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Financial Centers and BRICS Stock Markets: The Effect of the Recent Crises

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Abstract : This paper uses a DCC-GARCH model framework to examine mean and volatility spillovers (i.e. causality in mean and variance) dynamics between financial centers and the stock market indexes of the BRICS countries. In addition, tests for changes in the transmission mechanism are carried out by first testing for structural breaks and then setting a dummy variable to control for the 2008 financial crises. We use weekly data for nine countries, four financial centers (Germany, Japan, UK and USA) and the five BRICS countries (Brazil, Russia, India, China and South Africa). Furthermore, we control for monetary policy using domestic interest rates (90-day Treasury Bill interest rate) over the period 03/1/1990 - 04/2/2014, for a total of 1204 observations. Results show that the 2008 financial crises changed the causality dynamics for most of the countries considered. The same pattern can also be observed in conditional correlation showing a shift upward following the turbulence associated to the 2008 crises. The magnitude of these effects suggests a leading role played by the financial centers in effecting Brazil and South Africa, whereas Russia, India and China show a higher degree of resilience.

Keywords : financial crises, DCC-GARCH model, volatility spillovers, economics
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