

GT 30 Index  
Guidebook  
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# 1 INTRODUCTION

The GT 30 Index (GT 30) tracks the performance of companies that are active in the various sectors covering Greece and Turkey. The GT 30 index comprises of companies which have their biggest market capitalisation of the companies listed in the respective markets. The index members are the 30 largest stocks from the list of eligible companies with a cap of 4 banks from each country.

The GT 30 Index is launched on 28 September 2009. The selection of the index constituents is conducted by STOXX Ltd - following a rules-based process. STOXX Ltd is responsible for the index calculation and maintenance.

Four versions of the GT 30 Index are available as follows:

GT 30 Index in EUR (GT30P)

GT 30 Return Index in EUR (GT30R)

GT 30 Index in TRY (GT30TP)

GT 30 Return Index in TRY (GT30TR)

## 2 PERIODIC REVIEW

### 2.1 Review Dates

Semi-Annual Review:

The composition of the GT 30 Index is reviewed on a semi-annual basis. The resulting changes (i.e. additions and deletions) to the index are implemented after the closing on the third Friday in March and September and effective on the next trading day.

Quarterly Review:

To ensure that the GT 30 Index is always accurate and is calculated with the most up-to-date constituent data, the component data (i.e. number of shares, weighting cap factor) of the GT 30 is reviewed on a quarterly basis. The resulting changes to the index are implemented after the closing on the third Friday in March, June, September and December and are effective the next trading day.

### 2.2 Investment Universe

The GT 30 investment universe, i.e. stocks that are eligible for inclusion, is reviewed semi-annually in March and September. It comprises of all stocks that

- (1) classified as country - Greece and Turkey in the Dow Jones STOXX Eastern Europe TMI and
- (2) have a minimum free float of  $\geq 20\%$ .

### 2.3 Selection

Starting from the GT 30 investment universe, the components of the GT 30 are selected based on the following steps:

#### 1. Full Market Capitalization Ranking:

Each stock in the GT 30 universe is ranked according to its end-of-day full float market capitalization on the last trading day of the month prior to the semi-annual review month (the market cap review date), i.e. the last trading day of February or August.

#### 2. Initial Selection

The largest 15 stocks of each country in terms of full market capitalization are selected as components of the GT 30 with a maximum of four banks can be selected.

## 2.4 Weighting Cap factors

The numbers of shares are updated quarterly. To ensure that these changes are also reflected in the resulting component weights, the weighting cap factors for each stock in the GT 30 are also calculated quarterly.

The weighting cap factors (10%) will be calculated on the basis of the new number of shares and the adjusted closing prices of the (new) components on the Wednesday before the review date. The calculation of the weighting cap factors is described in section 4.55

## 3 ONGOING MAINTENANCE

In addition to the periodic reviews, the GT 30 is also continually reviewed for corporate events – e.g. mergers, takeovers, spin-offs, de-listings and bankruptcy - affecting the index components.

### 3.1 Replacements

For all corporate events that result in a stock deletion from the GT 30, the leaving stock will be replaced according to the following rules:

Replacement: Country to country taking into account the maximum number (4) of banks.

### 3.2 Changes due to Spin-Offs

If a GT 30 component is split to form two or more companies, the following rules apply:

If the spin-off stock after the change no longer qualifies for the GT 30 or if the spin-off stock is going to be de-listed after the change, the spin-off stock will either be replaced by the eligible spun-off stock (only if spun-off stock larger than smallest stock in GT 30) or will be replaced according to the rules set forth in section 3.1 above.

If the spun-off stock does not qualify for the GT 30 the market capitalization of the spin-off stock will be adjusted according to the STOXX standards.

If the spun-off stock qualifies for the GT 30 and is larger (in terms of full float market capitalization and the minimum free float is  $\geq 20\%$ ) than the smallest stock in the GT 30, the spun-off stock replaces the smallest stock, unless this change would increase the number of stocks in the Banks Sector to greater than four. In this case the spun-off stock will not enter the index.

If more than one spun-off stocks qualify for the addition to the GT 30, these stocks will be added in sequence:

The largest qualifying spun-off stock replaces the original stock in the GT 30 as described above; the next largest qualifying spun-off stock replaces the smallest current GT 30 component as described above;

Likewise for other qualifying spin-off stocks

The deletion and addition of a component due to a spin-off is effective according to STOXX standards.

### 3.3 Changes due to Mergers & Takeovers

#### Component & component:

If two or more GT 30 components merge or one GT 30 component takes over another or several GT 30 components, the resulting stock is included in the GT 30 unless it no longer qualifies for the GT 30.

The original components are deleted.

Deleted components due to a merger or takeover are replaced according to section 3.1 above.

The deletion and replacement of any components due to a merger or take-over are effective according to STOXX standards.

#### **Component & non-component:**

If a GT 30 component merges with or takes over a non-component, the following rules apply:

If the newly formed company qualifies for the GT 30 by fulfilling all GT 30 universe and GT 30 component selection criteria as described under 2, then its stock is included in the GT 30.

If the newly formed company does not qualify for the GT 30, the original company's stock is replaced according to section 3.1 above.

The deletion and replacement of any components due to a merger or take-over are effective according to STOXX standards.

### **3.4 Changes due to number of shares**

The GT 30 constituents are maintained according to STOXX standards, i.e.

Changes to the number of shares due to stock dividends, splits, rights issues, etc.:

Implemented immediately and effective the next trading day

Changes of more than  $\pm 10\%$  to the number of shares from one trading day to the next, or changes to the combined free float adjusted number of shares of more than  $\pm 10\%$  from one trading day to the next: i.e. for clarification of doubt only the number of shares will be adjusted.

Announced immediately, implemented two trading days later and effective the next trading day after implementation.

All other changes are implemented at the quarterly review dates.

Changes to the number of shares in-between reviews do not affect the weighting cap factors.

### **3.5 Changes due to Illiquidity**

Stocks that are illiquid for the following reasons are considered for deletion from the GT 30:

- 10 consecutive non-trading days
- Suspension from trading
- Ongoing bankruptcy proceedings

The deleted component is replaced according to section 3.1 above.

The changes to the composition of the GT 30 due to illiquidity of a component are implemented according to STOXX standards.

### **3.6 Changes due to Delisting**

Index components that are to be de-listed for reasons that have not already been described, will be deleted from the GT 30. The deleted component is replaced according to section 3.1 above.

The changes to the composition of the GT 30 due to delisting of a component are implemented according to STOXX standards.



## 4 INDEX FEATURES & DATA DISSEMINATION

### 4.1 History and Index Value

GT 30 historical index values are available since 31 December 2005; the index value started with 1'000.00.

### 4.2 Stock Prices

The stock prices used to calculate the index are:

The opening price: the first traded price during the official trading hours of the stock's trading system; until this is available, the previous day's closing/ adjusted price is used;

The intraday price: the currently traded price during the official trading hours of the stock's trading system. As long as the stock is not traded, the last available stock price will be used.

This could either be the last available intraday stock price (e.g. if the stock is temporarily suspended) or the last available closing/ adjusted price (e.g. if the stock exchange is closed)

The closing price: the last traded price or auction price during the official trading hours of the stock's trading system. If the stock has not been traded all day, then the previous day's closing/ adjusted price is used

The adjusted price: the closing price is adjusted to reflect a stock's corporate action effective the next trading day

### 4.3 Currency Rates

The applicable closing currency rate for the calculation of the closing index values are the official fixed foreign exchange rates at 17:00 hrs CET as provided by WM.

### 4.4 Dividend Treatment

The GT 30 Index is available as both a total return index (GT 30 Total Return Index, all dividends are re-invested) and a price index (GT 30 Price Index, only special dividends > 10% of stock's previous days closing price or dividends from non-operating income are re-invested).

Dividend payments are included as net dividends or gross dividends according to STOXX standards

### 4.5 Weighting Cap Factors

The individual weightings are capped with a weighting cap factor of 10%

The capping for market capitalisation weighted indices is implemented at the time of the quarterly reviews.

If the weighting of a stock is 10 percent or less, then its weighting cap factor is 1.0

If the weighting of a stock is greater than 10 percent, then its weighting cap factor is adjusted to reduce the weighting to 10 percent. The weightings of all other index components will therefore increase at the same time.

The weighting cap factors are calculated and announced on the quarterly underlying data announcement dates, implemented on the quarterly implementation dates and fixed until the next quarterly review.

#### **4.6 Index Divisors**

Index divisors for the GT 30 are adjusted to maintain the continuity of the index's values across changes due to corporate actions and/or changes in the composition of the index.

#### **4.7 Index Dissemination**

The index dissemination calendar is determined by STOXX according to its standards.

#### **4.8 Calculation Parameters**

The GT 30 Index is calculated as a price and a total return index.

The GT 30 Index is calculated in EUR and TRY and disseminated in real-time.

## 5 CALCULATION MODEL

### 5.1 Input Data Specification

The calculation of the GT 30 Index is based on the following input data!

- Stock prices (local currency)
- Currency rates
- Number of shares
- Cap factors
- Corporate action information and data
- Divisor

### 5.2 Input Data Monitoring

Various verification and audit procedures are implemented to ensure that the stock price and currency rate input-data feeds are of the highest accuracy and consistency. These procedures include:

- Data filters
- Quality assurance tools
- Verification against secondary sources

### 5.3 Input Data Corrections

Every effort is made to prevent erroneous input data.

Incorrect index divisors are corrected immediately if discovered on the effective day.

### 5.4 Data Accuracy

The accuracy of the input, computational and output data is specified below:

Exchange rates: rounded to ten decimal places

Cap factors: rounded to ten decimal places

Index divisors: float numbers

Index values: rounded to two decimal places

## 5.5 Index Formula

The GT 30 Index is calculated based on the following formula:

$$\text{Index}_t = \frac{\sum_{i=1}^n (p_{it} \cdot s_{it} \cdot cf_{it} \cdot x_{it})}{D_t} = \frac{M_t}{D_t}$$

**Where:**

$D_t$  = divisor at time (t)

$n$  = the number of stocks in the index

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

$s_{it}$  = the number of shares of stock (i) at time (t)

$cf_{it}$  = the weighting cap factor of stock (i) at time (t)

$x_{it}$  = Exchange rate from local currency into index currency for stock (i) at time (t)

## 5.6 Index Divisor Adjustments

The index divisors are adjusted as follows in response to corporate actions or index composition changes:

$$D_{t+1} = D_t \cdot \frac{\sum_{i=1}^n (p_{it} \cdot s_{it} \cdot cf_{it} \cdot x_{it}) \pm \Delta MC_{t+1}}{\sum_{i=1}^n (p_{it} \cdot s_{it} \cdot cf_{it} \cdot x_{it})}$$

**Where:**

$D_t$  = divisor at time (t)

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

$n$  = Number of stocks in the index

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

$s_{it}$  = Number of shares of stock (i) at time (t)

$cf_{it}$  = the weighting Cap factor of stock (i) at time (t)

$x_{it}$  = Exchange rate from local currency into index currency for stock (i) at time (t)

$\Delta MC_{t+1}$  = The difference between the closing market capitalisation of the index and the adjusted closing market capitalisation of the index:

For stocks with corporate actions effective at time (t+1), the full float market capitalisation is calculated with adjusted closing prices (in index currency), the new number of shares at time (t+1) minus the full float market capitalisation calculated with closing prices (in index currency), number of shares at time (t).

## 6 DISCLAIMER

The GT30 Index is proprietary to STOXX Limited and calculated and maintained by STOXX Limited specifically for the use of Athens Exchange & Istanbul Stock Exchange.

Index calculations are based on large quantities of data which are being provided to STOXX by third party sources and need to be processed within short time. The results of the calculation are being disseminated through third party infrastructure. Thus the risk of errors and delays in the GT 30 Index cannot be fully excluded.