

Annotation

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Methods of predicting the probability of payments at providing bank factoring services

The article outlines the arguments in favor of the feasibility of using simulation methods for the analysis of indicators of the probability of payments under the provision of factoring services by commercial banks. In practice, banks use such indicators as financial stability and creditworthiness of the debtor for providing services of this nature. For evaluating the instrument of multidimensional classification and fuzzy logic is used on the basis of which the algorithm is developed and a simulation model for calculating probability of payments under the provision of factoring services by banks taking into account peculiarities of borrowers and loan terms. In addition, the proposed method solves the problem of bank employees associated with the problems of classification of receivables and determination of its management practices.

A practical example of the implementation of the proposed model is grounded and presented. It is found that customers are considered suitable for the provision of factoring services as they have the average probability of solvency, creditworthiness, level of financial stability, as well as satisfactory quality characteristics.

Using the proposed model allows us to estimate the probability of payments, taking into account not only quantitative estimates of the customer's financial status, but also the qualitative characteristics of both the client and the service market. The model can be supplemented with new qualitative and quantitative assessments that characterize a particular situation.

The results allowed developing effective control solutions in the field of establishing the necessary balance of the related resources.

Key words: *simulation modeling, methods of analysis, credit risk, factoring, banks*