

THE RELATIONSHIP BETWEEN VOLATILITY OF  
MALAYSIAN STOCK PRICE AND THE VOLATILITY OF  
MACROECONOMIC VARIABLES FOR FIVE ASIAN  
COUNTRIES

MAI SYAHEERA BT MIAU SHAARI

MASTER OF SCIENCE (FINANCE)  
UNIVERSITI UTARA MALAYSIA

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COUNTRIES

By

MAI SYAHEERA BT MIAU SHAARI

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**KOLEJ PERNIAGAAN**  
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Universiti Utara Malaysia

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yibrahim@uum.edu.my

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806059

College of Business

Universiti Utara Malaysia

06010 Sintok

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## ABSTRACT

The rapid liberalization and globalization of the financial market around the world has been recognized causes to the higher volatility between macroeconomic variables and stock market. Stock market is one of the macro economy variables and as a leading indicator for economy plays an important role in the development of any country. Despite the importance of the establishing of the relationship between macroeconomic variables and stock prices, there is still no general rule or consensus for both theoretical and empirical literature either in emerging, developed, Asian and Europe economies.

This thesis attempts to analyze the relationship between volatility of Malaysian stock price and the volatility of macroeconomic variables namely exchange rates, money supply and interest rates for Singapore, Philippine, Thailand, Japan and China from January 2000 until December 2010. All previous studies examined the relationship between macroeconomic variables and stock market in a particular country. It is also interesting and beneficial to study the relationship of Malaysian stock market with other countries macroeconomic factors such as exchange rates, money supply and interest rates.



Several tests are used in this study namely Unit Root Tests, Multivariate Cointegration Test, Error Correction Model and Estimation Equation Analysis. Augmented Dickey-Fuller (ADF) test and Phillips-Perron (1988) test are used to ensure all variables are stationary. The other techniques are used to identify short-run and long-run relationship between volatility of Malaysian stock price and macroeconomic variables of five Asian countries and also to determine which country macroeconomic variables give the most impact on Malaysian stock price.

The study finds that there exist short run cointegrating link or relationship between macroeconomic variables and Malaysian stock price. The empirical findings reveal that relationship between macroeconomic variables and Malaysian stock price do form a long run cointegrating link or relationship. From the result shows that exchange rate from China gives the most impact on Malaysian stock price. Policy-makers need to be careful when trying to influence the economy through changes in macroeconomic variables such as the money supply, interest rates or the exchange rate. They may inadvertently depress the stock market and curtail capital formation which itself would lead to further slowdown of the economy.

# TABLE OF CONTENTS

	<b>Page</b>
DECLARATION	ii
PERMISSION	iii
ACKNOWLEDGEMENTS	iv
ABSTRACT	v
TABLE OF CONTENTS	vii
LIST OF TABLES	ix
LIST OF ABBREVIATIONS	x
<b>CHAPTER 1: INTRODUCTION</b>	
1.1 Background of Study	1
1.2 Problem Statement	5
1.3 Research Questions	10
1.4 Research Objectives	10
1.5 Significance of the Study	10
1.6 Organization of the Thesis	11
<b>CHAPTER 2: LITERATURE REVIEW</b>	
2.1 Introduction	13
2.2 Related Theory	13
2.3 Related Empirical Studies	15
<b>CHAPTER 3: RESEARCH METHOD</b>	
3.1 Introduction	29
3.2 Data	29
3.3 Data Analysis Methods	31
<b>CHAPTER 4: ANALYSIS AND FINDINGS</b>	
4.1 Introduction	36
4.2 Unit Root Tests	36
4.3 Multivariate Cointegration Test	38

4.4	Vector Error Correction Model	41
4.5	Estimation of The Long Run Equation	45
<b>CHAPTER 5: CONCLUSION</b>		<b>50</b>
<b>REFERENCES</b>		<b>53</b>
<b>APPENDICES</b>		<b>57</b>
Appendix 1:	Result on Unit Root Tests	57
Appendix 2:	Result on Multivariate Cointegration Test for five Asian Countries	66
Appendix 3:	Result on Vector Error Correction Model for five Asian Countries	70
Appendix 4:	Result on Estimation Equation Analysis for five Asian Countries	76

## LIST OF TABLES

Table 1	Test results of Unit Roots
Table 2	Johansen Cointegration Test for five Asian Countries
Table 3	Johansen Cointegration Test after combine five Asian Countries
Table 4	Estimates of the Error Correction Model for five Asian Countries
Table 5	Estimates of the Error Correction Model after combine five Asian Countries
Table 6	Estimates of the Long-run Co-integrating Relationship for five Asian Countries
Table 7	Estimates of the Long-run Co-integrating Relationship after combine five Asian Countries

## LIST OF ABBREVIATIONS

ADF	Augmented Dickey Fuller
KLSE	Kuala Lumpur Stock Exchange
IR	Interest Rate
M3	Money Supply
EXRC	Exchange rate China
EXRT	Exchange rate Thailand
EXRP	Exchange rate Philippine
EXRS	Exchange rate Singapore
EXRJ	Exchange rate Japan

# CHAPTER 1

## INTRODUCTION

### 1.1 BACKGROUND OF STUDY

Most nations desire a stable economic growth as their major goal. In order to guarantee a stable and high standard of living, policy makers and economists are continuously searching ways for maintain the economic growth. However, history had shown that economic growth never been stable in the long run. Economic instability has also been interrupted in certain period. Economists have classified this situation as the business cycle due to the out of action and rumble in economic activities (Cheng and Okposin, 2000).

The growing linkages between macroeconomic variables and the movement of stock prices for the developed countries have well been documented in the literature over the last several years (Fama, 1981; Friedman, 1988; Keran, 1971, Nelson, 1976). Most of such studies suggest that financial and macroeconomic variables influence stock prices across a variety of markets and time horizons (Been et al., 1990; Bulmash & Trivoli, 1991; Campbell, 1987; Cochrane, 1991; Fama & French, 1989; Golsten et al., 1993, Ibrahim, 1999; Maysami & Koh, 2000; Mukherjee & Naka, 1995; Poon & Taylor, 1991). A number of studies, for example, modeled relationships between US stock prices and real economic activity (Abdullah & Hayworth, 1993; Chen et. al., 1986;

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