FORECASTING NETFLOW OF MONEY CURRENCY
USING ARIMAX AND RADIAL BASIS FUNCTION
NETWORK METHODS
(CASE STUDY IN BANK INDONESIA)

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ABSTRACT
Bank Indonesia (BI) is the central bank of the Republic of Indonesia. BI has one single overarching objective, to establish and maintain rupiah stability. One of the things which has done to achieve this goal is by monitoring netflow of money currency so BI can decide policy toward the money which is out and in to BI. This monitoring is done through forecasting from netflow of money currency value. Forecasting methods in BI are still using ARIMA and the extrapolation of data that is not maximized in predicting netflow of money currency. Thus in this study netflow of money currency would be predicted by different methods, namely ARIMAX and Artificial Neural Network (ANN). Of both methods will be compared to the results of forecasting which method is better. ARIMAX which is used is ARIMAX with calendar variation effect, the predictor variables Consumer Price Index (CPI), and exchange rate. ARIMAX with calendar variation effect is used because Eid-holidays affect netflow of money currency. While the ANN method used is Radial Basis Function Network (RBFN). It is caused the ANN method as a new forecasting techniques in the field of economics and finance at some research gave better forecasting results than existing methods. Period data used in this study is January 2005 to December 2013. The result shows that ARIMAX model with calendar variation effect and CPI as a predictor is the best model for forecasting netflow of money currency.

Key words: Netflow of Money Currency, CPI, Exchange Rate, Forecasting, Calendar Variation, Transfer Function, RBFN.