Case-based Reasoning in Bankruptcy Prediction

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Abstract

There has been intensive research regarding machine learning models for predicting bankruptcy in recent years, which achieved remarkably accurate results. However, the current generation of machine learning algorithms has been criticized for being black box oracles that allow limited insight into decision factors. To overcome this issue, explainable machine learning models are necessary, which provide accurate prediction results and reasons for decision-making, which enable humans to understand and trust the decisions appropriately. In this study, we propose a data-driven explainable casebased reasoning approach for bankruptcy prediction. This is a joint work with Wolfgang Karl Härdle and Stefan Lessmann.