The consumer loan default predicting model-An application of DEA-DA and neural network

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Abstract

In this paper we construct the consumer loan default predicting model through conducting the empirical analysis on the customers of unsecured consumer loan from a certain

financial institution in Taiwan, and

adopt the borrower's demographic variables and money attitude as the real-timeaneous discriminant

information. Furthermore, we construct respectively through four predicting methods, such as DA, LR,

NN and DEA - DA, to compare the suitability of these four mentioned methods. The results show that

DEA - DA and NN are possessed better predicting capability and they are the optimal predicting model

that this study longing for. In addition, this study showed that the default loan predicting model will

be possessed higher level of predicting capability after added money attitude.

Keyword: Consumer loans, Money attitude, Neural networks, DEA-DA, DEA, Logistic regression