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FINANCIAL ECONOMICS | RESEARCH ARTICLE

Correlations and volatility spillover from China to Asian and Latin American Countries: Identifying diversification and hedging opportunities

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Abstract: China is considered the largest emerging economy and thus investors perceived as an attractive investment. We examine the spillover effect from Chinese stock exchange to stock exchanges of Asia and Latin America, namely, India, Indonesia, Mexico, and Brazil. For empirical purpose, the study employs VARMA-Multivariate Generalized Autoregressive Conditional Heteroskedasticity (MGARCH) model with BEKK, diagonal, Constant Conditional Correlation (CCC), and finally, Dynamic Conditional Correlation (DCC) specifications. DCC model outperforms among others and identifies two diversification opportunities with Mexican (MEXICAN) and Indian stock market (BSE). Finally, the hedge ratio and portfolio weights have been calculated. The hedge ratios between China and Mexico (SSE/MEX), and China and India (SSE/BSE) were 0.01 and 0.06, respectively. This implies that a $1 long position in Chinese market (SSE) could be hedged with a 1 cent short position in Mexico (MEXICAN) and a 6 cent short position in the Indian Market (BSE). The findings of this paper provide an insight into investors and policymakers.

Subjects: Environmental Economics; Public Finance; Corporate Finance

Keywords: China; Asia; Latin America; MGARCH; portfolio weight; hedge ratio

JEL Classification: C58; F37; G11; G23

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PUBLIC INTEREST STATEMENT

Investors want to mitigate the risk by identifying the suitable diversification opportunities. One of the ways is to check the spillover effect and find either diversification is feasible or not. In this context, this paper examines the spillover effect from Chinese stock exchange to Asian and Latin American stock exchanges. We employ VARMA-Multivariate Generalized Autoregressive Conditional Heteroskedasticity (MGARCH) model with BEKK, diagonal, Constant Conditional Correlation (CCC) and finally, Dynamic Conditional Correlation (DCC) specifications. It is found that DCC model outperforms among others and identifies two diversification opportunities with Mexican (MEXICAN) and Indian stock market (BSE).