



Bank Credit Risk: Evidence from Tunisia using Bayesian Networks

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Abstract

In this article, a problem of measurement of credit risk in bank is studied. The approach suggested to solve it uses a Bayesian networks. After the data-gathering characterizing of the customers requiring of the loans, this approach consists initially with the samples collected, then the setting in works about it of various network architectures and combinations of functions of activation and training and comparison between the results got and the results of the current methods used.

To address this problem we will try to create a graph that will be used to develop our credit scoring using Bayesian networks as a method. After, we will bring out the variables that affect the credit worthiness of the beneficiaries of credit. Therefore this article will be divided so the first part is the theoretical side of the key variables that affect the rate of reimbursement and the second part a description of the variables, the research methodology and the main results.

The findings of this paper serve to provide an effective decision support system for banks to detect and alleviate the rate of bad borrowers through the use of a Bayesian Network model. This paper contributes to the existing literature on customers' default payment and risk associated to allocating loans.