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# MACROECONOMIC VARIABLES AND STOCK PRICES IN MALAYSIA: AN EMPIRICAL ANALYSIS FROM THE PREAND POST JULY 1997 PERIOD

A thesis submitted to the Graduate School in partial fulfillment for the requirements for the degree

Master of Economic

Universiti Utara Malaysia

by Siti Nurazira Binti Mohd Daud

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### ABSTRAK (BAHASA MALAYSIA)

Kertas ini mengkaji kewujudan interaksi dinamik di antara lima pembolehubah makroekonomi dengan harga saham di Malaysia, bagi tempoh sebelum dan selepas krisis kewangan yang berlaku pada Julai 1997. Pemboleubah makroekonomi yang digunakan dalam kajian ini terdiri daripada tingkat harga, bekalan wang, jumlah rizab, kredit aggregat dan pengeluaran industri. Bagi mengkaji keseimbangan dinamik dalam jangkamasa pendek dan jangkamasa panjang di antara pembolehubah makroekonomi dengan harga saham, ujian Kointegrasi (Cointegration) dan ujian Kesebaban Granger (Granger Causality) dengan Model Pembetulan Ralat (Error Correction Model) digunakan. Oleh itu, di samping dapat mengukuhkan hubungan dalam jangkamasa pendek dan jangkamasa panjang di kalangan pembolehubah, ia juga dapat mengkaji hipotesis keefisienan pasaran saham sebelum dan selepas krisis kewangan. Hasil kajian mendapati bagi tempoh masa sebelum krisis kewangan, harga saham di Malaysia adalah tidak efisien; masih bergantung kepada maklumat mengenai tingkat harga, bekalan wang, jumlah rizab, kredit aggregat dan pengeluaran industri. Manakala selepas krisis kewangan, kajian mendapati bahawa harga saham di Malaysia masih berada dalam keadaan yang tidak efisien; masih bergantung kepada maklumat kesemua pemboleubah kecuali pembolehubah jumlah rizab. Ujian kesebaban Granger pula mendapati, sebelum krisis kewangan, kredit aggregat dan jumlah rizab mempunyai hubungan jangkamasa pendek dengan harga saham. Walaubagaimana pun, selepas krisis kewangan, didapati wujud hubungan jangkamasa pendek di antara pemboleuhbah kredit aggregat, tingkat harga, jumlah rizab dan pengeluaran industri dengan harga saham. Kesimpulannya, harga saham di Malaysia masih berada dalam keadaan yang tidak effisien walaupun selepas pelaksanaan beberapa polisi baru semasa krisis kewangan. Dapatan daripada kajian ini, diharap dapat membantu para pelabur dalam proses mencipta keuntungan, serta membantu pembuat polisi dalam memilih, merancang dan melaksanakan polisi bagi menstabilkan dan mengekalkan ekonomi negara.

### **ABSTRACT (ENGLISH)**

This paper aims to investigate the dynamic interaction between five macroeconomic variables and the stock prices during pre- and post financial crisis in July 1997. The macro variable consists of price level, money supply, total reserve, domestic credit aggregate and industrial production. The cointegration and causality Error Correction Model (ECM) were used in this study, to analyze the dynamic equilibrium in the shortrun and long-run between macroeconomic variables and the stock prices. Moreover, it established the short-run and long-run relationship among the variables in order to test the informational efficiency market hypothesis before and after the financial crisis. The result shows that Malaysian stock prices is informationally inefficient due to money supply, credit aggregate, total reserve, price level and the industrial production during the period before financial crisis. Meanwhile, period after the financial crisis suggest that Malaysian stock market still in its informational inefficient market prior to all variable except for the total reserve which indicate the long-run predictability of Malaysian equity prices. The Granger Causality test for the period before financial crisis found that credit aggregate and total reserve has short-run relationship with the stock prices. However for the period after the financial crisis, the result suggest that the short run relationship exist among the credit aggregate, price level, total reserve and industrial production with the stock price. As a conclusion, after some new policy implemented, Malaysian stock prices are still in the informationally inefficient behavior. In addition, investors can use this information to formulate some profitable trading and it may be useful for the policy maker in choosing, planning and implemented a new policy to stabilize and maintain our economic situation.

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### CHAPTER 1

### INTRODUCTION

### 1.1 Introduction

This paper describes the dynamic interaction between macroeconomic variables and stock prices during pre- and post Asian financial crisis in July 1997. Prior to the attack on Thai Baht in mid May 1997, the crisis has been spread out across East Asian countries. Indonesia and Philippines also have been forced to float their currencies in the market while Singapore Dollar and Malaysia Ringgit came under repeated bouts of selling pressure. During the financial crisis, Ringgit to dollar value had been pegged and some capital controls policies had been implemented in order to recover from the economic downturn. This chapter briefly illustrates about the financial crisis and policy that had been implemented in order to investigates the structural changes of the informational efficiency of KLSE. The problem statement, objectives and the significance of the study have also been stated in this chapter.

### 1.2 Asian Financial Crisis on the Malaysian Economy

The East Asian crisis that began in July 1997 was unique in terms of the frequency and severity of the contagion effect which spread to countries spanning three continents. At its initial stage, the crisis was perceived as an isolated

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