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# A First Look at Entropy, Monetary Policy, and Expected Inflation Rates in the Determination of Exchange Rates

By

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## 1. Introduction

The econometric performance of structural exchange-rate models is rather poor. As yet and to our knowledge there is no exchange-rate model all of whose variables have been empirically identified. It has long been recognized that most coefficients are not constant over the course of time but fluctuate considerably as the sample size is modified. Moreover, the common exchange-rate models fail to outperform the random-walk model in true ex-ante forecasting tests, even if rolling regressions are used to adjust for time-dependent coefficients, and even if the actual realized values of future explanatory variables are used. In a comprehensive empirical study, Meese and Rogoff (1983) compare the out-of-sample forecasting accuracy of the flexible-price monetary model of Frenkel (1976) and Bilson (1979), the sticky-price monetary model of Dornbusch (1976) and Frankel (1979), and the sticky-price model which incorporates the current account as given in Hooper and Morton (1982) with that of time-series exchange-rate models and the random walk. Their study confirms that the natural logarithm of the spot exchange rate can, from an empirical point of view, best be explained by a random walk.

This poor econometric performance has been variously attributed to simultaneous equation bias, sampling error, movements of

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