On The Application of Scoring Models in P2P Lending*

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Abstract

The article discusses the features of using scoring models in peer-to-peer lending. P2P aggregators act as an alternative to traditional bank lending. However, as in traditional bank loan financing, there is a problem of the borrower’s solvency assessing both in the short and long term. The main purpose of this process is to minimise credit risk and reduce the share of “bad” loans. In the process of solving it, a scoring model is created, the main stages of its development are given and the system is tested based on a historical sample. The article proposes an algorithm for assessing the creditworthiness of such online platforms’ potential client. The algorithm is based on classical correlation with the use of predictor significance analysis, categorization of variables, in particular with the construction of a grief graph (weight of evidence) and the Kolmogorov-Smirnov index (KS-index). The ROC curve of the final logistic regression based on the Gini method and the KS-curve to detect the cut-off point are constructed. The final logistic regression based on 10 factors is presented.

Keywords: P2P lending, scoring model, credit rating