INFLUENCE OF MACROECONOMIC FACTORS ON

MALAYSIAN STOCK RETURNS

KHAIRUL NAJIHAH BINTI YUSOF

UNIVERSITI UTARA MALAYSIA

2015

INFLUENCE OF MACROECONOMIC FACTORS ON

MALAYSIAN STOCK RETURNS

KHAIRUL NAJIHAH BINTI YUSOF

Thesis Submitted to

School of Economic, Finance and Banking,

Universiti Utara Malaysia,

In Partial Fulfillment of the Requirement for the Master of Sciences (Finance)

PERMISSION TO USE

In presenting this dissertation/ project paper in partial fulfilment of the requirements for a Post Graduate degree from Universiti Utara Malaysia (UUM), I agree that the library of this university may make it freely available for inception. I further agree that copying of this dissertation/ project paper in any manner is permitted, in whole or in part, for scholarly purpose may be granted by my supervisor(s) or in their absence, by the Dean of School of Economic, Finance and Banking where I did my dissertation/ project paper. Any activities related to this dissertation/ project paper in whole or in part, for financial gain shall not be allowed without my written consent. It is also understood that due recognition shall be given to me and to the UUM in any scholarly use which may be made of any material in my dissertation/ project paper.

Request for permission to copy or to make other use of materials in this dissertation/ project paper in whole or in part should be addressed to:

Dean of School of Economic, Finance and Banking,

University Utara Malaysia

06010 Sintok

Kedah Darul Aman

i

ABSTRAK

Kajian ini mengkaji faktor-faktor makroekonomi yang mempengaruhi pasaran saham di Malaysia. Antara faktor-faktor makroekonomi yang dikaji adalah bekalan wang, inflasi, harga minyak, kadar pertukaran mata wang dan indeks pengeluaran industri. Manakala pasaran saham Malaysia yang dikaji adalah FTSE Bursa Malaysia KLCI (FBM KLCI) dan FTSE Bursa Malaysia EMAS Indeks (FBM EMAS Indeks). Hasil kajian mendapati hanya tiga pembolehubah makroekonomi yang penting dapat mempengaruhi FBM KLCI manakala dua lagi tidak mempengaruhi secara penting. Bagi FBM EMAS Index pula, semua pembolehubah makroekonomi tidak dapat mempengaruhi secara penting kecuali bekalan wang. Walaubagaimanapun, kedua-dua pasaran saham ini menunjukkan hubungan yang sama iaitu hanya inflasi mempengaruhi secara positif manakala empat pembolehubah lain mempengaruhi secara negatif. Akhir sekali, krisis kewangan 2008 menunjukan tiada kesan penting keatas kajian ini.

Katakunci :   bekalan wang; inflasi; harga minyak; kadar pertukaran mata wang; indeks pengeluaran industri; FBM KLCI; FBM EMAS Indeks
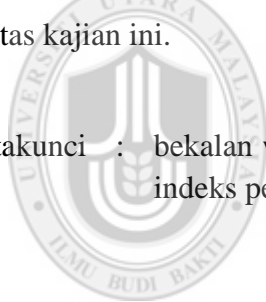
ABSTRACT

This paper studies macroeconomic factors that influence stock market in Malaysia. Macroeconomic factors used in this study are money supply, inflation, oil price, exchange rate and industrial production index. Meanwhile, Malaysian stock market returns studied are FTSE Bursa Malaysia KLCI (FBM KLCI) and FTSE Bursa Malaysia EMAS Index (FBM EMAS Index). The findings showed only three macroeconomic variables are significantly influenced FBM KLCI while the rest two are not significant. Meanwhile, for FBM EMAS Index, all macroeconomic variables are not significantly influenced except for money supply. However, both stock returns show the same relationship which is only inflation has positive influences while the rest four variables are negatively influence. Lastly, the financial crisis 2008 indicates that there is no significant impact on this study.

Keywords : money supply; inflation; oil price; exchange rate; industrial production index; FBM KLCI; FBM EMAS Index.
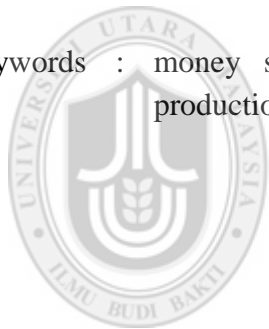
ACKNOWLEDGEMENT

Praises to Allah, the Most Merciful and Most Gracious for bestowing me with patience, strength and health throughout the process of completing this research. This project paper would not be done without the assistance and supports from many people.

I would like to take this opportunity to extend my deepest gratitude to my supervisor, Dr. Hanita binti Kadir @ Shahar for her advices, guidances and supports throughout the entire research. In addition, I would like to thank Universiti Utara Malaysia (UUM) for giving me this great opportunity to achieve my educational goals throughout my Master of Science (Finance) programme in UUM main campus in Sintok, Kedah.

My deepest appreciation also goes to my beloved husband, Mohamad Redzuan bin Sulehin for constant support, patience and understanding throughout my life. Finally, I am thankful for the encouragement and supports given by my beloved parents, Hajah Anisah binti Abdul Rahim, Haji Yusof bin Salleh and Puan Foiazah binti Othman, my family and friends.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

ABT	:	Arbitrage Pricing Theory
ADF	:	Augmented Dickey-Fuller
CPAM	:	Capital Asset Pricing Model
CPI	:	Consumer Price Index
D2LEMAS	:	Second Differnced FBM EMAS Index
D2LIP	:	Second Differenced Industrial Production Index
DFC	:	Dummy Financial Crisis
DLEXR	:	First Differenced Exchange Rate
DLM2	:	First Differenced Money Supply
EXR	:	Exchange Rate
FBM EMAS	:	FTSE Bursa Malaysia Emas Index
FBM KLCI	:	FTSE Bursa Malaysia Kuala Lumpur Composite Index
FBM SCI	:	FTSE Bursa Malaysia Small Cap Index
FBM Top100	:	FTSE Bursa Malaysia Top 100 Index
INF	:	Inflation
IP	:	Industrial Production Index
KLSI	:	Kuala Lumpur Syariah Index
MFT	:	Morden Financial Theory
M2	:	Money Supply
MYR	:	Malaysia Ringgit
OP	:	Oil Price
RHBII	:	Rashid Hussain Berhad Islamic Index
SEE	:	Shanghai Stock Exchange Index
VIF	:	Variance Of Inflation Factors

CHAPTER 1

INTRODUCTION

1.0 Introduction

This study is conducted to examine the relationship between two of the Malaysian stock market returns and five macroeconomic factors. The Malaysian equity markets involved in this study are FTSE Bursa Malaysia KLCI (FBM KLCI) and FTSE Bursa Malaysia EMAS Index (FBM EMAS Index). Meanwhile, the five macroeconomic factors involved are money supply, inflation, exchange rate, oil price and industrial production index. This chapter provides background study, impact of financial crisis 2008, problem statements, research questions and objective, significance of study and study organization.

1.1   Background Study

In recent decades, equity market became a central issue in Malaysia as it is one of the important factors to represent economic activities. Ibrahim and Yusoff (2001) argued that interaction between macroeconomic and stock price is one of the focus that financial economists, policy makers and investors attempted to understand. They also mention that Malaysia's stock price seem to be driven more by the changes in domestic factor.

FTSE Group has partnered with Bursa Malaysia to create the definitive family of indices for the Malaysian market - the FTSE Bursa Malaysia Index Series. The FTSE Bursa Malaysia Index Series is designed to represent the performance of companies, providing investors with a comprehensive and complementary set of indices, which

The contents of the thesis is for internal user only

REFERENCES

Adam, A. M., & Tweneboah, G. (2008). Macroeconomic Factors and Stock Market Movement: Evidence from Ghana. *MPRA Papper No. 11256, posted 26.*

Al-Aharkas, A. (2004). The Dynamic Relationship Between Macroeconomic Factors and The Jordian Stock Market. *International Journal of Applied Econometrics and Quantitative Studies, 1*(1).

Alam, Z., & Rashid, K. (2014). Time Series Analysis of Relationship between Macroeconomic Factors and the Stock Market Returns In Pakistan. *Journal of Yasar University, 9*(36).

Bailey, W. (1989). The Effect of US Money Supply Announcements on Canadian Stock, Bond and Currency Prices. *The Canadian Journal of Economics, 22*(3), 607-618.

Bashar, S. A., & Sadorsky, P. (2006). Oil price risk and emerging stock markets. *Global Finance Journal 17*, 224-251.

Baum, C.F. (2006). *An Introduction to Modern Econometrics Using Stata*. Texas: State Press.

Chen, N.-F., Roll, R., & Ross, S. A. (1986). Economic Forces and the Stock Market. *the journal of Business, Vol. 59, No. 3*, 383-403.

Coakes, S. J., & Ong, C. (2011). *SPSS: analysis without anguish: version 18 for Windows/.* Australia: Jhon Wiley & Sons Australia, Ltd.

Cooper, R. V. L. (1974). Efficient Capital Markets and the Quantity Theory of mone. *Journal of Finance, 24, 887-921.*

EADS, R. S. (2008). *Financial Advisor.* Retrieved 2015, from Inflation Impact: http://www.fa-mag.com/news/inflation-impact-1985.html

Economic Made Simple. (15 October, 2015). Retrieved from Policonomics: http://www.policonomics.com/clement-juglar/

Fama, E. F. (1981). Stock Return, Real Activity , Inflation and Money. *The American Economic Review, 71*(4), 545-565.

FTSE Group. (September 2015). *FTSE Monthly Report.* FTSE.

Gan, C., Lee, M., Yong, h. A., & Zhang, J. (2006). Macroeconomic variables and stock market interactions: New Zealand evidence. *Investment Management and Financial Innovations, 3*(4).

Gujarati, D. N., & Porter, D. C. (2009). *Basic Econometrics International Edition.* New York: McGraw-Hill Education.

Habibullah, M. S., & Baharumshah, A. Z. (1996). Money , Output and Stock Prices in Malaysia: An Application of the Cointegration Tests. *international Economic Journal, 10*(2), 121-130.

Hosseini, S. M., Ahmad, Z., & lai, Y. W. (2011). The Role of Macroeconomic variables on Stock Market Index in China and India. *International Journal of Economics and Finance, 3*(6).

Hsing, Y., Budden, M. C., & Philiph, A. S. (2012). Macroeconomic determinants of the stock market index for a major Latin American country and policy implication. *business and Economic Research ISSN 2161-4860, 2*(1).

Hussin, o. Y., Muhammad, F., Abu, M. F., & Awang, S. A. (2012). Macroeconomic Variables and Malaysian Islamic Stock Market: A Time Series Analysia. *Journal ob Business Studies Quarterly, 3*(4), 1-13.

Ibrahim, M. H., & Aziz, H. (2003). Macroeconomic Variables and the Malaysian Equity Market: a View Through Rolling Subsamples . *Journal of Economics Studies, 30*(1), 6-27.

Ibrahim, M. H., & Wan, S. W. (2001). Macroeconomic Variables, Exchange Rate and Stock Price: A Malaysian Perspective. *IIUM Journal of Economics and Management, 9*(2).

Ibrahim, M. H., & Yusoff, W. S. (2001). Macroeconomic Variables, Exchange Rate and Stock Price: A Malaysian perspective. *IIUM Journal of Ecomonics and Management 9*.

J. Pallant. *SPSS Survival Manual : a step by step guide to data analysis using SPSS*, 4th Edition, Crows Nest, New South Wales, 2006.

Janor, H., Halid, N., & Rahman, A. A. (2005). Stock Market and Economic Activity in Malaysia. *Investment Management and Financial Innovation*.

Jones, C. M., & Kaul, G. (1996). Oil and the Stock Markets. *The Journal of Finance, 11*(2).

Kaasa, A. (2003). Factors Influencing Income Inequality in Transition Economies. *Tartu University Press, 18.*1-40.

Kassim, S. H., Majid, M. S., & Hamid, Z. (2011). The 2007 global financial crisis and the Malaysian stock market: a sectoral analysis. *Afro-Asian J. Finance and Accounting, 2*(3), 185-209.

Khill, J., and B-S. Lee. "Are Common Stocks a Good Hedge Against Inflation? Evidence From the Pacific-rim Countries." *Pacific-Basin Finance Journal 8* (2000):457-82.

Kirui, E., Wawire, N. H., & Onono, P. O. (2014). Macroeconomic Variables, Volatility and Stock Market Returns: A Case of Nairobi Securities Exchange, Kenya. *International Journal of Economics and Finance, 6*(8).

Koop, G. (2008). *Introduction To Econometrics.* West Sussex, England: John Wiley & Sons Ltd.

Kraft, J., & Kraft, A. (1977). Determinants of Common Stock Prices: A time Series Analysis. *The Journal of Finance, 32*(2).

Lee, J., & Wong, A. (2009). Impact on Financial Liberalization on Stock Market Liquidity: Experience in China. *Hong Kong Monetary Authority, 3, 1-22.*

Lewis-Beck, M. (n.d.). R-Squared. Department of Government, 224 Littauer Harvard University Cambridge, MA 02138.

Maskay, B., & Chapman, D. M. (2007). Analysing the relationship between change in money supply and stock market prices. *Department of Economics, Illinois Wesleyan University.*

Maysami, R. C., Lee, C. H., & Hamzah, M. A. (2004). Relationship between Macroeconomic Variables and Stock Market Indices: Cointegration Evidence from Stock Exchange of Singapore's All-S Sector Indices. *Jurnal Pemgurusan, 24,* 47-77.

Mei-Pochtler, D. A. (2015). *The Statistics Portal*. Retrieved from Statista: http://www.statista.com/statistics/319033/inflation-rate-in-malaysia/

Millera, J. I., & Rattib, R. A. (2009). Crude Oil and Stock market: Stability, Instability and Bubbles. *Energy Economics, 31*(4), 559-568.

Mukherjee, T. K. and Naka, A. (1995). Dynamic relations between macroeconomic variables and the Japanese stock market: an application of a vector error correction model. *Journal of Financial Research, 18, 223-37.*

Nieha, C. C., & Lee, C. F. (2001). Dynamic relationship between stock prices and exchange rate for G-7 countries. *The Quarterly Review of Economics and Finance 41*, 477-490.

Pal, K., & Mittal, R. (2011). Impact macroeconomic indicators on Indian capital market. *The Journal of Risk Finance, 12*(2), 84-97.

Rahman, A. A., Sidek, N. Z., & Tafri, F. H. (2009). Macroeconomic determinants of malaysian stock. *Africant Journal of Business management , 3*(3), 095-106.

Rault, C., & Arouri, M. E. (2009). On the influnece of oil prices on stock markets: Evidence from panel analysis in GCC countries. *William Davidson Institute Working Paper Number 961*.

Ravichandran, K., & Alkhathlan, K. A. (2010). Impact of Oil Prices on GCC Stock Market. *Research Applied Economics ISSN 1948-5433, 2*(1).

Rogaliski, R. J. and Vinso, J. D. (1977). Stock returns, money supply and the directions of causality. *Journal of Finance 32, 1017-1030.*

Ross, S. (1976). The Arbitraj Theory of Capital Asset Pricing. *Journal of Economic Theory, 13*(3), 341-360.

Rozeff, M. S. (1974). Money and Stock Prices. *Journal of Financial Economics, 2, 245–302.*

Schwartz, A. J. (27 April, 2015). *the Concise Encyclopedia of Economics Money Supply*. Retrieved from Economist at the National Bureau of Economic Research: http://www.econlib.org/library/Enc/MoneySupply.html

Spanos, A. (1986). Statistical Foundation of Econometric Modelling. *Cambridge: Cambridge University Press.*

Stock, J.H. & Watson, M.W. (2006). Introduction to Econometrics. (2nd ed.). Boston" Addison Wesley.

Subeniotis, D. N., Papadopoulos, D. L., Tampakoudis, I. A., & Tampakoudi, A. (2011). How Inflation, Market capitalization, Industrial Production and the Economic Sentiment Indicator Affect the EU-12 Stock Market. *European Research Studies, 17*(1).

Subhani,M.L.,Osman,A.,&Gul,A.(2010). Relationship Between Consumer Price Index (CPI) and KSE-100 Index Trading Volume In Pakistan and Finding The Endogeneity In The Involved Data. *Relationship between CPI and Stock Trading, 1*, 1-12.

The Malay Mail Online. (2014, December 1). Retrieved October 2015, 2015, from Bernama: http://www.themalaymailonline.com/money/article/weaker-oil-prices-send-kl-shares-lower

Tsoukalas, D. (1988). Macroeconomic factores and stock prices in the emerging Cypriot equity market. *Managerial Finance, 29*(4), 87-92.

Yusof, R. M., & Majid, M. S. (2007). Stock Market Volatility Transmission in Malaysia: Islamic Versus Conventional Stock Market. *J.KAU: Islamic Econ., 20*(2), 17-35