

Volatility expectations and bric and us market comovements

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Keywords

Volatility expectations, Quantile regression, Asymmetric dependence, Comovements, BRIC markets, AG-DCC model

Abstract

Brazil, Russia, India and China (BRIC countries) have experienced fast economic growths and showed good future prospects during recent years. They also suffered from global financial crisis which cast suspicion on these prospects. The literature contains mixed evidence on existence of comovements between BRIC and developed markets. However, what determines the magnitude and existence of these comovements remains untapped. This study aims to investigate the determinants of time-varying conditional correlations between BRIC and US stock markets following the global financial crisis. To that respect, we first employ asymmetric generalized dynamic conditional correlation (AG-DCC) and dynamic conditional correlation (DCC) models to derive the time-varying correlations between these markets. Our findings indicate existence of marginal asymmetric effects in the comovements among markets. Then we examine the determinants of the DCCs using quantile regression approach to present a detailed analysis of dependence structure containing non-linear and asymmetric relations. We find that volatility expectations in global stock, gold, oil, and currency markets play an important role on correlation dynamics between these markets. The impacts of volatility expectations in global stock, gold and oil markets on correlations seem to be asymmetric based on the level of correlations. Hence, contagion is driven or reduced by risk perceptions in both financial and non-financial markets depending upon the level of correlations.
