

Bayesian Model Estimation and Selection for the Weekly Colombian Exchange Rate

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This document reviews and applies recently developed techniques for Bayesian estimation and model selection in the context of Time Series modeling for Stochastic Volatility. After the literature review on Generalized Conditional Autoregressive models, Stochastic Volatility models, and the relevant results on Markov Chain Monte Carlo methods (MCMC), an example applying such techniques is shown. The methodology is used with a series of Weekly Colombian-USA Exchange Rate on seven different models. The GARCH model, which uses Type-IV Pearson distribution, is favored for the selecting technique, Reversible Jump MCMC, over other models, including Stochastic Volatility Mode