

# Efficient Bankruptcy Prediction using Machine Learning

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**Abstract:** *This study is based on a meta-analysis of bankruptcy prediction using machine learning. The data on these studies was collected on six levels: algorithms, data balance, variable categories, variables types, industry, and region. The aim of this project is to analyze the determinants of accuracy in bankruptcy prediction models. To achieve this aim, Mixed Effects models were developed. The results obtained show that while some factors are significant determinants for the accuracy of machine learning models in bankruptcy prediction (algorithm, databalance, industry, region), some factors as data type (continuous or continuous and categorical) and data category (financial or financial and non-financial) do not have an impact on accuracy prediction.*

**Keywords:** Deep Learning, ANN, RNN