ABSTRACT

Islamic rural bank (BPRS) is a type of Islamic bank that helps the national economy through business services to the middle, small and micro. The BPRS has the duty to distribute financing as the main operational activity of the business. The ratio of non-performing financing (NPF) which represents problematic financing actually exceeds the safe limit set by Bank Indonesia.

This research is intended to analyze the factors that influence the BPRS NPF in Indonesia. The independent variables considered for study are internal and external variables. The internal variables (specific bank) in this study are financing to deposit ratio (FDR), operational costs to operating income (BOPO), capital adequacy ratio (CAR), return on assets (ROA), size. Meanwhile, the external variables (macroeconomics) used in this study are gross domestic product (GDP), inflation, and the exchange rate. The population of this study are all BPRS in Indonesia registered in the OJK SPS for the period 2010-2018. This study uses purposive sampling, so that the observation data obtained is 36. The method used in this research is artificial neural network (ANN) to measure the sensitivity of variable influence in a powerful direction. This study also features a multiple linear regression (MLR) model to see the direction of influence and as a comparison for the prediction accuracy of ANN methods.

The results of this study are all variables have influence sensitivity with high classification (> 0.50). Size is the highest measure of influence on ANN method analysis. MLR test results indicate that the variable CAR, ROA, GDP have a positive effect on NPF. Exchange Rate has a negative effect on NPF, while the FDR, BOPO, Size, and Inflation variables have no effect. ANN has a higher level of accuracy when compared to MLR measured through the mean square error, R square, and data distribution.

Keywords: non-performing financing, BPRS, ANN, MLR