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DCC and Analysis of the Exchange Rate and the Stock Market Returns' Volatility: An Evidence Study of Thailand Country

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ABSTRACT

This paper studies the relatedness and the model construction of exchange rate volatility and the Thailand's stock market returns. Empirical results show that we can construct a bivariate IGARCH (1, 1) model with a dynamic conditional correlation (DCC) to analyze the relationship of exchange rate volatility and Thailand's stock market returns. The average estimation value of the DCC coefficient for these two markets equals to –0.1650, this result indicates that the exchange rate volatility negatively affects the Thailand's stock market. Empirical result also shows that there do not exist the asymmetrical effect on the Thailand's exchange rate and Thailand's stock markets. And the Japan's stock return volatility truly affects the variation risks of the Thailand stock market. Based on the viewpoint of DCC, the bivariate IGARCH (1, 1) model with a DCC has the better explanation ability compared to the traditional bivariate GARCH (1, 1) model.

KEYWORDS

Four Quadrant (4Q) Converter, Interlacing, Traction Systems, Power Quality Analysis

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