Exchanger Rate Forecasting with Fundamentals: The Trader-Company Method☆

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Summary

In this paper, we propose a novel machine learning method for forecasting future exchange rates using economic fundamentals derived from exchange rate theories and past returns. This method, which we call the "Trader-Company method," mimics the roles of a financial institution and traders belonging to it. The company has a number of traders and combines the forecasts of selected traders to make forecasts. The company can improve its own forecast accuracy by educating traders with poor forecasts, firing them if there is not enough improvement, and hiring new traders. We demonstrate that the out-of-sample forecasting accuracy outperforms random walk for all six developed countries' exchange rates. This method has the advantage of being interpretable because of its discrete decision making based on conditional branching. The evidence suggests that both education and firing/hiring are important to the predictability of the TC method, with education playing a particularly large role.

JEL classification: C53, F31, F37.
Keywords: Exchange rates, Forecasting, Machine learning, Taylor-rules, Purchasing power parity, Uncovered interest rate parity, Monetary models.

☆ We received constructive comments from XXX.
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