Publicat pe (https://www.bnm.md)

30.06.2025

Working Paper No. 2/2025: Better policymaking and analysis with a new Dynamic Behavioral Equilibrium Exchange Rate model for small, open economies

Working Paper No. 2/2025: Better policymaking and analysis with a new Dynamic Behavioral Equilibrium Exchange Rate model for small, open economies [1]

Author: Alexandru Monahov, National Bank of Moldova

Summary

This paper introduces a Dynamic Behavioral Equilibrium Exchange Rate (DBEER) model designed specifically for small, open economies, using Moldova as a primary case study. While traditional BEER models are effective for long-term analysis, they often fail to capture short-term volatility and structural shifts. The proposed DBEER model bridges this gap by employing rolling window estimations. Furthermore, the paper finds that adding Remittances/GDP as a regressor significantly improves the outcome of the model for small, open economies.

The paper also introduces two novel performance metrics – the Dynamic Partial R2 and Relative Dynamic Partial R2 – which allow policymakers to quantify the evolving importance of different economic drivers over time, rather than relying on a static average of explanatory power.

Key Findings:

- **Superior Model Fit**: The dynamic approach significantly outperforms traditional full-sample BEER models (higher R2), providing a predicted exchange rate series that closely tracks actual movements, even during periods of high volatility.
- **The Dominance of the Balassa-Samuelson Effect**: Across all time horizons, productivity growth differentials (Balassa-Samuelson) remain the most robust and consistent driver of the real exchange rate (RER).
- **Important Role of Remittances**: In small, open economies, remittances are a primary driver of currency valuation. However, their impact is non-linear: during stable periods, they tend to appreciate the RER, but during crises, this relationship can invert as recipients hoard foreign currency.
- **Macro-Financial Linkages**: Strong correlations exist between the "BEER Gap" (the difference between actual and equilibrium rates) and various indicators, including government bond yields, dollarization levels, economic growth and prices.

***Note**: The views expressed in this paper are entirely those of the author and do not in any way imply or represent the views of the National Bank of Moldova. All rights reserved. Reproduction of the information is permitted solely for educational and non-commercial purposes and only where the source is acknowledged.*

Tag-uri

dynamic model of the behavioural equilibrium of the exchange rate [2]

behavioural equilibrium of the exchange rate [3]

exchange [4]

Rate [5]

equilibrium [6]

behavioral [7]

dynamic [8]

regression [9]

model [10]

policy [11]

central bank [12]

Sursa URL:
https://www.bnm.md/ro/node/70116

Legături conexe:

[1] https://www.bnm.md/files/Alexandru Monahov - Dynamic BEER for Small Open Economies.pdf [2] https://www.bnm.md/ro/search?hashtags[0]=dynamic model of the behavioural equilibrium of the exchange rate [3] https://www.bnm.md/ro/search?hashtags[0]=behavioural equilibrium of the exchange rate [4] https://www.bnm.md/ro/search?hashtags[0]=exchange [5] https://www.bnm.md/ro/search?hashtags[0]=Rate [6] https://www.bnm.md/ro/search?hashtags[0]=equilibrium [7] https://www.bnm.md/ro/search?hashtags[0]=behavioral [8] https://www.bnm.md/ro/search?hashtags[0]=dynamic [9] https://www.bnm.md/ro/search?hashtags[0]=regression [10] https://www.bnm.md/ro/search?hashtags[0]=model [11] https://www.bnm.md/ro/search?hashtags[0]=policy [12] https://www.bnm.md/ro/search?hashtags[0]=central bank