

METHODOLOGICAL APPROACH TO ASSESSMENT OF CREDIT HISTORY OF A COMPANY

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The article presents methodological recommendations for evaluation of credit history on the basis of calculation of the rhythm index on repayment of obligations by a company; it is also proposed to carry out adjustment of overall potential of company's creditworthiness on the value of rhythm index. As a result, potential opportunities of enterprises of real sector of economy to get a bank loan will be enhanced.

Keywords: creditworthiness, credit history, rhythmicity.

Credit history – information that characterizes the performance of assumed obligations by the borrower under the loan (credit) agreements and which is stored in a credit bureau. Credit history reflects the level of confidence in the borrower from the public and private for-profit institutions, primarily - from banks. Credit history will be checked each time you get a bank loan. Moreover, companies with good credit history are more likely to be provided with the most favorable credit terms from credit institutions. And if credit history is damaged or there is no history at all, the lender will offer either less favorable loan conditions, or just refuse to conclude credit agreements.

When developing the method of credit history analysis, it will be taken into account that the main indicator of a good credit history is a timely repayment of debt. Currently, however, it is of paramount importance for banks not only the fact of disbursement of a loan on term, but also the timely payment of interests on the loan and the parts of the principal.

To assess the credit history, it is proposed to introduce the rhythm index on company's repayment of obligations under the loan, the main components of which are the sum of the principal and interest payments by periods.

As a payment period of the principal and interests it is suggested to take a month, as the duration of the evaluation of the rhythm index – a year. If a previous loan was taken for a period exceeding a year, the final rhythm in-

dex of repayment of obligations by a company should be calculated as the arithmetic mean of annual indices.

Below is a formula (1) presented to be used for calculating the rhythm index on payment of outstanding debt by a company within a year:

$$I_{PKOr} = \sqrt[12]{\prod_{i=1}^{12} \left(\frac{D_{Bi}}{D_{Ti}} \frac{per_{Bi}}{per_{Ti}} \right)_i}, \quad (1)$$

where I_{PKOr} – rhythm index of payment of outstanding debt by a company within a year; i – month of a year; D_{Bi} – part of the principal paid back during the month, thous. RUR; D_{Ti} – part of the principal to be paid within the month, thous. RUR; per_{Bi} – interest on credit paid back during the month, thous. RUR; per_{Ti} – interest on credit to be paid back during the month, thous. RUR.

To calculate the average annual index of rhythmic performance of lending commitments the following formula is used (2).

$$I_{PKO} = \frac{\sum_{j=1}^m I_{PKOr_j}}{m}, \quad (2)$$

where I_{PKO} – average annual rhythm index of payment of outstanding debt by a company

within a year; j – number of a year; m – number of years for repayment of the loan.

Index value below one unit indicates a violation of rhythmicity when repaying obligations under the loan.

Analysis of the credit history of two textile enterprises has been carried out with the

aim to test the proposed technique. Analysis was conducted on the basis of data regarding repayment of the loan. Data regarding credit and calculation of the index are given in Tables 1 and 2.

Table 1

Month	Minimum repayment amounts under credit (D_{Ti}), th. RUR	Payment of interests (per_{Ti}), th. RUR	Actual repayments under credit (D_{Bi}), th. RUR	Actual repayments of interests (per_{Bi}), th. RUR	$\frac{D_{Bi}}{D_{Ti}}$	$\frac{per_{Bi}}{per_{Ti}}$	$\frac{D_{Bi}}{D_{Ti}}$ $\frac{per_{Bi}}{per_{Ti}}$
January	1 000	190,000000	1 000	190,000000	1,00	1,00	1,00
February	1 000	174,166667	1 000	174,166667	1,00	1,00	1,00
March	1 000	158,333333	1 000	158,333333	1,00	1,00	1,00
April	1 000	142,500000	1 300	142,500000	1,30	1,00	1,30
May	1 000	121,916667	1 000	121,916667	1,00	1,00	1,00
June	1 000	106,083333	1 200	106,083333	1,20	1,00	1,20
July	1 000	87,083333	1 000	87,083333	1,00	1,00	1,00
August	1 000	71,250000	1 000	71,250000	1,00	1,00	1,00
September	1 000	55,416666	800	55,416666	0,80	1,00	0,80
October	1 000	42,750000	1 000	42,750000	1,00	1,00	1,00
November	1 000	26,916667	1 000	26,916667	1,00	1,00	1,00
December	700	11,083333	700	11,083333	1,00	1,00	1,00
Σ		1 187,499999	12 000	1 187,499999			
Sum of Principle Debt	12 000				I_{PKO}		1.02

Table 2

Month	Minimum repayment amounts under credit (D_{Ti}), th. RUR	Payment of interests (per_{Ti}), th. RUR	Actual repayments under credit (D_{Bi}), th. RUR	Actual repayments of interests (per_{Bi}), th. RUR	$\frac{D_{Bi}}{D_{Ti}}$	$\frac{per_{Bi}}{per_{Ti}}$	$\frac{D_{Bi}}{D_{Ti}}$ $\frac{per_{Bi}}{per_{Ti}}$
January	750	142,500000	750	142,500000	1,00	1,00	1,00
February	750	130,625000	750	130,625000	1,00	1,00	1,00
March	750	118,750000	750	118,750000	1,00	1,00	1,00
April	750	106,875000	700	106,875000	0,93	1,00	0,93
May	750	95,791667	750	95,791667	1,00	1,00	1,00
June	750	83,916667	500	83,916667	0,67	1,00	0,67
July	750	76,000000	600	76,000000	0,80	1,00	0,80
August	750	66,500000	700	66,500000	0,93	1,00	0,93
September	750	55,416667	800	55,416667	1,07	1,00	1,07
October	750	42,750000	750	42,750000	1,00	1,00	1,00
November	750	30,875000	800	30,875000	1,07	1,00	1,07
December	1 150	18,208333	1 150	18,208333	1,00	1,00	1,00
Σ		968,208334	9 000	968,208334			
Sum of Principle Debt	9 000				I_{PKO}		0,95

According to the analysis results, the values of rhythm indices of repaying obligations under the loan by the enterprises were obtained; for Enterprise 1 – 1.2, and for Enterprise 2 – 0.95.

In earlier studies (1) absolute value of the creditworthiness by factor blocks has been obtained (external factors: sectorial, regional, country; internal factors: production and economic, financial-organizational, management, security of lending). Each block of evaluation had independent weighting coefficients for each group of factors that make up the block. Such evaluation, on the one hand, is of interest for the credit institution providing lending,

since loan portfolio is limited, and the total amount of potential loan applicants may be much higher. On the other hand, this evaluation is of considerable interest for the enterprise of the borrower, as it gives specific directions for improving its performance in terms of increasing the attractiveness of lending by maximizing the potential of creditworthiness. The maximum rating of each of the above-listed blocks is achieved at the maximum of all scores for all groups of factors.

Results of relationship of creditworthiness group with possible values of integral creditworthiness potential are given in Table 3.

Table 3

Integral creditworthiness potential (P _{CW})	1,00...1,44	1,45...1,88	1,87...2,32	2,33...2,76	2,77...3,20	3,21...3,64	3,65...4,08	4,09...4,52	4,54...5,00
Creditworthiness group	1	2	3	4	5	6	7	8	9

Calculation of integral creditworthiness potential for enterprises under consideration has been made. Integral potential for the Enterprise 2 equals to 2.90 (group 5 of creditworthiness), and for the Enterprise 1 – 4.05 (group 7 of creditworthiness).

Assessment of rhythmicity of repayment of obligations under the loan by the enterprise, which characterizes its credit history, is to be taken into account when assessing the company's overall creditworthiness potential. With this in mind, we propose to use a rhythm index of obligations repayment under the loan as a correction factor in calculating the adjusted integral creditworthiness potential (Formula 3).

$$\Pi'_{KC} = \Pi_{KC} I_{PKO} . \quad (3)$$

So, having done adjustment of creditworthiness potential for Enterprise 1 and Enterprise 2, we have respectively obtained the following values – 3.85 (group 7 of creditworthiness) and 2.96 (group 5 of creditworthiness). In our case, the enterprises were not transferred to another group of creditworthiness, because values of potentials were not

boundary and rhythm index values did not differ significantly from 1.

Thus, due to increased role of the credit history methodological recommendations for evaluation thereof have been proposed on the basis of calculating creditworthiness index of repayment of obligations under the loan.

It has been established that it is advisable to make adjustment of company's overall creditworthiness potential on the value of the rhythm index.

The proposed method is based on comprehensive information about the company's activities, takes into account company's industry classification, also takes into account not only quantitative but also qualitative parameters with the developed scales of values. This will enhance potential opportunities of enterprises of real sector of economy to get a bank loan.

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