

Uncovered interest parity in Central and Eastern Europe under permanent external shocks*

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Abstract

Fluctuations in uncovered interest parity (UIP) premia reflect changes in country risk that stem from adjustments in interest rate home and abroad, as well as the exchange rate. However, the way those factors affect the UIP premium may depend not only on their observable changes but also on the underlying structural shocks that drive their movements. For example, international investors will likely respond in a different way to a central bank's decision to go "low-for-long" in its monetary policy, than to a decision to adjust the policy stance only for a pre-announced, limited period. Hence, the response of interest rates or exchange rates to such shocks may be different. This type of shock-dependence can be explained by the existence of the Neo-Fisher effects of monetary shocks, but also by behavioural factors and agents' bounded rationality that contribute to bubbles and crashes in foreign-exchange markets.

In this paper, we seek to understand the relative role of permanent and transitory shocks that affect the UIP premia in Central and Eastern European (CEE) countries, Czechia, Hungary, Poland, and Romania. Focusing on these four CEE economies allows us to investigate the importance of both external and internal shocks in countries that are strongly integrated in the global economy but maintain independent monetary policies.

A simple behavioural macroeconomic model with two types of agents, i.e. fundamentalists and chartists, is used as a theoretical framework. The former use the UIP to form their expectations whereas the latter rely on trend extrapolation. The domestic central bank is assumed to include the exchange rate stability in its policy rule. The model makes it possible to explain the differentiated impact of permanent and transitory shocks in global monetary conditions on the exchange rate and domestic interest rate.

The empirical analysis is based on vector error correction models, estimated for the period from 2001 to 2021. We explicitly identify the structural shocks by imposing long-run restrictions that exploit both the theoretical underpinnings of

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permanent monetary shocks and statistical properties of data. This allows us to further distinguish between shocks originating in large economies (the euro area, the US) or in CEE economies. We investigate the dynamic impact of these shocks on interest rates, exchange rates, and the constructed deviations from the UIP. We also provide a shock-dependent decomposition of Fama regression coefficients.

Our tentative empirical results point out to a significant role of permanent shocks in driving the UIP premium, even in the short run. Another major findings are that: (i) permanent and transitory shock display asymmetric effects on the UIP premium, which highlights the importance of knowing the shocks behind interest rate and exchange rate movements, (ii) permanent external shocks are not behind the systematic deviations from the UIP.

Keywords: uncovered interest parity; risk premium; permanent shocks; transitory shocks; Fama regression; Central and Eastern Europe.

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