

## Abstract

Gold is a precious metal that used as a media for invest by some people, because its price that continue to rises every time. Prediction of gold price will rise to 20% by the end of 2011 according to <http://www.bisnis-jabar.com> website. It would be an attractive for investors to buy gold as their investment. That big attention to the rising price of gold would be interesting with the establishment of a method that predict the future price of gold.

In this final assignment, the system prediction of gold proces be build using artificial neural network (ANN) with Time Delay Neural Network (TDNN) architecture as training algorithm.

In this final assignment, invistigated several parameters that associated with TDNN–LMA that covering number of input patterns, lenght of each inputs, number of delay in each layer, and the number of hidden neurons. The results are, predicting gold price can be implemented using Time Delay Neural Network and Levenberg Marquardt Algorithm with the the smallest average error is 0,91 for MSE, and 0,18 for MAPE for the prediction a day later for testing data.

**Key Words:** gold price prediction, *artificial neural network, time delay neural network, levenberg marquardt algorithm* .