## DETECTION OF REGIME SWITCHING IN STOCK PRICES BEFORE XD DATES USING GENETIC ALGORITHM

TATCHA SUDTASAN

MASTER OF ECONOMICS

THE GRADUATE SCHOOL
CHIANG MAI UNIVERSITY
APRIL 2012

### DETECTION OF REGIME SWITCHING IN STOCK PRICES BEFORE XD DATES USING GENETIC ALGORITHM

TATCHA SUDTASAN

AN INDEPENDENT STUDY SUBMITTED TO THE GRADUATE SCHOOL IN
PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
MASTER OF ECONOMICS

THE GRADUATE SCHOOL
CHIANG MAI UNIVERSITY
APRIL 2012

# DETECTION OF REGIME SWITCHING IN STOCK PRICES BEFORE XD DATES USING GENETIC ALGORITHM

#### TATCHA SUDTASAN

# THIS INDEPENDENT STUDY HAS BEEN APPROVED TO BE A PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ECONOMICS

EXAMINING COMMITTEE

INDEPENDENT STUDY ADVISORY COMMITTEE

CHAIRPERSON

Prof. Dr. Hung T. Nguyen

TOMOGRA SOUNDMENTERER

Asst. Prof. Dr. Komsan Suriya

22. MEMBER

Assoc. Prof. Dr. Songsak Sriboonchitta

J. Cousan Sunyadvisor

Asst. Prof. Dr. Komsan Suriya

....CO-ADVISOR

Assoc. Prof. Dr. Songsak Sriboonchitta

26 April 2012 © Copyright by Chiang Mai University

#### Acknowledgements

This work would not be possible without the supports and encouragement from Dr. Komsan Suriya. He has trusted on my ability and encouraged me during the whole stage of the work. He has been abundantly helpful by instructing me the right track how to proceed my study in order to develop my own contributions to the academic world.

Moreover, I would also like to thank the examining committee, Professor Dr. Hung T. Nguyen and Associate Professor Dr. Songsak Sriboonchitta for giving me the most precious advice, comments and suggestions on my work.

The author would like to thank Professor Berlin Wu for his inspiration and stimulation of this study. His instructions and comments are so crucial to the study and make me confident to go on my work.

I would also like to thank the officer at the Financial and Investment Center (FIC), Chiang Mai University for his kind assistance in retrieving the data.

I cannot end without thanks to my father and mother for their constant encouragement and enormous love on which I have relied throughout my time at the academy.

Tatcha Sudtasan