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Volatility Spillovers Influencing the Risk Identity and Financial Interdependence of Indian and Global Financial Markets

Delnaz Variava*, Jariwala Khushil Ashokkumar**
and Jariwala Shubham Chetankumar***
S. R. Luthra Institute of Management

Abstract: The rising integration of global financial markets as well as volatility spillovers are reshaping the risk identity of equity markets. Also, the current global turbulence makes it even more relevant to be studied. This study measures the volatility spillovers between select equity markets and NIFTY 50. It examines how the external shocks affect the risk dynamics of the Indian stock markets. The study uses daily price data of over a ten year period (2115 observations) and uses ARCH-GARCH Models, Vector Autoregression (VAR) and Variance Decomposition Analysis to evaluate volatility persistence and transmission mechanisms. The results of ARCH and GARCH reveal both volatility clustering and persistence in both global and Indian Markets. The results of VAR and Variance Decomposition Analysis indicate that substantial portion of Indian equity markets is driven by its own shocks, but are contributed by global volatility transmission as well indicating global financial integration. The findings confirm volatility spillovers and shocks shaping the risky identity of equity markets. These results also encourage the need for more robust risk management strategies and superior portfolio management to mitigate contagion risks amidst the global economic turmoil.

Keywords: Volatility Spillover, Global Financial Markets, ARCH, GARCH, VAR

* Corresponding author. Email: delnaz.variava@srlimba.ac.in; ** and ***Student.