Exchange Rate Dynamics and its Effect on Macroeconomic Volatility in Selected CEE Countries

By Volha Audzei and František Brázdik

Abstract

Structural asymmetries between the countries and loss of exchange rate and monetary policy adjustment channels are important aspects to consider when forming a currency union. This work studies the group of Central and Eastern Europe countries, consisting of new and potential Eurozone members. It focuses on the relative importance of the symmetric and asymmetric shocks for the macroeconomic volatility and the adjustment role of the real exchange rate.

Two country structural vector autoregression models are used, where shocks are identified by sign restriction identification method. Shocks are defined via their impact on the economy irrespective their common or idiosyncratic origin, as this allows to assess the relative importance of symmetric with respect to asymmetric shocks.

The analysis finds that:

- Countries with significant importance of the asymmetric shock for their output volatility are identified
- Symmetric shocks dominate the macroeconomic volatility over the business cycle, for most of the CEE countries
- Shock absorbing nature of the real exchange rate adjustment role is consistent with the sources of fluctuations
- Real exchange rate itself does not generate much volatility.

These results provide rationale for becoming member of currency union or adoption of the single monetary policy stance.

Keywords: Sign restrictions, Real exchange rates, Structural vector autoregression, Monetary union, Asymmetric Shocks, Central and Eastern Europe.