Linkages between Thai stock and foreign exchange markets under the floating regime

Document Information:

Title:	Linkages between Thai stock and foreign exchange markets under the floating regime
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Citation:	Komain Jiranyakul, (2012) "Linkages between Thai stock and foreign exchange markets under the floating regime", Journal of Financial Economic Policy, Vol. 4 Iss: 4, pp.305 - 319
Keywords:	Bivariate GARCH, Causality, Exchange rates, Stock prices, Thailand,Volatility spillover
Article type:	Research paper
DOI:	10.1108/17576381211279280 (Permanent URL)
Publisher:	Emerald Group Publishing Limited
Acknowledgements:	The author is grateful to two anonymous referees for their comments and suggestions that are very helpful in improving the quality of this paper.

Abstract:

Purpose – The purpose of the present study is to directly examine the relationship between bilateral exchange rate and stock market index in a bivariate framework during the period of the floating exchange rate regime in Thailand.

Design/methodology/approach – The monthly data used in this study are the stock market index or stock prices from the Stock Exchange of Thailand, and the nominal bilateral exchange rate in terms of baht per US dollar from the Bank of Thailand. The period covers July 1997 to June 2010 with 156 observations. This is the period that the country switched from fixed to floating exchange rate regime. The stock market return is calculated by the percentage change of stock market index (or stock prices) while the exchange rate return is the percentage change of the nominal bilateral exchange rate. Three estimation methods are used to capture the interaction between stock and foreign exchange markets: bounds testing for cointegration, non-causality test, and the two-step approach with a bivariate GARCH model and Granger causality test.

Findings – The results of the present study show that bounds testing for cointegration does not detect the long-run relationship between stock prices and exchange rate. In addition, the non-causality test fails the diagnostic test for multivariate normality in the residuals of the estimated VAR model. However, the two-step approach adequately detects the linkages between the stock and foreign exchange markets. It is found that there exists positive unidirectional causality running from stock market return to exchange rate return. The exchange rate risk causes stock return to fall as expected. Moreover, there are bidirectional causal relations between stock market risk and exchange rate risk, but in different directions.

Research limitations/implications – Since a rising trend in the risk in the foreign exchange market causes stock return to fall, both domestic and foreign investors should be aware of the risk or uncertainty in the foreign exchange market because it can cause their portfolio return to fall. For policymakers, reducing exchange rate risk cannot be done without the associated costs from a rising risk in the stock market.

Originality/value – This study provides an evidence of volatility (or risk) spillovers in stock and foreign exchange markets. In addition, the risk in foreign exchange market that adversely affects return in the stock market is an expected phenomenon under the floating exchange rate regime.