



# Determinants of the Exchange Rate in Colombia under Inflation Targeting

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Determinants of the Exchange Rate in Colombia under Inflation Targeting Determinants of the Exchange Rate in Colombia under Inflation Targeting\* Fredy Alejandro Gamboa Estrada\*\*  
fgamboes@banrep.gov.co F.A.Gamboa-Estrada@warwick.ac.uk Abstract This research studies the forecasting performance of conventional and more recent exchange rate models in Colombia. The purpose is to explain which have been the main exchange rate determinants under an Inflation Targeting regime and a completely floating exchange rate scheme. Compared to similar studies, this paper includes conventional specifications and Taylor rule approaches that assume exogenous and endogenous monetary policy respectively. Based on the Johansen multivariate cointegration methodology, the results provide evidence for the existence of cointegration in all specifications except in the Sticky-Price Monetary Model and the Taylor Rule model that includes the real exchange rate. In addition, out of sample forecasting performance is analyzed in order to compare if all specifications outperform the drift less random walk model. All models outperform the random walk at one month horizon. However, the Flexible Price Monetary Model and the Uncovered Interest Parity Condition have superior predictive power for longer horizons. Keywords: Exchange rate determination, Inflation Targeting, Out of sample performance, Johansen multivariate cointegration. JEL Classification: C32, C53, E58, F31. \* I thank Michael Thornton for his valuable support and suggestions as supervisor. Also I would like to thank Norberto Rodríguez and José V. Romero from the Central Bank of Colombia for the advice in some econometric issues and for the help in building some data variables respectively. This document corresponds to my Master dissertation at University of Essex in September 2009. \*\* The author is Phd student in Economics at University of Warwick, fully funded by the Central Bank of Colombia. The points of view expressed in the document are those of the author and do not represent those of the Banco de la República or the Board of Directors. The author is the only one responsible for any error in the document.