An Empirical Study of the effect of Macro-Economic Factors on the Stock Market: An Indian Perspective

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Abstract

The volatility and movement in stock markets reflect the direction of any economy. This study is an endeavor to evaluate the effect of macroeconomic determinants on the performance of the Indian Stock Market Index Nifty using monthly data over the period April 2006 to March 2016 (10 financial years) with twenty macroeconomic variables, namely, Bank Rate, Cash Reserve Ratio (CRR), Statutory Liquidity Ratio (SLR), Repo Rate, Call Money Rate, 91-Day Treasury Bill, Consumer Price Index (CPI), Wholesale Price Index (WPI), Foreign Institutional Investment (FII), Exchange Rate (USD-INR, EUR-INR, GBP-INR, JPY-INR), Gross Domestic Product at Market Price, Index of stock market as dependent variable. Initially, regression analysis has been performed taking CNX Nifty as dependent variable. Then, factor analysis has been applied and interestingly the behavior of the dependent variable i.e Nifty can be explained in a better way with the help of factors derived in this process.

I. Introduction

THE MACROECONOMIC VARIABLES, both real and financial, do have considerable influence, positive as well as negative, on the potential of the corporate sector of the economy. Consequently, the stock markets of the economy get affected by such influence. The movement of stock prices, apart from the firms' fundamentals, also depends upon the level of development accomplished in the economy and its integration towards the world economy. Numerous domestic factors as well as international factors directly or indirectly affect the performance of the stock market. The relationship between macroeconomic variables and a developed stock market is well

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Dr. Agarwal’s book fills a growing and important need. It addresses very succinctly the problems of portfolio construction with multiple objectives.

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Dr. Agarwal’s book reviews ways in which goal programming can enrich the traditional risk-return focus of financial modeling.

—Joseph H. Horan, Professor of Finance, The University of Baltimore, USA

This book explores the risk-return paradox in portfolio selection by incorporating multi-objective criteria. Empirical research is presented on the development of alternative portfolio models and their relative performance in the risk-return framework to provide solutions to multi-objective optimization. Next in outlining techniques for undertaking individual investor’s profiling and portfolio programming, it also offers a new and practical approach for multi-objective portfolio optimization. This book will be of interest to foreign institutional investors (FIIs), mutual funds, investors, and researchers and students in the field.

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