Approved at the meeting of the Committee representing ZAO Interfax and OOO Cbonds.ru on November 1, 2005 with amendments compliant with Agreement # 545 as of December 17, 2008.

# IFX-Cbonds Russian Corporate Bond Index Methodology

Moscow, March 2008

## **1.** General Provisions

- 1.1. This Methodology on calculating the Russian corporate bond index sets out rules and the procedure of index calculation carried out by OOO Cbonds.ru and ZAO Interfax.
- 1.2. This Methodology and all amendments to it are approved and implemented by a special Committee made up of representatives of OOO Cbonds.ru and ZAO Interfax. The Methodology is amended no sooner than once a quarter.
- 1.3. The text of this document and all information on amendments to the Methodology are disclosed to market participants and other interested parties by publishing corresponding news on the website of OOO Cbonds.ru and in the newswire of ZAO Interfax no later than two weeks prior to their enactment.
- 1.4. IFX-Cbonds is an index on the Russian ruble bonds weighted by effective market capitalisation. The index base includes the most liquid ruble bonds issued by Russian companies and admitted for trading on the MICEX quotation lists. The index is calculated on the basis of prices of deals done with bonds from the Index List on the MICEX in the main trading mode.
- 1.5. The index is calculated once a day based on the MICEX end-of-day trading results.

## 2. Index List

- 2.1. In the framework of this Methodology the Index List is a list of ruble-denominated bonds issued by Russian issuers and admitted for trading on the MICEX. IFX-Cbonds Index is calculated on the basis of this list.
- 2.2. The Index List is formed and amended by the Expert Board set up for this purpose. The Index List contains bonds of no fewer than 10 issues.
- 2.3. The Index List is revised by the Expert Board no sooner than once a quarter. Information on amendments to the Index List is disclosed on the website of OOO Cbonds.info and in the newswire of ZAO Interfax no later than two weeks prior to changing the List.

## **3.** Index List Formation

- 3.1. We start forming the list for calculating IFX-Cbonds by picking all ruble-denominated corporate bonds listed on quotation lists (A1, A2 and B) of the MICEX.
- 3.2. Then we exclude foreign currency-pegged bonds from the array of bonds outlined in Clause 3.1.
- 3.3. Then we exclude bonds maturing or puttable/callable in less than 120 days from the array of bonds selected in Clause 3.2.
- 3.4. Then we exclude bonds with low secondary market liquidity from the array of bonds selected in Clause 3.3. Bonds are excluded if

3.4.a. the number of days when the bond issue was not traded in the main trading mode on the MICEX exceeds half of the trading days in the quarter;

3.4.b. the average daily trading turnover for this bond issue in the previous quarter over the period when the issue was admitted for trading on the trading floor was below RUB 3bn.

- 3.5. The list formed in line with the above mentioned rules is called the Market Securities List and is used for formation of the Index List.
- 3.6. The Index List includes all bonds from the Market Securities List if their market capitalisation accounts for 5% or more of the total market value of bonds on the MICEX quotation lists.
- 3.7. If this list accounts for 95% of the market value of all bonds from the Market Securities List but counts fewer than 10 issuers, it is expanded by bond issues having the biggest share by market value until the number of issuers reaches 10 whereby the formation of the list is completed.
- 3.8. If this list does not account for 95% of the market value of all bonds from the Market Securities List, it is expanded by bond issues having the biggest share by market value until either the 95% threshold is reached (and then all steps to meet conditions outlined in Clause 3.7 are taken) or the number of bond issues reaches 30.
- 3.9. If the selection process outlined in Clause 3.8 is completed based on the criterion of the number of securities on the list, but all securities on the list account for 25% or more of market value of all bonds but the number of issuers on the index list is fewer than 10, then the index list formation is completed. Otherwise the list is expanded by bond issues having the biggest share by market value until the number of issuers reaches 10.
- 3.10. If 30 bonds are selected, but the 25% threshold is not reached, the list is expanded by bonds until this threshold is reached and until the number of issuers on the Index List is no fewer than 10.

#### 4. IFX-Cbonds Index Formula

4.1 IFX-Cbonds is calculated using the following formula and is rounded to two decimal places:

$$I(0) = 100;$$

$$\mathbf{I}(t) = \mathbf{I}(t-1) * \frac{\sum_{i=1}^{n} [P(i,t) + ACI(i,t) + G(i,t)] * V(i,t) * C(i,t)}{\sum_{i=1}^{n} [P(i,t-1) + ACI(i,t-1)] * V(i,t) * C(i,t)}; t = 1, 2, 3, \dots (1)$$

where

n

- number of underlying securities on the index list;

- P (i, t) price of bond i at moment t equal to the recognized bond quote published by the MICEX every trading day and denominated in RUB. If there is no recognized quote of bond i at moment t, we use the recognized quote for the previous day as P (i, t); i.e. P (i, t) = P (i, t-1);
- ACI (i, t) accrued coupon interest on bond i at moment t (it is zero on the coupon payment date, which is at the same time the first day of a new coupon period);

(G (i, t) differs from 0 only on a coupon date and /or amortization payment date for bond i, when G (i, t) equals the coupon and/or amortization payment);

V (i, t) - the amount of bond issue i from the index list (the number of securities) at moment t;

C (i, t) - a multiplier limiting the share of capitalisation for bonds of one issuer.

For all periods t excluding cases of index list revision, C (i, t) is a constant value, i.e.

$$C(i, t) = C(i, t-1).$$

#### 5. IFX-Cbonds Information Disclosure

5.1. Information on the current IFX-Cbonds index values, index list and the capitalization share for every security in the total capitalization of bonds on the Index List is disclosed on a daily basis on the websites of OOO Cbonds.info and in the newswire of ZAO Interfax.

5.2. This Methodology, history of IFX-Cbonds index values and the capitalization share for every security in the total capitalization of bonds on the Index List over last two years are disclosed on the website of OOO Cbonds.info.

#### Annex to IFX-Cbonds Index Methodology

OOO Cbonds.ru also calculates weighted average YTM and weighted average duration of the index portfolio.

Weighted average yield is calculated as simple yield (without taking into account annual reinvestment of coupon payments, which is a standard coupon calculation method for the

eurobond market) and effective yield (including annual reinvestment of coupon payments, which corresponds to yield calculation for the GKO-OFZ market).

Weighted average duration is an averaged portfolio duration weighted in line with the share of every security in total capitalisation. We use duration to maturity for every security if it can be calculated correctly; otherwise we use duration to put/call.

$$D_{p} = \frac{\sum_{i} D_{i,t} [P_{i,t} + ACI_{i,t}] N_{i,t}}{\sum_{i} [P_{i,t} + ACI_{i,t}] N_{i,t}}$$

where

 $D_p$  – portfolio duration  $D_{i,p}$  – duration of bond i at moment t

By weighted average yields we mean weighted average yield to maturity or to put/call on bonds in the index portfolio. If it is possible to calculate yield to maturity correctly, we use yield to maturity; otherwise we resort to yield to put/call. Yield is weighted based on the securities' share in the market capitalization and its duration.

$$Y_{p} = \frac{\sum_{i} Y_{i,t} D_{i,t} [P_{i,t} + ACI_{i,t}] N_{i,t}}{\sum_{i} D_{i,t} [P_{i,t} + ACI_{i,t}] N_{i,t}}$$
$$Y_{p}^{*} = \frac{\sum_{i} Y_{i,t}^{*} D_{i,t} [P_{i,t} + ACI_{i,t}] N_{i,t}}{\sum_{i} D_{i,t} [P_{i,t} + ACI_{i,t}] N_{i,t}},$$

where

Y<sub>p</sub> – weighted average yield of the portfolio (simple)

Y<sub>i,t</sub> – weighted average yield of security i at moment t (simple)

 $Y^*_p$  – weighted average yield of the portfolio (effective)

 $Y_{i,t}^*$  - weighted average yield of security i at moment t (effective)