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A comparison of MA and RSI returns with exchange rate intervention

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Abstract

This study compares the efficacy of the Relative Strength Index (RSI) vis-à-vis the Moving Average (MA) trading rules on the daily exchange rates of six currencies. The results indicate that the trading rules can yield positive risk-adjusted returns, and the profitability of these trading rules is positively related to central bank interventions. It is also found that the impact of interest rate differentials on the trading rule return is immaterial.

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Notes

[1] For a comprehensive study on trading rule returns in the foreign exchange market, one is referred to Taylor and Allen (1992).

[2] LeBaron (1999) used intervention series from the Federal Reserve and showed that the Sharpe ratios reduced dramatically after removing the intervention periods. Other studies on interventions include Sarno and Taylor (2001) and Neely (2002).

[3] Neely (2002) defined intervention as transactions made by central banks.

[4] Neely (2002) did not include the Euro series.

[5] The present authors thank Christopher Neely for the provision of daily interest rate data for the DEM, JPY, and USD.

[6] The exchange rate of Australian Dollar (AUD) was floated in December 1983.

[7] The Swiss National Bank has not intervened in foreign exchange markets since 1995.

[8] The intervention data for Japan are obtained from the Ministry of Finance Japan website: http://www.mof.go.jp/english/e1c021.htm

[9] The value of date 1 depends on the window width and the rule used.

[10] Panel A of Tables 1a–4b show that the RSI rules usually have higher Sharpe ratios than the MA rules for the Deutsche Mark, while for the Japanese Yen, the Sharpe ratios under the MA rules are in general greater than that under the RSI rules.