FINANCE INDIA

Vol. XXXVII No. 4, December 2023
Pages—1001 - 1022

Shifts in Volatility Altering Nature of Derivatives – New Evidences from National Stock Exchange (NSE) of India

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Abstract

Derivative contracts are believed to benefit the spot market in stabilising its volatility, passing on vital information for better price discovery, abridging the information asymmetry, and neutralising the short-term shocks on volatility. This paper examines the functionality of derivatives in the recent times with stocks introduced into the equity derivatives segments after 2014 in NSE India with empirical data over 1995-2022. We use GJR GARCH model to reassure the functionality of derivatives. We find inconsistent and weak evidences that derivatives positively alter the volatility patterns of the underlying stocks. This insignificant functionality of derivatives reminds us of dominance of speculators in derivatives segment, information inefficiency and the poor outreach of derivatives. As a result of this study, investors making foray into derivative market may avoid taking excessive risks.

JEL Code : C22, C22, G14, G17
Keywords : Equity; Derivatives; Spot Market; Volatility; Asymmetric Effect; Information Effect; NSE; India

I. Introduction

IN THE EVER-EVOLVING field of financial innovation, the introduction of derivatives is a significant milestone. Commencement of trading on derivatives with the launch of index futures on June 12, 2000, Indian stock market has opened a new chapter in the risk mitigation mechanism. By taking a long or short position in the derivatives contracts, investors can get protection against the loss of economic value of the underlying assets. This functionality of the derivatives contributes to the development of the tremendous market for such contracts in India. The notional value of all the

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Submitted August 2022; *Accepted* January 2023

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