Volatility Clustering and Persistence of Volatility in National Stock Exchange Market of India

Subhrabaran Das and Intaz Ali

The paper examines the volatility clustering, leverage effect and persistence of volatility for the NSE three broad market indices by using GARCH models. It reveals that the volatility in these indices exhibits characteristics like volatility clustering, asymmetry effect and persistence of volatility in their daily return. It reveals that both the recent as well as past news have an impact on volatility of these indices. It also finds the existence of leverage effect indicating that the negative shocks or bad news have more impact on volatility than positive shocks or good news.

I Introduction

Growing role of the financial sector in the efficient allocation of resources at appropriate prices could significantly enhance the efficiency with which our economy functions. If financial markets work well, they will direct resources to their most productive uses. Risks will be more accurately priced and borne by those who have ability for absorbing them. Real economic activity with higher investments in both quantity as well as quality would result in growth with macroeconomic stability and fewer financial uncertainties. A stable financial system facilitates efficient transmission of monetary policy initiatives.

Financial sector reforms constitute the core of the New Economic Policy initiated in India in early 1990s. As a result of this, Indian stock market has witnessed metamorphic changes and transition from a tedious situation to an emerging stock market in international arena. Improved market surveillance, trading mechanism and introduction of new financial instruments have made it a centre of attraction for the international investors. Entry of Foreign Institutional Investors (FIIs) and at the domestic level spectacular growth of the corporate sector and mutual fund industry have further added to the depth and width of the Indian stock market. Introduction of screen based trading depository system, derivative instruments, rolling settlements, etc., have changed the very

Subhrabaran Das, Associate Professor, Department of Economics, Tripura University, Suryamaninagar, Agartala 799022, Tripura, Email: subhrabaran@rediffmail.com

Intaz Ali, Research Scholar, Department of Economics, Assam University, Silchar 788011, Assam, Email: intaz.ali1984@gmail.com