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Long Run and Short Run Relation between Exchange Rate and Indian Stock Market

AMIT CHAUDHARY*
RAJKUMAR SHARMA**
YAMINI AGARWAL***

Abstract

This study has been done to look into the relation between Exchange Rate (Indian Rupees vs US Dollar) and Indian Stock Market (Nifty 50) by taking daily data from 01st January 2015 to 31st December 2019. ADF Test, Regression, Johansen Cointegration, Wald Test, Granger Causality, were all used for this study. Findings from regression analysis revealed that rate of exchange and stock market in India have a significant negative relation. Results of Johansen Cointegration helped to infer that there is absence of long term equilibrium relation between rate of exchange and Indian stock market. By applying Granger test, no causality has been found from Exchange Rate to Nifty 50 but there is causality from Nifty 50 to rate of exchange. By applying Wald Test, we conclude there is no causality (short term) from Exchange Rate to India's Stock Market but there is causality (short term) from India's Stock Market to Exchange Rate during the period of this study.

JEL Code : F31, F37, F65
Keywords : Exchange Rate; Indian Stock Market; Nifty 50; Johansen Cointegration; Wald Test; Granger Causality; NSE; India

I. Introduction

STOCK MARKETS ARE very essential for economy of any country of the world. Stock markets provide platform for the generation of capital by various businesses. Indian stock market has shown great development after liberalization, privatization and globalization in early nineties. There are many aspects which influence the growth and development of stock markets. Many studies have been done in various countries with the purpose to understand the connection among rate of exchange and stock markets; Mukherjee and Naka (1995); Chung and Shin (1999); Mukhopadhyay and

* Research Scholar Bharati Vidyapeeth (Deemed-to-be-University) Institute of Management and Research (BVIMR) A-4, Paschim Vihar, Delhi, 110063, INDIA.
** Controller of Examination, Guru Ghasidas Vishwavidyalaya Koni, Bilaspur, Chhattisgarh, 495009, INDIA.
*** Professor and Director, Bharati Vidyapeeth (Deemed-to-be-University) Institute of Management and Research (BVIMR), A-4, Paschim Vihar, Delhi, 110063, INDIA.

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Achugbu (2019). The cause for the variation in findings may be due to differences in frequency of data, geographical region and time period taken for the study.

6.1 *Recommendations and Implications*

The present research has valuable implications for various stakeholders viz; investors, academicians, researchers, portfolio managers as well as policy makers. As the relation between variables has been found to be negative and significant, therefore, investors and portfolio managers can take into account exchange rate movement in order to have an idea about the movement in Nifty 50. Causality from Nifty 50 to exchange rate in the short run provides an opportunity to anticipate the investment strategy of foreign institutional investors (FIIs). Retail investors, fund managers and portfolio managers can make use of this information in order to make buy or sell decisions depending upon their risk appetite. For academicians and researchers, this paper provides a thoroughanalysis of relation between exchange rate and Indian stock market in most recent times along with comprehensive overview of available literature. This paper provides a base for researchers from other developing countries to carry further research in this area. The findings of this study can be used by policy makers in order to formulate regulations to prevent a sudden and considerable depreciation of currency.

6.2. *Limitations and Suggestions for Further Research*

One limitation of present study is that it is restricted to Indian context only. Another limitation is that the time period taken for this study is five years. Further research can be undertaken by taking a much larger sample in order to understand relation among rate of exchange and Indian stock market. Moreover, further research can be undertaken by considering few more macroeconomic variables along with exchange rate to study their relation with Indian stock market. Apart from this, data from some other countries can also be taken along with India for further research in this area.

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