

Study on Risk Analysis and the Way of Framing the Activity of Credit Guarantee for SMEs in Prudential Requirements/ Indicators

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Abstract

This study deals with risk analysis and with the way of framing the activity of credit guarantee for SMEs in terms of prudential requirements/ indicators. It also tackles the ways of framing the activity of guaranteeing, financing and treasury, under prudential requirements/ indicators, within the limits laid down for Non-Banking Financial Institutions, for Guaranteeing the Credits granted to SMEs, by the National Credit Guarantee Fund for SMEs, under the Risk Policy and internal regulations (rules, procedures, operation instructions).

Key words: risk analysis, credit guarantee, SME, prudential requirements, indicators

J.E.L. classification: G30

1. Introduction

The aspects related to the prudential indicators on the banking market, for the fiscal year 2015, are presented in accordance with several internal regulations, such as: "Methodological Norm no. 37 on credit risk management", "Methodological Norm no. 39 on market risk management and liquidity risk", "Methodological Norm no. 19 on the classification and provisioning of guarantees", "Working Procedure no. 14 on the identification and coding of groups of borrowers" etc. Within this study, we are going to deal with risk analysis and with framing the activity of guaranteeing, financing and treasury, under prudential requirements/ indicators. It is noteworthy that, in 2015, the Fund's activity was conducted in accordance with the prudential indicators established by the Risk Policy and by the above-mentioned risk management rules (Isărescu, M., 2015, p. 7).

2. Elements connected to the way of framing the activity of credit guarantee

As far as research methodology is concerned, in this paper, we used both qualitative and quantitative methods of data analysis (regarding the prudential indicators for the fiscal year 2015), such as comparative data analysis, systems analysis and descriptive analysis (Chorafas, D.N., 2007, p. 17). It is noteworthy that the data analyzed within this paper are provided by Charisma, a business intelligence software for the advanced processing and analysis of performance indicators. The main elements analyzed in connection to the way of framing the activity of credit guarantee, in terms of prudential indicators, on the banking market, for the fiscal year 2015, are as follows:

1) The balance of the guarantees granted under equity, in the amount of 2,282,911,962 RON, registered at 31.12.2015, decreased by 4.02%, compared to the balance of November 2015 (i.e. 2,378,488,000 RON). The pace of this decline was slightly higher compared to the previous month (i.e. 3.34%). In December 2015, guarantees were granted in the amount of 72,712,571 RON, registering a decrease by 29.9%, compared to the guarantees granted in November 2015, in the amount of 103,730,667 RON, while the number of the guarantees granted registered a decrease by 17.9%.

2) The exposure from the activity of credit guarantee, respectively to the clientele of financial institutions, at 31.12.2015, represented by the balance of the guarantees from the portfolio of

guarantees issued from the equity, in the amount of 2,282,911,962 RON, and falls in the coverage limit of 6,718,021,866 RON, as determined by the risk policy. Also, by monitoring the funders' use of the guarantee coverage limits based on risk classes, the exposure falls within the limits assigned to funders. Thus, the coverage limit of 6,718,021,866 RON was used in a ratio of 33.98% at 31.12.2015, considering the balance of the guarantees granted under own sources, i.e. 38.81%, if we take into account the risk exposure of 2,607,806,421 RON.

3) Regarding the quality of the portfolio of guarantees from the balance sheet, it is noteworthy that, in absolute amounts, the undervalued guarantees have decreased slightly compared to November 2015 (this decrease was triggered mainly by the decrease in the beneficiaries with payment application and in the beneficiaries with demand for payment). On the other hand, the value of the balance for insolvent debtors grew by 6.3% in December, compared to the value recorded in November 2015. Regarding the quality of the guarantees granted monthly between October and December 2015, assessed according to the credit risk categories assigned by banks, we underline the fact that approx. 98% of the grants fell in the first 3 categories (standard, in observation, substandard), the difference of about 2% of the grants classified as doubtful and loss representing extensions.

4) In terms of the exposure represented by the balance of the guarantees issued from administration sources, on 31.12.2015, the total balance of the guarantees issued from administration sources (SAPARD, EAFRD, POP, according to GEO 79/2009, Law 329/2009, GEO 20/2014 and GEO 43/2014) was 1,183,604,279 RON, decreasing by 1.85%, compared to the balance recorded in the previous month, i.e. 1,205,892,197 RON. The balance corresponding to each portfolio falls within the limits set by source categories, as presented in the report.

5) At 31.12.2015, the exposure from financing activities was of 76,600,169.49 RON (current and overdue loans, current and overdue interest, penalty interest and overdue commissions) and it was provisioned at a share of 99.55% (provisions of 76,258,053.6 RON). The exposure resulting from the guaranteeing activity, respectively to the clientele of financial institutions, reflect the framing of the exposures resulting from the guaranteeing activity at the book value cumulated at the Fund level under equity, within the maximum coverage limit (Dardac, N. and Moinescu, B., 2006, p. 45). The maximum coverage limit was set at 6,718,021,866 RON (7 times the equity of FNGCIMM). It also examines the compliance with the maximum coverage limit allocated to a funder's clientele, depending on the risk class determined in accordance with "PL 15". At 31.12.2015, the Fund's exposure to risk, regarding the guarantees granted on equity, consisted of the balance of the financial guarantees registered in the book keeping plus the amount of the payment applications rejected by the Fund, the inactive guarantees that can turn into payment of guarantees if the bank appeals against the Fund's decision, and the appeal is settled favorably by the courts or by the Fund (Uyemura, D.G. and Deventa, D.R., 1993, p. 20). Thus, at 31.12.2015, the Fund's exposure to risk was of 2,607,806,421 RON, of which 2,282,911,962 RON represented the balance of the guarantees granted under the equity, and 324,894,459 RON represented the amount of the payment applications rejected by the Fund between 2007 and 31.12.2015, registered in Charisma database.

Table no. 1a. Evolution (I) of risk exposure under the equity

Date	Balance of the guarantees granted under equity (RON)	Rejected payment applications, registered in the Charisma database (in balance) (RON)	Total risk exposure (RON)
31.10.2015	2,460,730,220	275,453,409	2,736,183,629
30.11.2015	2,378,488,000	302,165,730	2,680,653,730
31.12.2015	2,282,911,962	324,894,459	2,607,806,421

Source: Processing performed by the author, based on Charisma database

The balance of the guarantees granted under equity (2,282,911,962 RON) registered at 31.12.2015, experienced a decrease by 4.02%, compared to the balance from November 2015 (2,378,488,000 RON). The pace of the decrease was slightly higher compared to the previous month (i.e. 3.34%). The situation regarding the evolution of the balance of the guarantees granted under the equity, at 31.12.2015, compared to 30.11.2015, can be explained as follows:

Table no. 1b. Evolution (II) of risk exposure under the equity

Balance of the guarantees granted under equity at 30.11.2015 (RON)	New grants (including increases) in December 2015 (RON)	Balance outflow in December 2015 (RON)			Balance of the guarantees granted under equity at 31.12.2015 (RON)	Payment applications under analysis at 31.12.2015 (RON)
		Total	of which:			
			Settled payment applications	Expired/ paid off guarantees		
2,378,488,000	18,355,643	113,931,681	27,534,698	86,396,983	2,282,911,962	189,898,690

Source: Processing performed by the author, based on Charisma database

The decrease in the balance of December 2015, compared to November 2015, by 95.6 million RON, was determined by the outflows of guarantees from the balance, amounting to 113.9 million RON (of which the expired guarantees/ disclaims/ exchange influences amounted to 74 million RON; the decreases in the balances of guarantees triggered by the amortization of the loan guaranteed amounted to 8.9 million RON; the settlement of payment applications amounted to 27.5 million RON, and the extensions with a decrease in the balance amounted to 3.5 million RON, while the newly granted guarantees (without extensions) amounted to 17.2 million lei, and supplementations (extensions with an increased guarantee value) amounted to 1.2 million RON. In this regard, we emphasize the continuation of the descendant trend of the guarantees newly granted also in December, by the new guarantees amounting to 17.2 million RON, compared to the previous month, when there was registered an amount of 22.7 million RON.

It is noteworthy that during January-December 2015, following the analysis on the granting of guarantees, there were rejected 347 applications for guarantees from own sources, amounting to 126.55 million RON (of which 95.38 million RON under the Coverage Convention, and 31.17 million RON under the Express Convention). In December 2015, there were rejected 25 applications for guarantees, totaling 6.0 million RON under the Coverage Convention. The main reasons for rejecting the respective guarantees are due to: the poor financial performance of debtors, guarantees required for loans in progress, failure to comply with eligibility criteria, the structure of the guarantees presented, exceeding the maximum exposure.

The number of the guarantees issued under equity at 31.12.2015 was 11,658, decreasing by - 2.62%, compared to the previous month (i.e. 11,972 guarantees). Of the 11,658 guarantees, 9,760 guarantees were recorded with the value of the guarantees in the balance sheet > 0, plus 1,898 guarantees with the balance amounting to 0, representing paid and provisioned guarantees, wherefore there were initiated recovery proceedings that are not yet completed. Regarding the total balance of guarantees at 31.12.2015, the largest share was held by Unicredit (24.51%), followed by CEC Bank (11.90%), Transylvania Bank (9.78%), BRD-SG (7, 61%), Raiffeisen (6.15%) and BCR (5.06%), the remaining funders representing each less than 5% of the balance of guarantees.

In December 2015, a more important increase in the value of the balance of guarantees from the previous month was registered by CEC Bank (+5.36 million RON), Eximbank (+4.07 million RON), INTESA San Polo (+2, 05 million RON), IDEA Bank (+1.39 million RON). In contrast, the largest decreases in the balance of guarantees, compared to the previous month, were recorded by Unicredit (-33.38 million RON), Transylvania Bank (-10.21 million RON), LIBRA Bank (-10.65 million RON), BRD (-9.51 million RON). It is noteworthy that Transylvania Bank took over Volksbank (merger by absorption) on 31.12.2015. Moreover, it is noteworthy that, for analyzing, establishing and monitoring the use of the guarantee coverage limits by funders, there were used the funders' risk classes, established according to the internal assessment performed by the Fund.

Coverage limits were used as follows:

- a) at 31.12.2015, the coverage limit of 6,718,021,866 RON was used in a ratio of 33.98%, considering the balance of the guarantees granted under own sources, of which the largest share of the coverage limit, i.e. 17.46%, belongs to the financial institutions from the risk category C (Unicredit, CEC, Libra Bank, Alpha, Bancpost, OTP, CreditEurope, Romanian Bank) and 8.28% of the coverage limit belongs to the financial institutions from the risk category B (BRD, Transylvania, BCR, Procredit Bank).
- b)

Table no. 2. The distribution of the balances of guarantees from own sources: evolution

RISK CLASS/ VALUE	A	B	C	D	E	E-	TOTAL RON
31.12.2015	154,168,483	556,639,867	1,173,625,664	260,550,424	104,674,969	33,252,555	2,282,911,962
30.11.2015	156,732,766	470,678,162	1,333,215,530	273,166,618	110,894,233	33,800,690	2,378,488,000
NO. OF FUNDERS							TOTAL NO
31.12.2015	2	5	9	7	4	4	31
30.11.2015	2	5	9	8	4	4	32

Source: Processing performed by the author, based on Charisma database

It is noteworthy that the risk class C has the highest concentration of the balance of guarantees (approximately 51.4%) registered by funders on 31 December 2015, with a few changes compared to the previous month, following the quarterly assessment of funders, depending on payment shares. At 31.12.2015, the next funders recorded a payment share above the average payment share of 1.97%, being downgraded as follows: Idea Bank (formerly RIB) registered a payment share of 11.18% and, according to PL 15, fell in risk class E; ING Bank - 8.65% and, according to PL 15, migrated from risk class D to risk class E; Romanian Bank - 6.65% and, under PL 15, migrated from risk class B to risk class C; Credit Agricole recorded a share of 6.39%, and under PL 15, migrated from risk class E to risk class D. BCR returned to risk class B; this explains the increase in the concentration of the balance of guarantees, compared to the previous month. In the first three risk categories of Funders (A-C) there is 82.5% of the balance of guarantees issued by the Fund.

Table no. 3. Evolution of the use of the coverage level according to the balance of guarantees and risk exposure:

Date	The balance of the guarantees granted under own sources (RON)	Total risk exposure (RON)	Coverage level (RON)	The share of the use of the coverage level (%) according to the balance of guarantees	The share of the use of the coverage level (%) according to risk exposure
31.10.2015	2,460,730,220	2,736,183,629	6,825,866,543	36,05%	40,09%
30.11.2015	2,378,488,000	2,680,653,730	6,826,036,426	34,85%	39,27%
31.12.2015	2,282,911,962	2,607,806,421	6,718,021,866	33,98%	38,81%

Source: Processing performed by the author, based on Charisma database

The decrease in the coverage level, in December 2015, compared to November 2015, was triggered by modest decreases in equity value, from 1,017,604,660.8 RON to 991,863,628.47 RON, triggered by the decrease in the net interim profit recorded in December, while the net financing balance decreased slightly (the non-provisioned financing from Helco Leasing decreased from 344,846.1 RON in November 2015 to 342,115.89 RON in December 2015). Table 4 below presents some statistical data on to the first 10 funders, related the value of the balance of guarantees at 31.12.2015 (cumulatively, they represent 80.1% of the balance of guarantees):

Table no. 4. Top 10 Funders

Bank	The balance of guarantees at 31.12.2015 (RON)	Guarantees granted (cumulated 12 months 2015) (RON)	The balance of guarantees at 31.12.2014 (RON)	Payment applications settled (cumulated 12 months 2015) RON	Types of settlement of payment applications			Amount of rejected guarantees (cumulated 12 months 2015) RON	Share of the refusals to pay guarantees
					Approved payment applications (RON)	Rejected payment applications (RON)	Other types of settlement (RON)		
UNICREDIT	559,535,619	418,474,270	762,799,671	43,234,397	9,292,558	33,849,959	91,879	14,077,532	78,3%
CEC	271,692,906	94,921,133	345,193,930	41,459,380	9,173,064	32,198,530	87,786	27,309,708	77,7%
TRANSILVANIA	223,174,405	146,897,469	355,887,280	18,681,761	7,597,157	10,357,170	727,434	13,263,322	55,4%

BRD-GSG	173,836,962	106,345,427	299,532,802	18,496,909	2,617,224	15,796,056	83,630	7,484,477	85,4%
RAIFFEISEN	140,416,595	142,114,756	137,986,809	1,516,790	262,362	1,237,764	16,665	6,088,745	81,6%
BCR	115,454,080	57,269,704	176,736,255	20,632,488	4,164,763	12,125,758	4,341,967	12,009,035	58,8%
LIBRA	99,143,536	96,470,963	165,081,096	10,210,948	7,632,018	2,578,930	0	5,863,538	25,3%
ALPHA	96,137,097	76,617,866	84,181,107	292,295	0	292,295	0	11,219,100	100,0%
CARPATICA	76,109,282	30,690,198	95,830,455	269,464	0	269,464	0	6,708,652	100,0%
BANCPOST	73,850,869	62,183,210	73,257,293	251,974	0	251,974	0	3,187,561	100,0%
TOTAL	1,829,351,350	1,231,984,996	2,496,486,698	155,046,408	40,739,146	108,957,901	5,349,361	107,211,668	70,3%

Source: Processing performed by the author, based on Charisma database

The top 10 funders did not change in December 2015, compared to November 2015. From the guarantee applications amounting to 1,339,196,664 RON, made by the 10 funders between January and December 2015, the grants represented 92%, the rejection share being 8.0%. Regarding the ways for settling the payment applications, 26.3% were settled by payment and 70.3% were rejected. Table 4 above shows that funder CEC Bank is the leader in terms of the rejections of guarantee applications (with 26.3% of the total rejections of guarantee applications and with 22.3% of the total amount of the guarantee applications submitted to the Guarantee Fund). The share of the resolutions by refusal of payment, higher than 80%, were registered in relation to Alpha Bank (100% of the total payment applications settled in favor of Alpha Bank were refused payment), Carpatica (100%), BANCPOST (100%), BRD-GSG (85.4%), Raiffeisen (81.6%). In top 10 funders, the highest share of the resolutions by approval of payment was recorded in relation to Libra Bank (74.7% of total amount of the payment applications settled in favor of Libra Bank).

Table 4 reveals that Raiffeisen and Alpha are the only funders in top 10 funders whose balance of guarantees, at 31.12.2015, was higher than the balance of guarantees at the end of 2014 (Alpha with an increase by 11.9% and Raiffeisen with an increase by 2.4%). The highest share of rejections was recorded in relation to Nexte Bank (41.4%) and ING Bank (32.4%), while at the opposite pole stands Eximbank, Garanti Bank, Intesa, Volksbank, Banca Romaneasca, whose rejection share is 0. Regarding the rejected payment applications, it is noteworthy that the following funders recorded a share of 100%: Carpatica, Alpha Bank, Bancpost, Small Finance. In December 2015, guarantees were granted in the amount of 72,712,571 RON, registering a decrease by 29.9%, compared to the guarantees granted in November 2015, in the amount of 103,730,667 RON, while the number of the guarantees granted registered a decrease by 17.9%. It is also noteworthy that top 10 grants, in terms of the amounts registered in December 2015, changed compared to the previous month, OTP Bank being replaced by Idea Bank. The largest grants were in favor of the following funders.

Table no. 5. Top 10 Grants

No.	Funder	Grants in December 2015		Grants in November 2015	
		No.	value (RON)	No.	value (RON)
1	UNICREDIT BANK SA	76	18,498,616	103	32,450,844
2	BANCA TRANSILVANIA SA	38	7,403,586	50	12,328,724
3	BRD - GROUPE SOCIETE GENERALE SA	16	6,758,116	8	1,029,634
4	LIBRA INTERNET BANK S.A.	10	6,252,850	8	4,546,400
5	RAIFFEISEN BANK SA	35	5,275,401	41	10,908,214
6	CEC BANK SA	17	5,148,306	14	6,486,103
7	BANCPOST SA	36	4,726,400	37	3,958,091
8	ALPHA BANK ROMANIA SA	32	4,583,307	37	5,763,090
9	BCR	19	3,256,811	19	4,317,780
10	IDEA BANK	3	2,455,400	1	160,000
	<i>Top 10 funders - grants</i>	282	64,358,793	318	81,948,881

Total grants	302	72,712,571	368	103,730,667
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Source: Processing performed by the author, based on the Charisma database

The amount of grants rose in December 2015, compared to November 2015, in relation to BRD-GSG, IDEA BANK and Libra Bank, while the other banks registered a decrease (Unicredit, BCR, Raiffeisen Bank, CEC Bank, Alpha Bank, Bancpost). In terms of the above presented issues, it is noteworthy that were observed the maximum exposure limits established by the funder. On 31.12.2015, the exposures from the guarantee activity, respectively to the clientele of financial institutions, fell within the maximum guarantee coverage level of 6,718,021,866 RON.

3. Conclusion

According to the analysis detailed above, we conclude the following:

- At 31.12.2015, the activity of the National credit guarantee fund for SMEs respected the prudential indicators established by the Risk Policy and by risk management rules.
- There were respected the established maximum exposure limits established by the funder.
- At 31.12.2015, the Fund's aggregate exposure reported to the NBR, i.e. the value of all net exposures from the balance sheet assets and from the off-balance sheet items, calculated under the "NBR Regulation no. 20 of 2009 on non-bank financial institutions ", as supplemented and amended, was 875,228,297.35, representing 62.77% of its own funds, falling within the applicable limit of 1,500%; moreover, in this respect, we noticed a nominal decline, compared to the value of 1,023,557,674.66 RON, from 30.09.2015, when it represented 73.26% of own funds.

4. References

1. Audit of the Guarantee Fund for SMEs [submitted pursuant to Article 287 (4), second subparagraph TFEU], 2011, Luxembourg: Publications Office of the European Union.
2. *Buletinul Fondului Roman de Contragarantare nr. 1, 2011*, ed. S.C. "Tribuna economica" S.A.
3. *Buletinul Fondului Roman de Contragarantare nr. 2, 2011*, ed.: S.C. "Tribuna economica" S.A.
4. *Buletinul Fondului Roman de Contragarantare nr. 3, 2012*, ed.: S.C. "Tribuna economica" S.A.
5. *Buletinul Fondului Roman de Contragarantare nr. 1, 2013*, ed.: S.C. "Tribuna economica" S.A.
6. Chorafas, D.N., 2007. *Stress Testing for Risk Control under Basel II*. Oxford, USA: Elsevier Ltd.
7. Dardac, N., Moinescu, B., 2006. *Evaluarea cantitativă a riscului de credit din perspectiva Basel II*. Revista Economie teoretica și aplicata.
8. Financial Stability Report, 2015 <www.bnr.ro> [Accessed 23 April 2016].
9. Isărescu, M., 2015. *Unconventional monetary policies and financial stability: implications for banks and financial markets*.
10. Law no. 93 of 04.08.2009 on NFIs, Official Gazette of Romania, Part I, no. 259 / 21.04.2009).
11. NBR Annual Report, 2014 < www.bnr.ro> [Accessed 23 April 2016].
12. NBR Order no. 28/2011 for changing patterns of periodic financial statements and detailed procedures for their establishment and use, applicable to NFIs, approved by NBR Order no. 18/2007.
13. NBR Regulation no. 20 of 13.10.2009 on non-banking financial institutions (Official Gazette of Romania, Part I, no. 707 / 21.10.2009).
14. NBR Regulation no. 2 of 12.01.2010 amending NBR Regulation no. 20/2009 (Official Gazette of Romania, Part I, no. 39 / 18.01.2010).
15. NBR Regulation no. 5 of 21.04.2010 amending and supplementing NBR Regulation no. 20/2009 (Official Gazette of Romania, Part I, no. 281 / 29.04.2010).
16. NBR Regulation no. 8/2012 amending NBR 20/2009 on NFIs.
17. NBR Order no. 4/2012 reporting on the situation regarding the classification of exposures from loans/credits related to payment services and the necessary credit risk provisions related thereto, applicable to entities supervised by the National Bank of Romania, other than credit institutions.
18. NBR Regulation no. 5/2012 on the classification of loans and on the establishment, adjustment and use of credit risk provisions applicable to entities supervised by the National Bank of Romania, other than credit institutions.
19. Regulation no. 4/2014 regarding the reporting of statistical data and information from the National Bank of Romania, Title I, Chapter I and Chapter IV.
20. Uyemura, D.G., Deventia, D.R., 1993, *Financial Risk Management in Banking*, USA and UK.