Examining Dynamic Interdependencies among Major Global Financial Markets

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JEL Classification: C13, F21, F36, G01, G15

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Abstract

This paper investigates dynamic interdependencies among major global financial markets from January 1999 to April 2017 by examining their risk and return spillovers. Risk and return interactions are also analysed within the sample markets. Using block aggregation technique under Diebold-Yilmaz framework, we find strong linkages among the global financial markets that intensify during the turmoil period. The equity market of US is the most dominant market based on information transmission, while India and Japan are found to be least dominant among all sample markets. With regards to interaction between risk and return, results reveal return spillovers of high magnitude onto risk and almost negligible risk spillover onto returns. This indicates that return has greater role to play in volatility prediction than vice-a-versa. Further, we find that systematic effect amplifies during the crisis, highlighting the role of common global factors in propagating risk and return across the global financial markets in the stress times. These findings are relevant for portfolio management and risk assessment, and have important implications for asset pricing theories.

Keywords: Financial markets, Diebold and Yilmaz, spillovers, conditional volatility, conditional skewness