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HEDGING EFFECTIVENESS OF USD DENOMINATED NIFTY INDEX FUTURES

Abstract:

The fundamental aspect of hedging from the perspective of risk-averse investors is to obtain minimum variance from the hedged portfolio. This study investigates the hedging effectiveness of USD denominated Nifty Index futures using daily closing prices of Nifty spot and Nifty futures traded on the Singapore Stock Exchange (SGX) for the time period July 15, 2010 to July 15, 2016. Comparison is made among various optimal hedging strategies which includes both the constant and dynamic optimal hedging ratios. Various competing forms of Multivariate GARCH models like BEKK, Constant Conditional Correlation (CCC) and Dynamic Conditional Correlation (DCC) have been used to capture the time-varying volatility. The results clearly depict that the dynamic hedge ratios outperform the traditional constant hedge ratios with the BEKK-GARCH model being the most efficient with maximum variance reduction from the unhedged portfolio.

Keywords:

Stock index futures, optimal hedging strategies, multivariate GARCH

JEL Classification: G13, C32, G10