

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Lungu, Laurian; Kállai, Ella Viktoria

# **Research Report**

When should Romania join the European banking union, sooner or later?

Strategy and Policy Studies (SPOS), No. 2014,1

#### **Provided in Cooperation with:**

European Institute of Romania, Bucharest

Suggested Citation: Lungu, Laurian; Kállai, Ella Viktoria (2015): When should Romania join the European banking union, sooner or later?, Strategy and Policy Studies (SPOS), No. 2014,1, ISBN 978-606-8202-42-6, European Institute of Romania, Bucharest

This Version is available at: https://hdl.handle.net/10419/141819

#### 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.





# WHEN SHOULD ROMANIA JOIN THE EUROPEAN BANKING UNION, SOONER OR LATER?





# EUROPEAN INSTITUTE OF ROMANIA STRATEGY AND POLICY STUDIES SPOS 2014

#### STUDY NO. 1

# When Should Romania Join the European Banking Union, Sooner or Later?

## **Authors:**

Laurian LUNGU (Coordinator) Ella Viktoria KÁLLAI

Bucharest, 2015

Coordonator de proiect din partea Institutului European din România / Project Coordinator from the European Institute of Romania: Oana Mocanu

© Institutul European din România, 2015 Bd. Regina Elisabeta nr. 7-9

Sector 3, București www.ier.ro

Grafică și DTP: Monica Dumitrescu Foto copertă: <u>www.freeimages.com</u>

Tipar: Alpha Media Print www.amprint.ro

Splaiul Unirii nr. 313, București

ISBN online: 978-606-8202-42-6

Studiul exprimă opinia autorilor și nu reprezintă poziția Institutului European din România.

The study reflects the opinion of the authors and does not represent the European Institute of Romania's position.

#### **CUVÂNT ÎNAINTE**

Promovarea unor politici publice riguros fundamentate, sprijinite pe analize și dezbateri prealabile, reprezintă un element esențial în furnizarea unor rezultate de calitate și cu impact pozitiv asupra vieții cetățenilor. Institutul European din România, în calitate de instituție publică cu atribuții în sprijinirea formulării și aplicării politicilor Guvernului, a continuat și în anul 2014 programul de cercetare-dezvoltare dedicat *Studiilor de strategie și politici (Strategy and Policy Studies – SPOS)*.

Programul SPOS este menit a sprijini fundamentarea și punerea în aplicare a politicilor Guvernului României în domeniul afacerilor europene, oferind decidenților politici informații, analize și opțiuni de politici.

În anul 2014, în cadrul acestui proiect au fost realizate două studii, care au abordat arii tematice diferite, relevante pentru evoluția României în context european. Cercetările au urmărit furnizarea unor elemente de fundamentare a politicilor în domenii precum: valorificarea potențialului de rezerve de gaze de șist (Gazele de șist: între nevoi energetice și standarde de mediu) și perspectiva aderării României la Uniunea Bancară (When Should Romania Join the European Banking Union, Sooner or Later?).

Studiul de față, *When Should Romania Join the European Banking Union*, *Sooner or Later*?, a beneficiat de contributiile unei valoroase echipe de cercetători:

Laurian Lungu deține un doctorat în economie de la Universitatea din Cardiff, un masterat în economie la Universitatea Liverpool și un masterat în administrarea afacerilor în cadrul programului canadian MBA din București. Anterior, a lucrat în mediul academic susținând cursuri de macroeconomie și metode matematice în cadrul departamentului de Economie al Universității Cardiff. Domeniile sale de expertiză includ prognoza macroeconomică și modelarea politicilor economice. Este autor al numeroase articole și analize publicate în jurnale internaționale de specialitate și cărți.

Ella Viktoria Kállai este economist-șef din 2006 la Alpha Bank Romania, unde activează din 2001. Anterior a fost cercetător la Institutul Economic al Academiei de Științe din Praga, la Université de Paris I Pantheone-Sorbonne, la Center for Integration Studies din Bonn și la Institutul de tehnică de calcul din Cluj. A obținut titlul de doctor în economie la Université de Paris 1, Pantheone-Sorbonne în iulie

2000, la Universitatea Carol din Praga și State University din New York în decembrie 2000. Deține un masterat în matematică de la Universitatea Babeș Bolyai Cluj și un masterat în economie de la Academia de Studii Economice București. Domeniile sale de cercetare includ teoriile de creștere, piața muncii și capitalul uman, politica fiscală, problematica financiar monetară.

Pe parcursul realizării studiului, echipa de cercetători s-a bucurat de contribuția activă a coordonatorului de proiect din partea IER, Oana Mocanu, precum și de sprijinul unui grup de lucru, alcătuit din reprezentanți ai principalelor instituții ale administrației centrale cu atribuții în domeniu. Etapa de editare a beneficiat de contribuția colegilor din cadrul Biroului de Studii și Analize, Bogdan Mureșan și Eliza Vaș.

În final, adresez mulțumirile mele atât cercetătorilor, cât și tuturor celor care au sprijinit derularea acestei cercetări.

Gabriela Drăgan

Director general al Institutului European din România

#### **FOREWORD**

The promotion of rigorously based public policies, supported by preliminary analysis and debates, represents an essential element in providing quality results with a positive impact on people's lives. The European Institute of Romania, as a public institution with responsibilities in supporting the formulation and implementation of government policies, continued in 2014 its research and development program dedicated to the *Strategy and Policy Studies (SPOS)*.

The SPOS Programme is designed to support the foundation and implementation of policies of the Romanian Government in European affairs, providing policymakers with information, analysis and policy options.

In 2014, two studies were completed within this project, which addressed various thematic areas relevant for Romania's evolution in the European context. Research has sought to supply fundamental policy elements in areas such as the potential of shale gas reserves (*Shale gas: between energy needs and environmental standards*) and Romania's perspective for accession to the Banking Union (*When Should Romania Join the European Banking Union, Sooner or Later?*).

The present study, When Should Romania Join the European Banking Union, Sooner or Later?, is the result of the combined efforts of a valuable research team composed of:

Laurian Lungu holds a PhD in Economics from Cardiff University, a MA in Economics from University of Liverpool and a MBA degree from the Canadian MBA Programme in Bucharest. Previously, he worked in academia, teaching courses in Macroeconomics and Mathematical Methods for both undergraduate and postgraduate degrees at Cardiff University's Economics department. His areas of expertise are in the fields of macroeconomic forecasting and policy modelling. He is the author of a number of articles and analyses published in internationally renowned professional journals and books.

Ella Viktoria Kállai is Chief Economist at Alpha Bank Romania since 2006 and works in the bank since 2001. Previously she was a research fellow in the Economics Institute of the Academy of Science from Prague, Université de Paris 1, Center for Integration Studies Bonn and Institute for Computer Technique Cluj. She obtained her PhDs in Economics from Université de Paris 1, Pantheone-Sorbonne in July

2000, from Charles University Prague and State University of New York in December 2000. She also has a MA in Mathematics from Babes Bolyai University Cluj and a MA in Economics from Academy of Economics Studies Bucharest. Her main research interests are growth theories, labour markets and human capital, fiscal policy, monetary and financial issues.

During the survey, the research team enjoyed an active contribution of the EIR project coordinator, Oana Mocanu, and the support of a working group consisting of representatives of key institutions of central government. The editing and proofreading benefited from the contribution of the colleagues from the Studies and Analyses Unit, Bogdan Mureşan and Eliza Vaş.

Finally, I would like to address my thanks to both researchers and to all those who supported the conduct of this research.

Gabriela Drăgan

General Director of the European Institute from Romania

# Acknowledgements

The authors would like to thank to Aniela Creţu, Valentin Lazea, Cosmina Manolescu, Adina Mătăoanu, Olivia Pavel and Eveline Turturescu for useful comments and discussion on an earlier version of this study. We would also like to thank the EIR project and management team, Gabriela Drăgan, Agnes Nicolescu, Oana Mocanu and Mihai Sebe for their commitment in the successful completion of the project. We greatly acknowledge the financial support provided by the EIR. All remaining errors are ours.

# **CONTENTS**

	List	of Abbreviations	pg. 9
	SIN	TEZA STUDIULUI (Executive Summary in Romanian)	pg. 11
	EXI	ECUTIVE SUMMARY	pg. 21
1.	Intr	oduction - The Rationale for the European Banking Union	pg. 31
2.		European Banking Union – Foundations and Shortcomings	pg. 37
		The Architecture of the EBU	pg. 37
	2.2.	The Single Rule Book	pg. 38
	2.3.	The Single Supervisory Mechanism	pg. 40
	2.4.	The Single Resolution Mechanism	pg. 43
		The Single System Deposit Guarantee Scheme	pg. 45
		Shortcomings and Flaws in the Design of the EBU	pg. 46
	2.7.	The Implications of EBU Governance for Non-EZ	
		Member Countries	pg. 47
3.	The	Banking Systems in Romania, CEE and the euro zone	pg. 49
	3.1.	The Size of the Banking Systems	pg. 49
	3.2.	The Level of Concentration	pg. 52
	3.3.	Banks' Foreign Ownership	pg. 54
	3.4.	Cross-Border Banking Linkages	pg. 57
	3.5	The Quality of the Banking Systems	pg. 66
4.	Fact	tors Influencing Romania's Position vis-à-vis	
	Eur	opean Banking Union	pg. 73
	4.1	Shared Technical Standards for EU Banks	pg. 74
	4.2	When Is the Right Time to Join the EBU?	pg. 77
	4.3	The Lender of Last Resort and Potential Vulnerabilities	
		to Contagion Effects	pg. 81
	4.4	The Reputational Aspect of the ECB	pg. 84
	4.5	Regional Aspects and the UK Effect	pg. 84
	4.6	What Are the Cost Implications of the EBU Membership?	pg. 85
	4.7	Shadow Banking in an Overbanked Europe	pg. 89
	4.8	The Vicious Circle between Banks and Sovereigns;	
		Banks Capital Shortfall	pg. 91
	4.9	The Implications of Macroprudential Supervision	pg. 99

5. Concluding Remarks	pg. 101	
List of Annexes:		
A1 Banks Assets, Foreign Consolidated Claims and the G8 Exposure	pg. 107	
A2 Main Indicators of the Banking System Quality in Romania		
and in Its Principal Lenders in 2013	pg. 115	
A3 Parent Banks among the 1000 Largest in the World		
and Their CEE Subsidiaries		
A4 Significant Credit Institutions Supervised Directly by ECB		
Parents of Romanian Banks	pg. 121	
A5 Banking Regulations for EU and BU	pg. 122	
A6 Top 5 Country and Banking Systems' Risk Evaluation in the EU	pg. 123	
References	pg. 127	

#### **List of abbreviations** used in the text:

BRRD Bank Recovery and Resolution Directive

CRD IV Capital Requirements Directive IV

CEE BG, CZ, HU, PL, RO
DGS Deposit Guarantee Scheme

DGSD Deposit Guarantee Scheme Directive

DTI Debt-to-Income Ratio

EBA European Banking Authority
EBU European Banking Union
EC European Commission
ECB European Central Bank
EMU European Monetary Union
ESM European Stability Mechanism

EZ Euro zone

GDP Gross Domestic Product

G8 DE, GR, ES, FR, IT, NL, BE, AT

LTV Loan-to-Value Ratio

MS Member State

NBR National Bank of Romania

SRB Single Rule Book

SRBd Single Resolution Board
SRF Single Resolution Fund
SRM Single Resolution Mechanism
SSM Single Supervisory Mechanism

BE	Belgium	LV	Latvia
BG	Bulgaria	LT	Lithuania
CZ	Czech Republic	LU	Luxembourg
CY	Cyprus	MT	Malta
DE	Germany	NL	Netherlands
DK	Denmark	AT	Austria
EE	Estonia	PL	Poland
GR	Greece	PT	Portugal
ES	Spain	RO	Romania
FR	France	SI	Slovenia
HR	Croatia	SK	Slovakia
HU	Hungary	FI	Finland
IT	Italy	SE	Sweden
IE	Ireland	UK	United Kingdom
CII	C:411	TD	T1

CH Switzerland TR Turkey
US United States JP Japan

# Când ar trebui să adere România la Uniunea Bancară Europeană, mai devreme sau mai târziu?

#### SINTEZĂ

#### Motivația înființării Uniunii Bancare Europene

Izbucnirea crizei financiare în 2007 a expus o serie de deficiențe în modul de funcționare al mecanismelor europene, evidențiind arhitectura incompletă a politicii Uniunii Economice și Monetare (EMU). Astfel, a devenit evident că integrarea financiară, stabilitatea financiară și responsabilitatea națională pentru prevenirea și administrarea crizelor nu puteau fi îndeplinite toate simultan.

Au existat mai mulți factori care au fost responsabili pentru adâncirea efectelor crizei financiare în UE (Uniunea Europeană)/EZ (zona euro), în principal: politica monetară unică din zona euro și absența unei instituții fiscale ca și contrapartidă pentru BCE (Banca Centrală Europeană), guvernanța zonei euro concentrată mai degrabă pe reguli ca modalitate de prevenire a crizelor și mai puțin pe administrarea acestora, standardele permisive de supraveghere, absența mecanismelor de partajare a riscurilor transfrontaliere și naționalismul bancar și, nu în ultimul rând, lipsa leadershipului politic la nivelul UE. Având în vedere aceste carențe, scopurile UBE (Uniunii Bancare Europene) ar fi în principal două:

- Să întărească piața unică a serviciilor financiare prin asigurarea de standarde de operare similare pentru băncile din zona euro. Aceasta ar necesita o supraveghere competitivă și neutră în zona euro (și de dorit în UE).
- Să întrerupă cercul vicios existent între datoriile suverane și bănci, inversând procesul de fragmentare financiară.

#### Uniunea Bancară Europeană - Fundamente și slăbiciuni

Arhitectura UBE se bazează pe trei piloni, și anume: un mecanism unic de supraveghere (MUS), un mecanism unic de rezoluție (MUR) și o schemă unică¹ de garantare a depozitelor (SDGS).

La nivelul guvernanței, UBE se va baza pe setul de Reguli Prudențiale Comune (Single Rule Book-SRB), ansamblul de reguli ce guvernează sectorul financiar din toate statele membre ale UE. Trei componente ale SRB sunt mai relevante pentru UBE:

Directiva (CRD IV) și Regulamentul (CRR) cerințelor de capital, care implementează cerințele Basel III în legislația UE și stabilesc o serie de limite

 $<sup>^{\</sup>scriptscriptstyle 1}$  Formularea originală este Schema Unică de Garantare a Depozitelor. Totuși ținând cont de faptul că resursele nu sunt agregate încă, denumirea de Sistem de schemă de garantare a depozitelor este mai potrivită.

pentru standardele de capital și lichiditate, tampoanele de capital, precum și cadrul de reglementare al bonusurilor bancherilor și al problemelor de guvernanță și transparentă.

- Directiva schemei de garantare a depozitelor (DGSD) având drept scop îmbunătățirea regulilor existente UE pentru protecția deponenților în cazul falimentului bancar; se aplică tuturor băncilor din UE.
- ➤ Directiva de rezoluție bacară (BRRD) stabilește cadrul de intervenție al autorităților naționale pentru băncile falimentare naționale și transfrontaliere, prin stabilirea regulilor de recapitalizare internă (bail-in) sau a fondurilor de rezoluție; se aplică tuturor băncilor din UE.

Mecanismul Unic de Supraveghere urmărește întărirea supravegherii sectorului bancar din UE prin realizarea unei arhitecturi integrate care leagă BCE de autoritățile de supraveghere naționale. Țările membre din zona euro sunt obligate să adere la MUS, în timp ce țările membre UE din afara zonei euro au posibilitatea să aleagă aderarea la MUS în mod voluntar. BCE va avea puteri de supraveghere directă² asupra celor mai mari bănci din țările membre MUS (cele considerate a fi sistemice, în jur de 130 reprezentând aproape 85% din totalul activelor bancare) care îndeplinesc oricare din următoarele două criterii: au active de peste 30 mld euro sau activele băncii reprezintă mai mult de 20% din produsul intern brut al statului membru de origine, dacă activele acelei bănci nu depășesc 5 mld euro.

Mecanismul Unic de Rezoluție constă în două elemente: o autoritate de rezoluție la nivel UE, Autoritatea Unică de Rezoluție (AUR) și un fond unic de rezoluție (FUR) finanțat de sectorul bancar. Obiectivul său este să asigure o soluționare ordonată a băncilor falimentare cu costuri minime pentru plătitorii de taxe și pentru economia reală. În cazul unui faliment bancar, contributorii la recapitalizarea internă sunt obligați să acopere 8% din totalul pasivelor înainte ca suma în valoare de 5% din totalul pasivelor să poată fi accesată din FUR, care va capitaliza 55 mld euro până în 2024, și înainte de a se recurge la finanțare externă.

*Sistemul schemei de garantate a depozitelor.* Progresul în stabilirea celui de-al treilea pilon al UBE a fost practic nul până acum. Negocierile, în principal din cauza opoziției Germaniei față de centralizarea controlului și mutualizarea responsabilității financiare pentru falimentul bancar, au eșuat.

#### Slăbiciunile și defectele de design ale UBE

Dintre cei trei piloni care formează UBE doar primul, MUS, este complet. Al doilea pilon, MUR, este doar parțial complet deoarece problema activelor moștenite împiedică efectiva funcționare a acestuia. Iar al treilea pilon nu a fost încă antamat.

<sup>&</sup>lt;sup>2</sup> BCE va autoriza și va retrage licențele bancare, va verifica și impune cerințe de capital și lichiditate, va autoriza modelele bancare și va impune măsuri de intervenție timpurie; va restricționa sau limita activitatea instituțiilor sau va cere diminuarea activității, va conduce teste de stres. Atribuțiile rămase la autoritățile de supraveghere naționale se vor limita la activității legate de protecția consumatorilor și combaterii spălării de bani și a supravegherii băncilor autohtone mici și a sucursalelor băncilor non-UE.

- Există un conflict de interese în combinarea activităților de supraveghere și a politicii monetare sub aceeași umbrelă a BCE. Construirea MUS în cadrul BCE împiedică asigurarea unui grad suficient de independență a activităților de supraveghere și politică monetară.
- Absența unei autorități fiscale centrale acționând în contrapartidă cu BCE. În cazul unui șoc negativ serios în sectorul bancar european, este nevoie de o rezervă fiscală credibilă și de dimensiuni semnificative.
- Rolul ESM (Mecanismul European de Stabilitate) pe care l-ar putea avea în perioada de tranziție până la crearea FUR este practic limitat din cauza reticenței țărilor creditoare de a aloca fonduri pentru salvarea băncilor din alte țări însă și din cauza reticenței țărilor cu probleme în sectorul bancar de a se supune disciplinei condiționalităților ESM.
- Introducerea unei asigurări paneuropene pentru depozite în situația actuală ar necesita mutualizarea activelor moștenite situație puțin probabil să fie acceptată.
- ➤ BCE împreună cu autoritățile naționale competente vor exercita supravegherea pe baza SRB. Totuși, deoarece CRD IV, element principal al SRB, conține elemente importante care rămân la latitudinea autorităților naționale, BCE va trebui de facto să supravegheze bănci pe baza seturilor de reguli prudențiale comune din 28 de țări.
- Definiția actuală a "importanței sistemice" a unei bănci nu este potrivită. Per ansamblu, bănci active pe plan local, deși mici, ar putea prezenta un risc sistemic dacă sunt expuse la anumite șocuri macroeconomice.
- Divizarea sistemului bancar pe criterii predefinite asupra importanței sistemice ar putea genera oportunități de arbitraj la nivelul reglementării. Acesta are efecte adverse asupra stabilității financiare și alocării eficiente de capital.

Este foarte important să se găsească o soluție pentru problema activelor moștenite. Acestea nu trebuie să devină un pasiv comun la nivelul zonei euro (sau UE), ci ar trebui soluționate la nivel național deoarece acumularea activelor moștenite în bilanțurile băncilor s-a petrecut în perioada în care instituțiile de supraveghere naționale au avut responsabilitatea de a le monitoriza. UBE în sine nu poate soluționa problema datoriei moștenite care planează asupra sistemului bancar din Europa.

### Sistemele bancare din România, CEE<sup>3</sup> și EZ

Pentru a evalua argumentele pro și contra aderării la UBE s-a efectuat o analiză comparativă a sistemelor bancare din țările candidate și zona euro în perioada 2008-2013. În acest context, ajustările sistemelor bancare din 2013 ar putea fi văzute ca reacții la construcția UBE – denumite generic "efect UBE"<sup>4</sup>.

<sup>&</sup>lt;sup>3</sup> În notația din text, CEE include Bulgaria, Cehia, Ungaria, România și Polonia.

<sup>&</sup>lt;sup>4</sup> Generic, deoarece trendul de consolidare este de asemenea important, de exemplu ce s-a întâmplat în 2014 și evoluțiile din viitorul apropiat. Separarea completă a efectului UBE de alte efecte politice și economice este dificil de realizat.

Dimensiunea sistemului bancar. Ca raport al activelor bancare în PIB sistemul bancar românesc a fost cel mai mic în UE atât în 2008, cât și în 2013. Acest raport a rămas la 56%, aproape neschimbat, în jur de o cincime din dimensiunea mediană a zonei euro. Analize empirice efectuate la nivelul UE arată că sistemul bancar european este supradimensionat. Activele bancare totale în UE reprezentau 303% din PIB în 2013. În comparație activele băncilor japoneze au fost de 192% din PIB, iar cele ale băncilor americane de 145% din PIB. Dată fiind importanța sectorului bancar în finanțarea economiilor din UE, și implicit impactul asupra creșterii economice, un aspect important îl reprezintă nivelul creditului în PIB. O serie de studii au relevat că riscul creditării devine mai mare cu cât raportul creditelor în PIB este mai mare. În această logică, sistemul bancar românesc ar fi cel mai puțin riscant și ar avea cel mai mare potențial de creștere, cu efecte pozitive asupra creșterii reale în UE.

Nivelul de concentrare al sistemului bancar și ponderea băncilor străine. Sistemul bancar românesc are un nivel mediu de concentrare. Ponderea celor mai mari 5 bănci în totalul activelor este de 54.4%, aproape neschimbată din 2008, în timp ce concentrarea în sistemul bancar din statele membre UE a variat între 31% în Germania și 94% în Grecia. CEE se evidențiază la nivel de UE prin magnitudinea ridicată a ponderii activelor bancare deținute de bănci străine (sucursale și filiale). Această pondere a fost de 73% comparativ cu 14% în zona euro în 2013, în scădere de la 78% și respectiv 15% în 2008. Băncile străine domină sistemul bancar românesc, 80% din activele totale aparținând filialelor străine cu personalitate juridică română<sup>5</sup>. O situație similară este în Republica Cehă, în timp ce în Ungaria și Polonia ponderea activelor băncilor străine în total active bancare a fost mai mică, în jur de 60%. Dependența de finanțarea băncilor străine ar putea reprezenta un risc în eventualitatea unei crize financiare, când fluxurile de capital provenind de la băncile-mamă din țara de origine s-ar putea recalibra.

Legăturile transfrontaliere. Băncile transfrontaliere au jucat un rol central în dinamica recentei crize globale. În CEE originea geografică transfrontalieră a băncilor a influentat și fluxurile de creditare transfrontalieră. De exemplu, între 2009 și 2011 atât în România cât și în Ungaria a fost activat programul "Inițiativa Viena" pentru menținerea expunerii băncilor străine și prevenirea retragerii accelerate de capital, în timpul programelor FMI-UE. În România, ca și în Ungaria și Bulgaria, creanțele internaționale (creanțele transfrontaliere și creanțele locale în valută) au reprezentat cea mai mare parte a creanțelor străine și au suferit cea mai mare contracție.

<sup>&</sup>lt;sup>5</sup> Băncile străine sunt definite ca sucursalele și unitațile bancare cu personalitate juridică română controlate fie de o bancă mamă din UE sau non-UE, adică de o bancă "străină" din punctul de vedere al țării raportoare.

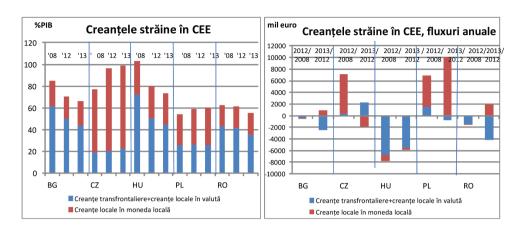


Figura S1: Creanțele străine în CEE

Băncile cu cea mai mare expunere în CEE provin cu preponderență din 8 țări ale zonei euro (G8)<sup>6</sup>. Ca o remarcă, țările recipiente de capital trebuie să stimuleze fluxurile bancare transfrontaliere atât prin reglementări și supraveghere întărite, cât și prin indeplinirea unor condiții de stabilitate macroeconomice mai bune.

Calitatea sistemelor bancare. Deteriorarea calitătii activelor a fost un proces observat la nivelul întregului sistem bancar din UE însă o caracteristică a acestuia în Romania a fost ritmul foarte abrupt de degradare. Volumul creditelor neperformante a continuat să crească, atingând un nivel de mai bine de trei ori mai mare comparativ cu cel observat la băncile din zona euro în 2013. Însă, este important de remarcat faptul că indicatorii de sănătate și stabilitate financiară ai sistemului bancar românesc (de exemplu, indicatorii de adecvare a capitalului sau a lichiditătii) arată o imagine mai bună în comparatie cu valorile existente în cele mai multe tări din UE (Tabel S3 - disponibil în anexa sintezei). Din această pespectivă băncile românești au mai mult spatiu pentru absorbtia riscurilor în comparație cu băncile autohtone din zona euro (sau sistemele bancare din G8). Un alt element pozitiv este cresterea ponderii activelor lichide (numerar, active disponibile pentru vânzare) în băncile românesti între 2008 si 2013 în timp ce aceasta a înregistrat o tendintă de scădere în băncile din zona euro. Pe timpul crizei băncile românești au fost mai dependente de piața interbancară autohtonă decât de băncile din zona euro (și cu atât mai puțin dependente față de băncile străine prezente în zona euro). Aceasta sugerează că fragmentarea pieței monetare a fost mai intensă pentru băncile din zona euro, iar neîncrederea a fost mai răspândită printre ele.

# Factorii care influențează poziția României față de Uniunea Bancară Europeană

Evaluarea beneficiilor și a dezavantajelor aderării României la UBE trebuie facută prin prisma modului în care construcția UBE poate sprijini semnificativ obiectivele

<sup>&</sup>lt;sup>6</sup> În acest context țările G8 sunt: Germania, Grecia, Spania, Franța, Italia, Olanda, Belgia și Austria.

României de creștere economică, stabilitate și intermediere financiară, precum și implementarea eficientă a politicilor monetare și fiscale.

Teama de faptul că neapartenența la UBE ar stimula dezintermedierea financiară a băncilor cu capital străin care operează în România este foarte probabil exagerată. Expunerea transfrontalieră a băncilor este dictată de anticipațiile acestora vis-avis de profitabilitate și rentabilitatea capitalului. Este adevărat că în acest moment profitabilitatea băncilor din România este redusă. Dar, înainte de criză, aceasta a fost printre cele mai ridicate din sistemele bancare ale CEE, fără a le menționa pe cele din zona euro. Acest indicator trebuie analizat din perspectiva ciclurilor economico-financiare. Procesul de dezintermediere bancară este foarte probabil să se fi apropiat de sfârșit, deoarece de-a lungul ultimilor ani acest proces a fost, în esență, unul de auto-corecție. Finanțările externe de la băncile străine au scăzut cu o treime față de nivelul anterior crizei, iar depozitele interne finanțează acum în totalitate creditarea autohtonă, reducând astfel nevoia de transferuri de capital din străinătate.

Un alt argument menționat adeseori în favoarea aderării la UBE este prezența ridicată în România a băncilor domiciliate în zona euro. Dar acest argument poate funcționa în ambele sensuri: deoarece toate țările din UE trebuie să adopte moneda euro la un moment dat, devenind astfel implicit membre ale UBE, băncile au tot interesul să își întărească activele bilanțiere în toate țările care operează în UE. Această strategie le va permite prevenirea pierderii de cotă de piață și a avantajului competitiv în momentul în care România va adera la UBE.

Există o serie de alte argumente în favoarea aderării la UBE care sunt preconizate a aduce diverse beneficii. Unul dintre acestea este legat de stabilitatea financiară și anume prezumția că BCE, ca supraveghetor unic, ar fi mai credibilă decât agențiile de supraveghere naționale. Într-adevăr, mecanismele de prevenire și rezoluție a falimentelor bancare ale BCE ar putea fi considerate probabil mai consistente și eficiente. Însă și componenta de supraveghere bancară a BNR s-a dovedit a fi eficientă în trecutul recent. România este printre cele șapte state membre ale UE care nu au avut nevoie de bani publici pentru salvarea băncilor după 2008. În plus, BCE va trebui să-și dovedească eficiența ca supraveghetor și să-și câștige reputația în anii ce vin. Mai mult, BCE trebuie să convingă și piețele financiare că independența politicii monetare nu va fi afectată de rolul său de supraveghetor.

Legat de supravegherea financiară, o altă observație importantă (Tabel S1) este faptul că țările din UE care nu sunt membre ale zonei euro beneficiază de aceleași standarde tehnice de supraveghere ca și țările din zona euro. Prin instrumentele sale de prevenire și rezoluție BRRD întărește sistemele de rezoluție naționale în toate tările membre UE, indiferent de apartenenta la UBE.

Un alt argument în favoarea aderării la UBE este costul potențial ridicat al efectelor de contagiune în eventualitatea unei crize financiare. Acest argument însă, tinde să minimizeze rolul pe care BNR îl are ca împrumutător de ultimă instanță. Capacitatea

BNR de a acționa ca împrumutător de ultimă instanță, și deci de a atenua efectele de contagiune, rămâne confortabil de ridicată. La sfârșitul lunii iulie 2014 rezervele internaționale acopereau de 2,6 ori baza monetară, satisfăcând astfel mult mai stringent condițiile cerute chiar și de consiliile monetare. Este adevărat că raportul veniturilor bugetului general consolidat în PIB este printre cele mai mici din țările UE și, în consecință, România ar avea o capacitate fiscală de reacție relativ limitată în cazul în care ar fi nevoie de sprijinirea financiară a unor banci. O soluție în acest sens este cea practicată la nivelul UBE și anume extinderea capacității de recapitalizare internă a fiecărei bănci prin creșterea cantității și calității capitalului și asigurarea că fondul de rezoluție este operațional.

Dacă România ar adera la UBE, accesul la lichiditate în euro ar trebui să fie asigurat de BNR datorită faptului că țările UE din afara zonei euro nu pot avea acces direct la finanțarea BCE. Acesta este un dezavantaj serios deoarece în cazul unei crize financiare viteza de răspuns a băncii centrale și capacitatea acesteia de a asigura măsuri credibile sunt cruciale. Există rezerve serioase în ceea ce privește gradul de operationalitate al UBE în țările care au monedă și politică de dobânzi proprii, însă ale căror bănci autohtone nu au acces la lichiditatea furnizată de Eurosistem.

Mai mult, aderarea la UBE ar afecta serios eficiența de răspuns a politicii monetare a BNR la șocuri asimetrice. Controlul centralizat al BCE în ceea ce priveste implicațiile reglementărilor macroprudențiale, via MUS, ar periclita răspunsul BNR la șocurile sectoriale specifice. Dat fiind faptul că șocurile asimetrice sunt mai degrabă locale decât globale, arsenalul politicii monetare trebuie completat cu o politică macroprudențială eficientă, individuală, specifică țării, care să rămână sub controlul autorității naționale. Caracteristicile pieței muncii și ale pieței imobiliare, de exemplu, sunt net diferite în țările UE. Implicit, măsurile de prevenire a dezechilibrelor trebuie sa fie individuale, pentru fiecare țară membră a UE în parte.

Până la un punct, costurile fiscale și bancare sunt probabil similare indiferent de aderarea sau nu la UBE. Aceasta deoarece, după recapitalizarea internă este foarte probabil ca în cazul unor crize sistemice, tot guvernele naționale să rămână responsabile pentru recapitalizarea băncilor proprii. Diferența va fi făcută de accesul la fondurile FUR/FSE, care datorită efectului de "pooling" al resurselor prezintă un grad de risc mai scăzut, (în caz de membru UBE) sau la Fondul de rezoluție bancară din România (în cazul în care Romania nu aderă la UBE). Însă, sistemul bancar românesc este superior din punct de vedere al solvabilității, al provizionării creditelor neperformante și lichidității comparativ cu multe sisteme bancare ale țărilor din zona euro. De aceea, ca membru UBE, riscul ca România să fie contributor net la FUR pentru salvarea băncilor din zona euro este ridicat. Mai mult, deși este adevărat că Fondul de rezoluție bancară din România nu are beneficiile de scală ale unui fond agregat cum este FUR, acesta este în curs să fie chiar mai bine capitalizat, în termeni relativi, decât FUR.

#### Remarci finale

Deși pe hârtie arhitectura UBE este realizată, două mari întrebări rămân. Prima, cum va funcționa UBE în practică? Dintre cei trei piloni care formează structura completă a uniunii bancare doar primul, MUS, este complet. Al doilea pilon, MUR, este doar parțial complet ca urmare a problemei activelor moștenite care îi împiedică funcționarea sa efectivă. Iar funcționarea celui de-al treilea pilon, SDGS, nu a fost încă detaliată.

A doua întrebare este cum va arăta sistemul financiar European în viitorul apropiat? În ultimele două decenii băncile europene au devenit mai mari, mai concentrate și mai îndatorate comparativ cu cele din Statele Unite ale Americii și Japonia, iar în timpul crizei s-au dovedit a fi un risc de amenințare serios chiar pentru stabilitatea Sistemului Financiar European. De la începutul crizei expansiunea sectorului bancar tradițional din zona euro a încetinit în timp ce sectorul financiar nebancar (shadow banking) s-a extins. Indiciile curente arată ca aceste tendințe vor continua și pe viitor. Din această perspectivă riscul sectorului financiar nebancar pentru stabilitatea financiară din zona euro ar putea crește în absența unor măsuri suplimentare de reglementare și supraveghere a acestui sector. Din acest punct de vedere rolul politicilor macroprudențiale, care să poată fi aplicate individual, de fiecare țară în parte, devine și mai relevant.

Dată fiind globalizarea piețelor financiare, atât structura sistemului bancar autohton, cât și legăturile sale transfrontaliere cu sistemele bancare din zona euro, joacă un rol fundamental în asigurarea stabilității financiare. Însă, la momentul actual, bănci supradimensionate - și din acest motiv mai riscante - populează zona euro cu efect pozitiv minim asupra creșterii economice. Conduita de supraveghere a BCE în UBE ar putea avea drept consecință reducerea dimensiunii băncilor care cad sub incidența BCE. Însă, acest obiectiv ar putea contraveni interesului României, în cazul în care ar fi parte din UBE, dată fiind dimensiunea mult redusă a sistemului bancar autohton vis-a-vis de media din zona euro.

Pentru România, sau orice țară UE care nu se află în zona euro, decizia de aderare la UBE depinde, în sens larg, atât de analiza cost-beneficiu, cât și de orizontul de timp pentru adoptarea monedei euro. BNR a anunțat deja că aderarea la UBE este o decizie strategică exprimându-și intenția de a încheia procesul de aderare la UBE până la sfârșitul anului 2016. Astfel, strategia BNR este diferită de perspectiva altor bănci centrale din CEE, cum ar fi cele din Polonia, Republica Cehă sau Ungaria, care au optat la unison pentru a rămâne în afara UBE deocamdată (Tabelul S2). Aceasta în ciuda faptului că structurile sistemelor bancare autohtone prezintă multe similarități cu cele al României.

În concluzie, date fiind deficiențele existente în designul structurii UBE, starea actuală a sistemului bancar din România, perspectivele de dezvoltare economică ale României și beneficiile pentru politica monetară, o atitudine de așteptare "wait and

see" ar fi preferabilă unei participări premature în UBE. Strategia de "wait and see" este una potrivită mai cu seamă că a fost deja adoptată de cele mai multe din țările UE care nu sunt în zona euro. Ar fi benefic de văzut mai întâi cum funcționează UBE în practică înainte de asumarea angajamentului de participare.

Tabel S1: Statutul existent al pilonilor UBE

		Aplicabilitate	Status	Remarci
	Directiva și Regulamentul cerințelor de capital	UE	Efectiv	
Supraveghere bancară	Regulament MUS	EZ	Adoptat	Opțional pentru membrii non-EZ
	Revizuirea regulamentului Autorității Bancare Europene	UE	Efectiv	
	BRRD	UE	Agreat	
Rezoluție bancară	Regulament MUR	EZ	Agreat	Opțional pentru membrii Non-EZ
bancara	Sprijin financiar european public pentru SRF	EZ	Neagreat	Opțional pentru membrii Non-EZ
Asigurarea depozitelor	Noi reguli pentru schemele de garantare a depozitelor, Directiva DGS	UE	Agreat	
	DGS Unic		Neagreat	
Altele	Reguli de ajutor de stat pentru sectorul financiar	UE	Efectiv	
Aitele	Directa recapitalizare a băncilor din ESM	EZ	Neagreat	

Tabel S2: Poziția actuală a membrilor Non-EZ vis-à-vis de UBE

	BG	CZ	DK	HR	HU	PL	RO	SE	UK
a actuală	Probabil	Deocamdată	Probabil	Deocamdată	Deocamdată	Deocamdată	Probabil	Nu	Nu aderă
vis de UBE	da	nu	da	nu	nu	nu	da	aderă	

Table S3. Principalii indicatori ai calității sistemului bancar din Romania și din principalele sale țări creditoare în 2013

		1			•					^	1	-	^			
	România		Austria		Franța		Grecia		Italia		Olanda		Zona euro		UE	
	Bănci	toate	Bănci	toate	Bănci	toate	Bănci	toate	Bănci	toate	Bănci	toate	Bănci	Bănci	Bănci	Bănci
	autohtone		autohtone		autohtone		autohtone		autohtone		autohtone		autohtone	străine	autohtone	străine
	Indicatori a	i calității	activelor													
_	14.5 17.87 4.08	17.87	4.08	4.23	4.72	4.64	24.58	24.19	13.25	12.42	2.83	2.73	5.92	4.3	4.89	3.64
7	32.21	17.07	13.4	14.46	33.94	33.8	135.71	134.66	92.28	89.87	24.99	24.01	40.38	25.99	31.41	18.2
8	75.05	86.52	74.28	71.96	48.79	48.72	49.26	50.36	42.21	42.62	40.75	40.98	45.93	52.68	48.06	57.29
	Indicatori d	le adecva	re a capitalul	ii												
4	20.05 18.79 15.84	18.79	15.84	15.39	15.03	15.01	13.51	13.57	13.76	13.7	14.89	15.27	15.49	18.74	15.95	17.46
15	18.02	15.77	11.85	11.89	13.15	13.16	13.12	13.18	10.52	10.55	12.48	12.86	12.99	14.06	13.11	14.2
9	12.05	10.79	7.84	7.39	7.03	7.01	5.51	5.57	5.76	5.7	689	7.27	7.49	9.58	7.95	11.79
	Indicatori de lichiditate	le lichidit	ate													
<u></u>	21.39	20.53	8.95	7.73	29.74	30.45	5.84	2.67	9.6	9.02	12.3	13.2	19.56	17.41	22.99	38.27
8	37.72	33.51	16.5	16.58	35.95	36.63	9.19	96.8	22.16	20.99	20.57	21.81	27.94	25.8	19.39	14.56
6	11.35	21.35	21.18	20.47	8.44	8.54	7.58	9.19	11.56	13.54	3.79	6.83	12.08	30.44	9.83	19.38
10	80.98	75.89	56.95	8.69	61.95	61.79	88.88	84.19	58.22	56.85	61.46	89.09	62.99	52.74	63.14	49.7
11	9.47	99.6	13.35	13.44	17.81	18.07	11.98	14.02	15.02	14.96	20.9	20.78	17.26	16.14	17.25	16.67

. (Brut) Credite îndoielnice și neperformante (credite și debt securities) per total credite și avansuri și total instrumente ale datoriei

2. (Net) Credite îndoielnice și neperformante (credite și debt securities) per total fonduri proprii

3. Provizioane per Total (brut) credite îndoielnice și neperformante

4. Rata de solvabilitate

5. Rata capitalului de rang 1

6. Capital tampon (%), rata de solvabilitate -8%

7. Numerar și active de tranzacționare per total active

8. Numerar, active de tranzacționare și active de vânzare per total active 9. Rata dependenței de piața interbancară, depozite de la instituții de credit per total active

10. Funding base stability ratio, depozite altele decât cele de la instituții de credit/total depozite

11. Efectul de levier (capital/total active)

Sursa: BCE date bancare consolidate.

# When Should Romania Join the European Banking Union, Sooner or Later?

#### **EXECUTIVE SUMMARY**

#### The Rationale for the European Banking Union

The emergence of the financial crisis back in 2007 exposed a series of deficiencies in the way the European mechanisms functioned, highlighting the incomplete policy design of the EMU (Economic and Monetary Union). Thus, it became evident that financial integration, financial stability and national responsibility for crisis prevention and management could not be all simultaneously fulfilled.

Several factors have been responsible for the deepening of the financial crisis effects in the EU (European Union)/EZ (Euro Zone), namely the one-size fits all monetary policy and the absence of a fiscal institution counterpart to the ECB (European Central Bank), the EZ governance focused on rules-based prevention with limited scope for crisis management, lax banking supervisory standards, the absence of cross-border risk sharing mechanisms and bank nationalism, and the lack of political leadership. Given these flaws, the aims of the EBU (European Banking Union) would largely be twofold:

- ➤ To strengthen the single market for financial services by ensuring a level playing field for banks. This would require a competitively neutral financial supervision across the EZ (and ideally across the EU).
- To break the vicious circle between sovereigns and banks, thus reversing the process of financial fragmentation.

#### The European Banking Union - Foundations and Shortcomings

The architecture of the EBU rests on three founding pillars, namely: a single supervisory mechanism (SSM), a single resolution mechanism (SRM), and a single deposit guarantee scheme (SDGS).

At the governance level the EBU will be nested into the so-called "Single Rule Book" (SRB), the set of rules governing the financial sector across all EU Member States (MS). There are three pillars of the SRB which are most relevant for the EBU, namely:

- The Capital Requirements Directive IV (CRD IV) and Capital Requirements Regulation (CRR) which implement the Basel III agreement in EU legislation and set a series of provisions for banks' capital and liquidity requirements, leverage capital buffers, bankers' bonuses and governance and transparency issues.
- The deposit guarantee scheme directive (DGSD) aims at improving the existing EU rules on protection of depositors in cases of bank failure; it applies to all EU banks.

<sup>&</sup>lt;sup>1</sup> The original formulation is Single Deposit Guarantee Scheme however, since resources are not pooled yet the System Deposit Guarantee Scheme would be deemed more appropriate.

➤ The bank recovery and resolution directive (BRRD) sets the framework for national authorities to deal with failing national and cross-border banks through the establishment of bail-in rules and resolution funds.

The Single Supervisory Mechanism aims to strengthen supervision of Europe's banking sector through an integrated architecture which links the ECB with national supervisory authorities. EZ member countries are required to join the SSM while any non-euro EU country could choose to join the SSM voluntarily. The ECB will have direct supervisory powers<sup>2</sup> over the most significant banks in SSM-member countries (i.e. those deemed to be systemic, around 130 banks, representing almost 85% of its total banking assets) that meet any of the following criteria: have assets over EUR 30 bn or represent more than 20% of national GDP, unless total assets of that bank amount to less than EUR 5 bn;

*The Single Resolution Mechanism* consists of two main elements: an EU-level resolution authority, the Single Resolution Board (SRB) and a common (single) resolution fund (SRF), financed by the banking sector. Its objective is to ensure an orderly resolution of failing banks with minimal costs to taxpayers and the real economy. In case of a bank failure, bail-in creditors are required to cover 8% of the total liabilities before the 5% of the total liabilities can be accessed via SRF, amounting to EUR 55 Bn by 2024, and before resorting to external funding.

*The System Deposit Guarantee Scheme*. The progress regarding the setting up of the third pillar of the EBU has been virtually none so far. Negotiations, mainly because of German-led opposition to the centralization of control and the mutualisation of financial responsibility for bank failure, have failed to make any headway.

## Shortcomings and Flaws in the Design of the EBU

- ➤ Of the three pillars that form the EBU only the first one, the SSM, is complete. The second pillar, the SRM, is only partially complete as the issue of "legacy assets" weighs on the effective functioning of its components. And the third pillar has not even been attempted yet.
- There is a conflict of interest in combining supervision and monetary policy under the same umbrella. The set-up of SSM within the ECB fails to ensure a sufficient degree of independence of supervision and monetary policy.
- The absence of a European fiscal central authority acting as a counterpart to the ECB. In the event of a serious negative shock to the European banking system, a sizable and credible fiscal backstop needs to be in place.

<sup>&</sup>lt;sup>2</sup> The ECB will: authorise and withdraw bank licenses; check and impose capital and liquidity requirements; authorise banks models and impose early intervention measures; restrict or limit business of institutions or to request the divestment of activities; conduct stress tests. The powers left to the national supervisors will be those concerning consumer protection and anti-money laundering issues and the supervision of smaller domestic banks together with branches of non-EU banks.

- The role the ESM (European Stability Mechanism) could play during the transition period of the SRF establishment is, in practice, limited given the reluctance of creditor countries to provide funds for rescuing banks in other countries and the reluctance of countries with banking sector problems to subject themselves to the discipline of the ESM conditionality.
- ➤ Introducing European-wide deposit insurance in the current situation would require the mutualisation of legacy assets a situation which is unlikely to be accepted.
- ➤ The ECB, together with the national competent authorities, will exercise supervision on the basis of the SRB. However, since the CRD IV, as the main component of the Rule Book, contains substantial elements which are left at national discretion, the ECB will de facto have to supervise banks on the basis of 28 rulebooks.
- ➤ The current definition of "systemic importance" of a bank could be misplaced. As a whole, smaller and locally active banks could still become systemic if they are exposed to macroeconomic risks.
- ➤ By dividing the banking system along predefined criteria on systemic importance there emerges an incentive for regulatory arbitrage. This has potentially adverse effects for financial stability and for the efficient allocation of capital.

In particular, a solution to the problem of legacy assets still needs to be found. Legacy assets should not become a common liability and will need to be resolved at the national level as national supervisors were in charge while these assets had been accumulated on the balance sheet of the national banking system. The EBU cannot, by itself, address the debt overhang that is weighing on the banking system in Europe.

#### The Banking Systems in Romania, CEE<sup>3</sup> and EZ

In order to put into balance the pros and cons for joining the EBU, a comparative analysis of candidate countries and EZ banking systems is made. The time span covered is 2008-2013 and the adjustments of the banking system in 2013 could be viewed as reactions to the EBU construction – loosely named the EBU effect<sup>4</sup>.

The Size of the Banking System. In terms of assets-per-GDP ratio the Romanian banking system was the smallest in the EU in both 2008 and 2013. This remained at 56%, virtually unchanged, around 1/5th of the median size in EZ. Empirical evidence shows that the European banking system is oversized. Total banking assets in the EU were 303% of GDP in 2013. By contrast Japanese banks' assets were 192% of GDP and US banks' assets add up to 145% of GDP. Given the importance of bank finance in supporting economic growth in the EU, an interesting question relates to the level of credit-to-GDP ratio that would support growth. Some studies have found that the

<sup>&</sup>lt;sup>3</sup> CEE includes Bulgaria, the Czech Republic, Hungary, Romania and Poland.

<sup>&</sup>lt;sup>4</sup> Loosely because trend consolidation is also important, i.e. what has happened over 2014 and what will happen in the near future. Disentangling completely the EBU effect from other political and economic effects could be rather difficult.

higher the credit-to-GDP ratio, the larger bank risk lending becomes. Judging upon these facts Romanian banking system is the least risky and has the highest growth potential with positive effects on real growth in EU.

The Level of Concentration and Banks' Foreign Ownership. Romanian banking system has a medium level of concentration. The share of the first largest 5 banks in total assets was 54.4% almost unchanged since 2008, whereas the concentration of the banking systems in the EU MS ranged between 31% in Germany and 94% in Greece. The CEE stands out in EU by the magnitude of the share of assets of foreign-controlled subsidiaries and branches. This ratio stood at 73% compared to 14% in EZ in 2013 down from 78% and 15% respectively in 2008. Foreign banks dominate the Romanian banking system, with 80% of total assets belonging to foreign subsidiaries and 10% to foreign branches<sup>5</sup>, similar with the situation in the Czech Republic. In Hungary and Poland the share of assets of foreign banks was smaller, around 60%. The dependency on foreign banks could become a threat for host countries during a crisis as home countries banks' backstops could be scaled down.

Cross-Border Banking Linkages. Cross-border banks have played a central role in the dynamics of the recent global crisis. In CEE the cross border ownership of banks generated cross border lending. In Romania and Hungary between 2009 and 2011 the "Vienna Initiative" program was in force aiming to maintain foreign banks' exposure for the time of the IMF-EU loan programs. In Romania, as in Hungary and Bulgaria, international claims (cross-border claims and local claims in non-local currency) represented the largest part of the foreign claims and went through the largest decline.

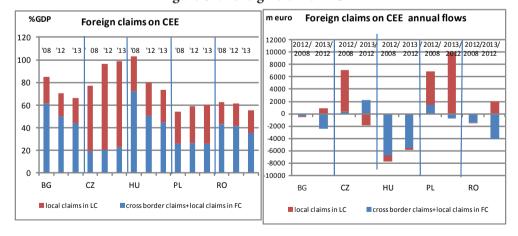


Figure S1: Foreign claims in CEE

<sup>&</sup>lt;sup>5</sup> Foreign banks are defined as subsidiaries and branches that are controlled by either an EU or a non-EU parent that is "foreign" from the reporting country's point of view.

The banks with the largest exposure to CEE originate from 8 EZ countries (G8)<sup>6</sup>. And, host countries willing to boost financial intermediation have to stimulate crossborder banking flows by stronger bank regulation and supervision and a better macroeconomic framework.

The Quality of the Banking Systems. The deterioration of assets quality was widespread, but its pace was very abrupt in Romania where the nonperforming loans ratio became more than three times larger compared to the level observed in EZ banks in 2013. But the Romanian financial soundness and stability indicators such as capital adequacy or liquidity indicators paint a better picture compared to its counterparts in most EU countries (Table S3). From this perspective Romanian banks have more room to absorb risks than the domestic banks from EZ and banking systems from G8 countries. Also, the share of liquid assets (cash, trading and available for sales assets) while declining among the EZ banks, it increased among Romanian banks between 2008 and 2013. During the crisis Romanian banks remained more reliant on inter-bank market than domestic banks from EZ and less reliant than the foreign banks from the EZ. This suggests that the fragmentation of money market was more intense for banks domiciled in the EZ and the lack of confidence more widespread among them.

#### Factors Influencing Romania's Position vis-à-vis the European Banking Union

Assessing the benefits or the drawbacks of accessing EBU before the membership in the EZ has to take into account whether the objectives aimed by the EBU construction can significantly support Romania's objectives of economic growth, financial stability and intermediation for growth as well as efficient implementation of monetary and fiscal policies.

The fear that the non-EBU membership would stimulate de-leveraging of banks with foreign capital operating in Romania is, very likely, overdone. The cross-border exposure is rather led by the expectation on banks profitability and capital returns. At the moment banks profitability in Romania is rather dismal. But, prior to the crisis, this was among the highest in CEE, not to mention EZ. The way to look at this indicator is across a financial cycle. Banks de-leveraging in Romania is very likely to have already come close to an end as, over the last years the process was in fact self-correcting. External funding from foreign banks has already fallen by a third compared to its pre-crisis level and domestic deposits now finance all domestic loans, reducing the need for banks capital transfers from abroad.

Another argument often mentioned in favour of joining the EBU is the large presence in Romania of banks headquartered in the EZ. But, this argument can work both ways: since banks headquartered in the EZ would need to comply with EBU requirements and since all EU members will join the EZ eventually, and thus EBU, sooner or later, the banks' incentives are to strengthen balance sheets across all of

 $<sup>^6</sup>$  In this context the G8 countries are: Germany, Greece, Spain, France, Italy, The Netherlands, Belgium and Austria.

their EU operations. This strategy will prevent them from losing market share and competitive advantage at a time when Romania would join EBU.

There are a string of other arguments in favour of joining the EBU which are deemed to bring a number of benefits on several fronts. On the financial stability front the ECB, as a single supervisor, would – allegedly – be more credible than any national supervisor. The prevention and solution of bank failure mechanisms would probably be deemed to be more consistent and effective. But the NBR proved to be an efficient supervisor in the past. Romania is among the seven EU MS where no public money was needed for rescuing banks post 2008. ECB has yet to prove its efficiency as supervisor and build a reputation in the years to come. Moreover, ECB has to persuade the market that the independence of the monetary policy will not be impaired by its single supervisory role.

Another important observation (Table S1) is that when it comes to financial supervision, non-EZ member countries benefit from the same technical standards as other EZ countries. Through its prevention and resolution tools the BRRD strengthens national resolution systems in all EU member states.

Another argument in favour of EBU membership is the potential high costs of contagion effects. But this tends to minimise the role the NBR could play as a lender of last resort. The NBR's ability to act as a lender of last resort remains comfortably high. At the end of July 2014 foreign reserves covered 2.6 times the monetary base, fulfilling a much stronger condition than that required by currency boards. It is true that the income of the general consolidated budget as percent in GDP is the lowest among the EU MS (Member States) and Romania would have a relative limited fiscal backstop capacity in case of bank's failure. One answer to this could be to enlarge the bail-in capacity of each bank by raising the quantity and the quality of capital and assure that the resolution fund is operational.

If Romania joined the EBU, the access to euro liquidity would need to be provided by the NBR due to the fact that non-euro area members will not have access to the ECB's financing. This is a serious drawback as, in the event of a crisis, the speed of the response and the ability to enforce credible measures are crucial. There are sensible reservations about how EBU would actually work in MS that have their own currencies and interest rate policies, and whose domestic banks do not have access to Eurosystem liquidity provision.

Moreover, joining the EBU could seriously impair the effectiveness of NBR's monetary policy to respond timely to asymmetric shocks. The ECB's centralised powers and its influence over the SSM when it comes to macro prudential regulation would hamper the NBR's response to sector specific shocks. Given the fact that asymmetries are inherently local, rather than global monetary policy should be supplemented by a country-specific macro prudential policy, with the latter remaining under the control of national authorities. Housing and labour market features, for instance, are markedly different across EU countries and therefore different measures are needed to address and prevent the disequilibria in these.

Up to a point, the fiscal and banking costs are likely to be similar whether Romania joins the EBU or not. This happens because after the bail-in, it is very likely that, in the event of a systemic crisis, the national governments will ultimately be responsible for bailing out their banks anyway. The difference will be made by the recourse to the SRF/ESF funds (if part of the EBU) or the Romanian Bank Resolution Fund (if not part of the EBU). The Romanian banking system is superior in terms of capital adequacy, non-performing provisioning and liquidity than many EZ banking systems. Therefore the risk for Romania to be a net contributor of public funds to the rescue of foreign banks, in the case of EBU membership, is high. Moreover, while it is true that the Romanian Bank Resolution Fund does not have the economic scale benefits of pooling it is still on course to be higher capitalised, in relative terms, than SRE

#### **Concluding Remarks**

Although on paper the architecture of the EBU is largely in place now, two major questions remain. First, how would the EBU function in practice? Of the three pillars that form the fully fledged banking union only the first one, the SSM is complete. The second pillar, the SRM, is only partially complete as the issue of "legacy assets" weighs on its effective functioning. And the third pillar, SDGS has not even been attempted yet.

The second major question is how the European financial system would look like in the near future? Over the last two decades European banks have become bigger, more concentrated and more leveraged compared to their counterparties in both the US and Japan, and during the crisis became a serious risk threat to the stability of the European Financial System itself. Since the beginning of the crisis the traditional banking sector in the euro area has slowed down whereas growth has continued in the non-banking financial sector, especially in shadow banking, which would require additional supervision – and possibly regulation – in the near future in order to prevent future systemic risks emerging.

In today's financially integrated world, much depends on the structure of the domestic banking system and its cross-border inter-linkages with its EZ counterparts. Oversized and thereby risky banks populate the EZ with dismal positive effect on economic growth. The conduct of supervision by ECB in EBU might have as objective the downsizing of significant banks. This objective clashes with Romania's interest where the size of the banking system is just one fifth of the EZ median sized banking system.

For Romania, or any non-EZ member for that matter, the decision to join the EBU would depend, more broadly, on its benefits vs. costs analysis and its decision to join the EZ in the near future. However, the NBR has already declared joining the EBU a strategic decision and it intends to complete the whole application process by the end of 2016. The NBR's stance of joining the EBU sooner rather than later contrasts other central banks' decisions namely those of Poland, the Czech Republic and Hungary, all

of them opting to stay out of the EBU for the time being (Table S2), in spite of the fact that there are many similarities among banking structures in all these economies.

To conclude, given the existing designing flaws in the EBU structure, the current state of Romanian banking sector, future perspectives of economic development in Romania and the benefits for monetary policy, a "wait and see" approach would be preferable to a premature participation in the EBU. It is a sensible option to wait and see how the EBU works in practice first, before committing to its membership, a strategy already adopted by most non-EZ EU members.

**Table S1: The Existing Status of EBU Pillars** 

		Applicability	Status	Remarks
Bank Supervision	Rules on bank capital requirements, CR Directive & Regulation	EU	Effective	
	SSM Regulation	EZ	Adopted	Optional for Non-EZ members
	Revisions of EBA Regulation	EU	Effective	
Bank	BRRD	EU	Agreed	
Resolution	SRM Regulation	EZ	Agreed	Optional for Non-EZ members
	European public backstop for SRF	EZ	Not agreed	Optional for Non-EZ members
Deposit Insurance	New rules on deposit guarantees schemes, DGS Directive	EU	Agreed	
	Single DGS		Not agreed	
Other	Rules on state aid for the financial sector	EU	Effective	
	Direct recapitalisation of banks from ESM	EZ	Not agreed	

Table S2: Current Stance of Non-EZ Members vis-à-vis the EBU

	BG	CZ	DK	HR		PL	RO	SE	UK
Current stance vis-à-vis the EBU	bably	Wait and	bably	Wait and	Wait and	Wait and	Probably	Opt out	Opt out
	yes	see	yes	see	see	see	yes		

Table S3. Main Indicators of the Banking System Quality in Romania and in Its Principal Country Lenders in 2013

					,											
	Romania		Austria		France		Greece		Italy	_	The Netherlands Euro Area	ands	Euro Area		EU	
	Domestic all	all	Domestic	all		all		all	stic	all	stic	all		Foreign		Foreign
	banks		banks		banks		banks		banks	_	banks	_	banks		banks	banks
	Asset quality indicator	indicators														
-	14.5	17.87	4.08	4.23	4.72	4.64	24.58							4.3	4.89	3.64
7	32.21	17.07	13.4	14.46	33.94	33.8	135.71	134.66	92.28	28.68	24.99	24.01	40.38	25.99	31.41	18.2
3	75.05	86.52	74.28	71.96	48.79	48.72	49.26							52.68	48.06	57.29
	Capital adequacy indic	uacy indicat	ors													
4	20.05	18.79	15.84	15.39	15.03	15.01		13.57						18.74	15.95	17.46
ıc	18.02	15.77	11.85	11.89	13.15	13.16	13.12	13.18	10.52	10.55	12.48	12.86	12.99	14.06	13.11	14.2
9	12.05	10.79	7.84	7.39	7.03	7.01		5.57						9.58	7.95	11.79
	Liquidity indicators, 9	licators, % o	f total assets													
^	21.39	20.53	8.95	7.73	29.74	30.45		2.67						17.41	22.99	38.27
8	37.72	33.51	16.5	16.58	35.95	36.63		96.8						25.8	19.39	14.56
6	11.35	21.35	21.18	20.47	8.44	8.54	7.58	9.19	11.56	13.54	3.79	6.83	12.08	30.44	9.83	19.38
10	80.98	75.89	56.95	59.8	61.95	61.79		84.19						52.74	63.14	49.7
11	9.47	99.6	13.35	13.44	17.81	18.07		14.02						16.14	17.25	16.67

1. (Gross) Total doubtful and non-performing loans (loans and debt securities) per total loans and advances and total debt instruments 2. (Net) Total doubtful and non-performing loans (loans and debt securities) per total own funds for solvency purposes 3. Total loss provisions per Total (gross) doubtful and non-performing loans

4. Overall solvency ratio

5. Tier 1 ratio

6. Capital buffer (%), solvency ratio -8%

7. Cash and trading assets ratio

8. Cash, trading and available-for-sale assets ratio

9. Interbank market dependence ratio, deposits from credit institutions/assets

10. Funding base stability ratio (denominator other than total assets), deposits from other than CI/total deposits

11. Leverage ratio (total equity/total assets)

Source: ECB Consolidated banking data.

## 1. Introduction: The Rationale for the European Banking Union

The emergence of the financial crisis back in 2007 exposed a series of deficiencies in the way the European mechanisms functioned, highlighting the incomplete policy design of the EMU. The financial crisis in the EZ revealed the fact that a sustainable currency union would need more coordination, given the high degree of economic, financial and fiscal interconnections among its member countries. In this set-up the establishment of new structures of governance became indisputable. Another important aspect underscored by the events unfolding during the crisis emphasised the so-called "impossible trinity" or financial trilemma. Thus, it became evident that financial integration (i.e. conditions for a good functioning of the markets for banking services), financial stability and national responsibility for crisis prevention and management (supervision) could not be all simultaneously fulfilled.

Banking crises take a heavy toll on GDP growth and unemployment. Therefore, taking steps towards a more stable and resilient banking and financial system in Europe could minimise such costs in the future. The EU's impact assessment (EU 2012) summarises the state support to banks between October 2008 and October 2011: "The Commission approved EUR 4.5 trillion, equivalent to 37% of EU's GDP, in state aid measures to financial institutions, of which EUR 1.6 trillion, the equivalent to 13% of EU GDP, was used in 2008-2010. Guarantees and liquidity measures account for EUR 1.2 trillion, or roughly 9.8% of EU GDP. The remainder went towards recapitalisation and impaired assets measures amounting to EUR 409 billion (3.3% of EU GDP)<sup>1</sup>."

The IMF data also show that at end-2011 the cumulated output loss in the EZ was 23% and fiscal cost represented 3.9% of GDP. These are large numbers by historical standards. Recent developments have underlined several weaknesses in the governance structure of the EU, with quite a few of them amplifying the effects of the crisis. Taking a broader time span and enlarging the geographical context, according to an IMF database<sup>2</sup>, the average (cumulated) output loss relative to trend of all banking crises in developed economies, during the period 1970-2011, was 33%. Direct fiscal costs were also significant, amounting to 3.8% of GDP. Social costs of the banking crises were also large impacted by high unemployment rates and falls in household wealth.

Several factors have been responsible for the deepening of the financial crisis effects in the EU/EZ, among these are:

<sup>&</sup>lt;sup>1</sup> For more details on these see also section 4.8.

<sup>&</sup>lt;sup>2</sup> Laeven and Valencia (2012).

One-size fits all monetary policy and the absence of a fiscal institution counterpart to the ECB

Since its establishment in 1999 the ECB monetary policy had a hard task in responding appropriately to economic conditions prevailing across all EZ countries. Divergences among peripheral countries, such as Greece, Ireland, Portugal and Spain and the so-called core countries, Austria, Belgium, France, Germany and The Netherlands, emerged not only on inflation rates and unemployment gaps, but also on competitiveness, trade balances and private debt levels. The ECB's interest rate, was suited for the core-countries, but was inappropriate for fast growing economies at the periphery, fuelling the build-up of sizable macroeconomic imbalances, both internal and external. Among these disequilibria, the high levels of bank debt was of particular concern across EZ countries (debt financing was favoured to equity financing) as the risk of this debt was underpriced. Up until the crisis borrowing costs for all EZ governments converged, virtually placing on par their default risk. After the emergence of the crisis, a reassessment of the individual country risk led to spiralling risk premiums on the peripheral countries sovereign debt, raising their borrowing costs and putting a large strain on banks' financing in those countries<sup>3</sup>. As a result, the whole European banking market became increasingly segmented along national boundaries.

One indicator of the intensity of the European debt crisis is TARGET2 balances<sup>4</sup>. These balances reflect the capital outflows from vulnerable EZ countries, triggered by the loss of confidence, to banks in countries such as The Netherlands and Germany, whose creditworthiness is perceived to be higher. As the graph below shows, the imbalances were higher around mid-2012, but the trend has reversed since then, immediately after Mario Draghi, the ECB President (speech at the Global Investment Conference, London, June 26, 2012), said in July 2012 that "within our mandate, the ECB is ready to do whatever it takes to preserve the euro".

The absence of a centralised fiscal control renders the EMU an incomplete system (von Hagen and Eichengreen 1996 among others). Given this, under the existing treaties, the ECB's function as a lender of last resort was seriously impeded. Thus, the ECB's policy options, as a response to the crisis, were constrained and subject to substantial delays, in contrast to its other counterparts, the Federal Reserve or the Bank of England.

<sup>&</sup>lt;sup>3</sup> It may be that the high country risk in the peripheral countries, measured by CDS spreads, was in reality higher than the level implied by fundamentals as the market priced in either excessive pessimism about these countries or expectations of further deterioration in fundamentals (see Aizenman et all 2011).

<sup>&</sup>lt;sup>4</sup> TARGET2 is the payment system enabling direct transfers between commercial banks in the EZ. These transfers can arise from many different sources, including trade transactions and interbank loans. TARGET2 payments are channelled via accounts that banks hold at their National Central Bank.

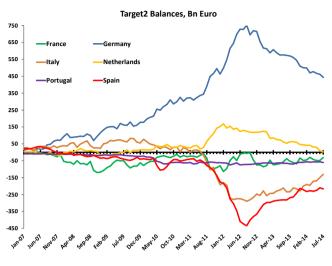


Figure 1.1 TARGET2 Balances

Source: Euro Crisis Monitor

A Eurozone governance focused on rule-based prevention with limited scope for crisis management

The architecture of the EMU did not entrust the ECB with the *lender of last resort* function<sup>5</sup>, historically speaking the "raison detre" of central banks (Goodhart 1988). In September 2012, forced by economic circumstances, the ECB committed itself to a program of unlimited (but conditional) sovereign bond purchases in the secondary markets<sup>6</sup>, effectively becoming a lender of last resort in these. However, this policy instrument, extremely useful in a short-term crisis situation, was not effectively operational prior to 2012, thus preventing ECB in providing a more powerful and timely response. On the fiscal side, the Stability and Growth Pact acts more like a prevention mechanism. It was introduced in order to set specific constraints to individual MS in order to ensure budgetary discipline, thus enforcing the fiscal criteria of the Maastricht Treaty. Even so, the EU institutional framework left wide discretion to national policy.

# Lax banking supervisory standards

The rapid pace of financial innovation led to the development of complex structures where risk was difficult to be assessed. Moreover, the systemic ramifications of these

<sup>&</sup>lt;sup>5</sup> There has been a debate on whether the ECB's lender of last resort function should be limited to banks (Issing 2013) or applied to government bonds as well (De Grawe 2011).

<sup>&</sup>lt;sup>6</sup> In the context of its "Outright Monetary Transactions" programme.

financial arrangements were even less understood. Weak supervision and poor due diligence practices have facilitated the accumulation of risks on banks' balance sheets. These were amplified further by the existing shortcomings in banks' requirements such as insufficient equity or procyclicality of capital.

#### The absence of cross-border risk sharing mechanisms and bank nationalism

Prior to the crisis, such mechanisms were largely absent in Europe (IMF 2013). Given the large costs of a potential bank bail out, it was obvious that banks would not be able to be fully insured at the national level as domestic deposit insurance systems were clearly insufficient to deal with the systemic nature of the crisis. Moreover, in the face of an increasingly competitive environment, national authorities tended to favour increased protection of their domestic banks<sup>7</sup> even though this behaviour brought about even more risk taking. This form of banking nationalism supported an inappropriate business model, which led to increased leverage and overcapacity in the European banking sector<sup>8</sup>. As a consequence banks and sovereign risks have become intertwined and, with many governments lacking the fiscal capacity to support their distressed banks, the risks tended to be shifted to the European level through the channel of monetary rather than fiscal policy. A characteristic of the current EZ crisis is the fact that, since 2008, there has been a strong correlation between banking and sovereign solvency crises in vulnerable countries.

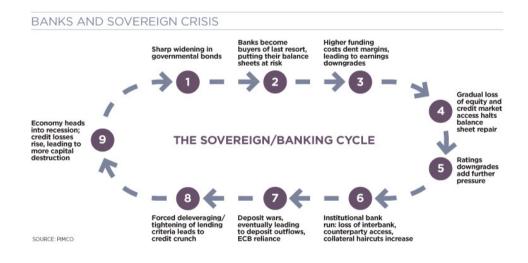


Figure 1.2 The Vicious Circle between Banks and Sovereigns

<sup>&</sup>lt;sup>7</sup>There were question marks over the adequacy of the banking stress tests between 2009 and 2011. Banks like Dexia for instance, were given a clean bill of health, only to collapse a few months later.

<sup>8</sup> ESRB (2014).

Over time, the correlation has been very high in Spain, Italy, Greece and Ireland but also in France to some extent. Banks have been exposed to sovereigns because of the strong home bias in the composition of their sovereign bond portfolios and the exposure they have to the domestic economy. Moreover, the implicit government guarantee for bailing out banks is being reduced when the sovereign's solvency is put into question. In turn sovereigns are exposed to banks because of this very guarantee and the indirect fiscal cost of a financial crisis (see diagram below). This bi-directional correlation generates vicious circles that monetary policy alone cannot resolve as the ECB cannot be mandated to assist individual sovereigns.

#### Lack of political leadership

The EZ crisis has had a political dimension as well. The outcomes of EZ's crisis management were influenced, in part, by economics and politics pulling in different directions. Political establishment failed to address the underlying political tradeoffs from the beginning. The indecisiveness and the lack of coordinated political leadership was due to the diverse array of EU institutional actors, the ECB, the IMF and the leading EZ states, in particular Germany and France. Thus, in spite of several landmark institutional innovations, such as the ESM or the Fiscal Pact, the market perception was that the EU lacked to some extent the common political will to do what is necessary.

Thus, given the above mentioned flaws, the aims of the EBU would largely be twofold:

- First, to strengthen the single market for financial services by ensuring a level playing field for banks. This would require a competitively neutral financial supervision across the EZ (and ideally across the EU). The discrepancy between the national objectives of supervision and the European dimension of the financial system, which largely explains the failure to address the banking problems issues during the crisis, could thus be addressed.
- Second, the establishment of the EBU is intended to break the vicious circle between sovereigns and banks<sup>9</sup>. The increased market pressure on several interlinked euroarea banks and sovereigns during the crisis, which eventually led to growing financial fragmentation, was, at times, a serious threat to the existence of the EZ itself.

Although the architecture of the EBU is largely in place now, one major question that often arises is what the European financial system would look like in the near future (Liikanen 2014). The European banking system will need to change and the speed of this change, as well as the time horizon over which it will happen, are going to be of paramount importance.

<sup>&</sup>lt;sup>9</sup> The vicious circle has been highlighted by different authors: Veron, 2011; Darvas, 2011; Angeloni and Wolff, 2012 among others.

Over the last two decades the European banking systems have become a serious risk threat to the stability of the European Financial System. A seminal study (ESRB 2014) highlights the reality of the current situation. European banks have become bigger, more concentrated and more leveraged compared to their counterparties in both the US and Japan<sup>10</sup>. In terms of *size*, total assets/GDP ratio was greater than three for European banks, with Japan and the US banking sectors being much smaller than their European counterpart (see Chapter 3).

The European banking system has become more *concentrated* over the last 15 years. In all major EU countries – minus Italy – the three largest domestic banks increased their share in the national banking system total assets. The *leverage* of the EU banks, measured as the median equity to assets ratio, also increased when compared to their US counterparts. The mean leverage ratio of globally systemically important banks in the EU stood at 3.9% in the second quarter of 2013, compared with 4.5% for US (ESRB 2014).

Besides the excessive levels of concentration, leverage and size, the European banking system did not increase their market-based funding in proportion. The EZ's share of bank loans in total liabilities remains high, at around 70%, a figure which is less than one sixth in the US. Thus, European firms, the SMEs in particular<sup>11</sup>, are much more dependent on bank finance compared to the US, where more capital is raised directly in debt markets, through the issuance of bonds and other securities, rather than via conventional bank loans. As a consequence banks' ability to provide credit to both private and public sectors influences decisively the economy's overall financial strength. In addition, fragmentation and divergence of lending rates in the EZ compound further the problem.

The Europe's banking system is large both relative to the size of the economy, whether measured by income or household wealth<sup>12</sup>, and relative to other sources of intermediation, such as bond and equity capital markets. Going forward, the implied measures to reduce excess capacity in the banking system will likely pose challenges to growth, given the importance of the European banks in financing the economy.

The article is structured as follows. The next chapter explains the building blocks of the EBU, highlighting its main shortcomings. Chapter 3 looks at the characteristics of the banking systems in Romania, CEE and the EZ and does comparative analyses. Chapter 4 looks at the main factors influencing Romania's stance vis-à-vis EBU. The last chapter provides some concluding remarks.

<sup>&</sup>lt;sup>10</sup> See for instance Eilis (2014), IMF (2013a), Pisani-Ferry et al (2012a) or Pisani-Ferry et al (2012b).

<sup>&</sup>lt;sup>11</sup> SMEs represent 68% of the EU employment and almost 60% of EU's GDP (Giuli 2014).

<sup>&</sup>lt;sup>12</sup> For more detailed information see ESRB (2014).

# 2. The European Banking Union – Foundations and Shortcomings

On April 2014 legislation laying down the institutional framework of the EBU was finalised. This ended an important stage of the process which started in mid-2012 at an EZ summit, where the EU leaders committed to break the vicious circle between banks and sovereigns, centralise banking supervision at the ECB and to use the recently-created ESM, for direct recapitalisation of individual banks. Although important progress has been made, there are still challenges ahead. In its current form, from an operational point of view, the EBU remains imperfect.

This chapter describes the founding blocks of the EBU, highlighting the existing drawbacks. It also looks at the issues pertaining to the non-EZ members. From their point of view the decision to join the EBU is not straightforward by any means. Country-specific domestic considerations should be analysed carefully from the perspective of their interaction with the whole institutional set-up.

## 2.1. The Architecture of the EBU

The EBU rests on three founding pillars, namely:

- ➤ A Single Supervisory Mechanism (SSM)
- A Single Resolution Mechanism (SRM)
- ➤ A System<sup>13</sup> Deposit Guarantee Scheme (SDGS)

At the governance level the EBU will be nested into the so-called "Single Rule Book" (SRB), the set of rules governing the financial sector across all EU Member States. The diagram below shows the pillars of the EBU and their immediate relation to other EU institutions.

<sup>&</sup>lt;sup>13</sup> The original formulation is Single Deposit Guarantee Scheme, but since resources are not pooled yet the System Deposit Guarantee Scheme is deemed to be more appropriate.

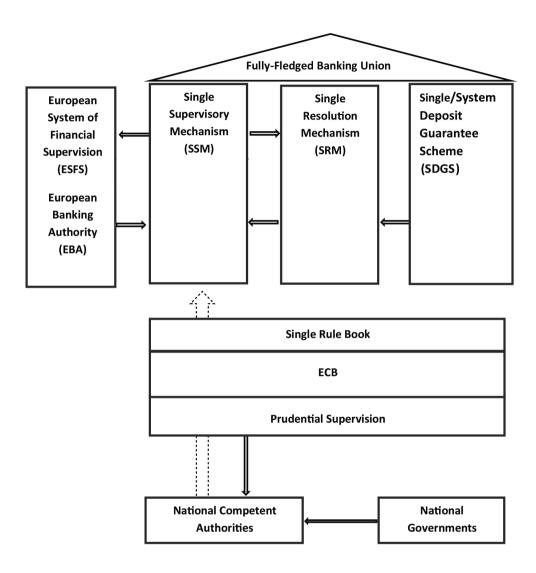


Figure 2.1 The Architecture of the EBU

# 2.2. The Single Rule Book

The SRB<sup>14</sup> comprises of a series of legal acts which all EU financial institutions must comply with. The single rulebook approach was initiated at the recommendation of the EC back in June 2009 and was aimed at eliminating legislative differences

<sup>&</sup>lt;sup>14</sup> Legislation and more details on the SRB are available at: <a href="http://www.consilium.europa.eu/policies/ecofin/banking-union?tab=Single-rulebook&lang=en">http://www.consilium.europa.eu/policies/ecofin/banking-union?tab=Single-rulebook&lang=en</a>.

among MS. Thus, the purpose of the SRB is to ensure the consistent application of the regulatory banking framework across the EU.

There are three pillars of the SRB which are most relevant for the EBU, namely:

- The Capital Requirements Directive IV (CRD IV) and Capital Requirements Regulation (CRR). These implement the Basel III agreement in EU legislation. The rules apply across all EU MS since 1 Jan 2014 and set a series of provisions for banks' capital<sup>15</sup> and liquidity<sup>16</sup> requirements, leverage<sup>17</sup>, capital buffers, bankers' bonuses and governance and transparency issues.
- The deposit guarantee scheme directive (DGSD). Approved by the EP in April 2014, it aims at improving the existing EU rules on protection of depositors in cases of bank failure; it applies to all banks in the EU. Bank deposits are protected up to an amount of €100.000 per bank by the guarantee scheme¹8. The funds of deposit guarantee schemes come from the banking sector¹9, they should amount to 0.8% of covered deposits in each MS by 2025.
- The bank recovery and resolution directive (BRRD). It sets the framework for national authorities to deal with failing national and cross-border banks through the establishment of bail-in rules and resolution funds<sup>20</sup>, financed by the banking sector. All EU banks are required to prepare their own recovery plans (so-called "living wills") and update them each year. In turn, national resolution authorities need to have in place resolution plans for each bank. The EBA sets the technical standards, guidelines and reports on the main areas of recovery and resolution.

The BRRD represents a key building block of regulatory reform and it is a crucial component in the new governance set-up. By setting up minimum and non-distorting standards for banking resolution in the EU, the BRRD cross-references SRM extensively – given that the same standards form the core of the SRM. The BRRD will enter into force on 1 January 2015 and its bail-in procedures will be applicable from 1 January 2016.

<sup>&</sup>lt;sup>15</sup> Banks have to hold 8% of risk-weighted assets in liquid capital, i.e. convertible into cash at any time.

<sup>&</sup>lt;sup>16</sup> Sets the minimum amount of liquid assets that a bank has to hold at 25% of outflows. This so-called 'liquidity coverage ratio' will be applied gradually, starting at 60% in 2015 and reaching 100% in 2018.

<sup>&</sup>lt;sup>17</sup> Banks will be required to disclose their leverage ratio (bank's Tier 1 capital divided by its average total consolidated assets) from 1 January 2015.

<sup>&</sup>lt;sup>18</sup> Depositors will be reimbursed within a maximum of 20 working days as from mid-2015 and the time limit will be gradually reduced to 7 working days by 2024.

<sup>&</sup>lt;sup>19</sup> The amount of the payment is partly determined by bank's risk profile, a bank pays more if it undertakes a higher risk.

<sup>&</sup>lt;sup>20</sup> The resolution fund can be used only after losses representing at least 8% of a bank's total liabilities have been imposed on its shareholders and creditors. The fund's contribution is capped at 5% of a bank's total liabilities, and only under extraordinary circumstances the resolution authority could access funds from other sources.

The overarching theme of the BRRD is that, in future cases of banking sector failures, bail-in should become the rule and bail-outs the exception. The winding-up or recovery of the bank concerned will be based on a pre-defined cascade of liability. Thus, losses will be covered by recourse to the following sequence of bail-in: shareholders, subordinated creditors, senior unsecured bond-holders and certain groups of depositors not covered by DGSD.

In parallel to the access of the BRRD's resolution fund, MS also agreed on an operational framework for using the ESM as a fiscal backstop for banking resolution. In principle, ESM recapitalisation funds cannot be used before the BRRD. The ESM will be entitled to provide up to EUR 60 bn to recapitalise insolvent banks but this amount could be reviewed by the ESM Board of Governors, "if deemed necessary". As a rule, capital will be provided as Common Equity Tier 1 capital, thereby establishing ownership rights for the ESM.

Many of the some new rules governing the European financial sector have already come into force or are expected to be validated either later in 2014 or in 2015 at the latest.

### 2.3. The Single Supervisory Mechanism

The establishment of the SSM<sup>21</sup> was one of the first stepping stones of the EBU. The Council of the EU and the European Parliament reached a political agreement on the SSM package in March 2013. Its aim is to strengthen supervision of Europe's banking sector through an integrated architecture which links the ECB, as the bank licensing authority for the whole EU banking market, with national supervisory authorities. EZ member countries are required to join the SSM while any non-Euro EU country could choose to join the SSM voluntarily. So far among the non-EMUs, the UK and Sweden have already declared that they do not intend to join.

According to the SSM, the ECB will assume supervision of all credit institutions in SSM-member countries. It will have direct supervisory powers over the more significant banks, i.e. those deemed to be systemic, that meet any of the following criteria:

- ► Have assets over EUR 30 bn
- Represent more than 20% of national GDP, unless total assets of that bank amount to less than EUR 5 bn

<sup>&</sup>lt;sup>21</sup> Regulation of the ECB 16 April 2014 establishing the framework for cooperation within the Single Supervisory Mechanism between the European Central Bank and national competent authorities and with national designated authorities (SSM Framework Regulation) (ECB/2014/17) available at: <a href="http://www.ecb.europa.eu/ecb/legal/pdf/en\_reg\_ecb\_2014\_17\_f\_sign.pdf">http://www.ecb.europa.eu/ecb/legal/pdf/en\_reg\_ecb\_2014\_17\_f\_sign.pdf</a>.

**Supervisory Board (SB) ECB Governing Council** Members: Chair: not a member of the ECB **Governing Council** Vice-Chair: a member of the ECB **Executive Board** One representative from each of the supervisory authority of the **Mediation Panel** participating MS Members: > Four representatives of the ECB One member per Decision making: participating state, elected among the > Simple majority, each member members of SB or the having one vote **Governing Council** In case of draw, the Chair has the decisive vote **Decision making:** > Simple majority, each member has one vote **Steering Committee (SC)** > Established by the SB among its Members Maximum 10 members, rotation principle No decision-making powers

Figure 2.2: How the SSM Works

Source: Council of the European Union (2013). Adapted from Buch et all (2013).

Currently, in the EZ there are around 130 banks deemed to be systemic, representing almost 85% of its total banking assets. In addition, the ECB will have direct supervisory powers over all banks for which ESM assistance has been requested or granted. Moreover, the ECB may decide to exercise supervision directly by itself at any time after consulting with national authorities or upon request by a national competent authority.

The ECB will have extensive powers over credit institutions. Thus, it could:

- authorise and withdraw bank licenses
- check and impose capital and liquidity requirements

- > authorise bank models and impose early intervention measures
- restrict or limit business of institutions or to request the divestment of activities

#### conduct stress tests

The powers left to the national supervisors will be those concerning consumer protection and anti-money laundering issues and the supervision of smaller domestic banks together with branches of non-EU banks.

Decision-making within the SSM stay within three bodies, namely the ECB Governing Council, the Supervisory Board and the Mediation Panel. However, in order to avoid changes of the EU treaties, European authorities decided to establish the SSM under the responsibility of the ECB, based on Article 127(6) TFEU. Thus the ECB can assume supervisory functions with its Governing Council remaining in charge.

This has led to the existing governance structure of the SSM. Draft decisions are prepared by the SB, where all members will have equal rights and they will be deemed adopted unless the Governing Council objects to them in writing. When the Governing Council objects a draft decision of the SB, the draft decision is negotiated in the Mediation Panel. Members of the latter are chosen by the participating MS among the members of the SB or the Governing Council with each MS choosing one representative. Decisions are taken by simple majority with each member having one vote.

In its role as banking supervisor, the ECB will be accountable to Council and Parliament. However, EBA will remain responsible for developing the single rule book.

A key transition step, required by the Article 33(4) of the SSM Regulation, mandates the ECB "to carry out a comprehensive assessment, including a balance-sheet assessment, of the credit institutions" which it would start supervising directly in November 2014. This process, referred to as the Asset Quality Review (AQR) is of paramount importance as the ECB has a vested interest in revealing any potential problems before it takes over as supervisor<sup>22</sup>.

Based on the AQR results, a series of stress tests, done in conjunction with EBA and national supervisors, have been performed throughout the EU. The findings from this comprehensive assessment have already been published at the end of October 2014 (see Chapter 4). Their purpose has been to examine how the capital buffers for

<sup>&</sup>lt;sup>22</sup> In case a bank turns out to be short of capital following the AQR exercise, the ECB will be giving its lenders between 6-9 months to fill any capital shortfalls they might have; Banks could do so by selling shares, bonds or assets, cutting dividends or by using their own earnings.

2014–2016 cope under more severe market conditions. Passing the test requires a common equity Tier 1 capital ratio of at least 5.5% in the risk scenario<sup>23</sup> or 8% under the baseline scenario.

#### 2.4. The Single Resolution Mechanism (SRM)

The SRM consists of two main elements, an EU-level resolution authority, the Single Resolution Board (SRBd) and a common (single) resolution fund (SRF), constituting the financial backbone of the SRM, which is financed by the banking sector.

The objective of the SRM is to ensure an orderly resolution of failing banks with minimal costs to taxpayers and the real economy. The SRM forms a necessary counterpart to the SSM, complementing the supervisory process of the ECB with banks' resolution through the application of the BRRD in the EZ.

Centralised resolution decisions are hoped to prevent distortions of competition in future. The SRBd will have the power to require, review and monitor resolution planning by all banks subject to the SSM. It can require changes in organisational structure, in business activities and exposures, or in business models. For legal reasons, the final decision of any bank resolution rests with the EC while execution is fulfilled by national authorities. The absence of a pan-European bank insolvency law requires that resolution is done based on the existing national laws.

From 2016 onwards, the SRF will be funded through levies from all banks domiciled in a country that has joined the SRM. By 2024, the fund's volume is set to amount to EUR 55 billion, approximately 1% of guaranteed deposits. Each MS has to set up financing arrangements funded with annual contributions of banks in proportion of their liabilities and risk profile in order to reach a target that funding level of at least 1% of covered deposits over a 10 year period<sup>24</sup>. Contributions will have to be paid ex ante. As current European law does not provide for a European bank levy, the fund will initially be based on a system comprising so called "national compartments" to which the national bank contributions will be transferred from 2016 onwards.

For these reasons, during the build-up phase, resolutions will initially be funded primarily from contributions raised by each national banking sector. The gradual merger of the national funds is planned to take place over an eight–year time frame during which the "mutualisation" of the use of paid-in funds will start with 40% in

<sup>&</sup>lt;sup>23</sup> The risk scenario assumes a series of risks (i.e. credit, market, country, securitization risks and risks associated with rising financing costs) coupled with recession and rising unemployment.

 $<sup>^{24}</sup>$  1% represents around  $\in$ 80 bn for EU and  $\in$ 65bn for EZ as of March 2012 based on data from European Commission, ECB and Bankscope.

the first year and 20% in the second year, and subsequently increase by equal amounts over the remaining 6 years until the national compartments cease to exist.

A salient characteristic of the SRM is that the bail-in will become the rule and the bail-out the exception. In case of a bank failure, bail-in creditors are required to cover 8% of the total liabilities before the 5% of the total liabilities can be accessed via SRF and before resorting to external funding<sup>25</sup>. In principle, there is no limit to the amount of bailout by the SRF. If the fund is drawn upon, the outflows will be replenished from bank levies raised at national level. In practice however, the smooth functioning of this mechanism might entail hurdles as the speed at which SRF will be replenished is going to be a determining element especially in crisis conditions, when rapid access to liquidity is of the utmost importance.

During the initial build-up phase of the SRF, bridge financing will be available either from national sources, backed by bank levies, or from the ESM, the permanent stability mechanism for euro area MS.

#### The Forthcoming Resolution Framework

The EU MS are required to adopt and publish the necessary laws and regulations to transpose the BRRD by December 2014 and to apply them from 1 January 2015. They have the option of delaying the application of the bail-in measures until 1 January 2016 at the latest. According to BBRD, in the case of the failure of a cross border group, the consolidating supervisor would play a leading role in overseeing the development of a recovery plan and the group resolution authority (the authority in the MS in which the consolidating supervisor under EU banking rule is situated) will be responsible for designing a resolution plan for the whole banking group. The resolution plans could allow for intervention at the level of the parent or holding or of the subsidiaries. Coordination would be ensured through resolution colleges and binding technical standards by EBA. Entities in a group are allowed to enter into agreements to provide help to other parts of the group in case of difficulties, conditioned on the approval of the supervisory of each subsidiary/parent company, which is asked to help, and by the shareholders of each entity.

Thus, no aid should damage the solvency of the providing entity or cause a breach of regulatory capital requirements. After the authorities determine that a bank needs to be resolve, the resolution authorities intervene according to the resolution plan prepared for the bank and sell parts of the bank or transfer business to a temporary structure or separate clean and toxic assets between good and bad banks through partial transfer of assets and liabilities or bail in creditors. After the bank's shareholders and creditors bear losses equivalent to 8% of the bank's liabilities (or alternatively 20%

<sup>&</sup>lt;sup>25</sup> The legislation allows temporary transfers between national compartments to take place.

of risk weighted assets), resolution funds could assume 5% of the losses. Public funds could either be provided to give limited backup support to the resolution fund or in extraordinary circumstances, directly to cover losses after the 5% contribution from the resolution fund and if bail-in has reached eligible deposits. In severe systemic stress public funds can replace the resolution fund immediately. The EU framework for state aid<sup>26</sup> governs the granting of any rescue aid by a state.

Under the SRM Regulation applicable from 2016, in a resolution college, the Single Resolution Board will represent all the national authorities of participating MS. However, the national resolution authorities of the participating MS in the SRM can attend as observers in the resolution colleges. In case of group resolution involving non-participating MS in SRM, the SRBd will be empowered to cooperate with the non-participating MS at key stages of the process and resolution colleges and other procedures provided for under BRRD will apply. The national funds collected by euro zone MS will be transferred into national compartments of the SRF starting with 1 January 2016 or when the Intergovernmental agreement on the transfer and mutualisation of contributions to SRF<sup>27</sup> will enter into force, and will be progressively mutualised until 2024<sup>28</sup>. In the transitional period the resolution costs will be borne by the compartments of the MS where the institution or the group under resolution is established or authorized. When a cross-border credit institution is under resolution the costs shall be distributed between different compartments corresponding to the MS where the parent undertakings and subsidiaries are established in proportion to the relative amount of contribution that each of the entities of the group under resolution has provided to their respective compartments with respect to the aggregate amount of contributions that all entities of the group have provided to their national compartments. When a non-euro MS decides to join BU, it has to transfer all the national funds collected up to date.

# 2.5. The Single System Deposit Guarantee Scheme

The progress in setting-up the third pillar of the EBU has been virtually none. Negotiations, mainly because of German-led opposition to the centralization of control and the mutualisation of financial responsibility for bank failure, have failed to make any headway so far. In practice, there should be a Single Deposit Guarantee Scheme but its set-up looks remote for now. Deposits are covered up to EUR 100,000 and this limit applies to all aggregated accounts of the same depositor at the same bank.

<sup>&</sup>lt;sup>26</sup> The State aid rules established in response to the financial crisis are available at: <a href="http://ec.europa.eu/competition/state\_aid/legislation/temporary.html">http://ec.europa.eu/competition/state\_aid/legislation/temporary.html</a>.

<sup>&</sup>lt;sup>27</sup> Available at <a href="http://europa.eu/rapid/press-release">http://europa.eu/rapid/press-release</a> STATEMENT-14-165 en.htm.

<sup>&</sup>lt;sup>28</sup> In absolute terms and based on 2011 data on banks' balance sheets, the fund will reach about EUR 55 Billion in 2024, meaning that the banking industry annual contribution will be around 12.5% of the target amount or in absolute terms EUR 6.8 Billion.

The deposits by the same depositor in different banks all benefit from separate protection. Deposit Guarantee Schemes will protect all deposits held by individuals and enterprises whatever their size. However, deposits of financial institutions and authorities will not be covered, except for small local authorities that may be covered.

## 2.6. Shortcomings and Flaws in the Design of the EBU

Of the three pillars that form fully fledged banking union only the first one, the SSM is complete. The second pillar, the SRM, is only partially complete as the issue of "legacy assets" weighs on the effective functioning of its components. Even so, the current architecture of the EBU reveals several shortcomings, as documented by several authors (Buch et all 2013, EU Monitor DB 2013, Obstfeld 2013):

- There is a conflict of interest in combining supervision and monetary policy under the same umbrella. The set-up of SSM within the ECB fails to ensure a sufficient degree of independence of supervision and monetary policy A central bank that incorporates supervisory functions may abstain from raising interest rates if this action would cause banks' financial situation to deteriorate. Such antagonistic goals threaten a central bank's independence from politics. If a central bank pursues different goals, there is a risk that monetary policy may be used for supervisory goals and thus for fiscal purposes.
- The absence of a European fiscal central authority acting as a counterpart to the ECB. In the event of a serious negative shock to the European banking system, a sizable and credible fiscal backstop needs to be in place. To cover the likelihood of bigger, systemic events, the SRM should have the ability to draw on the joint fiscal resources of MS. A sustainable solution would require the set-up of a pan-European resolution mechanism along a pan-European funding mechanism in order to break the vicious circle bank-sovereign. For this to happen however, EBU would entail an EU Treaty change in order to allow the creation of a pan-European Resolution Authority. A pan-European Supervisory Authority could also be established thus solving the problems arising from allocation the supervisory task to the ECB.
- ➤ The role the ESM could play during the transition period of the SRF establishment is, in practice, limited given the reluctance of creditor countries to provide funds for rescuing banks in other countries and the reluctance of countries with banking sector problems to subject themselves to the discipline of an ESM programme. The direct recapitalization of banks through the ESM is hard to envisage until legacy assets on banks' balance sheets have been cleaned up. This leaves wide open the question of where the funding will come from, if needed, during the eight-year transition period.

- ➤ Introducing European-wide deposit insurance in the current situation would require the mutualisation of legacy assets a situation which is unlikely to be accepted. With national deposit insurance schemes currently differing across countries in terms of risk premia that are being charged to banks introducing a common deposit guarantees scheme would not be feasible nor desirable.
- ➤ The ECB, together with the national competent authorities, will exercise supervision on the basis of the SRB. However, since the CRD IV, as the main component of the Rule Book, contains substantial elements which are left at national discretion, the ECB will de facto have to supervise banks on the basis of 28 rulebooks.
- The current definition of "systemic importance" of a bank could be misplaced. Although large banks have, undoubtedly, a greater influence to the system as a whole than smaller and locally active banks, the latter could still become systemic if they are exposed to macroeconomic risks (Greenwood et al., 2012). The US S&L crisis in the 1980s and the current crisis among Spanish Cajas are good examples in this respect.
- By dividing the banking system along predefined criteria on systemic importance there emerges an incentive for regulatory arbitrage. This has potentially adverse effects for financial stability and for the efficient allocation of capital. Moreover, the incentives for regulatory arbitrage open the possibility of political interference in the banking sector via influences to national supervisory authorities. It is for this reason that, in principle, all banks should be treated equally.

The perspective for a thorough and timely implementation of further essential elements of the EBU has remained vague. In particular, a solution to the problem of legacy assets still needs to be found. The root cause of the problem is the legacy of high levels of private - and public - sector indebtedness and their unequal distribution across national jurisdictions that requires a near-term solution – especially from the point of view of the ECB's comprehensive health check exercise. The EBU cannot, by itself, address the debt overhang that is weighing the banking system in Europe. Legacy assets should not become a common liability and will need to be resolved at the national level as national supervisors were in charge while these assets had been accumulated on the balance sheet of the national banking system.

# 2.7. The Implications of EBU governance for Non-EZ Member Countries

# Participation in the SSM of non-EMU EU MS

Non-EZ MS cannot be represented in the ECB Governing Council so their incentives to take part in the SSM are somehow limited. For this reason the SSM regulation allows the non-EZ members wishing to participate in the SSM an "optin" alternative. This comes with an option to "opt-out" and not be bounded further

by supervisory decisions of the SSM. The opt-in comes in the form of "close cooperation" between the MS wishing to join the SSM and the ECB. Following the successful completion of an established mechanism (see Chapter 4) the national supervisory authority of the applicant MS will be granted a seat and voting rights in the Supervisory Board.

There are two ways for opting out. Firstly, close cooperation agreement could be terminated on the MS's own initiative three years after the opt-in. Secondly, in the case of disagreement with a draft decision of the Supervisory Board. In the latter case the MS could close the cooperation immediately, and it is not bound by the final supervisory decision based on the concerned draft decision. In both opt-out cases, the MS could enter again into a new close cooperation after three years.

## The costs and financial implications of participation in the EBU

These are detailed in the SRM Regulation and the SRF Intergovernmental Agreement. Contributions paid into the SRF at the time of joining should equal the amount it would have transferred had it joined as an original participant. On exit, the amount withdrawn should permit the funding of a national resolution fund up to the BRRD-required level.

## The SRM membership

A non-EZ MS that opts to join the SSM will automatically also be part of the SRM. This arrangement is necessary because supervision and resolution support each other and both have to be at the same level. The governance issues that pertain to the SSM are not replicated in the SRM context because the SRBd is an EU agency established under TFEU, Article 114 in which all participating MS are on an equal footing.

#### Access to ESM

Non-euro members' banks do not have access to the ESM. Although the SRF Intergovernmental Agreement envisages the development of a common backstop during the transitional period, prior to the backstop being in place, there will be a gap so far as non-euro members are concerned. Therefore the need for public sector support, on a temporary or "bridge" basis cannot be ruled out.

# 3. The Banking Systems in Romania, CEE and the euro zone

The EBU will form another segregation among EU MS, rather different compared to the previous one created by the usage of euro, as the EBU members could be either EZ MS or non-EZ EU MS. In order to put into balance the pros and cons arguments for joining the EBU we propose a comparative analysis of candidate banking systems and EZ banking system, the core of EBU. Due to the fact that Romanian banking system is dominated by banks headquartered in the euro area - as it is the case of neighbouring non-Euro EU MS from Central and Eastern Europe<sup>29</sup> (CEE) - at first sight a joint EBU membership seems to benefit all whereas an opt-out decision in one of these countries might affect the financial stability in the others. To argument this view we extend the analyses to the banking systems from CEE. The time span covered is 2008-2013, with special attention to what happened in 2013.

The adjustments of the banking system in 2013 could be viewed as reactions to the EBU construction - which we call the EBU effect<sup>30</sup> – given the fact that the vision of the EBU was laid down in June 2012 and the roadmap for its completion was agreed in December 2012<sup>31</sup>. Judging upon these reaction movements, within the banking systems inside and outside the euro area, one can have a sense on the future fulfilment of the objectives for which the EBU was set up, i.e. to place the banking system on a more sound footing, curtail the increasing risk of fragmentation of EU banking markets - which undermines the single market for financial services - impair the effective transmission of the monetary policy to the real economy throughout the euro zone and to break the link between sovereign and bank debt.

# 3.1. The Size of the Banking Systems

In terms of assets-per-GDP the Romanian banking system was the smallest in the EU in both 2008 and 2013 (Fig. 3.1) with an almost unchanged ratio of 56%, around one fifth of the median size in EZ. The size of the banking system was small compared to the other CEE countries as well; the asset-to-GDP ratio was 88% in Poland, 106% in Hungary, 110% in Bulgaria and 120% in the Czech Republic in 2013.

<sup>&</sup>lt;sup>29</sup> In our notation throughout the paper, CEE includes Romania, Bulgaria, the Czech Republic, Hungary and Poland.

<sup>&</sup>lt;sup>30</sup> This should be interpreted more loosely as the trend consolidation is also extremely important, i.e. what has happened over 2014 and what will happen in the near future. Disentangling completely the EBU effect from other political and economic effects could be rather difficult.

<sup>&</sup>lt;sup>31</sup> The vision for the EBU was laid down in "Towards a genuine economic and Monetary Union", a report prepared by the Presidents of European Council, European Commission, European Central Bank and Eurogroup and presented to the European Council in June 2012.

Empirical evidence shows that the European banking system is oversized (ESFR, 2014). The total assets in EU banking sector amounted to 303% of GDP in 2013. By contrast Japanese banks' assets add up to 192% of GDP, US banks' assets add up to 145% of GDP (using IFRS-equivalent accounting and including the assets held by Fannie Mae and Freddie Mac). According to recent studies there is a hump shaped relationship between financial deepening and economic growth.

Given the importance of bank finance in supporting economic growth in EU, one interesting question relates to the level of credit-to-GDP ratio that would support growth. However, on the level above which credit-to-GDP ratio becomes harmful for growth there are mixed results. Arcand, Berkes and Panizza (2012) showed that positive association between finance and growth has decreased over time, with a negative and significant correlation between private credit-to-GDP and GDP growth when the former ratio exceeds 100% of GDP. But Reinhart and Rogoff (2009) find that economic growth slows after certain thresholds of credit/GDP ratio are passed.

For countries with credit-to-GDP ratio beyond 165%, the marginal effect on bank risk of a marginal increase in bank credit-to-GDP ratio becomes 3 times higher than the estimated effect for countries in the middle 50% of distribution. *Judging upon these facts Romanian banking system is the least risky and has the highest growth potential with positive effects on real growth in EU*.

Over the last five years a sizable deleveraging occurred across European banking systems (Table 3.1). Nevertheless, the European banking sector remains still quite large compared to its international peers. As mentioned by (Draghi, 2014), a "good" form of bank deleveraging is one where equity is built up, either through retained earnings or through outright issuance, where deposits rise and where balance sheet reduction takes the form of an asset carve-out, rather than of credit attrition. However, the speed and characteristics of deleveraging varied across the EU's banks.

The banking assets relative to GDP in EZ were downsized with an average annual speed of 3% between 2008 and 2012 and 10% in 2013. Loans and advances to GDP ratio declined linearly all over the period at a slower pace than assets-to-GDP ratio, deposits-to-GDP ratio remained stable, while equity-to-asset ratio increased annually by 7% in 2008-2012 and 10% in 2013.

In non-EZ, excluding CEE, the evolution of loans-to-GDP ratio and deposits-to-GDP ratio had a significant BU effect, but not the evolution of assets-to-GDP. Loans-to-GDP and deposits-to-GDP ratios declined between 2008 and 2012 and increased in 2013, while asset-to-GDP ratio declined by 10% annually all over the period. Equity-to-assets ratio has increased all over the period but slower than in EZ.

In spite of the accelerated contraction, the banking system in this area, including Denmark, Sweden and United Kingdom, remained well above the size in euro area.

United Kingdom and Sweden announced their opt-out decision of the EBU. The EBU effect seemed indeed to stimulate the good deleveraging in non-EZ, where, relative to GDP, the assets have declined, loans and deposits rose and the increase of equity-to-assets ratio accelerated.

In EZ the BU effect stimulated the decline of assets-to-GDP ratio and the fall of leverage, but did not affect the credit attrition and deposits accumulation relative to GDP.

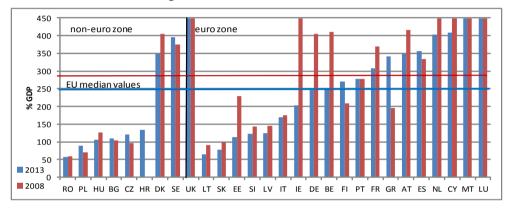


Fig. 3.1 The EU Banks' Asset Size

Source: ECB Consolidated banking date. Notes: For presentation purposes the y-axis was truncated at 450%. The values in 2013 for UK, Malta and Luxembourg are 489%, 693% and 1579% respectively.

	EZ	Non-EZ	CEE	Romania	Non-EZ w/o CEE	EU				
Assets, % of GDP										
2008	349	634	82	58	811	424				
2012	304	406	93	63	503	331				
2013	274	367	92	57	452	298				
Annual growth, %										
2012/2008	-3.4	-10.5	3.2	2	-11.3	-6				
2013/2012	-10	-9.7	-1.2	-9.3	-10.2	-9.9				
Loans and advances, % of GDP										
2008	181	316	56	39	399	217				
2012	153	155	61	38	184	154				
2013	146	168	60	33	202	152				

Table 3.1 Assets, Loans, Deposits and Equity in EZ, RO, CEE, EU and non-EZ Countries

Annual growth, %											
2012/2008	-4.1	-16.3	2.1	-0.6	-17.6	-8.2					
2013/2012	-4.7	8.3	-2.2	-12.6	9.4	-1.2					
Deposits, % of GDP											
2008	104.7	228.5	46	29.5	287.1	137.1					
2012	106.9	133.2	59.5	36.0	156	113.8					
2013	106.5	142.5	59.7	35.9	168.1	116.1					
Annual growth	Annual growth, %										
2012/2008	0.5	-12.6	6.6	5.1	-14.1	-4.5					
2013/2012	-0.4	7.0	0.3	-0.3	7.7	2.0					
Equity, % of as	sets										
2008	3.5	4.7	8.4	9.2	4.6	4					
2012	4.6	5.4	10.4	10.3	5.1	4.9					
2013	5.1	5.7	10.4	10.5	5.4	5.3					
Annual growth, %											
2012/2008	6.9	3.5	5.6	3	2.7	5.1					
2013/2012	9.7	5.5	0.5	0.4	5.6	8.2					

Source: ECB Consolidated banking date.

What adjustment endured the small banking systems in CEE? They seemed quite affected by the EBU effect since the dynamics of all analysed indicators inverted in 2013: the assets-to-GDP ratio and loans-to-GDP started to contract almost in tandem, deposits-to-GDP ratio and equity-to-assets ratio stalled after healthy expansion in 2008-2012 (see Table 3.1).

The adjustments did not alter the leverage level of the banking systems, twice as low as in other parts of EU, confirming that small is less risky. The adjustment in the Romanian banking system had the same pattern as in CEE, but with an EBU effect with larger magnitude on asset and loans to GDP ratios. Moreover the equity-to-assets ratio remained quite stable in 2013, at 10.5%, higher than in any other group of countries.

# 3.2. The Level of Concentration

Romanian banking system has a medium level of concentration. The share of the first largest 5 banks in total assets was 54.4% almost unchanged since 2008, whereas the concentration of the banking systems in the EU MS ranged between 31% in Germany and 94% in Greece (Fig 3.2).

According to the Herfindahl index of credit institutions<sup>32</sup>, Romania has a medium concentration similar to Hungary, Sweden or Spain. By comparison, the banking system in the Czech Republic is more, while in Poland is less concentrated.

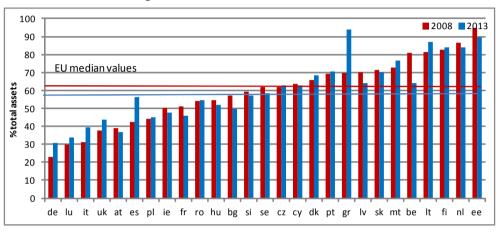


Fig. 3.2 TOP 5 Banks' Assets in the EU

Source: ECB EU structural financial indicators.

In 2013 the share of top 5 banks' assets in total assets was 48% up by 4 percentage points compared to 2008 in both euro and non-EZ countries, the last percentage point increase occurring in 2013. The EBU effect did not stop the biggest banks to become bigger. These banks contracted slower when the other banks contracted and expanded faster when the other banks expanded. In the EZ the deleveraging of the biggest banks was moderate during 2008 and 2012, but accelerated in 2013, while in non-EZ the decline started just in 2013. Too big to fail (TBTF) and save concept appears to persist. Lambert et al.(2014) quantify the implicit government subsidy received by US, UK, and euro area banks as a result of TBTF implicit bail-out guarantees.

Euro area banks continue to benefit from a greater reduction in funding costs (60-90 bps) owing to government support than US (15bps) or UK banks (20-60bps). In dollar terms, if applied to banks' total liabilities (net of equity), the implicit subsidies given only to systemically important banks at the global level in 2011-2012 represented around USD 15-70 bn in US, USD 20-110 bn in the United Kingdom and up to USD 90-300 bn in the EZ.

<sup>&</sup>lt;sup>32</sup> The Herfindahl index is obtained by summing the squares of the market shares of all the credit institutions in the banking sector.

TOP five banks' assets, % of GDP The other banks' assets, % of GDP 2012 2013 Annual % 2008 2012 Annual % 2008 2013 change change 2012/ 2013/ 2012/ 2013/ 2008 2012 2008 2012 EZ160.5 147.9 134.8 -2.0 -8.9 200.5 163.3 144.4 -5.0 -11.5 192.7 Non-EZ 151.9 174.0 6.1 -9.7 196.8 220.5 189.6 2.9 -14.0 CEE 42.8 47.7 47.4 2.8 -0.7 39 45.2 44.4 3.7 -1.7 RO 31.5 34.5 31.1 2.3 -9.8 26.8 -8.7 28.6 26.1 1.6 Non EZ w/o 184.3 234.0 244.0 270.7 231.1 2.6 -14.6 CEE 210.0 6.1 -10.2 EU 158.2 159.7 0.2 199.6 178.3 156.4 -2.8 -12.3 145.2 -9.1

**Table 3.2 Banks' Concentration Evolution** 

Source: ECB-EU Structural Financial indicators.

Subsidies are more evenly distributed across banks in the euro area than in the US, where they tend to be more directly targeted at systematically important banks. The national supervision and resolution systems, through which each country backs its national bank champions, might be one of the reasons why this is so. Instead of resolving the distressed banks, European authorities prefer to rescue them by favouring acquisition by other domestic banks. Marques et al. (2013) find that the intensity of government support is positively related to measures of bank risk taking, especially over 2009-2010.

In CEE the share of the assets of the largest 5 banks in total remained unchanged between 2008 and 2013 at 52%. The adjustments, which took place, showed that the biggest banks have expanded slower during 2008 and 2012 and declined less in 2013 compared to other banks. In Romania the adjustment process had similar characteristics, but the intensity of expansion during 2008 and 2012 was slower and the following decline more abrupt in the whole banking sector. The result was the same: unchanged concentration.

# 3.3. Banks' Foreign Ownership

The CEE stands out in EU by the magnitude of the share of assets of foreign-controlled subsidiaries and branches (Fig. 3.3). This ratio stood at 73% compared to 14% in EZ in 2013 down from 78% and 15% respectively in 2008. In the EZ the assets of both foreign and domestic banks declined all over the period. The annual average contraction rate was 2.8% for domestic banks and 4.2% for foreign banks between 2008 and 2012.

The EBU effect accelerated sharply the contraction to 8.5% for domestic banks and 14.6% for foreign banks. In CEE the dynamics of assets was different: domestic banks' assets expanded all over the period, twice faster (by 9.4% annually) in 2008-2012 than in 2013, while the foreign banks' assets expansion was moderate in 2008-2012 (up by 1.5% annually) and stopped in 2013.

Foreign banks dominate Romanian banking system, 80% of total assets belongs to foreign subsidiaries and 10% to foreign branches<sup>33</sup> as in the Czech Republic. In Hungary and Poland the share of assets of foreign banks was smaller, around 60% (Fig. 3.4).

During the crisis, in Romania the share of assets belonging to foreign subsidiaries declined up to 2012 when a medium domestic bank was reclassified from domestic banking group to foreign EU controlled subsidiaries due to a change in ownership.

100 2013 90 2008 80 70 %oftotal assets 60 EU median values 50 40 30 20 10 SI CY BE HU LV PL ΙE FI BG MT LU SK HR RO LT CZ EE

Fig. 3.3 Assets of Foreign Controlled Subsidiaries and Branches in the EU, 2008 and 2013

Source: ECB Consolidated banking date.

<sup>&</sup>lt;sup>33</sup> Foreign banks are defined as subsidiaries and branches that are controlled by either an EU or a non-EU parent that is "foreign" from the reporting country's point of view.

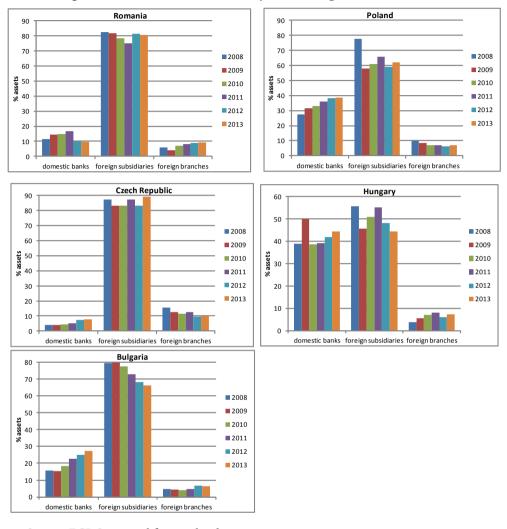


Fig. 3.4 The Structure of Assets by Ownership in CEE Countries

Source: ECB Structural financial indicators.

According to the ECB structural financial indicators most of the assets of foreign banks in Romania, as in the other countries from CEE, are from EU while the amount of assets of foreign banks from non-EU is negligible (Tables A1&A2). In CEE foreign banking takes overwhelmingly the form of subsidiaries associated to the decentralized form of banking organization. While a subsidiary is a separate legal entity, which is licensed and supervised by local regulators, with the parent having no legal obligation to support it if it falls into distress, a branch is legally inseparable

from the parent, which is fully responsible for its financial commitments. The two types of organizational structures evolved differently during the crisis.

In Romania, between 2008 and 2012, the assets of subsidiaries have declined, while those of branches have increased, the EBU effect just moderated the trends. In Hungary the trends were similar, but the EBU effect had an accelerator role. The pattern of dynamics was different in Poland and the Czech Republic. In these countries the assets of subsidiaries have increased and the assets of branches have declined between 2008 and 2012, and the EBU effect accelerated the expansion of subsidiaries and upturned the trend for branches.

The presence of foreign banks can bring particular competitive and countercyclical benefits through risk sharing, because foreign banks often expand lending when domestic banking are under common domestic strain. Foreign banks operate under a wide variety of business models and structures with varying degrees of centralization of decision-making and restrictions on intra-group transfers that reflect the legal, regulatory and business climates in the home and host jurisdictions in which they operate.

Therefore the dependency on foreign banks becomes a threat for host countries during crisis in home countries since the likelihood that some home country governments of significant international firms will backstop their banks' foreign operations might diminish. The possible constraints placed on the ability of international banks' home offices to provide support to their foreign operations, inclusive through the avoidance of imposing losses on equity owners at home, affect the supervisory terrain for host countries.

This is especially true when the incidence of subsidiary structure prevails, since supervisory control and oversight responsibility of the host country is greater than under the branch structure and in the event of distressed affiliate the host country would have a relatively heavier burden when dealing with a subsidiary than with a branch, which is the responsibility of the parent bank and home authority (Fiechter et al., 2011). Capital surcharges for systemically important firms are designed to mitigate the threat they impose on home and host countries. But these reforms are primarily directed at the consolidated level, with little attention to vulnerabilities posed by internationally active banks in host countries. The risks associated with the large intra group funding flows remained largely unaddressed.

# 3.4. Cross-Border Banking Linkages

Cross-border banks have played a central role in the dynamics of the recent global crisis. Although the breakdown in credit and asset markets was an international phenomenon, the European banks' cross-border linkages suffered disproportionately

due to greater information problems vis-à-vis cross-border counterparties and the differences in regulatory regimes. The provision of fiscal support for distressed banks was an important issue in relation to cross-border activities. The rescue of Dexia and Fortis banks, for instance, required the governments involved to devise ad hoc burden-sharing agreements. In relation to Eastern Europe, there were fears that policies of home-country governments might encourage parent banks to fail to support the operations of affiliates<sup>34</sup>.

While financial integration in EZ has primarily taken the form of debt market integration and increasing international borrowing and lending rather than equity market integration (Buch et al., 2013), CEE stands out as an exception. Here the cross border ownership of banks generated cross border lending. Between 2008 and 2013 foreign claims on CEE according to BIS consolidated data<sup>35</sup> increased faster than the GDP in Poland and the Czech Republic and slower in Hungary, Bulgaria and Romania (Fig.3.5). Compared to the fast expansion in the Czech Republic and the abrupt contraction in Hungary and Bulgaria, the evolution of the foreign claims relative to GDP showed resilience in Poland and Romania. After declining by EUR 2 bn yearly during 2008-2013, the amount of foreign claims remained equivalent to the size of the assets in the banking system in Romania, the largest in CEE. In Bulgaria and the Czech Republic foreign claims represented 80% of the banking system assets, while in Hungary and Poland 70%.

In Romania and Hungary between 2009 and 2011 the Vienna Initiative program was in force aiming to maintain foreign banks' exposure for the time of the IMF-EU loan programs. Taking into account the evolution of foreign claims on CEE, the programs appeared to have stabilising effects in Romania<sup>36</sup>, but not in Hungary<sup>37</sup> (Table A3).

Moreover, Poland and the Czech Republic seemed not to be affected by the fact that the Vienna Initiative did not cover them (de Haas et al., 2012).

<sup>&</sup>lt;sup>34</sup> See also Allen et al. (2011).

<sup>&</sup>lt;sup>35</sup> BIS consolidated data cover foreign claims of banking groups globally, aggregated according to nationality of the parent bank. So, from the perspective of a given country, the data exclude resident foreign banks, but include the positions of subsidiaries and branches of domestically owned banking groups operating abroad. Data are consolidated, netting out the intra-group claims. Foreign claims consist of cross-border claims (claims on entities located in a country other than the country of residence of the reporting banking office) and local claims (claims on entities located in the country of residence of affiliates) of foreign affiliates (branches and subsidiaries located outside the country in which the reporting bank is headquartered).

 $<sup>^{36}</sup>$  In Romania, the largest nine banks promised to increase the minimum capital adequacy ratio from 8% to 10% and fully maintain the March 2009 exposure for the time of the IMF Program.

<sup>&</sup>lt;sup>37</sup> In Hungary the six largest banks have promised to ensure a prudent capitalization of their subsidiaries and to maintain at least 95% of the September 2008 exposure.

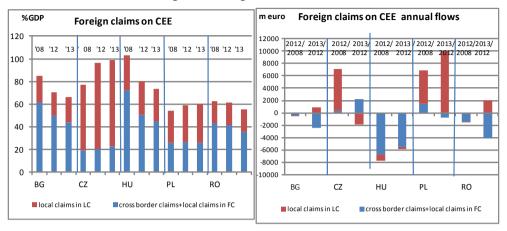


Fig. 3.5 Foreign claims on CEE

Source: BIS.

In Romania, as in Hungary and Bulgaria, international claims (cross border claims and local claims in non-local currency) represented the largest part of the foreign claims and went through the largest decline. Only in 2013 the shrinkage of international claims was offset partially by the expansion of local claims in local currency in Romania.

In Poland and the Czech Republic the foreign claims increased over time mainly due to the expansion of the domestic currency lending by local affiliates all over the period in Poland and between 2008 and 2012 in the Czech Republic. Interbank lending was particularly hit in Bulgaria, Romania and Hungary and has not recovered yet (Table A5). This impacted the maturity structure of international claims, short term loans have been continuously declining in both countries (Table A4). The long term maturity cross-border lending was relatively stable during 2008 and 2012 and declined abruptly in 2013 in Romania. In Hungary the decline was abrupt during 2008-2012 and milder in 2013 (Fig. 3.6). The EBU effect on foreign claims accumulation was different for each of the analysed countries. The foreign claims accumulation stopped in the Czech Republic due to the decline in local claims, accelerated in Poland due to the acceleration of local claims, while in Hungary the contraction pace of foreign claims got milder due to the slowdown of the contraction of local claims. In Romania and Bulgaria the contraction of foreign claims accelerated due to the abrupt decline of cross-border claims (Table A3).

m euro Cross-border claims on CEE by maturity m euro Cross-border claims on CEE by sectors annual flows annual flows 4000 4000 2012/ 2013/ 2012/ 2013/ 2012/ 2013 / 2012/ 2013/ 2012/ 2013/ 2012/ 2013/ 2012/ 2013/ 2012/2013/ 2012/ 2013/ 2012/2013/ 2008 2012 2008 <mark>201</mark>2 2008 2012 2008 2012 2008 2012 3000 2008 2012 2008 2012 2008 2012 2008 2012 2008 2012 2008 2012 2008 2000 2000 1000 O -1000 -2000 -2000 -3000 -4000 -5000 -6000 -6000 -7000 -8000 CZ HU BG RO below 1 year ■1 to 2 years above 2 years banks public sector non bank private sector

Fig. 3.6 Cross-Border Claims On CEE

Source: BIS.

Banks based in countries from EZ had the majority of foreign claims on CEE (Fig 3.7). Banks from the same nationality are exposed to more than one CEE country. The share of top 5 largest lenders in total foreign claims is largest in Romania, Bulgaria and the Czech Republic (89%), smallest in Poland (69%) and in between in Hungary (79%) (Table A6). The group of the top 5 countries with the largest exposure in each CEE country in 2013 includes Italy (exposed to all CEE), Austria (exposed to Bulgaria, Romania, the Czech Republic and Hungary), France (exposed to Bulgaria, the Czech Republic, Poland and Romania), Germany (exposed to the Czech Republic, Hungary and Poland), Netherlands (exposed to Hungary, Poland and Romania), Belgium (exposed to Bulgaria, the Czech Republic and Hungary), Spain (exposed to Poland) and Greece (exposed to Bulgaria and Romania).

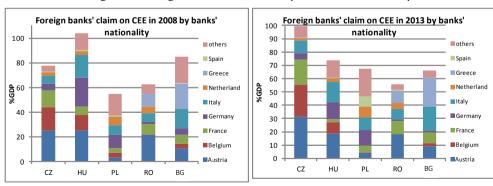


Fig. 3.7 Foreign Claims on CEE by Banks' Nationality

Source: BIS.

Table 3.2 Exposure of Five Largest Romanian's Lenders on CEE in 2013

Nationality	Size of foreign claims															
of lender ' % recipient's GDP					% lender's GDP					% lenders' exposure on CEE						
banks	RO	BG	CZ	HU	PL	RO	BG	CZ	HU	PL	CEE	RO	BG	CZ	HU	PL
Austrian	18.1	9.1	31.4	18.5	4.4	8.2	1.2	15	5.8	5.4	35.6	23	3.4	42.1	16.3	15.2
French	9.8	8.2	18.9	2.4	4.8	0.7	0.2	1.4	0.1	0.9	3.3	21.2	6	42.4	3	27.3
Greek	9.4	21.6	0	0.1	0.1	7.3	4.7	0	0.1	0.2	12.2	59.8	38.5	0	0.8	1.6
Italian	7.9	18.1	9.7	15.3	9.7	0.7	0.5	0.9	1	2.4	5.5	12.7	9.1	16.4	18.2	43.6
Dutch	4.3	0	1.9	2.5	8	1	0	0.5	0.4	5.2	7.1	14.1	0	7	5.6	73.2

Source: Own computation based on consolidated banking data from BIS and Eurostat.

# Risk sharing across main lenders of CEE

The banks with the largest exposure to CEE originate from 8 EZ countries (G8). For some of these banks, the exposure to CEE looks significant with respect to the home country GDP (Table A7) and raises worries on the credit risk such large exposure embodies. However, the situation is not as risky as the figures tend to show, since all countries where banks exposed to CEE are headquartered are borrowing from an extended network of foreign banks from all over the world (Table A8). G8 countries might be among the lenders as well. These countries take up additional indirect exposure to CEE. Several G8 countries are borrowing more than they lend and thereby transfer the whole credit risk of their foreign claims on CEE on their foreign lenders. In these countries, like Greece in 2008 and Italy in 2008 and 2013 the inward foreign claims are higher than the outward foreign claims. When the inward foreign claims are less than outward of foreign claims, the transfer of credit risk is partial to the foreign lenders. After the risk sharing, G8 exposure to CEE diminishes considerably, even though some members of the group take on indirect exposure to CEE. Taking into account that the inward foreign claims are directed towards banks located in the country not just the domestic banks, to obtain a proxy for the foreign claims on domestic banks we applied the share of domestic banks in total assets to the total foreign claims. Under this condition:

 $b = a^* (outward \ exposure-share \ of \ domestic \ banks \ assets \ in \ total \ assets^* in ward \ exposure)/outward \ exposure$ 

 $c = (a-b)^*$ share of country in the inward exposure

Table 3.3 Exposure to CEE of G8 after risk sharing, % of GDP

	Unshared		Direct ex	1	l	exposure	Total exposure (d		
	exposure to CEE		after risk	sharing	due to ris	sk sharing	) = (b) + (c)		
	(a)		(b	)	(	c)			
Banks	2008	2013	2008	2013	2008	2013	2008	2013	
Italian	4.6	5.5			2.1	1.0	2.1	1.0	
Austrian	39.2	35.6	19.6	18.7			19.6	18.7	
French	2.9	3.2	1.6	1.5	2.1	2.4	3.7	3.9	
Greek	9.3	12.3		7.7			0.0	7.7	
Dutch	7.4	7.1	2.9	1.9	2.0	2.4	4.9	4.3	
German	3.1	2.5	1.5	0.9	1.6	1.5	3.1	2.4	
Belgian	17.3	12.5	9.1	5.7	1.3		10.4	5.7	
Spanish	0.4	2.9	0.1	1.8			0.1	1.8	

Source: Authors own computation.

The composition of the group was the same in 2008. There were two changes among top 5 lenders between 2008 and 2013: in Poland where Spain took the place of Belgium, and in Hungary where Netherlands replaced France. The eight countries face direct exposure to CEE and some of them indirect exposure through their foreign claims on the countries with direct exposure to CEE.

Although for receiving countries the size of the top 5 largest foreign claims is significant, when viewed from the lenses of originating countries the significance diminishes (Table 3.2). In case of Romania, the Austrian and Greek foreign claims remain relative significant from Austria's and Greece's point of view as well. The Austrian foreign claims on Romania represent 8.2% of Austrian GDP and 23% of the Austrian exposure to CEE.

The Greek foreign claims on Romania represent 7.3% of Greek GDP and almost 60% of Greek exposure to CEE. Two points are worth emphasizing. First, that Romania is rather a small exposure for the foreign banks on which its financial intermediation depends. Second, the accession into BU of Romania alone does not eliminate the financial fragmentation in CEE and does not stop the arbitrage across jurisdictions. Due to the fact that the majority of the financing source for CEE originates from the same euro area countries, G8, and belongs in most cases to the same credit institutions (Table A11) these countries are in competition for the financial resources. G8 countries exposed to more CEE countries face the continuous need to optimize their exposure.

Before the financial crisis all CEE countries received increasing funds from G8 (Fig.3.9), but after the financial crisis hit most G8 countries picked a favoured CEE country for channelling funds at the expense of the others (Fig 3.8). Usually, the most favoured countries were the ones to which the exposure was the highest before the financial crisis hit (in 2007).

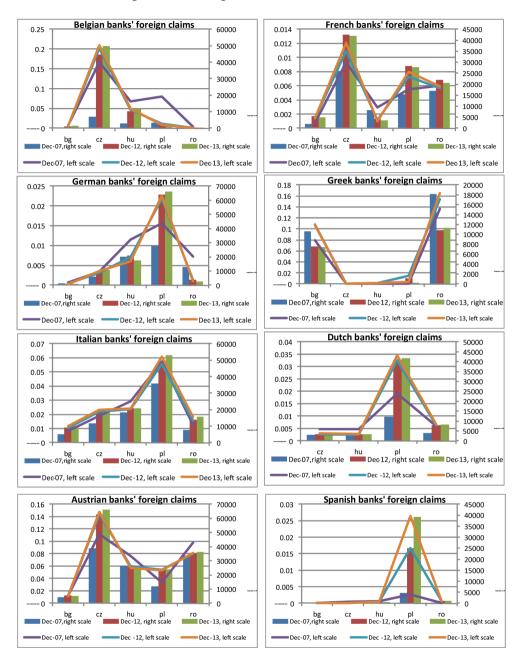


Fig. 3.8 G8 Foreign Claims On CEE, 2000-2013

Source: BIS, national central banks, Eurostat.

Although the financing strategy of CEE countries differed among G8 post-2008, there was a common pattern, namely that CEE was a favoured region compared to the other regions to which G8 were exposed. The share of exposure towards CEE in total exposure of each of G8 country increased after 2007.

Compared to 2008, the share of exposure to each CEE country evolved differently in G8. French banks increased the share of exposure towards Bulgaria, the Czech Republic, Romania and Poland and decreased it towards Hungary. Small BU effect determined the decline of the share of exposure in all countries.

In absolute terms only in Poland and the Czech Republic the exposures increased compared to 2007. The Austrian banks increased their share of exposure towards the Czech Republic and Poland, and maintained it towards Hungary, Bulgaria and Romania.

The EBU effect was small and increased the share of exposure towards Romania, Poland and the Czech Republic and declined it towards Hungary and Bulgaria. The volume of exposure increased only in Poland and the Czech Republic compared to 2007. The Greek banks cancelled their share of exposure to Poland as a BU effect and increased their share of exposure and the amount of the exposure to Romania and Bulgaria. The EBU effect favoured Romania but not Bulgaria.

The share of exposure to Romania increased slightly from 9.7% in 2012 to 10.3% in 2013, while that of Bulgaria declined from 6.8% in 2012 to 6.6% in 2013. The Dutch banks increased their share of exposure to Poland and Romania, and maintained it towards the Czech Republic and Hungary. The EBU effect favoured the share of exposure to Romania and the Czech Republic. In terms of amount, the exposure increased just in case of Poland. Italian banks increased their shares of exposure to all CEE. The BU effect was positive for all CEE. The volume of exposure increased just in the Czech Republic compared to 2007.

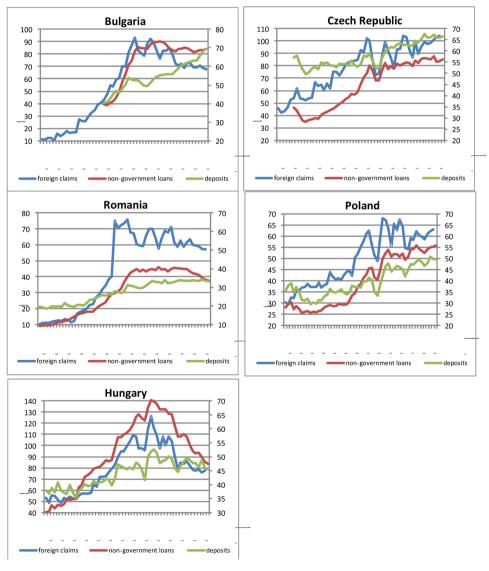
Overall, after 2008 the parent banks increased the funding of the subsidiaries hosted in Poland and the Czech Republic and decreased the funding for subsidiaries from Hungary, Romania and Bulgaria measured in terms of GDP of the host country. The banking financial intermediation to the private sector in Romania, Hungary and Poland was strongly dependent on the size of foreign funding (Fig. 3.9). The contraction of foreign funds in Bulgaria, Hungary and Romania, constrained the domestic private lending to match the size of domestic savings.

The opposite was true for Poland, where the abundance of foreign funds led to a widening gap between domestic savings and domestic private lending. In the Czech Republic, where domestic savings exceeded all over the period the domestic private lending, the abundance of foreign funds played no role in financing private lending.

Countries willing to boost financial intermediation beyond the domestic saving capacity in order to speed up convergence have to stimulate cross-border banking

flows. Empirical evidence (Cerrutti et al., 2014) showed that cross-border banking flows depend on both sending and recipient country characteristics and the recipient country's tools for attracting cross-border lending are capital control, stronger bank regulation and supervision and a better macroeconomic framework. CEE countries might use the last two tools.

Fig. 3.9 G8 Foreign Claims and Financial Intermediation in CEE (2000-2013)



Source: BIS, national central banks.

#### 3.5. The Quality of the Banking Systems

The pre-crisis financial regulation suffered from several shortcomings: the international agreed minimum capital levels were too low, the quality standards for required capital were too weak, the risk weights assigned to certain asset classes did not reflect their actual risks, the potential for liquidity strains was seriously underappreciated (Tarullo, 2014). The purpose of this section is an analysis of the current situation, emphasizing the differences between the Romanian and its main lenders' banking systems quality in terms of non-performing loans, capital adequacy, liquidity and profitability.

For EZ the analysis separates the foreign from domestic banks. While the quality of foreign banks is rather the outcome of the cooperation between supervisors from home and host countries from EZ, the quality of domestic banks is uniquely the result of the supervision from EZ countries. Differences in the quality of the two type of banks population reflect differences in regulations and supervision mechanisms.

For Romania a separate analysis of the domestic banks from the whole banking system is provided. Although domestic banks represent a small part of the total assets (around 10% before 2012), their quality is uniquely the result of the domestic supervision.

The quality of the whole banking system with dominating foreign banks from EZ (90% of total assets) is the result of the supervisory consultation between Romania and foreign banks' home countries from EZ. Thus, differences in the quality of domestic banks and total banking system reflect differences in the exigencies of the home supervisor and the negotiated exigencies with the supervisors of the parent banks.

# Nonperforming loans<sup>38</sup>

The deterioration of assets quality was widespread, but its pace was very abrupt in Romania (Fig. 3.10). The nonperforming loans ratio became more than three times larger in Romanian banking system than for domestic banks in EZ in 2013. That level was outpaced only by Bulgaria, Ireland, Greece and Cyprus, countries that witnessed significant economic and financial stress over the last years. Foreign banks had lower nonperformance rate than the domestic banks in EZ. The contrary was true in Romania, where domestic banks had lower nonperforming rates than the average level of the banking system.

The provisioning of the nonperforming loans in Romania is the highest in EU by more than 20 pp higher than in countries with similar nonperforming ratio levels

<sup>&</sup>lt;sup>38</sup> Nonperforming assets and provisioning indicators should be interpreted with caution, since the definitions of impaired assets (nonperforming and doubtful assets) and provisions differ between countries.

such as Ireland, Slovenia or Bulgaria. In EZ, although the nonperforming ratio more than doubled, the coverage ratio slightly declined in the case of domestic banks. Banks retain considerable discretion in determining the amount of loan loss provisions.

As a general rule, banks may create specific provisions only when there has been a credit event. This implies that provisions typically lag the deterioration in loans portfolio. In Romania, the intervention of supervision authorities seemed to be led by a forward-looking approach aimed to diminish the provisioning gap.

The EBU effect (Table A10) was particularly significant in the case of provisioning: for domestic EZ banks, for which the provisioning contracted substantially in 2013 compared to the previous period.

However, among the home countries of Romanian main subsidiaries, apart from Greece, which shared the above EZ pattern, in Italy, France, Netherlands and Austria the provisioning sharply increased.

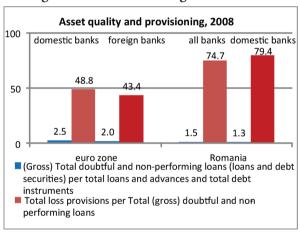
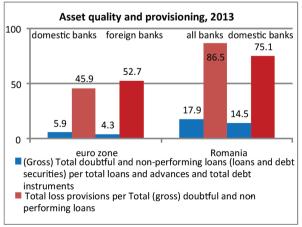
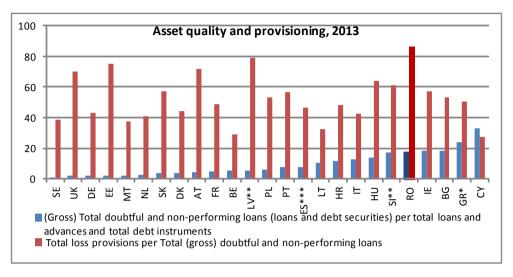


Fig. 3.10 Non-Performing Loans in the EU





Notes: \*The implementation of the Private Sector Involvement (PSI) had a profound impact both on the financial results and on the capital adequacy of the Greek banking system. As a consequence, certain indicators - such as total impairment (% of total income), return on equity, return on assets, net total doubtful and nonperforming loans (% of total own funds for solvency purposes), and solvency ratios - are not meaningful for analysis purposes and for comparison with the previous period. Hence, in order to avoid major comparability issues, the aforementioned indicators are not disseminated for end-2012 and end-2013 in the case of Greece. \*\*Data compiled on a solo-basis only.\*\*\* The changes observed for Net total doubtful and non-performing loans [% of total own funds for solvency purposes] and for Total loss provisions [% of total gross doubtful and nonperforming loans] arise from a methodological change in the compilation of the provisions for NPL's: the allowances for incurred but not reported losses were excluded to calculate net total doubtful amount from 2013. The value of net total doubtful and nonperforming loans [% of total own funds for solvency purposes] would be 46,34% for domestic banks, 86,08% for foreign banks and 47,83% for total system if all the allowances set aside by Spanish credit institutions are considered. And the value of the coverage ratio would be 56,34% for domestic banks, 58,83% for foreign banks and 56,51% for total system if all the allowances set aside by Spanish credit institutions are included.

Source: ECB.

#### Capital adequacy

After 2008 the trends were for increasing solvency and Tier 1 ratios and declining leverage. In recent years banks have increased their regulatory capital ratios by reducing average risk-weights. Without risk weighting, some EU banks are thinly capitalized (ESRB, 2014). Perhaps this is the reason why the compliance with risk based regulatory ratios is decreasingly useful as an indicator of future distress probability (Danielson, 2002). The leverage ratio, measured by equity per assets, shows that Romanian banks are twice less levered than the domestic banks from EZ.

The solvency ratio and Tier 1 ratio are higher than in EZ and comparable to the levels registered by the foreign banks in EZ (Fig. 3.11). From this perspective Romanian banks have more room to absorb risks than the domestic banks from EZ and banking systems from G8 countries.

The EBU effect (Table A10) accelerated the rise in solvency ratio and the equity-to-assets ratio of domestic EZ banks and did not affect the capitalisation process of the foreign EZ banks. In Romania the rise in the solvency ratio was twice as high as the annual average rise registered between 2008 and 2012. The acceleration of solvency ratios in several home countries of Romanian subsidiaries certainly helped. In Greece and Austria the solvency ratio increased by 4.9 pp and 1.2 pp respectively in 2013, compared to the annual average decline during 2008-2012 by 0.2 pp in Greece and the annual average increased by 0.8 pp in Austria.

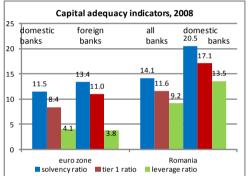
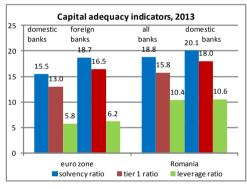
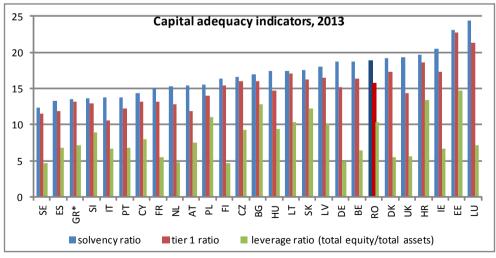


Fig. 3.11 Capital adequacy in EU





Source: ECB.

#### **Liquidity**

Due to the rise in the perceived counterparty risk, the interbank markets dried up as the financial crisis unfolded. Therefore, substituting the dependence on wholesale deposits with retail deposits was the main tendency both in EZ and Romania post-2008. Romanian banks remained more reliant on interbank market than domestic banks from EZ and less reliant than the foreign banks from EZ. This suggests that the fragmentation of money market was more intense for banks domiciled in EZ and the lack of confidence more widespread among them.

The share of liquid assets (cash, trading and available for sales assets) declined among the EZ banks and increased among Romanian banks between 2008 and 2013. The precautionary liquidity hoarding seems to be more severe in the case of Romanian banks. An explanation might be that while the money market for domestic currency was operational, the difficulty to transact foreign currency pushed banks to hoard foreign currency liquidity.

The funding stability ratio (the share of non-bank in total deposits) increased by 21.4% for the Romanian banks and by 17% for domestic banks in EZ between 2013 and 2008, reflecting banks' efforts to increase their reliance on customer deposits (Fig. 3.12).

The substitution of interbank funds with non-bank deposits particularly and the accumulation of cash accelerated in 2013 all over EZ domestic banks (Table A10). The foreign banks behaved in the opposite way, they seemed to substitute non-bank deposits with interbank funding alongside accelerated accumulation of cash. The banks in Romania share the EZ domestic banks' behaviour.

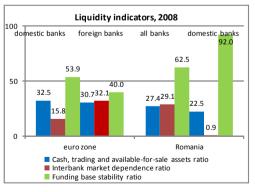
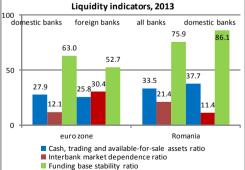
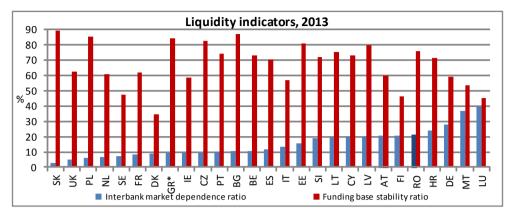


Fig. 3.12 Liquidity Indicators in the EU





Source: ECB.

## **Profitability**

Banks' profitability declined across both EZ and CEE. While banks in the Czech Republic and Poland continued to register large profits, banks in Hungary made losses in 2011 and 2012 and maintained income and expenses in balance in 2013. The profitability of Romanian banks evolved from the largest level in EZ and CEE in 2008 to the largest loss in 2012. The divergent evolution of banks' profitability in CEE marked the evolution of cross-border lending, larger inward foreign claims were associated to larger ROE (Fig3.13), foreign claims on the Czech Republic and Poland expanded, while those on Hungary and Romania contracted.

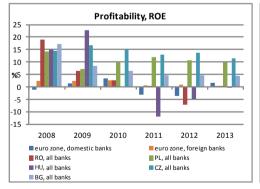
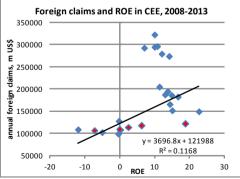


Fig. 3.13 Banks' profitability in EU



Source: BIS, ECB (Note: the red points in the right-hand side graph pertain to Romania).

# 4. Factors Influencing Romania's Position vis-à-vis European Banking Union

The debate over when and if Romania should join the EBU has been extremely muted so far, apart from a few presentations held by the NBR<sup>39</sup>. Board member representatives, proper evaluations exercises and impact analyses – available to public scrutiny – have been scarce up until the time of writing. This is however, a characteristic observed across of all non-EZ countries<sup>40</sup>. Part of the answer in why the debate has been slow to take off is the fact that a significant part of legislation on EBU was finalised only recently. Even so, with the third EBU pillar still unresolved, uncertainties relating to the quantification of banking and fiscal costs and thus the overall benefit and cost of joining the EBU remain.

For a non-EZ country joining the EBU there could be a number of benefits on several fronts. On the financial stability front the ECB, as a single supervisor, would – allegedly – be more credible than any national supervisor. The prevention and solution of bank failure mechanisms are also deemed to be more consistent and effective. On the monetary policy front, a more integrated financial system in EZ/EU is expected to reverse the existing trend of market fragmentation, provide funding – and thus to improve credit conditions in countries with perceived weaker banking systems. As a conclusion, all these aspects should enhance the effectiveness of the monetary policy transmission mechanism.

At the same time, as argued by Isărescu (2014), EBU participation would remove the foreign banks incentive to deleverage. But banks deleveraging in Romania is very likely to have already come close to an end as, over the last years the process was in fact self-correcting. External funding from foreign banks has already fallen by a third compared to its pre-crisis level and domestic deposits now finance all domestic loans, reducing the need for banks capital transfers from abroad. And, given the interest rate differential between both domestic lending and borrowing rates and domestic-foreign lending-borrowing rates it makes sense for a bank, from a profitability point of view, to expand in Romania, once the credit growth goes once again into positive territory. It is true that, at the moment, the high NPL ratio and the banks' need to comply with new regulation hamper domestic bank credit growth but, with the

<sup>&</sup>lt;sup>39</sup> See for instance "Uniunea Bancară: De la proiect la realitate" – Dissertation held by Mugur Isărescu, the governor of NBR, Constanța 5 June 2014, "Relations between euro and non-Euro countries within the Banking Union" - Mugur Isărescu, Speech by Mr Mugur Isărescu, Governor of the National Bank of Romania, before the Unicredit 15th International Advisory Board, Rome, 10 July 2014 and "Aderarea României la Uniunea Bancară și ajustarea sectorului bancar" – Presentation by Florin Georgescu, prim vice-governor, Constanța 4 September 2014.

 $<sup>^{40}</sup>$  Only a very few papers have been written on the subject in CEE countries, Kisgergely (2014) is one example.

economy gradually recovering, the existing financial cycle should reverse its trend in the near future.

The dynamics of cross-border exposure of foreign banks in CEE in 2013, which can be seen as triggered by the EBU construction, compared to the 2008-2012 period was very diverse (Table A3). In Hungary contraction slowed down, in Poland the expansion accelerated, in the Czech Republic the expansion stalled whereas in Bulgaria and Romania the contraction deepened. The cross-border exposure is rather led by the expectation on banks profitability and capital returns.

Another argument often mentioned in favour of joining the EBU is the large presence in Romania of banks headquartered in EZ (see section 3.3). But, this argument can work both ways: since banks based in the EZ would need to comply with EBU requirements and since all EU members will join the EZ eventually, and thus EBU, sooner or later, the banks' incentives are to strengthen balance sheets across all of their EU operations. This strategy will prevent them from losing market share and competitive advantage at a time when a particular country would enter the EBU since most of the foreign banks in CEE economies are subsidiaries or branches of the banks operating in G8 countries.

Participating from the beginning in the set-up of the EBU could be perceived as being an advantage. Isărescu (2014a) argues that "[ ...] it is always preferable to have a voice in the set-up of a mechanism the working of which will affect all EU countries anyway, irrespective of whether they are members or not". Without diminishing the potential role Romania could have on the unresolved issues of the ECB, Romania is more likely to have solely "ears" rather than a "voice". The EBU has been set up for the EZ to benefit states with less stable fiscal positions whose financial sector problems impeded the proper financing of the economy. Both as a non-EZ member and as a country with a banking system more resilient (compared to average EZ) Romania, as a minority, is more likely to simply adjust to any new proposals rather than be able to influence decisively the course of further EBU development. Moreover, given the EBU's existing designing flaws, it would be more sensible to wait and see how the EBU works in practice first, before committing to its membership.

The next sections look at several issues that could influence Romania's position vis-à-vis joining the EBU sooner rather than later.

# 4.1. Shared Technical Standards for EU Banks

Assessing the benefits or the drawbacks of accessing EBU before the membership in the EZ has to take into account whether the objectives aimed by the EBU construction can significantly support Romania's objectives of economic growth, financial stability, financial intermediation for growth and fiscal thrift. Financial stability and financial

intermediation depend on the volatility and structure of cross-border foreign claims, which in turns depend on the monetary, economic and regulation frame of source and destination country.

The EBU will affect Romania indirectly through the effects on Romania's main lenders, all of them belonging to EZ. In accordance with Regulation ECB/2014/17 within the list of credit institutions, financial holding companies and mixed financial holdings which have been notified of the ECB's intention to consider them significant within the meaning of Article 6(4) of Council Regulation 1024/2013 there are 14 parent institutions of Romanian credit institutions. These institutions will be directly supervised by ECB on a consolidated basis.

Consequently, indirectly 71% of total assets of the Romanian banking system will be supervised by the ECB (Table A12). If Romania decides to join BU by submitting a close cooperation request, none of the largest banks fulfils the size criterion specified in Regulation ECB/2014/17. However, the first three largest banks (two of them belong to significant banks under the supervision of ECB) representing 40% of the assets might become entities supervised directly by ECB, upon the national authority request.

The single rule book (Capital Requirement Directive and Regulation), the rules on recovery and resolution of banks (BRRD), the rules on deposits guarantee scheme, the revised rules on state aid for the financial sector operate in all EU MS (Table 13).

## Criteria for determining significance of supervised entities

Regulation ECB/2014/17 sets four criteria to determine the significance of credit institutions: size, importance to a participant MS, cross border activity and financial assistance from ESM beneficiaries.

According to the size (Article 50) a supervised entity or a supervised group shall be classified as significant if its total assets EUR 30 Billion. According to the importance for the participating MS (Article 56-58) a supervised entity of a supervised group shall be classified as significant either when its total assets exceed EUR 5 Billion and that amount is greater or equal to 20% of GDP or upon the evaluation of the request of the National Competent Authority by the ECB taking into account.

- a. The significance of the supervised entity or supervised group for specific economic sectors in Union of a participating MS.
- b. Interconnectedness of the supervised entity or supervised group with the economy of Union or a participating MS.

- c. The substitutability of the supervised entity or supervised group as both a market participant and client service provider.
- d. The business, structural and operational complexity of the supervised entity or supervised group.

According to the size of cross-border activity (Article 59), a supervised entity or supervised group with established subsidiaries in more than one other participating MS may be classified as significant if its cross-border assets or liabilities exceed 20% of its total assets or liabilities.

Any supervised entity or supervised group receiving financial assistance from ESM in accordance with the decision taken by the Board of Governors of ESM under Article 19 of the Treaty establishing the European Stability Mechanism regarding the direct recapitalization of a credit institution and with the instrument adopted under that decision (Article 61).

So far, domestic supervision was proved to be efficient by the superior health of the domestic banks compared to the health of hosted foreign banks supervised in cooperation with home supervisory authorities and the better health of the latter compared to the health of domestic banks in the EZ.

Table 4.1 looks in more detail on the EBU legislation sets, their area of applicability and status. One observation that emerges from the Table 4.1 is that when it comes to financial supervision, non-EZ MS benefit from the same technical standards as other EZ countries. Through its prevention and resolution tools the BRRD strengthens national resolution systems in all EU MS<sup>41</sup>.

The bail-in clause will force creditors to take losses before any other financing becomes available. One of the important advantages in signing a close cooperation agreement by non-EZ countries is the access to the resolution fund. However, this will be of limited effect given that it may be too small to cope with the failure of the largest banks.

		Applicability	Status	Remarks
Bank Supervision	Rules on bank capital requirements, CR Directive & Regulation	EU	Effective	
	SSM Regulation	EA	Adopted	Optional for Non- EA members
	Revisions of EBA Regulation	EU	Effective	

**Table 4.1 The Existing Status of EBU Pillars** 

 $<sup>^{41}</sup>$  Although widespread differences in terms of the interpretation and application of regulatory and prudential definitions across MS, and especially in what concerns supervisory aspects still remain.

Bank	BRRD	EU	Agreed	
Resolution	SRM Regulation	EA	Agreed	Optional for Non- EA members
	European public backstop for SRF	EA	Not agreed	Optional for Non- EA members
Deposit Insurance	New rules on deposit guarantees schemes, DGS Directive	EU	Agreed	
	Single DGS		Not agreed	
Other	Rules on state aid for the financial sector	EU	Effective	
	Direct recapitalisation of banks from ESM	EA	Not agreed	

Source: Adapted from Tomsik (2014).

### 4.2. When Is the Right Time to Join the EBU?

The close cooperation agreement requires the fulfilment of several steps from the moment a non-EZ country initiates it and the moment when the ECB gives it approval, namely:

- The non-EZ MS has to notify that its national competent authority and its national designated authority will adhere to any instructions, guidelines or requests issued by the ECB.
  - Has to provide all required information.
- ➤ Will adopt all relevant legislation which effectively ensures that all the legal acts adopted by the ECB are binding and enforceable in the applicant member country.
- $\blacktriangleright$  The ECB undertakes a comprehensive evaluation and notifies within three months the MS of its preliminary assessment.  $^{42}$

Given the length of the approval process any request by the non-participating MS to join the close cooperation agreement should be made at least five months before the date on which it intends to participate in the SSM.

The NBR has declared joining the EBU a strategic decision and it intends to complete the whole application process somewhere towards the end of 2016 (Georgescu, 2014). The diagram below highlights the provisional calendar and the envisaged steps:

<sup>&</sup>lt;sup>42</sup> The legislation is available at: ttps://www.ecb.europa.eu/pub/pdf/other/en\_dec\_2014\_05\_fen.pdf

Diagram 4.1 Provisional Timeline for Romania Joining the EBU



Source: Georgescu (2014).

As Romanian authorities have already set their preferred target date to join the Euro at the beginning of 2019, the activation of the close cooperation agreement would thus come at a time when Romania enters into the ERM II mechanism, at the beginning of 2017. From a governance point of view this would make sense<sup>43</sup>, since, by that time Romania would have needed, more or less, to have taken all the necessary steps in aligning the required legislation.

However, if the decision to join the euro was to be postponed, a revision of the close cooperation calendar would be desirable, as by that time new information on the health of the EU banking and on how the EBU would work in practice would be available, thus allowing a more thorough assessment of the costs and benefits involved.

Such logic is warranted since the decision itself of Romania joining the euro in 2019 could be premature. An analysis enlisting the arguments pro and cons for a given date of euro adoption is beyond the scope of this paper<sup>44</sup>. However, given the

<sup>&</sup>lt;sup>43</sup> This represents our presumption. It may be pure coincidence the fact that Romania plans to start, at the end of 2016, its close cooperation with the ECB, at a time when it should also enter into the ERM II mechanism – if the assumed EZ accession date is maintained.

<sup>&</sup>lt;sup>44</sup> For Romania this decision was largely motivated by political considerations. To date, we are not aware of any publicly available comprehensive analysis, looking at the long-term economic implications of the euro adoption. Moreover, for now, the decision towards euro adoption of other regional non-EZ countries such as Poland, Hungary or Czech Republic, which have a higher GDP/capita than Romania, is one of "wait and see".

mandatory requirement of EBU's membership once into the EZ, one remark will be made on this subject.

Even though a country seeking to join the euro area fulfills the nominal convergence criteria, its level of economic performance, at the time of membership, matters substantially for its future economic growth path. In general, countries tended to join the EZ once their level of economic development was high enough in order to prevent a sudden loss of competitiveness – a process which could take years to reverse once in the EZ.

Figure 4.1 below depicts the GDP/capita in PPS – an indicator of economic performance – of the countries which joined the EZ after 2007, in the year prior to their adoption of the euro.

GDP/Capita in PPS in the year prior to joining the Euro, EU-28 = 100 94 100 88 90 78 74 80 72 67 64 70 60 50 40 30 20 10 0 SI CY MT SK EE LV LT

Figure 4.1 GDP/capita in PPS in Selected Countries

Source: Eurostat. Years of joining the Euro in parentheses. SI(2007), CY(2008), MT (2008), SK(2009), EE(2011), LV(2014), LT(2015).

As it can be seen, with the exception of the three Baltic countries, which had for years currency board arrangements and still had a ratio close to 70, the economic performance of other countries at the time of euro adoption was pretty high, the unweighted average GDP/capita ratio was over 83.

Romania, by contrast, has one of the lowest GDP/capita ratios in the EU, at the end of 2013 it stood at 54, after six years of dismal growth. The issue raised is during what time frame can Romania reasonably hope to raise its level of economic development close to that had by other countries which joined the euro. Figure 4.2 below presents the results of a hypothetical exercise involving projections of Romania's GDP/capita

under three scenarios by assuming various compound annual growth rates (CAGR)<sup>45</sup>. These are hypothetical in the sense that CAGR rates are assumed to remain constant although in practice they will fall as Romania closes the GDP/capita gap with average EU-28.

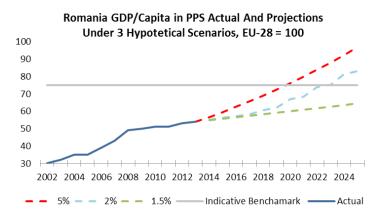


Figure 4.2 Projections of Romania's GDP/capita in PPS

Source: Authors' own calculations.

The three scenarios consider various CAGR rates of the GDP/capita in PPS terms for the period stretching to year 2025:

- Scenario 1: A CAGR rate of 5%. This corresponds to Romania's historical growth rate over the period 2002-2013. Given the existing global uncertainties and constraints to financing growth, such a high rate of purchasing power growth is highly unlikely to materialise over the next decade. In the past this was achieved mainly over the period of three years, between 2005 and 2008, around the years of the EU accession.
- Scenario 2: A CAGR rate of 2% corresponding to the historical growth rate over the period 2007-2013. Growth rates in the recent past may be a better approximation of what is going to happen in the future.
- Scenario 3: A CAGR rate of 1.5% assumed to be a more realistic projection given Romania's economic perspectives over the next decade.

 $<sup>^{45}</sup>$  A comment on a previous version of the paper suggested the use of the differential growth rate between Romania and EZ/EU. However, this is implicitly in our results since GDP/capita is expressed in PPS where EU-28=100.

Thus, if the GDP/capita is used as a supplementary indicator of the economic readiness for a country to join the euro area, using a target indicative benchmark for the GDP/capita of 75<sup>46</sup> - which would roughly be an average of the last 7 countries that adopted euro - in can be seen that year 2019, the existing target year for Romania's entrance into EZ, would not be "appropriate" even in the highly unlikely Scenario 1. Based on the current assumptions a more realistic target date for Romania to adopt the euro would be somewhere beyond the 2023 horizon<sup>47</sup>. If the logic that participation in EBU is seen as representing a step closer to adoption of the euro follows through, the argument on the real convergence above could warrant a rethinking of the provisional timeline for EBU membership.

# 4.3. The Lender of Last Resort and Potential Vulnerabilities to Contagion Effects

One argument in favour of EBU membership of a non-euro area country is the potential high costs it could face due to contagion effects (Isărescu 2014b). But, such an argument tends to minimise the role of the NBR could play as a lender of last resort. If Romania joined the EBU, the access to euro liquidity would need to be provided by the NBR due to the fact that non-EZ members will not have access to the ECB's financing. This constraint is a serious drawback as, in the event of a crisis, the speed of the response and the ability to enforce credible measures are crucial.

There are sensible reservations about how EBU would actually work in MS that have their own currencies and interest rate policies, and whose domestic banks do not have access to Eurosystem liquidity provision. The NBR's ability to act as a lender of last resort remains comfortably high. Figure 4.3 shows the ratio of NBR foreign reserves to monetary base (M0). At the end of July 2014 foreign reserves covered 2.6 times the monetary base, fulfilling a much stronger condition than that required by currency boards<sup>48</sup>.

Even after allowing for the reduction in the minimum reserve requirement ratio for foreign currency, so that these would converge towards the ECB levels and subtracting the medium term costs of the IMF repayment loan<sup>49</sup>, the ratio is still around 1.9 giving NBR ample space to act as a lender of last resort.

<sup>&</sup>lt;sup>46</sup> Other non-EZ countries, like Hungary for instance, expressed their intention to join the EZ only after the GDP/capita ratio (PPS) reaches the 80 threshold.

<sup>&</sup>lt;sup>47</sup> Suggesting an alternative date for Romania's euro adoption is not the purpose of this exercise. It simply points out that, if the authorities would favor a "wait and see" approach towards EBU, they could delay Romania's entrance into EBU until at least 2023 – if economic considerations would be taken into account – roughly the time when the SRF would be close to be fully built up.

<sup>&</sup>lt;sup>48</sup> Which would require a ratio equal to 1.

<sup>&</sup>lt;sup>49</sup> Assuming the MRR for foreign reserves is reduced by 14 percentage points, with each percentage point reducing NBR's foreign currency reserves by around EUR 250 Million.

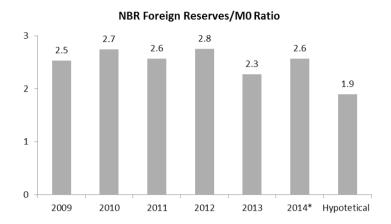


Figure 4.3 NBR's Foreign Reserves/Base Money Ratio

Source: Authors' calculation using NBR data. \*end July. Hypothetical is the ratio which takes into consideration the reduction of NBR's foreign exchange MRR ratio to 2% and medium term loan repayments to the IMF.

It is true that the income of the general consolidated budget as percent in GDP is the lowest among the EU MS and Romania would have a relative limited fiscal backstop capacity in case of bank's failure. One answer to this could be to enlarge the bail-in capacity of each bank by raising the quantity and the quality of capital and assure that the resolution fund is operational (covers 1% of insured deposits in 10 years). For cross-border groups the relevant arrangements will be required to contribute to a financing plan pre-agreed between the competent resolution authorities. If the ex-ante funds are insufficient to deal with the resolution of an institution, further contributions will be raised (ex-post). In case of necessity, national financing schemes will also be able to borrow from one another.

However, it is worthwhile mentioning that in Romania the vicious circle between banks and sovereign has been absent. Romania is one among the seven EU MS<sup>50</sup> where no public money was spent to rescue banks. A recent analysis by Cohen and Scatigna (2014) shows that banks that had high capital ratios or strong profitability in the post-crisis years tended to grow more than other banks. This points to the importance of solid bank balance sheets in supporting lending, but also to the fact that the banks' presence in growing markets matters.

Compared to developed EU economies, Romania has a higher growth potential. But even compared to other non-EZ countries, both bank lending rates and the interest rate spreads were higher in Romania (see Fig. 4.4), highlighting banks potential to

<sup>&</sup>lt;sup>50</sup> Bulgaria, the Czech Republic, Estonia, Croatia, Malta, Poland and Romania were the only EU MS where the government did not undertake any intervention to rescue banks during 2007-2013.

record higher profitability in the future. As a consequence banks' incentives for further deleveraging should become more limited<sup>51</sup>.

The small-scale of the banking system in Romania relative to the size of the banks in EZ, makes foreign banks' exposure significant to Romania look negligible from the home country perspective inviting to inaction even if some action would be required from the host country's point of view.

Bank Leding Rates, %, Selected Countries 20 15 10 5 O 2009 2010 2011 2012 2013 CR — HU — Banks Interest Rate Spread,%, Selected Countries 8 7 6 2010 2012 2013 2009 2011 CR — HU -

Figure 4.4 Bank Lending Rates in Selected Countries

Source: IMF

According to the current regulations, the home country inaction bias can be counteracted by the host country in case of the countercyclical capital buffer. In this case, the host authority activates the buffer with respect to the exposure to its jurisdiction while the home authority can always do more but not less. Such reciprocity clauses might be useful in case of other macro prudential tools as well to improve the efficacy of host country supervision efficiency (Borio, 2014).

<sup>&</sup>lt;sup>51</sup> Between 2008 and 2013 external funding from parent banks fell by more than a third due to the cross-border de-leveraging.

## 4.4. The Reputational Aspect of the ECB

One of the aspects taken into consideration when joining the EBU is the so-called "badge of quality" associated with being under the supervision of the ECB. In theory, such a position should allow banks located in countries under the ECB supervision to raise finance on more favourable terms. Thus, domestically-owned banks of MS outside EBU could be at a competitive disadvantage if the quality of their domestic banking supervision is deemed to be inferior to that within the SSM as this could result in higher funding costs (Darvas and Wolff 2013).

Reputational advantages of being willing to submit the banking sector to ECB supervision could constitute a motivation factor for the NBR to join the EBU sooner. Romania's banking system is deeply integrated in the banking system of the euro area; foreign banks fully used the benefits of the single market. The dominated banks population is represented by subsidiaries of financial groups headquartered in euro area (Table 10). Cross-border ownership generated cross-border lending. Thus it could be especially appealing the capacity of EBU participation to act as a mechanism for removing incentives for deleveraging on the part of banks with foreign capital, to eliminate possibilities of jurisdictional arbitrage and to create a more competitive market. However, the decision needs to put in balance the ability of domestic Romanian mechanisms, resources and instruments to cope on their own with the potential contagion effects of a crisis. The quality of existing national arrangements will be an important factor in determining whether there are net gains from opting into EBU.

# 4.5. Regional Aspects and the UK Effect

Given that some banks have a strong local presence, regional considerations could play a role. Of the 8 EU MS which can decide whether to join the EBU or not, Romania, Denmark and Bulgaria indicated their intention to join as soon as possible. The United Kingdom and Sweden will definitely opt out of the EBU for foreseeable future. While the rest of the MS have not refused the opportunity to join outright, for the time being, they have taken a "wait and see" approach. Hungary, Poland and the Czech Republic have all seem to be uncommitted so far; therefore their accession is not expected over the short term.

Table 4.2 Current Stance of Non-EZ Members vis-à-vis the EBU

	BG	CR	DK	HR	HU	PO	RO	SE	UK
Current stance vis a vis the			Probably ves	Wait and	_		Probably ves	1 0	1 0
EBU	yes	see	yes	see	see	see	yes	out	out

The concentration of EU financial market activity in the UK, London's role as a gateway to Europe and euro-denominated transactions, together with UK's decision to opt out of the EBU would raise serious issues to the EBU's effectiveness in the event of a significant negative financial shock originating in London.

## 4.6. What Are the Cost Implications of the EBU Membership?

In terms of impact on banks' and sovereigns' funding costs, predictions are rather difficult to make. For banks, on the one hand, funding costs should rise as a bail-in becomes more likely, deposits become less sticky, and senior unsecured creditors will be demanding a higher risk premia. Their costs will also rise due to the contributions needed to be paid into the resolution fund. In addition, fiscal buffers required for bank resolution would entail an additional cost. For EBU members, clearer rules on bank resolution are likely to remove some of the uncertainty premium.

But the EBU will have repercussions on the funding structure of banks more generally. Thus, for instance, the emphasis of bail-in over bail-out will have repercussions on depositors' behaviour. Two reactions appear most likely. First, deposits will become less persistent, as depositors will probably react more quickly to negative news. Second, individual and corporate depositors will seek to limit their exposure to a possible bail-in by limiting their deposits held in any one bank.

Given the requirements imposed by BRRD, these effects would likely be felt across all EU banks. The banks in the EU countries which decide to opt out of SSM will still need to contribute to their national guarantee bank fund. For these national competent authorities it makes sense to set a level of contributions in such a way that domestic banks contributions would be the equivalent of the amount which would have been paid into the SRF anyway. This will prevent a situation in the future when the country's decision to join the EBU would require additional funds to be paid in by the banks since, at the time of joining the EBU, the amount of bank contributions collected into the national resolution fund, and which would be transferred into the SRF, would need to be the same as if the country joined the EBU from the beginning.

On 21 October 2014 the EC adopted a so called Delegated Act<sup>52</sup> which details how banks contributions to the national resolution funds are calculated. The Delegated Act<sup>53</sup> will determine how much individual credit institutions will have to pay each year to their respective resolution funds according to two main factors:

1. The bank's size, the contribution of each institution will be pro rata to the amount of its liabilities excluding own funds and guaranteed deposits.

<sup>&</sup>lt;sup>52</sup> The Delegated Act is subject to a right of objection by the Council and the European Parliament within three months, extendable by a further three months from the moment of its publication in the Official Journal.

<sup>&</sup>lt;sup>53</sup> The Delegated Act should be applicable by 1 January 2015 when the BRRD enters into force.

2. Its risk profile, the riskier a bank is the higher its contribution would be. The proposal includes a number of risk indicators against which the risk level of each institution will be assessed. The Delegated Act introduces a range of 0.8-1.5 so that the total, risk-adjusted contribution of each institution may not be lower than 80% of the basic risk contribution or higher than 150% of it. In practice, the largest<sup>54</sup> banks<sup>55</sup> would pay the bulk of the contributions into the SRF.

In Romania, the levy for Bank Resolution Fund is currently set at 0.0678% of nonguaranteed bank liabilities (i.e. approximately 100 Mill RON in 2013). The levy is capped at 0.1% of nonguaranteed bank liabilities. The figure below depicts the size of total Romanian banking deposits, including guaranteed and covered deposits:

Romanian Banking Deposits, Bn EUR 80 70 60 50 40 30 20 10 2006 2008 2009 2010 2011 2012 2013 2014\* ■ Total deposits at credit institutions in Romania ■ Total deposits at credit institutions participating in BDGF Guaranteed Deposits Covered deposits

Figure 4.5 Romanian Banking Deposits

Source: BDGF and Dijmărescu (2014a, b).

According to data from the BDGF, at the end of 2013 the DGF was worth EUR 768 Million while the Bank Resolution Fund amounted to EUR 47.3 Mill. Thus, the ratio of BDGF own resources/covered deposits was around 3% at the end of September 2013.

<sup>&</sup>lt;sup>54</sup> Institutions are considered to be small institutions if they meet a double threshold: their total liabilities (excluding own funds) less covered deposits are equal or less to EUR 300 million, and their total assets do not exceed EUR 1 billion (MS can extend this threshold to up to EUR 3 billion).

<sup>&</sup>lt;sup>55</sup> According to the Commission Staff Working Document accompanying the Delegated Act the largest banks representing 85% of total assets would pay around 90% of total contributions, while the smallest banks representing 1% of total assets would pay around 0.3% of total contributions.

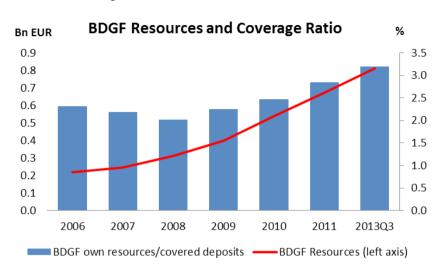


Figure 4.6 Romanian BDGF Resources

Source: BDGF and Dijmărescu (2014a, b)

The SRF fund will be built over 10 years and targets 1% of covered deposits. If the BDGF decides to follow the same procedure, which makes sense as explained above, the bank levies do not necessarily need to be higher than the current ones as the Romanian Bank Resolution Fund was already representing 18.2% of the target at the end of last year<sup>56</sup>. Thus, the 10% requirement of the gradual phasing has already been achieved before 2015, when the legislation will come into force.

Although the minimum level of DGS target funding required by EU law is 0.8% of covered deposits, MS can set a higher target levels for their DGS. Currently, schemes in about half of MS have already reached the above target level or are relatively close to it. In one third of MS, DGS funds are above 1% of covered deposits, and in a few of them, they are even beyond 2% or 3%.

At the EZ level Gros and Schoenmaker (2014) estimate the covered deposits to total banking assets in the EZ to 18.4% (in 2012) while for Romania the ratio was around 33% in 2013 (given that Romania's banking assets amounted to around EUR 80 Bn). But this happens because Romania's banks asset size is much smaller in comparison to the EU average (see Figure 3.1). In the future this ratio is expected to fall as Romania's banking assets expand – this is a compelling argument for opting out of the EBU for the time being as there is plenty of room for Romanian-based banks to increase the size of their assets, thus helping to finance the economy.

<sup>&</sup>lt;sup>56</sup> The Deposit Guarantee Fund was EUR 47.3 Million which represents 18.2% of the covered deposits, worth EUR 260 Million.

In practice, the size of the resolution fund could be enough to deal with a bank crisis, but it is likely to be insufficient to address the needs of a wider systemic crisis. Geeroms and Karbownik (2014) for instance compare several benchmarks when it comes to the size of the SRF. For instance, the EC impact assessment in 2012 comes up with the 1% of covered deposits figure taking into account the margin offered by the bail-in tools. IMF (2013b) estimates a common fund of 1-2% of total liabilities for large systems and 4-5% for smaller systems.

However, the EC's impact assessment for the BRRD includes wide ranging estimates, depending on the crisis scenarios employed. If bail-in would be sufficient to absorb losses and recapitalise banks, the minimum size of the total liabilities that should be eligible for bail-in ranges from 3 % to 17 % if these liabilities include unsecured debt, uncovered deposits and unsecured interbank exposures above one month maturity. Without bail-in, the size of the pre-financed fund would need to range between 0.3-28% of GDP, pointing to the difficulty of estimating the appropriate size of the SRF.

In any case however, it is very likely that in the event of a systemic crisis, the national governments will be ultimately responsible for bailing out their banks. For a non-EZ country in which the efficiency gains of joining the EBU are unsatisfactory (see for instance in Schoenmaker and Siegmann (2013), which show that this is the case for Romania) it would probably make more sense to opt out for the time being in order to avoid paying a net contribution into the SRF<sup>57</sup>.

In terms of potential fiscal costs, a banking crisis could entail and estimates are hard to be made. This is because potential fiscal costs would depend on several factors, among them the causes of the crisis or contagion effects.

As a benchmark however, one could look at historical costs, although in the case of Romania - see section 4.8 – these would be higher than future costs given the particularities of the 1997-1999 banking crisis and the fact that now the banking system is much more resilient and better supervised than it was then, or just take an average of recent fiscal costs in other European countries with banking systems similar to Romania's.

<sup>&</sup>lt;sup>57</sup> A comment on a previous version of the study highlighted the fact that it would preferable to have a partial mutualisation of costs rather than no mutualisation at all. However, we think that, on the contrary, with the risk of Romania being a net contributor to SRF quite high and given the relative soundness of the Romanian banking system compared to its EZ counterparts (i.e. no legacy assets, no bail out funds from the state), no mutualisation would be, in fact, preferable.

### 4.7. Shadow Banking in an Overbanked Europe

It is a widely acknowledged fact the Europe has an overbanked system (ESRB 2014, Liikanen 2014) and that the establishment of the EBU will trigger a structural change. The implications of this process are extremely important for the EZ's financial markets and although ECB has acknowledged this 58, further work on how to monitor and regulate the activity of the new entities emerging outside the standard banking system is ongoing. In the short term bank lending will be expected to gradually start losing share in favour of shadow banking lending as banks credit creation will continue to be hampered by additional regulation and the health of their balance sheets. Given this, two different questions are raised. First, given the size of the Romanian banks, their concentration and leverage factors which strategy would the NBR follow better, to wait and see or immediate opt-in?

Data from table A9 shows that Romanian banks are twice less levered than the domestic banks from EZ. The solvency ratio and tier 1 ratio are higher than in EZ and comparable to the levels registered by the foreign banks in EZ. Romanian banks have thus more room to absorb risks than the domestic banks from EZ. This argument has also been used forcefully by other non-EZ members national banks in advocating a "wait and see" approach towards joining the EBU (Singer 2014).

A second question pertains to the implications of the shadow banking for financial stability even with a functioning EBU. Shadow banking generally represents entities operating outside the regular banking system, such as investment funds, hedge funds, equity and bond funds, money market funds but also any other entities involved in securitisation or more broadly, finance activities. The FSB has described shadow banking as "credit intermediation involving entities and activities outside the regular banking system" (FSB 2013 - see Annex 2.1 for an overview of definitions used in the literature).

Work done by the Financial Stability Board (FSB 2013) revealed that as long as such entities remain subject to a lower level of regulation and supervision than the rest of the financial sector, reinforced banking regulation could drive a part of banking activities beyond the boundaries of traditional banking and towards shadow banking. As the recent history has shown, disorderly failure of shadow banking entities could pose a significant systemic risk, both directly and through their interconnectedness with the regulated banking system.

As IMF GFSR (2014) notes: "Like banks, a leveraged and maturity-transforming shadow banking system can be vulnerable to "runs" and generate contagion risk, thereby amplifying systemic risk. Such activity, if unattended, can also heighten procyclicality by accelerating credit supply and asset price increases during surges

<sup>&</sup>lt;sup>58</sup> See for instance Constancio (2014).

in confidence, while making precipitate falls in asset prices and credit more likely by creating credit channels vulnerable to sudden loss of confidence. [...] But whereas banks are subject to a well-developed system of prudential regulation and other safeguards, the shadow banking system is typically subject to less stringent, or no, oversight arrangements."

Liikanen (2014b) also acknowledges that "[...] the traditional banking sector in the euro area has slowed down since the beginning of the crisis whereas the growth has continued in the non-banking financial sector, especially in shadow banking. The diversification of the financial system in Europe is a healthy development".

The latest studies indicate that the aggregate shadow banking assets are about half the size of the regulated banking system. The size of the shadow banking system in Europe is thus quite large, FSB figures reveal that in 2012 its assets were EUR 16.3 trillion in EZ and EUR 6.7 trillion in the UK. Improved transparency<sup>59</sup> is one important measure to prevent that banks shift parts of their activity in the less regulated shadow banking sector. According to the IMF, GFSR 2014, the shadow banking system in EZ represents around 60% of total banking assets. The corresponding figure for the US is much higher, close to 180%. Moreover, the recent estimates provided by the IMF show a pick-up in shadow banking activity in both EZ and UK with investment based activities expanding strongly.

**Lending by Shadow Banks** (Percent of bank and shadow bank lending) 60 50 40 30 20 10 Dec-09 Dec-01 Dec-03 Dec-05 Dec-07 Dec-11 Dec-13 

Figure 4.7 Lending by Shadow Banks in the US, EZ and UK

Source: IMF, GFSR (2014).

<sup>&</sup>lt;sup>59</sup> The European Commission has recently adopted a Communication setting-out a roadmap for tackling the risks inherent in shadow banking, including enhanced transparency.

The continued increase in finance options outside the traditional banking system would require additional changes in regulation and supervision which would assess better the systemic risk. There is ongoing work, by the FSB for instance, in which proposed minimum standards for methodologies to calculate haircuts on noncentrally cleared securities financing transactions and a framework of numerical haircut floors<sup>60</sup>, are likely to be more clearly defined. However, until such standards are firmly put in place, the use of macroprudential tools by the national central banks would likely achieve superior results at the local level as these could be tailored to fit better specific market characteristics.

# 4.8. The Vicious Circle between Banks and Sovereigns; Banks Capital Shortfall

Public interventions to support financial institutions and financial markets during the financial crisis were frequent and in many cases sizable. The phenomenon, described as the vicious cycle between banks and sovereign, was the fundamental reason for EBU construction. By creating the bail-in frame and the fiscal backstop for resolution mechanism, spending taxpayers' money for saving banks is hoped to be avoided in the future. The analysis of the state interventions (Table 4.3) for supporting financial institutions gives an idea about the costs of banks' recovery and resolution in EZ and EU and implicitly about the dimension the fiscal backstop of the EBU has to have. The data collected by Eurostat<sup>61</sup> separates the effects of interventions into the effects on government budget deficit/surplus, the effects on current and possible future (contingent liabilities) government debt. All but seven MS reported various interventions in the context of the crisis during 2008-2013. There were no reportable interventions in Bulgaria, the Czech Republic, Estonia, Croatia, Malta, Poland and Romania. In Finland there were only interventions related to contingent liabilities.

<sup>&</sup>lt;sup>60</sup> The US has been one step ahead of ECB in this respect. For instance, the Fed's new "reverse repo" (RRP) facility gives shadow banks an account at the Fed, similar to the reserve accounts that deposit-taking institutions keep there. As noted by McCulley (2014), "It conceptually gives the Fed a way to prevent excessive credit creation in the shadow banking sector. Regular banks are required to hold minimum levels of capital, placing a limit on the expansion of their loan books. The Fed could achieve a similar effect in the shadow banking sector by setting minimum "haircuts" – limits on the amount market participants can raise against safe assets such as Treasuries. This could give it a degree of macroprudential control it lacked pre-crisis, when haircuts became perfunctory. Similarly, just as regular banks are required to hold a certain level of reserves, so shadow banks could be forced to maintain minimum balances in the RRP".

<sup>&</sup>lt;sup>61</sup> More details about the data sets on <a href="http://epp.eurostat.ec.europa.eu/portal/page/portal/government\_finance\_statistics/excessive\_deficit/supplementary\_tables\_financial\_turmoil\_statistics/excessive\_deficit/supplementary\_tables\_financial\_turmoil\_statistics/excessive\_deficit/supplementary\_tables\_financial\_turmoil\_statistics/excessive\_deficit/supplementary\_tables\_financial\_turmoil\_statistics/excessive\_deficit/supplementary\_tables\_financial\_turmoil\_statistics/excessive\_deficit/supplementary\_tables\_financial\_turmoil\_statistics/excessive\_deficit/supplementary\_tables\_financial\_turmoil\_statistics/excessive\_deficit/supplementary\_tables\_financial\_turmoil\_statistics/excessive\_deficit/supplementary\_tables\_financial\_turmoil\_statistics/excessive\_deficit/supplementary\_tables\_financial\_turmoil\_statistics/excessive\_deficit/supplementary\_tables\_financial\_turmoil\_statistics/excessive\_deficit/supplementary\_tables\_financial\_turmoil\_statistics/excessive\_deficit/supplementary\_tables\_financial\_turmoil\_statistics/excessive\_deficit/supplementary\_tables\_financial\_turmoil\_statistics/excessive\_deficit/supplementary\_tables\_financial\_turmoil\_statistics/excessive\_deficit\_statistics\_financial\_turmoil\_statistics\_financial\_turmoil\_statistics\_financial\_turmoil\_statistics\_financial\_turmoil\_statistics\_financial\_turmoil\_statistics\_financial\_turmoil\_statistics\_financial\_turmoil\_statistics\_financial\_turmoil\_statistics\_financial\_turmoil\_statistics\_financial\_turmoil\_statistics\_financial\_turmoil\_statistics\_financial\_turmoil\_statistics\_financial\_turmoil\_statistics\_financial\_turmoil\_statistics\_financial\_turmoil\_statistics\_financial\_turmoil\_statistics\_financial\_turmoil\_statistics\_financial\_turmoil\_statistics\_financial\_turmoil\_statist\_financial\_turmoil\_statist\_financial\_turmoil\_statist\_financial\_turmoil\_statist\_financial\_turmoil\_statist\_financial\_turmoil\_statist\_financial\_turmoil\_statist\_financial\_turmoil\_statist\_financial\_turmoil\_statist\_financial\_turmoil\_statist\_financial\_turmoil\_statist\_financial\_turmoil\_statist\_financial\_turmoil\_statist\_finan

Table 4.3 The Effects on Governments' Budget and Financial Accounts Arising from the Support of Financial Institutions

	2008		2009		2010		2011		2012		2013	
	EUR Bn	#WS	EUR Bn	#WS	EUR Bn #MS	#WS	EUR Bn	#WS	EUR Bn	#WS	EUR Bn	#WS
EZ									-		-	
Net revenues	-3.1	4	6.9-	8	8.99-	7	-9.6	6	-52.2	13	-28.4	11
( to ( ) (+)												
(-)												
Assets	174.9	6	210.6	13	386.7	13	347.9	13	363.0	14	297.8	13
Liabilities <sup>1</sup>	177.8	111	218.7	13	467.8	13	458.3	12	531.6	15	480.7	15
Contingent												
liabilities <sup>2</sup>	509.3	10	774.8	13	580.3	13	576.3	14	579.2	14	502.9	14
GDP	9265.9		8940.0		9185.8		9444.0		9505.5		9602.6	
EU												
Net revenues/												
cost	-8.7	9	-14.7	6	-64.5	7	-8.5	10	-49.6	13	-29.2	12
Assets	212.7	12	304.9	17	581.5	17	499.9	18	527.5	18	448.7	16
Liabilities <sup>1</sup>	242.9	14	356.4	17	677.3	18	655.5	17	717.2	19	647.4	18
Contingent												
liabilities <sup>2</sup>	848.0	12	1,429.0	16	1,051.8	16	810.2	17	602.0	17	505.2	16
GDP	12548.5		11815.7		12337.2		12711.2		12959.7		13068.6	

Source: Eurostat, Supplementary Table for the Financial Crisis. Notes: 1 recorded in ESA95 government debt, 2 not recorded in ESA 95 government debt.

The banking system support from public money during 2008 and 2013 generated the highest net costs in 2010 (EUR 66.8 Billion) and 2012 (EUR 52.2 Billion) close to the magnitude of the fiscal backstop of EUR 55 Billion intended to be accumulated until 2024. The government support with impact on deficit/surplus of general government<sup>62</sup> budget was needed in an increasing number of countries. The financial support affecting the stocks of governments' financial assets and liabilities<sup>63</sup> and the stock of contingent liabilities was offered in even more countries determining the growth in the balance sheet until 2010 with the stock of liabilities consistently exceeding that of assets. Where interventions were needed the risks in the banking systems were the highest. The risks were the highest in countries with the largest banking systems characterized by low equity to assets ratio.

Table 4.4 EU MS Quartiles by Banking Assets to GDP Ratio

		2008	2009	2010	2011	2012	2013
1st quartile	Assets-to-GDP,%	65-139	57-127	69-137	67-119	63-118	62-118
(smallest)	Equity-to-assets,%	8.4	9.2	9.5	9.8	10.6	10.8
	%EU GDP	7.2	6.7	7	7	7	7.1
2 <sup>nd</sup> quartile	Assets-to-GDP,%	139-257	127-253	137-292	119-38	118-287	118-254
	Equity-to-assets,%	6.9	7.2	7.2	6.7	8	8.7
	%EU GDP	16.6	17	16.5	16.1	17.2	35.1
3 <sup>rd</sup> quartile	Assets-to-GDP,%	257-417	253-387	292-409	308-404	287-387	254-355
	Equity-to-assets,%	4.2	5	5.1	4.6	5	5.9
	%EU GDP	62.9	51.5	50.9	51.1	49.2	31.4
4 <sup>th</sup> quartile	Assets-to-GDP,%	417-854	387-711	709-854	404-802	387-801	355-724
(largest)	Equity-to-assets,%	4.8	5.8	7.4	7.1	7.3	7.5
	%EU GDP	13.3	24.9	25.6	25.7	26.6	26.4

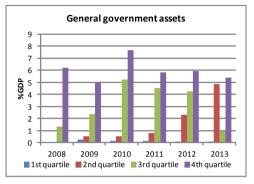
Source: Own computation based on Eurostat, ECB and European Commission.

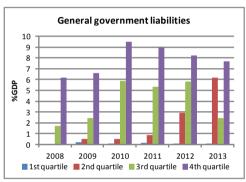
<sup>&</sup>lt;sup>62</sup> The net impact on government deficit/surplus is calculated as the difference between total revenues and total expenditure. Government revenues include fees received as remuneration for guarantees granted to financial institutions on the value of their impaired assets or for the repayment of their liabilities, accrued interest receivable on loans granted, distributions received on equity subscribed by government in financial institutions. Government expenditures include accrued interest payable arising from financing of interventions, mainly due to issuance of debt instruments, granting funds in the form of capital injections recorded as capital transfer expenditure, amounts of payments arising from government guarantees granted to financial institutions that have been called by the beneficiary and consequently paid by the government or associated debt that has been assumed.

<sup>&</sup>lt;sup>63</sup> The most common types of assets and liability instruments recorder in government accounts due to government interventions were: loans granted by government or acquired from financial institutions (assets), loans incurred (directly or indirectly) by government in order to finance various interventions (liabilities), debt instruments issued by financial institutions and bought by government as provision of liquidity (asset), debt securities issued by government to finance the interventions (liabilities), equity subscribed by government in financial institutions as a counterpart for a provision of liquidity to the banks.

Net revenue(+)/cost(-) for general government 0.2 0 -0.2 **6** -0.4 % -0.6 -0.8 -1 -1.2 2008 2009 2010 2011 2012 2013 ■1st quartile ■2nd quartile ■3rd quartile ■4th quartile







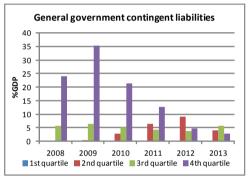


Figure 4.8 shows the magnitude of the four types of state interventions by quartiles of countries sorted in ascending order of the magnitude of their banking systems in terms of assets-to-GDP ratio. The  $1^{\rm st}$  quartile which include countries with the lowest assets-to-GDP ratio up to 120% beyond 2010 (Table 4.4) did not need government support for financial institutions. Moreover, the banking systems in these countries were the least levered. Most of the public support of all kind was granted in countries in the third and fourth quartiles with the largest and most leveraged banking systems. The rising support in the second quartile starting with 2012 was due to changes in the members in 2012 Belgium replaced Portugal and in 2013 Germany took the place of Belgium.

#### Romania's Recent Experiences With Banking Crises

The last domestic bank failure occurred in 2006 and closed with a wave of small banks'64 failures at the turn of century. For insured depositors at these banks the

<sup>&</sup>lt;sup>64</sup> The weights in total assets in the year prior to the bankruptcy were the following: 0.4% for Banca Comercială Albina SA in 1998, 2.2% for Banca Internațională a Religiilor in 1999, 0.9% for Bankcoop in 2000, 0.15% for Banca Română de Scont in 2001, 0.2% for Banca Turco-Română in 2001, 0.1% for Banca Columna in 2002, 0.02% for Nova Bank in 2005.

DGF paid RON 512 Million between 1999 and 2005, representing below one tenth of a percentage point of GDP yearly. Near one third (34.18%) of that amount was recovered from the bankrupted banks up to end 2013 (BDGF, 2013).

The real big trouble represented the resolution of two large state banks, Bancorex and Banca Agricolă (IMF, 2001). Bancorex, the former foreign trade bank from the Communist era was the largest state-owned bank in Romania prior to its closure in 1999, accounting for one fourth of the total banking sector assets. The legacies of subsidized loans, years of mismanagement and webbed political connections rendered Bancorex the most weakened bank in the wake of exchange rate and price liberalization, and the termination of central bank's directed credit in 1997. At the end of 1997, the bank received and equivalent of USD 600 Million in government bonds (2% of GDP) in order to restructure its nonperforming loans. The restructuring plan was not implemented and the bank's situation worsened. When the bank was again in crisis in late 1998, the authorities concerned about the systemic risk and the cost of liquidation contemplated an up-front recapitalization. In early 1999, after investigations, it became clear that the bank was in worse shape than expected and the privatization with recapitalization would be prohibitively costly. In April 1999 the bank collapsed as depositors massively withdrew their money. In April 2000, the authorities finalized a liquidation plan aimed at orderly removal of the bank from the banking system. All bad assets amounting to around USD 1.7 Billion (5% of GDP) were transferred to the newly established Asset Recovery Agency (AVAB), some of deposits liabilities and most foreign debt liabilities were transferred to BCR. The NBR provided special credit to curtail the financial haemorrhage. Both BCR and NBR were compensated by government securities in corresponding currencies. The remainder of the bank was merged with BCR, which absorbed the balance sheet of Bancorex and received government securities to compensate the gap in Bancorex balance sheet. The Ministry of Finance agreed to guarantee Bancorex's off-balance sheet items (more than USD 400 Million) transferred to BCR. The closure of Bancorex removed some USD 2 Billion in nonperforming assets from the banking system. In this process, the government took on public debt amounting to USD 1.5 Billion (net of provisions and other assets) or 5.5% of GDP in 1999.

Banca Agricolă was established in 1990 to specialize in financing agricultural and rural sector on behalf of the state and became the second largest insolvent bank in 1997 with around \$750m nonperforming loans or 70% of its total assets; by the end of 2005 it accounted for 20% of total banking system assets. In 1997 the government initiated a restructuring plan according to which part of the non-performing loans were written off against \$420m five year flouting T-bills used for the bank recapitalization and the bank was downsized. The bank continued to make losses, partly due to the yield mismatch in assets and liabilities and partly to non-transparent investments such as the NIF – National Investments Fund which collapsed in May 2000. A renewed

effort to restructure the bank was agreed in 1999, with a view to a final resolution of the bank's problem by mid-2000. The restructuring process involved the transfer of all bad assets (USD 1.5 Billion) and assets in the Danube Fund (USD 550 Million) to AVAB in exchange for government securities, appointment of an administrative board to effectively place the bank under the control of NBR, establishment of a strict timetable for restructuring and privatization of the bank. The government approved the privatization strategy in April 2000, when the bank was publicly offered for sale. In 2001 the privatization was completed.

### The EU's Banks Capital Shortfall

On 26 October 2014 the ECB, simultaneously with the stress tests carried out by EBA, has undertaken a comprehensive audit of the value of the assets on each bank's balance sheet, the Asset Quality Review (AQR)<sup>65</sup>.

Table 4.5 Top Riskiest EU Banks, as of 24 October 2014

Rank	Name	Country	SRISK	Market Capitalisation	Leverage	LRMES*	Corr with world market
			Bn EUR	Bn EUR	ratio	%	
1	Deutsche Bank	GE	75.4	34.7	50.7	40.4	0.68
2	BNP Paribas	FR	74.3	61.7	32.9	42.1	0.61
3	Barclays	UK	67.6	47.3	36.7	43.5	0.57
4	Societe Generale	FR	58.7	31.1	45.1	43.7	0.61
5	Credit Agricole	FR	55.4	57.2	29.1	39.1	0.59
6	Royal Bank of Scotland	UK	38.9	52.9	25.3	36.7	0.51
7	ING	NL	34.1	43.5	23.9	49.8	0.6

<sup>&</sup>lt;sup>65</sup> Results are available on the ECB website at: <a href="https://www.ecb.europa.eu/ssm/assessment/html/index.en.html">https://www.ecb.europa.eu/ssm/assessment/html/index.en.html</a>.

8	London Stock Ex Group	UK	31.0	8.4	80.0	30.0	0.49
9	Unicredit	IT	26.5	34.5	25.6	37.9	0.55
10	BPCE	FR	25.8	60.9	18.9	40.7	0.52
11	Commerzbank	GE	24.6	13.4	45.7	33.7	0.57
12	AXA	FR	22.9	43.4	19.2	50.2	0.63

Note:  $^{\star}$  - LRMES is defined as the sensitivity to a (hypothetical) 40% semi-annual market decline.

Source: The Center for Risk Management at Lausanne (CRML) based at HEC Lausanne, <a href="http://www.crml.ch/index.php?id=4.">http://www.crml.ch/index.php?id=4.</a>

This was applied to the 123 largest EZ banks, which from 4 November are regulated by the ECB. The results of these tests revealed that 24 banks failed, which together have a capital shortfall under an adverse macroeconomic scenario amounting to €24.6bn, or almost 0.1% of total banking assets of EUR 28 Trillion. And, after allowing for capital raised since the beginning of 2014, 14 banks remained short by EUR 9.5 Billion.

But the results of the stress test have been challenged by alternative estimates which used a different methodology. Professors Viral Acharya and Sascha Steffen from the Volatility Institute at New York University's Stern School<sup>66</sup> and Center for Risk Management in Lausanne found much larger values for banks capital shortfalls (Table 4.5). The systemic risk measures (SRISK, leverage and LRMES) are based on papers by Acharya, Pedersen, Philippon, and Richardson (2010) and Brownlees and Engle (2010). The paper by Engle, Jondeau, and Rockinger (2012) provides an extension for European banks/countries. Below are the Top Riskiest EU Banks with a total systemic risk<sup>67</sup> (SRISK) value of EUR 535 Billion, far higher than the ECB's estimate.

There are several explanations for these differences.

The EBA has a long record of stress tests that tend to underestimate the capital shortfalls in EU banks. As Buiter (2014) remarks: "Both the AQR and the stress test relied heavily on national regulators and supervisors, the very entities on whose watch the excesses that led to the financial crisis were allowed to fester and compound.

<sup>66</sup> http://vlab.stern.nyu.edu/.

<sup>&</sup>lt;sup>67</sup> The expected capital shortfall under adverse scenarios.

Table 4.6 Top Riskiest EU Banking Systems, as of 24 October 2014

Country	SRISK	Market Cap.	Leverage	LRMES	ECB Shortfall
	Bn EUR	Bn EUR	ratio	%	Bn EUR
France	261.8	331.8	24	38.2	0
UK	209.4	613.9	16.2	34.1	
Germany	127.1	178	24.1	31.3	0
Italy	76.1	160	20.4	33.5	7.6
Netherlands	50.7	96.8	16.7	39.1	
Switzerland	41.7	236.8	12.6	26.7	
Spain	25.4	181.7	13.6	37.6	0
Belgium	21.1	47.6	14.0	31.1	0.3
Sweden	16.3	169.1	9.7	36.2	
Denmark	12.0	37.3	16.2	27.5	
Austria	10.7	28.4	17.3	24.9	0.9
Greece	10.6	30.6	17.5	29.1	8.7

Source: The Center for Risk Management at Lausanne (CRML) based at HEC Lausanne, <a href="http://www.crml.ch/index.php?id=4">http://www.crml.ch/index.php?id=4</a>.

There are fundamental differences in the methodology. For instance, SRISK takes into account the banks' total balance sheet without regard for risk. It also uses the stock market value of a bank and not its book value of equity. But, in spite the fact that using the stock market to compute a bank's equity makes SRISK vulnerable to irrational optimism or irrational pessimism of investors (Braithwaite 2014), the authors argue that this measure would be a better indication in extreme situations.

As it can be seen in the table above, France has the riskiest banks (see also Annex 6). The large differences between ECB and alternative estimates of EZ banks capital shortfall (last and second column in table above) raise serious questions over the true state of health of the EZ's banking system. If the EZ's banking system is indeed as risky as implied by the SRISK values, for Romania it pays off to adopt a "wait and see" approach towards the EBU. Part of the reason why the SRISK values are so high resides in the quality of the legacy assets in EZ's banks. As long as these continue to remain a large source of valuation uncertainty staying outside the EBU for the time being should entail lower future costs.

### 4.9. The Implications of Macroprudential Policies

Prudential requirements set for the banking sector are currently undergoing a thorough reform. Banks capital requirements, implemented in the EU legislation via the BRRD for instance, have represented a major step forward in reducing banks' incentives towards taking excessive risks. After the crisis, prudential regulatory requirements have been increasingly set to address macroprudential or system wide vulnerabilities and risks in addition to targeting institution-specific risks. These are seen as key measures in enhancing the soundness of Europe's financial system especially at times of economic stress, when the EU economy is subjected to asymmetric shocks and increased financial risks (see for instance IMF GFSR 2014). Macroprudential policy aims at monitoring endogenous processes in which institutions that may seem individually sound could trigger a systemic crisis through mutual interaction. Thus, within the EZ, the ability of national central banks to make use of their macroprudential policy tools, tailoring them to country-specific needs, is distinctly relevant as the monetary policy is conducted for the entire EZ.

Macroprudential policy is, as its name suggests, inherently pro-active and is aimed at enhancing the system's resilience to shocks through the creation of capital, systemic and liquidity buffers, by addressing procyclicality issues or by containing risks that individual institutions may pose to the system as a whole.

The SSM assigns certain responsibilities related to macroprudential supervision to the ECB. As such macroprudential supervision recognises the importance of the inter-linkages among banks and financial institutions by adopting a broader macroeconomic view, in order to avoid the risk of the fallacy of composition, reduce the risk and the macroeconomic costs of financial instability<sup>68</sup>. While a Supervisory Board was created for microprudential supervision, no such institution was set up for macroprudential supervision; therefore these tasks will lie within the ECB.

But the influence of the ECB in this respect could be detrimental to non-EZ countries and even within the EZ as, as for now, it is not clear how the ECB's macroprudential policy would work in the EBU. Recently, representatives of both Poland and Czech Republic National Central Banks (Belka 2014 and Singer 2014) expressed their concern over ECB's centralised powers, especially the influence of the SSM when it comes to macroprudential regulation. They argued that although monetary policy itself cannot be autonomous – given the existence of cross-border financial linkages and the free movement of global capital - it should be supplemented by a country-specific macroprudential policy. The latter has to remain under the control of national authorities given the fact that asymmetries are inherently local,

<sup>&</sup>lt;sup>68</sup> Macroprudential policy uses diverse instruments, including supervisory tools like countercyclical capital buffers, sectorial capital requirements, caps on loan-to-value (LTV) and debt-to-income (DTI) ratios, taxation policy and structural (competition) policy.

rather than global. As an example, housing and labour market features are markedly different across EU countries and therefore different measures are needed to address and prevent the disequilibria in these markets (via various LTV or DTI across different jurisdictions). Romania itself had a recent experience with the housing boom and the NBR made use, at the time, of a set of macroprudential policies to stem the excessive credit growth.

The NBR should use its accumulated experience with macroprudential policy and enhance its framework further to make use more extensively and efficiently of its policy tools. Such a situation is preferred rather than ceding control to the SSM, where the imposition of standards and requirements might be inappropriate, at times, for the Romanian economic and financial conditions.

# 5. Concluding Remarks

The establishment of EBU is a landmark endeavour. Its aims are largely twofold: to strengthen the single market for financial services by ensuring a level playing field for banks and to break the vicious circle between sovereigns and banks. In this respect the banking union could be seen as a direct solution to the Maastricht treaty's incompleteness in the banking area. The 1992 EU treaty combined a commitment to a single financial market and a single currency, but there was no provision to integrate bank supervision and resolution at European level.

Although on paper the architecture of the EBU is largely in place now, two major questions remain. First, how would the EBU function in practice? Of the three pillars that form the fully fledged banking union only the first one, the SSM is complete. The second pillar, the SRM, is only partially complete as the issue of "legacy assets" weighs on its effective functioning. And the third pillar, SDGS has not even been attempted yet.

The second major question is how the European financial system would look like in the near future? Over the last two decades European banks have become bigger, more concentrated and more leveraged compared to their counterparties in both the US and Japan, and during the crisis became a serious risk threat to the stability of the European Financial System itself. Since the beginning of the crisis the traditional banking sector in the euro area has slowed down whereas growth has continued in the non-banking financial sector, especially in shadow banking. While the diversification of the financial system in Europe is a welcome development it also brings about a series of unknowns, especially related to the speed and direction of change of the existing financial structure in the euro area and the requirement for additional supervision – and possibly regulation - of the shadow banking system in order to prevent future systemic risks emerging.

As much effort as it has been put into the set-up of the EBU and its institutions, the effective functioning of the EBU is likely to be hampered both by the existing design flaws, such as the SSM set-up under the ECB umbrella, banks' inheritance of the legacy assets (this despite the recent AQR and stress test results) and, more crucially, the absence of an European fiscal central authority acting as a counterpart to the ECB.

There is a significant change in the resolution mechanism however. As detailed in the BRRD, in the future cases of banking sector failures bail-in should become the rule and bail-outs the exception. The winding-up or recovery of the banks concerned will be based on a pre-defined cascade of liability. Thus, losses will be covered by recourse to a sequence of bail-in involving, in order, shareholders, subordinated creditors, senior unsecured bond-holders and certain groups of depositors. The hope

of the European regulators is that the 8% bail-in threshold is likely to be enough to address small isolated banking crisis, thus preventing banks' recourse to ESM/SRF funds or, ultimately, public sector funds.

For Romania, or any non-EZ member for that matter, the decision to join the EBU would depend, more broadly, on its benefits vs. costs analysis and its decision to join the EZ in the near future. However, the NBR has already declared joining the EBU a strategic decision and it intends to complete the whole application process by the end of 2016. The NBR's stance of joining the EBU sooner rather than later contrasts other central banks' decisions namely Poland, Czech Republic and Hungary, all of them opting to stay out of the EBU for a time being, in spite of the fact that there are many similarities among banking structures in all these economies.

Assessing the benefits or the drawbacks of accessing EBU before the membership in the EZ has to take into account whether the objectives aimed by the EBU construction can significantly support Romania's objectives of economic growth, financial stability and intermediation for growth as well as efficient implementation of monetary and fiscal policies. In today's financially integrated world, much depends on the structure of the domestic banking system and its cross-border inter-linkages with its EZ counterparts. Oversized and thereby risky banks populate the EZ with disappointing effects on economic growth (given their low propensity to lend to businesses which exhibited various levels of riskiness). The conduct of supervision by ECB in EBU might have as objective the downsizing of significant banks. This objective clashes with Romania's interest where the size of the banking system is just one fifth of the EZ median sized banking system and where the subsidiaries owned by the significant EZ banks represent 57% of the total banking assets. In Romania, the banking system size has to grow in order to support future economic growth and real convergence. For countries with credit to GDP ratio beyond 165%, the marginal effect on bank risk of a marginal increase in bank credit to GDP ratio becomes 3 times higher than the estimated effect for countries in the middle 50% of distribution. Judging upon these facts Romanian banking system is the least risky and has the highest growth potential with positive effects on real growth in EU.

The Romanian financial soundness and stability indicators such as capital adequacy or liquidity indicators paint a better picture compared to its counterparts in most EU countries. While it is true that the asset quality indicators reveal a high ratio for non-performing loans, the return to economic growth and the end to the current deleveraging process would very likely improve this indicator in the future. During the crisis Romanian banks remained more reliant on interbank market than domestic banks from EZ and less reliant than the foreign banks from EZ. This suggests that the fragmentation of money market was more intense for banks domiciled in EZ and the lack of confidence more widespread among them.

The fear that the non-EBU membership would stimulate deleveraging of banks with foreign capital operating in Romania is, very likely, overdone. The cross border exposure is rather led by the expectation on banks profitability and capital returns. It is true that at the moment banks' profitability in Romania is rather dismal. But, prior to the crisis, Romanian based banks' profitability was among the highest in CEE, not to mention EZ. The way to look at this indicator is across a financial cycle. Once the lending to the economy resumes profitability will improve. Moreover, banks' profitability has been impacted by regulation. In Romania, high Tier 1 capital ratios and high foreign reserves requirement ratios, have a negative impact on banks' profitability indicators. However, this is achieved at a benefit of a sounder banking system. In addition, banks deleveraging in Romania is very likely to have already come close to an end as, over the last years the process was in fact self-correcting. External funding from foreign banks has already fallen by a third compared to its pre-crisis level and domestic deposits now finance all domestic loans, reducing the need for banks capital transfers from abroad. Given the interest rate differential between both domestic lending and borrowing rates and domestic-foreign lendingborrowing rates it makes sense for a bank, from a profitability point of view, to expand in Romania, leading credit growth again into positive territory.

Another argument often mentioned in favour of joining the EBU is the large presence in Romania of banks headquartered in EZ (see section 3.3). But, this argument can work both ways: since banks headquartered in the EZ would need to comply with EBU requirements and since all EU members will join the EZ eventually, and thus EBU, sooner or later, the banks' incentives are to strengthen balance sheets across all of their EU operations. This strategy will prevent them from losing market share and competitive advantage at a time when Romania would join EBU.

There are a string of other arguments in favour of joining the EBU which are deemed to bring a number of benefits on several fronts. On the financial stability front the ECB, as a single supervisor, would – allegedly – be more credible than any national supervisor. The prevention and solution of bank failure mechanisms would probably be deemed to be more consistent and effective. But the NBR proved to be an efficient supervisor in the past. Romania is among the seven EU MS where no public money was needed for rescuing banks post-2008. ECB has yet to prove its efficiency as supervisor and gain the reputation in the years to come. Moreover, ECB has to persuade the market that the independence of the monetary policy will not be impaired by its single supervisory role

On the monetary policy front, a more integrated financial system in EZ/EU is expected to reverse the existing trend of market fragmentation, provide funding – and thus to improve credit conditions in countries with perceived weaker banking systems. As a conclusion, all these aspects should enhance the effectiveness of the monetary policy transmission mechanism.

One argument in favour of the EBU membership is the potential containment of high costs the contagion effects could trigger. Being inside the EBU is deemed by some to offer a better protection to banks in case a financial crisis emerges. But, such an argument tends to minimise the role of the NBR could play as a lender of last resort. The NBR's ability to act as a lender of last resort remains comfortably high. At the end of July 2014 foreign reserves covered 2.6 times the monetary base, fulfilling a much stronger condition than that required by currency boards. It is true that the income of the general consolidated budget as percent in GDP is the lowest among the EU MS and Romania would have a relative limited fiscal backstop capacity in case of bank's failure. One answer to this could be to enlarge the bail-in capacity of each bank by raising the quantity and the quality of capital and assure that the resolution fund is operational. If Romania joined the EBU, the access to euro liquidity would need to be provided by the NBR due to the fact that non-euro area members will not have access to the ECB's financing. This is a serious drawback as, in the event of a crisis, the speed of the response and the ability to enforce credible measures are crucial. There are sensible reservations about how EBU would actually work in MS that have their own currencies and interest rate policies, and whose domestic banks do not have access to Eurosystem liquidity provision.

Moreover, joining the EBU could seriously impair the effectiveness of NBR's monetary policy to respond timely to asymmetric shocks. The ECB's centralised powers and its influence over the SSM when it comes to macroprudential regulation would hamper the NBR's response to sector specific shocks. Given the fact that asymmetries are inherently local rather than global, monetary policy should be supplemented by a country-specific macroprudential policy, with the latter remaining under the control of national authorities. Housing and labour market features are markedly different across EU countries and therefore different measures are needed to address and prevent the disequilibria in these markets (via various LTV or DTI across different jurisdictions). Romania itself had a recent experience with the housing boom and the NBR made use, at the time, of a set of macroprudential policies to stem the excessive credit growth. The NBR should use its accumulated experience with macroprudential policy and enhance its framework further to make use more extensively and efficiently of its policy tools. Such a situation is preferred rather than ceding control to the SSM, where the imposition of standards and requirements might be inappropriate, at times, for the Romanian economic and financial conditions.

Up to a point, the fiscal and banking costs are likely to be similar whether Romania joins the EBU or not. This happens because after the bail-in, it is very likely that, in the event of a systemic crisis, the national governments will ultimately be responsible for bailing out their banks anyway. The difference will be made by the recourse to the SRF/ESF funds (if part of the EBU) or the Romanian Bank Resolution Fund (if not part of the EBU). The Romanian banking system is superior in terms of

capital adequacy, non-performing provisioning and liquidity than many EZ banking systems. Therefore the risk for Romania to be a net contributor of public funds to the rescue of foreign banks, in the case of EBU membership, is high. Moreover, while it is true that the Romanian Bank Resolution Fund does not have the economic scale benefits of pooling it is still on course to be higher capitalised, in relative terms, than SRF.

To sum up, given the existing designing flaws in the EBU structure, the current state of Romanian banking sector, future perspectives of economic development in Romania and the benefits for monetary policy, a "wait and see" approach would be preferable instead of a premature participation in the EBU. It is a sensible option to wait and see how the EBU works in practice first, before committing to its membership, a strategy already adopted by most non-EZ EU members.

# Annex 1. Banks Assets, Foreign Consolidated Claims and the G8 Exposure

Table A1. Banks' assets dynamics originating from EU

اێ	From EU, bn euro		Annual % c	Annual % change 2012/2008	3/2008	% cha	% change 2013/2012	12
subsidiaries   brar	=	branches	subsidiaries branches	branches	total	subsidiaries	branches	total
2013 2008		2013						
4200 3327		2289	0.2	-4.7	-1.8	-11.6	-16.5	-13.4
3080 1269		1132	-0.4	3.3	9.0	-14.3	-21.6	-16.4
56.1 4.8		7.7	-4.2	10.2	-3.0	-2.8	8.8	-1.5
30.1 1.7		2.5	-1.7	11.1	2.4	-0.3	-4.8	
159.8 22.8	-	18.2	3.6	9.9-	2.3	7.7	5.0	7.4
46.1 5.2	-	2.6	-7.6	6.1	-6.5	-10.5	15.2	-7.6
205 16.2		8.0	1.4	-18.8	0.1	7.1	13.6	7.4

Source: ECB EU structural financial indicators.

Table A1a. Banks' number dynamics originating from EU

	total		-1.2	-0.8	-3.4	-11.8	2.8	-8.0	0.0
% change 2013/2012	branches		8.0	1.3	12.5	-25.0	5.0	-10.0	4.8
% chang	subsidiaries		-1.1	-0.4	-5.4	0.0	7.5	0.0	3.9
2/2008	total		-2.4	-1.8	-3.2	0.0	3.8	-3.6	0.0
Annual % change 2012/2008	branches		-4.6	-4.5	-9.5	-7.7	0.0	-6.7	-3.2
Annual %	subsidiaries		-4.4	-4.0	-2.2	0.0	0.0	-5.7	-2.3
	branches	2013	771	562	10	4	15	10	18
From EU, bn euro	bran	2008	418	295	19	12	16	14	30
From EU	iaries	2013	438	309	21	13	16	15	31
	subsidiaries	2008	525	364	23	13	16	19	34
			EU	EZ	RO	BG	CZ	НП	PL

Source: ECB EU structural financial indicators.

Table A2. Banks' assets dynamics originating from non-EU

		From 1	From non-EU		Annual %	Annual % change 2012/2008	2/2008	% ch:	% change 2013/2012	012
	subsic	subsidiaries	branches	ches	subsidiaries branches	branches	total	subsidiaries branches	branches	total
	2008	2013	2008	2013						
EU	1241	1258	1870	2072	1.9	4.9	3.8	-6.0	-8.6	-7.6
EZ	551	497	208	245	-2.0	7.2	8.0	-2.2	-10.7	-5.2
RO	1	ı	0	0						
BG	8.0	ı	1	0.4						
CZ	1	0	1	0						
HU	3.8	ı	0	0						
PL	25.5	24.4	0	0	-5.3		-5.3	19.2		19.2

Source: ECB EU structural financial indicators, where the number of institutions is less than three, the underlying data are not disclosed for confidentiality reasons.

Table A2a. Banks' number dynamics originating from non-EU

	From	From non-EU		Annual %	Annual % change 2012/2008	12/2008	% ch	% change 2013/2012	012
subsi	subsidiaries	branches	ches	subsidiaries	branches	total	subsidiaries	branches	total
2008	2013	2008	2013						
293	289	288	217	-0.3	1.2	0.3	-0.3	2.2	8.0
180	187	181	116	1.0	1.5	1.2	-3.2	6.5	9.0
2	1	1	0	-15.9		-15.9	0.0		0.0
3	2	2	2	9.6-	10.7	0.0	0.0	0.0	0.0
1	2	2	П	18.9		0.0	0.0		0.0
3	2	2	0	9.6-		9.6-	0.0		0.0
8	5	9	0	-11.1		-11.1	20.0		20.0

Source: ECB EU structural financial indicators, where the number of institutions is less than three, the underlying data are not disclosed for confidentiality reasons.

Table A3. Foreign claims on EU, EZ and CEE countries of BIS reporting banks

		Total	Total foreign claims	ns	Cons in all	olidate	Consolidated cross –border claims in all currencies and local claims in	der claims I claims in	Loca	l claims loc	Local claims of foreign affiliates in local currency	ffliates in
						l-uou	non-local currencies	cies				
	Bn eu	euro	Annual 9	Annual % change	Bn euro	anto	Annual 9	Annual % change	Bn ε	Bn euro	Annual 6	Annual % change
	2008	2013		2012/ 2008   2013/2012   2008   2013   2012/2008   2013/2012	2008	2013	2012/2008	2013/2012	2008	2013	2008 2013 2012/2008 2013/2012	2013/2012
EU	11,529	9,786	-2.3	-7.0	8,592 6,737	6,737	-4.2	6.9-	2,937 3,049	3,049	2.82	-7.2
EZ	7,918	6,296	-3.7	-7.5	6,059 4,609	4,609	-5.3	-5.3	1,859	1,687	1.1	-13.1
BG	30.1	26.5	-1.8	-5.5	21.7	17.5	-2.1	-12.3	8.3	6	8.0-	11.3
CZ	119	148	5.5	8.0	30	34	1.3	7.2	68	114	8.9	-1.6
HU	109	72	-8.1	-7.5	92	44	-10.4	-11.2	33	28	-3.1	-1.3
bΓ	197	234	3.3	4.1	94	66	1.5	8.0-	103	135	4.9	8.1
RO	87	79	-1.8	-2.7	09	20	-2.5	-7.6	27	28	-0.5	7.4

Source: BIS Consolidated Statistics, Table 9A.

Table A4. Consolidated cross border claims in all currencies and local claim in non-local currency by maturities

		٦	Up to 1 year			Ove	Over 1 year up to 2	2		Mo	More than 2 years	r.s
	9 uq	bn euro	Annual % change	6 change	bn euro	uro	Annual % change	change	pu enro	arro	Annual % change	6 change
	2008	2013		2012/2008 2013/2012 2008 2013	2008	2013	2012/2008 2013/2012 2008 2013	2013/2012	2008	2013	2012/2008	2013/2012
EU	4,454	1,454 3,281	-5.6	-7.4	393	315	-4.9	-2.0	2,512 2,106	2,106	-2.9	-5.7
EZ	2,869	9 2,068	-6.4	-5.9	300	215	-7.6	-1.9	1,916	1,916 1,527	-4.4	-4.4
BG	6	5	2.7.	-24.9	1.5	1.4	-9.3	39.1	10.5	8.9	-1.4	-1
CZ	11	10	-1.9	5.3	1	2	11.2	-3.4	14	15	-0.1	12.4
HU	21	14	-6.1	-17.1	4	2	6.6-	-23.6	41	23	-12.2	-4.5
bΓ	23	24	1.5	-2.0	5	8	-2.1	61.2	99	57	1.2	-2.4
RO	27	16	-11	-6.8	5	4	-12	16.6	25	21	-1.1	-12.1

Source: BIS Consolidated Statistics, Table 9A.

Table A5. Consolidated cross-border claims in all currencies and local claim in non-local currency by sectors

			Banks			Pı	Public sector			Non-ba	Non-bank private sector	ctor
	) uq	bn euro	Annual <sup>9</sup>	Annual %change	bn euro	nro	Annual	Annual % change	o uq	bn euro	Annual	Annual % change
	2008	2013	2012/2008 2013/2012	2013/2012	2008	2013	2012/2008	2013/2012	2008	2013	2012/2008	2013/2012
EU	4,464	1,464 2,961	-7.4	8.6-	1,044	1,051	9.0	-1.8	3,010	2,687	0.5	-4.8
EZ	3,165	1,939	-10.2	-5.9	806	906	0.3	-1.3	1,948	1,744	-0.3	9.9-
BG	2.1	9.0	-18.2	9.66-	2.1	1.7	7.3	-19.7	17.5	14.9	2.6	-9.2
CZ	4	4	-1.8	0.5	9	6	3	20.5	19	21	-3.4	5.7
HU	12	5	-14.6	-27.7	17	10	-10.7	-5.6	46	28	9.2	-9.7
PL	10	11	2.4	3.0	25	23	-2.9	2.1	58	64	-3.1	-2.1
RO	10	4	-15	-16.1	8	11	7.3	-1.0	41	35	6.0	-7.9

Source: BIS Consolidated Statistics, Table 9A.

Table A6. Consolidated foreign claims of BIS reporting banks by nationality of banks on BG, CZ, HU, PL and RO, % of GDP of recipient country

		BG			CZ			HU			bΓ			RO	
	2008	2012	2013	2008	2012	2013	2008	2012	2013	2008	2012	2013	2008	2012	2013
Total	84.9	70.1	6.3	76.1	96.3	99.3	101.8	79.9	73.2	53.5	58.8	59.9	61.5	61.4	55.3
EU	63.6	63.8	6.09	72.7	90.1	93.1	89.7	68.2	61.7	40.8	52.0	53.8	54.6	57.7	52.3
EZ	63.4	63.0	8.09	71.7	88.1	7.06	89.5	8.99	2.09	39.5	48.2	49.9	54.5	56.4	51.8
TOP 5	59.5	61.2	59.5	68.3	86.3	88.7	85.0	63.6	57.6	33.0	39.4	41.7	51.3	53.0	49.4
AT	10.6	10.2	9.1	25.0	31.1	31.4	24.9	20.4	18.5	3.0	4.7	4.4	21.4	20.4	18.1
BE	3.8	2.3	2.4	18.5	24.0	23.8	12.2	8.8	8.8	4.2	0.5	0.4	9.0	0.2	0.2
DK	0.1	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.4	0.1	0.1	0.0	0.0	0.0
FR	7.3	9.8	8.2	13.7	17.5	18.9	7.1	2.9	2.4	3.7	4.7	4.8	8.0	10.4	8.6
DE	5.5	1.7	1.2	5.2	4.4	4.9	22.7	15.5	12.5	10.4	12.2	11.8	2.2	2.1	1.3
GR	20.5	22.9	21.6	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.3	0.1	10.1	6.6	9.4
II	15.5	17.2	18.1	5.9	9.4	9.7	18.2	16.0	15.3	8.1	9.5	6.2	6.5	7.8	7.9
NL	0.0	0.0	0.0	3.1	1.6	1.9	3.2	2.5	2.5	6.7	8.1	8.0	5.3	4.5	4.3
PT	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.1	2.7	3.2	3.4	0.3	0.4	0.4
SP	0.2	0.1	0.1	0.3	0.1	0.1	6.0	0.5	0.4	8.0	5.0	7.4	0.1	9.0	0.5
SE	0.0	0.1	0.0	0.0	0.1	0.0	0.2	0.1	0.0	1.3	2.6	2.4	0.0	0.0	0.0
UK	0.1	2.0	0.1	6.0	2.0	2.4		1.3	1.0		1.2	1.5	0.1	1.3	0.4
Non-EU															
JP	0.3	0.1	0.1	0.5	0.4	0.5	1.4	0.7	8.0	1.0	1.2	1.1	0.0	0.1	0.1
CH	12.9	0.3	0.3	0.1	0.2	0.3	0.4	0.7	0.4	1.4	0.2	0.3	3.4	0.3	0.1
TR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.3
NS	0.7	1.4	1.1	1.7	2.7	2.5	1.9	4.1	4.7	2.3	2.9	2.8	0.7	1.5	1.5

Source: BIS Consolidated Statistics and Eurostat, based on Table 9B.

Table A7. G8's foreign exposure, % of GDP (to be continued)

		Greek banks	S	H L	French banks	ks	Aı	Austrian banks	S		Italian banks	ks
	2008	2012	2013	2008	2012	2013	2008	2012	2013	2008	2012	2013
Total	30.6	69.2	71.3	136	111.2	104.9	127.7	105.8	99.2	46.8	40.8	39.2
Ouside EU	13.0	43.3	44.3	60.1	53.2	49.3	29.7	26.0	25.1	6.1	7.5	8.1
EU	17.6	25.9	27.0	75.9	0.85	55.7	6.76	8.62	74.1	40.7	33.3	31.1
EZ	5.3	8.4	10.3	55.7	45.0	43.0	45.9	34.4	26.6	32.4	23.7	22.1
Non-euro zone	12.3	17.5	16.7	20.1	13.0	12.7	52.1	45.4	47.5	8.4	9.6	9.0
CEE	9.3	12.2	12.3	2.9	3.4	3.2	39.2	38.1	35.6	4.6	5.7	5.5
Bg	3.1	4.7	4.7	0.1	0.2	0.2	1.3	1.3	1.2	0.3	0.4	0.5
CZ	0.0	0.0	0.0	1.1	1.5	1.4	13.8	16.0	15.0	9.0	1.0	6.0
HU	0.0	0.1	0.1	0.4	0.1	0.1	9.4	6.2	5.8	1.2	1.0	1.0
PL	0.0	0.7	0.2	0.7	1.0	6.0	3.9	5.8	5.4	1.9	2.5	2.4
RO	6.1	6.7	7.3	9.0	2.0	0.7	10.7	8.8	8.2	9.0	0.7	0.7
Opt-outs	3.0	5.2	4.3	16.4	9.2	9.0	6.2	5.1	4.6	2.3	2.7	2.4
SE	0.0	0.0	0.0	9.0	0.8	0.7	0.4	0.4	0.4	0.1	0.1	0.1
UK	3.0	5.1	4.2	15.8	8.4	8.3	5.8	4.6	4.1	2.2	2.6	2.3

Source: BIS, Consolidated Statistics based on Table 9B and Eurostat.

Table A7. G8's' foreign exposure, % of GDP (continuation)

German banks	2012 2013	76.2 71.1				45.1 41.7 28.9 26.5 16.2 15.2
Ğ	2008	105	41.6	63.1	63.1	63.1 42.2 20.9
S.	2013	107.4	31.7	48.4	48.4	48.4 16.6 31.7
Spanish banks	2012	110.7	9.09	50.0	50.0	50.0
Spa	2008	78.6	24.2	43.1	43.1	43.1 18.8 24.2
ks	2013	46.0	16.4	40.1	40.1	40.1 23.7 16.4
Belgian banks	2012	52.5	7.7	44.8	44.8	44.8 26.5 18.3
Be	2008	198.6	45.9	150.7	150.7	150.7 104.9 45.9
ks	2013	155.3	61.6	93.6	93.6	93.6 69.3 24.3
Dutch banks	2012	163.2	65.2	98.1	98.1	98.1 71.2 26.9
ı	2008	210	86.2	124	124	124 90.8 32.9
		Total	Ouside EU	EU	EU EZ	EU EZ Non-euro zone

0	0.3		9.0	0.6	0.6	0.6 1.7 0.1 12.6	0.6 0.4 1.7 1.7 0.1 0.1 9 12.6 12.1 1.0 1.1
							1.5 0.1 15.9 11.1
0	0.0	0.0		2.8	2.8	2.8 28.5	2.8 0.1 28.5 0.2
0	0.0	0.0		1.8	1.8	1.8 0.1 30.3	1.8 0.1 30.3 0.2
0	0.1	0.1		0.3	0.3	0.0	0.0 0.0 23.7 0.1
0.3	9.5	2.3		0.4	0.4	0.4	0.4 0.1 3.8 0.1
0.2	8.6	2.3		0.5	0.5	0.5	0.5 0.1 5.3 0.1
0.4	8.3	3.8		4.5	4.5	4.5 0.3 27.5	4.5 0.3 27.5 0.5
0	0.5	0.4		5.2	5.2	5.2 1.0 16.4	5.2 1.0 16.4 0.9
0	0.5	0.4		5.4	5.4	5.4 1.1 19.4	5.4 1.1 19.4 1.0
0	0.5	0.5		5.4	5.4	5.4 1.0 24.7	5.4 1.0 24.7 0.9
BG	CZ	HU		PL	PL RO	PL RO Opt-outs	PL RO Opt-outs SE

Source: BIS, Consolidated Statistics based on Table 9B and Eurostat.

Table A8. The largest foreign claims on G8, % of GDP (to be continued)

				,				,				
		GR			FR			AT			II	
Lending banks by nationality	2008	2012	2013	2008	2012	2013	2008	2012	2013	2008	2012	2013
total	83.0	22.6	28.6	65.5	59.3	57.1	9.06	6.99	65.2	63.5	45.6	44.3
European banks	71.4	19.6	23.0	33.2	26.3	26.6	82.2	56.0	55.0	46.4	30.3	30.2
Belgian	3.1	0.0	0.0	3.7	1.4	0.1	1.9	0.3	0.3	2.3	0.5	0.5
French	22.2	1.1	6.0				5.5	3.5	3.7	21.4	16.3	16.4
German	11.8	6.6	12.6	7.2	7.3	6.9	26.9	18.7	18.4	9.5	6.2	5.8
Italian	2.5	0.4	9.0	1.7	1.6	1.2	35.9	24.0	22.4			
Japanese	1.8	0.2	0.0	3.7	5.7	5.5	1.7	1.6	2.0	2.2	1.7	1.5
Dutch	3.9	6.0	9.0	4.5	2.7	3.2	2.3	2.4	2.6	3.2	1.6	1.6
Swiss	16.3	0.7	1.3	2.8	2.5	3.3	2.8	2.4	3.8	0.7	0.8	1.3
British	4.0	2.9	6.3	8.1	7.8	0.9		2.0	1.8	3.3	2.4	2.2
American	2.2	1.2	3.7	2.5	7.5	6.3	1.3	3.1	2.7	6.4	2.3	2.2

Source: BIS, Consolidated Statistics based on Table 9B and Eurostat.

Table A8. The largest foreign claims on G8, % of GDP (continuation)

	2013	47.7	28.4	0.3	4.9		6.0	3.8	5.1	2.8	4.2	3.9
DE	2012	57.4	33.7	0.4	5.4		9.9	3.7	5.2	1.8	7.4	5.6
	2008	61.0	38.2	1.8	7.9		10.1	4.2	4.9	2.0	3.9	2.5
	2013	44.8	32.8	8.0	9.8	8.9	1.5	1.6	3.7	1.3	5.5	4.3
ES	2012	45.5	33.0	0.7	7.9	8.9	1.6	1.6	4.0	1.1	6.1	3.8
	2008	75.8	57.9	3.1	12.3	16.8	1.9	1.7	8.4	1.0	7.9	2.2
	2013	8.66	83.9	0.0	42.6	5.9	6.0	3.9	27.3	1.5	2.6	2.8
BE	2012	108.5	0.68	0.0	44.1	5.6	0.7	3.9	30.8	1.2	3.6	4.2
	2008	110.9	86.1	0.0	22.7	8.6	2.3	5.0	31.5	2.9	8.3	5.4
	2013	121.6	62.9	3.0	16.4	17.8	2.1	11.3		4.8	13.2	13.1
NL	2012	137.1	6.62	2.9	19.6	19.9	2.6	6.6		3.8	21.9	14.2
	2008	133.7	78.7	10.5	15.3	20.2	2.7	6.3		5.4	13.5	6.4
	Lending banks by nationality	total	European banks	Belgian	French	German	Italian	Japanese	Dutch	Swiss	British	American

Source: BIS, Consolidated Statistics based on Table 9B and Eurostat.

Table A9. Main indicators of the banking system quality in Romania and in its principal lenders in 2013

	Foreign banks		3.64	18.2	57.29		17.46	14.2	11.79		38.27	14.56	19.38	49.7	16.67
EU			3.	18	57.		17.	14	11.		38.	14.	19.	45	16
H	Domestic banks		4.89	31.41	48.06		15.95	13.11	7.95		22.99	19.39	9.83	63.14	17.25
ırea	Foreign banks		4.3	25.99	52.68		18.74	14.06	85.6		17.41	25.8	30.44	52.74	16.14
Euro area	Domestic banks		5.92	40.38	45.93		15.49	12.99	7.49		19.56	27.94	12.08	65.99	17.26
spu	all		2.73	24.01	40.98		15.27	12.86	7.27		13.2	21.81	6.83	89.09	20.78
Netherlands	Domestic banks		2.83	24.99	40.75		14.89	12.48	68.9		12.3	20.57	3.79	61.46	20.9
	all	S.	12.42	89.87	42.62	tors	13.7	10.55	5.7	al assets	9.05	20.99	13.54	58.85	14.96
Italy	Domestic banks	Asset quality indicators	13.25	92.28	42.21	Capital adequacy indicators	13.76	10.52	5.76	Liquidity indicators, % of total assets	9.6	22.16	11.56	58.22	15.02
e	all	set quali	24.19	134.66	50.36	tal adequ	13.57	13.18	5.57	indicato	5.67	96.8	9.19	84.19	14.02
Greece	Domestic banks	As	24.58	135.71	49.26	Capi	13.51	13.12	5.51	Liquidity	5.84	9.19	7.58	88.88	11.98
0	all		4.64	33.8	48.72		15.01	13.16	7.01		30.45	36.63	8.54	61.79	18.07
France	Domestic banks		4.72	33.94	48.79		15.03	13.15	7.03		29.74	35.95	8.44	61.95	17.81
а	all		4.23	14.46	71.96		15.39	11.89	7.39		7.73	16.58	20.47	8.65	13.44
Austria	Domestic banks		4.08	13.4	74.28		15.84	11.85	7.84		8.95	16.5	21.18	56.95	13.35
ia	all		17.87	17.07	86.52		18.79	15.77	10.79		20.53	33.51	21.35	75.89	99.6
Romania	Domestic banks		14.5	32.21	75.05		20.05	18.02	12.05		21.39	37.72	11.35	86.08	9.47
			1	2	3		4	5	9		7	∞	6	10	11

1. (Gross) Total doubtful and non-performing loans (loans and debt securities) per total loans and advances and total debt instruments.

2. (Net) Total doubtful and non-performing loans (loans and debt securities) per total own funds for solvency purposes.

3. Total loss provisions per Total (gross) doubtful and non-performing loans.

4. Overall solvency ratio.

5. Tier 1 ratio.

6. Capital buffer (%), solvency ratio -8%.

7. Cash and trading assets ratio.

8. Cash, trading and available-for-sale assets ratio.

9. Interbank market dependence ratio, deposits from credit institutions/assets.

10. Funding base stability ratio (denominator other than total assets), deposits from other than CI/total deposits.

11. Leverage ratio (total equity/total assets).

Source: ECB Consolidated banking data.

Annex 2. Table A10. Main indicators of the banking quality dynamics

		2008-2012 Average annual change, %	2013-2012 % change		2008-2012 Average annual change,%	2013-2012, % change		2008-2012 Average annual change,%	2013-2012, % change
BG, all banks	Solvency ratio	0.4	0.3	$NPL^{1}$	3.8	-1.2	cash, available assets for sale	1.2	-0.3
	tier 1 ratio	1.0	6.0	Provisioning <sup>2</sup>	0.4	3.7	interbank dependency ratio <sup>6</sup>	-2.3	-2.5
	Leverage ratio <sup>8</sup>	0.4	-0.3				funding base ratio <sup>7</sup>	3.0	3.0
CZ ,all banks	Solvency ratio	1.0	6.0	$NPL^{1}$			cash, available assets for sale	0.3	1.6
	tier 1 ratio	1.1	1.1	Provisioning <sup>2</sup>	ning <sup>2</sup>		interbank dependency ratio <sup>6</sup>	-0.9	2.9
	Leverage ratio <sup>8</sup>	9.0	-0.4				funding base ratio <sup>7</sup>	1.4	-3.0
HU, all banks	Solvency ratio	6.0	1.1	$NPL^{1}$	2.6	0.0	cash, available assets for sale	0.0	0.0
	tier 1 ratio	9.0	1.4	Provisioning <sup>2</sup>	0.8	4.8	interbank dependency ratio <sup>6</sup>	0.0	0.0
	Leverage ratio <sup>8</sup>	9.0	0.7				funding base ratio <sup>7</sup>	3.7	1.1
PL, all banks	Solvency ratio	6.0	0.7	$NPL^{1}$	0.7	-0.4	cash, available assets for sale	0.2	0.4
	tier 1 ratio	0.7	0.8	Provisioning <sup>2</sup>	0.1	0.4	interbank dependency ratio <sup>6</sup>	-0.6	-0.2
	Leverage ratio <sup>8</sup>	0.4	0.1				funding base ratio <sup>7</sup>	0.1	0.3
RO, all banks	Solvency ratio	0.8	1.6	$NPL^{1}$	3.3		cash, available assets for sale	0.7	3.1
	tier 1 ratio	0.8	1.0	Provisioning <sup>2</sup>	2.4		interbank dependency ratio <sup>6</sup>	-1.3	-2.5
	Leverage ratio <sup>8</sup>	0.3	0.0				funding base ratio <sup>7</sup>	2.4	3.8
EZ , domestic banks	Solvency ratio	0.7	1.2	$NPL^{1}$	0.7	9.0	cash, available assets for sale	-0.6	3.1
	tier 1 ratio	6:0	6.0	Provisioning <sup>2</sup>	-0.3	-1.6	interbank dependency ratio <sup>6</sup>	-1.0	-2.5

	Leverage ratio <sup>8</sup>	0.3	9.0				funding base ratio <sup>7</sup>	1.7	3.8
EZ foreign banks	Solvency ratio	1.0	1.2	$NPL^{1}$	9.0	0.1	cash, available assets for sale	1.5	9.2
	tier 1 ratio	1.0	1.3	Provisioning <sup>2</sup>	2.4	-0.2	interbank dependency ratio <sup>6</sup>	8.0	7.2
	Leverage ratio <sup>8</sup>	0.4	0.7				funding base ratio <sup>7</sup>	0.5	-7.8
Austria, all banks	Solvency ratio	8.0	1.2	$NPL^{1}$	9.0	-0.1	cash, available assets for sale	1.0	-1.3
	tier 1 ratio	8.0	6.0	Provisioning <sup>2</sup>	0.2	3.4	interbank dependency ratio <sup>6</sup>	9.0-	-2.2
	Leverage ratio <sup>8</sup>	0.5	0.0				funding base ratio <sup>7</sup>	1.7	3.2
France, all banks	Solvency ratio	6.0	1.0	NPL¹	0.3	0.1	cash, available assets for sale	-1.6	-2.7
	tier 1 ratio	1.2	-0.2	Provisioning <sup>2</sup>	0.3	6.7	interbank dependency ratio <sup>6</sup>	-1.0	-0.4
	Leverage ratio <sup>8</sup>	0.3	9.0				funding base ratio <sup>7</sup>	2.7	1.7
Greece, all banks	Solvency ratio	-0.2	4.9	$NPL^{1}$	4.9	6.4	cash, available assets for sale	-0.4	-2.2
	tier 1 ratio	0.0	5.2	Provisioning <sup>2</sup>	9.0-	-1.5	interbank dependency ratio <sup>6</sup>	-1.4	2.0
	Leverage ratio <sup>8</sup>	-0.4	3.4				funding base ratio <sup>7</sup>	2.4	3.7
Italy, all banks	Solvency ratio	8.0	0.3	$NPL^{1}$	1.5	1.9	cash, available assets for sale	1.1	0.4
	tier 1 ratio	6.0	0.0	Provisioning <sup>2</sup>	-1.6	2.6	interbank dependency ratio <sup>6</sup>	0.7	-0.5
	Leverage ratio <sup>8</sup>	0.0	-0.3				funding base ratio <sup>7</sup>	0.1	3.3
Netherlands, all	Solvency ratio	9.0	8.0	$NPL^{1}$	0.2	0.1	cash, available assets for sale	9.0-	
									-2.9
	tier 1 ratio	0.7	9.0	Provisioning <sup>2</sup>	3.0	3.3	interbank dependency ratio <sup>6</sup>	-0.2	-2.2
	Leverage ratio <sup>8</sup>	0.3	0.3				funding base ratio <sup>7</sup>	-5.0	4.2

<sup>1. (</sup>Gross) Total doubtful and non-performing loans (loans and debt securities) per total loans and advances and total debt instruments.

2. Total loss provisions per Total (gross) doubtful and non-performing loans.

Source: ECB Consolidated banking data.

<sup>3.</sup> Overall solvency ratio.

<sup>4.</sup> Tier 1 ratio.
5. Cash, trading and available-for-sale assets ratio.
6. Interbank market dependence ratio, deposits from credit institutions/assets.
7. Funding base stability ratio (denominator other than total assets), deposits from other than CI/total deposits.
8. Leverage ratio (total equity/total assets).

Annex 3. Table A11. Parent banks among the 1000 largest in the world and their CEE subsidiaries

	cost to income	67.33	63.7	59.77	44.73		57.43	47.07	-65.89	41.39	49.8	33.91	65.7	42.56	47.43	52.86	55.4	
	RWA to assets	31.09	83.3	27.95	43.9	78.87	50.1	34.32	61.56	67.04	5	75.71	25.54	43.26	61.11	35.87	47.26	Ì
ratios, %	Loans to assets	38.59	84.06	48.37	6.89		64.24	50.37	66.84	2.69	58.79	91.69	30.98	56.84	70.54	70.51	53.5	
	NPL in total loans	4.7	8.4	3.4	5.64		8.75	3.12	17.95	7.3	11.08	n/a	9	3.8	24.8	2.86	4.1	Ī
	BIS	14.3	12.36	16.3	14.59	13.92	13.61	15.6	19.39	18.77	13.33	18.06	14.7	15.8	16.76	16.5	17.1	Ī
ROA	%	0.45	0.65	0.45	89.0	2.37	-1.89	1.55	0.46	2.18	0.05	1.45	0.25	1.82	-1.33	0.54	1.36	
profits on capital	% previous	13.79	3.27	-2.45	5.75	32.1	-1.04	39	14.92	19.16	9.3	14.19	4.05	30.09	-7.54	10.97	16.82	
prof cap	% latest	11.39	8.3	12.25	12.51	33.28	-37.37	29.09	4.52	17.47	0.65	10.6	7.48	25.49	-13.48	11.07	17.21	Ī
profit	% change	-17.45	164.26	L->P	125.36	40.89	-3184.97	-12.23	-67.75	-3.4	-92.65	-14.76	107.34	-11.05	-100.68	2.21	24.75	
pre-tax profit	\$m	11295.17	45.66	10558.62	10533.79	834.9	-22031.5	807.83	38.02	1146.82	4.58	138.23	4217.93	790.74	-196.62	5838.62	378.52	
capital asset ratio	% previous	3.94	7.86	3.07	4.85	9.54	5.27	4.8	10.53	12.73	8.97	13.32	3.05	7.15	8.93	4.72	7.44	Ì
capital a	% latest	3.99	7.84	3.66	5.47	7.12	5.05	5.34	10.25	12.47	8.33	13.67	3.31	7.14	68'6	4.85	7.92	Ī
%	change	-1.32	4.34	-11.16	-8.13	81.92	-4.58	5.76	9:38	80.8	13.07	11.18	3.26	5.17	1.27	-1.5	14.58	İ
assets	\$m	2482950	7011	2353553	1538811	35222	1166674	52017	8206	52630	8436	9540	170381	43429	14744	1086406	27779	
apital	% change	-0.06	4.07	5.96	3.66	35.89	-8.56	14.65	6.42	5.9	5.01	14.14	12.21	5.02	12.24	1.25	21.91	t
Tier 1 capital	\$m	89166	550	86201	84232	2509	58948	2777	841	6564	703	134	56394	3103	1459	52734	2199	
Home	country	France	Poland	rance	Spain	Poland	Italy	Czech Republic	Hungary	Poland	Romania	Bulgaria	France	Czech Republic	Romania	NL	Poland	
	Bank	BNP Paribas	BNP Paribas Bank Poland	Credit Agricole France	Banco Santander	Bank Zachodni WBK	UniCredit I	UniCredit Czech Czech Republic Republic	UniCredit Hungary	Bank Pekao	UniCredit Tiriac Bank	Unicredit Bank Bulgaria	Societe Generale	Komercni C Banka F	BRD  F	ING Bank	ING Bank Slaski	
rank	latest (2013)	11		13 (	14 18		24					1	25 8		]	27 I	- *	ı

7 62.12	2 46.08	74.56	3 42.18	64.3	2 47.88	2 47.07	14.64	2 70.84	8 57	9 37.53	4 50.85	5 41.39	5 58.3	52.72	9 91.03	5 70.07	3 54.33	1 59.55	8 60.42	8 60.42	1
74.67	44.12	79.8	24.63		37.52	34.32	34.2	51.32	48.98	47.19	61.44	55.06	61.16	70.4	71.19	80.76	67.23	69.21	80.69	80.69	
77.66	59.18	93.56	59.32	86.12	57.26	50.37	101.35	53.49	68.42	60.17	77.45	70.99	64.06	88.55	82.99	71.06	65	85.54	79.56	79.56	
	9.2		0.82	2.07	5.9	3.12		12.9	9.6	4.6		29.2	10.7	6.724			8.74	n/a	32.7	32.7	
13.27	14.8	15.49	18.1	14.12	19	15.6	33.81	14.18	16.3	18.58	17.6	24.89	15.9	13.22	11.51	12.35	17.22	19	16.4	16.4	
0.57	-0.77	-6.87	0.65	0.29	0.71	1.55	1.65	0.83	0.19	2.01	-0.96	0.1	0.64	0.54	-2.08	0.45	1.8	-0.82	3.09	3.09	
5.9	8.1	-59.88	17.73	10.03	6.94	39	13.92	15.61	6.55	30.64	-0.21	-23.72	11.12	19.25	-58.9	0.56	21.06	0.39	-36.46	-36.46	
6.61	-14.21	-73.67	17.12	4.37	12	29.09	14.3	12.13	3.24	23.28	-12.46	96.0	9.31	7	-38.32	4.56	20.44	-7.07	27.75	27.75	
19.64	P->L	6.72	4.53	-52.58	83.61	-12.23	-1.75	-19.3	-51.16	-9.32	-5552.86	L->P	-15.41	-59.14	29.58	729.24	7.54	P->L	L->P	L->P	
67.14	-6633.1	-589.3	5677.24	32.12	2364.14	807.83	177.84	98.54	516.27	979.24	-100.81	20.51	1151.72	53.13	-178.78	79.71	146.54	-34.53	2410.62	3142.07	
7.93	5.35	11	3.43	6.28	5.47	4.8	12.32	7.02	5.72	7.3	6.8	8.55	6.82	6.51	4.53	9.75	9.2	14.81	5.71	6.32	
8.56	5.4	9.33	3.81	6.74	5.92	5.34	11.56	6.84	5.78	8.64	7.7	10.38	98.9	79.7	5.44	98.6	8.82	11.63	8.92	11.14	
-1.01	-2.77	-10.61	-2.7	1.52	-1.79	5.76	1.86	9.9	-2.27	0.81	-16.72	-6.07	0.35	-4.67	-9.73	0.5	15.74	0.91	36.63	32.3	
11878	863839	8574	869564	10908	332836	52.017	10754	11881	275691	48694	10510	20500	180193	2886	8585	17729	8134	4200	126910	101651	
6.76	-1.75	-24.18	8.24	8.92	6.22	17.65	-4.37	3.81	-1.12	19.33	-5.66	14.05	1.05	12.3	8.26	1.62	10.83	-20.77	113.69	132.66	
1016	46676	800	33160	736	19705	2777	1244	812	15945	4205	608	2128	12370	759	467	1748	717	488	11324	11323	
Poland	Italy	Hungary	Sweden	Poland	Belgium	Czech Republic	Czech Republic	Hungary	Austria	Czech Republic	Hungary	Romania	Austria	Czech Republic	Hungary	Poland	Romania	Bulgaria	Greece	Greece	
Bank Gospodarki Zywnosciowey	Intesa Sanpaolo Italy	CIB Bank	Nordea	Nordea Bank Poland	KBC	CSOB	Hypotecni Banka	K&H	Erste	Ceska Sporitelna	Erste Bank Hungary		Raiffeisen Bank International	Raiffeisen Bank Czech Czech Republic Republic	Raiffeisen Bank Hungary	Raiffeisen Poland	Raiffeisen Romania	Raiffeisen Bank Bulgaria	ank	Alpha Bank	Alaba Dank
	31		48		72	-			82				101	-					110	111	

62.29	98.39		43.17	47.7	61.31	60.81	42.6	42.45	45.69	55
		65				Н				51
50.2	53.56	51.65	78.75	68.69	49.15	66.77	74.38	76.72	62.75	75.51
71.2	73.44	72.29	78.44	74	72.26	74.65	80.31	74.83	62.63	80.36
22.5	==	76.88	8.2	19.8	29.4	9.71	13.6	90.9		6.85
11.2	14.6		13.6	19.9	11.1	9.3	12.4	13.47	13.47	12.11
-0.16	-0.99	∞	2.03	1.78	-2.48	-0.33	0.61	1.07	1.49	1.13
-36.35	-21.13	13.8	24.72	15.98	-40.13	-3.77	11	15.06	17.47	12.07
-2.98	-14.39	13.53	20.62	14.62	-47.52	-6.5	67.6	15.07	19.53	14.44
90.58	35.4	17.53	-10.4	-1.45	-13.51	-70.85	-12.41	7.74	33.3	29.01
-246.9	-1120.69	225.95	1342.63	857.3	-2656.55	-171.3	128.82	150.54	147.28	95.62
5.21	6.93	8.69	9.71	11.9	6.53	5.01	7.05	7.61	7.15	8.91
5.41	88.9	8.82	9.84	12.18	5.22	5.12	6.43	7.12	761	7.81
10.67	-4.46	11.26	5.98	5.15	19.9	-2.82	11.36	14.97	11.96	23.15
153007	113113	18930	66146	48134	107015	51457	21121	14011	9066	8483
14.81	-5.14	12.86	7.43	99.2	-4.15	-0.84	1.52	7.68	19.22	7.88
8276	7788	1669	6511	5862	5590	2635	1358	666	754	662
Greece	Portugal	Poland	Poland	Hungary	Greece	Italy	Poland	Netherland	Romania	Poland
national Bank of Greece	Millennium BPC	Millennium Bank Poland	PKO Bank Polski	OTP Bank	Eurobank Ergasias	Veneto Banca	Getin Noble Bank	Credit Europe Bank	Banca Transilvania	Alior Bank
142	154		169	179	185	321	518	625	737	794

Source: The Banker, July 2014.

## Annex 4.

Table A12. Significant credit institutions supervised directly by ECB Parents of Romanian Banks

C::	TT h1-	Size in 2	013
Significant parent banks	Home bank	Assets, bn €	% GDP
Alpha Bank SA	Alpha Bank Romania	3.62	2.6
Eurobank Ergasias SA	Bancpost	2.65	1.9
National Bank of Greece SA	Banca Românească	1.61	1.2
Piraeus Bank SA	Piraeus Bank Romania	2.04	1.5
Societe generale	BRD Group Societe Generale	10.50	7.5
Credit Agricole	Credit Agricole Romania	0.28	0.2
Intesa Sanpaolo SA	Intesa Sanpaolo Romania	1.14	0.8
UniCredit SpA	UniCredit Țiriac Bank	6.12	4.4
Veneto Banca Holding SCpA	Veneto Banca România	1.04	0.7
Bank of Cyprus Public Company Ltd	Bank of Cyprus Romania	0.37	0.3
ING Bank NV	Ing Bank N.V.	4.06	2.9
Erste Group Bank AG	BCR	14.16	10.1
	BCR Banca pentru Locuințe	0.48	0.3
Ostereichische Volksbanken AG	Volksbank România	3.08	2.2
Raiffeisen Zentralbank Osterreich AG	Raiffeisen Bank	5.90	4.2
	Total	57.05	40.71
	Total Banking system	80.8	57.6

Source: ECB and NBR.

# Annex 5.

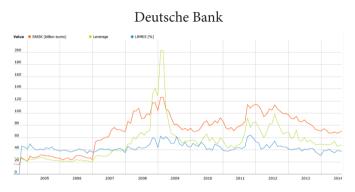
Table A13 Banking Regulations for EU and BU

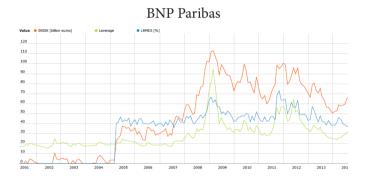
Single rule book (capital requirement directive and	Directive 2013/36 of the European Parliament and of the Council, 26 June 2013	On the access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms.				
regulation)	Regulation 575/2013 of the European Parliament and of the Council, 26 June 2013	On prudential requirements for credit institutions and investment firms.				
Deposit guarantee scheme	Directive 2014/49 of the European Parliament and of the Council, 16 April 2014	On deposit guarantee scheme.				
BRR	Directive 2014/59 of the European Parliament and of the Council, 15 May 2014	Establishing a framework for the recovery and resolution of credit institutions and investment firms.				
	Council Regulation 1024/2013, 15 Oct 2013	Conferring specific task on the ECB concerning policies relating to the prudential supervision of credit institutions.				
SSM	Regulation (EU) 468 of the European Central Bank (ECB/2014/17) 16 April 2014	Establishing the framework for cooperation within Single Supervisory Mechanism between ECB and national competent authorities and with national designated authorities.				
	Council of the European Union, 14 May 2014	Agreement on the transfer and mutualisation of contribution to the Single Resolution Fund (SRF).				
SRM	Regulation 806/2014 of the European Parliament and Council, 15 July 2014	(SRF).  Establishing uniform rules and a uniform procedure for the resolution of credit institutions in the framework of SRM and SRE.				

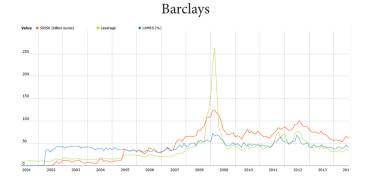
# Annex 6. Top 5 Country and Banking Systems' Risk Evaluation in the EU

All the figures and data are from the Center for Risk Management at Lausanne (CRML) based at HEC Lausanne, at <a href="http://www.crml.ch/index.php?id=4.">http://www.crml.ch/index.php?id=4.</a>

Top 5 EU Riskier Banks











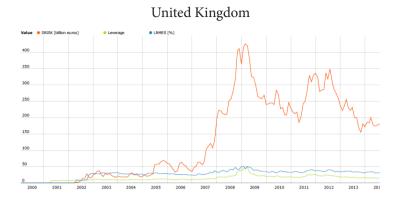
# Credit Agricole

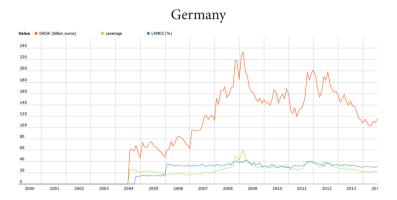


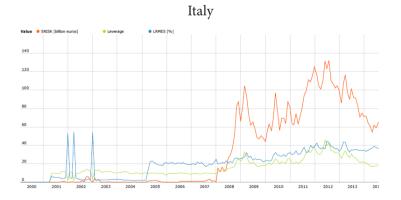
*Top 5 EU's riskier banking systems:* 

# France









# The Netherlands



### References:

- Acharya, V.V., L.H. Pedersen, T. Philippon, and M. Richardson (2010), *Measuring Systemic Risk*. Available at SSRN: <a href="http://ssrn.com/abstract=1573171">http://ssrn.com/abstract=1573171</a>.
- Aizenman Joshua, Jinjarak Yothin and Hutchison M Michael (2011) What
  is the risk of European sovereign debt defaults? Fiscal space, CDS spreads
  and market pricing of risk. Available at: <a href="http://www.voxeu.org/article/risk-default-eurozone-new-analysis-fiscal-space-cds-spreads-and-market-pricing-risk">http://www.voxeu.org/article/risk-default-eurozone-new-analysis-fiscal-space-cds-spreads-and-market-pricing-risk</a> (accessed 26 Sept 2014).
- Allen Franklin, Thorsten Beck, Elena Carletti, Philip R. Lane, Dirk Schoenmaker and Wolf Wagne (2011) Cross-Border Banking in Europe: Implications for Financial Stability and Macroeconomic Policies, Centre for Economic Policy Research.
- Angeloni, Chiara, and Guntram Wolff (2012) Are banks affected by their holdings of sovereign debt? Working Paper 2012/07, Bruegel, <a href="http://www.bruegel.org/publications/publicationdetail/publication/717-are-banks-affected-by-their-holdings-of-government-debt/">http://www.bruegel.org/publications/publicationdetail/publication/717-are-banks-affected-by-their-holdings-of-government-debt/</a>
- Arcand J.L, Berkes E., Panizza U. (2012), Too much finance?, IMF Working Paper 12/161.
- Avdjiev S., Kuti Zs., Takats E, (2012), *The euro crisis and cross-border bank lending to emerging markets* BIS Quarterly Review, December.
- Bank Deposit Guarantee Fund (2013), *Annual Report* (available at <u>www.fgdb.</u> ro).
- Belka, Marek (2014) Keynote speech at the Euro 50 Group Meeting *The Eurozone in the aftermath of the Euro Crisis*, Washington DC, 12 October 2014. Available at:
- http://www.obserwatorfinansowy.pl/tematyka/in-english/the-central-bank-should-look-at-underlying-processes-not-just-the-inflation-target/.
- Borio C. (2014), *Macroprudential framework, (too) great expectations?*, Contribution to the 25th anniversary edition of Central Banking Journal.
- Braithwaite, Tom (2014) Alternative stress tests find French banks are weakest in Europe, *Financial Times* October 27, 2014.
- Brownlees, C.T., and R.F. Engle (2010), *Volatility, Correlation and Tails for Systemic Risk Measurement*. Available at SSRN: <a href="http://ssrn.com/abstract=1611229">http://ssrn.com/abstract=1611229</a>.

- Buch M. C., Körner T and Weigert B (2013) *Towards Deeper Financial Integration in Europe: What the Banking Union Can Contribute*, German Council of Economic Experts, WP 2/13.
- Buiter, Willem (2014) Four rescue measures for stagnant euro zone, *Financial Times*, October 30, 2014.
- Cerrutti E., Claessens S. and Ratnovski L. (2014), *Global Liquidity and Drivers of Cross-Border Bank Flows*, IMF Working Paper 14/69.
- Cohen H Benjamin and Scatigna Michela (2014) Banks and capital requirements: channels of adjustment. BIS Working Papers No 443.
- Constâncio, Vítor (2014) Beyond traditional banking: a new credit system coming out of the shadows, Speech at the 2nd Frankfurt Conference on Financial Market Policy, 17 October 2014, available at: <a href="http://www.ecb.europa.eu/press/key/date/2014/html/sp141017">http://www.ecb.europa.eu/press/key/date/2014/html/sp141017</a> 2.en.html.
- Danielsson J. (2002), The emperor has no clothes. Limits to risk modelling *Journal of Banking and Finance* 26, pp 1273-96.
- Darvas Zsolt, Wolff G. (2013), Should Non-euro area countries join the single supervisory mechanism?, *Danube: Law and economics Review* 4(2), 141-163.
- Darvas, Zsolt (2011) A tale of Three Countries: Recovery after Banking Crises, Policy Contribution2011/19, Bruegel, <a href="http://www.bruegel.org/publications/publication-detail/publication/663-a-taleof-three-countries-recovery-after-banking-crises/">http://www.bruegel.org/publications/publication/663-a-taleof-three-countries-recovery-after-banking-crises/</a>.
- De Grauwe, P. (2011b). *The European Central Bank as a lender of last resort* 18 August, available at: <a href="http://www.voxeu.org/article/european-central-bank-lender-last-resort">http://www.voxeu.org/article/european-central-bank-lender-last-resort</a>.
- De Haas R., Kornyienko Y., Loukpianova E., Pivovarsky A. (2012), Foreign Banks and the Vienna Initiative: Turning Sinners into Saints, IMF Working Paper 12/117.
- Dijmărescu, Eugen (2014a) Presentation Academica BNR, Sinaia, 4 March 2014. Available at: <a href="http://www.fgdb.ro/uploads/publications/ED04032014.pdf">http://www.fgdb.ro/uploads/publications/ED04032014.pdf</a>.
- Dijmărescu, Eugen (2014b) Presentation at the conference entaitled *Uniunea Bancară Europeană*, element central pentru asigurarea stabilității financiare, Bucharest, 17 June 2014. Available at: <a href="http://www.fgdb.ro/uploads/publications/exlgakfo">http://www.fgdb.ro/uploads/publications/exlgakfo</a> kozntfhp ED17062014.pdf.

- Draghi M. (2014), *Bank restructuring and the economic recovery*, Speech at the presentation ceremony of the Schumpeter Award, Oesterreichische Nationalbank, Vienna, 13 March 2014.
- ECB (2014) Banking Structures Report, October 2014.
- Eilis Ferran (2014) European Banking Union and the EU Single Financial Market: More Differentiated Integration, or Disintegration? Paper no. 29/2014, April, Cambridge University.
- Engle, R.F., E. Jondeau, and M. Rockinger (2012), *Conditional Beta and Systemic Risk in Europe*. HEC Lausanne working paper.
- European Commission (2014) Size and determinants of implicit state guarantees, Annex 2 to the Impact assessment of a regulation on structural reform of EU banks.
- European Commission COM (2014) 509 Report from the Commission to the European Parliament and the Council on The Operation Of The European Supervisory Authorities (ESAS) And The European System Of Financial Supervision (ESFS).
- European Commission Commission staff working document summary of the impact assessment SWD/2012/0167 final (2012), Available at: <a href="http://eurlex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52012SC0167">http://eurlex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52012SC0167</a>.
- European Systemic Risk Board (2014), *Is Europe Overbanked?*.
- EU Monitor, DB Research (2013) EU Banking Union Right Idea, Poor Execution.
- Fiechter J., Otker-Robe I, Ilyina A., Hsu M., Santos A. Surti J. (2011), Subsidiaries or Branches: Does One Size Fit All?, IMF Staff Discussion Note 11/4.
- Financial Stability Board (FSB) (2013) Policy Recommendations to Strengthen Oversight and Regulation of Shadow Banking. Available at <a href="http://www.financialstabilityboard.org/press/pr">http://www.financialstabilityboard.org/press/pr</a> 130829a.pdf.
- Geeroms, Hans and Karbownik, Pawel (2014) How to Complete the EU's Banking Union, Bulletin de Documentation no 1 Trim 1, 2014, Service Public Federal Finances – Belgium.
- Georgescu Florin (2014) *Aderarea României la Uniunea Bancară și ajustarea sectorului bancar* Presentation, Constanta 4 September 2014.

- Giuli Marco (2014) What Does the Banking Union Mean for the Real Economy? In Banking Union and Beyond Discussion Papers Session 2 BTTD 2014.
- Goodhart, C.A.E. (1988), *The Evolution of Central Banks*, The MIT Press, Cambridge.
- Greenwood, R., A. Landier, and D. Thesmar (2012). *Vulnerable banks*. Working Paper
- 18537, National Bureau of Economic Research.
- Gros, Daniel and Schoenmaker, Dirk (2014) European Deposit Insurance and Resolution in the Banking Union, *Journal of Common Market Studies* 2014, pp 1-18.
- Issing, O. (2013). *Challenges for Monetary Policy*. Speech delivered at the DIW Conference, 2 September 2013, available at: <a href="http://www.diw.de/documents/dokumentenarchiv/17/diw">http://www.diw.de/documents/dokumentenarchiv/17/diw</a> 01.c.426881.de/issing omt konferenz 2013.pd.
- IMF (2014), Global Financial Stability Report (GFSR), October.
- IMF (2013a), A Banking Union for the Euro Area Staff Discussion Note.
- IMF (2013b), *Credibility and Crisis Stress Testing*, Li Lian Ong and Ceyla Pazarbasioglu, August.
- IMF(2001) Romania Country Report 16.
- Isărescu Mugur (2014a) *Uniunea Bancară: De la proiect la realitate* Dissertation, Constanța 5 June 2014.
- Isărescu Mugur (2014b) Relations between euro and non-euro countries within the Banking Union Speech before the Unicredit 15th International Advisory Board, Rome, 10 July 2014.
- Kisgergely K. and Szombati A. (2014), *Banking Union through Hungarian eyes- the MNB's assessment of a possible close cooperation* Hungarian National Bank, Occasional paper 15.
- Lambert F.J, Ueda K., Pragyan D., Gray D.F., Grippa P. (2014) IMF, *Global Financial Stability Report*, Chapter 3, How big is the implicit subsidy for banks considered too big to fail?.
- Laeven Luc and Valencia Fabián (2012) *Systemic Banking Crises Database: An Update*, IMF Working Paper, WP/12/163, June.

- Liikanen Erkki (2014b) On a sound and growth-enhancing financial sector in Europe
- Keynote speech at the Financial Risk and Stability Network, Deutsches Institut für Wirtschaftsforschung (DIW Berlin), Berlin, 30 October 2014. Available at: <a href="http://www.bis.org/review/r141031a.htm">http://www.bis.org/review/r141031a.htm</a>.
- Liikanen Erkki (2014) Europe without banks? The future of financial sector.
- Keynote speech at the Alpbach Financial Market Symposium, Austria, 28
  August 2014.
- Marques L.B., Correa R., Sapriza H. (2013), International evidence on government support and risk taking in the banking sector IMF Working Paper 13/94.
- McCulley, Paul (2014) Make shadow banks safe and private money sound, *Financial Times*, 16 June 2014.
- Obstfeld Maurice (2013), Finance at Center Stage: Some Lessons of the Euro Crisis, European Economy, Economic papers 493/April 2013, ISBN 978-92-79-28575-2.
- Pisani-Ferry Jean, Andre Sapir, Nicolas Veron and Guntram B Wolff, What Kind of European Banking Union? (2012a) Bruegel Policy Contribution Issue 2012/12, June.
- Pisani-Ferry, J., Sapir A and Wolff G B (2012b) *The messy rebuilding of Europe*, Bruegel Policy Brief, March 2012/01.
- Reinhart M. Carmen and Rogoff, Kenneth (2009) *This Time Is Different:* Eight Centuries of Financial Folly, Princeton University Press.
- Schoenmaker D si Siegmann A. (2013), *Efficiency gains of a European Banking Union* Tinbergen Institute Discussion Paper TI 13-026/IV/DSF51.
- Singer M. (2014), Banking Union and macroprudential policy: CNB view governor of Czech National Bank, presentation at CFO Forum, EY, Prague, October 15.
- Tarullo D.K. (2012), *Regulation of Foreign Banking Organisations*, Yale School of Management Leaders Forum, New Heaven Connecticut.
- Tomsik V. (2014), Banking Union from the perspective of non-euro area MS"Czech National Bank.

- Véron, Nicolas (2011) Euro area banks must be freed from national capitals, Bruegel Blog, 20 September, <a href="http://www.bruegel.org/publications/publication-detail/publication/611-euroareabanks-must-be-freed-from-national-capitals/">http://www.bruegel.org/publications/publication/611-euroareabanks-must-be-freed-from-national-capitals/</a>.
- Von Hagen Jürgen and Eichengreen Barry (1996) Federalism, Fiscal Restraints, and European Monetary Union, *The American Economic Review* Vol. 86, No. 2, Papers and Proceedings of the Hundredth and Eighth Annual Meeting of the American Economic Association San Francisco, CA, January 5-7, 1996 (May, 1996), pp. 134-138.