

# 1. HEX25 INDEX

The HEX25 Stock Index is a capitalisation weighted share price index. It is calculated on a continuous basis from the most recent prices of the 25 most traded share series that are listed at the Helsinki Exchanges' Main list. The calculation of the HEX25 (then FOX) index started on 4 March 1988 and its market level was given the value 500. ISIN code for the index is FI0008900436.

HEX25 is used as a benchmark index for management of diversified Finnish-stock portfolios. Options and futures on HEX25 are traded at Eurex. As the blue-chip index for the Finnish market HEX25 gains international visibility as a reference index for the Finnish market.

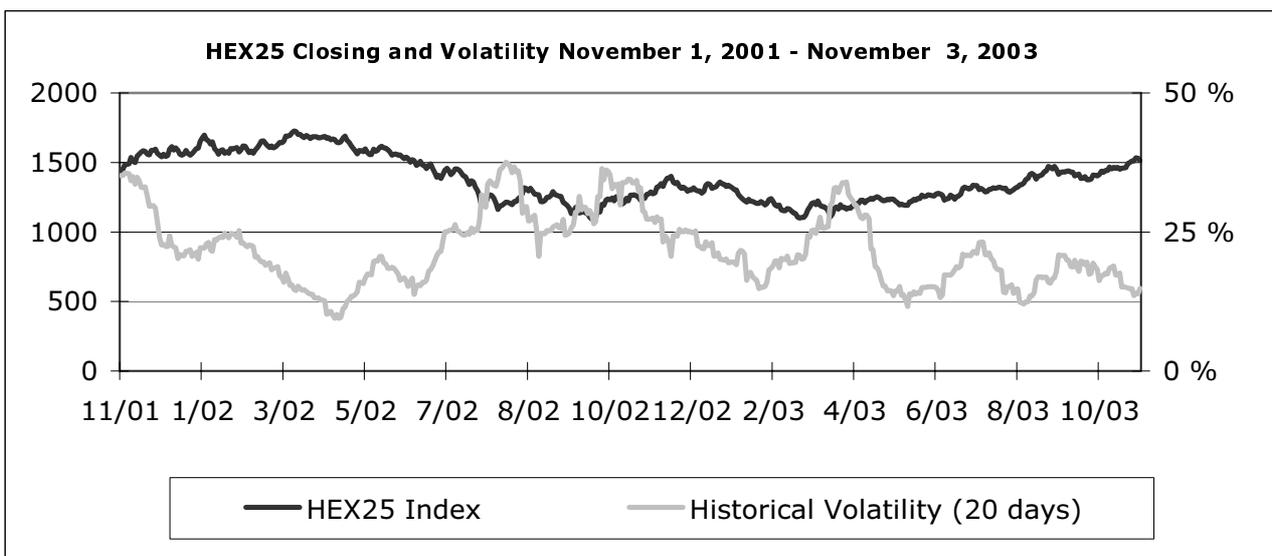
HEX launched a market for HEX25 index shares (exchange traded funds, ETFs) on February 2002. An index share is a listed unit of an index fund. The index share combines the benefits of indexing and share trading: effective diversification, real time market value and efficient trading.

The current data vendor codes for the HEX25 Index are following:

Vendors	Codes
Reuters	.HEX25
Bloomberg	HEX25
Moneyline Telerate	FI;HEX25
Thomson Financial	
• Datastream	HEX25IN
• Thomson ONE	HEX.25-HE
• Thomson Markets	=HEX-25.HE

The index was formerly called FOX. The name was changed to HEX25 on September 1, 2001. However, system codes for the Eurex options and futures on the index (OFOX and FFOX, respectively) were not changed.

The calculation of FOX (HEX25) was as well modified on August 1, 2001. The maximum weight for the stocks of any single index constituent was lowered from 20 to 10 per cent. This change is in view of the index history expected to lead to lower volatility for the index. The weight-limit (then at 20 %) was first time applied on November 1st 1995. HEX25 has from August 1, 2001 also included Free Float Factor and Special Dividends.



## 2. COMPUTATION RULES APPLYING TO HEX25

Detailed computation rules for HEX25 are included in the Option corporation rules of HEX. The following is a presentation of the fundamental principles involved.

### 2.1 Selection of the index shares

The structure of the index is reformulated semi-annually. A new structure comes into force in the beginning of February and August. The stock series selected to constitute the index are the top 25 shares on the Helsinki Exchanges main list, in terms of their daily median trading volume during the previous half a calendar year. The above selection principle means that the HEX25 index is made up of the exchange's most liquid stocks. Moreover, the liquidity of the shares in the HEX25 index basket also facilitates the arbitrage between the stock and derivative markets, thereby invigorating the functioning of the two markets. The stock series, whose quoting can be expected to end during the lifetime of the basket, are generally not selected to HEX25 index.

### 2.2 Weighting of the index

The HEX25 index is a capitalisation weighted stock price index. However, the maximum weight of one company is limited to 10 per cent.

The numbers of shares used to compute the market value are determined on a quarterly basis in the beginning of February, May, August and November. The weight-limit is applied by reducing the numbers of shares used in index calculation. The new numbers of shares are numbers that corresponds to the weight of 10 per cent, using the most recent share prices. The numbers of shares in the index basket are normally fixed for three months at a time. Consequently, just as in any passive portfolio, the weights of the stock series vary as the market prices of the stock

change. Thus, investors can easily calculate and simulate the development of the index, as well as form portfolios that replicate the index. This also means that due to price changes, the weight of one company may exceed or fall under the 10 per cent limit between the quarterly checkpoints.

### 2.3 Index formula

The HEX25 index is calculated by dividing the market value of the index stocks by their market value at the previous moment and multiplying this with the previous index value. In a mathematical form that is:

$$(1) \quad I_t = (BV_t / B_t) * I_{t-1}$$

where:

$I_t$  = HEX25 index value at moment t

$B$  = Base value i.e. number of shares per stock class multiplied by the most recent known deal price in each stock class for the calculation period

$BV_t = Ka(t) * Aa(t)$  , i.e. combined base value of all stock classes belonging to the HEX25 stock index at time t

$B_t = BV_{t-1}$ , i.e. base value at time t-1

$T$  = Point in time when the day value is calculated

$t-1$  = Point in time of the deal prices influencing the preceding day value

$Ka(t)$  = Deal price of stock class a at time t

$Aa(t)$  = Quantity of shares of stock class a at time t

### 3. INDEX ADJUSTMENTS

#### 3.1 Subscription issue adjustment

In conjunction with subscription issues, a coupon is detached from the share. This coupon entitles the holder to subscribe for new shares either free of charge or at a price which is usually below the market price. Consequently, a market develops for the subscription coupon and the price of the actual share falls abruptly. To compensate this, special adjustment is made to the index formulas.

When calculating the HEX25 index after the issue, the first post-issue market value of a stock series is computed according to the post-issue number of shares and the post-issue market price (in which investors have taken into account the effects of the issue). The sum of money invested in the company is added to the pre-issue market value. The adjustment is made immediately after the first deal of the stock without the coupon (or after the split of the stock) is made on the stock exchange.

The formula used in subscription issues is therefore:

$$(2a) \quad MV = S_{old} * P_b$$

$$(2b) \quad MV = (S_{old} + S_{new}) * P_a$$

where:

MV = Market value of company

$S_{old}$  = Number of shares before subscription issue

$S_n$  = Number of new shares offered for each  $S_o$

$S_o$  = Number of old shares which entitles the owner to buy  $S_n$  new shares

$S_{new}$  =  $(S_n / S_o) * S_{old}$ , number of new shares after subscription issue

$P_{sub}$  = Price of subscription right (per share)

C =  $S_{new} * P_{sub}$ , new capital invested in the company in the issue. It is assumed that all offered shares are subscribed.

$P_b$  = Stock market price before issue

$P_a$  = Stock market price after issue

*Example: A company has 2 million shares, currently priced at EUR 50. The company issues stock using subscription rights at EUR 45 per shares and the owners can buy three new shares per five already owned shares. So the additional number of shares is  $3/5 \times 2 = 1.2$  million units and the capital invested (C) is  $1.2 \times EUR 45 = EUR 54$  million. When calculating the index, the market value of the stock before the issue is taken as  $2 \text{ million} \times EUR 50 + EUR 54 \text{ million} = EUR 154$  million. If after the issue the stock trades at EUR 48 per share, the new market value used in would be  $(2 + 1.2) \text{ million} \times EUR 48 = EUR 153.6$  million.*

#### 3.2 Stock split adjustment

Stock splits are adjusted in the same way as subscription issues, as a stock split is essentially a free subscription issue. For example a 1-to-4 split is regarded a 1-to-3 subscription issue. In this case the new capital invested (C) is zero.

#### 3.3 Other adjustments

If convertible bonds and option loans with subscription-rights offered to shareholders, adjustment is carried out as follows: On the first trading day after the subscription coupon is detached, the stock is removed from the index. This is done by deducting the market value of the stocks from the previous total market value. During that day the index is calculated without that stock. After this day the stock is returned to the index by adding its most recent market value to the entire market value. The additions in the numbers of shares caused by directed stock issues, public issues and exercised warrants and convertible bonds

are taken into account in connection with the quarterly revision on the numbers of shares.

### **3.4. The effect of dividends**

HEX25 is a stock price index. The payment of dividends is not taken into account when computing the index. The date on which dividends are detaching, the market price of the stock usually drops abruptly and this is also reflected in the index.

From August 1, 2001 special dividends from either non-operating income or any cash-dividends that are larger than 10 % of the stock price are included in HEX25 Index. Special dividends are included in the index on ex-dividend date. In unclear situations HEX will give a notice no later than the end of the following day if the dividend will be handled as special dividend. If a notice is not given any dividend will not be considered special. Dividends are included as net amounts, i.e. net dividend = declared dividend – withholding tax.

### **3.5 Computation of the index under exceptional circumstances**

The continuous HEX25 index is computed on the basis of the most recent prices for actual trades. This rule is departed from when computing the index on the expiration date used in the exercising of standardised options and futures and in conjunction with changing the index structure.

### **3.6 Expiration day**

At the expiration day HEX25 futures are exercised using cash settlement. The index value used to calculate the settlement value of a derivative contract is called the expiration index. It is calculated by using the mean market prices of at least lot-sized deals during continuous trading (9.40 a.m. - 6.00 p.m.) on the expiration day. When taking the average, the deals are weighted with their volumes.

ISIN code for the expiration index is FI0008900451.

### **3.7 Changes of the constituents**

When the constituents of the index are changed, averaged prices are used when determining the last market price of the stocks. Prices are calculated on the last day of the old index the same way as expiration index prices as determined. The aim of these rules for exceptional situations is to ensure that the index will reflect only those factors that normally influence the prices of index stocks. The index at expiration is checked and confirmed by HEX together with an index ombudsman. His or her task is also to consult HEX in matters connected to the computation and development of the index.

### **3.8 Free Float Rule**

When calculating the number of shares per stock class to be included in the HEX25 Index only those shares are taken into consideration which can be freely floated. Free float is defined as follows:

- 1) Shares registered in the name of custodian nominees are always considered to be in free float.
- 2) Other shares than those registered in the name of custodian nominees are as a main rule considered to in free float. However, if a shareholder owns more than 5 % of the number of shares in a stock class, those shares are excluded from the index.
- 3) As an exemption to point 2. the holdings of mutual funds, pension funds and HEX-listed investment companies are considered to be in free float, i.e. they are not excluded from the index.

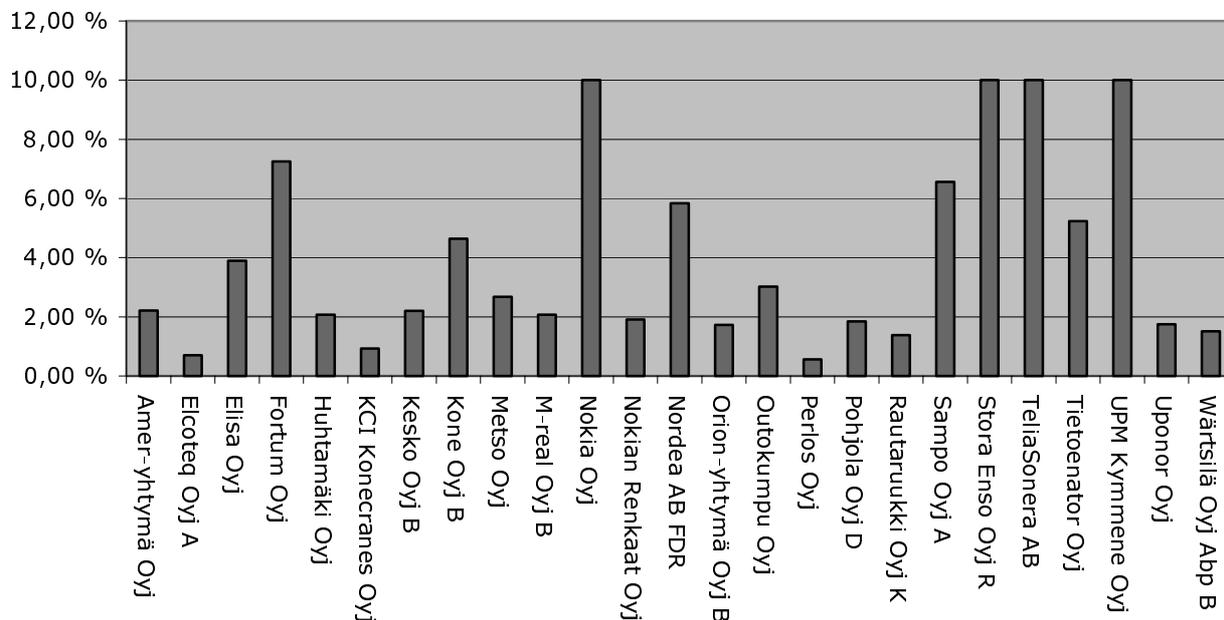
Free Float Factor (%) = 100% - shares as % of total excluded from the index.

## 4. HEX25 INDEX CONSTITUENTS AND WEIGHTINGS

The HEX25 Index constituents with respective index weights as of November 3, 2003

SHARE SERIES	NUMBER OF SHARES	WEIGHT % AS OF AUGUST 1	SHARE SERIES	NUMBER OF SHARES	WEIGHT % AS OF AUGUST 1
Amer-yhtymä Oyj	24 405 070	2,21 %	Orion-yhtymä Oyj B	37 406 292	1,73 %
Elcoteq Oyj A	17 377 682	0,70 %	Outokumpu Oyj	104 303 584	3,02 %
Elisa Oyj	138 011 757	3,90 %	Perlos Oyj	33 194 986	0,56 %
Fortum Oyj	332 064 785	7,25 %	Pohjola Oyj D	33 847 851	1,84 %
Huhtamäki Oyj	82 826 480	2,07 %	Rautaruukki Oyj K	83 229 747	1,38 %
KCI Konecranes Oyj	13 079 530	0,93 %	Sampo Oyj A	329 038 884	6,56 %
Kesko Oyj B	59 383 393	2,20 %	Stora Enso Oyj R	309 761 839	10,00 %
Kone Oyj B	37 001 532	4,64 %	TeliaSonera AB	952 846 508	10,00 %
Metso Oyj	100 633 143	2,68 %	Tietoenator Oyj	82 886 444	5,23 %
M-real Oyj B	99 504 975	2,07 %	UPM-Kymmene Oyj	224 437 008	10,00 %
Nokia Oyj	248 169 907	10,00 %	Uponor Oyj	27 434 747	1,75 %
Nokian Renkaat Oyj	10 655 516	1,91 %	Wärtsilä Oyj Abp B	36 832 390	1,52 %
Nordea AB FDR	392 438 994	5,84 %			

HEX25 Index structure on November 3, 2003



## 5. PRODUCTS BASED ON THE INDEX

### 5.1 HEX25 options and futures

Both options and futures based on the HEX25 index are traded at Eurex. With these products investors can effectively invest in Finnish equity markets, as well as hedge and adjust their risk in Finland. The full contract details

for HEX25 options and futures as well as the market information are available at Eurex website [www.eurexchange.com](http://www.eurexchange.com). HEX25 product specifications are provided on the following tables.

#### HEX25 PRODUCT SPECIFICATIONS

<b>HEX25 Future (FFOX)</b>	
<b>Contract Standard</b>	HEX25 Index
<b>Contract Value</b>	EUR 10 per HEX25 index point.
<b>Settlement</b>	Cash settlement based on the final settlement price, payable on the first exchange trading day immediately following the last trading day.
<b>Quotation</b>	In points, carried out one decimal place.
<b>Minimum Price Movement</b>	0.10 of a point, representing a value of EUR 1,00
<b>Contract Terms</b>	The three nearest months within the cycle March, June, September, December.
<b>Last Trading Day</b>	The third Friday of the expiration month, if that is an exchange trading day; otherwise, on the exchange trading day immediately prior to that Friday. Trading ceases at 5.00 p.m. (CET).
<b>Daily Settlement Price</b>	The last-paid price of the trading day; or, if the last-paid price is older than 15 minutes or does not reasonably reflect actual market conditions, then Eurex will establish the official settlement price.
<b>Final Settlement Price</b>	The value of the HEX25 is calculated using average prices of the respective stocks weighted by the volume of the transactions traded in full HEX Securities Exchange lots on HEX Securities Exchange in the daily opening and in the continuous trading between 8.40 a.m. - 5.00 p.m. (CET).
<b>Trading Hours</b>	9.00 a.m. until 8:00 p.m. CET.

**HEX25 Option (OFOX)**

<b>Contract Standard</b>	HEX25 Index
<b>Contract Value</b>	EUR 10 per HEX25 index point.
<b>Settlement</b>	Cash settlement based on the final settlement price, payable on the first exchange trading day immediately following the last trading day.
<b>Quotation</b>	In points, carried out one decimal place.
<b>Minimum Price Movement</b>	0.10 of a point, representing a value of EUR 1,00
<b>Last Trading Day</b>	The third Friday of the expiration month, if that is an exchange trading day; otherwise, on the exchange trading day immediately prior to that Friday. Trading ceases at 5.00 p.m. (CET).
<b>Daily Settlement Price</b>	The last-paid price of the trading day; or, if the last-paid price is older than 15 minutes or does not reasonably reflect actual market conditions, then Eurex will establish the official settlement price.
<b>Final Settlement Price</b>	The value of the HEX25 is calculated using average prices of the stock series weighted by the volume of the transactions traded in full HEX Securities Exchange lots on HEX Securities Exchange in the daily opening and in the continuous trading between 8.40 a.m. - 5.00 p.m. (CET).
<b>Exercise Period</b>	European Style, i.e. an option may only be exercised on the last trading day of option series up to the end of post trading period.
<b>Expiration months</b>	The three nearest calendar months and the three following months within the cycle March, June, September and December, i.e. options contracts are available with a duration of 1, 2, 3, max 6, max 9 and max 12 months.
<b>Exercise prices</b>	Exercise price gradation for HEX25 options are 25 index points. Each contract month will be introduced with at least five strike prices.
<b>Option Premium</b>	The EUR equivalent of the premium in points is payable on the first trading day immediately following the trade date.
<b>Trading Hours</b>	9.00 a.m. until 8:00 p.m. CET.