

**COPULA BASED-GARCH MODEL ANALYSIS OF VOLATILITY  
AND DEPENDENCE OF CHINA INTERNATIONAL  
TOURISM DEMAND**

**JIECHEN TANG**

**DOCTOR OF PHILOSOPHY  
(ECONOMICS)**

**GRADUATE SCHOOL  
CHIANG MAI UNIVERSITY**

**MAY 2014**

**COPULA BASED-GARCH MODEL ANALYSIS OF VOLATILITY  
AND DEPENDENCE OF CHINA INTERNATIONAL  
TOURISM DEMAND**

**JIECHEN TANG**

**A THESIS SUBMITTED TO CHIANG MAI UNIVERSITY IN PARTIAL  
FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF  
DOCTOR OF PHILOSOPHY  
(ECONOMICS)**

**GRADUATE SCHOOL, CHIANG MAI UNIVERSITY**

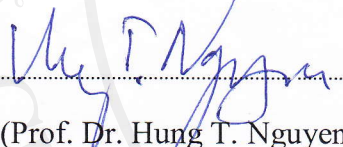
**MAY 2014**

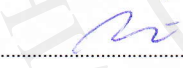
**COPULA BASED-GARCH MODEL ANALYSIS OF VOLATILITY  
AND DEPENDENCE OF CHINA INTERNATIONAL  
TOURISM DEMAND**

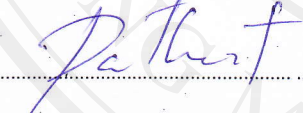
JIECHEN TANG


THIS THESIS HAS BEEN APPROVED TO BE A PARTIAL FULFILLMENT OF  
THE REQUIREMENTS FOR THE DEGREE OF  
DOCTOR OF PHILOSOPHY  
(ECONOMICS)


**Examination Committee:**

.....Chairman  
(Prof. Dr. Hung T. Nguyen)


.....Member  
(Prof. Dr. Songsak Sriboonchitta)

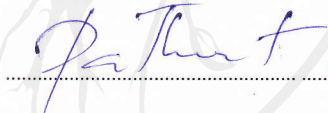
.....Member  
(Lect. Dr. Pathairat Pastpipatkul)


.....Member  
(Lect. Dr. Chukiat Chaiboonsri)

.....Member  
(Assoc. Prof. Dr. Kanchana Chokethaworn)

**Advisory Committee:**

.....Advisor  
(Prof. Dr. Songsak Sriboonchitta)

.....Co-advisor  
(Lect. Dr. Pathairat Pastpipatkul)

.....Co-advisor  
(Lect. Dr. Chukiat Chaiboonsri)

12 May 2014

Copyright © by Chiang Mai University

## ACKNOWLEDGEMENT

This thesis would not be completed without sincere support and patient guidance from many wonderful people. I hereby would like to express my sincere and heartfelt appreciation to them who have assisted me.

First, I am grateful to my advisor, Prof. Dr. Songsak Sriboonchitta of Chiang Mai University's Faculty of Economics for his guidance and support and throughout my doctoral studies. Your knowledge and wisdom steered my study and research.

Second, I would like to express my heartfelt gratitude to Prof. Dr. Hung T. Nguyen, Wing-Keung Wong and Vicente Ramos, who provided patient guidance and given me helpful advice. Also I would like to thank Assoc.Prof. Dr. Kanchana Chokethaworn, Dr. Pathairat Pastpipatkul, and Dr. Chukiat Chaiboonsri, my thesis committee, for comments, suggestions, and supporting me with everything related to my thesis.

I would like to express my sincere thanks to my friends who help, supported and encouragement me throughout more than three years of study and life in Chiang Mai University's Faculty of Economics.

I have submitted parts of the developing thesis to various conferences and journals. The editors of those papers have given me valuable suggestions and helped me to take shape my thesis. Thank you for them.

Most importantly, I would like to express my heartfelt appreciation to my family. Without their love and support, I would never complete the thesis and realize my goal. I love you and thank you very much!

Jiechen Tang