

Dynamic Causality between Stock Return and Exchange Rate across Global Financial Crisis: does “stock-oriented” hypothesis valid in emerging market?

Abstract

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This paper examines a dynamic causality between the Malaysian stock return and change of Malaysian Ringgit (MYR) against US Dollar (MYRUSD) as well as between the stock return and change of MYR against Chinese Yuan (MYRCNY). The sample period is divided into pre-crisis, crisis and post-crisis periods respectively. Based on the causality-in-mean and causality-in-variance analysis, notably, it is found that: First, in pre-crisis period, stock return is found to Granger cause MYRCNY and MYRUSD in mean and variance; Second, during crisis period, the causality from stock return to MYRCNY and MYRUSD is only found in the mean; Third, in post-crisis period, there is causality-in-mean from stock return to MYRUSD, in addition to volatility spillover from stock return to both MYRCNY and MYRUSD. A general observation is that the impact of stock return on MYRUSD appears to be significant throughout all the sub-periods. In addition, most of the spillovers in mean during the sample period can be attributable to the channel running from stock return to exchange rates. These findings have made the stock-oriented hypothesis more tenable in Malaysia, suggesting that stability of MYR against USD is determined by a short-term flow of portfolio balance rather than trade balance. These findings imply the importance of managing the portfolio balance in promoting the stability of the exchange rate in the context of an emerging market.

Key Words: Stock market, exchange rate, stock-oriented model, global financial crisis, causality-in-mean, causality-in-variance, cross-correlation functions, Malaysia