Cross-stock market spillovers through variance risk premiums and equity flows

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Abstract

We estimate variance risk premiums (VRPs) in stock markets of selected major advanced economies (AEs) and emerging market economies (EMEs) over 2007–2015, and decompose the VRP into variance-diffusive risk premium (DRP) and variance-jump risk premium (JRP). Daily VAR analysis reveals significant spillovers from US and developed Eurozone's VRPs to the other economies' VRPs especially during the post-Global Financial Crisis (GFC) period. We also find that during the post-GFC period, shocks on the DRPs of the United States and the developed Eurozone have relatively strong and long-lived positive effects on other economies' VRPs, whereas shocks on their JRPs have relatively weak and short-lived positive effects. In addition, we show that increases in the size of US VRP, DRP and JRP tend to significantly reduce weekly equity fund flows to all other AEs and some EMEs during the post-GFC period. Finally, US DRP plays a more important role than US JRP in the determination of equity fund flows to other AEs and some EMEs during the post-GFC period, while the opposite holds for equity fund flows to other AEs during the GFC period. Such results indicate the possibility of equity fund flows working as a channel of cross-stock market VRP spillovers.

Keywords: cross-stock market correlation, emerging market economy, equity fund flow, variance risk premium.

JEL classification: F32, G12, G15, G23.

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