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ORIGINAL RESEARCH

Volatility Spillover Between Chinese Stock Market and Selected Emerging Economies: A Dynamic Conditional Correlation and Portfolio Optimization Perspective

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Abstract

This paper examines the spillover effect from Chinese stock market to select emerging economies to check the diversification opportunities. The study analysed the data in three different periods including full period from January 3, 2000 to February 7, 2020; first sub period from January 3, 2000 to October 18, 2009 and second sub period from October 19 to February 7, 2020. We applied Granger Causality and Dynamic Conditional Correlation Generalized Autoregressive Conditional Heteroscedasticity (DCC-GARCH) to investigate the spillover between Chinese and emerging economies. Referring to the Granger causality, it reveals that there is bi-directional causality between China and Indonesia only in full period. Further, DCC-GARCH indicates that there is spillover effect from the Chinese market to the Indonesian stock market in full period of observations both in the short run and long run. There is no spillover effect from China to emerging economies in first and second sub periods. We recommend that portfolio managers investing in Chinese economy may explore emerging economies as possible destinations to diversify their risk.

Keywords Volatility spillover · Dynamic conditional correlation · Emerging economies · Portfolio diversification · Causality

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