Short-run forecasting of the euro-dollar exchange rate with economic fundamentals[1]

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Abstract

We propose a fundamentals-based econometric model for the weekly changes in the euro-dollar rate with the distinctive feature of mixing economic variables quoted at different frequencies. The model obtains good in-sample fit and, more importantly, encouraging out-of-sample forecasting results at horizons ranging from one-week to one month. Specifically, we obtain statistically significant improvements upon the hard-to-beat random-walk model using traditional statistical measures of forecasting error at all horizons. Moreover, our model obtains a great improvement when we use the direction of change metric, which has more economic relevance than other loss measures. With this measure, our model performs much better at all forecasting horizons than a naive model that predicts the exchange rate as an equal chance to go up or down, with statistically significant improvements.

Keywords: Euro-dollar rate, Exchange rate forecasting, State-space model, Mixed frequencies.

JEL: F31, F37, C01, C22.