



UNIVERSITI PUTRA MALAYSIA

***RELATIVE FORECASTING PERFORMANCE OF STOCK RETURN
FOR REAL ACTIVITY IN EMERGING MARKETS OF ASEAN
COUNTRIES***

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**MASTER OF SCIENCE
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UPM
UNIVERSITI PUTRA MALAYSIA
BERILMU BERBAKTI

**RELATIVE FORECASTING PERFORMANCE OF STOCK RETURN FOR
REAL ACTIVITY IN EMERGING MARKETS OF ASEAN COUNTRIES**

By

LIM YIN PING

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in
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December 2012

Abstract of thesis presented to the Senate of Universiti Putra Malaysia
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**RELATIVE FORECASTING PERFORMANCE OF STOCK
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This study has given a focus on the forecasting ability of stock market return for real GDP using stock market indicators. The forecasting ability of various financial variables particularly stock market variables for real economic activity is highly important since it signals whether policy makers should respond to changes in stock market returns. The present study is limited to the ASEAN-5 countries, as they are closely integrated and in addition it is the region that deserves more attention. In the analysis, a comparison is made between stock returns and other potential predictive variables in their ability to predict future variation in GDP. These potential predictive variables include interest rate, exchange rate, money supply and US GDP. From many forecasting methods, the out-of-sample rolling regression has been adopted to examine the forecasts over 1-, 2-, 4-, and 8-quarters ahead. Eviews 7.0™ was employed for running the simulation and obtaining the results. The

results showed that the stock returns serve as the best predictor, as it improves the forecast accuracy by up to 44%, meaning that there is a 44% reduction in the forecasting error, for the case of 2-quarter ahead GDP growth forecast in Malaysia. In addition, stock returns played an important role in GDP forecast for Singapore as it reduces the forecast error at most by 38%, Thailand by 18% and Indonesia by 7% in the 1-quarter ahead forecast, while the Philippines getting 8% forecast error reduction in the 4 quarter-ahead forecast.



Abstrak tesis yang dikemukakan kepada Senate Universiti Putra
Malaysia sebagai memenuhi keperluan untuk ijazah Master Sains

**PRESTASI UNJURAN DARI PULANGAN PASARAN SAHAM
UNTUK KDNK BENAR DALAM PASARAN BARU MUNCUL DI
NEGARA ASEAN**

Oleh

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Kajian ini memberi fokus kepada keupayaan unjuran dari pulangan pasaran saham untuk KDNK Benar dengan menggunakan penunjuk pasaran saham. Keupayaan unjuran daripada pelbagai pemboleh ubah kewangan terutamanya pemboleh ubah pasaran saham bagi aktiviti ekonomi sebenar adalah amat penting kerana ia menandakan sama ada penggubal dasar perlu bertindak balas terhadap perubahan atas pulangan pasaran saham. Kajian ini adalah terhad kepada negara-negara ASEAN-5, kerana mereka berkait rapat dan ianya juga adalah rantau yang layak diberi lebih perhatian. Dalam analisis, perbandingan dibuat di antara pulangan saham dan juga potensi pemboleh ubah ramalan yang lain yang berupaya meramalkan perubahan KDNK masa depan. Pemboleh ubah ramalan potensi ini termasuk kadar faedah, kadar pertukaran asing, bekalan wang dan KDNK Amerika Syarikat. Di kalangan banyak kaedah unjuran, regresi beralun luar-sampel telah diterima pakai untuk

memeriksa unjuran atas 1-, 2-, 4-, dan 8-suku tahun hadapan. Eviews 7.0TM telah digunakan untuk menjalankan simulasi dan mendapatkan keputusan. Hasil kajian menunjukkan pulangan saham bertindak sebagai peramal yang terbaik. Ianya mampu meningkatkan ketepatan unjuran sehingga 44%, iaitu pengurangan 44% ralat unjuran atas ramalan pertumbuhan KDNK 2-suku hadapan dalam kes Malaysia. Tambahan pula, pulangan saham ialah pemboleh ubah yang penting untuk meramalkan KDNK Singapura, sebab ianya mampu mengurangkan ralat unjuran sebanyak 38%, Thailand dengan 18% and Indonesia 7% dalam ramalan 1-suku hadapan. Filipina dapat 8% pengurangan ralat unjuran dalam ramalan 4-suku hadapan.

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DECLARATION

I declare that the thesis is my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously, and is not concurrently, submitted for any other degree at Universiti Putra Malaysia or at any other institution.



LIM YIN PING

Date: 4 December 2012



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LIST OF ABBREVIATIONS

AR	Autoregression
ADL/ARDL	Autoregressive Distributed Lag
ASEAN	Association of Southeast Asian Nations
ECM	Error Correction Models
ER	Exchange Rate
G7	Group of Seven Countries
GDP	Gross Domestic Product
KDNK	Keluaran Dalam Negara Kasar
IMF	International Monetary Fund
INT	Interest Rate
JKSE	Jakarta Stock Exchange
KLSE	Kuala Lumpur Stock Exchange
MAE	Mean Absolute Error
MS	Money Supply
OECD	Organization for Economic Co-operation and Development
OLS	Ordinary Least Square
PSEI	Philippines Stock Exchange
RMSE	Root Mean Square Error
SET	Stock Exchange of Thailand
SR	Stock Returns
STI	Straits Times Index
VAR	Vector Autoregression
VECM	Vector Error Correction Models

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