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STATISTICAL APPROACH TO THE EVALUATION OF CREDIT PORTFOLIO RISK OF COMMERCIAL BANK

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Summary. The article dwells on the necessity of a loan, the importance of forming bank high quality loan portfolio and statistical approach to its evaluation.

Key words: *credit, loan portfolio, credit risk, statistical method of loan portfolio risk assessment.*

Modern economy is impossible without credit relationships. There are objective reasons for this fact. One of them is temporary need of some business entities for additional resources on the one hand and, on the other hand, temporary free resources in other business entities that are looking for profitable investment.

Credit operations have a high risk. That is why a very important criterion of the credit portfolio quality is credit risk.

Assessment of the credit portfolio quality from the position of credit risk is currently the main “headache” of the majority of commercial banks of the Republic of Belarus. Creating a high quality loan portfolio should be a basis for a stable financial position for each individual bank as well as for the whole banking system.

Among many existing methods, banks of the Republic of Belarus are advisable to apply the statistical method of assessing bank credit portfolio.

The statistical method aims to estimate risk of bank credit portfolio with the help of statistical analysis methods and is based on analysis of statistical data related to the states of financial borrowers for a certain period of time. Statistical values indicate the importance of each characteristic for determination of risk level. Credit risk assessment means that cumulative risks impact on the loan portfolio affects its quality. This statement allows interpreting the credit

risks variation on the agreements comprising bank loan portfolio as a generalizing indicator of lending activities riskiness

Statistical method of risk assessment includes several stages:

- statistical analysis of credit risks concerning the agreements comprising bank loan portfolio;
- characteristics of credit risk sparseness on loan portfolio;
- magnitude and frequency of credit risk occurrence.

The main instruments of statistical method of bank credit portfolio risk estimation are such indicators as dispersion (volatility), variation, standard deviation, variation coefficients, asymmetry, correlation and covariance.

Bank credit risk is characterized by a probability distribution. Main statistical indicators of risk level determination are standard deviation and coefficient of variation. The calculation of average weighted credit portfolio risk, its variance and standard deviation gives a possibility to monitor the level of bank credit portfolio diversification.

The advantage of using the statistical method lies in the fact that it allows to take into account losses probability on loans issued to borrowers whose creditworthiness did not cause any concerns at the time of issuance.

References

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