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**MODELS IN BEHVAIORAL
MACROECONOMICS**

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ABSTRACT

In recent decades, behavioral models have evolved in the literature as a response to the limitations of models assuming perfect rationality among economic agents. In this paper, we have estimated such a behavioral model, where economic agents use two simple heuristic rules to form expectations, periodically evaluating these rules based on a success criterion. Consequently, agents employ a trial-and-error learning strategy. This expectations formation mechanism enables the introduction of an "animal spirit" variable, an index quantifying market sentiment, which fluctuates between periods of generalized optimism or pessimism and influences the dynamics of the model's variables. Estimates were conducted using a sample comprising six countries: two advanced economies (the US and the Euro Area) and four emerging economies (Czech Republic, Hungary, Poland, and Romania). This represents the first study offering a comparative analysis across an extended sample for such a behavioral model. Subsequently, we calibrated and simulated the behavioral model for each economy using parameters derived from the estimations. The evidence indicates that the behavioral model better reproduces observed dynamics, generating non-normally distributed variables with high inertia, without requiring the assumption of error autocorrelation. Additionally, the transmission of shocks differs from that in models with rational expectations, contingent on the state of the economy at the time of the shock (expansion or recession). Consequently, the transmission of shocks in the economy exhibits a higher degree of uncertainty compared to models with rational expectations. Monetary policy analysis suggests that a moderate emphasis by the central bank on stabilizing the output gap is essential for model stability, ensuring the mitigation of volatility in both economic fluctuations and inflation. However, optimizing monetary policy depends on each economy's structure, and no standard calibration exists. Incorporating fiscal policy into the behavioral model and estimating it reveals a stronger countercyclical response in advanced economies compared to emerging ones, and lower fiscal multipliers in developed economies relative to developing ones. Furthermore, the analysis of the fiscal policy trade-off indicates that a fiscal policy oriented towards a countercyclical response to the output gap yields benefits only if the real interest rate remains below the growth rate of the economy. Absent this condition, fiscal space narrows, necessitating either moderation in the countercyclical response of fiscal policy or heightened attention to public debt stabilization to prevent simultaneous amplification of volatility in both variables.

KEY WORDS: behavioral model, macroeconomics, shocks transmission, monetary policy, fiscal policy.

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