ABSTRACT

Gold plays an important role in the world economy because it has many uses, including

as a protective asset, currency guarantees and others. Some reasons to invest in gold is gold more

resistant to inflation and immune to the political intervention. Basicilly the price of gold

fluctuates daily moves and therefore required a system that can predict the movement of the gold

price to assist investors in analyzing and appropriate action so that the risk can be optimized

diminamilisir and return.

In this final project, a softwarethat will predict gold price movements will be built using

technical analysis approach that implemented using memetic algorithm. The algorithm was first

introduced by Pablo Moscato in 1989, this is a combination of genetic algorithm and local search

algorithms. Memetic algorithm are used as a basic framework becauseof memetic algorithm has

higher complexity compared with genetic algorithm (for a given domain) due to memetic

algorithm has local search method to reduce the possibility of premature convergence fitness

value so that it can overcome the problem of premature convergence ..

The database that is used in this Final Project using historical data of Emas Antam

movement which refer to www.portalreksadana.com. at 2009 to 2014 period. Parameter that will

be tested is the influence of the number of chromosomes in a population of fitness value to be

generated.

Key Word: Gold Price Forecasting, Memetic Algorithm, Genetic Algorithm, Local Search

Algorithm, Tabu Search, Antam Gold.