



## Seminario Aleatorio

*Sesión 339*

# Covered Interest Parity: A Stochastic Volatility Approach to Estimate the Neutral Band

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### Abstract

The neutral band is the interval where deviations from Covered Interest Parity (CIP) are not considered meaningful arbitrage opportunities. The band is determined by transaction costs and risk associated to arbitrage. Seemingly large deviations from CIP in the US Dollar foreign exchange markets vis-a-vis Sterling, Euro and Mexican Peso have been the norm ever since the onset of the Global Financial Crisis. This topic has attracted a great deal of attention in the literature. There are no estimates of the neutral band to assess whether deviations from CIP reflect arbitrage opportunities, however. This paper proposes an estimate of the neutral band based on the one-step-ahead density forecast obtained from a single equation stochastic volatility model. Comparison across econometric models is made with the log-score statistic computed, from the predictive likelihood functions.

The model with stochastic volatility, estimated with the Auxiliary Particle Filter, has the best fit and forecasting performance, hence superior neutral band estimates.

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**Aula B-2, Plantel Río Hondo**

El Seminario Aleatorio está destinado tanto a profesores como a estudiantes, por lo que el Departamento de Estadística agradece a los profesores que colaboren invitando a sus alumnos a estas sesiones.

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