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BAYESIAN ESTIMATION FOR RANDOM PANEL DATA MODEL WITH APPLICATION

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ABSTRACT

In this paper, we consider the random effect panel data model which has fixed and random effects as well as the experimental error term. Bayesian approach employed to make inferences on the model coefficients. To illustrated the effectiveness of the methodology. We have chosen a data set from gross fixed capital formation and gross domestic product by economic activities for public sector at current prices for the years (2005-2015) (Million I.D.).The data are analysed according to our methodology by using gretl, R and matlab softwares.

KEYWORDS: Panel Data Model, Likelihood function, Bayesian approach, Markov chain Monte Carlo (MCMC), Prior distribution, Posterior distribution, Bayes factor, gross fixed capital formation, gross domestic product, economic activities for public sector, current prices