

**SG European Quality Income Index**  
(EUR – Price Return)

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**Index Rules**

Version as of 21 March 2013

# SG European Quality Income Index (EUR – Price Return)

## 1. Index Summary Description:

### 1.1. Index Description

The SG European Quality Income Index (the “**Index**”, displayed on Bloomberg page SGQE<Index>), with an Index Launch Date on the 21 March 2013 (the “**Index Launch Date**”), aims to capture the performance of Shares which are listed on the regulated exchange of an “Eligible Country” (each such exchange, an “**Eligible Exchange**” and together the “**Eligible Exchanges**”) which offer attractive and sustainable dividend yields.

The Index is calculated real time.

The Index is calculated in Euro Price Return and published by Solactive AG (the “**Index Calculation Agent**”).

### 1.2. Index Philosophy

The quality income strategy is based on two basic principles. The first is that historically dividend yield has been the dominant component of equity returns, and the second is that equity investors are not rewarded for buying higher risk stocks.

The index aims to identify a universe of assets which may offer lower risk and higher quality. Societe Generale (the “**Index Sponsor**”) has identified a set of measures that aim to reduce the overall volatility, beta and drawdown of the portfolio and also to reduce the probability of dividend cuts. None of the quality measures incorporate any forecasts and are solely based on reported information.

The selection of Shares comprising the Index is fully systematic and excludes financial companies.

## 2. Index Rules:

### 2.1. Methodology applicable

The Index is computed and maintained pursuant to the general index guidelines and index calculation guidelines (together the “**Index Calculation Rules**”) which apply to indices which follow the standard formula, as provided and published by the Index Calculation Agent on its website (<http://www.solactive.com>).

### 2.2. Terms and definitions relating to the Index:

“**Closing Valuation Time**” means (18:30 Central European Time as of the Index Launch Date and as may be modified by the Index Calculation Agent after consultation with the Index Sponsor from time to time thereafter).

“**Company**” means in respect of a Share, the issuer of such Share;

“**Dividend Yield**” or “**DY(I,T)**” means in respect of any Review Date (T) and any Share (i) within the Universe, the estimated gross dividend yield for such share determined as follows:

$$DY(i,T) = d(i,T) / p(i,T)$$

where

- (i)  $d(i,T)$  is the estimated annualised gross dividend per Share (i) as of the Review Date (T) and
- (ii)  $p(i,T)$  is the official closing price of Share (i) on the relevant Exchange as of the Review Date (T).

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**“Early Closure”** means in respect of any Index Component, the closure on any Exchange Business Day of the Exchange prior to its Scheduled Closing Time;

**“Eligible Country”** means any European country considered as developed by the Index Calculation Agent. As of the Index Launch Date, the list of Eligible Countries is the following: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom. Such list may be updated from time to time by the Index Calculation Agent in order to insure that it remains consistent over time with the definition of developed countries as determined by the Index Calculation Agent.

**“Exchange”** means, for each Eligible Country, a regulated exchange of such Eligible Country, or any substitute exchange or quotation system to which trading in the Index Components has temporarily or permanently relocated (provided that the Index Sponsor has determined that there is comparable liquidity relative to such Share on such substitute exchange or quotation system as on the original Exchange);

**“Exchange Business Day”** means in respect of any Index Component, any Scheduled Trading Day on which the Exchange is open for trading during its respective regular trading session, notwithstanding any the Exchange closing prior to its Scheduled Closing Time;

**“Exchange Disruption”** means in respect of any Index Component, any event (other than an Early Closure) that disrupts or impairs the ability of market participants in general to effect transactions in, or obtain market values for any futures on the Exchange;

**“Index”** means the SG European Quality Income Index (EUR – Price Return) as described below (Bloomberg: SGQE <Index>);

**“Index Base Date”** means the Index Launch Date;

**“Index Calculation Agent”** means Solactive AG acting as calculation agent for the Index;

**“Index Calculation Date”** means any Scheduled Trading Day on which no Index Disruption Event exists;

**“Index Component”** means a share constituting the Index. The Index Components are determined pursuant to the section “Review of the Index Components” set out hereinafter;

**“Index Currency”** means the Euro (“EUR”);

**“Index Disruption Event”** means the occurrence or existence in respect of any Index Component of (i) an Exchange Disruption, or (ii) a Trading Disruption, or (iii) an Early Closure, which in any case the Index Sponsor, after consultation with the Index Calculation Agent, determines is material;

**“Index Launch Date”** means 21 March 2013;

**“Index Level”** means, in respect of any Index Calculation Date(t), the level of the Index calculated and published by the Index Calculation Agent as at the Valuation Time on such Index Calculation Date(t), pursuant to these Index Calculation Rules;

**“Index Sponsor”** means Societe Generale (“SG”);

**“Opening Valuation Time”** means (09:00 Central European Time as of the Index Launch Date and as may be modified by the Index Calculation Agent after consultation with the Index Sponsor from time to time thereafter).

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“**Rebalancing Date**” means the 7<sup>th</sup> Index Calculation Date of January, April, July and October;

“**Related Exchange(s)**” means in respect of each Index Component, each exchange or quotation system where trading has a material effect on the overall market for futures and options contracts relating to such Index Component, any successor exchange or quotation system or any substitute exchange or quotation system to which trading in futures or options contracts relating to such Index Component, has temporarily relocated.

“**Review Date**” means, in respect of a Rebalancing Date, the 3<sup>rd</sup> Index Calculation Date preceding such Rebalancing Date;

“**Scheduled Closing Time**” means in respect of an Exchange or Related Exchange, the scheduled weekday closing time of such Exchange or Related Exchange, without regard to after hours or any other trading outside of the regular trading session hours.

“**Scheduled Trading Day**” means, in respect of all Index Components, any day on which the Exchange is scheduled to be open for trading during its regular trading session.

“**Share**” means each ordinary share or common stock issued by a company;

“**Trading Disruption**” means, in respect of any Index Component, any suspension of or limitation imposed on trading by the Exchange for such Index Component or otherwise and whether by reason of movements in price exceeding limits permitted by the Exchange or otherwise.

“**Universe**” means the eligible universe of Index Components defined as all ex-financials companies which are listed on an Eligible Exchange.

“**Valuation Time**” means with respect to the Index, any time between the Opening Valuation Time and the Closing Valuation Time provided that the relevant data is available to enable the Index Calculation Agent to determine the Index Level.

### **2.3. Review of the Index Components:**

#### **2.3.1. Quarterly Rebalancing**

On each Review Date, the Index Sponsor will determine the new composition of the Index, which will be implemented on the following Rebalancing Date (such event being referred to as a “**Quarterly Rebalancing**”).

As of each Review Date, the Shares which enter in the composition of the Index are selected in accordance with the Index Selection Rules, as defined hereinafter, i.e.

- Shares are filtered in order to only include Shares which belong to the Universe
- Shares which belong to the Universe and which already belong to the Index as of the relevant Review Date must comply with the Maintenance Eligibility Rules; failing which they are removed from the Index
- Shares which belong to the Universe and which do not belong to the Index as of the relevant Review Date must comply with the Entry Eligibility Rules in order to be eligible for inclusion to the Index

Should the resulting selection include several Shares which are issued by the same company, only the Shares which correspond to the greatest free float adjusted market capitalisation will be eligible for inclusion.

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Should the resulting allocation contain less than 25 Shares, the process described in 2.4.3. shall apply.

Should the resulting allocation contain more than 75 Shares, the process described in 2.4.4. shall apply.

The Index is then rebalanced on the following Rebalancing Date. The quantity of each Index Component as of the Rebalancing Date is determined using the last available prices of each stock as at the Closing Valuation Time of the Review Date immediately preceding such Rebalancing Date so that the Index would be equiweighted if it were to be rebalanced at the close of such Review Date.

### **2.3.2. Extraordinary Rebalancing**

Following the occurrence of extraordinary events (including, but not limited to acts of God, natural disaster, epidemic, weather, accident, industrial action, Government action, civil unrest, war, threat of war, or major accounting fraud), the Index Sponsor may but shall not be obliged to remove one or several affected Index Components or replace such affected Index Components with new Shares (such replacement being called an “**Extraordinary Rebalancing**”).

Any Extraordinary Rebalancing will correspond to the sale of exiting Index Components and (in case of replacement) the purchase of new Shares. However, no reweighting will take place (i.e, the Index post Extraordinary Rebalancing will not be reweighted following the process which applies to Quarterly Rebalancings).

## **2.4. Index Selection Rules:**

### **2.4.1. Entry Eligibility Rules**

To be eligible for entry into the Index on a Rebalancing Date, a Share must belong to the Universe and combine all four criteria below (the “**Entry Eligibility Rules**”) as of the Review Date immediately preceding such Rebalancing Date:

- i) A Quality Score, as defined above, of 7 or better.
- ii) A Balance Sheet Risk Score, as defined above, that ranks within the top 40% of the Universe.
- iii) A Dividend Yield, as defined above, greater than 4%.
- iv) Comply with the Entry Market Cap Criteria and the Entry Liquidity Criteria, as defined hereinafter.

The “**Entry Market Cap Criteria**” means having a free float adjusted market capitalization of at least one billion Euros (EUR 1,000,000,000) (adjusted for the performance of the European equity market as measured by the performance of the Euro STOXX 50 futures (Bloomberg: FSX5ES <Index>) starting from 31/12/2012).

The “**Entry Liquidity Criteria**” means having a 6-month average daily traded volume of at least one million Euros (EUR 1,000,000).

### **2.4.2. Maintenance Eligibility Rules:**

To be eligible to remain in the Index on a Rebalancing Date, an Index Component must still belong to the Universe and combine all four criteria below (the “**Maintenance Eligibility Rules**”) as of the Review Date immediately preceding such Rebalancing Date:

- i) It maintains a Quality Score of 5 or better.
- ii) It maintains a Balance Sheet Risk Score that ranks within the top 60% of the Universe.
- iii) It maintains a Dividend Yield greater than 3.5%.

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iv) It complies with the Maintenance Market Cap Criteria and the Maintenance Liquidity Criteria, as defined hereinafter.

The “**Maintenance Market Cap Criteria**” means having a free float adjusted market capitalization of at least seven hundred million Euros (EUR 700,000,000) (adjusted for the performance of the European equity market as measured by the performance of the Euro STOXX 50 futures (Bloomberg: FSX5ES <Index>) starting from 31/12/2012).

The “**Maintenance Liquidity Criteria**” means having a 6-month average daily traded volume of at least one million Euros (EUR 1,000,000).

Shares that fail to satisfy any of the above conditions will be removed from the Index as of the Rebalancing Date.

### **2.4.3. Minimum number of Companies:**

If there are less than 25 Shares on aggregate that meet (i) the Entry Eligibility Rules for shares which are candidate for entry into the Index or (ii) the Maintenance Eligibility Rules for shares which already belong to the Index (together the “**Eligibility Rules**”), the Index Sponsor will:

- i) Include all companies that pass the Eligibility Rules into the index
- ii) For all remaining Shares that belong to the Universe, include the Shares which have a Dividend Yield of at least 3.5%, a free float adjusted market capitalization of at least seven hundred million Euros (EUR 700,000,000) (adjusted for the performance of the European equity market as measured by the performance of the Euro STOXX 50 futures (Bloomberg: FSX5ES <Index>) starting from 31/12/2012) and a 6-month average daily traded volume of at least one million Euros (EUR 1,000,000) (such modified rules being called the “**Modified Eligibility Rules**”).
- iii) Should the resulting selection includes several Shares which are issued by the same company, only the Shares which correspond to the greatest free float adjusted market capitalisation will be eligible for inclusion.
- iv) In the event that the resulting selection includes less than 25 Shares, the Index Sponsor will repeat steps ii) and iii) above but further reducing the applicable Dividend Yield, the free float adjusted market capitalization and the 6-month average daily traded volume thresholds in the Modified Eligibility Rules by 10%.
- v) Rank all resulting companies (i.e. the companies which comply with Eligibility Rules and the companies which comply with the Modified Eligibility Rules) based on the “**Overall Quality Score**”, which is defined as the sum of (i) the Quality Score and (ii) two times the Balance Sheet Score quintile ranking (5 being the highest rank).
- vi) Add such companies with the highest Overall Quality Score until the Index gets to 25 stocks. For companies with identical Overall Quality Score the stocks with the higher Dividend Yield will be selected.

### **2.4.4. Maximum number of Companies:**

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If there are more than 75 Shares that meet the Eligibility Rules, the Index Sponsor will:

- i) Retain all Index Components that pass the Maintenance Eligibility Rules.
- ii) Rank all Shares which meet the Entry Eligibility Rules by their respective Overall Quality Score
- iii) Add such Shares which show the highest Overall Quality Score until the Index includes 75 Shares.  
For Shares which show an identical Overall Quality Score, the Shares with the higher Dividend Yield will be selected.

### **2.4.5. Balance sheet risk score**

The Index Sponsor uses a distance to default model that looks at the equity of the firm as a contingent claim on the firm's capital structure. It assumes that the corporation is financed through a single debt instrument (zero-coupon bond) and a single equity issue (not paying dividends). At the maturity of the bond, the firm liquidates its assets and ceases to exist. Bondholders receive back the face value of the bond while shareholders receive any residual payment (assets minus face value of bond). In the case where the firm is not capable of paying off its creditors (default), the bondholders will claim the whole asset value of the firm and the shareholders will receive nothing.

The Distance to Default (DD or "**Balance Sheet Risk Score**") is a widely used indicator of the credit quality of a company. It measures the number of standard deviations between the asset's value and the default point.

$$\text{Distance to Default} = \frac{\text{Assets Value} - \text{Default Point}}{\text{Assets Value} \times \text{Asset Volatility}}$$

or

$$\text{Distance to Default} = \frac{\ln(A/F) + (r - \sigma_A^2 / 2) \times T}{\sigma_A \times \sqrt{T}}$$

In order to estimate the distance to default for a company the Index Sponsor first estimates the value of the distance to default inputs:

#### **Default point (F)**

The Index Sponsor uses book value of current liabilities plus half the long term.

#### **Interest rate (r)**

The Index Sponsor uses the local six month interbank rate, or if that is not available the most relevant alternative.

#### **Time to maturity (T)**

The Index Sponsor assumes a time to maturity of one year for all the companies in our sample. A higher or lower maturity would alter the estimated distance to default significantly but would not affect the ranking.

#### **Market value of assets (A) and asset volatility ( $\sigma_A$ )**

Neither of these inputs are directly observable, but they can be implied starting from the market value of the equity (E) and equity volatility ( $\sigma_E$ ) and by using the Black-Scholes formula. Estimating the equity value and volatility is clearly not a problem. The Index Sponsor uses the six month historical volatility and the full market value of the company.

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A and  $\sigma_A$  can be estimated by solving the below system of equations:

$$E = A \times N(d_1) - e^{-rT} \times F \times N(d_2)$$

$$\sigma_E = \frac{A}{E} \times N(d_1) \times \sigma_A$$

N(.): Cumulative Standard Normal Distribution

$$d_1 = \frac{\ln(A/F) + (r + \sigma_A^2/2) \times T}{\sigma_A \times \sqrt{T}}, d_2 = d_1 - \sigma_A \times \sqrt{T}$$

### 2.4.6. Quality score

The Index Sponsor calculates a quality score based on the following 9 binary criteria. The quality score (the “**Quality Score**”) is defined as the number of criteria that a company meets and can range from 0 to 9.

- (i) ROA positive. ROA is calculated as net income before extraordinary items divided by total assets
- (ii) CFO positive. CFO is cash flow from operations divided by total assets.
- (iii)  $\Delta$ ROA positive.  $\Delta$ ROA is simply the year-on-year change in ROA.
- (iv) Accruals negative. Accruals are defined as ROA minus CFO.
- (v)  $\Delta$ Leverage negative.  $\Delta$ Leverage is the annual change in a company’s leverage as measured by the year-on-year change in the ratio of long-term debt to total assets.
- (vi)  $\Delta$ Liquid positive.  $\Delta$ Liquid is the annual change in the current ratio (the ratio of current assets to current liabilities).
- (vii)  $\Delta$ Finance negative.  $\Delta$ Finance is the year-on-year change in number of shares
- (viii)  $\Delta$ Margin positive.  $\Delta$ Margin is the year-on-year change in the gross operating margin
- (ix)  $\Delta$ Turnover positive.  $\Delta$ Turnover is the year-on-year change in the asset turnover (sales over assets) ratio.

### 2.5. Publication of the Index Level:

The Index Level is published on Reuters/Bloomberg and on the website of the Index Calculation Agent and of the Index Sponsor for each Index Calculation Date.

### 2.6. Rounding Rules:

The rounding policy is defined as follows:

- Index Level : 2 decimal places

## 3. Consequences of an Index Disruption Event:

- 3.1 If an Index Disruption Event exists on a Scheduled Trading Day for an Index Component (a “**Disrupted Scheduled Trading Day**”), then the Index Calculation Agent shall not determine the level for the Index on such Scheduled Trading Day. The next Index Calculation Date following such Disrupted Scheduled Trading Day for which the Index Calculation Agent shall determine the level for the Index shall be the first succeeding Scheduled Trading Day on which the Index Calculation Agent determines that an Index Disruption Event no longer exists; *provided* that if the Index Calculation Agent determines that an Index Disruption Event

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exists on the five consecutive Scheduled Trading Days immediately following the initial Disrupted Scheduled Trading Day, then:

- (i) the fifth Scheduled Trading Day following the initial Disrupted Scheduled Trading Day, and each Scheduled Trading Day thereafter on which an Index Disruption Event continues to exist (each, a “**Disrupted Calculation Date**”), shall be deemed to be an Index Calculation Date for the purpose of calculating and publishing the Index Level only, notwithstanding the existence of an Index Disruption Event on such date(s), and
- (ii) the Index Calculation Agent shall use its reasonable efforts to determine, the level of Index as of the Closing Valuation Time on that fifth Scheduled Trading Day following the initial Disrupted Scheduled Trading Day, and as of each Closing Valuation Time on each Scheduled Trading Day thereafter on which an Index Disruption Event continues to exist.

**3.2** Notwithstanding the foregoing Section 3.1, if an Index Disruption Event continues for twenty consecutive Scheduled Trading Days, then the Index Sponsor shall, after consultation with the Index Calculation Agent, either (each a “**Disruption Remedy**”)

- (i) amend the Index Rules in a manner that preserves the economic characteristics of the Index and results in the Disruption Event ceasing to exist,
- (ii) permanently cancel the Index, or
- (iii) decide to continue the determination of the Index Level as provided in section 3.1. above for another period of twenty (20) Scheduled Trading Days (a “**Disruption Period Extension**”), provided that after such period, the Index Sponsor shall decide again between the Disruption Remedies above, subject to a maximum of three Disruption Period Extensions, including the first one.