INTERNAL RATING – AN ACTIVE INSTRUMENT IN THE MANAGEMENT OF BANKING RISKS. CASE STUDY BCR

PhD Gabriela Cornelia Piciu*

Abstract

This paper aims to clarify some aspects regarding the banking activity in general, of crediting, in particular, because it involves a risk by the very elements of anticipation underlying the decision of the banking specialists. For the bank it is very important to know this risk, to make an evaluation as close as possible to reality, and to reject or accept it in full awareness.

The contribution of the internal rating in terms of efficiency and stability of a bank is shown via a case study – the Romanian Commercial Bank. The internal rating used by BCR is an active instrument for making credit decisions it provides valuable indicators to the banking analysts that can be used to develop de risk management policies and the prudential measures for the balanced risk dispersion.

Given the fact that the credit rating contributes to the objective, professional analysis, the system must be continuously improved and developed by categories of clients and types of risk, so that the included criteria and the resulting conclusions are relevant.

Keywords: rating system, managing risk, monitoring the credit, analysis of the customers

JEL Classification: G11, G21

1. Introduction

The rating system of credits may be two dimensional, corroborating the results of the analysis of the customer's characteristics with those of the credit and it is based both on statistical comparison and on analysis and prognosis.

---

* *Scientific researcher III, "Victor Slăvescu" Centre for Financial and Monetary research, Romanian Academy.*

The customer's characteristics are based on the analysis of the general aspects, the financial aspects, the position in the field of activity, the quality and stability of management and the strategy of business. The analysis of the credit's characteristics is based on the credit relationship history, the achievement of the terms of eligibility, the managing and monitoring the credit, the debt service, the source of repayment and the nature of the sides.

The credit rating is calculated for all the customers who benefit of credits and who are in the bank's portfolio, based on the annual accountant balance and on the other periodical accountant situations, as well as on the occasion of granting/reviewing credits.

2. Credit rating - instrument of risk management

As a functional instrument of risk management, the credit rating is actively used in underlying crediting decisions, because the determined rating underlies the approval or the rejection of credits request and further on the approval, the permanent monitoring of the relationship cost/efficiency/risk regarding each field of activity, each customer and even each product.

For the customers who are eligible for crediting, rating is associated with other criteria (the debt service, the level of currency profits) in order to establish the risk margin of the customer (RMC). This way, the rating has a direct influence on credit costs, taking into account that RMC represents a component of the rate of interest established for credits.

Throughout the mentioned criteria, the mark (rating) given to a customer has a high informative level and it represents the basis for establishing the limits of risk exposure for the big customers of the bank. Besides the operative function of decision instrument in the process of crediting, credit rating, analysed in its evolution on categories of customers, on economic branches and so on, offers valuable clues to bank analysts, and based on these they ground the management policies of risks and the caution measures for a balanced dispersion of it.

The purpose of the analyses based on credit rating is that of making difference between the risk levels from the loaning portfolio of the bank in order to: avoid the gathering of credits in the categories with a high risk; determine a trend of a financial stand of customers so as to take the necessary measures early in order to avoid the deterioration of the quality of the loaning portfolio ; ensure the management of crediting risk and the appropriate protection of the bank and of the customers against the typical risks.

Thus, it was expected that a great number of financial institutions to start improving their own risk management systems by designing some internal patterns which could go far towards measuring and aggregation of risks in a shape integrated along the whole institution.

So, a relevant example in this direction is represented by the Romanian Commercial Bank, a dynamic and stable bank in the Romanian banking system, which created its own system of credit rating.

3. BCR - internal rating

From the point of view of BCR, the internal rating represents an efficient instrument for the management of risks, in this bank it has been existing for more than 10 years their own methodology of risk approaching in the crediting activity based on rating.

The initial system of credit rating was adapted to the new economic realities, based on the results and the conclusions drawn from practice and moreover, they resorted to the identification of some new domains of activity which lend themselves to an interpretation of risk management by using the rating method.

Through the complexity of the activities that it displays, BCR disposes of a complex frame of banking risks management, in which the rating system is applied, besides its crediting activity, which is its main activity and in other domains of activity:

- using the ratings assigned by the famous international agencies (country rating, bank rating) in their own analyses, which have as a purpose the establishing of the risk limits towards the partner-banks;
- using the method of internal rating in order to analyse the credit worthiness of the-reinsurance societies with whom BCR has business relationships and conferring risk limits towards these;
- Establishing risk limits regarding the maximal exposure of the bank towards its main customers, corporations and the judicial

dispersion of credit exposures on each domain of activity of the national economy.

The Romanian Commercial Bank has implemented and has been using since the year 2000 its own system of credit rating, which contributes to the objective and professional analysis of the customers of BCR. The system has been continuously improved and developed on categories of customers and types of risks, so that, the included criteria and the obtained conclusions could be relevant.

At present, BCR disposes of internal ratings for:

- Customers from the category of corporations,
- New-appeared customers (for whom there is no history of business),
- Natural persons and authorized natural persons.

For customers which are corporations, the methodology of BCR presents an appropriate detailed description on quantitative (quantifiable) and qualitative (unquantifiable) criteria.

In the category of quantifiable criteria (Table 1) there are taken into consideration:

- The evolution of the business turnover in real terms;
- Liquidity and solvency;
- Profitability;
- Debt degree;
- The value of export in the business turnover;
- Refund source.

Table 1: BCR's credit rating for corporate clients - quantifiable criteria

Nr. crt.	**Financial Criteria**	**Val.**	**CR1**		**CR5**
1.	Trend of turnover (in real terms)	0,10	Ascending the last 5 years		Decrease by more than 30%
2.	Current asset liquidity	0,06	high		Unfit

3.	Patrimonial solvency	0,07	high		insolvency
4.	Profitability (return on equity)	0,08	High and stable		Losses, the prospect of bankruptcy
5.	Indebtedness	0,06	very good		Inadequate
6.	Share of exports in turnover	0,02	Over 50%		Less than 10%
7	Source of repayment	0,10	Cash flow from operations		Liquidation of assets

Source: www.bcr.ro

For each of these quantitative criteria, employment levels are set by branch of activity which includes client, so finally score have a high degree of relevance in terms of the client's financial standing and function industry-specific.

In what regards the qualitative, non-financial criteria (Table 2), the analysis of BCR takes into consideration:

- the quality of the shareholder and management;
- the strategy, market conditions;
- the accuracy of the financial-accountant reports;
- received collaterals.

Table 2: BCR's credit rating for corporate clients – non-financial criteria

Nr. crt.	**Non-Financial Criteria**	**Val.**	**CR1**	**…**	**CR5**
1.	Quality shareholding	0,08	Domestic and internationa l prestige		Quality confusing / dubious
2.	Management	0,1	Stability and experience high		Weak, frequent changes
3.	Eligibility conditions	0,09	For any type of loan		ineligible

4.	Strategy	0,08	Well defined and systematica lly carried		unclear
5.	Market conditions	0,09	Growing		Without development opportunities
6.	Accuracy of the financial-accountant reports	0,03	Audited by internationa l firms		Unaudited unavailable
7.	*Received collaterals*	0,04	Strong guarantees		Guarantees low market value, with the trend of deterioration

Source: www.bcr.ro

For each one of these quantitative criteria, the levels of classifications are established depending on the field of activity in which the customer takes part, so that, in the end, the obtained score can have a high degree of relevance in what regards the customer's financial standing and depending on the characteristics of each industry.

In order to establish the credit rating, with each financial and non-financial criterion it is associated a level of appraisal from 1 (the best) to 5 (the weakest) and it is balanced with the specific weight attributed to each appraisal criterion. The balanced average of the 14 criteria represents the credit rating of each loan.

A distinct objective of risk management in BCR in the year 2007 was the fulfilment in the shortest time of a database, regarding the evaluation of the possibility of non-payment associated with each debtor and of the additional risk factors, as well as the loss generated by non-payment and the exposure to non-payment. That is why, the credit rating which exists in the bank's records on a previous period of about 3 years, for each customer from the portfolio, has been really useful for the application of the principles from Basel III, based on a standardized approach of risks in the form of rating systems.

At the same time as the introduction in the portfolio of products of BCR of the mortgage credit, it was created a rating system intended for the analysis made to give this type of credit. It is based on the greatest part of the criteria used for the rating of natural persons, with some new criteria adjusted to the characteristic of the mortgage credit.

This is a proof of flexibility and adaptability, a proof offered by BCR on the track of identifying market needs, creating the products which correspond to these needs, at the same time adapting the instruments of risk management that the bank takes through its new promoted products.

A distinct form of an analysis type rating applied in BCR is that of determining the limits of risk exposure on domains of activity, used in order to avoid the gathering of credits in certain domains of activity with a higher risk. This is made because the criteria used in establishing the final score of each domain of activity take into account: the remaining credit, the unpaid interests, the payment arrears (budget, suppliers), the importance of the private domain, the medium degree of supply, the loss recorded by the customers from that domain, the contribution of the domains to the making of PIB and to the accomplishment of export.

For a long period of time, BCR has been elaborating and implementing a complex methodology of analysis and quantification of risks towards the societies of insurance-reinsurance with which it gets into business relationships.

Based on its own rating system, BCR determines the limits of risk exposure towards the societies of insurance-reinsurance, limits that are usually established for a year, but which are permanently revised and they can be modified as many times as necessary.

Just like in the case of the other customers – corporations, rating is based on the financial and non-financial indicators, with a special emphasis on the position in its domain of activity, the quality of management, the strategy and the caution policies which are characteristic to the insurance societies.

In what regards the non-financial indicators, there are taken into account:

- the structure of shareholders;
- the level and the structure of the corporate funds;

- the network of branch offices and the market share;
- Giving up risks to external reinsurance and the quality of reinsures.

The financial indicators taken into consideration refer to:

- liquidity coefficient;
- solvability degree;
- technical reserves obtained;
- damage rate;
- profitability rate; indebtedness degree;
- Other relevant indicators, mentioned in the norms of the Commission of Insurance Surveillance.

4. Results and contribution to existing knowledge

The research has shown that the credit rating system of a bank can also be bi-dimensional (the case of BCR), corroborating the results of client characteristics analysis with the results of credit analysis, relying both on statistic comparisons, and on analysis and prognosis.

Client characteristics result from the analysis of the general financial aspects, of the position in the field of activity, of the quality and stability of the management and of business strategy.

Credit analysis includes the history of past credits, fulfilment of the eligibility criteria, credit administration and monitoring, debt service, source of reimbursement and type of collaterals.

The credit rating is calculated for all clients of credits included in the portfolio of the bank, on the basis of the annual accounting balance and of other periodical accounting documents, and when the credits are reviewed.

As functional instrument for risk management, the credit rating is actively used to decide whether to accept or reject the credit application, to monitor permanently the cost/efficiency/risk relation of each branch of activity, each client and even each product.

For the clients who are eligible for crediting, the rating is corroborated with other criteria (debt service, hard currency cashing) in order to determine the client risk margin (CRM). Thus, the rating has a direct influence on the cost of the credit, since CRM is a component of the interest rate for the credit.

By the included criteria, the rating assigned to a client has a high informative content and it is used to determine the limits of risk exposure for the big clients of the bank.

Besides the operative function of decision-making instrument within the process of credit granting, the credit rating, analysed by category of clients, economic branches, etc., provides valuable hints to the bank analysts, which enable developing the risk management policies and the prudential measures for the balanced dispersion of the risk.

5. Conclusions

The rating system used by BCR is based on a series of coefficients of change in an equivalent risk of securing the exposures which appear both from direct risks and from indirect risks of the bank towers the insurance-reinsurance societies. This professional approach of managing risks under the standardized form of internal rating must be watched in the general context of the management system developed within BCR and it proves the bank's concern to consolidate its position within the banking system and to maintain its performance indicators at a high level, by eliminating any potential sources of loss, thus protecting the customer's interests.

References

1. Borio, C., Drehmann, M., 2009, Assessing the risk of banking crises –revisited, *BIS Quarterly Review*, March.
2. Colgate, M., Alexander, N., 1998, Banks, retails And their customers: a relationship marketing perspective*, International Journal of Bank Marketing*, Vol. 16, No. 4.
3. Colgate, M., Hedge, R., 2001, An investigation into the switching process in retail banking services*, International Journal of Bank Marketing*, Vol. 19, No. 5.
4. Cronin, Jr., J.J., Taylor, S.A., 1992, Measuring service quality: a reexamination and extension*, Journal of Marketing* 56, July.

5. Danielsson, J., & Morimoto, Y., 2000, *Forecasting Extreme Financial Risk: A Critical Analysis of Practical Methods for the Japanese Marke*t, Bank of Japan, IMES Discussion Paper Series, 2000, No. 8, April.
6. Cantor, R, Packer, F., 1994, The credit rating industry, *Federal Reserve Bank of New York Quarterly Review,* Summer-Fall.
7. Fender, I., Tarashev, N., Zhu, H., 2008, Credit fundamentals, ratings and value-at-risk: CDOs versus corporate exposures, *BIS Quarterly Review*, March.
8. Hoalin, D.C*.,* 1985, *Exploring Data Tables, Trends and Shapes*, Publishing House: John Wiley & Sons, New York.
9. Lăzărescu, S., 2003, *Rating financiar*, Editura ASE, Bucureşti.
10. Mood, A.M., Graybill, F.A., Boes, D.C., 1974, *Introduction to the Theory of Statistics*, Publishing House: McGraw-Hill, New York.
11. Van den Goorbergh, R., Vlaar, P., 1999, Value-at-Risk Analysis of Stock Returns: Historical Simulation, Variance Techniques or Tail Index Estmation?, *DNB Staff Report, No.40*, Nederlandsche Bank.
12. Drehmann, M., Tarashev, N., 2011, Systemic importance: some simple indicators, *BIS Quarterly Review*, March.
13. Morgan, D., 2002, Rating banks: risk and uncertainty in an opaque industry", *American Economic Review*, vol 92.
14. *** Financial Stability Board, 2010, *Principles for reducing reliance on CRA ratings*, October.