

NYSE Euronext changes the review frequency and calculation method of the BEL 20 index family

The Global Index Group standardises its Blue Chip Indices. The main features of the new standard are:

- *A transparent calculation method*
- *A quarterly review scheme that is both stable and representative*
- *Index changes in between reviews only for corporate actions*
- *Leaving only a limited number of differences between the main indices regarding selection*

What's new for the BEL 20 family

- Review schedule to an annual full review with a **quarterly update** for clear new entrants or replacement for removed constituents
- No entries in between reviews and no replacement in case of removals other than the acquiring company.
- The basket model will change into a divisor based index
 - No rounded weight factors anymore, but number of shares listed plus free float and capping factors
- Return index calculated based on reinvestment at close of the ex-date
- Reviews to be effective after the close of the **third Friday of March**, June, September and December (March being the annual review)
- Implementation in September 2010.

What will stay the same

- Changes to the BEL 20 in between the annual reviews will be kept to a minimum.
- The selection method will not be changed: the free float adjusted market capitalisation and companies will only be included where there is solid evidence of liquidity.
- Corporate action treatment will remain the same.
- No updates for changes in listed shares, free floats or capping factors apart from the annual review or when certain thresholds are crossed.
- For BEL Mid and BEL Small full quarterly reviews will continue to be based on current capitalisation levels.

The index basket will be based directly on the number of listed shares

In the new set up the rounded numbers will be replaced by the full number of listed shares in combination with a free float factor and a capping factor. The number of shares in the basket already are determined based on those three elements. That's why the users will hardly notice the change apart from the change of the divisor.

Constituents will continue to have a percentage weight that is the same as in the old method apart from the rounding that took place in the old procedure. The development of the level of the index will not be influenced by the change in the method.

The timing of the determination of the new portfolio will also be different: instead of 31 December, in the new method a few days before the index change will be leading.

Users that want to continue to use the numbers in the same range as the current method may determine those numbers from the new combination of number of shares listed/free float/capping using a factor that consists of the two divisors. This yields the unrounded number of shares according to the old method.

Table 1 current basket compared to new composition

Name	current index		New index composition		
	Shares in current basket		Listed number of shares	FF Band	capping factor
AB INBEV	1782		1,603,352,125	50%	0.266
ACKERMANS V.HAAREN	196		33,496,904	70%	1
BEFIMMO-SICAFI	119		16,790,103	85%	1
BEKAERT	108		19,834,469	65%	1
BELGACOM	1271		338,025,135	45%	1
COFINIMMO-SICAFI	95		12,698,682	90%	1
COLRUYT	112		33,414,490	40%	1
DELHAIZE GROUP	843		100,870,626	100%	1
DEXIA	5155		1,762,478,783	35%	1
FORTIS	18668		2,351,661,425	95%	1
GBL	674		161,358,287	50%	1
GDF SUEZ	2141		2,260,265,416	55%	0.206
KBC	1345		357,752,822	45%	1
MOBISTAR	251		60,014,414	50%	1
NAT PORTEFEUIL (D)	276		110,000,000	30%	1
OMEGA PHARMA	142		24,227,303	70%	1
SOLVAY	495		84,701,133	70%	1
TELENET GROUP	460		110,096,549	50%	1
UCB	766		183,365,052	50%	1
UMICORE (D)	953		120,000,000	95%	1

Change of return calculation

The return calculation will be based on the following procedure:

The total return index (TR) calculation takes two steps: the first step is to transpose the announced dividend payment into index points. This is called the XD adjustment. This uses the following formula:

$$\text{XD adjustment} = \sum_{i=1}^n \frac{g_i * w_i}{d}$$

Where:

- n: The number of securities in the index;
- g_i: The announced dividend per share of the ith component stock (for net return index withholding tax is deducted from this dividend);
- w_i: The weighting of the ith component stock in the index, based on number of shares included in the index, free float factor, capping factor and exchange rate;
- d: Divisor of the index.

The second step of the calculation uses the figures calculated in step one (XD adjustment). These figures are now included in the formula below which actually calculates the index value including dividend re-investment (total returns) and the underlying price index (IV).

$$\text{TR}_t = \text{TR}_{t-1} \left(\frac{\text{IV}_t + \text{XD}}{\text{IV}_{t-1}} \right)$$

In comparison to the current procedure which uses a separate divisor, the timing of the reinvestment of the dividend will change.

In the new return calculation the assumption is that the reinvestment takes place at the close of the ex-date. During the ex-day, the dividend amount will be included in the level of the return index, but will not move with the performance of the underlying price index. So, for the duration of the ex-day, the dividend component is included as if it is held in cash.

The current method would change the divisor of the return index immediately after the close of the cum-day. This

assumes that the dividend amount is reinvested immediately after the close of the cum day in the index portfolio.

The change in calculation method will enhance the possibility to replicate the index as the new method resembles better the practice of the investor. It also means that in order to replicate the index, the investor doesn't have to invest the dividend that he will receive in shares that will pay the dividend.

Change of effective date and additional quarterly reviews

The Global index Group intends to move the effective date of the reviews of all its main indices to after the close of the Third Fridays of March/June/September and December. These dates are chosen to align the indices with the expiration of major derivative contracts. Years ago it was decided not to do the review on an expiration date to reduce pressure on administrative systems. Today, the market has the capability to cope with huge volumes and it has become an advantage to rebalance the index at a time where there is a lot of activity in the market. That is why the change to such standard date is pursued.

Quarterly reviews

Quarterly reviews will be introduced in June, September and December. As these date will usually not trigger an update of numbers of shares, free float percentages or capping factors, the stability of the index will be maintained.

The following changes will occur in the index portfolio at the occasion of quarterly reviews:

- A (fast) entry if the ff market cap ranks among the top 10
- A (fast) exit if the ranking has become lower than 30
- Removal of lowest ranking constituent if there are more than 20 members (due to spin off/fast entry)
- Recapping to 12% if any of the constituents would weigh more than 15%
- Update of the number of shares in the index if there is a difference of more than 5% between listed number of shares and number of shares in the index.

The introduction of quarterly reviews will make the moment of the inclusion of new constituents predictable.

As no companies will be included in between reviews, the reservelist will cease to exist.

Changes at the annual review

In the new set up the numbers of shares in the index will be based directly on the numbers of shares listed at that time. This number is announced a few days in advance in combination with the applicable free float factors. If necessary a capping factor is also determined based on the situation a few days before the effective date. When the actual changes are implemented, the only thing that will

happen is the finetuning of the divisor in order to keep the index level unchanged.

At current reviews the numbers of shares in issue and free float factors of the new constituents of the index form the basis of the review in combination with the closing prices of the 31st December. Observing the closing level of the index in combination with the maximum weight of 12%, unrounded numbers of shares in the basket are determined. These are subsequently rounded in order to arrive at the rounded numbers.

As the new procedure will not involve rounding, the uncertainties around the index rebalancing will be reduced.

Impacts of the changes for users of the index

- There will be three quarterly moments on which rebalancing *may* occur. More often than not these moments will pass without any changes to the index.
- The practice around reviews will change marginally. In stead of mid January, the new portfolio will be published two days in advance. Besides that, the date on which the rebalancing occurs will move from the first business day of March to the third Friday of March, with additional quarterly reviews after the third Friday of Jun/Sep/Dec.
- The calculation of the Total Return index will change whereby the assumption that reinvestment of the dividend will now take place at the close of the ex-date rather than the close of the cum-date.
- The basis for the annual review in March will change from the end of December to end of January and similar for the other reviews.

NYSE Euronext Global Index Group manages over 300 indices in Europe as well as the US. Our aim is to provide indices that represent the underlying markets in a stable, transparent, objective and replicable way.

Within the set of European main indices, the aim is to align all indices as much as possible. However, two elements of index management will remain structurally different: the selection mechanism and the treatment of mergers & acquisitions.

Contact us for more information

This document is not intended as a formal consultation. However, users of the index and other parties that feel they have an interest are kindly invited to give their reactions to the Global Index Group of NYSE Euronext.

The changes will be implemented in September 2010 barring unforeseen circumstances.

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