

Getting FIT with Imperfect Policy Credibility: DYNARE/JULIA Workshops with an Application for a Small Open Economy

2022-11-30

WP 2022/07

Central Bank of Armenia
Working Paper 2022/07

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November 30, 2022

Abstract

Following the work done by Argov and others (2007), we develop a small-open-economy model with endogenous policy credibility and a policy loss function (Open ENDOCRED). The model also builds on the ENDOCRED model presented in Kostanyan and others (2022b), which is a simple workhorse model of flexible-inflation targeting under imperfect credibility, and adapts it for small open economies with an interaction of credibility and country-risk premium. The first version of the model is calibrated to Armenia. This Open ENDOCRED model can serve as a core quarterly production model (QPM) for small emerging economies, particularly for those implementing the Mark II adaptation of the Forecasting and Policy Analysis System (FPAS Mark II) to better incorporate uncertainty and nonlinearities, and support monetary policy as a risk management exercise.

We also provide empirical estimates of credibility for Armenia, and demonstrate the crucial role of understanding credibility as an endogenous process. The paper also discusses the important role of linear satellite models, which were employed as core models in the FPAS Mark I framework but can serve as essential analytical tools for current economic analysis in the FPAS Mark II system.

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