shall be ineligible for inclusion in the SNE500 Index and therefore ineligible for inclusion in the O'Shares Europe Quality Dividend Index.

## V. *Selection and Weighting Methodologies*

Companies included in OEURX are derived from the following GICS Sectors within the S-Network Europe 500 Index (SNE500):

- Communication Services
- Consumer Discretionary
- Consumer Staples
- Financials
- Health Care
- Industrials
- Information Technology
- Utilities

Index constituents are selected by the ranking of their score modified market cap weight. The score consists of the following factors: quality, volatility, dividend yield and dividend quality. The following steps are taken to select the holdings:

- 1) Calculate the percentile ranks of the metrics used in each factor (multiple metric ranks within a factor are averaged using the noted weights):

### **Quality**

- a. 70% weight (100% weight for Financials) — Return on Assets (ROA) in the trailing 12 months (in descending order)
- b. 30% weight (0% weight for Financials) — Total Net Debt / EBITDA (in ascending order)

### **Volatility**

- c. Trailing-5-year weekly volatility (in ascending order)

### **Dividend Yield**

- d. Logarithm of the trailing 12-month regular cash dividend yield (in descending order)

### **Dividend Quality**

- e. 50% weight — Income Available to Common Shareholders / Gross Dividends (in descending order)
- f. 50% weight — Trailing-5-year regular cash dividend growth (in descending order)

- 2) Calculate the percentile rank for each factor to produce the factor's Score
- 3) Calculate the score-modified float market cap in the following way: Float market cap \* (Quality Score)<sup>2</sup> \* (Volatility Score)<sup>2</sup> \* Yield Score \* Dividend Quality Score
- 4) Weight all companies by score-modified float market cap resulting from (3)
- 5) Select top 50 highest-weighted companies

During a reconstitution, the selected companies are weighted as follows:

- 1) Weight (summed to 100%) using score-modified float market cap
- 2) Apply sector constraints by limiting each sector's weight to a) no greater than 1.4 times the same sector's weight in the starting universe, and b) no greater than 22%
- 3) Apply country constraints by limiting each country's weight to between 1.4 and 0.6 times the same country's weight in the starting universe
- 4) Apply currency constraints by limiting each currency's weight to between 1.4 and 0.6 times the same currency's weight in the starting universe
- 5) Cap each constituent's weight at the lesser of a) 5% and b) the sum of 2% and the ratio of that constituent's float-adjusted market capitalization to the sum of all the float-adjusted

market capitalizations of the constituents of the S-Network Europe Equity 500 Index (SNE500) as of the Snapshot Date

During a quarterly rebalancing apart from a reconstitution, only the constituent weight cap of 5% is applied; the preceding steps are not taken. Such rebalancings are only done if at least one constituent's weight has exceeded 6% as of the Snapshot Date.

## **VI. Roles of Parties in the Annual Reconstitutions.**

- i) The EOD Calculation Agent shall determine a proposed update to the list of Index constituents using the Index rules together with data available as of the market close on the last trading date of the second month of the calendar quarter (the "Snapshot Date"). The EOD Calculation Agent shall provide the Index Committee with a list of the differences between this new list and the current Index constituents.
- ii) The Committee shall approve or reject the changes in accordance with this Methodology and notify the EOD Calculation Agent of its decisions no later than the Thursday following the first Friday of the rebalancing month.
- iii) No later than the Thursday following the first Friday of the rebalancing month, the Index Committee or its designee shall issue a press release announcing additions to and/or deletions from the O'Shares Europe Quality Dividend Index. The press release shall be posted on the O'Shares Europe Quality Dividend Index website.
- iv) The EOD Calculation Agent shall provide new Index Shares to the Committee or its designee based on prices as of the close of trading on the Thursday prior to the second Friday of the rebalancing month (the "Weight Date").
- v) The EOD Calculation Agent shall distribute the new Index Shares to all approved parties via email and/or FTP after the Weight Date.

The reconstitution or rebalancing will be effective at the close of trading on the third Friday of the rebalancing month. The EOD Calculation Agent will post all final rebalancing data and information on its FTP server on or by the third Friday of the rebalancing month.

## **VII. Ongoing Maintenance**

- i) In addition to the scheduled quarterly reviews, the O'Shares Europe Quality Dividend Index is reviewed on an ongoing basis. Changes in index composition and related weight adjustments are necessary whenever there are extraordinary events such as delisting, bankruptcy, mergers or takeovers involving index components. In these cases, each event will be taken into account as soon as it is effective. Whenever possible, the changes in the index's components will be announced at least two business days prior to their implementation date. Changes in shares outstanding are reflected at each rebalancing, as well as between rebalancings for certain corporate actions such as stock splits or consolidations.
- ii) Additions to the Index. Additions may be made to the O'Shares Europe Quality Dividend Index at the close of trading on the quarterly rebalancing dates in the case of certain recent Initial Public Offerings that occurred more than 22 trading days prior to the rebalancing date.
- iii) Deletions from the Index. Deletions may be made to remove companies that fail to meet the inclusion criteria as of the Snapshot Date for a reconstitution or rebalancing, or in the event a constituent is de-listed, files for bankruptcy, is acquired or merges with another company.

- iv) **Changes of Eligible Securities.** In the event that a component no longer meets the eligibility requirements described in Section IV herein, it may be removed from the index.
- v) **Changes of Industry Classification.** Companies are eligible for inclusion in the O'Shares Europe Quality Dividend Index based on the revenues received from its applicable business segment. Mergers, takeovers, spin-offs, or organic growth in a company's business segments may cause a company to lose its eligibility. In such a circumstance, the company will be deleted from the index. A company's classification may also require an immediate change as the result of a special event such as a merger, takeover or spin-off.
- vi) **Splits and Spin-offs.** If an index constituent splits or spins off a portion of its business to form one or more new companies, all of the companies involved in the spin-off will be immediately included in the O'Shares Europe Quality Dividend Index, if they would otherwise qualify for membership.
- vii) **Mergers.** If two index constituents merge, their component positions will be replaced by the surviving company immediately. If an index constituent merges with a non-component company, it will be removed from the index and its weight will be redistributed to all the remaining constituents on a proportional basis.
- viii) **Takeovers.** If an index component is taken over by another component company, the former will be removed from the index immediately upon completion of the takeover. If an index component is taken over by a non-component company, it will be removed from the index and its weight will be redistributed to all the remaining constituents on a proportional basis.
- ix) **Share Offerings, Tenders and Purchases.** If a Rights Offering is in the money, the rights are exercised and the newly acquired shares are applied to the company issuing the rights. A divisor change is made to reduce the holdings of the remaining constituents in order to settle the acquisition of the rights. If the rights offering is out of the money, it expires worthless. Tender offers are not accepted, and no adjustments are made for self tenders or stock buybacks.
- x) **Removal of Companies Due to Delisting, Bankruptcy or Extreme Financial Distress.** If an index constituent is de-listed by its primary market, or is in bankruptcy proceedings, it will be removed from the index.
  - \* If an index component is de-listed by its primary market due to failure to meet financial or regulatory requirements, it will be removed from the index.
  - \* If an index component enters bankruptcy proceedings, it will be removed from the index and will remain ineligible for re-inclusion until it has emerged from bankruptcy.
  - \* The Committee shall remove a company that is in extreme financial distress from the O'Shares Europe Quality Dividend Index to protect the integrity of the index and the interests of investors in products linked to that index.
- xi) **Pricing of Stocks in Extreme Financial Distress for Index Maintenance.**
  - \* When a stock is suspended from trading due to financial distress and subsequently delisted by its primary market prior to resumption of trading, the Calculation Agent will use the best-available alternate pricing source to determine the value at which the company should be removed from the index.
  - \* If the stock's primary market price is no longer available due to its suspension or delisting, a current price from another exchange, such as a regional or electronic marketplace, may be used. In the absence of those prices in the case of U.S. securities, OTC Bulletin Board, OTC Equity (non-OTCBB stocks), and Pink Sheet traded prices shall be applied in that order.

\* If the security has become worthless or is likely to remain too illiquid to be traded, it will be removed from the index at .01 local currency of the stock.

## VIII. Calculation and Adjustments

### i) Calculation Agents

The O'Shares Europe Quality Dividend Index is calculated on an end-of-day basis by S-Network Global Indexes (the "EOD Calculation Agent") and on an intraday basis by Refinitiv (the "Intraday Calculation Agent"). The EOD Calculation Agent is also responsible for index maintenance.

### ii) Input Data Sources

\* Real-time stock prices are provided by Refinitiv.

\* The number of shares is determined separately for each class of stock. This information is obtained from regulatory filings and a variety of data vendors. The data also may be sourced from the companies themselves.

\* Corporate actions are sourced from public news services, regulatory filings and data vendors. The companies themselves may be used as an additional source.

\* Float data are obtained from a variety of sources including data vendors, exchanges, regulators and the companies themselves.

### iii) Index Formula. The index is calculated using a Laspeyres formula. This formula is used for the calculation of the return index and the price index. The only difference is that the divisor $D_t$ is different for the two indexes (return index and price index).

The index is computed as follows:

$$\text{Index}_t = \frac{\sum_{i=1}^n (p_{it} \times q_{it})}{C_t \times \sum_{i=1}^n (p_{i0} \times q_{i0})} \times \text{Base Index Value} = \frac{M_t}{B_t} \times \text{Base Index Value}$$

The above mentioned formula can be simplified as:  $\text{Index}_t = \frac{M_t}{D_t}$

Where:

$$D_t = \frac{B_t}{\text{base index value}} = \text{divisor at time (t)}$$

$n$  = the number of stocks in the index

$p_{i0}$  = the closing price of stock  $i$  at the base date

$q_{i0}$  = the number of shares of company  $i$  at the base date

$p_{it}$  = the price of stock  $i$  at time  $(t)$

$q_{it}$  = the number of shares of company  $i$  at time  $(t)$

$C_t$  = the adjustment factor for the base date market capitalization

$t$  = the time the index is computed

$M_t$  = market capitalization of the index at time  $(t)$

$B_t$  = adjusted base date market capitalization of the index at time  $(t)$

Dividend payments are not taken into account in the price indexes, whereas dividend payments are reinvested in the index samples of the total return indexes.

- iv) Divisor Adjustments. Corporate actions affect the share capital of component stocks and therefore trigger increases or decreases in the index. To avoid distortion, the divisor of the index is adjusted accordingly.

\* Formulae for Divisor Adjustment. The following formulae will be used for divisor adjustments. (Note: No divisor adjustments are necessary for stock splits, since market capitalization does not change and the share number and share price are adjusted prior to the opening of trading on the split's ex-date.)

$$D_{t+1} = D_t \times \frac{\sum (p_{it} \times q_{it}) \pm \Delta MC_{t+1}}{\sum (p_{it} \times q_{it})}$$

Where:

$D_t$  = divisor at time (t)

$D_{t+1}$  = divisor at time (t+1)

$p_{it}$  = stock price of company i at time (t)

$q_{it}$  = number of shares of company i at time (t)

$\Delta MC_{t+1}$  = add new components' market capitalization and adjusted market capitalization (calculated with adjusted closing prices and shares effective at time t+1 and/or minus market capitalization of companies to be deleted (calculated with closing prices and shares at time t)

Note: If the current trading price of an issue is unavailable, the previous trading session's closing price is used. However, if the issue is affected by any corporate action that requires an adjustment, then the adjusted price is used.

\* Adjustments for Corporate Actions. An index divisor may decrease (▼) or increase (▲) or keep constant (■) when corporate actions occur for a component stock. Assuming shareholders receive "B" new shares for every "A" share held for the following corporate actions:

▼ A) CASH DIVIDEND (applied for return index only)

adjusted price = closing price - dividend announced by the company

▼ B) SPECIAL CASH DIVIDEND (applied for price and return index)

adjusted price = closing price - dividend announced by the company

■ C) SPLIT AND REVERSE SPLIT

adjusted price = closing price \* A / B

new number of shares = old number of shares \* B / A

▲ D) RIGHTS OFFERING

adjusted price = (closing price \* A + subscription price \* B) / (A + B)

new number of shares = old number of shares \* (A + B) / A

■ E) STOCK DIVIDEND

adjusted price = closing price \* A / (A + B)

new number of shares = old number of shares \* (A + B) / A

▼ F) STOCK DIVIDEND OF A DIFFERENT COMPANY SECURITY

adjusted price = (closing price \* A - price of the different company security \* B) / A

▼ G) RETURN OF CAPITAL AND SHARE CONSOLIDATION

adjusted price = (closing price - dividend announced by company) \* A / B



new number of shares = old number of shares \* B / A

▼ H) SPIN-OFF

adjusted price = ( closing price \* A - price of spun-off shares \* B ) / A

▲ I) COMBINATION STOCK DISTRIBUTION (DIVIDEND OR SPLIT) AND RIGHTS OFFERING

Shareholders receive B new shares from the distribution and C new shares from the rights offering for every A shares held:

\* If rights are applicable after stock distribution (one action applicable to other).  
adjusted price = [closing price \* A + subscription price \* C \* (1 + B / A)] / [ (A + B) \* (1 + C / A) ]  
new number of shares = old number of shares \* [(A + B) \* (1 + C / A)] / A

\* If stock distribution is applicable after rights (one action applicable to other).  
adjusted price = [closing price \* A + subscription price \* C] / [(A + C) \* (1 + B / A)]  
new number of shares = old number of shares \* [ (A + C) \* (1 + B / A) ]

▲ J) STOCK DISTRIBUTION AND RIGHTS (NEITHER ACTION IS APPLICABLE TO THE OTHER)

adjusted price = [closing price \* A + subscription price \* C] / [A + B + C]  
new number of shares = old number of shares \* [A + B + C]

- v) Computational Precision. Index values are rounded to two decimal places and divisors are rounded to integers. Any values derived by the index calculation engine from a corporate action used for the divisor adjustments and index computations are rounded to seven decimal places.

## IX. Calculation of Intraday Index Values

- i) The Intraday Calculation Agent will calculate index values using price data on each reported trade it receives on each component security.
- ii) The Intraday Calculation Agent will distribute index values to vendors at set 15-second intervals, provided the index value has changed from the previously distributed value.
- iii) The index calculations will start at 18:00 (ET - US) for the next trading day (opening price). At that time, the index will begin changing as new prices or exchange rates are processed.
- iv) Index calculation will cease each trading day at 17:00 (ET-US) and official summaries will be disseminated between 17:00 (ET-US) and 19:00 (ET-US) (closing price).
- v) Each week, the indexes will be calculated starting Sunday night at 18:00 ET and extending through Friday night at 17:00 ET.
- vi) If, during periods when the index is calculated, one or more markets are closed, the index calculation will continue using the last closing price for those stocks that trade on the closed exchange(s).
- vii) Stocks denominated in foreign currencies will be converted to USD with each reported price using exchange rates sourced from Refinitiv. Official closing prices for the indexes will be calculated using the Refinitiv snapshot rates as of 4:00 PM GMT.
- viii) The indexes will be calculated and disseminated in USD and EUR.

- ix) The indexes will also be calculated and disseminated in USD and EUR using the constituents' respective countries' dividend tax rates to calculate Net Total Return.

## X. *Dissemination*

Index values will be disseminated in US dollars via the NYSE Global Index Feed (GIF) using the following tickers:

<u>Index</u>	<u>Ticker</u>
The O'Shares Europe Quality Dividend Index	OEURX
The O'Shares Europe Quality Dividend Index Gross Total Return	OEURXT

Index values will be disseminated in EUR via the NYSE GIF using the following tickers:

<u>Index</u>	<u>Ticker</u>
The O'Shares Europe Quality Dividend Index EURO	OEURXE
The O'Shares Europe Quality Dividend Index EURO Gross Total Return	OEURXET

## XI. *Data Correction Policy*

To maintain a high standard of data integrity, a series of procedures have been implemented to ensure accuracy, timeliness and consistency. Input prices are monitored using a variety of computerized range-check warning systems for both ticker-plant and real-time index systems. Fault tolerant methods are employed in the collection of market and corporate action data. Various verification and audit tasks are performed to ensure the quality of the real-time data feeds and related market data. While every effort is taken to ensure the accuracy of the information used for the index calculation, an index error may occur due to incorrect or missing data, including trading prices, exchange rates, shares outstanding and corporate actions, due to operational errors or other reasons.

- i) **Intraday Corrections.** Reasonable efforts are employed to prevent erroneous data from affecting the indexes. Corrections will be made for bad prices and incorrect or missing corporate actions as soon as possible after detection.
- ii) Since the indexes are calculated on a real-time basis, an incorrect index value tick will not be fixed retroactively. Incorrect daily high/low index values will be corrected as soon as practicable.
- iii) **Index-Related Data and Divisor Corrections.** Incorrect pricing and corporate action data for individual issues in the database will be corrected upon detection. In addition, an incorrect divisor of an index, if discovered within five days of its occurrence, will always be fixed on the day it is discovered to prevent an error from being carried forward.
- iv) If a divisor error is discovered more than five days after occurrence, the adjustment will depend upon how significant the error is, how far back the error occurred and the feasibility of performing the adjustment.

## XII. *Review Schedule*

### Share Updates

Frequency: Quarterly (skipped if no constituent has exceeded 6% in weight as of the Snapshot Date)

Effective date: The close of trading on the third Friday of the last month of each calendar quarter

Advance notice: At least two business days

### Reconstitutions

Frequency: Annual

Effective date: The close of trading on the third Friday of September  
Advance notice: At least two business days

News Notification\*

Frequency: As needed

Effective date: As announced

Advance notice: At least two business days whenever possible

\* Includes events such as de-listings, mergers, bankruptcies and other extraordinary events.

\* Based on available news.