Bank Stock Returns and Macroeconomic Variables: Empirical Evidence from Selected ASEAN Countries

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ABSTRACT

The aim of this study is to examine the effect of macroeconomic variables on bank stock returns in ASEAN. The panel data were retrieved from the DataStream and World Bank data archive, consisting of 58 banks from six countries (Malaysia, Indonesia, Singapore, Thailand, Philippines, and Vietnam) for the period 2004 to 2014. The bank stock return index is used as a proxy for bank stock return while proxies for macroeconomic variables are money supply, interest rate, inflation, and foreign exchange rate. By applying pooled OLS regression analysis, the results show that money supply has negative impact on bank stock returns, indicating that changes in money supply is a major signal for change in stock price because it has a direct influence on stock market and an indirect influence on bond market based on the adjustment of interest rates. Inflation also has negative significant influence on bank stock returns, implying that negative inflation –real activity induced the relationship through the money demand theory and the quantity theory of money. Foreign exchange rate has a positive significance influence on bank stock returns, indicating that the foreign exchange exposures of ASEAN banks have influenced their stock returns since most part of the stock returns are sensitive to the changes in exchange rates during the periods. Meanwhile, interest rate is insignificant with bank stock returns, implying that interest rate sensitivity does not exert a significant impact on the common stock of the banks, which could be caused by the effect of wealth distribution triggered by unexpected inflation when banks hold nominal assets and nominal liabilities. It is recommended that ASEAN banks should involve in various off-balance sheet activities and implement effective and efficient approaches of risk management which reduce their exposure to fluctuations in macroeconomic factors.

Keywords: macroeconomic, stock returns, money supply, interest rate, inflation, exchange rate.

ABSTRAK

Tujuan kajian ini adalah untuk mengkaji kesan pembolehubah makroekonomi pulangan saham bank di ASEAN. Data panel telah diambil dari Datastream dan data Bank Dunia, yang terdiri daripada 58 bank dari enam negara (Malaysia, Indonesia, Singapura, Thailand, Philippines dan Vietnam) bagi tempoh 2004 hingga 2014. Bank indeks pulangan saham digunakan sebagai proksi untuk kembali saham bank manakala proksi untuk pembolehubah makroekonomi adalah bekalan wang, kadar faedah, inflasi, dan kadar pertukaran asing. Dengan menggunakan panel OLS dikumpulkan analisis regresi, keputusan menunjukkan bahawa bekalan wang mempunyai kesan negatif ke atas pulangan saham bank dan menunjukkan bahawa perubahan dalam penawaran wang adalah isyarat utama bagi perubahan dalam harga saham kerana ia mempunyai pengaruh langsung ke atas pasaran saham dan pengaruh tidak langsung kepada pasaran bon berdasarkan pelarasan kadar faedah. Inflasi juga mempunyai pengaruh negatif yang besar ke atas pulangan saham bank, membayangkan hubungan melalui teori permintaan wang dan teori kuantiti wang. Kadar pertukaran asing mempunyai pengaruh yang signifikan dan positif ke atas pulangan saham bank, menunjukkan bahawa pendedahan pertukaran asing bank ASEAN telah mempengaruhi pulangan saham kerana kebanyakan sebahagian daripada pulangan saham sensitif kepada perubahan dalam kadar pertukaran sepanjang tempoh itu. Sementara itu, kadar faedah adalah tidak penting dengan pulangan saham bank, membayangkan bahawa sensitiviti kadar faedah tidak memberikan kesan yang besar ke atas saham biasa bank-bank, yang boleh disebabkan oleh kesan pengagihan kekayaan yang dicetuskan oleh inflasi yang tidak dijangka apabila bank-bank mempunyai aset yang nominal dan liabiliti nominal. Ia adalah disyorkan bahawa bank-bank di negara ASEAN harus melibatkan pelbagai aktiviti di luar lembaran imbangan dan melaksanakan pendekatan yang berkesan dan cekap pengurusan risiko yang mengurangkan pendedahan mereka kepada faktor-faktor makroekonomi.

Kata kunci: makroekonomi, pulangan saham, bekalan wang, kadar faedah, inflasi, kadar pertukaran.

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LIST OF ABBREVIATIONS

ASEAN – Association of South East Asian Nations

BI – Bank of Indonesia

BNM – Bank Negara Malaysia

BoT - Bank of Thailand

BSP - Bangko Sentral ng Pilipinas

IMF – International Monetary Fund

MAS - Monetary Authority of Singapore

DJIA - Dow Jones Industrial Average

CPI – Consumer Price Index

M – Money Supply

FOREX – Foreign Exchange Rate

CHAPTER ONE

INTRODUCTION

1.0 Background

Investment is simply regarded as funds' commitment. In investment, portfolio managers or investors struggle with determining the value of a specific financial asset that is invested on for a period; in order to evaluate whether or not the investment is up to its worth. In making decision on the way to allocate funds among various investment opportunities, it deems imperative to properly assess the intrinsic value of the investments by comparing the estimated value with the main market prices. In regards to the issue of estimating financial asset value, numerous valuation approaches for estimation have been formulated over time. These valuation approaches apply numerous inputs such as the expected rate of return, risk premium, cash flow, interest rate, inflation rate, exchange rate, growth rate, and sales. These variables that are regarded to be associated with the future returns on investment are seriously influenced by the economic attitude. In addition, based on operating in diverse industries in similar economy, companies have different sensitivities to economic factors such as interest rates, inflation, exchange rates, money supply, and economic growth. Thus, companies' different industry and economic environment should be put into consideration in the process of valuation.

Macroeconomic variables are theoretically considered as the causes of volatility in the stock market. Thus, these variables are considered as the important indicator of stock returns. According to Binder and Merges (2001), market portfolio return volatility is negatively associated with the ratio of required profits to required incomes of the

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