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## ANNs-Based Early Warning System for Indonesian Islamic Banks

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DOI: <https://doi.org/10.21098/bemp.v20i3.856>**Keywords:** Early Warning System, Artificial Neural Networks, Islamic Banks, Financial Distress**Abstract** This research proposes a development of Early Warning System (EWS) model towards the

financial performance of Islamic bank using financial ratios and macroeconomic indicators. The result of this paper is ready-to-use algorithm for the issue that needs to be solved shortly using machine learning technique which is not widely applied in Islamic banking. The research was conducted in three stages using Artificial Neural Networks (ANNs) technique: the selection of variables that significantly affect financial performance, developing an algorithm as a predictor and testing the predictor algorithm using out of sample data. Finally, the research concludes that the proposed model results in 100% accuracy for predicting Islamic bank's financial conditions for the next two consecutive months.

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