

Methodology for credit and ESG ratings publication on Cbonds website

1. Principal provisions

1.1.Cbonds publishes only **long-term** credit ratings of companies and debt securities and ESG ratings. The ratings are updated on a daily basis in line with their publication in original sources.

1.2. Cbonds publishes only **rating actions** by international and national rating agencies. The Credit and ESG Ratings section of the website (<u>https://cbonds.com/ratings/</u>) does not display data on expected ratings.

2. Rating geography data

		International rating agencies		National rating agencies*			
Region	Rating type	Sector		Sector			
		Sovereign	Corporate	Municipal	Sovereign	Corporate	Municipal
Russia and CIS	companies	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	✓
	issues	✓	✓	\checkmark	✓	\checkmark	✓
Poland	companies	✓	~	~	~	✓	-
	issues	✓	✓	✓	-	-	-
EM (without Russia and CIS)	companies	✓	~	✓	~	-	-
	issues	~	~	~	-	-	-
DM	companies	~	~	~	~	-	-
	issues	✓	~	~	-	-	-

Table 1. Rating geography

Russia: ACRA, Expert RA, NCR, National Rating Agency, AK&M Rating Agency. Belarus: BIK Ratings. Uzbekistan: SNS RATINGS. Ukraine: Credit rating, UCRA, IBI-Rating, NRA Rurik, Expert-rating. Argentina: FixSCR. Germany: Scope Ratings, RAEX-Europe. Hong Kong: Lianhe Ratings Global Limited. China: Dagong Global Credit Rating. India: Acuité Ratings & Research, Brickwork Ratings, CARE Ratings, CRISIL, ICRA, India Ratings and Research. Israel: Midroog. Poland: EuroRating. Trinidad and Tobago: CariCRIS. Turkey: Saha Rating, TURKrating. USA: A.M.Best. Canada: DBRS Limited. Japan: Japan Credit Rating Agency.

No.	Moody's Investors Service	S&P Global Ratings	Fitch Ratings
1	Aaa	AAA	AAA
2	Aa1	AA+	AA+
3	Aa2	AA .	AA
4	Aa3	AA	AA-
5	A1	A+	A+
6	A2	Α.	А
7	A3	A-	A-
8	Baa1	BBB+	BBB+
9	Baa2	BBB .	BBB .
10	Baa3	BBB	BBB-
11	Ba1	BB+	BB+
12	Ba2	BB .	BB .
13	Ba3	BB-	BB
14	B1	B+	B+
15	B2	Β.	Β.
16	B3	В	В
17	Caa1	CCC+	CCC+
18	Caa2	CCC .	CCC .
19	Caa3	CCC-	CCC-
20	Ca	CC	CC
21	С	С	С

Table 2. Comparison of international rating scales of Moody's, Standard & Poor's, Fitch

We used materials of the Bank for International Settlements when preparing Table 2¹. This correspondence table is used in simple and advanced search in the bond database and in the Yield Curves service.

4. <u>Comparison of Cbonds rating scales with rating scales of international rating agencies</u>

Table 4. Comparison of Cbonds rating scales with rating scales of international rating agencies

Chanda appla	International rating agency scales			
Cbonds scale	Moody's	Fitch	S&P	
	 LT Bank Deposits (Foreign) Insurance financial etranath rating 	Long Term Issuer Default Rating	Foreign Currency LT (Issuer Credit Rating)	
Foreign Currency LT	strength rating (IFSR) (Foreign) • LT Issuer Rating (Foreign)	 Insurer Financial Strength 	 Foreign Currency LT (Financial Strength Rating) 	
	 LT Corporate Family Ratings (Foreign) BACKED Senior Unsecured (Foreign) 			

¹ Long-term Rating Scales Comparison - <u>http://www.bis.org/bcbs/qis/qisrating.htm</u> - October 18, 2016

	Senior Unsecured (Foreign)		
LT National Scale (Russia)	 LT Bank Deposits (Domestic) Insurance financial strength rating (IFSR) (Domestic) LT Issuer Rating (Domestic) LT Corporate Family Ratings (Domestic) BACKED Senior Unsecured (Domestic) Senior Unsecured (Domestic) 	Local Currency Long Term Issuer Default Rating	 Local Currency LT (Issuer Credit Rating) Local Currency LT (Financial Strength Rating)

5. <u>Peculiarities of rating publication</u>

5.1. Apart from the above-mentioned scales of international rating agencies used both for companies and for bond issues, the Cbonds website also offers sf rating scales for mortgage-backed bonds and structured products.

Table 5. Comparison of Cbonds of scales with sf scales of international rating agencies

Cbonds scale	International rating agency scales			
Chollus Scale	Moody's	Fitch	S&P	
Foreign Currency LT (sf)	Structured Finance Ratings (Foreign)	 Long Term Issuer Default Rating sf 	Foreign Currency LT (sf)	
Local Currency LT (sf)	Structured Finance Ratings (Domestic)	 Local Currency Long Term Issuer Default Rating sf 	Local Currency LT (sf)	

5.2. When a rating is on the CreditWatch/Rating Watch list, then empty outlook is shown for this rating.

5.3. There is no emr mark for ratings where the embedded market risk is not taken into account. Such ratings are shown in line with standard rating scales (Foreign Currency LT, Local currency LT and national scale).

5.4. When two ratings are assigned on one day on the same rating scale by the same rating agency (one of the ratings is withdrawn), then the withdrawn rating is considered to be the current rating.

5.5. If, when converting rating scales, one scale loses its relevancy, the rating on this scale is shown with the "withdrawn" status.

5.6. In "Bond Search" and "Watchlist" sections a dash "-" is placed in case of the absence of credit ratings of the issue or issuer from certain agencies.

6. Bond issue credit ratings

6.1. Rating scales for bond issues are as follows:

- Local currency LT
- Foreign Currency LT
- National scale

6.2. There is a rule for distribution of bond issue ratings assigned by Fitch Ratings between rating scales (including sf rating scales), namely the international long-term local currency and international long-term foreign currency rating scales. If the currency of issue is the same as the currency of the actual issuer's

country, the rating is shown as an international long-term local currency rating; if the currencies are different then the rating is shown as an international long-term foreign currency rating.

6.3. For S&P Global Ratings and Moody's ratings, the rating scale shown on the website is the same as given by the agency. In some cases there will be different rating scales for one and the same issue as S&P Global Ratings and Moody's have different rating scale methodologies.

6.4. The website publishes bond principal credit ratings (Principal LT) assigned by S&P Global Ratings. This rating's peculiarity is that it reflects credit risk of the bond principal only and does not cover interest payable on bonds. Local Currency Principal LT and Foreign Currency Principal LT ratings are shown on Cbonds on the following scales: the Local Currency LT and Foreign Currency LT, respectively. It will be mentioned in the comment to the rating that the rating covers only the bond principal.

7. Disclaimer

Please be aware that this methodology prepared by Cbonds specialists constitutes subjective assessment of rating scales correspondence. Cbonds News Agency shall not be liable for use of the information provided in this methodology and shall not be liable for any losses that may result from any transactions with securities and/or other financial instruments carried out taking into account information contained in this methodology.

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