

**VOLATILITY LINKAGES AMONG THE INDIAN AND US  
STOCK MARKETS**

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## ABSTRACT

In this world of globalization, countries and economies around the world are interconnected through trade, data, people and ideas. The flow between the countries is not limited in terms of goods and services. Financial markets have become one of the important links among these countries and the flows can be observed in terms of risk, shocks and volatilities. This paper investigates into the discussion regarding the attributes and mechanisms involved in the transmission of volatility during significant market crashes across global stock markets spanning from 2007 to 2023. The paper finds that India and US markets are related in terms of persistence effect of volatility transmission. The short term effect of volatility shocks is not as pronounced as the long term effects between the two markets. We have also utilized GJR DCC GARCH model which shows that the US market is more impacted by the negative shocks in the market and there is an asymmetric effect on volatility transmission that can be observed for US. It is also found that during the COVID 19 pandemic, the volatility transmission did not jump significantly. This could be attributed to policies in the two countries and their insulation from the shocks. We also see that the correlation between S&P500 and NIFTY 50 is falling over time.

Keywords: *conditional volatility, DCC GARCH, GJR GARCH, volatility transmission, crisis*