

**INTERNATIONAL NETWORK FOR ECONOMIC RESEARCH**

# Financial, monetary and banking integration of CESEE countries with the EU and the Euro area

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*This policy brief, based on Raguideau-Hannotin (2021), Raguideau-Hannotin (2023) and an unpublished work, summarizes (i) some empirical evidence on financial, monetary and banking integration of Central, Eastern and South Eastern European (CESEE) countries<sup>1</sup> with the EU and the Euro area ; (ii) their impact on macroeconomic adjustment policies, particularly, monetary policy and private risk sharing. Nominal convergence, historical and geographical proximity with the EU, together with banking systems' characteristics and integration are found to have critical effects. International integration to capital flows may play a role as well, as we find dilemma effects.*

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CESEE countries share a common history as Socialist economies, as Transition economies after the end of the Soviet Union since 1991, and more recently, as European Union (EU) New Member States. While Croatia has joined the Euro area in January 2023, the remaining countries do not plan to apply to the ERM II<sup>2</sup> in the near future, except Bulgaria since July 2010. These specific historical and institutional contexts (that translate into nominal and real convergence with the EU but also to integration to international trade and capital flows), combined with three decades of banking and financial crises motivate our research that

focuses on financial, monetary and banking integration of these countries with the EU and the Euro area.

First stylized fact for this region is the building up of external financial vulnerabilities since the beginning of the Transition period, as evidenced by the evolution of their external position (Figure 1). External funding mix of CESEE countries is based on both FDI and External Debt, and characterized by a very strong but evolving EU investor and creditor countries' base, particularly banking sector's assets that are mainly controlled by European banks (50%

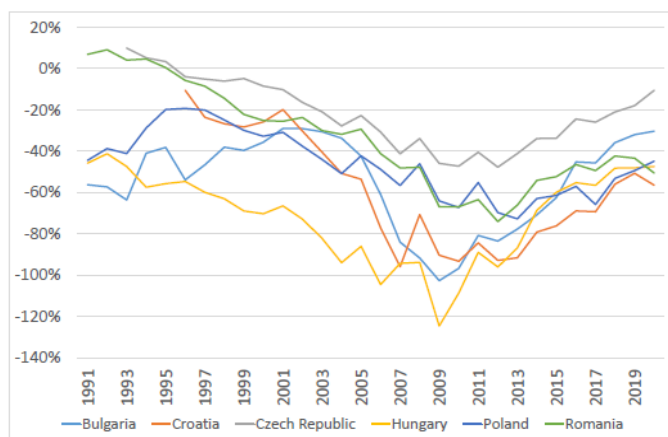
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<sup>1</sup> Bulgaria, the Czech Republic, Croatia, Hungary, Poland, Romania: EU countries that are not Euro area members (except for Croatia, since January 2023)

<sup>2</sup> Exchange Rate Mechanism II

to 90% of banking assets depending on country).

Given this context, cross-border banking, mostly in its foreign claims format, has grown exponentially during the 2000s and much more than in other Emerging region, which is a second key stylized fact for CESEE countries (Figure 2).

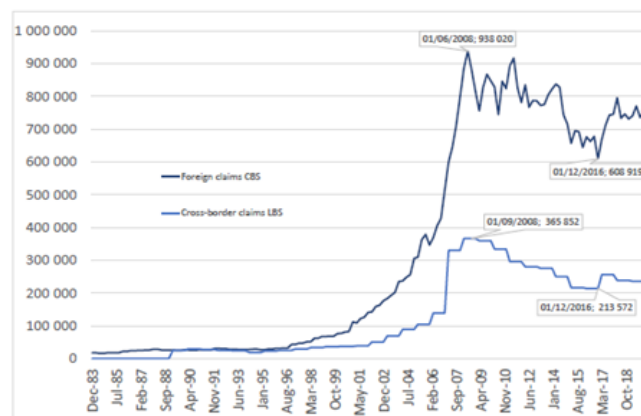


**Figure 1: Ratio of Net Foreign Assets to Domestic GDP (in %) - 1990-2020;** Source: External Wealth of Nations -EWN- Mark II database (Lane and Milesi-Ferretti (2017)) and author's calculations from IMF IIP database

In Raguideau-Hannotin (2023), our motivation is to better understand the determinants of international financial integration of CESEE countries, so as to avoid the building up of financial vulnerabilities and as empirical literature seldom provides specific answers for these countries. In relation with the literature on the impact of gross financial flows on financial stability (Forbes and Warnock, 2012), we first estimate the long-term historical, geographical and cultural determinants of cross-border banking claims with a bilateral financial gravity model, derived from the trade gravity model in Anderson and van Wincoop (2003) and developed by Okawa and van Wincoop (2012). As a second step, we analyze the impact of domestic (pull), foreign (push) and global factors (such as a Global Financial cycle, identified by Rey, 2013) using the gravity framework.

Our results first show that cross-border banking in these economies is significantly driven by geographical proximity and common historical links, particularly with EU Member States.

Second, we find that banking sector health variables are more significant as push factors, while structural banking system variables (banking concentration and regulatory capital amounts) are more significant as pull factors and may play a countercyclical role. These results provide evidence in favour of an impact of European banking systems on financial liabilities in the CESEE region, in relation with the very high level of EU ownership of banking assets. Finally, US global liquidity factor matters more than exchange rate stability, which points towards the existence of a monetary policy dilemma (Rey 2015) in the region.



**Figure 2: Evolution of Foreign banking claims and cross-border banking claims;** Source: BIS LBS and CBS data; position in million \$

Raguideau-Hannotin (2021) is motivated by the heterogenous stages of monetary integration of CESEE countries with the Euro area, even though these countries are advanced in terms of nominal convergence as measured by the Maastricht criteria (European Central Bank, 2020 and 2022). We formulate the hypothesis that these countries face macroeconomic policy issues and fear of losing both the policy rate and the exchange rate interventions as two monetary policy instruments, that have been extensively used since 2008, and therefore defer Euro accession.

We investigate the monetary autonomy of CESEE countries with the Euro area, in the context of nominal convergence with the EMU. This question has been addressed in an earlier literature i) in relation with their exchange rates, within the trilemma framework, with the Fear of Floating hypothesis also explored; ii) on the European Monetary System (EMS). We contribute to this literature by assessing monetary autonomy over the long run, through the estimation of monetary VECMs by country with endogenous Euro area variables and structural breaks (Johansen et al., 2000), thus exploiting all information contained in data characterized by breaks in levels and trends.

For Bulgaria, the Czech Republic, Hungary and Romania, we find that monetary policy dependence with the Euro area is aligned with their exchange rate regimes: the less flexible (or the higher the degree of foreign exchange interventions), the higher the monetary spillover from the Euro area. It may be interpreted as evidence of policy trilemma for these countries, except for Hungary for which results points towards policy dilemma. Poland is the most monetary-independent country of our study across the various models estimated. Our analyses are rather robust to the use of a shadow short rate (Krippner, 2015) instead of the conventional policy rates.

Finally, in an unpublished work, we investigate the impact of the European Banking Union (EBU) implementation on private risk sharing within the EU. Private risk sharing refers to a market-based macroeconomic adjustment mechanism to an idiosyncratic shock. CESEE countries have opted out from EBU early participation (i.e., before Euro accession), despite their high level of local and cross-border banking integration and the fact that bank-related systemic risk almost materialized in 2008, with the Vienna Initiative I ultimately circumventing such outcome. Risk sharing benefits for CESEE countries are not discussed

either on the literature on EBU early participation, focused on institutional issues (Hüttl and Schoenmaker, 2016).

We contribute to the literature by using a bilateral private risk sharing model in a macroeconomic panel setting, so that we can identify unilateral, bilateral and directional effects between country pairs (in the line of Kose et al., 2009 and Cimadomo et al., 2020, for instance). We also estimate overall level of risk sharing, conditional on the development of two financial channels: first, credit markets, second, bond and equity portfolio investments, using an estimator that accounts for the cross-section dependence within countries (CCEMG estimator - Pesaran, 2006).

Our results show that average private risk sharing within the EU-25 EBU is large and increasing (from 37pp on 1979-2018 period to 57 pp on 2002-2018), with an initial risk-sharing role from cross-border banking that has shifted towards capital markets channel at the beginning of the 2000s.

We identify significant group effect between EU members excluding CESEE countries, that share 20 additional pp above average level. Nevertheless, the implementation of the EBU has a negative contribution to risk sharing that is greater for EBU members than for non-EBU members, which points towards an overall negative effect of EBU implementation on average risk sharing (after controlling for the Great Retrenchment of banking flows during the 2010s, with control variables and the common correlated factors).

Relative to directional impacts of EBU, two strong results emerge: i) a very large and negative contribution of credit markets channel through local claims in local currency on the level of risk shared *from* EBU members *to* CESEE countries (maximum -16 pp effect); ii) a large and negative group effect between Vienna 2 Initiative participants on risk sharing.

# Policy Implication

Our research contributes to the debate on Euro area accession issues, namely the timing of Euro adoption and Banking Union early participation. Regarding Euro accession, the Czech Republic and Romania could accelerate the Euro adoption process probably at a lower cost compared to Poland. Monetary policy dilemma effect for Hungary may be an incentive to join the Euro area quickly as well. We do not find evidence in favor of an early participation to EBU for CESEE countries as a whole, but we strongly advocate for greater control of banking integration through foreign claims, as they negatively impact private risk sharing mechanism from EBU members towards CESEE countries. Overall, as global and pull factors play a significant role for CESEE countries, we strongly call for increased bilateral and multilateral cooperation, so as to avoid the building up of financial imbalances.

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