ABSTRACT

Prediction using Artificial Neural Network (ANN) is nothing new. Interest in using ANN for forecasting has led to a tremendous surge in research activities in the past decade. ANN provide great prediction result and better accuracy compared to other methods for non-linear variable relations. ANN has several advantages such as the ability to learn how to do work based on data provided for initial training or experience, can create its own organization or representation of the information it receives during its learning time, and ANN calculations can be performed in parallel so that specially designed and manufactured hardware can take advantage of this capability. This research presents a prediction of Indonesian economy using multilayer perceptron ANN model.

Indonesia experienced serious economic crisis in 1998. It considered has the worst growth reversal in history, -13% of growth. Rupiah depreciated by more than 500% and inflation reached 78% by 1998 which lead to the rise of unemployment and the downfall of Suharto government. It is very important to prevent the crisis. Prediction of the economy give an insight for government or decision maker to make a better policy so the negative impact of crisis can be prevented. This research applies machine learning in predicting economic condition of Indonesia using ANN to prevent another crisis to happen.

Keywords—Macroeconomics, Artificial Neural Network, Backpropagation.