SUMMARY

ESSAYS ON THE MONGOLIAN MONETARY POLICY

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August 24, 2016

The dissertation aims to study the current Mongolian monetary policy by using the New Keynesian DSGE model of SOE and the Bayesian estimation technique. We propose three research questions: i) Do the Bank of Mongolia (BoM - the central bank) really concern inflation target rates on its monetary policy rule setup or not?, ii) Does the recent official exchange rate regime - a managed floating by the BoM and a floating by the IMF - actually effective in the Mongolian economy?, and iii) Does the current effective policy rule in Mongolia an optimal or not? If not what alternative policy rule would be the optimal for Mongolia?

This study is timely and important for two reasons. First, the economics is one of newly developing social sciences in Mongolia, and consequently macroeconomic research studies using general equilibrium models and Bayesian estimation technique have rarely been developed. This study can be a contribution to literature of this kind study.

Second, a high level quantitative study of the significance, timing and effect of monetary policy rule's instruments will benefit the Mongolian policy makers in formulating and implementing monetary policy.

In Chapter II, we introduce a dynamic stochastic general equilibrium (DSGE) model by Gali and Monacelli (2005) that extend the benchmark New Keynesian DSGE model to a small open economy (SOE) setting and estimate it with Mongolian quarterly data from 2000Q1 to 2014Q3 using Bayesian estimation technique by following Lubik and Schorfheide (2007).

We perform the posterior odds test using the estimation results and we found that the BoM do not concern inflation target rates and systematically respond to nominal exchange rate (NER) changes when setting its monetary policy rule. Moreover, due to the estimated impulse response function, terms-of-trade movements do not contribute significantly to domestic business cycles in Mongolia.

Chapter III is devoted to an analysis of the optimal monetary policy rule Mongolia. As the main result Chapter II, the current effective monetary policy rule in Mongolia is the total or CPI inflation based Taylor rule (CITR) without inflation target rates. In order to find the optimal monetary policy rule for Mongolia, we determine alternative policy rules based on the possible Taylor-type rules, CITR and domestic inflation based Taylor-rule (DITR), and to rank them by the corresponding welfare losses.

By following research framework of Gali and Monacelli (2005), we show the conditions for optimal monetary policy rule and derivations the welfare loss function that is a measurement by the second-order approximation for domestic representative consumer's utility losses due to deviations from the optimality conditions for the SOE. We show that how to derive this function by different approach from in the article.

We used simulation analysis on the same DSGE model based on the corresponding

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Bayesian estimates for each alternative monetary policy rules and obtained values that need in calculations of the welfare losses. By our calculation results, the DITR reacting to the domestic inflation and NER changes would be delivered the highest welfare than in other rules, however, if we consider only total or CPI inflation, it turns to CITR reacting to inflation and NER changes. We proved this result is a robust by using household utility computations under various main parameter assumptions.