

匯率的非線性調整、套利 與經濟價值可預測性*

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多數狀態轉換模型提供較線性模型為佳的配適度，而在樣本外預測卻難以推翻 Meese and Rogoff (1983) 認為名目匯率不可預測的結論。文獻在衡量匯率模型預測能力多數建立在預測誤差上，但較低的預測誤差並不代表較高的收益性或經濟價值。本文應用 STAR 家族模型探討 1990 至 2007 年間美元兌英鎊與日元的報酬率，檢定 MF 模型與 AR 模型是否存在非線性的調整行為，並評估預測誤差與經濟價值。實證結果顯示，英鎊與日元的報酬率分別呈現 Logistic 與 Exponential 型式的 ST(A)R 模型，且能提升線性模型的配適度。在樣本外向前一期滾動預測上，ST(A)R 模型的預測誤差雖無法完全超越 Random Walk 或線性模型，卻可提供較佳的擇時能力。對於 Mean-Variance 投資者而言，STAR 模型具有最佳的擇時與資產配置能力，並提供高報酬低風險的效率投資組合，顯示提升經濟價值時須考量報酬率存在狀態轉換現象。

關鍵字：貨幣基要、套利、平滑轉換（自我）迴歸模型、擇時能力、
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Nonlinear Adjustment, Arbitrage and Economic Value Predictability of Exchange Rate

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ABSTRACT

Most regime switching models give good in-sample fits to exchange rate data but are usually outperformed by random walks model under out-of-sample forecasts. Prior research on the ability of exchange rate models to forecast exchange rates relies on statistical measures of forecast accuracy, but lower forecast error does not necessarily imply higher profitability or economic value. This study tries to test for and model nonlinearities in the USD/GBP and USD/JPY exchange rate returns. We apply the STAR-family models to test nonlinearities of MF model and AR model and measure their economic values in predicting exchange rate returns. Our tests reject the linearity hypothesis for the exchange rate returns during the 1990s, and ST(A)R models all provide better goodness-of-fits than linear models. Although ST(A)R models can't beat

random walk model and linear models in forecasting USD/JPY exchange rate returns, they can provide better market timing ability and Mean-Variance asset allocation performance than linear models in forecasting exchange rate returns. These findings confirm the economic value importance of accounting for the presence of regimes in exchange rate returns.

Key Words: monetary fundamentals, arbitrage, ST(A)R model, market timing, asset allocation