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CAN MACROECONOMIC VARIABLES EXPLAIN LONG -TERM STOCK MARKET MOVEMENTS?

A CASE OF COLOMBO STOCK EXCHANGE

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Abstract

This research focuses on studying Sri Lankan stock market in view of finding out whether macroeconomic variables can explain long-term movements of stock returns in Sri Lankan market. The major objective of this research is to determine whether stock returns in Sri Lankan market are mostly driven by macroeconomic variables or by market sentiments based on other factors, to assess the level of the impact of macroeconomic variables in the movements of stock returns. This study also aimed at identifying whether the level of the impact of macroeconomic variables differs among different industries. Monthly a. a period of 15 years from 1991 to 2005 is used in this study. All Share Price Index is used to represent stock returns and four other macro economic variables namely, money supply (M_2), one-year Treasury bill interest rate, Inflation measured by the Colombo Consumer Price Index and Exchange rate in the form of US dollar equivalent per one rupee, are used as proxies for macroeconomic fundamentals. In addition, sector indices of six sectors such as Banking and Finance, Hotel and Tourism, Construction, Industry, Services and Investment are also used in the this research in the sector wise analysis. This research employs two major statistical tools such as Vector Auto Regression (VAR) and Granger Causality Test as the main tools.

Through the results, it is found that there is a long-term relationship between stock returns and macroeconomic variables. Second, the lag-level relationship between stock returns and macroeconomic variables is stronger than contemporaneous relationship. Finally, the level of the impact of macroeconomic variables varies among different industries. According to the contemporaneous analysis, the interest rate and exchange rates are negatively correlated with stock returns, while the money supply and inflation are positively correlated with stock returns in Sri Lankan context. The interest rate is the most influential variable on stock returns and the exchange rate is the least influential variable on stock returns. In the causality analysis, bi-directional causation is found between money supply and stock returns. In addition, a unidirectional causation runs from inflation to stock returns throughout the total sample period. According to the comparison of the findings of contemporaneous analysis and lag-level analysis, the lag-level relationship between stock returns and macroeconomic variables is proved to be stronger than the contemporaneous

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relationship. It proves that the stock market reacts well in advance to the changes in macroeconomic variables. The sector wise analysis has proved that the level of the influence of the selected macroeconomic variables differs among selected six sectors.

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