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## **Establishment and analysis of the credit risk profile in a Romanian retail bank**

Popescu, Ramona Florina and Clipici, Emilia

University of Pitesti, Romania

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# **ESTABLISHMENT AND ANALYSIS OF THE CREDIT RISK PROFILE IN A ROMANIAN RETAIL BANK**

## **1. Introduction**

According to the National Bank of Romania (NBR) regulations, besides the strategy regarding the risk administration, credit institutions must choose a risk profile, setting out the objectives and the strategy for each significant type of risk, including the outsourcing activities [6].

In its' assumed credit risk profile, each bank determines the categories of loans that it intends to promote, the type of exposure, the economic sector, the form of property, the counter party category, the residence, the geographic area, the currency, the initial duration and the estimated profitability. All those are established by a series of limits and thresholds of significance, depending on which the bank will continue to expose itself to a certain type of clients, sector.

## **2. The loans portfolio risk profile**

Besides the counter parties risk profile accepted at the beginning of the contractual relations, considering the dynamics of the loans portfolio, the bank needs to establish an accepted loan portfolio risk profile.

Considering the specific of the retail bank, such as the creation of a banking book portfolio by registering mostly exposures (loans and guarantees) than individual and SME counter parties, the loans portfolio can be calculated by analysing a matrix which allows quantifying the risk probability and its impact on the banks profitability.

As a result, each loan granted by the bank gets a rating according to its risk category, used to establish the needs of provisions and the risk weight given to the exposure, in order to determine the capital necessary to cover the credit risk according to Basel II standards.

The loans portfolio can be classified upon risk categories, such as: low risk (AAA to A), medium risk (BBB to B) and high risk (CCC to C).

The risk profile of the loans portfolio can be quantified by calculating the share of the loans divided into the three categories in the loans total amount, the bank being able to establish limits for each of the categories for example, a minimum of 10% of the loans in the low risk category and a maximum of 10% of the loans in the high risk category represents the banks option for a medium risk profile.

*Table 1. Loans rating according to the risk weight and the risk category*

<b>Risk weight</b>	<i>0%</i>	<i>20%, 35%</i>	<i>50%, 75%</i>	<i>≥100%</i>
<b>Risk category</b>				
<i>Standard</i>	<i>AAA</i>	<i>AA</i>	<i>A</i>	<i>BBB</i>
<i>Watched</i>	<i>AA</i>	<i>A</i>	<i>BBB</i>	<i>BB</i>
<i>Substandard</i>	<i>A</i>	<i>BB</i>	<i>B</i>	<i>CCC</i>
<i>Doubtful</i>	<i>B</i>	<i>B</i>	<i>CCC</i>	<i>CC</i>
<i>Loss</i>	<i>CCC</i>	<i>CC</i>	<i>C</i>	<i>C</i>

### **3. The analysis of the factors used to quantify the probability and the impact of the credit risk upon the loans portfolio**

According to NBR's regulations, the need of provisions used to cover the credit risk can be established by applying a provision coefficient on each exposure, according to its risk category [1].

The risk category used in the above matrix is calculated depending on three factors: the clients' performance class, the debt's service and the initiation of legal procedures against them. [1]

The clients' performance class is established at the bank's level, when the loans are being granted. For the legal entities, it is revised each time a financial statement is produced. The debt's service represents the number of days the payment is being delayed from the payment term.

The connection between the risk categories and the criteria for the loans granted to entities, others than credit institutions, is presented below in *Table 2*. [2]

*Table 2. Connections between the risk categories and the loan granting criteria*

<b>Financial performance</b> <b>The debt's service</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
<b>0-15 days</b>	Standard	Watch	Substandard	Doubtful	Loss
<b>16-30 days</b>	Watch	Substandard	Doubtful	Loss	Loss
<b>31-60 days</b>	Substandard	Doubtful	Loss	Loss	Loss
<b>61-90 days</b>	Doubtful	Loss	Loss	Loss	Loss
<b>At least 91 days</b>	Loss	Loss	Loss	Loss	Loss

When legal procedures are being initiated against the client, it is classified as "loss", despite its financial performance and the debt service. The risk category informs the bank on the risk probability, respectively the probability to have losses from the clients' exposures.

The risk weight of the exposure, the second factor of the matrix, is calculated depending on its class and the loan quality (established on the basis of the ratings of external loan estimation institutions, according to NBR regulations, based on Basel II – standard approach).

As a result, the legal entities (corporations) exposures (benefiting of ratings from external loan estimation institutions), are being adjusted with risk weights from 20% to 150%, depending on the loan's quality. [3]

If such a rating is not available, the legal entities exposures are being adjusted with the maximum value between the 100% risk weight and the risk weight of the state administration which has the client in the jurisdiction. [3]

The exposures of retail counter parties are being adjusted with a 75% risk weight. The exposures can be classified in the retail exposure class if they are being registered relating to one or more individuals or small and medium enterprises (SMEs) and they are accomplishing all NBR's granularity criteria. [3]

The exposures or parts of exposures guaranteed by first class mortgages upon inhabited or rented residential assets are being adjusted by a 35% coefficient. The residual exposures exceeding 90 days are adjusted with a 100% or 150% coefficient, depending on the level of provisions. [3]

Whenever the exposures are being guaranteed with Basel II eligible guarantees, the guaranteed part of the exposure can be adjusted with a lower risk weight than the one of the counter party [4]. The risk weight represents for the bank the impact of the risk upon the quality of the loans portfolio and, as a result, upon its profit.

#### **4. The employment of the analysis results**

The matrix analysis regarding the bank's loans portfolio profile is conducted monthly, being one of the factors able to contribute to the change of the bank's loan policy, intending to:

- Avoid the concentration of the loans portfolio in the high risk profile, so that the loans portfolio quality deterioration may not happen;
- Assure the credit risk management and the proper protection of the bank against this risk;

To fit in the chosen risk profile, the bank must identify the effective risk types and perform a permanent evaluation of the risk generating situations, by carrying out a credit risk administration strategy based on [5]:

- A credit activity based on sound and well defined criteria;
- Clearly defined processes meant to approve the new loans, the change of the clauses, the renewal and the re-financing of the existing ones;
- The administration and continuous monitoring activities of different portfolio and exposures affected by the bank's credit risk, including identifying and administrating the non-performing loans;
- The diversification of credit portfolio as against the bank's markets and its credit general strategy;
- Residual risk monitoring and controlling activities based on politics and written procedures, such as the risk that the known techniques used to diminish the credit risk might be less efficient than expected;
- Concentration risk monitoring and controlling activities based on politics and written procedures, such as the risk that appears from the exposures of the counter parties, groups of counter parties and counter parties from the same economic sector, region, activity or merchandise.

The efficiency of the risk administration system, including the measurement of the risk using the credit portfolio risk profile matrix is screened in the end by analysing the risk / profit relation, respectively by analysing the risk rate at the bank's level. It is calculated as a proportion between the net loss from the credit activity and the credit stock, compared to the medium disparity between the bank's active and its' passive interests.