STOCK PRICE FORECASTING

BY USING FUZZY INFERENCE SYSTEM

A THESIS

Presented as Partial Fulfillment of the Requirements

Obtain the *Sarjana Ekonomi* (S1) Degree in Management Program

Faculty of Economics, Universitas Atma Jaya Yogyakarta

Compiled by:

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FACULTY OF ECONOMICS

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Dated December 7^{th}, 2011

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AUTHENTICITY ACKNOWLEGEMENT

I, the writer of this thesis, entitled

"STOCK PRICE FORECASTING

BY USING FUZZY INFERENCE SYSTEM"

Hereby declare that I fully knowledge that my writings does not contain others' or part(s) of others' writing, except for those that have been cited and mentioned in the references.

Yogyakarta December 7th, 2011

Kintakaloka Trisetiawanto

This Thesis Is Dedicated To:

My Lord Jesus Christ

My Beloved Family

My Special One

Heri "Heboh Sendiri" Family

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And All of my friends

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Abstract

This research is to establish a Fuzzy Inference System forecasting model to help the decision making process. In this research, the decision making is about decision making about stocks with the used of the historical data. The data used in this research are secondary data that consist of daily stock price fluctuation, daily closing price, daily trade volume, Price Earning Ratio and Dividend per Share and the name of companies listed in the LQ45 in the period of January 1st 2000 to December 31st 2010. The total sample is one company. For testing the model is performed by compare the real stock price fluctuation and forecasted stock price fluctuation. Every model has its limitation, called as an error. In this research, error is a differences between the real fluctuation compared with forecasting stock price fluctuation. In this research, to know whether the model is applicable or not, errors indexes used. Many errors indexes such as Mean Absolute Deviation, Mean Square Error, Mean Absolute Percentage Error, and Mean Percentage Error.

Keyword: Fuzzy Inference System, forecasting, stock price fluctuation, error indexes.