Panel analysis of monetary model of ASEAN-5 exchange rates

Abstract

In this study, we examined whether the exchange rates in ASEAN-5 countries are driven by monetary fundamentals. We applied the panel unit root tests and found that the United States denominated nominal exchange rates of Malaysian Ringgit, Indonesian Rupiah, Philippines Peso, Singapore Dollar, and Thailand Baht are all integrated of order one. Meanwhile, relative money supply and relative real income are also integrated in the same order. Nonetheless, the relative interest rate is integrated in order zero, and it implies the uncovered interest rate parity held in ASEAN-5. By using a panel cointegration test pioneered by Pedroni (2000, 2004), we found evidence that there is a long-run relationship between nominal exchange rate and its monetary fundamentals. Consistent with the monetary model of the exchange rate, relative money supply is positively related to nominal exchange rates, while relative real income is negatively related to nominal exchange rates. Therefore, this study reveals the importance of relative real money supply and relative income for the exchange rate market players to predict and monitor ASEAN-5 exchange rates.