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PANEL DISCUSSION III:

ERM II: from waiting room to fitness centre?

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The European Exchange Rate Mechanism (ERM II) as a Preparatory Phase for Euro Adoption: The Case of Bulgaria and Croatia

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The European Exchange Rate Mechanism (ERM II) as a preparatory phase for euro adoption: the case of Bulgaria and Croatia*

(Draft 13 July 2021)**

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Abstract

Following completion of a roadmap agreed among all relevant EU stakeholders in the previous years, the Bulgarian lev and the Croatian kuna were included in the European Exchange Rate Mechanism (ERM II) on 10 July 2020. This has set a milestone in view of future enlargement of the euro area, thus highlighting the important role that ERM II plays as a preparatory phase for euro adoption. Because of this role, ERM II participation has also the potential to alter the incentive structure of international and local investors, as well as of the national authorities of the Member State concerned. This "regime shift" may have important policy implications, be them positive, e.g. sustainable convergence, or negative, e.g. accumulation of imbalances. We provide quantitative evidence that this may indeed have been the case for those countries in central and eastern Europe (CEE) which joined the mechanism in 2004-05. The article also briefly looks at ERM II from a historical perspective and reviews its main features and procedures. Finally, we explain the new roadmap towards participation in ERM II – and, simultaneously, the EU banking union – which was established and successfully implemented for Bulgaria and Croatia. The main conclusion is that a smooth participation in the mechanism requires sound policies, governance and institutions, thus addressing risks with adequate macroeconomic, macroprudential, supervisory and structural measures.

*The views expressed in this paper are those of the authors and do not necessarily represent those of the European Central Bank or Banka Slovenije.

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1 Introduction

Two EU Member States, Bulgaria and Croatia, joined ERM II on 10 July 2020. The related process unfolded during the period 2017-20 along a roadmap that reflected the lessons learned from the euro area crisis, the advent of the EU banking union, as well as a careful assessment of country-specific strengths and vulnerabilities.[1] The roadmap was agreed between the Bulgarian and Croatian authorities and the so-called "ERM II parties", i.e. the finance ministers of the euro area Member States, the ECB, and the finance minister and central bank governor of Denmark.[2] These stakeholders took their decisions following a common procedure involving, inter alia, the European Commission and consultation of the Economic and Financial Committee (EFC) in its euro area format, which is called Euro Working Group (EWG).

The inclusion of the Bulgarian lev and the Croatian kuna in ERM II has set a milestone in view of further enlargement of the euro area. Bulgaria and Croatia are expected to adopt the euro once they have fulfilled the necessary requirements (the so-called "Maastricht" convergence criteria) as examined in the Convergence Reports of the European Commission and the ECB.[3]

For Bulgaria and Croatia ERM II will therefore serve not only as an exchange rate arrangement, but also as a preparatory phase for euro adoption. ERM II has two main purposes. The first one is acting as an arrangement for managing exchange rates between the participating currencies, thus also contributing to the smooth functioning of the European Single Market by fostering exchange rate stability. The second purpose is to assist the convergence assessment which the Treaty on the Functioning of the European Union (TFEU) establishes in view of the adoption of the euro by the non-euro area EU Member States, with the exception of Denmark which has a special status.[4] In this way, ERM II also offers a testing ground before the adoption of the euro, as the economies of the participating Member States operate under a regime of stable exchange rates vis-à-vis the euro (market test) and are expected to further strengthen their macroeconomic, macroprudential, supervisory and structural policies (policy test).

This article looks at the participation of the Bulgarian lev and the Croatian kuna in ERM II from the broader perspective of the second purpose of ERM II, i.e. its role as a bridge from the domestic currency towards the introduction of the common currency, the euro. Section 2 sets the stage by briefly reviewing the history, the main features and the procedures of ERM II. Section 3 makes the main point in this article: we argue, also on the basis of quantitative evidence, that the process towards euro adoption may induce a "regime shift" when a country joins ERM II and is, therefore, expected to introduce the euro once complying with the Treaty-based criteria. This shift may alter the economic incentives of local and international investors, as well as of the authorities of the Member

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1 See Dorrucci et al. (2020a).

2 Denmark was until 10 July 2020 the only non-euro area EU Member State participating in the mechanism. Since then the ERM II parties also include Bulgaria and Croatia.

3 Art. 140 and Protocol 13 of Treaty on the Functioning of the European Union (TFEU) state that euro adoption by a given Member State is subject to the fulfilment of several economic and legal ("Maastricht") convergence criteria. In their biennial Convergence Reports, the ECB and the European Commission examine whether: (i) the countries concerned have achieved a high degree of sustainable economic convergence, (ii) the national legislations are compatible with the Treaty and the Statute of the European System of Central Banks and the ECB; and (iii) the statutory requirements are fulfilled for the relevant national central banks to become an integral part of the Eurosystem.

4 With regard to exchange rate stability, the ECB and the European Commission examine whether the country has participated in ERM II for a period of at least two years before the examination without severe tensions observed in the normal fluctuation margins of the exchange rate mechanism. In particular, this means that in such period the country should not devalue the bilateral central rate against the euro on its own initiative. Protocol 16 grants an exemption to Denmark from participation in Stage Three of the Economic and Monetary Union of the European Union (EMU). Denmark is, therefore, the only non-euro area EU Member State participating in ERM II without pursuing the objective of euro adoption.

State concerned, with important policy implications. History provides several examples in this regard, be them positive, e.g. sustainable catching-up, or negative, e.g. accumulation of imbalances. For this reason, in the run-up to euro adoption countries need to establish sound policies, governance and institutions in order to allocate capital inflows and domestic credit efficiently, and address risks with adequate macroeconomic, macroprudential, supervisory and structural measures. Drawing on this analysis, Section 4 explains the roadmap towards ERM II participation that was established and implemented by Bulgaria and Croatia. This involved the completion of several policy commitments before joining ERM II, as well as the announcement of post-entry commitments taken by the Bulgarian and the Croatian authorities at the moment of joining the mechanism. Finally, Section 5 concludes by highlighting the way ahead and key challenges in view of the eventual adoption of the euro by Bulgaria and Croatia.

2 The history, main features and procedures of ERM II

2.1 History

With the introduction of the euro on 1 January 1999, ERM II replaced the original Exchange Rate Mechanism, which was one of the components of the European Monetary System (EMS) in place since 13 March 1979.[5] Initially the Greek drachma and the Danish krone were both part of the new mechanism, but Denmark remained the only non-euro area EU Member State participating in the mechanism when Greece adopted the euro in 2001.

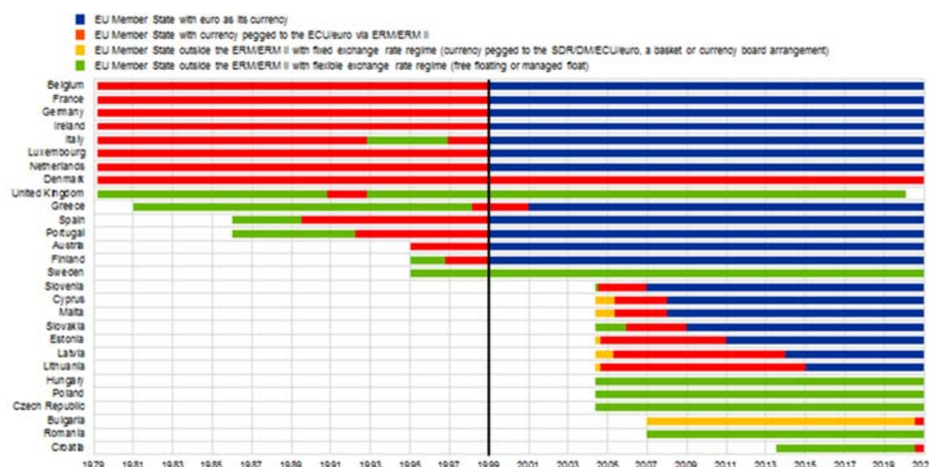
On 1 May 2004, ten new Member States joined the EU and their national central banks (NCBs) became part to the ERM II Central Bank Agreement. Soon after the EU enlargement, on 28 June 2004, the Estonian kroon, the Lithuanian litas, and the Slovenian tolar were included in ERM II. On 2 May 2005 the Cypriot pound, the Latvian lats and the Maltese lira, and on 28 November 2005 the Slovak koruna joined the mechanism. After "*fulfilling their obligations regarding the achievement of economic and monetary union*" (Art. 140 TFEU), including positive convergence assessments from the ECB and the European Commission, these countries have all joined the euro area between 1 January 2007, when Slovenia adopted the euro, and 1 January 2015, when Lithuania introduced the single currency.

ERM II is an important chapter in the much longer history of European monetary integration since the collapse of the Bretton Woods system in the early 1970s. The main steps in that history are summarised in Chart 1. The original ERM, initiated in 1979 as a core element of the EMS, aimed at reducing exchange rate variability and foster monetary stability in Western Europe. The other main components of the EMS were the European Currency Unit (ECU) – an official basket currency which acted as a hub in the system and can be seen as the forerunner of the euro – and a number of arrangements to foster cooperation in the implementation of monetary and exchange rate policies by the participating central banks. While originally only eight countries – Belgium, Germany, Denmark, France, Ireland, Italy, Luxemburg and the Netherlands – participated in the ERM, the mechanism was subsequently joined by all other EU Member States, with the exception of the Czech Republic, Hungary, Poland, Romania and Sweden.

[5] More generally, on 1 January 1999 the whole EMS was replaced by Stage Three of EMU.

Chart 1

Exchange rate regimes of the EU Member States since the start of the European Monetary System



Source: ECB.

Notes:

1) The ERM, which was one element of the European Monetary System, became operational on 13 March 1979 and ended with the start of stage three of the Economic and Monetary Union (EMU) on 1 January 1999. On the same day the ERM was succeeded by ERM II.

2) Belgium and Luxembourg were in a monetary association until the adoption of the euro in 1999.

3) The standard fluctuation band around the central rates in the ERM was ± 2.25%, except for the Italian lira, the Spanish peseta, the Portuguese escudo and the UK pound sterling, for which it was ± 6%. From 8 January 1990 until 16 September 1992 the Italian lira (previously in the wide band of the ERM) was in the narrow band.

4) In August 1993 the ERM fluctuation bands were widened temporarily to ± 15% for all ERM participants.

5) In September 1992 the participation of the Italian lira and the UK pound sterling in the ERM was suspended. The lira resumed full participation in the ERM in November 1996.

6) Greece participated in ERM II in 1999-2000 with the new standard ±15% fluctuation band. Denmark kept the ± 2.25% fluctuation band within both the ERM and ERM II. While the nominal band was the standard one, nearly all subsequent ERM II members unilaterally committed to a narrower actual fluctuation band upon joining ERM II. These unilateral commitments do not involve any obligations on the other ERM II parties.

7) The Czech Republic introduced an exchange rate floor towards the euro (one-sided commitment) from November 2013 to April 2017.

8) The United Kingdom exited the EU on 31 January 2020.

2.2 Main features

ERM II was established by the European Council Resolution of 16 June 1997, which stipulated that "the euro will be the centre of the new mechanism". The main features are: (i) a central rate against the euro; (ii) a fluctuation band with a standard width of ±15 percent around the central rate; (iii) interventions at the margins of the agreed fluctuation band; and (iv) the availability of very short-term financing from the participating central banks. Participating NCBs may unilaterally commit themselves to tighter fluctuation bands than those provided for by ERM II, without posing any additional obligations on the remaining participating NCBs or the ECB. Interventions at the margins of the fluctuation bands are in principle automatic and unlimited although the ECB and the participating NCBs can suspend them at any time if they were to conflict with the primary objective of maintaining price stability.

ERM II is a multilateral exchange rate arrangement with a fixed, but adjustable, central rate and a fluctuation band. The standard fluctuation band has a width of ±15 percent. Formally agreed fluctuation bands narrower than the standard one may be set at the request of the non-euro area EU Member State concerned. According to the policy position of the ECB Governing Council[6], such decisions – taken on a case-by-case basis and by mutual agreement – are exceptional in nature as the

[6] See "Policy Position of the Governing Council of the European Central Bank on Exchange Rate Issues Relating to the Acceding Countries" (18 December 2003), in https://www.ecb.europa.eu/pub/pdf/other/policyaccexchangerateen.pdf.

standard band is deemed to be appropriate for a Member State undergoing a process of convergence.[7] While narrower bands are as a rule adopted on a unilateral basis, i.e., without posing any additional obligations on the remaining participating NCBs or the ECB, they can be multilaterally agreed in the case of economies at a sufficiently advanced stage of economic convergence. This applies to the Danish krone, for which a multilaterally agreed fluctuation band of ±2.25 percent vis-à-vis the euro is in place. The operation of ERM II is monitored by the General Council of the ECB, which also ensures the coordination of monetary and exchange rate policies and administers the intervention mechanisms together with the NCBs.

During ERM II participation, realignments of the central rate or changes to the width of the fluctuation band may occur, for example, if equilibrium exchange rates evolve over time. Such developments are likely to be all the more relevant during a process of real convergence (i.e. catching-up in the real GDP per capita of lower-income economies), in the case of significant changes in external competitiveness, and/or in the presence of inconsistent macroeconomic policies. While realignments were much more common during the European Monetary System (EMS), the history of ERM also provides a concrete case: after joining ERM II on 28 November 2005, the central rate of the Slovak koruna vis-à-vis the euro was revalued on three occasions, i.e. on 16 March 2007, 27 May 2008 and 31 December 2008, just before Slovakia adopted the euro on 1 January 2009.

Interventions at the margin of the fluctuation bands are in principle automatic and unlimited. For participating NCBs that intervene at the margins of the fluctuation band by selling foreign currency in support of their domestic currency, very short-term financing (i.e., foreign exchange liquidity provided by the ECB or another participating central bank) can be made available in order to preserve a comfortable level of foreign exchange reserves. The availability of unlimited domestic and foreign currency liquidity ensures symmetry in the intervention capacity at both the upper and the lower margin of the fluctuation bands, thus making the system (in principle) resilient to even large-scale speculative attacks. Finally, it should be emphasised that any interventions within ERM II could be suspended if they were to conflict with the primary objective of price stability in the euro area or a non-euro area EU Member State participating in the mechanism.

2.3 Main procedures related to ERM II participation

While ERM II is referred to in the Treaty as an integral part of the "Maastricht" exchange rate convergence criterion, the ERM II procedures and agreements are not based on the Treaty, since they are intergovernmental in nature. According to Article 2.3 of the aforementioned European Council Resolution of 1997, the decisions regarding participation in ERM II – in particular, whether the currency of an applicant country can be included in the mechanism with a certain central rate and fluctuation band – are taken by mutual agreement of the finance ministers of the euro area Member States, the ECB, and the finance ministers and central bank governors of the non-euro area Member States participating in ERM II at a given point in time. A confidential procedure to this effect can be initiated by all ERM II parties. The decisions are taken at the end of a process involving consultation of the aforementioned EWG. The European Commission is also involved in this process as it participates in the relevant meetings, can be mandated particular tasks, and is kept informed by the ERM II parties.

[7] In particular, currency board arrangements are not a substitute for participation in ERM II. This implies that countries operating a sustainable euro-based currency board are required to participate in the mechanism for at least two years before a convergence assessment can be made in view of possible euro adoption.

As participation in ERM II is a precondition for the eventual introduction of the euro, all EU Member States with a derogation from euro adoption (hereafter: "Member States with a derogation") are expected to join the mechanism at some stage. This follows from the Treaty, under which the Member States with a derogation, i.e. all non-euro area EU Member States except Denmark, are required to take the necessary steps in order to fulfil their obligations regarding the achievement of the Economic and Monetary Union. Given (i) the general entitlement to ERM II participation and (ii) the requirement that the basic parameters of ERM II participation need to be mutually agreed, it follows that, while ERM II parties may decide not to agree to participation of a country at some stage if no consensus can be found on the main parameters of participation (e.g. the central rate), this right is not absolute, i.e. the legal principle of good faith has to be observed.

In the interest of all stakeholders, decisions regarding participation in ERM II are to be taken on the basis of a sound and thorough economic assessment to be conducted by the relevant parties, and in consultation with the European Commission, through a candid, in-depth exchange of views before eventually reaching an agreement. In particular, the requirement of mutual agreement on ERM II participation is to be interpreted as achievement of a consensus that the Member State concerned is effectively pursuing stability-oriented policies consistent with smooth participation in the mechanism. All parties take part in the search for consensus in a positive spirit, and negotiations continue until there is an agreement acceptable to all. This is reflected in the policy position on ERM II adopted by the Governing Council of the ECB in 2003, which also emphasises the need for a holistic approach and comprehensive analysis in the economic assessment to be made.[8]

3 ERM II as a "regime shift" for investor and policymaker behaviour

3.1. Motivation

As the euro area sovereign debt crisis has taught, the full benefits of euro adoption can only be reaped if coupled with adequate policy efforts, including at the national level.[9] Having attained "*a high degree of sustainable convergence*" (Art. 140 TFEU) is the most important precondition for the successful adoption of the euro. To this aim, sound policies and an adequate level of institutional quality are of the essence and, therefore, have to be taken into due consideration when assessing the readiness of a non-euro area EU Member State to participate in ERM II.

This is even more important as participation in ERM II may affect the expectations and economic incentives of international and local investors, as well as those of the local policy authorities – a regime shift that may in turn trigger positive or negative dynamics. Progress in the process of monetary integration, as well as the prospect of adopting the euro, may improve international investor sentiment towards the Member States joining ERM II, which may result in an acceleration of

[8] The ECB policy position of 2003 indeed specifies: *"As the acceding countries differ greatly in their economic structure, exchange rate and monetary regimes, and the degree of nominal and real convergence already achieved, no single path towards ERM II and the adoption of the euro can be identified and recommended […]. Therefore, country situations and strategies will be assessed on a case-by-case basis […]. In this context, the Governing Council of the ECB may give specific recommendations to individual countries […]. To ensure a smooth participation in ERM II, […] it would be necessary that major policy adjustments – for example with regard to price liberalisation and fiscal policy – are undertaken prior to participation in the mechanism and that a credible fiscal consolidation path is being followed. Moreover, as with any exchange rate regime, participation in ERM II is only one element of the overall policy framework and […] must be compatible with other elements of this overall policy framework, in particular with the monetary, fiscal and structural policies.*"

[9] For a recent review of the benefits of euro adoption, see Draghi, M. (2018).

gross capital inflows and, in turn, stronger domestic credit growth coupled with a significant improvement in financing conditions. While this may fuel a sustainable catching-up process, if coupled with a weak institutional and business environment it may at some point also set wrong incentives, potentially leading to e.g. misallocation of capital, the postponement of necessary reforms, and deterioration in the country's adjustment capacity. The ensuing accumulation of imbalances might eventually exacerbate a possible capital flow reversal. Despite increasing evidence of global "push" factors, compared with country-specific "pull" factors, as main driving forces of international capital flows, the interaction of country-specific characteristics with global trends may play an important role in determining the dynamics of international capital flows.[10]

Against this backdrop, some insights can be gained from the analysis of developments in capital inflows and credit growth in the countries which joined ERM II in the past. Our analysis focuses on the EU Member States in central and eastern Europe (CEE) that joined ERM II in 2004 and 2005 and subsequently adopted the euro, i.e. Estonia, Lithuania, Latvia, Slovakia and Slovenia. Section 3.2 compares their experience with that of the Member States in the same region which did not participate in ERM II, i.e. the Czech Republic, Hungary, Poland and Romania, or joined the mechanism only very recently, i.e. Bulgaria and Croatia. Based on this analysis, Section 3.3 suggests some policy implications.

3.2. Empirical evidence

Following EU accession, the CEE EU Member States that participated in ERM II experienced a more pronounced cycle in capital inflows than those Member States in the region that did not participate in ERM II. Gross capital inflows as a share of GDP accelerated ahead of EU accession, which for some Member States also coincided with the start of ERM II participation.[11] However, those Member States that joined ERM II experienced a much stronger surge (Chart 2 and Chart 3). Gross capital inflows in ERM II countries peaked about three years after the start of ERM II participation, at, on average, around 30% of GDP (Chart 2). On the other hand, gross capital inflows were more stable in the countries that did not participate in ERM II, at between 5% and 10% of GDP following EU accession (Chart 3). Furthermore, the Member States participating in ERM II experienced a sharper capital flow reversal with the outburst of the great financial crisis, which materialised in most countries about three to four years after EU accession (Chart 2 vs. Chart 3).[12]

Bank lending was the main driver behind the differences in gross capital inflows between the CEE Member States participating in ERM II and other CEE Member States. The largest share of capital flows to ERM II CEE countries took the form of "other investment", i.e. mainly bank lending to firms and households and flows within banking groups. While this may also reflect the strong presence of foreign (mostly EU-based) banks in that period, this was a common feature in the whole region. Conversely, the composition of capital flows to CEE Member States not participating in ERM II was much more evenly distributed between foreign direct investment (FDI) and other investment (Chart 2 vs. Chart 3).

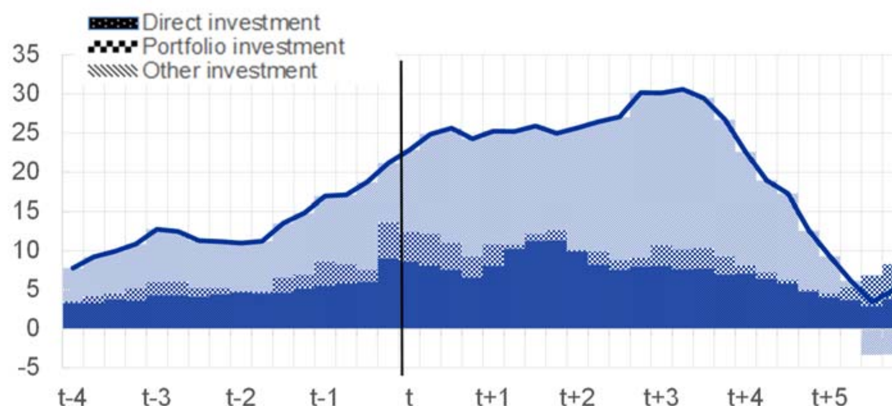
[10] See for example Rey (2013).

[11] As both EU accession and the start of ERM II participation by the countries under consideration took place in 2004-2005 (except for Bulgaria, Romania and Croatia), these developments to some extent also reflected business cycle synchronisation.

[12] Also in net terms, countries participating in ERM II experienced larger capital inflows than the other CEE Member States.

Chart 2: Gross capital inflows of central and eastern European EU Member States before and after joining ERM II

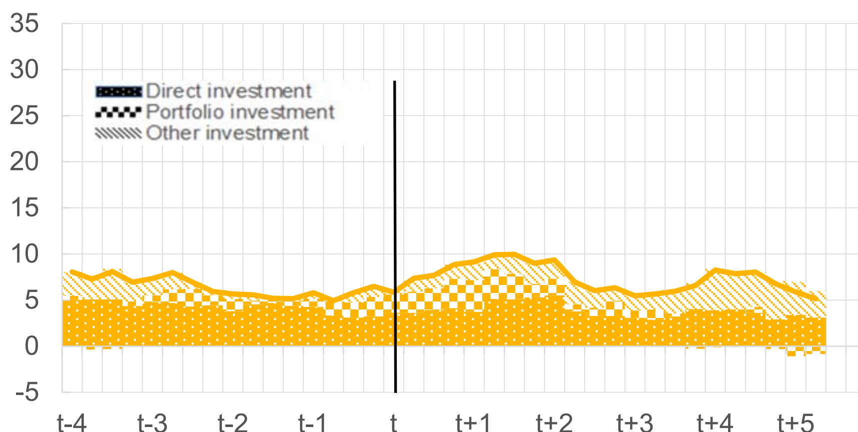
(in percent of countries' GDP; unweighted averages)



Source: ECB staff calculations.
Note: Countries covered are Estonia, Lithuania, Latvia, Slovakia and Slovenia. Period "t" is a country-specific event and identifies the year of the start of participation in ERM II: 2004 for Estonia, Lithuania and Slovenia; 2005 for Latvia and Slovakia.

Chart 3: Gross capital inflows of central and eastern European EU Member States not participating in ERM II before and after joining the EU

(in percent of countries' GDP; unweighted averages)



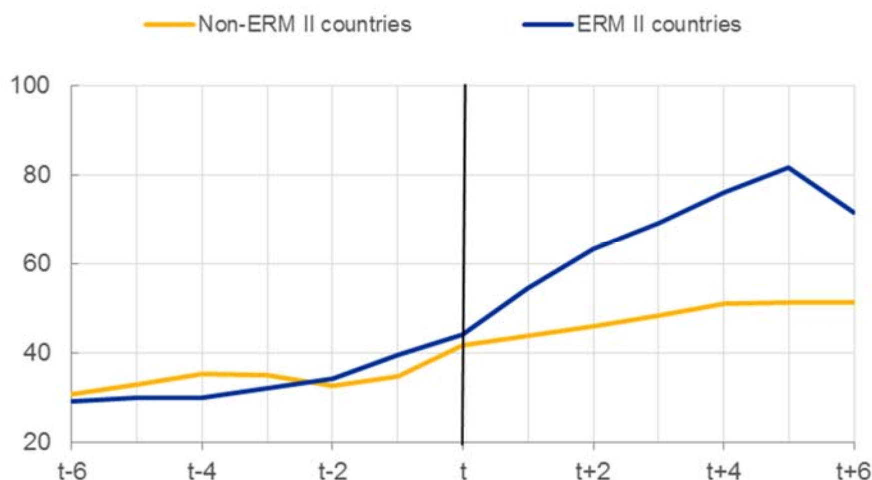
Source: ECB staff calculations.
Note: The countries covered are Bulgaria, the Czech Republic, Croatia, Hungary, Poland, and Romania. Period "t" is a country-specific event and identifies the year of EU entry: 2004 for the Czech Republic, Hungary and Poland, 2007 for Bulgaria and Romania, 2013 for Croatia.

After joining the mechanism, ERM II participants also experienced a stronger expansion in domestic credit than those CEE Member States that did not join ERM II after EU accession, as well as lower real interest rates. Large capital inflows, particularly in the form of bank credit and other interbank flows, can exacerbate the domestic credit cycle by e.g. supporting funding for banks.[13] Credit to the private sector (as share of GDP) nearly doubled in ERM II countries in the five years after they joined the mechanism, while in the other CEE countries the increase in credit stock was more gradual (Chart 4). At the same time, ERM II countries experienced negative short-term real interest rates, on average, in the three-to-four-year period after the start of ERM II participation. In addition, the drop in long-

[13] See for example Lane and McQuade (2014), who also find that domestic credit growth in European countries before 2008 was strongly related to net debt inflows but not to net equity inflows.

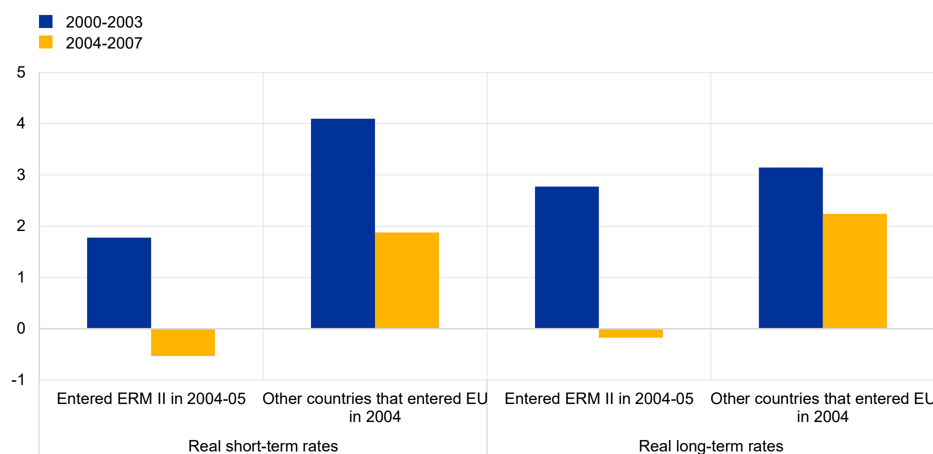
term real interest rates was much stronger in ERM II countries than in the countries that did not join ERM II (Chart 5).

Chart 4: Domestic credit to the private sector in ERM II and non-ERM II CEE EU countries
(in percent of countries' GDP; unweighted averages)



Source: ECB staff calculations.
Note: ERM II countries: Estonia, Lithuania, Latvia, Slovakia and Slovenia. Period "t" is a country-specific event and identifies the year of the start of participation in ERM II: 2004 for Estonia, Lithuania and Slovenia, 2005 for Latvia and Slovakia. Non-ERM II countries: Bulgaria, the Czech Republic, Croatia, Hungary, Poland, and Romania. Period "t" is a country-specific event and identifies the year of EU entry: 2004 for the Czech Republic, Hungary and Poland, 2007 for Bulgaria and Romania, 2013 for Croatia.

Chart 5: Real interest rates in ERM II and non-ERM II CEE EU countries
(in percent)



Source: DataStream, ECB, Eurostat, OECD, Reuters, and ECB staff calculations.
Note: Nominal three-month money market rates and nominal long-term (10 years maturity) interest rates for convergence purposes are HICP-adjusted. Aggregates are simple averages across countries. Countries that entered the ERM II in 2004-2005: Estonia, Lithuania, Slovenia (all in 2004), Latvia and Slovakia (both in 2005). Other countries that entered the EU in 2004: Czech Republic, Hungary, and Poland. Data for real long-term rates is missing in 2000; data for Slovenia is available from 2002 onwards. Estonia is excluded from the aggregate of real long-term rates due to missing data.

Econometric analysis on a panel of emerging market and (former) transition economies finds that ERM II participation increases the magnitude of gross financial inflows, while the degree of flexibility of the exchange rate regime per se does not help to explain capital inflows to these countries. In order to econometrically test whether the choice of the exchange rate regime, and in particular participation in ERM II, has an impact on capital inflows, a panel analysis was conducted for a large sample of 25 advanced and 36 emerging and (former) transition economies[14]. It was systematically controlled for other (pull and push) factors.[15] In particular, gross capital inflows (total and excluding FDI) were regressed on: (i) a variable capturing the flexibility of the exchange rate regime (ERR)[16]; (ii) dummy variables controlling for EU accession and ERM II participation[17]; and (iii) a vector of variables capturing other (country-specific) macroeconomic and financial factors. These include consumer price inflation, real GDP growth, trade openness (measured as share of total exports and imports in GDP) and public debt (as share of GDP). We also control for the degree of financial market development.[18] Additionally, we account for capital account openness by using the Chinn and Ito (2006) index, which is based on the restrictions on cross-border financial transactions reported in the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER). Interest rates (short and long-term; national, international and interest rate differentials), GDP per capita and euro adoption dummy are found insignificant and hence dropped from the estimations.[19] Time fixed effects were used to control for common time-varying trends that are considered to affect countries in a similar magnitude (such as shifts in global interest rate levels, risk aversion, return-seeking behaviour, etc.). Country fixed effects were in turn added to capture country-specific time unvarying effects.

The regression results provide evidence that the degree of flexibility of the exchange rate regime per se does *not* help explain capital inflows, but they also confirm that ERM II participation resulted in a positive, albeit temporary impact on capital inflows (Chart 6 or Table 1). Although fixed exchange rate regimes are expected to attract more capital inflows, for example due to higher exchange rate predictability and lower volatility which reduces the transaction costs, the coefficient on exchange rate flexibility turns out to be statistically insignificant for all groups of countries after controlling for other factors.[20] At the same time, the results suggest that EU accession per se is not relevant for explaining the capital inflows recorded in the Member States.[21] As to the other determinants, the estimates reported in Table 1 suggest that capital inflows are larger in faster growing countries and more financially developed economies, whereas a higher inflation environment and higher public indebtedness adversely affect capital inflows. Furthermore, the impact of ERM II participation is largely explained via *capital inflows other than FDI*, which are mainly composed of banking flows, as the findings described in Charts 1 and 2 above also suggest (Table 1, rows 2 vs. 4).

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14 Annual data, broadly spanning over the period 1980-2016.

15 For the purpose of this analysis central and eastern European Member States are included among the emerging and (former) transition economies as they generally exhibit significantly lower levels of financial development than the rest of EU.

16 Exchange rate flexibility is measured by using the Coarse De Facto Exchange Rate Arrangement Classification, which defines exchange rate regimes on the basis of their actual ex-post exchange rate variability. See Ilzetzki et al. (2017).

17 The dummy for ERM II participation is defined as taking value of 1 for four subsequent years after a country joins ERM II (or for a shorter period in case a country joins the euro area in less than four years after joining ERM II). In alternative specifications, the dummy is defined to take value 1 for the entire period of ERM II participation, but in this case the effects on capital inflows of joining ERM II are found to be insignificant. This result is very likely being affected by the Global Financial Crisis (GFC) which started around 4-5 years after ERM II/EU entry of these countries.

18 As measured by an index developed by IMF reflecting financial markets and institutions access, efficiency and depth: https://www.imf.org/external/pubs/ft/wp/2016/wp1605.pdf. Two alternative measures are used as robustness checks: total market capitalization (country's equity market, private and public bond markets as share in GDP) and external debt (as a share in GDP).

19 The data are sourced from the International Financial Statistics (IFS) of the IMF.

20 This is consistent with Magud et al. (2014) and Reinhart (2012) where they find no evidence of a relationship between capital inflows and the exchange rate regime for a set of EMEs.

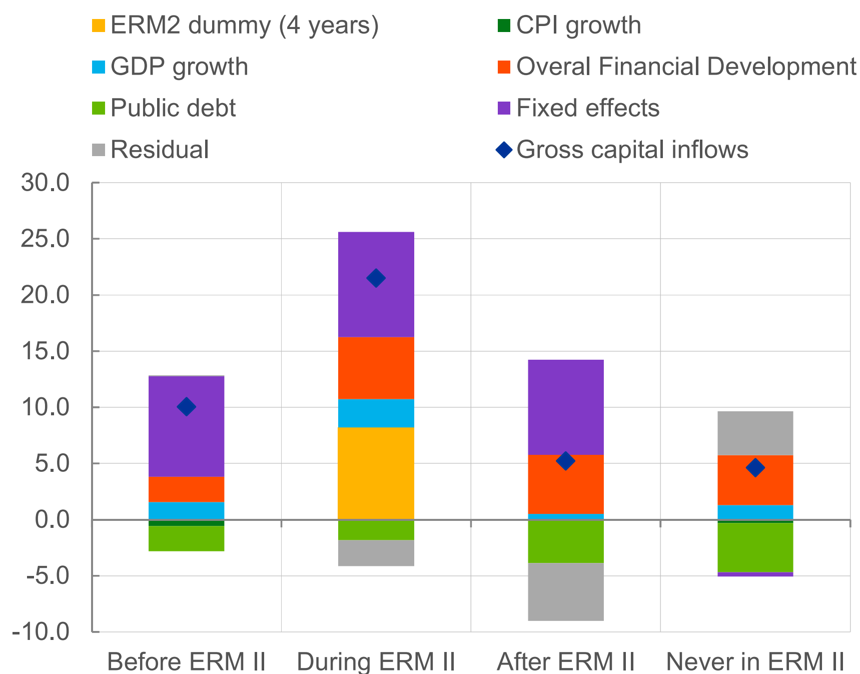
21 The insignificance of EU accession for capital inflows to the central and eastern European EU countries is robust if the ERM II participation dummy is dropped from the specification.

Table 1: Gross capital inflows and exchange rate regimes

Dependent variable: gross capital inflows as a share of GDP	(1) All flows, all economies	(2) All flows, emerging economies	(3) Excluding FDI, all economies	(4) Excluding FDI, emerging economies
ERR	0.00708	0.00752	0.00347	0.00407
	(0.0117)	(0.0100)	(0.00983)	(0.00587)
ERMII dummy (4 years)	0.000981	0.0821**	-0.0122	0.0662**
	(0.0474)	(0.0387)	(0.0404)	(0.0275)
CPI growth (-1)	-0.0113**	-0.00768***	-0.00778	-0.00300*
	(0.00512)	(0.00213)	(0.00490)	(0.00157)
GDP growth (-1)	0.705**	0.357***	0.649**	0.349***
	(0.338)	(0.0790)	(0.320)	(0.0525)
Trade openness (-1)	0.0110	0.0359	-0.0434	0.0187
	(0.0609)	(0.0231)	(0.0453)	(0.0226)
Overall financial development	0.437**	0.152**	0.404**	0.132**
	(0.197)	(0.0705)	(0.172)	(0.0628)
EU dummy	-0.00446	-0.0270	0.00860	-0.0206
	(0.0194)	(0.0225)	(0.0144)	(0.0153)
Public debt	-0.101**	-0.102***	-0.0851*	-0.0856***
	(0.0483)	(0.0287)	(0.0450)	(0.0225)
Constant	-0.0921	0.0251	-0.0531	-0.00589
	(0.0706)	(0.0309)	(0.0521)	(0.0209)
Other controls	Country and year FEs	Country and year FEs	Country and year FEs	Country and year FEs
Observations	1,414	678	1,414	678
R-squared	0.167	0.349	0.131	0.364
Number of countries	61	36	61	36

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.10

Chart 6: Contributions to gross capital inflows
(in percent of GDP)



Source: ECB, IMF, World Bank, and ECB staff calculations.
Note: The estimated contributions are computed as averages from a panel regression including 36 emerging and (former) transition economies. The exchange rate regime is found to be insignificant and, therefore, is not shown in the chart. The same applies to trade openness. Most controls, except for financial development and public debt, are lagged to avoid endogeneity bias. Time and country fixed effects are included.

Empirical evidence also suggests that relatively stronger capital inflows after joining ERM II in 2004-05 positively contributed to the surge in domestic credit, thus exacerbating, on top of other factors, the credit cycle in the period under consideration. This finding is based on panel regressions on the same set of countries as above, where domestic credit (as a share of GDP) is regressed on gross capital inflows, M3, capital account openness and financial market development. While this finding holds for the extended set of countries, the impact of gross capital inflows on domestic credit expansion seems to be larger in emerging and (former) transition economies than in advanced economies.[22] Such a conclusion reflects the fact that financially less-developed economies have usually lower domestic savings and, therefore, need financing from abroad in order to support economic growth and the overall catching-up process. At the same time, this might pose a challenge for certain countries joining ERM II, as large international financial inflows have the potential to fuel credit booms and busts.[23] Moreover, credit booms can turn out to be more severe and difficult to contain in countries with fixed exchange rates, as rising inflation typically associated with strong domestic demand lowers real interest rates further and this in turn triggers additional credit demand.

Table 2: Domestic credit and capital inflows

Dependent variable: Domestic credit to private sector (% GDP)	(1) All economies	(2) Emerging economies
Capital inflows (-1)	0.113***	0.330**
	(0.0408)	(0.120)
M3	0.00535***	0.00640***
	(0.00112)	(0.00112)
Capital account openness	0.0181*	0.0103
	(0.00933)	(0.0101)
Financial markets development	0.757***	0.291*
	(0.194)	(0.147)
Constant	0.0519	0.0325
	(0.0534)	(0.0611)
Other controls	Country and year FEs	Country and year FEs
Observations	1,502	944
R-squared	0.598	0.555
Number of countries	47	31

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.10

[22] Due to data availability the sample is somewhat smaller, encompassing 31 emerging and 16 advanced economies. Data as described above and sourced from the IFS (IMF). All specifications remain robust to using alternative measures for financial development.

[23] The experience of credit booms in the new EU Member States during the 2000s has been widely discussed; see for example Backé and Wojcik (2008), Bakker and Gulde (2010).

3.3. Policy implications

Although the period following EU accession in 2004-05 fell within the environment of "Great Moderation", which is very different from today's prevailing conditions, the empirical findings discussed above suggest some general policy implications that may be of relevance also for Bulgaria and Croatia today, as well as for other EU Member States that will seek ERM II participation in the future. ERM II participants may benefit from increased availability of capital, but they may at the same time also face an increased risk of accumulation of macroeconomic imbalances. Countries with large capital inflows are indeed more likely to experience credit booms and busts, as foreign capital inflows increase the available funds of the banking system, which in central and eastern Europe is often foreign owned for a significant share.

Historical experience suggests that factors such as resilient economic structures[24], as well as the quality of institutions and governance, reduce the risk of accumulation of economic imbalances and enhance the capacity of a country to cope with shocks. While economic literature has in this respect mainly focused on the phase *following* euro adoption,[25] the evidence discussed in the previous sub-section suggests that similar dynamics might materialise also during the *run-up* to euro adoption.

Resilient economic structures create the preconditions for allocating capital to productive firms, thus supporting the catching-up process rather than the formation of bubbles. It also implies an ability of policy makers to resist pressures of vested interests against the implementation of necessary reforms, as well as the build-up of fiscal buffers in good times along with other counter-cyclical measures, including on the macroprudential side. Developments such as a surge in the most volatile components of capital flows may set the wrong system of incentives in a weak institutional context, thus leading to the postponement of reforms and deterioration in the adjustment capacity of a country. This is not to deny that catching-up economies need to attract capital. But if institutions are weak, and the degree of corruption and rent-seeking in a country is high, such capital inflows are more likely to eventually become a curse than a benefit.

Smooth participation of a given currency in ERM II calls, therefore, for the proper framework conditions to be in place in the relevant country. The perspective of joining ERM II and, then, the euro area should serve – similarly to what happened with the incorporation of the *acquis communautaire* at the moment of EU accession – as an important incentive to improve policies, governance and institutions in order to attain convergence on a sustainable basis. If this step is missing, excessive ease of financing after joining ERM II – and later adopting the euro – risks reducing the incentives for necessary reforms.

A crucial European initiative setting the right framework conditions and channelling EU funding to productive uses is given, nowadays, by Next Generation EU (NGEU). NGEU disbursements in the period 2021-26, and in particular those pertaining to the Recovery and Resilience Facility, will be conditional on the implementation of a unique combination of measures mainly focused on productive public investment, capital transfers setting incentives to private investment, and structural reforms. These measures have been defined in detail – including milestones, targets, costing and controls – in the Recovery and Resilience Plans agreed by the Member States with the European

[24] The expression "resilient economic structures" is used in Juncker et al. (2015). Brinkmann et al. (2017) define economic resilience as "*the capability of a national economy to take preparatory crisis-management measures, mitigate the direct consequences of crises, and adapt to changing circumstances. In this regard, the degree of resilience will be determined by how well the actions and interplay of the political, economic and societal spheres can safeguard the performance of the economy – as measured against the societal objective function – also after a crisis*".

[25] See Fernandez-Villaverde et al. (2013); Challe, et al. (2016); Masuch et al. (2016); and Diaz del Hoyo et al. (2017).

Commission and then adopted by the ECOFIN Council. If properly implemented, NGEU-related measures may give an important contribution in putting Bulgaria and Croatia on the right track towards euro adoption.

4 The Bulgarian lev and the Croatian kuna in ERM II

4.1 The process towards ERM II

Following discussions with the ERM II parties, in summer 2018 and summer 2019 the Bulgarian and Croatian authorities, respectively, made a number of policy commitments in areas which are of high relevance for a smooth transition to and participation in ERM II. After successful completion of these so-called prior policy commitments as well as the announcement of post-entry policy commitments to be completed after joining ERM II, the two countries joined simultaneously ERM II and the EU banking union on 10 July 2020. This section explains the rationale for, and the roadmap towards ERM II participation that has been implemented by these two EU Member States.

When Bulgaria and Croatia had first expressed their interest to join the mechanism, ERM II parties took account of three fundamental considerations:

- **First, it was the first time a country would join ERM II after the financial crisis, from which important lessons had been learned**. Over the previous decade the European institutional framework had been substantially overhauled in order to reflect these lessons, which should not have been overlooked in ERM II decisions either. The resilience of economic structures, financial stability, and the quality of institutions and governance had come to the forefront, given their relevance for the longer-term sustainability of euro adoption. In particular, the experience of former ERM II participants had confirmed that ERM II participation required these features to be in place in view of a smooth participation in the mechanism.

- **Second, it was also the first time a Member State would join ERM II since the start of the EU banking union**. The banking union involves direct powers of the Single Supervisory Mechanism (SSM) and the Single Resolution Mechanism (SRM) over the banking system of the Member State concerned. Each Member State is required to enter the banking union at the latest by the time it introduces the euro. Given that ERM II is a preparatory phase for euro adoption, joining ERM II now also means becoming ready for the banking union. To this aim, entering into close cooperation with the ECB simultaneously with ERM II was considered an advisable avenue for Member States aiming to euro adoption.[26]

- **Third, there was also a need to take account of country-specific considerations**. While both Bulgaria and Croatia had made significant progress in addressing several macroeconomic imbalances and both countries had a significant track record under their exchange rate regimes to adjust to adverse shocks, there were concerns about their smooth participation in ERM II due a number of remaining vulnerabilities.

In this context, the question arose how the aforementioned considerations could be best accommodated within the existing institutional and legal framework. Member States have indeed

[26] At the same time, entering into close supervisory cooperation *without* joining ERM II is also a possible course of action for EU Member States that are currently outside the euro area, i.e. the two processes do not necessarily need to be synchronised.

to be treated equally at any given stage of EMU's development. This implies that no preconditions or new rules can be imposed before a Member State applies for ERM II participation. Any Member State is, therefore, free to request inclusion of its currency in ERM II at any point in time and make its policy commitments, as other Member States did in the past. At the same time and in line with the procedure recalled in Section 2.3, ERM II parties may decide not to agree to ERM II participation in case the policy commitments and related actions taken by the national authorities do not sufficiently address the developments, concerns and risks that have been identified so as to ensure a smooth participation in the mechanism. This approach is fully consistent with the ERM II framework.

Based on these considerations, during the informal phase of the roadmap towards participation in ERM II a dialogue was held between the ERM II parties and the Bulgarian and Croatian authorities on the risks that had been identified and how they could be mitigated. This allowed clarifying which kind of policy commitments the Bulgarian and Croatian authorities would have taken and fulfilled when moving forward with the roadmap towards ERM II participation. Once this phase was completed, the last step in the roadmap was given by the formal requests for inclusion of the Bulgarian lev and the Croatian kuna in ERM II, which were sent the day before the decision was taken.

Some policy commitments were completed by the time of formally entering ERM II ("prior commitments"); in line with past practices, other commitments have instead to be completed after joining ERM II, with the aim of achieving a high degree of sustainable economic convergence by the time of euro adoption ("post-ERM II-entry commitments"). Both prior and post-entry commitments needed to be reasonable, proportional and motivated. They also had to be specific, realistic and verifiable in nature. Finally, it was agreed that they could be implemented, monitored and verified in a relatively short lapse of time.

Adequate monitoring in order to verify compliance with both kinds of commitments was in the meantime established by the ECB and the Commission within their respective remits. In particular, the ECB focused on commitments related to the banking sector, including both banking supervision and macroprudential issues. Following a mandate by the ERM II parties, the Commission in turn focused on commitments on structural policies. In order to forestall overlap with other procedures, it was also borne in mind that fiscal policies are governed by the Stability and Growth Pact, and that the reforms in the areas of the judiciary and the fight against corruption and organised crime in Bulgaria were monitored by the Commission under the Cooperation and Verification Mechanism (CVM).

Prior commitments were taken by Bulgaria in summer 2018 and Croatia in summer 2019; they were completed before joining ERM II on 10 July 2020. In short, three of these commitments were basically in the same policy areas for Bulgaria and Croatia: (i) establishing close cooperation between the ECB Banking Supervision and the national competent authorities (NCAs) under the legal framework of the SSM; (ii) strengthening the macroprudential toolkit by empowering the national competent authority to adopt so called borrower-based measures, such as imposing limits on the debt service burden of borrowers relative to their income; and (iii) transposing the EU anti-money-laundering directives into national legislation. The other three commitments were country-specific and pertained to structural policies.

4.2 The completion of ERM II prior policy commitments

In their letters to the ERM II parties, Bulgaria[27] and Croatia[28] committed to implementing a number of policy measures related to banking supervision, the macroprudential toolkit and structural policies before joining ERM II. The European Central Bank (ECB) was mandated by ERM II parties to monitor the effective implementation of the two prior commitments related to banking supervision and financial stability, while the European Commission was mandated by ERM II parties to monitor the effective implementation of the prior policy commitments in the area of structural policies. The monitoring was facilitated by regular technical exchanges between the ECB, the Commission and the Bulgarian and Croatian authorities. The ECB and the European Commission reported regularly to the ERM II parties on the progress made with regard to policy commitments in the field of their respective responsibilities.

The two commitments related to banking supervision and financial stability were: (i) to establish close cooperation between ECB Banking Supervision and the national competent authority (NCA) under the legal framework of the SSM; and (ii) to strengthen the macroprudential toolkit by establishing a clear legal basis to adopt macroprudential borrower-based measures, such as imposing limits on the debt service burden of borrowers relative to their income.

Bulgaria and Croatia submitted requests for *establishing close cooperation between the ECB and the NCAs* in July 2018 and May 2019, respectively. Based on these requests, the ECB assessed whether the conditions for establishing close cooperation were met. As per the legal framework, the assessment consisted of two main parts: (i) a legal assessment of the relevant national law adopted by the requesting Member State; and (ii) the comprehensive assessment of credit institutions established in the Member State. To properly verify whether all conditions had been met, the ECB developed a standard assessment framework based on the conditions set out in Article 7 of the SSM Regulation and the procedural aspects specified in Decision ECB/2014/5 on close cooperation.

With regard to the legal assessment, Bulgaria adopted relevant legislation in December 2018, putting in place the mechanism to ensure that Българска народна банка (Bulgarian National Bank, BNB) would adopt any measure in relation to credit institutions as required by the ECB. The ECB assessed the implemented legislation, including whether the powers available to BNB would be at least equivalent to those of ECB Banking Supervision. In order to comply with all the requirements, in January 2020 BNB introduced a draft law amending the Law on credit institutions and the Law on BNB, which amended the sanctioning powers of BNB and extended the list of breaches which may be subject to sanctions.

Similarly to Bulgaria, the Croatian authorities amended the Law on Credit Institutions and the Law on Hrvatska narodna banka (HNB) in order to create the legal basis for close cooperation with the ECB. The first amendments were adopted by the Croatian Parliament in July 2019; they entered into force in August 2019. Additional amendments to the Law on Credit Institutions and to the Law on HNB were adopted by the Croatian Parliament in April 2020; they entered into force in the same month. The ECB assessed the national legal framework as compliant with the relevant preconditions to establish close cooperation. It ensured that, once close cooperation started, the ECB had all necessary powers to carry out its supervisory tasks vis-à-vis Croatian banks.

[27] See letter by Bulgaria on ERM II participation dated 13 July 2018: https://www.consilium.europa.eu/media/36125/st11119-en18.pdf

[28] See letter by Croatia on ERM II participation dated 4 July 2019: https://www.consilium.europa.eu/media/40282/letter-of-intent.pdf

The comprehensive assessment results for Bulgarian banks were published on 26 July 2019 and indicated capital shortfalls for two out of the six participating banks. The two banks implemented their respective capital plans before the establishment of close cooperation. With this final step, all necessary supervisory and legislative prerequisites were fulfilled. On 10 July 2020, the ECB announced that its Governing Council had adopted a decision to establish close cooperation with the BNB.

The comprehensive assessment results for Croatian banks were published on 5 June 2020 and did not indicate any capital shortfalls for the five selected Croatian banks. On 10 July 2020 the ECB announced that the Governing Council had adopted a Decision establishing close cooperation with HNB following the fulfilment of all supervisory and legislative prerequisites.

At the time of expressing the intent to join ERM II, the *macroprudential framework* in Bulgaria and Croatia did not include a legal basis for borrower-based measures. Instead, the framework mainly relied on capital instruments based on the Capital Requirements Directive IV and the Capital Requirements Regulation (CRD IV / CRR), such as the countercyclical capital buffer. Although both HNB and BNB had broad powers to issue recommendations on new lending practices, these were not as legally binding and enforceable as borrower-based measures.

Against this background, both the Bulgarian and the Croatian authorities committed to broaden the macroprudential toolkit by providing the legal basis for borrower-based measures. This was completed by the Bulgarian and Croatian authorities through the adoption of the relevant legislation in December 2018 and April 2020, respectively.

After the completion of prior commitments, Bulgaria and Croatia joined ERM II and banking union simultaneously. From 1 October 2020, the ECB started directly supervising Bulgarian and Croatian significant institutions, while the Single Resolution Board became the resolution authority for these and all cross-border groups. Credit institutions falling under close cooperation are subject to the same supervisory standards and procedures as their equivalents in the euro area[29].

The establishment of close cooperation with BNB and HNB marks an important milestone in the development of the banking union. It is the first time that the banking union has been enlarged to EU Member States outside the euro area.

Turning to structural policies, Bulgaria and Croatia formulated their prior policy commitments in a country-specific way, in order to avoid the build-up of macroeconomic imbalances and improve institutional quality and governance. The Bulgarian authorities committed to implement measures in the following policy areas: i) the supervision of the non-banking financial sector, ii) the insolvency framework, iii) the anti-money laundering framework, and iv) the governance of state-owned enterprises. In turn, the Croatian authorities committed to implement measures in the following policy areas: i) the anti-money laundering framework, ii) statistics, iii) public sector governance, and iv) the business environment.

The final assessment reports of the effective implementation of the prior policy commitments were published together with the decision to include the Bulgarian lev[30] and Croatian kuna[31] in ERM II.

[29] As regards the supervisory institutional setting, an important difference between Members States that have adopted the euro and members under close cooperation is that the ECB legal acts, including decisions on banks, do not have direct effect in the Member State in close cooperation. This implies that the ECB does not adopt decisions addressed to banks in these Member States, but rather addresses instructions to the respective NCA, which will in turn adopt the required national administrative measures addressed to the relevant banks.

[30] See Letter by Executive Vice-President Dombrovskis and Commissioner Gentiloni to ERM II parties on Bulgaria and assessment of prior commitments of Bulgaria: https://ec.europa.eu/info/sites/info/files/economy-finance/com_opinion_on_bg_erm-ii.pdf

[31] See Letter by Executive Vice-President Dombrovskis and Commissioner Gentiloni to ERM II parties on Croatia and assessment of prior commitments of Croatia: https://ec.europa.eu/info/sites/info/files/economy-finance/com_opinion_on_hr_erm-ii.pdf

On 8 June 2020 and 19 June 2020 the Croatian and the Bulgarian authorities, respectively, informed the ERM II parties of the full implementation of their prior commitments that did not relate to establishing close cooperation with the ECB, and asked ERM II parties to invite the Commission and the ECB to assess their effective implementation. Both institutions confirmed the full implementation of the policy commitments in their respective areas of competence and welcomed the efforts to better prepare the economies of Bulgaria and Croatia for a smooth participation in ERM II.

4.3. ERM II entry and the post-entry commitments

The Bulgarian authorities have committed to implement additional measures on the non-banking financial sector, state-owned enterprises, the insolvency framework, and the anti-money laundering framework. Furthermore, Bulgaria will also continue implementing the extensive reforms to be carried out in the judiciary and in the fight against corruption and organized crime under the CVM.

The Croatian authorities have committed to implement specific policy measures on the anti-money laundering framework, the business environment, state-owned enterprises, and the insolvency framework.

Finally, at the moment of joining ERM II the central rate of the Bulgarian lev against the euro was set at the prevailing market rate which coincided with the fixed exchange rate under the currency board arrangement (CBA). By adopting the standard fluctuation margins of ±15 percent it was also determined, in line with past arrangements, that the Bulgarian CBA is a unilateral commitment borne exclusively by Българска народна банка (Bulgarian National Bank, BNB), which should place no obligation on the ECB and other participants in ERM II.

The central rate of the Croatian kuna against the euro within ERM II was in turn set at a level close to the prevailing market rate. In line with past practice, the central rate was equal to the official ECB reference rate of the Friday prior to inclusion of the currency in ERM II, which is published on the ECB website on a daily basis. The inclusion of the Croatian kuna in ERM II is also subject to the standard fluctuation margins of ±15 percent. Section 4.4 summarises the economic assessment supporting these exchange rate decisions.

4.4 Assessing the central rates of the Bulgarian lev and the Croatian kuna within ERM II

Bulgaria and Croatia have both a longstanding track record of nominal exchange rate stability, which lasted for more than two decades. Bulgaria had adopted a currency board arrangement in July 1997 to address hyperinflationary pressure which was initially based on a legal obligation of Българска народна банка (Bulgarian National Bank, BNB), enshrined in the Law on BNB, to exchange domestic currency at the rate of 1000 old Bulgarian leva per Deutsche Mark. Following a (purely nominal) redenomination of the Bulgarian lev in June 1999, the fixed exchange rate was realigned to 1 new Bulgarian lev per Deutsche Mark. When in 2002 the Deutsche Mark lost its status as legal tender in Germany, the reference currency was changed to the euro and the fixed exchange rate set equal to the irrevocable conversion rate of the Deutsche Mark against the euro at 1.95583 leva per euro. The Croatian kuna, in turn, has been trading under a tightly managed floating exchange rate regime since

its introduction in 1994, with no preannounced level, path or band, and its exchange rate against the euro has been fluctuating in a narrow range of ±4.5 percent around its average level since 1999.

In line with its currency board regime, BNB frequently exchanges Bulgarian leva for euros in operations with domestic banks, while Hrvatska narodna banka (HNB) only rarely intervenes in foreign exchange markets. As stipulated by the Law on BNB, the monetary liabilities of BNB are fully covered by its foreign reserves, and BNB is obliged to exchange monetary liabilities and euro at the official exchange rate without any limit. Thus, the issuance of domestic currency is not discretionary, but directly linked to the availability of international reserves. As a result, the central bank does not need to undertake "traditional" foreign exchange interventions in order to maintain the exchange rate peg, but it issues or absorbs national currency solely against reserve currency in transactions with the banking sector, referred to as "type II interventions", such that the national currency supply automatically equates the demand. In the case of the Croatian kuna, interventions have historically been carried out both in support of as well as with the aim of weakening the kuna, although more recently, until the COVID-19 shock, HNB has mostly intervened in order to counter appreciation pressures.

As a result of their credible commitments to maintaining exchange rate stability, both NCBs have accumulated comfortable buffers of foreign exchange reserves. Since the outbreak of the global financial crisis, BNB and HNB have significantly expanded their holdings of foreign exchange reserves. In 2019, foreign exchange reserves stood at 47 percent of GDP in the case of BNB and at 38 percent of GDP in the case of NHB and substantially exceeded all traditional metrics of foreign exchange reserve adequacy.

At the same time, both countries experienced significant improvements in their external balance since the global financial crisis. The current account balances of both countries turned from double-digit deficits recorded prior to the outbreak of the GFC into surplus and their net international investment positions adjusted significantly from around -100 percent of GDP to -50 percent of GDP in the case of Croatia and -30 percent of GDP in the case of Bulgaria, which is thus among the least vulnerable in the region.

This rebalancing was also paired with significant adjustment of relative costs and prices, such that from a normative perspective the Bulgarian lev and the Croatian kuna were assessed to be in line with fundamentals. The assessment of both countries' external balance, at the time of the start of ERM II participation, suggested that both countries' current account balances were relatively close to their cyclically-adjusted level and if anything somewhat above their medium-term current account benchmarks, thus not pointing to any overvaluation of the currencies. At the same time, both countries' relative price levels were close to what their relative income levels would suggest based on a comparative econometric analysis. In 2019, Bulgaria's price level stood at 52 percent of that of the euro area, while its real per capita GDP was 49 percent of that of the euro area, whereas Croatia's price level stood at 65 percent of that of the euro area, while its real per capita GDP was 60 percent of that of the euro area.

In the absence of any significant real exchange rate misalignment, the ERM II parties decided to set the central rates of the Bulgarian leva and the Croatian kuna at a level close to their prevailing market rate, coinciding in the case of the Bulgarian lev with its fixed exchange rate under the currency board arrangement. Thus, the Bulgarian lev was included at with its central rate set as its fixed exchange rate of 1.95583 leva per euro. The Croatian kuna, in turn, was included with its central rate set to 7.53450 kuna per euro, corresponding to the level of the reference exchange rate (as

published by the ECB based on a regular daily concertation procedure between central banks across Europe) on the day of its inclusion.

Both countries were included with the standard fluctuation margin of ±15 percent. At the same time, it was accepted that Bulgaria joined ERM II with its existing currency board arrangement in place, as a unilateral commitment, thus placing no additional obligations on the ECB.

5 Conclusion: way ahead and the related challenges

The adoption of the euro by Bulgaria and Croatia would result in an enlargement of the euro area to 21 countries. At present, 19 EU Member States have adopted a common monetary policy including the euro as a common currency. Under the Treaty, all other EU Member States except Denmark are expected to introduce the euro once the necessary requirements will be fulfilled.

From a procedural angle, euro adoption is decided upon by the Council of the European Union in line with the relevant Treaty provisions, including the above-discussed need to stay in ERM II for two years at least. The process is defined in Article 140 and Protocol 13 of the TFEU and could be summarized as follows. After consulting the European Parliament and following discussion in the European Council, the Council shall, on a proposal from the Commission, decide which Member States with a derogation fulfil the necessary conditions to adopt the euro. This decision is taken on the basis of the Maastricht economic and legal criteria. As mentioned, the Convergence Reports on fulfilment of such criteria are prepared by the European Commission and the ECB. The Council shall act – on the basis of a recommendation of a qualified majority of its Member States whose currency is the euro – at the latest six months after receiving the Commission's proposal, which is based on the conclusions of the Converge Reports.

From a policy viewpoint, the adoption of the euro is an opportunity, albeit not a guarantee, for Member States to reap substantial benefits. Most importantly, among other benefits, the adoption of a global currency as a legal tender fosters monetary stability, which in turn manifests itself in a stable and low real interest rate environment. This benefit, however, may also expose a country to vulnerabilities if monetary stability is complacently taken advantage of to substitute for disciplined and sustainable economic policies.

The Treaty on the Functioning of the European Union states unambiguously that a country should achieve "a high degree of sustainable convergence" with the euro area (Article 140) before introducing the euro. This means that the adoption of the euro should be sustainable over the longer run. Factors such as resilient economic structures, financial stability, the quality of institutions and governance, as well as the progressive enhancement of EU architecture, also play a very important role. There is, therefore, no automatism in the convergence process, which at country level should rather be seen as a by-product of relentless policy efforts before and after the adoption of the euro, i.e. as a continuum. It is for these reasons that the communiques of 10 July 2020 on the Bulgarian lev and Croatian kuna in ERM II have also emphasised a "*firm commitment*" by the respective authorities "*to pursue sound economic policies with the aim of preserving economic and financial stability, and achieving a high degree of sustainable economic convergence*".

The regime shift implied by ERM II and its role as preparatory phase for euro adoption raise policy challenges that need to be addressed. While the prior commitments made by the Bulgarian and Croatian authorities in recent years have spurred important measures that will mitigate risks under

ERM II, these reforms will not fix all the vulnerabilities that the two countries are facing. The additional, voluntary structural policy measures announced at the moment of joining ERM II are, therefore, to be welcomed. On top of this, while crucial steps have been taken in both countries to address macroeconomic imbalances, significant progress is still needed with regard to the overall quality of institutions and governance. Advancing on this front by taking a "long view" in policy making will be decisive, also in the light of the new risks of divergence raised by the COVID-19 shock. As discussed, a very important contribution in the right direction will also be provided by the implementation of the NGEU package.

Last but not least, these policy efforts will need to also include measures aimed at preventing that the euro changeover is used by firms and price setters as an excuse for unwarranted price hikes that may harm the trust of the population in the single currency. In this regard, the national authorities in cooperation with the European Commission and the ECB can benefit from past experience with euro changeover in other countries, which includes measures such as public campaigns, the introduction of dual price display, as well as agreements with relevant associations. The ECB is fully committed, in liaison with the Commission, to support the Bulgarian and the Croatian authorities in the promotion of campaigns to prevent such price rounding-up effects.

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