Forecasting the USD/COP Exchange Rate: A Random Walk with a Variable Drift

Working Paper No. 253 Keep in mind
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AUTHOR OR EDITOR Peter Rowland

This study develops three exchange rate models as well as a simple statistical model defined as a random walk with a variable drift. The exchange rate models all use the purchasing power parity hypothesis to account for the long-term relationships between prices and the exchange rate, together with error correction models to represent any short-term dynamics. The models are estimated for the USD/COP rate of exchange, and their forecast performance is compared to that of a simple random walk as well as to that of the random walk with a variable drift term. Two of the models are shown to outperform the simple random walk on the 12 and 24-months forecasting horizon. However, all the models are outperformed by the random walk with a variable drift, where the drift term is estimated using a Kalman filter. The results suggest that fundamental models might only be a useful tool for forecasting of the exchange rate in the very long run.

Fuente: https://www.banrep.gov.co/en/borrador-253