Empirical Exchange Rate Models and Shifts in the Co-Integrating Vector*

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This paper finds that many of the anomalies in the exchange rate literature can be explained in large measure by recurrent shifts in the co-integrating vector. Using structural change tests that search recursively for break points, we find that the co-integrating vector implied by a composite monetary model experiences parameter shifts on five occasions over a sample period that includes the 1970s and 1980s. Within the implied regimes of parameter constancy, we find that many of the fundamental variables of the monetary models are significant and enter with correct parameter signs. We also find that the sets of significant variables in each regime are cointegrated, implying the existence of stable long-run relationships operating in the foreign exchange market. Finally, all of the structural models examined outperformed the random walk model in out-of-sample fit by considerable margins within the separate regimes of stability (in some cases by a margin of 70 percent in root mean square error), indicating that the large forecasting errors reported in Meese and Rogoff [1983] are the result of allowing the forecasting experiment to run past the end of one exchange rate regime and into the next. Our findings also suggest that a primary factor behind the observed instability of the co-integrating vector is unstable exchange rate expectations functions.

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