

Analyzing the Macroeconomic Determinants in Stock Market Development in Sri Lanka

T.G.D.C. Senavirathna and N.P.R. Deshapriya
Uva Wellassa University, Badulla, Sri Lanka

Introduction

Businesses use diverse types of methods to meet their financial needs. They can mainly be divided into capital market and money market. Capital market provides them long term capital while money market provides short term financial requirements. Among them, stock market is the place where secondary shares are issued to fulfill the capital requirements in public companies and make opportunities for investors to obtain benefits from their investments. In Sri Lanka, these transactions occur in Colombo Stock Exchange.

In generally, stock market development indicates a developing industrial sector and a growing economy of a country. According to the traditional theoretical arguments, stock market development depends on macro economic factors in both developed and emerging stock markets. Especially after the civil war in Sri Lanka, stock market has been playing a major role in the Sri Lankan economy. As a result, Colombo Stock Exchange completed its best year in the history in 2009 overcoming the challenges experienced in 2007 and 2008. This performance of the Colombo Stock Exchange during the year 2009 made it the best performing stock market among the 52 markets beating Mongolia and Bangladesh markets (According to Bloomberg News). Within this scenario, this research was conducted to identify macro economic determinants of growth of stock market as the primary objective while assessing the effect of Exchange rate policy on market capitalization and assessing the effect of war on market capitalization in stock market as secondary objectives. This paper is an effort to quantify the above problem descriptively and econometrically.

Methodology

This study investigated the effects of macroeconomic determinants of growth of stock market in Sri Lanka using monthly data for the period from 1990 to 2009. It also examined the effect of Exchange rate policy on market capitalization and the effect of war on market capitalization. In this study, stock market development was measured by the value of market capitalization. Six macroeconomic variables were employed and they include GDP rate, inflation rate, national saving rate, unemployment rate, nominal interest rate and real interest rate. The data collection was performed by the secondary data collection through the documents published by the stock exchange, Business magazines, Websites, Central bank reports. The analysis of data was performed by the STATA statistical software.

Descriptive tools have been used to summarize the characteristics of independent variables and the dependent variable while econometric tools have been employed to estimate the impact of the independent variable on the dependent variable. The main econometric tool was the Ordinary Least Square (OLS) method and the following regression model was tested.

$$MC = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 D_1 + \beta_8 D_2 + \mu$$

Where;

β_0 = Constant term

$\beta_1 - \beta_6$ are coefficient to be estimated

MC = Market Capitalization

X_1 = Growth rate of Gross Domestic Product

X_2 = Inflation rate

X_3 = Unemployment rate

X_4 = National savings as a percentage of GDP

X_5 = Interest rate

X_6 = Real rate of Interest rate

μ = Residual term

D_1 { 1 = Floating exchange rate policy
0 = Manage floating exchange rate policy

D_2 { 1 = Non war period
0 = War period

Results and discussion

Data analysis revealed three main results. Firstly, results show that while growth rate of gross domestic product, inflation rate, unemployment rate, nominal interest rate and real interest rate are becoming important determinants of stock market development, national savings do not prove to be significant. Secondly, the floating exchange rate policy is proven to be an influential determinant of the development of stock market in Sri Lanka. Lastly, results show that the market capitalization of the war period is lower than the non-war period. Therefore, the political stability has become an influencing factor for the development of the stock market in Sri Lanka.

The negative and positive effects of macroeconomic variables on stock market development found in this study have several practical implications. The evidence indicates that lower unemployment rate plays an important role in determining the stock market development. Thus, it is important to increase the employment rate in Sri Lanka. The growth rate of Gross Domestic Product (GDP) also plays an important role in determining stock market capitalization. This is caused by demanding more financial services and new instruments for economic expansion. Thus, it is essential to boost the economy with a sustainable development rate.

Inflation rate has found to be a negative effect on market capitalization. This finding implies that the stock prices decline during the inflationary phase. Decreasing the inflation rate would be another approach to promote the stock market development in Sri Lanka. The evidence shows that the real interest rate also plays an important role in determining stock market development. Whenever the real interest rate increases, the investors tend to switch out of stocks causing fall of stock market capitalization. Therefore, stock market capitalization can be explained through the behavior of the real interest rate. Further, the floating exchange rate policy plays a vital role in stock

market development in Sri Lanka because it enhances the free transaction possibility of the investors. Many emerging and developing economies are successful examples for this incident. Political stability is an influencing factor for the development of the stock market because peaceful situation gives rise to assurance of economy, strategic purchases made by foreign investors and expectation of increasing the company profits. Therefore the government should preserve this peaceful situation for further support of the stock market development in Sri Lanka.

Conclusions

It can be concluded that there is a significant effect of unemployment rate, growth rate of gross domestic product, inflation rate, nominal interest rate and real interest rate on the behavior of stock prices while national savings do not prove to be significant.

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