THE EFFECTS OF ECONOMIC FACTORS ON

KUALA LUMPUR STOCK EXCHANGE COMPOSITE INDEX

A thesis submitted to the Graduate School of Universiti Utara Malaysia

in partial fulfilment of the requirement

for the Master Degree of Science (Management)

BY

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1998

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ABSTRAK

Perkembangan ekonomi merupakan salah satu faktor utama yang mempengaruhi haluan pasaran saham. Pasaran saham pula mencerminkan dan menjadi salah satu ukuran perkembangan ekonomi negara yang boleh dipercayai. Kajian ini menyelidik impak kadar pertukaran wang asing, kadar faedah dan kadar inflasi terhadap Indeks Komposit Bursa Saham Kuala Lumpur (CI) dengan menggunakan kaedah "Multivariate Time-Series Regression". Berdasarkan "Pearson Correlation Matrices" dan "Scatter Plot", "multicollinearity" dan "heteroscedasticity" wujud di antara pembolehubah-pembolehubah matawang asing serta pembolehubah-pembolehubah bebas (independent variable). Oleh itu, kajian ini cuba minimakan masalah tersebut dengan mengaplikasikan kaedah "Multivariate Time-Series Regression" dengan "Autoregression" dan "Moving Average". Kajian ini mendapati bahawa ujian tiga-faktor dengan menggunakan kaedah di atas menunjukkan coefficient kadar pertukaran dan kadar faedah adalah signifikan, tetapi coefficient kadar inflasi sebaliknya. Ujian ini juga mendapati bahawa kadar pertukaran dan kadar faedah mempunyai penggaruh yang negatif terhadap CI. Ini menunjukkan bahawa kadar pertukaran dan kadar faedah adalah memberi impak yang negatif dan signifikan ke atas CI.

ABSTRACT

An economic climate is a major factor in determining the primary trend of a stock market. The stock market, on the other hand, is often regarded as a reliable barometer of a country's economy. In this study, Multivariate Time-Series Regression model are used to examine empirically the impact of foreign exchange rates, interest rate and inflation rate on Kuala Lumpur Stock Exchange Composite Index (CI). Pearson Correlation Matrices and Scatter Plots indicate that multicollinearity and heteroscedasticity exist among the selected currencies and independent variable. The finding in three-factor test using Multivariate Time-Series Regression with Autoregressive Moving Average technique indicates that coefficient of exchange rates and interest rate are significant, however, the coefficient of inflation rate is not significant. This study also indicates that both exchange rates and interest rate are negatively related to CI. This indicates that foreign exchange rates and interest rate do significantly and negatively affected the CI.

ACKNOWLEDGMENTS

I wish to express my sincere gratitude to my thesis supervisors: Dr. Che Ani bin Mad and Puan Nor Hayati binti Ahmad, for their encouragement, many helpful comments, valuable suggestions for improvement, and assistance in bringing this study to its conclusion.

I am indebted to many other people who have helped me either directly or indirectly with this study. There are too many of them to mention here individually. I wish to express my gratitude to my mother and brothers for their support and inspiration during my study. Finally, I would like to thank my wife, Siew Lee for her love, devotion, and tremendous help with this study.

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LIST OF ABBREVIATIONS

AIC	Akaike Information Criterion
ALR	Average Lending Rate
AR	Autoregression
ARMA	Autoregressive Moving Average
CDS	Central Depository System
CHF	Swiss Franc
CI	Kuala Lumpur Stock Exchange Composite Index
CPI	Consumer Price Index
CRSP	University of Chicago Center for Research in Security Prices
DM	German Mark
DW	Durbin-Watson
Forex	Foreign Exchange Rates
GDP	Pound Sterling
GLS	Generalized Least Squares
HK$	Hong Kong Dollar
IFS	IMF's International Financial Statistics
IMF	International Monetary Fund
KLSE	Kuala Lumpur Stock Exchange
MA	Moving Average
MCD	Malaysian Central Depository Sdn. Bhd.
MERM	Multilateral Exchange Rate Model

LIST OF ABBREVIATIONS -- Continued

OLS	Ordinary Least Squares
S$	Singapore Dollar
SCAN	Securities Clearing Automated Network Sdn. Bhd.
SDR	Special Drawing Right
SEE	Standard Error of Estimation
SES	Stock Exchange of Singapore
US$	US Dollar
Yen	Japanese Yen

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CHAPTER ONE

INTRODUCTION

1.1 Problem Statement

An economic climate is a major factor in determining the primary trend of a stock market. As such, the stock market is often regarded as a reliable barometer of a country's economy, and the stock prices are deemed as a reflection of future expectations concerning the economics well being of the country. Due to this factor, it is necessary to know the cause and effects of economic variables and their relationship with stock market performance.

In Malaysia, stock market contributes to the best allocation of capital resources among numerous users. The roles of the stock market are mainly to facilitate and encourage the mobilization of funds, direct them towards efficient economic activities, provide adequate liquidity for investors and encourage the creation of large-scale enterprises.

The Kuala Lumpur Stock Exchange Index (CI) is the most popular indicator of the Kuala Lumpur stock market performance. The CI represents share prices of 100 corporations. These companies are chosen because their operations cover a broad spectrum of economic performance in Malaysia and more significantly reflect stock market activities with fair accuracy.

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BIBLIOGRAPHY

_____. (1994). *SPSS Trend* 6.1. Chicago: SPSS Inc.

_____ *The Kuala Kumpur Stock Exchange Composite Index.* Kuala Lumpur Stock Exchange.

Bartov, Eli & Bodnar, Gordon M. (1994). "Firm Valuation, Earnings Expectation, and the Exchange-Rate Exposure Effect". *Journal of Finance, Vol. XLIV No. 5,* 1754-1785.

Bodnar, Gordon M. & Gentry, William, M (1993). "Exchange Rate Exposure and Industry Characteristics: Evidence from Canada, Japan, and the USA". *Journal of International Money and Finance, Vol. 12, 29-45*

Briggs, P. W. (1987). *Foreign Currency Exposure Management.* Butterworths.

Choi, Jongmoo Jay, Elyasiani, Elyas & Kopecky, Kenneth J. (1992). "The Sensitivity of Bank Stock Returns to Market, Interest and Exchange Rate Risks". *Journal of Banking and Finance, Vol. 16,* 983-1004.

Economic Report 1997/98. (1997). Ministry of Finance Malaysia

Fama, E.F. (1990). "Stock Returns, Expected Returns, and Real Activity". *Journal of Finance, Vol. 45,* 1089-l 108.

Http://www.bnm.gov.my – Bank Negara Malaysia Home Page.

Http://www.klse-ris.com.my/klse-ris / securities analysis / risk return analysis & performance evaluation.

Jorion, Philippe. (1990). "The Exchange-Rate Exposure of U.S. Multinationals". *Journal of Business, Vol. 63, No. 3, 33 1-345.*

Jorion, Philippe. (1991). "The Pricing of Exchange Rate Risk in the Stock Market". *Journal of Financial and Quantitative Analysis, Vol. 26, No. 3, 363-376.*

Kerridge, D. *S.* (1988). *Investment-A Practical Approach.* London: Longman.

Khoo, Andrew. (1994). "Estimation of Foreign Exchange Exposure: An Application to Mining Companies in Australia". *Journal of International Money and Finance,* Vol. 13, 342-363.

Lehmann, Michael B. (1990). *The Dow Jones-Irwin Guide to Using the Wall Street Journal.* 3ed. Japan: Toppan Co., Ltd.

Lessard, D. R. and Lightstone J. B. (1986). "Volatile Exchange Rates Can Put Operations at Risk". *Harvard Business Review, July-August.*

Lim, See-Yan. (1984). "ASEAN: Financial Development and Interdependent". *Occasional Paper* 2. Bank Negara Malaysia.

Mann, Prem S. (1995). *Statistics for Business and Economics.* New York: John Wiley & Sons, Inc.

Mark, Nelson C., "Real and Nominal Exchange Rates in the Long Run: An Empirical Investigation". *Journal of International Economics, February 1990, Vol. 28,* 115-136.

Norusis, Marija J. (1993). *SPSS for Windows Base System User's Guide Realease 6.0.* Chicago: SPSS Inc.

Norusis, Marija J. *(1995). SPSS 6. 1 Guide to Data Analysis.* Chicago: SPSS Inc.

Neoh, Soon Kean. (1991). *Stock Market Investment in Malaysia and Singapore.* Kuala Lumpur: Berita Publishing.

Prasad, Anita Mehra & Rajan, Murli. (1995). "The Role of Exchange and Interest Risk in Equity Valuation: A Comparative Study of International Stock Markets". *Journal of Economics and Business, Vol. 47,* 457-472.

Quarterly Bulletin, Third Quarter 1997. Bank Negara Malaysia

Shapiro, Alan C. (1975). "Exchange Rate Changes, Inflation, and the Value of the Multinational Corporation". *The Journal of Finance, Vol. 30, No. 2,* 485-502.

Shin, Kilrnan. (1996). *SPSS Guide for DOS version 5.0 and Windows Version 6.0 and 6.12. 2 ed.* Boston: Irwin.

Yeo, Keng Un. (1991). *Investment &You.* Kuala Lumpur: Pelanduk Publications.