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Discriminant Analysis Methods for Bank Failure Prediction: A Comprehensive Computational Comparison of Classification Performances on Indian Banks

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Abstract: The paper discusses how bank failures pose a threat to the economic system as a whole and how predicting bank financial failure is crucial to prevent and/or lessen its negative effects on the economic system. The study aims to apply Discriminant analysis methods to the bank failure prediction problem on Indian banks, and to present a comprehensive computational comparison of the classification performances of the techniques tested. Five financial ratios with 2 groups (strong and suspected banks) including capital adequacy, asset quality, management efficiency, earning, and liquidity (CAMEL) are selected as predictor variables in the study.

Keywords: Bank failure prediction, discriminant analysis, financial ratios, CAMEL, bank efficiency, and performance

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