True or Spurious Long Memory in European Non-EMU Currencies

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We examine the Polish Zloty, the Romanian Leu, the Swedish Krona, the Hungarian Forint, the Czech Koruna, and the Croatian Kuna whether their Euro exchange rate's volatility exhibit real or spurious Long Memory. Recent research reveals long memory in foreign exchange rate volatility. We confirm this finding for all time series by examining the long memory behavior of squared residuals by means of the V/S test. However, by using the ICSS approach we also find structural breaks in the unconditional variance. Literature suggests that structural breaks can lead to spurious long memory behavior. In a test strategy, we discriminate true from spurious long memory for the six exchange rates. Our findings suggest that Czech Koruna and Hungarian Forint do not exhibit real long memory, while the rest of the series have both, structural breaks and long memory. Finally, we demonstrate how to extend existing models to jointly model both properties yielding reasonable forecasts. The results of our work can help to avoid misspecification and provide a better understanding of the properties of the foreign exchange volatility.

Keywords: Conditional Variance, Forecasting, Foreign Exchange, Regimes, Spurious Long Memory, Value-at-Risk

JEL Classification: C22, C53, G15, G17, G32

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