

## ESTIMATION OF INDIVIDUAL ENTREPRENEURS' CREDIT RATING BY COMMERCIAL BANKS

© 2011 E.V. Sinelnikova\*

**Keywords:** credit rating, individual entrepreneur, methods of estimation, banking risk coefficient, maximum sum of credit.

The given article suggests the method of estimation of individual entrepreneurs' credit rating for commercial banks. The method is based on a complex estimation of a debtor and their business. The coefficient of a branch ( $Kb$ ), the coefficient of psychological portrait ( $Kpp$ ) and the coefficient of financial reporting ( $Kfr$ ) should be defined and then it will be possible to calculate the coefficient of banking risk which is necessary for more exact estimation of the maximum sum of credit.

The analysis of a debtor's credit rating which in Russian banking practice is understood as the ability of a person or a company to pay the debt in full and in time is carried out in order to have the exact estimate of the credit risk. This estimate influences the size of the reserve, the crediting limit and the size of the interest rate.

In the Western banking practice credit rating is interpreted as *the wish* in connection with *the ability* to pay the debt in time. If we use this interpretation of credit rating, the main task of this model as far as interviewing is concerned will be not only to estimate the creditability of a client but also the client's reliability.

The given model of credit rating estimation consists of several blocks or stages. Each stage should result in a definite coefficient. There will be three coefficients:

$Kb$  - the coefficient of the branch, reflecting the specific character of the branch, the dynamics of its development, its perspectives and its position on the market;

coefficient of banking risk for this entrepreneur. The advantage of this method is the thorough analysis of the debtor and the debtor's activities.

To analyze the specific character of a branch a credit inspector has to analyze the data given by the Department of Economic Development. We consider the following indices to be the most important: the dynamics of branch development, the perspectives of the development of regional economy and the estimation of the particular branch's products or services.

For the estimation of  $Kb$  we use the method suggested by V.V. Zabolotskaya, PhD in Economics, Associate Professor of KSU (Krasnodar State University). Each index has a rating and a corresponding value in accordance with the theory of indistinct quantities from 0 to 1 with the step of 0, 25. As there are only 6 defining indices the maximum  $Kb$  value tends to 6.

In accordance with the score each range the value of  $Kb$  is given in the table below:

*Table 1*

**The line of scores to find  $Kb$**

$Kb = 0,7$	from 0 to 2
$Kb = 0,8$	from 2,1 to 3
$Kb = 0,9$	from 3,1 to 4,2
$Kb = 1$	from 4,3 to 6

$Kpp$  - the coefficient obtained as a result of the client's psychological portrait evaluation, their reliability and potential;

$Kfr$  - the coefficient calculated after the analysis of the entrepreneur's financial state.

In the end when all the coefficients are found it is necessary to correct the maximum sum of credit using the average value of these coefficients which corresponds to  $Kbr$  - the coefficient

The next block is considered to be the most important one, because business environment is a specific environment and entrepreneurs usually have some peculiar traits of character and are inclined to take risk. "Entrepreneurship is characterized not only by the creative function influenced by the level of economic freedom of the entrepreneurs, but also by the organizational function, that is, making a decision to orga-

---

\* Ekaterina V. Sinelnikova, postgraduate student of the Samara State University of Economics. E-mail: sinelnikova.K@yandex.ru.

Table 2

Score ruler for identifying the *Kfr*

<i>Kfr</i>	0,8	0,75	0,7	0,6	0,5	0,4
% from maximum	65	60	52	44	36	Less than 36

nize a business, its diversification and formation of entrepreneurial style of management". According to A. Smith "...entrepreneurship in the market economy is a self-initiating and self-regulating activity which starts spontaneously in the presence of the main production factors".

This idea was supported by many economists in the 19<sup>th</sup> -20<sup>th</sup> centuries in Russia and abroad.

But today one can't be sure of the moral qualities of entrepreneurs. And you should make a distinct line between the ability to take risk and adventurousness, between creativity and marginality.

That is why it is so important for a bank to have a psychologist among its staff, able to teach the credit inspectors to make quality analysis of an entrepreneur and define their psychological portrait, revealing their potential and reliability.

Each bank can have its own version of a questionnaire. We suggest making the estimation on the basis of the test with 47 questions. The analysis of the test and the score will help to identify the *Kpp*.

To identify the coefficient of financial reporting (*Kfr*) we divided the estimation of a debtor into two groups:

- ◆ the analysis of their financial state
- ◆ risk analysis.

The first group was estimated as 80% and the second one - as 20%, thus indicating its importance. Then financial reporting should be divided into 10 groups, each with a certain score and score ruler.

- ◆ the total score in each group is multiplied on score coefficient;
- ◆ all the results are summed up;
- ◆ the results are corrected according to the score in the group;
- ◆ the same with the analysis of the activities risks;
- ◆ the results in the two groups are summed up;
- ◆ the final result leads us to the value of the *Kfr*.

While analyzing the financial state, the following areas there should be estimated: assets and liabilities, debts, financial results, cash flow, financial stability, solvency, business activities, the effectiveness of business and the season.

Such aspects as how long the debtor has been in business and how long he has used the bank services and how close his cooperation with the bank has been, the level of risks diversification and credit history quality must be taken into account as well.

The maximum value which is necessary to find *Kfr* is obtained as follows:

$$\begin{aligned} \text{Maxim} = & \left( \sum_{Zn} \left( \begin{array}{l} \text{values in subgroup} \\ \text{"analysis of financial state"} \end{array} \right) \times \right. \\ & \left. \times \begin{array}{l} \text{score in subgroup} \\ \text{"analysis of financial state"} \end{array} \right) \cdot \text{score in group 1} + \\ & + \left( \sum \left( \begin{array}{l} \text{values in subgroup} \\ \text{"risk analysis"} \end{array} \right) \times \right. \\ & \left. \times \begin{array}{l} \text{score in subgroup} \\ \text{"risk analysis"} \end{array} \right) \cdot \text{score in group 2.} \end{aligned}$$

Taking into consideration the maximum value when estimating financial state and risks of a debtor, you can find the *Kfr*.

When the values of all the coefficients are identified, it is necessary to identify the value of the banking risk coefficient *Kbr*:

$$Kbr = (Kb + Kpp + Kfr) / 3.$$

If the *Kbr* is equal or less than the threshold value, the bank will have to refuse a credit. In any other cases except when the security service of the bank has some negative information about the debtor the latter will be given credit. But the maximum sum of the credit will depend on the *Kbr* as the credit base will be corrected, using this coefficient.

We consider this method to be rather liberal to individual entrepreneurs, as a complex estimation of the entrepreneur and their business helps to understand the specific character of the business, its perspectives, competitiveness, profitability and the reliability of the debtor.

*Zabolotskaya V.V.* Increasing the Effectiveness of Credit Rating Estimation of Small Business Enterprises in a Commercial Bank // Banking. 2009. № 4.  
*Barr R.* Political Economy. M., 1994.

*Semyonov V.P.* Management of Innovation and Investment Process in Production: theory and methodology; Saint-Petersburg: Spb., 2003.