Quarterly Bayesian DSGE Model of Pakistan Economy with Informality

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Abstract

In this paper we use the Bayesian methodology to estimate the structural and shocks' parameters of the DSGE model in Ahmad et al. (2012). This model includes formal and informal firms both at intermediate and final goods production levels. Households derive utility from leisure, real money balances and consumption. Each household is treated as a unit of labor which is a composite of formal (skilled) and informal (unskilled) labor. The formal (skilled) labor is further divided into types "r" and households have monopoly over each type "r" labor which depends upon degree of education. We go a step further by converting the existing annually calibrated model to quarterly frequency. As a result our impulse response functions have more relevant and realistic policy implications. From the results we do find the shock absorbing role of the informal sector, however, with short term existence. The model estimation diagnostics also confirm robustness and reasonability of the estimation results.

Key words: Bayesian Estimation., DSGE Model, Shock Process. JEL Classification: E17

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