## Monetary policy rules in times of stability and volatility: A general equilibrium approach with Bayesian estimation for Bolivia

Valeria Fernanda Jemio Hurtado\*

## Abstract

Based on the assessment of a second-order approach of the utility function by applying a Dynamic Stochastic General Equilibrium Model (DSGE) calibrated and estimated using Bayesian techniques and considering Bolivian time series, the following work aims to know the performance of different monetary policy rules. The document analyzes two scenarios, the first of them based on the 1990 to 2019 period, and the second one considering a context of extreme volatility of variance of shocks, and simulating a recession conjuncture as the one lived in 2020. The main results show that, in an environment of stability and demand shocks, a monetary aggregate rule focused on lessening deviations of product and inflation achieves the best performance. However, in the case of extreme volatility, particularly with supply shocks, a monetary policy which considers exchange rate stability as a priority is the one with the best performance.

JEL Classification: C11, E52, E58, F44 Keywords: Monetary policy, Dynamic Stochastic General Equilibrium Models for open economies, Bayesian estimation

 The content of this document is the responsibility of the author and does not compromise the opinion of the Central Bank of Bolivia.
Email: jemiovaleria@gmail.com