

Belke, Ansgar; Dobrzańska, Anna; Gros, Daniel; Smaga, Pawel

**Working Paper**

## (When) should a non-euro country join the banking union?

ROME Discussion Paper Series, No. 16-02

**Provided in Cooperation with:**

Research Network "Research on Money in the Economy" (ROME)

*Suggested Citation:* Belke, Ansgar; Dobrzańska, Anna; Gros, Daniel; Smaga, Pawel (2016) : (When) should a non-euro country join the banking union?, ROME Discussion Paper Series, No. 16-02, Research On Money in the Economy (ROME), s.l.

This Version is available at:

<https://hdl.handle.net/10419/156214>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*

# R O M E

Research On Money in the Economy

No. 16-02 – March 2016

(When) should a non-euro country  
join the banking union?

Ansgar Belke, Anna Dobrzańska, Daniel Gros  
and Pawel Smaga

ROME Discussion Paper Series

"Research on Money in the Economy" (ROME) is a private non-profit-oriented research network of and for economists, who generally are interested in monetary economics and especially are interested in the interdependences between the financial sector and the real economy. Further information is available on [www.rome-net.org](http://www.rome-net.org).

ISSN 1865-7052

# Research On Money in the Economy

Discussion Paper Series  
ISSN 1865-7052

No 2016-02, March 2016

## (When) should a non-euro country join the banking union?

*Ansgar Belke, Anna Dobrzańska, Daniel Gros and Pawel Smaga*

*Prof. Dr. Ansgar Belke*  
University of Duisburg-Essen  
Department of Economics  
Universitaetsstr. 12  
D-45117 Essen  
e-mail: [ansgar.belke@uni-due.de](mailto:ansgar.belke@uni-due.de)

*Anna Dobrzańska*  
National Bank of Poland and  
Warsaw School of Economics  
al. Niepodległości 162  
02-554 Warsaw

*Dr. Daniel Gros*  
Centre for European Policy Studies (CEPS)  
1 Place du Congrès  
B-1000 Brussels  
e-mail: [danielg@ceps.eu](mailto:danielg@ceps.eu)

*Dr. Pawel Smaga*  
National Bank of Poland and  
Warsaw School of Economics  
al. Niepodległości 162  
02-554 Warsaw  
e-mail: [pawel.smaga@nbp.pl](mailto:pawel.smaga@nbp.pl)

The discussion paper represent the authors' personal opinions and do not necessarily reflect the views of the associated institutions.

NOTE: Working papers in the "Research On Money in the Economy" Discussion Paper Series are preliminary materials circulated to stimulate discussion and critical comment. The analysis and conclusions set forth are those of the author(s) and do not indicate concurrence by other members of the research network ROME. Any reproduction, publication and reprint in the form of a different publication, whether printed or produced electronically, in whole or in part, is permitted only with the explicit written authorisation of the author(s). References in publications to ROME Discussion Papers (other than an acknowledgment that the writer has had access to unpublished material) should be cleared with the author(s) to protect the tentative character of these papers. As a general rule, ROME Discussion Papers are not translated and are usually only available in the original language used by the contributor(s).

ROME Discussion Papers are published in PDF format at [www.rome-net.org/publications/](http://www.rome-net.org/publications/).

Please direct any enquiries to the current ROME coordinators  
Prof. Dr. Albrecht F. Michler / Markus Penatzer, M.Sc.  
Heinrich-Heine-University of Duesseldorf, Department of Economics, Universitaetsstr. 1,  
Build. 24.31.01.01 (Oeconomicum), D-40225 Duesseldorf, Germany  
Tel.: ++49(0)-211-81-15372  
Fax: ++49(0)-211-81-15261  
E-mail: [helpdesk@rome-net.org](mailto:helpdesk@rome-net.org)  
[albrecht.michler@hhu.de](mailto:albrecht.michler@hhu.de) or [markus.penatzer@hhu.de](mailto:markus.penatzer@hhu.de)

## **Abstract**

We analyze the benefits and costs of a non-euro country opting-in to the banking union. The decision to opt-in depends on the comparison between the assessment of the banking union attractiveness and the robustness of a national safety net. The benefits of opting-in are still only potential and uncertain, while costs are more tangible. Due to treaty constraints, non-euro countries participating in the banking union will not be on equal footing with euro area members. Analysis presented in the paper points out that reducing the weaknesses of the banking union and thus providing incentives for opting-in is not probable in the short term, mainly due to political constraints. Until a fully-fledged banking union with well-capitalized backstops is established it may be optimal for a non-euro country to join the banking union upon the euro adoption. Assessing first experiences with the functioning of the banking union and opt-in countries will be crucial for non-euro countries when deciding whether to opt-in.

**JEL-Classification: F36, F42, G21, G28**

Keywords: banking union, resolution, supervision, deposit guarantee scheme, euro, the ECB

### *Acknowledgements*

We would like to thank Martin Aehling from Financial Risk and Stability Network in Germany for help in coordinating work on this project. We are very grateful for comments on previous versions of this paper by an anonymous referee and participants of the OeNB Workshop "Toward a Genuine Economic and Monetary Union" in Vienna on September 10-11, 2015. We explicitly stress that the opinions expressed herein are those of the authors and do not reflect those of the associated institutions.

### *Corresponding author*

Pawel Smaga, National Bank of Poland and Warsaw School of Economics, al. Niepodległości 162, 02-554 Warsaw, Poland, [pawel.smaga@nbp.pl](mailto:pawel.smaga@nbp.pl).

## 1. Introduction

The global financial crisis exposed numerous weaknesses in the European safety net arrangements. The pre-crisis financial supervisory architecture was based on independent national competent authorities responsible for supervising financial institutions in their jurisdictions. As the European financial regulations were governed by minimum harmonization principle, national competent authorities often softened prudential requirements to ensure competitive advantage of domestic financial institutions. This forbearance resulted in very heterogeneous supervisory standards and practices across the EU. Free movement of capital within the single market induced regulatory arbitrage with concentration of capital inflows in high-risk countries with lax supervision and regulation, thus increasing contagion and systemic risk<sup>1</sup> in the EU. Moreover, the fragmented European supervision was not adjusted to changes caused by the growing internationalization and integration in the EU financial system and thus strengthened and unified financial supervision became necessary.<sup>2</sup> The crisis also underlined the need for a macroprudential approach, encompassing more than safety of particular institutions, going beyond national borders and limiting contagion effects on an integrated single market (Szpunar 2014).

All those institutional weaknesses called for a regulatory overhaul. Introduction of maximum harmonization together with the single rulebook principles should ensure uniform regulatory environment for all EU financial institutions, especially in the banking sector. However, the establishment of the European System of Financial Supervisors did not mark the end of institutional reforms within the EU. There is also a need for further strengthening resolution arrangements in the EU, especially for systemically important financial institutions (SIFIs). The issue of burden-sharing in case of cross-border bank insolvency is still not clearly resolved. Effective pan-European resolution is crucial because costs of financial crises are very high not only in terms of output loss<sup>3</sup> but also in terms of public deficit and debt increases, as evidenced by the exacerbation of the sovereign-bank nexus in the euro area countries. Establishing the banking union is a key reform to tackle those problems and strengthen the European safety net.

---

<sup>1</sup> More on the concept of systemic risk in De Bant and Hartmann (2000) and Smaga (2014a).

<sup>2</sup> As the level 3 committees had weak legal powers (only non-binding recommendations), they neither effectively promoted common supervisory standards nor were able to undertake quick cross-border actions in the face of emerging crisis (Dobrzańska 2012).

<sup>3</sup> For crises that started in 2007 onwards, the median output loss reaches 25 percent of GDP (Laeven and Valencia 2012).

Banking union is targeted, in the first place, at euro area countries, as they were hit most severely by the crisis. In the nutshell, banking union foresees the transfer of so far national supervisory and resolution competences to the euro area level. However, in order to be effective, without creating competitive distortions and fostering development of the single market, banking union has to remain open for participation of the non-euro countries as well. This group of countries is very heterogeneous and with financial systems at different stages of development and convergence with the euro area. Yet, the financial and economic interlinkages between non-euro area and euro area countries are strong and cannot be disregarded. It is therefore necessary and mutually beneficial to invite and encourage non-euro countries to participate in regulatory reforms at the level of the euro area, as many non-euro countries in CEE are EU Member States with a “derogation”.<sup>4</sup> While there is no doubt that further European integration is a natural direction for them, not all aspects of the banking union might be beneficial from their perspective and the question of opting-in to the banking union remains open.

The aim of the policy paper is to analyze and assess both advantages and disadvantages of opting-in to the banking union for non-euro EU countries, focusing on the example of CEE countries. We analyze the position of non-euro countries which can establish close cooperation with the ECB, i.e. join the banking union without simultaneously joining the euro area and thus become opt-in countries (“opt-ins”). The analysis covers the banking union in its current shape – the Single Supervisory Mechanism (SSM), the Single Resolution Mechanism (SRM), and the nascent European Deposit Insurance Scheme (EDIS), having in mind that opting-in means participation in all of those mechanisms.

The decision to opt in should on the one hand, take into account the assessment of banking union’s construction with all its weaknesses and strengths and on the other hand, the robustness of a national safety net as well as the structure and stability of the domestic banking system. The main research question is whether it pays for a non-euro country to opt-in to the banking union in its current shape? What would be the optimal choice: opting-in now or joining the banking union when entering the euro area?

The literature on evaluation of opting-in to the banking union is still very scarce. To our knowledge for the time being only Berglöf et al. (2012), Darvas and Wolff (2013), Kisgergely and Szombati (2014) and IMF (2015) analyze opting-in from the perspective of CEE

---

<sup>4</sup> At the time of their EU accession, they haven’t meet the convergence criteria for entry to the euro area, therefore their Treaties of Accession allow them time to make the necessary adjustments. They are obliged to join the euro area at some point, when all the convergence criteria are met.

countries. We also use banking union assessments provided in reports by central banks or by official government bodies from non-euro countries. Our contribution to the literature is threefold. First, we build upon those findings and attempt to provide a comprehensive assessment of attractiveness of all aspects of banking union pillars from the perspective of a non-euro Member State. Second, unlike the previous studies, we go beyond just analysis of banking union and outline practical policy proposals to encourage opting-in. Third, on the basis of economic underpinnings we evaluate current willingness of each non-euro country to opt in.

The article is structured as follows. In the next section, an overview of aims of the banking union and the rules of “opt-in option” are presented. In section 3 we analyze potential benefits of joining the banking union for opt-ins, which are mostly the same also for euro area banking union members.<sup>5</sup> Section 4 discusses risks for opt-in countries connected with their limited rights, risks stemming from the deficiencies in the banking union construction and issues related to specific features of opt-ins’ (especially CEE) financial systems. Having juxtaposed both benefits and risks, the subsequent section 5 outlines some policy implications and regulatory proposals to strengthen the banking union, counter the identified disadvantages, and thus encourage opting-in. The final section concludes.

## **2. Principles of the banking union**

The banking union is a milestone in European financial integration, comparable to the introduction of the euro. The banking union can be regarded as a hitherto missing element of the financial integration. The banking union is a part of vision of a stable and prosperous EMU, as laid out in Van Rompuy’s report (2012) encompassing integrated: financial framework, budgetary framework, economic policy framework, while ensuring democratic legitimacy and accountability.

There are several objectives of establishing the banking union, yet their achievement, at least in the short run, remains debatable (Smaga 2014b):

- reducing negative, mutually reinforcing links and feedback loops between the banking sector and public finances (mainly in the peripheral euro area countries) and *home bias*,

---

<sup>5</sup> In the paper we don’t include detailed descriptions of the banking union pillars as those can be found in e.g. Wymeersch (2014) for SSM and Junevièius and Puidokas (2014) for SRM. The description of SSM and SRM pillars and their overall assessment is also provided by Smaga (2015).

- reducing potential for cross-border contagion between banking union countries and the transmission of systemic risk,
- reverting the process of financial markets fragmentation, and in that way improving monetary policy transmission mechanism within the euro area,
- ensuring resilient and sound banking system which contributes to sustainable economic growth,
- establishing a level playing field for banks by supporting development of the single rulebook and ensuring harmonization and consistency of supervisory practices,
- strengthening the supervision of banks, especially of large cross-border banks, thus reducing national supervisory forbearance/national bias,
- ensuring financial stability and financial integration by centralizing supervisory and resolution decisions and responsibilities on the euro area level.<sup>6</sup>

The banking union aims at building an integrated financial framework to safeguard financial stability and minimize the cost of bank failures. It consists of five complementary elements (Constâncio 2013):

- the Single rulebook,
- the Single Supervisory Mechanism,
- the Single Resolution Mechanism,
- the financial backstop (the ESM),
- the common system of deposit protection.

The progress on different pillars of the banking union remains uneven. Key EU banking regulations (CRDIV/CRR package) came into force in January 2014. The EBA is constantly developing the single rulebook. The first pillar of the banking union - the SSM, has been launched in November 2014. The second pillar – the SRM started operating fully in 2016. It was agreed at the Euro area summit on 29 June 2012, that once the SSM becomes operational, the ESM would be able to recapitalize banks directly (i.e. without intermediation of states budgets giving rise to sovereign-bank feedback loop). However, until now no detailed proposals have been put forward, except for vague guidelines. The DGS Directive was revised and work on establishing the EDIS with a common Deposit Insurance Fund (DIF) has started

---

<sup>6</sup> The banking union is an attempt to counter the financial trilemma (Schoenmaker 2011) which states that (1) financial stability, (2) financial integration and (3) national financial policies are incompatible - any two of the three objectives can be combined but not all three, thus one has to give. Banking union bases on the assumption that effective pursuing of financial stability and financial integration requires supervision and resolution to be placed on the same level, eliminating national bias that might lead – through coordination failure and information asymmetry – to suboptimal “production” of financial stability as a public good.



in line with EC's proposal in late 2015. When complete, by combining the quality of supervision, swift resolution of banks with limited bailouts and increased depositors' confidence, the banking union might contribute to financial stability in the EU.

Joining the banking union is not compulsory for non-euro countries (see Table 1). While participation in the banking union and all its pillars is obligatory for the euro area countries, national authorities of non-euro countries have (at any time) an option to establish a close cooperation with the ECB ("opt-in option").<sup>7</sup> The conditions of opting-in are equal for all non-euro countries. A non-euro country has to notify the request to enter into a close cooperation and ensure (by introducing any necessary legal changes) that its national supervisory authority will abide by any guidelines or instructions issued by the ECB<sup>8</sup> and adopt any measure requested by the ECB, while providing all information on credit institutions.<sup>9</sup> This may imply amending national legislation accordingly to ensure that legal acts adopted by the ECB are legally binding in the opt-in country.<sup>10</sup> A prerequisite for opting-in is also examining the national banking system in a comprehensive assessment exercise.

Similarly, a euro area country can neither be expelled from nor exit the banking union. In case of opt-in countries close cooperation might be terminated. This might happen either on the initiative of the opt-in country or the ECB. Should SSM regulation no longer be met by the opt-in country, the ECB may issue a warning about suspension or termination of close cooperation and in case it is disregarded, terminate the close cooperation. Close cooperation might also be terminated upon request of a Member State after at least 3 years since its establishment.<sup>11</sup> In case of a disagreement with a draft decision of the Supervisory Board, the opt-in country might leave the banking union with immediate effect, after informing the Governing Council and terminating the close cooperation with the ECB. Furthermore, in case

---

<sup>7</sup> Entering the euro area might not lead national central banks to become on average more involved in taking care of the financial stability than non-EMU central banks in the EU (Smaga 2013).

<sup>8</sup> Due to constraints in the TFEU, the ECB has no legal power over non-euro Member States, the ECB shall not exercise direct powers over supervised entities established in an opt-in country, but shall issue instructions, guidelines and requests to the national competent authority with regard to the supervised entities, which the national supervisor commits to follow when opting-in. MNB (2014) also points out that it also raises the issue of liability, given that banks concerned can contest the local supervisor's decision in case of a disagreement.

<sup>9</sup> Apart from organizational purposes, it is necessary for the ECB to identify in an opt-in country significant credit institutions which will be supervised directly, as well as create supervisory procedures and any appropriate MoUs.

<sup>10</sup> Opting-in would require changes to the national legislation, as according to art. 132 and 139 of the TFEU, acts of the ECB shall not apply to the EU countries with derogation.

<sup>11</sup> The period of three years is also a cooling-off period before being eligible to again establish close cooperation by the non-euro Member State.

the Governing Council objects to the draft decision of the Supervisory Board, an opt-in country might also choose not be bound by the decision that has been objected to, but faces the risk of the ECB suspending or terminating close cooperation agreement.<sup>12</sup>

Table 1. Comparison of the position of non-euro vs. euro area countries in the banking union

<b>Status</b>	<b>Euro area countries</b>	<b>Non-euro countries</b>
Membership in the banking union	Obligatory	Voluntary
Participation in the Supervisory Board	Yes	Yes
Participation in the Governing Council	Yes	No
Participation in the Single Resolution Board	Yes	Yes
Access to the ECB liquidity facility	Yes	No
Access to Single Resolution Fund	Yes	Yes
Access to the Deposit Insurance Fund	Yes	Yes
Access to the ESM funds	Yes	No

Source: own work.

### **3. Potential benefits of opting-in**

From the perspective of a non-euro country there are several advantages to join the banking union. Unsurprisingly, most of those benefits will be shared by all banking union members, irrespectively of their currency.

#### **3.1. Increased stability of and confidence in the banking system**

Should the SSM prove to be an effective mechanism with the independent, well-established and credible ECB as a single supervisor at its helm, it might ultimately contribute in the SSM-countries to improved financial standing of banks, thus banking system stability and restoration of confidence, as mentioned in section 2.

Financial stability in the euro area is a prerequisite for financial stability in the whole EU. Irrespective of opting-in, increased stability of parent banks in the SSM countries improves the outlook for their subsidiaries and branches in potential opt-ins. However, banking union does not deal with legacy assets. At best, banking union will help to avoid, in the future, the accumulation of risks in Europe's banking systems – similar to those that led to the crisis – and to a speedier response to such problems, given that the ECB/SSM will be less susceptible to the temptation of forbearance than national supervisors may have been in the past (Speyer 2013).

---

<sup>12</sup> This is due to the fact that Governing Council does not involve representatives from non-euro area participating Member States (unlike Supervisory Board).

### **3.2. Potentially stronger and more effective supervision and uniform supervisory practices**

One of the main reasons behind establishing the SSM and entrusting supervisory competences to the ECB, is the expectation that a single supervisor will be better than multiple separate national supervisors, in particular in case of large cross-border banks. Common supervision should ensure that all SSM banks are subject to the same stringent capital and liquidity requirements. Furthermore, the SSM should enhance supervision and support the development and effective application of the single rulebook and the harmonization of supervisory procedures and practices, creating a level playing field (ECB 2013) and single supervisory culture. Within the SSM national supervisors will be prevented from “race to the bottom”, thus the regulatory arbitrage should be limited. Also combining micro- and macroprudential approaches and tools within the SSM might provide for an optimal policy mix as opposed to separate prudential authorities at the national level.

Although the ECB had no prior micro-supervisory experience, it has significant knowledge on financial stability and macroprudential issues. The ECB is better placed to get qualified supervisors because it can recruit within a broader talent pool, it is a prestigious institution and does not face political opposition to hiring on a pan-European basis (Hertig et al. 2010). Combining expertise from national supervisors and benefiting from more comprehensive supervisory data and cross-border comparisons might give rise to synergy effects. An opt-in country might benefit relatively from the increased supervisory efficiency, the ECB’s reputation and high-quality, consistent SSM supervisory standards (“best practice”). Those benefits should be most significantly experienced by those countries where the existing quality of supervision is rather questionable, i.e. supervisors are not prudent enough and prone to forbearance and national/inaction bias or where supervisory standards are simply less developed (i.e. CEE countries). Moreover, potential spillovers of micro- and macroprudential measures taken at the SSM level to the opt-in country should be better monitored and mitigated within the SSM, as opposed to dealing with spillovers as an “out”.<sup>13</sup> Nevertheless, along with reduction of national options and constraining the supervisory discretion within the SSM, flexibility of national supervisory policies will be constrained in the CEE countries when they decide to opt in.

---

<sup>13</sup> This problem is magnified by the asymmetry in the size of banking sectors in euro and non-euro countries.

### **3.3. Better communication between national supervisors and improved “home-host” relations**

Non-euro countries, in particular from CEE, are mostly host countries with systemic presence of foreign capital (mostly from euro area) in their banking sectors. The communication and flow of information between home and host countries is sometimes far from desired, even within supervisory colleges. Potential improvement of financial standing of parent banks in home countries in the euro area might also contribute to strengthening the condition of their branches/subsidiaries in non-euro host countries. Opting in is also highly desired for the development of internal market and the effectiveness of the single rulebook. As the ECB is the supervisor of both parent banks and their subsidiaries within the SSM, this might streamline communication and reduce/internalize coordination problems between home and host supervisory authorities and unsound reasons for protectionist behavior on behalf of domestic banks (national forbearance) at the expense of subsidiaries (Národná Banka Slovenska 2012). Supervisory college becomes irrelevant since any decision concerning any entity operating in the banking group is made by the entire Supervisory Board within an exclusively internal SSM process (Reich and Kawalec 2015). This improvement in cross-border cooperation might be especially helpful in crisis management. However, the effectiveness of the internal SSM mechanisms requires ensuring the ECB takes into due account interests of both (former) host and home countries. Opt-in countries, in addition to having a vote in the Supervisory Board might also be granted access to supervisory data concerning parent banks and have a chance to participate in joint supervisory teams dealing with parent banks. This would not be possible, should they remain outside the SSM.

### **3.4. Some (limited) reduction of sovereign-bank nexus**

The ECB in its supervisory capacity, while monitoring risks within the SSM, may limit the build-up of excessive risks arising from purchasing (national) sovereign debt by banks. However, demand for sovereign debt results from preferential treatment of sovereign debt in capital and liquidity requirements, eligibility for liquidity operations with the central bank and other reasons (ESRB 2015). More risk-sharing<sup>14</sup> within the SSM is, therefore, not a sufficient

---

<sup>14</sup> As Belke and Gros (2015) argue, a fully-fledged banking union might have increased shock absorbing properties basing on the examples of the way regional financial shocks have been absorbed at the federal level in the US. However, large cross-border or cross regional banks in EU can mitigate the local impact of local financial shocks, but they also propagate shocks to the overall financial system to all regions in which they play an important role. This stabilizing effect of this mechanism in the whole EU would work only if the supervisor (the ECB) allows banks to maintain foreign exposure and to recapitalize their subsidiaries. Another condition

remedy for the sovereign-bank nexus, especially in case of large banks. The SSM on its own is unable to break the sovereign-bank bias completely and the ECB might probably only try to limit home bias, impose concentration limits for government bonds and ensure more adequate capital requirements for government bonds at banks.<sup>15</sup> Since the fiscal background required for safeguarding of financial stability must still be provided by the Member States, potential contagion effects between the national governments and the banking sector have not been eliminated completely (MNB 2014).

### **3.5. Improved political position**

Furthermore, there are important arguments in favor of not to delay too much the decision to join the banking union. An opt-in country might also influence the supervisory policy in the SSM, which might be desirable from a political perspective. As the banking union project itself is still work in progress, it is always advisable to partake from the inside in the construction of a mechanism that the non-euro will eventually have to join anyway (Isărescu 2014). Should the SSM prove to be a “quality stamp” for banks, participating in the SSM might improve opt-in country’s reputation and political stance in negotiating further steps in EU financial integration. This also means inclusion into mainstream of European integration and increases the chance to tangible influence on the banking union (e.g. via national experts in its operational structures), as opposed to being an “out”.

### **3.6. Benefits for banks**

The decision to opt-in should benefit also banks in opt-ins. In particular, they might profit from harmonized supervisory framework. Common reporting requirements and asset valuation methods as well as lower compliance costs (e.g. uniform data reporting templates) should contribute to decrease costs of doing business and increase efficiency of SSM-wide capital allocation. Further benefits include easier and centralized liquidity management on a consolidated or sub-consolidated basis and improvement of group risk management in general. Those benefits might be especially achievable in case of cross-border banks and would foster their stability due to limited supervisory forbearance. This could strengthen financial integration, reduce competitive distortions and ensure level playing field for all SSM banks.

---

for loss absorption by ‘foreign banks’ to be stabilising is that the foreign-owned banks must be strong enough to carry substantial losses.

<sup>15</sup> For short discussion on this issue see Huertas (2013).

Before opting-in, banks operating in the non-euro country have to undergo a rigorous and impartial comprehensive assessment, which would identify any weak spots and induce remedial actions that would ultimately strengthen the whole banking system. Therefore, decision to opt in might result in ensuring banks are equipped with a prudent amount of capital.

In consequence, banks supervised within the effective SSM might be perceived by financial market investors as more attractive and safer (higher regulatory standards), with access to credible and well-capitalized backstops, therefore enjoy lower wholesale funding costs and risk premia, as well as easier access to liquidity and higher ratings.<sup>16</sup> The banking system in an opt-in country might, therefore, be seen as more stable in general. Nonetheless, contributing to the Single Resolution Fund, along with SSM supervisory fees will directly burden banks in an opt-in country.

### **3.7. Stronger resolution regime and mutualization of resolution costs**

According to Goyal et al. (2013) an effective resolution mechanism would facilitate intervention in a timely manner to address weak banks and prevent contagion across the system. A single resolution authority would support market discipline and should minimize the costs of failing individual banks. The creation of the SRM is a logical consequence of the SSM as it ensures that both supervisory and resolution competences are at the same level of competence. Together with the EDIS and a lender of last resort it would enhance the capacity to cope with shocks that may overwhelm any individual economy. A credible SRM would address coordination and burden-sharing problems related to cross-border failures and internalize associated externalities. This would also limit the potential burden on taxpayers through bailing in banks' shareholders and creditors and tapping from the Single Resolution Fund when necessary. Also EC (2013) notes that the SRM should ensure a uniform implementation of the EU level bank resolution rules and procedures in the banking union countries. It should also be noted that contrary to the SSM, in the SRM the opt-in countries have equal rights to participate in Single Resolution Board, which is the decision-making

---

<sup>16</sup> Fitch Ratings (2013) does not anticipate any short-term impact on banks' ratings from the introduction of banking union. However, if it is implemented successfully and meets objectives of achieving harmonised supervision at a heightened level and more effective capital allocation, the indirect and more long-term effect on Viability Ratings should be positive. More objective and credible mechanisms for the resolution of banks by an independent authority could, however, ultimately weaken state support for banks' creditors.

body responsible for resolution planning and implementing resolution measures. Participation in the SRM will remove the distortions of competition caused by divergences in the national resolution practices and the lack of a unified decision-making process.

An important element of the SRM is also a Single Resolution Fund which will ensure financing for resolution procedures. Mutualization of resolution costs should contribute to quick resolution actions and limit the costs borne at the national level. A single fund from the start would have available funds at potentially higher amount than separate national funds and would partially offset burden-sharing problem of financing resolution process of a large cross-border bank and the problem of mutual loans between national funds (NBP 2014). This should significantly reduce the risk of uncoordinated action when a bank gets in difficulties which may give rise to competitive distortions for banks. Consequently, the SRM should contribute to restoring a level-playing field among credit institutions in the banking union.

### **3.8. Mutualized deposit insurance scheme and access to common fund**

The initial EC's proposal on the EDIS as a third banking union pillar makes the project complete and enables the transfer the responsibility for financial stability to the banking union level. In this paragraph we provide assessment of the EDIS, should it be introduced according to this initial proposal. The banking union with responsibility for supervision, resolution and deposit insurance located at the same level should be effective and incentive-compatible. Opt-in countries and euro area banking union members have equal rights in the EDIS, according to the initial proposal. The EDIS construction is directly derived from the concept of a European Reinsurance Fund presented by Gros (2013) by applying the principles of subsidiarity and re-insurance to deposit insurance. The creation of the DIF further reduces the links between financial condition of banks and that of the state.<sup>17</sup> It should also prevent deposit flight from countries where the fiscal situation is so weak that depositors come to doubt the state's ability to fulfill its deposit insurance obligations (Národná Banka Slovenska 2012). The DIS is to act as a back-up for national DGSs (apart from emergency financing from national sources) that

---

<sup>17</sup> However, neither the existing national funds nor the DIF is likely to be large enough to resolve major financial crises and will have to rely on coverage by public budgets in the form of either guarantees or cash. If it becomes necessary to use money from the single fund to a greater extent, this will again give rise to expectations that strong countries will have to increase their public debts to help weaker countries, and sovereign risk may thus start to rise again in the euro area as a whole. In such case, the banking union will act as an accelerator of, rather than a barrier to, the spread of systemic risk (CNB 2013). The example of Cyprus shows that a deposit insurance scheme is only as good as the sovereign backing it. The banking union in its current form does not address this. The failure of the Portuguese Banco Espírito Santo also shows the limitations of effective resolution in fiscally weak countries (Beck 2014).

experience systemic shock depleting their own resources. The experience with Spain and Ireland has shown that such systemic shocks can certainly arise. Depositor confidence would be strengthened when a credible back-up for national DGS funds is at place.

However, there is still doubt whether the DIF would potentially be more efficient in case of a systemic crisis than a net of national DGS funds<sup>18</sup>, as its financial capacity will be just the sum of national DGS funds, and thus kept relatively low in comparison to the size of European SIFIs. Thus, creation of the DIF would not lead to significant risk reduction, but rather risk mutualization at the banking union level, smoothing cross-border shocks, reducing financial market fragmentation and encouraging banks to expand their operations within the banking union. Also better cooperation between national DGSs in the banking union in responding to cross-border bank failures can be expected.

All of this would clearly benefit opt-in CEEs with high presence of foreign capital in their banking sectors. Further, creation of the EDIS should also incentivize the national DGS funds to reach the target levels earlier than specified in the DGS Directive, as this is the prerequisite to tap the DIF. However, this could also disincentive them to increase their DGS funds above the required minimum target level. Still, emergency backstop arrangements for the DIF need to be put in place. Yet, until the EDIS is created, national DGS funds in opt-ins would have to cover payouts resulting from bank failures on which national authorities had only limited influence because decisions (supervision and resolution) were taken at the banking union level. Summing up, opting-in during the transition period - before the creation of EDIS - is still risky.

Nevertheless, for the time being, discussed benefits are mostly of theoretical nature and potential because the SSM/SRM have not yet fully proven their effectiveness. Therefore, it is difficult to juxtapose assessments of the banking union and an established national safety nets. Moreover, those benefits are interdependent, e.g. improvements in bank supervision within the SSM will likely lead to increased stability of and confidence in the banking system. Yet, the benefits discussed can be achieved probably no sooner than in the medium to long-term.

---

<sup>18</sup> Given the current (low) financial potential of the guarantee funds in the EU countries it should be noted that - apart from a few cases - they do not represent a strong backstop, which may in difficult circumstances undermine public confidence. Even with the pooling of all available resources of guarantee schemes on the EU level, they are unable to deal with a hypothetical insolvency of any G-SIB (Iwanicz-Drozdowska et al. 2015).



## **4. Risks of opting-in**

Joining the banking union as an opt-in country also brings several risks which are partly a result of the limited rights of the opt-in countries as opposed to euro area members of the banking union. Some of those risks are due to weaknesses in the construction of the banking union and faced by all its members, while other risks for opt-ins (in particular from CEE) arise due to the specifics and the level of development of the domestic banking sectors.

### **4.1. Limited influence over decision-making process within the SSM**

Due to treaty constraints, the ECB Governing Council is ultimately responsible for taking all ECB decisions and opt-ins cannot directly influence them as their currency is not the euro. The opt-in countries participate with voting rights in the Supervisory Board of the SSM. In this way, an opt-in country could at least influence decisions concerning the parent banks of its local subsidiaries, which would not be possible for an “out”. Nevertheless, the Supervisory Board only drafts decisions. The opt-ins lose most of supervisory sovereignty by shifting majority of decision-making power to the ECB and are clearly at a disadvantage - there is an unequal treatment of the SSM members. The creation of the Mediation Panel (to resolve differences of views expressed by the SSM members regarding an objection of the Governing Council to a draft decision by the Supervisory Board) does not seem to be a sufficient solution to mitigate the reduced role of opt-ins in decision-making process.<sup>19</sup> Yet, to date this decision-making mechanism has functioned well, and there are no publicly reported cases when the ECB Governing Council has not adopted the decision as proposed by the Supervisory Board.

### **4.2. Opt-ins lack access to backstops**

While banks in the euro area have access to the ECB liquidity facilities and the ESM funds, opt-ins still have to rely on national backstops.<sup>20</sup> This uneven level playing field does not support consistency and stability of the banking union, creating a two-tier system. Should, as a result, banks in opt-ins without recourse to backstops be perceived by investors as less

---

<sup>19</sup> As the Mediation Panel consists of central bank governors from the Governing Council of the ECB and members of the Supervisory Board, opt-ins will be represented only by members of the Supervisory Board, as opposed to euro area SSM members present in both bodies constituting the Mediation Panel.

<sup>20</sup> Access to common liquidity and fiscal backstops is important for the non-euro CEE countries, because (i) they still have large external liabilities, though many of their subsidiaries are now less reliant on foreign parent bank funding than before the crisis; (ii) banks in non-euro CEE countries typically hold less bail-inable funds (other than uninsured deposits) than euro area banking groups operating in the region. The non-euro CEE countries are, therefore, more likely to benefit from the risk-sharing aspect of the SRF or other common backstop (IMF 2015).

credible and less competitive than those in euro area, it might lead to distortions on the single market. This problem might be partly mitigated by the establishment of the EDIS as costs of instability/failure of banks in opt-ins (i.a. deposit payouts) would no longer be covered from national sources only.

#### **4.3. Opting-out is risky**

In order to compensate the limited SSM decision making powers for opt-ins, they were given an option to exit the banking union. An opt-in country can at any time, after lapse of three years, terminate close cooperation upon its request or the ECB can suspend or terminate it (see section 2). However, this apparent bonus option can entail significant risks. It seems probable that “opting-out” would spur negative shift in market sentiment, reduce the attractiveness of an “outing” non-euro country for investors and result in capital outflows. Apart from that, reorganizing in the short term supervisory structures at the national level creates many operational risks. Leaving the SSM would automatically means leaving the SRM/SRF and the EDIS/DIF. In such situation, a non-euro country would be forced to establish national resolution and DGS funds in accordance with the BRRD and DGS Directive requirements. Although the SRM and draft EDIS Regulations foresee the recoupment of contributions paid in to the SRF and DIF by an opt-in country, it is an open issue how much of those funds would actually be returned. This poses risks for the financial stability of “outing” country. What is more, according to Darvas and Wolff (2013) the opt-out clause caters for concerns but comes at a significant price. In particular, it introduces significant uncertainty about the permanence of the geographical coverage of the SSM and may negatively impact the consistency of the whole mechanism.

#### **4.4. The SSM might not be more efficient than national supervisor**

Centralization of supervisory tasks is not in itself a sufficient prerequisite for an increase in effectiveness of supervision. The case of operational effectiveness of task division between the ECB and national supervisors, as laid out in the SSM Framework Regulation, remains open. It appears, however, possible that the ECB will *de facto* become a standard setter in supervisory practices and most Member States would eventually have to apply those

standards (Darvas and Wolff 2013). The ECB as a single supervisor will probably “have an upper hand” over national supervisors and might resolve disputes with national supervisors in ECB’s favor.<sup>21</sup>

An opt-in country risks outflow of experienced, high-quality human capital to the ECB from national supervisory authority. Drainage of resources would be coupled with increased supervisory tasks within the SSM and loss of autonomy in bank supervision. It is still unclear whether adding another, centralized supervisory layer (the ECB) will bring more added-value and balance increased administrative and bureaucratic supervisory process within the SSM.

The ECB also faces higher reputational risk in conducting its supervisory function and safeguarding its reputation (as a monetary authority). Moreover, vesting within a single institution (the ECB) – microprudential, macroprudential and monetary policies, might further lead to overburdening, operational risk and internal conflicts of interests. Granting in mid-2015 ELA to Greek banks with questionable financial standing can serve as an example of conflict between monetary and supervisory interests. There is also the risk of lack of adequate democratic accountability and transparency of a very powerful authority. Moreover, it remains unclear how efficiently the cooperation between different banking union bodies as concerns the decision-making process will work in crisis situations.

#### **4.5. Partially reduced flexibility in macroprudential policy**

An opt-in country like each banking union member will still, as a rule, have flexibility in terms of applying macroprudential tools but the ECB may (on its own initiative or upon request of a national authority) apply more stringent measures aimed at addressing systemic or macroprudential risks at the level of credit institutions. The macroprudential powers of the ECB apply only to harmonized tools specified in the CRDIV/CRR. The use of other macroprudential measures (e.g. leverage ratio, caps on LTV and DTI ratios) is up to the national macroprudential authority.

Macroprudential powers give the ECB the chance to counter potential national inaction bias when systemic risk is not timely recognized and addressed at the national level. Yet, at the same time, it may also - perversely - reinforce national inaction bias by inducing overreliance of national supervisors on the ECB incentive to take remedial action, irrespective

---

<sup>21</sup> However, this risk might be mitigated by efficient cooperation between the SSM and the EBA. The involvement of the EBA gives a chance to provide an EU view, as opposed to the euro area view on the harmonization of supervisory practices and limit any negative effects on non-euro area countries arising from supervisory convergence and limitation of national regulatory options/discretion.

whether or not any national macroprudential measures are introduced. In its legal option to the CRDIV/CRR draft regulations the ECB expressed its support for the full flexibility of national authorities to adjust and impose stricter prudential requirements for macroprudential purposes (ECB 2012). As argued at that time by the ECB, structural differences and specific features of the national financial systems justify such an approach. Having unconstrained macroprudential policy at the national level should – at least in theory – allow for more effective mitigation of local systemic risks by the national macroprudential authority. This is especially important in case of converging (e.g. CEE) economies that are prone to boom-and-bust cycles and build-up of local imbalances.

As the use of macroprudential tools within the SSM is subject to notification procedure, it still remains unclear how (the ECB and a national authority) will “duly consider” the objection of one another, before proceeding with the final decision to introduce or apply more stringent measures. It is also uncertain how in practice the national authority can relax macroprudential policy measures after their initial tightening by the ECB. Moreover, it seems rather improbable that a national macroprudential authority within the SSM will introduce a measure that was negatively assessed by the ECB upon notification. Moreover, a conflict could emerge in an opt-in country in case of lax national monetary policy and tight macroprudential policy pursued by the ECB.<sup>22</sup>

#### **4.6. Banks in opt-ins might be “too small to matter”**

The SSM may also not be as effective as national supervisory authority towards banks in an opt-in country. This might be due to enormous scope of the SSM itself but also result from lack of systemic significance of local banks from the SSM, as opposed to national perspective. The problems in the banking sectors of large and systemically important countries may be solved at the expense of small open market economies which are relatively

---

<sup>22</sup> It is of primary importance that the supervisory guidelines set by the ECB on the implementation of capital requirements do not clash with comparable monetary policy actions in non-euro-area countries. In particular, governments could exert political pressure on their central banks’ monetary policy when a disagreement that cannot be solved in the current governing bodies of the SSM emerges. For instance, the ECB may have a stricter interpretation of the application of capital requirements, which may be in conflict with an expansionary monetary policy in those non-EMU countries or may even affect the domestic government’s borrowing costs. This inconsistency could distort the implementation of ECB supervisory policies and become a potential barrier to the level playing field that a banking union requires. It also raises the question of whether a true banking union can be created with financial systems outside the boundaries of the monetary union (Valiante 2014).

less important to the euro area as a whole (Národná Banka Slovenska 2012).<sup>23</sup> Thus, local systemic risks might be underestimated and neglected within the SSM (“too small to matter”) with adopted solutions focused on banking groups (or parent banks from home countries), as the ECB will supervise credit institutions mainly on a consolidated basis (Zettelmeyer et al. 2012).

Since the ECB would have ultimate decision-making power and full supervisory information about credit institutions in an opt-in country, it should therefore take responsibility for their condition.<sup>24</sup> This issue may arise in many of (potential opt-in) CEE (host) countries with relatively limited importance of local subsidiaries of banks domiciled in (home) euro area countries for the group as a whole. This would usually contrast with systemic importance of subsidiaries’ activities for host/opt-in countries.

Yet, there are counterarguments to such view. As calculations of Darvas and Wolff (2013) show, for most CEE countries, should they opt-in, banks not covered by the SSM would constitute 25-50% of banking sector assets. Therefore, most of local banks would remain under the scope of indirect supervision and thus some balance between the ECB (direct) supervision and national (indirect) supervision would be retained. Such solution allows to effectively cross-check if there are any inconsistencies in risk assessment between national and banking union level. Moreover, local risks may also become systemic and warrant the ECB’s attention. Moreover, the ECB is also able to take over from a national supervisor if the latter has not performed effectively. The reputation risk for the ECB should likewise lead to proper assessment of risks on both local and banking union levels.

---

<sup>23</sup> Source of risks is the promotion of the concept of group interest and solidarity of intra-group support, i.e. the prioritization of the interests of the entire bank group, possibly even to the detriment of its individual autonomous members (CNB 2013).

<sup>24</sup> Though not de jure, but de facto, the SSM may create a two-tier supervisory regime, as small banks will remain under a separate regime of national supervision. There is a risk for the ECB that Member States will have an incentive to shift competence to the ECB when trouble is imminent. In addition, the two-tier system may create competitive distortions that will be exacerbated by the fact that small banks will be allowed to remain under national accounting standards, rather than having to use IFRS, as all banks directly supervised by the ECB will have to (Speyer 2013). Moreover, as within the SSM supervisory colleges will cease to exist, there are no possibilities for an opt-in country to resort to binding mediation of the EBA in case of a dispute with the ECB (Reich and Kawalec 2015).

#### **4.7. Centralized capital and liquidity management**

Moreover, the ECB might be inclined to apply supervisory requirements at the highest level of consolidation, thus enabling centralized capital and liquidity management within the SSM. This might foster more free flow of funds between parent and subsidiaries, not necessarily to the benefit and stability of subsidiaries in host opt-ins.<sup>25</sup> CNB (2013) underlines the potential risk of disadvantageous and destabilizing transfers of liquidity and assets from domestic banks under the banner of the group interest. It would be particularly risky should parent banks convert large and possibly also systemically important subsidiaries into legally dependent branches. Therefore, balancing host and home financial stability concerns within the SSM will be challenging. The ECB within the SSM might thus be better than separate national supervisors at addressing cross-border issues but less effective at identifying and containing local systemic risks. This is the reason why national supervisors should be involved.

#### **4.8. Complicated and potentially inefficient decision-making process within the SRM**

The construction of the SRM is too complicated. In case of bank resolution and crisis management time is of the essence, therefore resolution process has to be quick and efficient, especially in case of restructuring a large cross-border bank. Therefore, the SRB decision-making process should take into account the need to act swiftly. Nevertheless, reaching a final resolution decision under the current decision-making procedures within the SRM seems to be both too complicated and time-consuming and involving too many institutions at the European level (including the Council, European Commission). Therefore, deciding on the resolution "over the weekend" is less than plausible. Also any modifications in resolution scheme require time-consuming procedures and approval at the highest level. In addition, it will be challenging to ensure the centralization of the resolution process and at the same time the right balance between home and host countries (NBP 2014). This is especially a source of concern when taking into account transnational implications of resolution at the expense of opt-ins.

---

<sup>25</sup>The ECB expects hidden barriers to disappear and liquidity and capital management to take place at the SSM level. Thus, the movement towards subsidiarisation observed in other parts of the world has no justification inside the SSM perimeter (Constâncio 2014). Nevertheless, this could contribute to more efficient allocation of capital in the banking union and reduce the risk of abrupt cross-border outflows in turbulent times.

#### **4.9. Gradual mutualization and the insufficient size of the SRF**

Gradual mutualization is a temporary weakness of the SRF construction. As long as there are separate national compartments, part of responsibility for financing resolution will explicitly remain at the national level, thus not completely severing the bank-sovereign nexus. The transitional period after which all national compartments will be merged and resolution funds mutualized is 8 years. This might appear a rather long but mutualization will proceed relatively quickly at the beginning, since 60% of resolution funds within the SRF will be mutual already after 2 years. The SRF is relatively small compared to the overall assets of the SSM banking system and also small relative to the overall capital of the sector. The target level of the SRF is set at 1% of covered deposits of banks operating within the banking union, which on the bases of 2011 data is estimated to be around EUR 55 billion. Even reaching such a target level would not be enough to deal with bank resolution in case of a systemic crisis. Schoenmaker and Gros (2012) show that this amount could suffice to resolve only one large EU bank or two/three medium sized banks.<sup>26</sup> Still it might be argued that any resolution fund can only be a first-aid kit dealing with a small number of occasional accidents. Ex-ante there is a clear intention to make the key pillar of the banking union in the euro area self-financing, reducing the need for financial support from the budgets of the Member States. Yet, a systemic crisis always requires a fiscal back-up. The SRM at present does not have such an explicit backstop that would lend to the SRF should its funds be insufficient to deal with a systemic crisis. Lack of an explicit backstop arrangements does not incentivize opting-in.

Moreover, in reality a practical problem arises. Reading of Art. 69 of the SRM Regulation gives an impression that once the target level has been reached, contributions are no longer needed. This might reduce an incentive for banks not to engage in risky operation due to the fact that contributions to the SRF, which take account of the risk factor at the individual bank,

---

<sup>26</sup> According to CNB (2014), the amount that will be available in the SRF and the ESM will be far from enough to resolve any major problems in the banking sector. The combined financial capacity of the SRF and the ESM will be less than EUR 120 billion in 2024. In 2013, the assets in the euro area banking sector totaled EUR 30 trillion (i.e. thirty thousand billion), of which EUR 10.5 trillion represented loans to the private sector, EUR 5 trillion interbank assets and EUR 1.7 trillion government securities. The current absence of an additional European backstop enabling sharing of liabilities for potential banking sector losses not covered by the SRF and the ESM thus represents one of the most important objections to the newly established banking union. Another risk relevant to the banking union and the euro area as a whole is moral hazard resulting from expectations that the costs of banks failures will always be covered by common funds. This view is shared by Beck (2014) – common funding mechanism seems too small to serve for the purpose of having to restructure a relatively large bank somewhere in Europe.

will no longer be collected once the target level has been reached. There might also be an increase in moral hazard due to expectations that costs of bank failure will always be (at least to some extent) covered by common funds.

However, the size of the SRF could be kept relatively small because the SRM Regulation established tough rules on the ‘bail in’ of shareholders and creditors before a bank can receive financial support from the SRF. On the assumption of effective use of bail-in and since there is a limit of the funding the SRF is authorized to provide (it can extend only up to 5% of liabilities including own funds), De Groen and Gros (2015) have simulated that the banking system support, as provided during the current global financial crisis, would have been manageable with the initial size of the SRF. Nevertheless, the effectiveness and application in practice of bail-in, thus the scope of recourse to SRF, still remain uncertain. Moreover, since the SRM has the possibility, if needed to raise ex-post levies, despite them being pro-cyclical, this might imply that taxpayers will be affected. The cost of contributing to future bank rescues will be factored in by investors as an element in their decisions leading them to demand higher risk premia. This means that the banking clients will ultimately bear the expected cost of future rescues in the form of lower deposit rates, higher lending rates or generally higher fees for banking services.

In sum, as opposed to the potential benefits, there are many immediate drawbacks and risks for a non-euro country connected with joining the banking union in its current shape which discourages from opting in. Moreover, many risks are already present in the regulation and may materialize in the short term. Those shortcomings are mainly due to deficient structure of the banking union pillars established within the unchanged treaty framework.

## **5. Policy implications**

The cost/benefit analysis of opting-in is, for the time being, rather unfavorable for non-euro countries. Within the SSM, opt-ins are not on equal footing as euro area countries and their rights and obligations are therefore asymmetric. The opt-ins renounce their autonomy in banking supervision but are not granted full influence on the SSM decision-making process. They are also excluded from the access to credible backstops (i.e. the ESM and ECB liquidity facilities). It seems that the opt-ins should have some form of access to the ECB liquidity facilities to deal with liquidity shocks.<sup>27</sup> Signing the ESM Treaty could also be a compulsory

---

<sup>27</sup> There is a need to start discussions with the ECB on short-term access to euro liquidity against non-euro collateral of appropriate quality for domestically-owned credit institutions. This access should be seen as an emergency facility, which can be tapped only under severe or imminent stress to non-euro area host country



prerequisite of opting-in. The discussed drawbacks and risks cannot be easily remedied as they would require opening lengthy and difficult legislation procedure to amend the SSM regulation and more importantly – the treaties, e.g. the TFEU and the ESM Treaty. Only by ensuring sound legal basis the banking union<sup>28</sup> can be strengthened and equal treatment of all its members regardless of their currency can be ensured. Last but not least, the opt-ins experience also some degree of sovereignty loss, which might be important from political perspective. Yet, it is unavoidable cost in the process of deepening financial integration. This is, however, mitigated by sound accountability mechanisms of the banking union. Entering the banking union upon euro accession would mitigate the majority, yet not all identified drawbacks.<sup>29</sup>

The possible remedial actions are proposed in Table 2. As it was mentioned, many of risks cannot be easily mitigated and require treaty changes. However, due to political constraints, this seems not to be possible in the short term. Nevertheless, ensuring stability of the banking union would require taking additional actions i.a. effectively tackling the sovereign-bank nexus by strengthening capital and liquidity regulations and reducing the status of “risk free asset” for sovereign bonds (Acharya 2012). Also some improvements could be made to the organization of the supervisory tasks concerning the governance of the SSM bodies (Véron 2012).

---

financial stability. The issue is relevant for CEE countries, where a significant degree of currency substitution in euro persists in terms of the stock of both loans and deposits e.g. in Romania (Isărescu 2014).

<sup>28</sup> Policymakers should not leave the situation regarding the SSM as it is, but should amend the European treaties promptly to create a sound legal basis for European prudential supervision. This can be done either by reforming the institutional framework of the ECB or by enshrining a separate European banking supervisory authority in primary law. In addition to the SSM, a change to primary law should focus on the SRM. Here, too, it is very doubtful whether the current treaties provide a sufficiently sound and institutionally consistent legal basis. Work should begin on making the necessary amendments to the treaties (Deutsche Bundesbank 2013).

<sup>29</sup> If non-euro countries, whose currencies are pegged to the euro, have high levels of foreign currency liabilities, or have a sizable presence of euro-area banks in their financial systems, adopt the euro at the same time as they join the banking union, the benefits would likely outweigh the costs, just as it does for euro area members currently (Goyal et al. 2013).

Table 2. Possible ways of mitigating the most important risks of opting-in

<b>Risks</b>	<b>How to mitigate?</b>	<b>Possibility of mitigation</b>
Limited influence of opt-ins over decision-making process within the SSM	Changes at least in the TFEU, ensuring equal rights and responsibilities of all SSM members, irrespective of their euro area membership. This would require changes in the SSM regulation as well. Full transfer of supervisory decision-making powers to the Supervisory Board.	Not probable in the short term, political constraints. Fully mitigated by joining the euro area.
Opt-ins lacking access to fiscal and liquidity backstops	Changes at least in the TFEU and the ESM treaty ensuring equal access to backstops for both euro and non-euro SSM members, including possibility of direct recapitalization of all SSM banks. <sup>30</sup> Signing the (amended) ESM treaty as an additional prerequisite for opting-in. Swap arrangements between the ECB and national central banks for liquidity support.	Not probable in the short term, political constraints. Fully mitigated by joining the euro area.
Opting-out	Establish fair, balanced and detailed opting-out conditions, not solely dependent on the ECB's discretion. This would require changes in the SSM regulation.	Average, probable in the medium term. Fully mitigated by joining the euro area.
SSM supervisory efficiency	Establish a sound and balanced cooperation framework between the ECB and national supervisors in practice. Achieve synergy effect without undue drainage of national resources. Strengthen the cooperation between the EBA and the SSM on the single rulebook.	Average, probably in the medium term.
Some reduction of flexibility in macroprudential policy	Constrain ECB rights to set more stringent macroprudential measures. This would require changes in the SSM regulation and more detailed explanation of division of responsibilities for macroprudential policy within the SSM.	Average, probable in the medium term.
"Too small to matter" banks in opt-ins and centralized capital and liquidity management	Increased involvement of national supervisors. Analyzing systemic importance also in national dimension. Prudent SSM policy of waivers for the application of prudential requirements.	Average, probably in the medium term.
The inefficiency of SRM decision-making process	Reduce the number of EU institutions involved in the decision-making process. Establish clear rules of cooperation in case of resolution.	Not probable in the short term, political constraints. Requires legislative changes.
The SRF is not mutualized from the start	This problem expires with full mutualization of SRF in 2024. Risks in transition period can be mitigated by increased pace of mutualization, higher contributions or bridge financing (e.g. additional credit lines, guarantees etc.)	A temporary problem.

<sup>30</sup> An alternative solution could include creating a separate fund (in close cooperation with SRF) for non-euro countries that could serve as backstop for opt-ins. However, as more EU countries would (probably) join the euro area, this might be perceived only as an interim solution.

Insufficient target level of SRF and DIF funds	Increase banks' contributions. <sup>31</sup> Enhance pooling of resolution and DGS funds.	Not probable in the short term, political constraints. Banks are already burdened with other new regulatory contributions.
--	---	--

Source: own work.

Nevertheless, non-euro countries have also an “option” to remain outside the banking union until the adoption of the euro.<sup>32</sup> There are also both risks and benefits of such a solution. The most important is that staying outside the banking union means keeping full autonomy in both supervisory, resolution and deposit payout decisions. This means that the national authority retain the right to take independent decisions to safeguard domestic financial stability. This might be especially important in crisis management. As stipulated in the BRRD, a resolution authority has the right to reject a group resolution scheme and take independent resolution measures. When within the banking union, opt-ins would have only partial influence on the resolution process in the SRM.

A country remaining outside the banking union, and in particular a host CEE country, would have to deal mainly with one home supervisor - the ECB. The reduced number of parties representing home countries from the SSM (coordinated by the ECB) within the supervisory colleges foster cross-border cooperation and crisis management with host countries outside the SSM. Work and communication in supervisory colleges is streamlined

---

<sup>31</sup> The problem of reaching the target level of SRF can be solved in two ways. One way would be to keep assessing contributions even after the fund has reached its target level, but provide banks with a refund based on their passed contributions. The ongoing contributions would then be based on current risk levels (in terms of riskiness and magnitude of insured deposits), thus providing the right incentives. Another approach would be to define a target level for the stake each bank has in the resolution fund. This stake is given by the sum of its past contributions to the fund. This would be subtly different from the usual approach of defining an annual contribution based on present risk levels. A simple way to ensure that the incentive effect of risk based contributions is preserved beyond the transition period is to stipulate that the annual contributions have to be paid each year, irrespective of the size of the fund. But there would be an additional rule that each bank receives also a transfer back which is proportional to its share in the total pot accumulated so far. Under this approach the incentive effects of the risk based factors would persists even after the target level has been reached (Belke and Gros 2015).

<sup>32</sup> It may be also possible to create an ‘associate member’ status in the banking union for non-euro area countries. Unlike their euro area counterparts, they would not give up supervisory control, nor would they benefit from the European Stability Mechanism. However, the ECB could give them access to euro liquidity – in the form of foreign-exchange swap lines against domestic collateral. In return, national supervisors would agree to share information with the ECB and to a periodic review of their supervisory policies. Swap lines would be committed from one review period to the next, and rolled over subject to the satisfactory completion of the review (Berglöf et al. 2012).

(as common guidelines are followed by the SSM-countries). This, however, in fact depends on the ECB and how it will perceive its relations with the EU countries outside of the banking union.

Not opting-in entails also important risks. In such a scenario, a country outside the banking union will have to bear all the costs of financial crisis, while within the SRM and EDIS those burdens will be shared. Not opting-in means also not participating in the mainstream of the European financial integration and might further isolate a non-euro country on the EU political arena. Nevertheless, the banking union will still have indirect effects on the domestic financial systems in “outs”, due to the significant share of foreign ownership (mainly from the euro area) in the CEE banking sector assets. According to Fitch Ratings (2013) estimates, in case of non-euro countries the proportion of banking system that will indirectly fall under the SSM varies from 85-95% in Croatia and Czech Republic to 55-60% in Poland and Hungary. There is also risk of conversion of local subsidiary of a SSM bank in an “out” into a branch, which would mean the transfer of even more supervisory power to the home supervisor - the ECB. This might not be preferable from the perspective of national supervisors, as their powers over branches are limited.

Moreover, should the banking union prove its effectiveness and ensure stability, banks headquartered in the SSM countries might shrink activities of their branches and subsidiaries established in “opting-out” countries and transfer their activities to the SSM countries, yet such risk remains low<sup>33</sup>, as evidenced by the first year of the SSM functioning. However, in “outs” increases in capital requirements for the largest credit institutions (Danmarks Nationalbank 2015) and stricter prudential supervision might be warranted.

## **6. Assessing non-euro countries willingness to opt-in**

The balance of benefits and risk of opting-in varies between non-euro countries. The decision to opt-in has to balance on the one hand, the assessment of the banking union and on the other, the status quo of the national safety net. One may assume that more willingness to opt-in would have non-euro countries with:

---

<sup>33</sup> The immediate risk related to reducing the activities of subsidiaries of major banking groups established in non-participating countries may not be very high, but uncertainty, including about discriminatory measures against non-participating Member States by the home supervisor of the parent bank, could limit the activities of large financial groups in non-participating Member States and also in non-EU countries (Darvas and Wolff 2013).

Table 3. Status quo in potential opt-ins

Country	Share of foreign ownership (1)	Size of the banking system (2)	Concentration in the banking sector (3)	Presence of SIFIs (4)	Financial capacity of national DGS (5)	Perspective of euro adoption (6)	Official opt-in assessment (7)
BG	75.1	99.4	55.0/0.083	0	4.87	No	Positive since mid-2014 (BNB 2014)
HR	90.4	133.7	72.3/0.136	0	N/A	Possible 2019	No rush (Vujčić 2013)
CZ	92.3	120.0	61.3/0.095	0	1.64	No	Not positive, "wait and see" (Ministry of Finance of the Czech Republic 2015)
DK	12.2	343.1	68.1/0.119	1	1.72	Opt-out	Positive (Danmarks Nationalbank 2015, Danish government 2015)
HU	47.1	95.7	52.5/0.091	0	0.96	No	Not positive, "wait and see" (MNB 2014)
PL	59.1	89.6	48.3/0.066	0	1.69	No	Not positive, "wait and see" (NBP 2014)
RO	90.2	52.8	54.2/0.080	0	2.97	Possibly later than 2019	Positive, (NBR 2014)
SE	6.7	402.2	58.5/0.088	4	2.41	No	Not joining in the foreseeable future (Borg 2013)
UK	37.2	499.2	38.9/0.046	6	-0.17	Opt-out	Not joining

## Notes:

1 - data H1 2015 (in % of banking system assets)

2 - total banking assets to GDP, data H1 2015 (in %)

3 - CR5 (share of 5 largest credit institutions in % of total assets)/Herfindahl index, data end 2014

4 - based on the EBA list of global systemically important institutions operating in the EU in 2014 (the list includes not only global systemically important institutions (G-SIIs), but also other large institutions with an overall exposure measure of more than EUR 200 billion)

5 - due to lack of early stages of establishing resolution funds, financial capacity of DGS (defined as accumulated funds/covered deposits in %) is used as a proxy, unweighted EU average is 0.31%

6 - official target dates in national documents

7 - opinions in official national documents or made by public officials

Source: own calculations basing on the ECB Consolidated Banking Data, Iwanicz-Drozowska et al. (2015), [www.imf.org](http://www.imf.org), [www.eba.europa.eu/risk-analysis-and-data/global-systemically-important-institutions](http://www.eba.europa.eu/risk-analysis-and-data/global-systemically-important-institutions).

- significant share of foreign ownership in banking system assets;
- large size of the banking system assets in nominal terms and in relation to GDP;
- significant presence of SIFIs;
- weak condition of the banking system and experiencing distress in the financial markets;
- lower supervisory standards and forbearance;
- insufficient financial capacity of the national resolution fund;
- perspective of joining the euro area in the close future (becoming an “equal” member of the banking union).

Not all of the abovementioned criteria can be easily assessed (see Table 3) and their relative importance among potential opt-ins is likely to differ. Even the preliminary analysis of Table 3 shows that countries currently staying outside the banking union can be divided into two groups: first group composed of Denmark, Sweden and the UK, and second group - the CEE countries. The foreign ownership is high in CEE countries ranging from 55% in Hungary to 93% in Czech Republic, while for the first group countries these numbers are significantly lower (only 6% in Sweden). There are also big differences between these two groups when we look at the size of the banking sector. The CEE countries have less developed banking sectors with total banking assets to GDP around 100%. This is much lower than the EU average closer to which are Denmark, Sweden and the UK with their banking sectors three times larger than the national GDP. Furthermore, in those countries banks of significant importance are present, while in CEE countries no G-SIFIs have been identified by the EBA. However, it does not exclude the fact that CEE countries have their local systemic institutions, yet not systemic from the EU perspective. The financial capacity of DGS, in many non-euro countries exceed the EU average which suggest strong and robust financial safety net.

However, political issues seem to have the most impact on the decision to opt-in. One might even risk saying that political willingness can be in practice more important than economic judgement. The perspective of the euro adoption in CEEs is not fixed and there is limited appetite for opting-in. Additionally, as IMF (2015) notes, economies where local banking systems are dominated by euro area banks (e.g., Czech Republic, Croatia) face a trade-off between gaining more information and involvement in discussions and decisions concerning euro area parent banks versus ceding full control over intra-group cross-border

capital and liquidity flows. For the time being, only Romania, Bulgaria and Denmark made a positive assessment of the opt-in option, while others (Poland, Czech Republic and Hungary) adopt a “wait-and-see” approach.

Lízal (2014) points out that view on the banking union may be different from perspective of various Member States, depending in particular on:

- membership in the euro area,
- impact of financial crisis on stability of national banking sector so far, e.g. need to recapitalize banks,
- costs spent on stabilizing national banking sectors so far,
- position of banks and their supervisors in the single EU market.

A euro area home country with high presence of internationally active banks and which has been significantly impacted by the financial crisis and has thus incurred high costs of stabilizing national banking sector would assess the banking union positively. According to Lízal (2014), the banking union might also be beneficial for countries having less stable fiscal situations and facing problems in their financial sectors or difficulties with financing their economies, as it was basically created as a response to problems within the euro area. Opting in might also be more attractive should the discussed drawbacks be remedied and should the number of “out’s” in the EU decrease materially. IMF (2015) presents a taxonomy of country characteristics and policy objectives while assessing whether joining the banking union could help or hinder their achievement. IMF (2015) notes that the risk-sharing preferences, degree of real or financial integration, economic flexibility, monetary and fiscal policies are key factors that have to be taken into account when assessing opt-in option.

Schoenmaker and Siegmann (2013), using game theory, analyse countries’ costs and benefits of participation in the banking union by simulating the resolution of the top 25 European banks and assessing its effectiveness in home-host terms. As far as net benefits for non-euro countries are concerned, the UK and Sweden would achieve the most benefits, while the balance for all CEE countries would be negative, yet only slightly below zero – with the exception of Poland with net effect of -5%.

In terms of scope of credit institutions covered in opt-ins, results by Darvas and Wolff (2013) indicate that for most non-euro countries participation would lead to a large share of their assets being covered but relatively low numbers of banks. For countries outside the

SSM, only branches of large SSM banks will fall under ECB supervision, which will be supervised by the ECB on consolidated basis. For opt-ins in CEE the SSM coverage would mainly relate to subsidiaries of the euro area banks and the three biggest local banks.

It seems reasonable to agree with the conclusion of Darvas and Wolff (2013) that non-euro countries where significant share of subsidiaries is controlled by euro area banks and where strong interlinkages with the SSM exist, should establish close cooperation with the ECB. Nonetheless, one may also argue the opposite – remaining outside the SSM allows defending own national position. At the same time “outs” should care for establishing robust MoUs with the SSM. The non-participation in the banking union can be viewed as a disadvantage only if the banking union will be perceived as an environment with higher regulatory standards, better compliance with, and enforcement of, such standards, and better financial securing of banking sector losses thanks to the common resolution fund and the fiscal mechanism of the banking union by comparison with conditions in countries outside the banking and monetary union (CNB 2014).

## **7. Conclusions**

The analysis shows that for the time being, the balance between benefits and risks of opting-in is rather unfavorable and uncertain. Opting-in to the banking union does not seem to be an optimal solution for a non-euro country where national supervision is strong and prudent, and where financial capacity of deposit guarantee and resolution funds is high. This negative assessment results from numerous weaknesses in the construction of the banking union. As a consequence, it seems optimal for a non-euro country not to opt-in now but to join the banking union upon euro adoption. Another solution is to wait until the institutional framework of the banking union is strengthened.

Even if a non-euro country decides to remain outside the banking union for the foreseeable future, it should be able to effectively pursue financial stability. The banking union solutions should not be forced upon the “outs” and they should have right to decide on their participation in the burden-sharing in case of resolution of cross-border banks and potential transformation of a subsidiary of a SSM-group operating in a CEE country into a branch.

One should remember that the success of the banking union depends on its scope. Ensuring the widest possible membership in the banking union is beneficial for all its members as it reduces unwanted single market fragmentation (a two-tier supervision in the EU), enhances the scope of the single rulebook and limits regulatory arbitrage. This calls for implementing changes that will encourage non-euro countries to opt-in. In a steady state, the construction of



the banking union should strive to the model of a “fully fledged banking union”, i.e. with high degree of bank risk-sharing and full scope of supranational bank supervision as opposed to *preventive* or *corrective* model (Skuodis 2014). To achieve this, treaty changes are inevitable (building the so-called „steel-framed” banking union, Véron 2013). One should not forget that political factors also play a significant role in deciding to opt-in and could sometimes overshadow the economic rationale. Moreover, the experiences of a “first mover” – a non-euro country that first decides to opt-in – can serve as a decisive factor to opt-in. Still, it seems that the more countries opt-in, the more marginalized “outs” become, thus the willingness to opt-in might increase.

Yet there are also fears that the idea of the banking union is not fully compatible with the integrity of the internal market and financial integration. Should the banking union project be successful, it could – paradoxically – increase the division of EU countries into the core (more integrated within the euro area and the banking union) and significantly less integrated “outs”.

It should be borne in mind that the banking union is a long term project and it will not solve the current financial crisis. The overinflated or unrealistic expectations of the banking union project should be avoided. A banking union cannot undo the past failures and mistakes which caused the present crisis. However, it may be a valuable tool for reducing the likelihood of future financial crises and increasing the resilience of the European financial market to shocks (Deutsche Bundesbank 2013).

It is too early to make a comprehensive assessment of the effects of the banking union and weighting costs and benefits of opting-in, thus the analysis presented in this paper should be revised in the future on a continuous basis. This study’s drawback is lack of a “living specimen” of an opt-in country and the hitherto assessment focuses on ex-ante predictions and not ex-post evidence. Therefore, analyzing experiences of first opt-ins and empirically verifying the materialization of both risks and benefits of opting-in, as discussed in this paper would be a valuable future research area.

## **References:**

- Acharya, V. V. (2012). Banking union in Europe and other reforms. In Thorsten, B. (Eds.), *Banking Union for Europe. Risks and Challenges* (pp. 45-49). A VoxEU.org Book, Centre for Economic Policy Research.
- Beck, T. (2014). After AQR and stress tests – where next for banking in the Eurozone? <http://www.voxeu.org/article/aqr-and-eurozone-stress-tests>

- Belke, A., & Gros D. (2015). Banking Union as a shock absorber. Ruhr Economic Papers #548, Germany.
- Berglöf, E., R. De Haas, & Zettelmeyer, J. (2012). Banking union: The view from emerging Europe. <http://www.voxeu.org/article/banking-union-view-emerging-europe>
- Constâncio, V. (2013). Towards the Banking Union. 2nd FIN-FSA Conference on EU Regulation and Supervision “Banking and Supervision under Transformation” organized by the Financial Supervisory Authority, Helsinki, 12 February.
- Constâncio, V. (2014). Banking Union: meaning and implications for the future of banking. Banking Union Conference organized by the Master in Banking and Financial Regulation, Navarra University, Madrid, 24 April.
- Czech National Bank. (2013). Financial Stability Report 2012/2013.
- Czech National Bank. (2014). Analyses of the Czech Republic’s Current Economic Alignment with the Euro Area.
- Danish government. (2015). Report on possible Danish participation in the Banking Union.
- Danmarks Nationalbank. (2015). “Financial Stability, 1st half 2015”.
- Darvas, Z., and G. B. Wolff. (2013). Should Non-Euro Area Countries Join The Single Supervisory Mechanism? Bruegel Policy Contribution, Issue 2013/06.
- De Bandt, O., & Hartmann, P. (2000). Systemic Risk: A Survey. ECB Working Paper No. 35.
- De Groen, W. P. & Gros, D. (2015). Estimating the Bridge Financing Needs of the Single Resolution Fund: How expensive is it to resolve a bank? CEPS Special Report No. 122, CEPS, Brussels.
- Deutsche Bundesbank. (2013). European Single Supervisory Mechanism for banks – a first step on the road to a banking union. Monthly Report July 2013.
- Dobrzańska, A. (2012). W kierunku jednolitego nadzoru bankowego w Unii Europejskiej. Bezpieczny Bank nr 4 (49), Bankowy Fundusz Gwarancyjny, Warszawa.
- ECB. (2012). Opinion of the European Central Bank of 25 January 2012 on a proposal for a Directive on the access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms and a proposal for a Regulation on prudential requirements for credit institutions and investment firms (CON/2012/5).
- ECB. (2013). Financial Integration in Europe.
- ESRB. (2015). ESRB report on the regulatory treatment of sovereign exposures.
- European Commission. (2013). Banking Union - Single Resolution Mechanism (SRM). Factsheet.

- Fitch Ratings. (2013). Impact of European Banking Union on Banks More to Gain Than Lose. Special Report.
- Goyal, R., P. Koeva Brooks, M. Pradhan, T. Tressel, G. Dell’Ariccia, R. Leckow, C. Pazarbasioglu, & IMF Staff Team. (2013). A Banking Union for the Euro Area. IMF Staff Discussion Note SDN/13/01.
- Gros, D. (2013). The SRM and the Dream to Resolve Banks without Public Money. CEPS Commentary, Centre for European Policy Studies, Brussels, 19 December.
- Hertig, G., R. Lee, & McCahery, J. A. (2010). Empowering the ECB to Supervise Banks: A Choice-Based Approach. DSF Policy Paper, No. 3, Duisenberg School of Finance.
- Huertas, T. F. (2013). Banking Union. Estabilidad Financiera, Núm. 24 Banco De España.
- IMF. (2015). Staff Report On Cluster Consultations - Common Policy Frameworks And Challenges. IMF Country Report No. 15/97, Central And Eastern Europe: New Member States (NMS) Policy Forum.
- Isărescu, M. (2014). Keynote address. The Euromoney Regional Finance and Investment Conference for SouthEast Europe, Bucharest.
- Iwanicz-Drozdowska, M., J. Kerlin, P. Smaga, & Tomasik, M. (2015). EU guarantee schemes: status quo and policy implications. *Journal of Banking Regulation* (2015) 16 (3), Palgrave, doi:10.1057/jbr.2015.6.
- Juncker, J-C., D. Tusk, J. Dijsselbloem, M. Draghi, & Schulz, M. (2015). Completing Europe's Economic and Monetary Union. European Commission.
- Junevičius, A., & Puidokas, M. (2014). The Single Resolution Mechanism of the European Banking Union: its structure and functioning. *International Business and Global Economy* 2014, no. 33, Institute of International Business, University of Gdansk, doi 10.4467/23539496IB.13.005.2390.
- Kisgergely, K., & Szombati, A. (2014). Banking union through Hungarian eyes - the MNB’s assessment of a possible close cooperation. MNB Occasional Papers, 115.
- Laeven, L., & Valencia, F. (2012). Systemic Banking Crises Database: An Update. IMF Working Paper WP/12/163.
- Lízal, L. (2014). How to Build a Stable European Financial System: A Non-EMU Central Banker’s View. Europe at the Crossroads: A Union of Austerity or Growth Convergence?, Czech National Bank.
- Ministry of Finance of the Czech Republic. (2015). Impact Study Of Participation Or Non-Participation Of The Czech Republic In The Banking Union. Summary Report.
- Národná Banka Slovenska. (2012). Financial Stability Report. November.

- National Bank of Poland. (2014). The economic challenges of Poland's integration with the euro area.
- National Bank of Romania. (2014). Financial Stability Report.
- Reich, A., & Kawalec, S. (2015). The Banking Union: state of art. mBank – CASE Seminar Proceedings No. 137/2015, CASE – Centrum Analiz Społeczno-Ekonomicznych - Fundacja Naukowa.
- Schoenmaker, D. & Gros, D. (2012). A European Deposit Insurance and Resolution Fund. CEPS Working Document No. 364.
- Schoenmaker, D. (2011). The Financial Trilemma. *Economics Letters* Vol. 111 (2011):57-59. doi:10.1016/j.econlet.2011.01.010
- Schoenmaker, D., & Siegmann, A. (2013). Efficiency Gains of a European Banking Union. Tinbergen Institute Discussion Paper, TI 13-026/IV/DSF51, Duisenberg School of Finance.
- Skuodis, M. (2014). The Political Economy of the European Banking Union: What Union for Which Member States? Paper prepared for the ECPR Joint Sessions of Workshops 2014, 10-15 April, Universidad de Salamanca.
- Smaga, P. (2013). Assessing Involvement of Central Banks in Financial Stability. Center for Financial Stability Policy Paper, 23 May.
- Smaga, P. (2014a). The Concept of Systemic Risk. Systemic Risk Centre Special Paper No 5, The London School of Economics and Political Science.
- Smaga, P. (2014b). Optymalny kształt pierwszego filara unii bankowej. *Ekonomista* nr 4/2014, Wydawnictwo Key Text sp. z o.o., Warszawa.
- Smaga, P. (2015). Banking union (pp. 98-112). In M. Iwanicz-Drozdowska, M. (Eds.), *European Bank Restructuring During the Crises. Palgrave Macmillan Studies in Banking and Financial Institutions*. Palgrave Macmillan.
- Speyer, B. (2013). EU Banking Union. Right idea, poor execution. DB Research.
- Szpunar, P., J. (2014). Macroprudential Policy: Rationale and Challenges (pp. 103-136). In J. Monkiewicz, J. and M. Malecki (Eds.), *Macroprudential Supervision in Insurance: Theoretical and Practical Aspects*. Palgrave Macmillan.
- Valiante, D. (2014). Framing Banking Union in the Euro Area. Some empirical evidence. CEPS Working Document No. 389.
- Van Rompuy, H. (2012). Towards a genuine economic and monetary union. Report by President of the European Council, Brussels, 26 June.

- Véron, N. (2012). Europe's Single Supervisory Mechanism and the Long Journey Towards Banking Union. Policy Brief, Number PB 12-24, Peterson Institute for International Economics.
- Véron, N. (2013). A Realistic Bridge Towards European Banking Union. Bruegel Policy Contribution, Issue 2013/09.
- Wymeersch, E. (2014). The single supervisory mechanism or "SSM", part one of the Banking Union. National Bank of Belgium Working Paper Research No 255.
- Zettelmeyer, J., E. Berglöf, & de Haas, R. (2012). Banking union: The view from emerging Europe (pp. 65-77). In B. Thorsten (Eds.), *Banking Union for Europe. Risks and Challenges*. A VoxEU.org Book, Centre for Economic Policy Research.

**The following ROME Discussion Papers have been published since 2007:**

- |   |      |  |  |
|---|------|--|--|
| 1 | 2007 | Quo vadis, Geldmenge? Zur Rolle der Geldmenge für eine moderne Geldpolitik                                       | Egon Görgens<br>Karlheinz Ruckriegel<br>Franz Seitz  |
| 2 | 2007 | Money and Inflation. Lessons from the US for ECB Monetary Policy   | Ansgar Belke<br>Thorsten Polleit                     |
| 3 | 2007 | Two-Pillar Monetary Policy and Bootstrap Expectations  | Peter Spahn  |
| 4 | 2007 | Money and Housing – Evidence for the Euro Area and the US  | Claus Greiber<br>Ralph Setzer                        |
| 5 | 2007 | Interest on Reserves and the Flexibility of Monetary Policy in the Euro Area                                     | Ulrike Neyer   |
| 1 | 2008 | Money: A Market Microstructure Approach  | Malte Krueger  |
| 2 | 2008 | Global Liquidity and House Prices: A VAR Analysis for OECD Countries   | Ansgar Belke<br>Walter Orth<br>Ralph Setzer          |
| 3 | 2008 | Measuring the Quality of Eligible Collateral   | Philipp Lehmbecker<br>Martin Missong                 |
| 4 | 2008 | The Quality of Eligible Collateral and Monetary Stability: An Empirical Analysis                                 | Philipp Lehmbecker                                   |
| 5 | 2008 | Interest Rate Pass-Through in Germany and the Euro Area  | Julia von Borstel                                    |
| 1 | 2009 | Interest Rate Rules and Monetary Targeting: What are the Links?  | Christina Gerberding<br>Franz Seitz<br>Andreas Worms |
| 2 | 2009 | Current Account Imbalances and Structural Adjustment in the Euro Area: How to Rebalance Competitiveness          | Ansgar Belke<br>Gunther Schnabl<br>Holger Zemanek    |
| 3 | 2009 | A Simple Model of an Oil Based Global Savings Glut – The “China Factor” and the OPEC Cartel                      | Ansgar Belke<br>Daniel Gros                          |
| 4 | 2009 | Die Auswirkungen der Geldmenge und des Kreditvolumens auf die Immobilienpreise – Ein ARDL-Ansatz für Deutschland | Ansgar Belke   |

5	2009	Does the ECB rely on a Taylor Rule? Comparing Ex-Post with Real Time Data	Ansgar Belke Jens Klose
6	2009	How Stable Are Monetary Models of the Dollar-Euro Exchange Rate? A Time-varying Coefficient Approach	Joscha Beckmann Ansgar Belke Michael Kühl
7	2009	The Importance of Global Shocks for National Policymakers – Rising Challenges for Central Banks	Ansgar Belke Andreas Rees
8	2009	Pricing of Payments	Malte Krüger
1	2010	(How) Do the ECB and the Fed React to Financial Market Uncertainty? The Taylor Rule in Times of Crisis	Ansgar Belke Jens Klose
2	2010	Monetary Policy, Global Liquidity and Commodity Price Dynamics	Ansgar Belke Ingo G. Bordon Torben W. Hendricks
3	2010	Is Euro Area Money Demand (Still) Stable? Cointegrated VAR versus Single Equation Techniques	Ansgar Belke Robert Czudaj
4	2010	European Monetary Policy and the ECB Rotation Model Voting Power of the Core versus the Periphery	Ansgar Belke Barbara von Schnurbein
5	2010	Short-term Oil Models before and during the Financial Market Crisis	Jörg Clostermann Nikolaus Keis Franz Seitz
6	2010	Financial Crisis, Global Liquidity and Monetary Exit Strategies	Ansgar Belke
7	2010	How much Fiscal Backing must the ECB have? The Euro Area is not the Philippines	Ansgar Belke
8	2010	Staatliche Schuldenkrisen – Das Beispiel Griechenland	Heinz-Dieter Smeets
9	2010	Heterogeneity in Money Holdings across Euro Area Countries: The Role of Housing	Ralph Setzer Paul van den Noord Guntram B. Wolff
10	2010	Driven by the Markets? ECB Sovereign Bond Purchases and the Securities Markets Programme	Ansgar Belke

11	2010	Asset Prices, Inflation and Monetary Control – Re-inventing Money as a Policy Tool	Peter Spahn
12	2010	The Euro Area Crisis Management Framework: Consequences and Institutional Follow-ups	Ansgar Belke
13	2010	Liquiditätspräferenz, endogenes Geld und Finanzmärkte	Peter Spahn
14	2010	Reinforcing EU Governance in Times of Crisis: The Commission Proposals and beyond	Ansgar Belke
01	2011	Current Account Imbalances in the Euro Area: Catching up or Competitiveness?	Ansgar Belke Christian Dreger
02	2011	Volatility Patterns of CDS, Bond and Stock Markets before and during the Financial Crisis: Evidence from Major Financial Institutions	Ansgar Belke Christian Gokus
03	2011	Cross-section Dependence and the Monetary Exchange Rate Model – A Panel Analysis	Joscha Beckmann Ansgar Belke Frauke Dobnik
04	2011	Ramifications of Debt Restructuring on the Euro Area – The Example of Large European Economies' Exposure to Greece	Ansgar Belke Christian Dreger
05	2011	Currency Movements Within and Outside a Currency Union: The Case of Germany and the Euro Area	Nikolaus Bartzsch Gerhard Rösl Franz Seitz
01	2012	Effects of Global Liquidity on Commodity and Food Prices	Ansgar Belke Ingo Bordon Ulrich Volz
02	2012	Exchange Rate Bands of Inaction and Play-Hysteresis in German Exports – Sectoral Evidence for Some OECD Destinations	Ansgar Belke Matthias Göcke Martin Günther
03	2012	Do Wealthier Households Save More? The Impact of the Demographic Factor	Ansgar Belke Christian Dreger Richard Ochmann
04	2012	Modifying Taylor Reaction Functions in Presence of the Zero-Lower-Bound – Evidence for the ECB and the Fed	Ansgar Belke Jens Klose



05	2012	Interest Rate Pass-Through in the EMU – New Evidence from Nonlinear Cointegration Techniques for Fully Harmonized Data	Joscha Beckmann Ansgar Belke Florian Verheyen
06	2012	Monetary Commitment and Structural Reforms: A Dynamic Panel Analysis for Transition Economies	Ansgar Belke Lukas Vogel
07	2012	The Credibility of Monetary Policy Announcements: Empirical Evidence for OECD Countries since the 1960s	Ansgar Belke Andreas Freytag Jonas Keil Friedrich Schneider
01	2013	The Role of Money in Modern Macro Models	Franz Seitz Markus A. Schmidt
02	2013	Sezession: Ein gefährliches Spiel	Malte Krüger
03	2013	A More Effective Euro Area Monetary Policy than OMTs – Gold Back Sovereign Debt	Ansgar Belke
04	2013	Towards a Genuine Economic and Monetary Union – Comments on a Roadmap	Ansgar Belke
05	2013	Impact of a Low Interest Rate Environment – Global Liquidity Spillovers and the Search-for-yield	Ansgar Belke
06	2013	Exchange Rate Pass-Through into German Import Prices – A Disaggregated Perspective	Joscha Beckmann Ansgar Belke Florian Verheyen
07	2013	Foreign Exchange Market Interventions and the \$-¥ Exchange Rate in the Long Run	Joscha Beckmann Ansgar Belke Michael Kühl
08	2013	Money, Stock Prices and Central Banks – Cross-Country Comparisons of Cointegrated VAR Models	Ansgar Belke Marcel Wiedmann
09	2013	3-Year LTROs – A First Assessment of a Non-Standard Policy Measure	Ansgar Belke
10	2013	Finance Access of SMEs: What Role for the ECB?	Ansgar Belke
11	2013	Doomsday for the Euro Area – Causes, Variants and Consequences of Breakup	Ansgar Belke Florian Verheyen
12	2013	Portfolio Choice of Financial Investors and European Business Cycle Convergence – A Panel Analysis for EU Countries	Ansgar Belke Jennifer Schneider

13	2013	Exports and Capacity Constraints – A Smooth Transition Regression Model for Six Euro Area Countries	Ansgar Belke Anne Oeking Ralph Setzer
14	2013	The Transmission of Oil and Food Prices to Consumer Prices – Evidence for the MENA countries	Ansgar Belke Christian Dreger
15	2013	Target-balances: The Greek Example	Malte Krüger
16	2013	Competitiveness, Adjustment and Macroeconomic Risk Management in the Eurozone	Peter Spahn
17	2013	Contextualizing Systemic Risk	Lukas Scheffknecht
01	2014	Exit Strategies and Their Impact on the Euro Area – A Model Based View	Ansgar Belke
02	2014	Monetary Dialogue 2009-2014: Looking backward, looking forward	Ansgar Belke
03	2014	Non-Standard Monetary Policy Measures – Magic Wand or Tiger by the Tail?	Ansgar Belke
04	2014	Böhm-Bawerk und die Anfänge der monetären Zinstheorie	Peter Spahn
05	2014	State-of-play in Implementing Macroeconomic Adjustment Programmes in the Euro Area	Daniel Gros Cinzia Alcidi Ansgar Belke Leonor Coutinho Alessandro Giovannini
06	2014	Der Transaktionskassenbestand von Euro-Münzen in Deutschland	Markus Altmann Nikolaus Bartzsch
06e	2014	The Volume of Euro Coins held for Transaction Purposes in Germany	Markus Altmann Nikolaus Bartzsch
07	2014	Labor Market Reforms and Current Account Imbalances – Beggar-thy-neighbor Policies in a Currency Union?	Timo Baas Ansgar Belke
08	2014	Do the poor pay for card rewards of the rich?	Malte Krüger
09	2014	The Bank Lending Channel in a Simple Macro Model – How to Extend the Taylor Rule?	Peter Spahn
10	2014	The Relevance of International Spillovers and Asymmetric Effects in the Taylor Rule	Joscha Beckmann Ansgar Belke Christian Dreger

11	2014	Sacrifice Ratios for Euro Area Countries: New Evidence on the Costs of Price Stability	Ansgar Belke Tobias Böing
01	2015	Zins- und Wohlfahrtseffekte extremer Niedrigzinspolitik für die Sparer in Deutschland	Gerhard Rösl Karl-Heinz Tödter
02	2015	Banking Union as a Shock Absorber	Ansgar Belke Daniel Gros
03	2015	The Demand for Euro Banknotes Issued in Germany: Structural Modelling and Forecasting	Nikolaus Bartzsch Franz Seitz Ralph Setzer
04	2015	Planned Fiscal Consolidations and Growth Forecast Errors – New Panel Evidence on Fiscal Multipliers	Ansgar Belke Dominik Kronen Thomas Osowski
05	2015	Exchange Rate Bands of Inaction and Play-Hysteresis in Greek Exports to the Euro Area, the US and Turkey – Sectoral Evidence	Ansgar Belke Dominik Kronen
06	2015	Beyond Balassa and Samuelson: Real Convergence, Capital Flows, and Competitiveness in Greece	Ansgar Belke Ulrich Haskamp Gunther Schnabl Holger Zemanek
07	2015	Regional Bank Efficiency and its Effect on Regional Growth in “Normal” and “Bad” Times	Ansgar Belke Ulrich Haskamp Ralph Setzer
08	2015	Brexit: Chance oder Untergang für Großbritannien	Markus Penatzer
09	2015	Did Quantitative Easing affect interest rates outside the US? New evidence based on interest rate differentials	Ansgar Belke Daniel Gros Thomas Osowski
01	2016	Transaction Balances: From accounting and economics to biology	Nikolaus Bartzsch Franz Seitz
02	2016	(When) should a non-euro country join the banking union?	Ansgar Belke Anna Dobrzańska Daniel Gros Paweł Smaga