



Bayesian Model Averaging. An Application to Forecast Inflation in Colombia

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An application of Bayesian Model Averaging, BMA, is implemented to construct combined forecasts for the colombian inflation for the short and medium run. A model selection algorithm is applied over a set of linear models with a large dataset of potencial predictors using marginal as well as predictive likelihood. The forecasts obtained when using predictive likelihood outperformed the ones obtained when using marginal likelihood. BMA forecasts reduce forecasting error compared to the individual forecasts, equal weighted average, dynamic factors model and random walk forecasts for most horizons. Additionally, the BMA outperformed for some horizons the frequentist Information theoretic model average, ITMA, when the weights of both methodologies are build based on the predictive ability of the models.

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