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PhD Thesis
- Summary -

European Banking Union: The impact on the banking supervision architecture in Romania

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Abstract

The paper "*European Banking Union: the impact on the Romanian banking supervision architecture*" aims to analyze how transformations at European level have shaped the Romanian banking supervision architecture and to examine how ready is Romania to join the Banking Union. The recent experience of Bulgaria and Croatia has proved that accession to the new European construction has become a mandatory precondition in the process of adopting the single currency. In our research, we demonstrated that the options of Member States with a derogation regarding the accession to the Banking Union were significantly influenced by the level of social and political development, proved by the strong negative correlation between good state governance and the authorities' preference regarding the transfer of supervision prerogative to the supranational level. The process of joining the Banking Union is a long one, which requires the adjustment of the relevant legal framework and a comprehensive assessment of the banking sector. Based on the results obtained so far from the ECB's comprehensive assessment of banking sectors, we have demonstrated a statistically significant correlation between the capital shortfall and the non-performing loans ratio. We also showed that, in the hypothetical scenario in which Romania would have gone through a comprehensive assessment of the banking sector at the same time as Bulgaria (at the end of 2018), an estimated capital deficit could have been identified between 69 - 114.45 million euros. Substantial declines in non-performing loans and recent measures to increase the capital of some major banks may be grounds for optimism for the future. On the other hand, Romania continues to record notable counter-performances on a number of indicators correlated with the capital deficit, such as good state governance, long-term interest on 10-year government securities and the CDS spread for medium-term public debt.

Keywords: banking supervision, banking regulation, financial stability, banking resolution, macroprudential policy, European Banking Union, Single Supervisory Mechanism, Single Resolution Mechanism, comprehensive assessment, asset quality assessment, stress test

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Introduction

The global financial crisis of 2007-2010 that initially started as a liquidity crisis in the area of subprime mortgages in the US and later transformed into a sovereign debt crisis, has demonstrated - by its duration and magnitude - the limited ability of markets to self-regulate. It has also highlighted the need to rethink the perspective on the financial stability, by reforming and strengthening the regulatory and supervisory mechanisms of the financial system, which has become increasingly complex and interconnected.

The huge economic, social and fiscal costs have transformed the problem of financial stability into a priority on political agenda both in the US and Europe. Consequently, comprehensive structural measures have been adopted in order to correct the vulnerabilities highlighted by the crisis by strengthening the capacity of relevant authorities and institutions to react quickly and coherently to systemic shocks and by developing a truly effective but fiscal-neutral financial "safety net". In this context, the Dodd – Frank Wall Street Reform and Consumer Protection Act was adopted in the USA, and in the European Union, a profound reform of the financial supervision architecture took place. This reform commenced with the establishment of the European Financial Stability Facility and the European System of Financial Supervisors, and continued at a later stage with the launch of Banking Union, as part of a larger project in the field of European economic governance.

During this period, we were witnessing the establishment of bodies and institutions with an international vocation that will play a key role in formulating future directions for action to reduce systemic risk, limit contagion and strengthen the resilience of the global financial system. In this context, the new concept of "macro-prudential policy" become increasingly important as its the specific instruments complement the set of measures available to authorities to prevent and combat systemic financial imbalances (Borio, 2011).

This paper aims to analyze in-depth the way that financial architectural transformations in the European Union have shaped the financial supervision landscape in Romania, at the micro and macroprudential level and, at the same time, to examine the extent to which Romania is prepared to participate in the Banking Union.

This research topic was chosen due to its importance and urgency, in the current context in which joining the Banking Union is a mandatory step for reaching our country's strategic goal of adopting the euro and full integration into the Economic and Monetary Union.

The research is focused on the conceptual analysis of the financial-banking supervision architecture and on the comparative evaluation of its evolution at European and national level. In parallel, the applicative component aims at a series of aspects related to identifying and examining the main phases of participation process to the Banking Union, such as: *i*) identification of the factors influencing the decision of the Member States with a derogation to join the new European construction before the adoption of the euro; *ii*) estimating the results of a potential comprehensive evaluation exercise of the Romanian banking sector, using the regression method, as a preliminary step in the process of entering into the mechanism of close cooperation with the ECB; *iii*) estimating a feasible timetable for this process, as well as detailing preparatory measures in this regard.

From the point of view of it structure, this PhD thesis is organized on four main chapters, as follows:

- The first chapter is dedicated to the presentation of the concept of financial supervision architecture and to the analysis of the current global trends related to its organization and content. The next section discusses the process of institutional construction of the financial-banking supervision framework in the European Union and the transformations it has undergone in response to the global financial crisis, as well as the prospects and directions for future development.
- Chapter two analyzes the structural components of the European Banking Union and the short- and medium-term development plans of this project. In addition, in parallel, the stage of implementation in Romania of some fundamental elements deriving from the unique regulatory framework is presented. A section of this chapter deals with the way in which the macroprudential component at the level of the European System of Financial Supervision influenced the implementation of the concept of "macroprudential policy" in Romania.
- Chapter three contains an analysis of the positions adopted by the Member States with a derogation related to their participation in the Banking Union, with a focus on understanding the arguments and the social, political and economic context that underpinned their options. A section of this chapter examines, based on empirical data, the relationship between state governance, as a reflection of the political and social development, and the option of Member States with a derogation regarding their participation in the Banking Union. At the end of this chapter, we addressed several

practical issues related to the preparation, organization and conduct of the future process of Romania's accession to the Banking Union, based on the results of the analysis in previous chapters and recent experience in the field of Bulgaria and Croatia, including implications for the timetable for the adoption of the euro. We also estimated the level of supervision fees for 2019 that the first six credit institutions in Romania would have paid to the ECB in the counterfactual scenario in which our country would have participated in the Single Supervisory Mechanism

- Chapter four deals with the issue of conducting a comprehensive evaluation exercise of the banking sector, a precondition for entering into the close cooperation procedure with the ECB and accession to the Banking Union. In this chapter we have conducted an empirical study (using data published by the ECB, following similar exercises to date) which aims to estimate the results that would have been obtained, in the scenario in which the Romanian banking sector would have gone through a such assessment together with the one in Bulgaria, respectively at the end of 2018.

As regards the research methodology, the main instrument of this study was the comparative examination, respectively the method of qualitative-comparative analysis, synthesis, induction, deduction and analogy. We also used quantitative methods, such as statistical and mathematical analyzes. The empirical study was performed using the cross-section regression technique, in the Eviews program, based on information extracted from the databases of BankFocus / Moody's Analytics, Eurostat, the International Monetary Fund, the World Bank and the European Central Bank.

The doctoral thesis is based on the theoretical and scientific support provided by the literature published by well-known authors in the financial-banking field, as well as by scientific research papers developed under the auspices of European and international financial institutions, such as the Bank for International Settlements, International Monetary Fund, European Central Bank and others.

Summary of Chapter I: The European financial & banking supervisory architecture – construction, mechanisms and regulations

The first chapter is dedicated to the concept of "financial & banking supervision architecture" and deals the analysis of the dilemmas that revolve around it. Thus, we have presented the models that globally prevailed in terms of the organization and allocation of responsibilities related to the financial sector, the factors that determine the choice of one model or another and their influence on developments in the real economy.

Over time, the central bank represented a central pillar of all these formulas of financial architecture (Bordo & Siklos, 2018). Due to its position in the financial system, where it acts as a "commercial bank", the central bank enjoys privileged access to detailed information on the financial situation of credit institutions and has a comprehensive understanding of banking issues in general. For this reason, the central bank has long been considered the best-placed institution to exercise banking supervision. These institutions have also gained over time a high degree of autonomy and independence, authority and professional reputation, so that in some jurisdictions their supervisory powers have been extended to other segments of the financial system (e.g. on the capital market or on the insurance sector).

The end of the 1990s and the beginning of the 2000s brought into the public debate the issue of the conflict of interests that appear when the central bank exercises both the monetary policy and the prudential supervision attributions. In the academia but also in the political discussion, the opinion that a "rebalancing" of the supervisory architecture is necessary, in the sense of detaching the prudential supervisory function from the central bank, in order to avoid the conflicts of interest that arise from such concentration of tasks got a lot of traction (Masciandaro & Quintyn, 2010). Against this background, the removal of prudential supervision from the Bank of England and their attachment to a new institution called the Financial Services Authority has inspired other countries to follow its path.

A second wave of transformations in the financial supervision architecture has been triggered by the global financial crisis. Subsequent reforms added new functions to the financial supervision architecture. If traditionally, the prudential dimension referred to the microprudential perspective, i.e. the monitoring of financial institutions in order to limit the risks of loss to customers or their investors and a possible contagion to other institutions, in the post-crisis context this architecture integrated a new dimension - macroprudential policy,

called upon to resolve systemic problems caused by the pro-cyclical behavior of financial institutions (D'Hulster & Unsal, 2019).

Another important trend is that central banks have acquired several prerogatives related to financial supervision. This finding is also supported by an IMF paper of 2010, which states that the role of central banks has been strengthened following the crisis amid the consensus that these institutions have played a key role in stabilizing financial systems and supporting economic recovery (FMI, 2010).

The resolution function is another new component of the financial supervision architecture, designed as a solution for removing systemic or critical financial institutions from the market (previously considered "too big to fail"), without severe disruptions, using taxpayers' money as little as possible, while maintaining the continuity of vital economic functions, through mechanisms involving the participation of shareholders and creditors in absorbing losses (FSB, 2014). There is also a trend of closer cross-border cooperation between national authorities, especially in the field of banking supervision. (Beck *et al.*, 2019).

The most recent study in the area, developed in 2018 under the auspices of the Bank for International Settlements (Calvo et al., 2018) makes a significant contribution to understanding the models of financial architecture that have internationally prevailed and identifies the main changes caused by the global financial crisis. This study is based on a questionnaire completed by the competent authorities of 82 states and jurisdictions relevant to the world economy. Thus, globally three main types of institutional arrangements for financial supervision can be identified: *i*) the sectoral model (considered as the traditional model); *ii*) the integrated (or unified) model; *iii*) the partially integrated model, with two particular variants - "Twin Peaks" (proposed in 1995 by Michael Taylor) and the "two-agencies authorities model". With the establishment of the Financial Supervision Authority (FSA) in 2013, Romania seems to have adopted the latter model, with two agencies: the FSA and the NBR. However, there is a big difference from the established model. Thus, the competence of the NBR does not include the responsibilities of supervising the business conduct of credit institutions, respectively of protection of consumers of banking services, this aspect being managed exclusively by the National Authority for Consumer Protection, Romania being the only state member in this situation.

Returning to the study of Calvo et al., in addition to the classical tasks related to the supervision of the banking sector, some central banks have also begun to acquire

responsibilities related to the supervision of insurance companies and macroprudential policy. Regarding the latter, there is a global propensity to place macroprudential tasks either on the central bank or on dedicated, inter-institutional committees, which include representatives of the government, the central bank and the sectoral supervisors. Even in this case, the central bank has a key role to play in monitoring financial stability.

Therefore, in the post-crisis period we are practically witnessing a reversal of the previous trend, when the supervisory function was detached from the central bank and transferred to another authority, while the problem of integrating the monetary policy and supervisory function of the microprudential bank at the central bank level has been re-evaluated. Probably an important influence in this respect was the experience of the United Kingdom, which in 2010-2011 took steps to transfer back to the Bank of England the function of prudential supervision, by creating the Financial Policy Committee within the central bank and setting up the Authority Prudential Regulatory Authority, a subsidiary of the Bank of England. A recent research published in 2019 (Ampudia et al., 2019) has shown that this unified formula, in which the supervisory and monetary policy functions are performed by the same authority, provides a better institutional framework than if they were separate, due to the following reasons:

- Better coordination is ensured than in the alternative solution when two separate authorities pursue interdependent objectives. In the case of separate institutions, each of them will chase its own objectives, so that if they become conflicting, each authority will take measures that would counteract the other's measures, using specific instruments, that will eventually lead to a suboptimal implementation of financial policies;
- Empirical data show that the likelihood of a credit expansion turning into a banking crisis when the central bank also handles the banking supervision function would be substantially reduced (by about 50%). The explanation is that in this situation, central banks have a greater propensity to use macro-prudential instruments, which could reduce the likelihood of a financial crisis;
- It would reduce the disputes, frictions and costs that naturally arise when two separate authorities are required to exchange of confidential information;
- The supervisory function would benefit from the independence and reputation of the central bank, being less exposed to political interference and external pressures;

- In less developed countries, financial issues have an important weight when assessing options for organizing the financial architecture. Having the prudential supervision under the wing of the central bank would be a solution to ensure financial resources for recruiting and retaining qualified staff resources.

In a study conducted in 1999 based on the US supervisory architecture, Peek et al. (1999) demonstrated that there is a strong complementarity between banking and monetary policy responsibilities. The study showed that confidential data and information obtained by the US Federal Reserve (FED) were particularly useful for econometric modeling of key macroeconomic variables for monetary policy, such as inflation or unemployment, so that FED forecasts were significantly more accurate than those of other institutions that did not benefit from such information.

At European level, the financial supervision architecture has undergone numerous adjustments to meet the new challenges, but it has long been anchored by the idea of maintaining prerogatives in the field at national level. Thus, between 1990 and 2000, the minimalist approach dominated its development, probably also because the Euro represented the priority on the agenda of decision-makers, while financial stability was not an important issue in the Maastricht Treaty.

An important moment in this period is the introduction of the concept of "European passport" through the Second Banking Directive, adopted at the end of 1989 and with a transposition deadline at the end of 1992. Starting with 1 January 1993, the prudential supervisory authorities of the host State had the legal ground to rely on their counterparts in the home country of the banking institution in a system of mutual recognition. This new concept has become a principle of EU banking supervision, along with two others, namely: *i*) the principle of the prevalence of home authorities in the supervision of cross-border credit institutions, and *ii*) the principle of minimum harmonization of the national legal framework (Alford , 2006).

Next, we analyzed from a historical perspective the main milestones of the transformation process that shaped the European Union's financial supervision architecture:

- ***The Lamfalussy Process,*** launched in 1999, laid the groundwork for a new approach to the development and adoption of financial regulations. In the banking sector, a major achievement was the establishment, in November 2003 of the Committee of European Banking Supervisors (CEBS), an independent body made up of senior officials of

banking regulators and supervisors, that served as a forum for reflection, debate and coordination on issues of common interest in this field;

- The ***Larosière Report*** launched a comprehensive reform process to strengthen financial supervision arrangements at European level. The ideas contained in this report laid the ground for the Commission's proposals towards the establishment of the European System of Financial Supervision. This system, which became operational in early 2011, is made of three micro-prudential and one macro-prudential components: *i*) the European Banking Authority (EBA); *ii*) the European Insurance and Occupational Pensions Authority (EIOPA); *iii*) the European Securities and Markets Authority (ESMA); *iv*) European Systemic Risk Board (ESRB) - the latter exercising macroprudential powers at European Union level.
- The ***European Banking Union*** is the most ambitious European project after the euro and the most important step in deepening financial integration in the European context;
- The ***CRD IV / CRR legislative package*** on capital requirements for banks, which entered into force on 1 January 2014, played a key role in shaping the European banking landscape, as it regulated in a unitary way key aspects of the banking activity and of the prudential supervision framework applicable to credit institutions.

We also presented in detail the institutional framework of the European Union dedicated to banking supervision, both the microprudential component - represented by EBA and the macroprudential one - represented by the ESRB, describing the attributions, the governance structure, as well as the new amendments brought in 2019 to the legal statutes of the two institutions.

As regards the prospects for further development of the financial supervision architecture in the European Union, we presented the main topics that are currently on the agenda of political discussions and negotiations:

- The need to strengthen the Banking Union, also by completing the third pillar, the European Deposit Guarantee Scheme (EDIS);
- Integration of capital markets through the creation of the Capital Markets Union, a project that was proposed in 2015 as a priority on the economic agenda of the European Commission, together with the Banking Union;

- The need to correct the weaknesses in the field of preventing and combating money laundering and terrorist financing, a topic which has become extremely worrying amid recent scandals. The proposed solution relates to the establishment of a specialized pan-European agency, with an explicit mandate related to the coordination at European level of activities in this field.

A longer-term vision is proposed by two important economists with influence in European decision-making forums, Dirk Schoenmaker and Nicolas Véron. In a 2007 study, they argued the need to move from the current model of sectoral supervision to the model " Twin Peaks", in which one authority deals with integrated prudential supervision (focused on the health and soundness of all financial institutions), and another one supervises the business conduct, respectively market behavior and protection of consumers of financial services.

Following the analysis, we appreciated that the current Romanian model is generally in line with these international trends in terms of organizing the financial supervision architecture. However, we pointed out a distinct issue related to the national institutional arrangement designed to ensure consumers protection in banking sector and to monitor the business conduct of credit institutions, which does not seem to be a rigorous solution, being in contradiction with European practice.

Summary of Chapter II: The European Banking Union and the Banking Supervisory Architecture in Romania - Comparative Analysis

From 2009-2010, the European Commission launched a comprehensive reform process to capitalize on the experience of the global financial crisis as soon as possible, with a view to strengthening the financial sector, which needed substantial changes to become safer and stronger. In a first phase, the weaknesses of the banking sector were identified, where rapid intervention was needed to ensure the resilience of this key segment of the European financial system. As a result, the Commission's action has focused on reforming the regulatory framework and developing new rules to improve the supervision and governance of the banking sector so that taxpayers will no longer pay for banks' mistakes in the future.

In response to a request from the European Council in June 12 September 2012, the European Commission published a package of three key documents for the construction of the Banking Union: *i*) the communication entitled “Roadmap to a banking union” (European Commission, 2012); *ii*) a proposal for a Council regulation, based on Art. 127, para (6) of the Treaty on the Functioning of the European Union, for the creation of the Single Supervisory Mechanism, with the ECB as its central axis; and *iii*) a proposal for a Regulation of the European Parliament and of the Council amending the 2010 Regulation establishing an EBA to adjust the powers of that institution to the new European construction. According to the first document ("*Roadmap to a banking union*"), the Banking Union project aims, inter alia, to "stop the trend of fragmentation of EU financial markets that is incompatible with the existence of an EMU and the single market, to strengthen financial stability, breaking the vicious circle of mutual negative influence between banks and government public debt, restoring the proper functioning of the monetary policy transmission mechanism and ensuring a single ECB oversight at the Eurozone level, a precondition for the direct recapitalization of troubled credit institutions with the help of the European Stability Mechanism” (European Commission, 2012).

Originally, the Banking Union project was conceived as an ensemble supported on three pillars, based on a pre-existing foundation, as follows:

a) The Single Rulebook is the pre-existing foundation of this construction that includes all regulatory acts that are supposed to be applied in a harmonized manner in the financial system throughout the European Union. It is not only specific to the Eurozone, but concerns the European Union as a whole, being developed in time, long before the birth of the Banking

Union project (the history of this concept is closely linked to the Lamfalussy process and the establishment of the Committee of European Banking Supervisors). In terms of content, the single regulatory framework in the banking sector is very broad and includes different types of acts that are organized in the following hierarchy: *i*) level 1 acts, respectively directives and regulations adopted in the co-decision procedure; the most important pieces in this category are those in the CRDIV / CRR package, the package on the establishment of the recovery framework and the resolution of credit institutions and the directive on deposit guarantee schemes; *ii*) level 2 acts are delegated and implementing acts, which take the form of European Commission regulations; *iii*) level 3 acts are the guidelines and recommendations issued by EBA, issued under the "apply or explain" mechanism (they are considered as "soft-law") .

b) The Single Supervisory Mechanism (SSM) is considered the mainstay of the Banking Union, aiming to ensure the coherent and effective implementation of the common policy on banking supervision and the uniform and rigorous application of the Single Rulebook. At the heart of the new system of micro-prudential banking supervision is the European Central Bank (ECB), which works with the competent national authorities of the participating Member States that are an integral part of the mechanism. The legal basis for the establishment of the SSM was represented by Regulation (EU) no. 1024/2013 conferring specific powers on the European Central Bank with regard to policies relating to the prudential supervision of credit institutions, hereinafter referred to as the "SSM Regulation". As of 4 November 2014, practically one year after the entry into force of the specific regulation, the SSM became operational and the ECB began to use its new powers of prudential supervision of Euro Area credit institutions. The SSM automatically applies to Member States that have adopted the euro and is optional for those with a derogation, which may participate through the close cooperation procedure. So far, only Bulgaria and Croatia have taken concrete steps to join this mechanism before adopting the euro.

In principle, all credit institutions based in the Eurozone countries fall within the scope of the SSM, but only those considered "significant", based on specific criteria, are directly supervised by the ECB. With regard to banks considered less significant, the competent national authorities will continue to exercise their supervisory powers under national law, but in accordance with the guidelines and instructions issued by the ECB (this is considered „indirect supervision"). Even so, the ECB ultimately remains the institution responsible for the effective and unitary functioning of the SSM, receiving clear coordination powers in this

regard. However, the ECB may also decide at any time to take direct supervision of any of the less significant credit institutions in order to ensure the consistent application of high supervisory standards. The financing of the SSM is done by charging an annual supervision fee, which must be paid to ECB by all entities in the scope of the supervision of the SSM, both the significant and the least significant.

A recent study highlights a number of positive results obtained in the 5 years of operation of the SSM (Angeloni, 2020): *i*) the banking sector in the Eurozone has become stronger and more secure, as reflected by the gradual consolidation of the average level of CET 1 for credit institutions under the direct supervision of the ECB, a substantial reduction in the average non-performing loans and an improvement in the level of CDS for a sample of countries for the period 2012-2018; *ii*) the efficiency with which banks in the Eurozone, as measured by „Return on Assets” (ROA), have improved, and an extensive process of consolidation through acquisitions and mergers has begun; *iii*) the banking sector in the Eurozone has gradually become more integrated, as evidenced on the one hand by the gradual increase in the volume of cross-border loans and on the other hand by the convergence of interest rates; *iv*) the transparency of banking supervision has increased, as the ECB publishes much more detailed information on its prudential supervision activities compared to national authorities.

b) The Single Resolution Mechanism, the second most important pillar of the Banking Union, was designed to complement the Single Supervisory Mechanism and ensure the restructuring and, ultimately, the orderly exit from the market of large credit institutions which are facing major difficulties and therefore cannot continue to operate, while the application of the common insolvency procedure would jeopardize financial stability and entail far too high costs for the economy and society. The institution of the resolution is relatively new in the European legal landscape and has emerged as a reaction to the massive interventions, based on public funds, launched by the Member States of the European Union to save large credit institutions (considered „too big to fail”).

The Financial Stability Board (FSB) set the principles and standards for banking resolution at the international level in 2011, in the document "Key Attributes for Effective Resolution Regimes". Subsequently, these principles and standards were incorporated within the Single Rulebook by adopting Directive 2014/59/EU, known as the “BRRD” (Bank Recovery and Resolution Directive). Thus, according to the provisions of BRRD, the resolution can be made by using the following tools: *i*) sale of business; *ii*) bridge bank; *iii*) asset separation;

iv) bail-in. This harmonized framework represents the foundation on which the second pillar of the Banking Union was subsequently built, namely the Single Resolution Mechanism by issuing Regulation (EU) No 806/2014 of the European Parliament and of the Council of 15 July 2014 laying down uniform rules and procedures for the resolution of credit institutions and certain investment firms under a single resolution mechanism and a single resolution and amendment fund of Regulation (EU) no. 1093/2010, hereinafter referred to as the SRM Regulation. This normative act establishes the Single Resolution Board, the central European resolution authority, and a special fund (Single Resolution Fund) that will finance the resolution process in the Banking Union. It is financed by contributions from credit institutions covered by the SRM, according to the principle that the banking sector must bear the cost of "solving" troubled banks and not taxpayers. A preoccupied issue for Member States has been the identification of a fiscal-neutral solution to ensure a "backstop" for the Single Resolution Fund, or an additional source of funding if the Fund's available resources are not sufficient for the resolution of large banking groups. In this regard, the Eurogroup meeting in June 2019 reached a consensus on the use of the European Stability Mechanism (ESM) as a "backstop" for this fund. From a technical point of view, in case the Fund's resources are exhausted, the ESM will borrow the Fund with the necessary amounts for the resolution, through a revolving credit line, the costs to be borne by the banking sector. For Member States with a derogation that will join the Banking Union, this "backstop" tool will not be available. These states will have to provide, in parallel with the ESM, revolving credit lines from the state budget.

c) The European Deposit Insurance Scheme (EDIS), which should be the third pillar of the Banking Union, is not currently operational. EDIS would be the mechanism of the Banking Union to ensure a high level of protection for depositors of banks within the supervision perimeter of the SSM.

At European level, the first common rules on the establishment and operation of deposit-guarantee schemes were introduced more than 30 years ago by Recommendation 87/63 /EEC of 22 December 1986 on the introduction of deposit-guarantee schemes in the European Economic Community. In 2012, the European Commission initiated a reform process in this area to align with international best practices, which was completed in 2014 with the adoption of Directive 2014/49/ EU of the European Parliament and of the Council of 16 April 2014 on guarantee schemes deposits (DGS). The new directive takes a different approach, pursuing maximum harmonization in all Member States of the European Union.

The main vulnerability of national deposit guarantee schemes is related to their limited capacity to deal with bankruptcy of major credit institutions. Due to the size of large cross-border banking groups, in the event that such an institution goes bankrupt, the resources of the national schemes would not be sufficient to cover and offset the losses for all insured depositors. The answer to this problem is to centralize them at the supranational level, by setting up a single European Deposit Guarantee Scheme. The advantages of this solution are multiple in terms of repayment capacity, cost effectiveness and operational efficiency.

In this regard, using the support that Banking Union enjoyed, on 24 November 2015, the European Commission published its proposal on the establishment of a European Deposit Guarantee Scheme (EDIS). The Commission's draft provided for the establishment of a European Deposit Guarantee Fund, administered by the Single Resolution Committee and financed by contributions of credit institutions participating in the Banking Union. The main problem with the European Commission's proposal is that it is built on the idea of "risk sharing", whereas the national banking sectors of the EU Member States have different risks, accumulated in the balance sheets of credit institutions before the establishment of the Single Mechanism. This situation is highlighted both by the different level of non-performing loans and by the results of the comprehensive evaluation exercises carried out by the ECB. In addition, sharing the resources accumulated by national deposit guarantee schemes does not seem to be a fair solution given that some states had set up such protection systems long before the DGS, so that the level of available resources was already consistent (e.g. Romania), while other states were just beginning (e.g. Luxembourg). As such, from the very beginning the Commission's proposal confronted the reluctance of northern Members States, with stronger banking systems, which blocked negotiations.

The following section of the research, we described in detail the institutional framework of micro-prudential banking supervision in Romania with its central axis, represented by the NBR. In addition, we presented the main milestones of the transformational process that the banking supervision activity went through:

a. Gradual alignment with EU instruments and practices, ensured in particular through the participation of NBR’s representatives in European working structures, initially CEBS and later EBA.
b. Participation in the colleges of supervisors for the realization of the supervision at consolidated level of the banking groups.

c. Adoption and implementation of primary and secondary legislation ensuring the implementation of the requirements of the Single Rulebook, in particular those related to Basel III, reflected in the CRD IV / CRR legislative package.

From the perspective of the concrete ways of exercising supervision, in order to obtain a more accurate picture of the viability and soundness of each bank, the risk profile assumed and the adequacy of the measures adopted to address the risks, the NBR uses the same tools as the ECB. These tools could be grouped into the following categories: i) off-site supervision activities; ii) on-site supervision activities; iii) thematic reviews; and iv) the application of supervision measures. Thus, the NBR annual reports show that the SREP methodology used by the ECB is also applied in its supervision activity, and the approach is a risk-based one, which involves on the one hand concentrating efforts and resources to verify the areas where significant risks, and on the other hand a forward-looking vision, which aims to identify and prevent problems before they materialize.

An extremely valuable source of information on the NBR's supervisory activity is the financial-banking system evaluation reports, prepared and published following the Financial Sector Assessment Program (FSAP) missions carried out by the International Monetary Fund and the World Bank. The last of these (conducted in 2017-2018) highlights the positive developments in the Romanian financial sector, which has strengthened significantly in recent years, including against the background of supervision measures adopted by the NBR regarding non-performing loans.

From this perspective, it was highlighted that Romania managed to achieve a remarkable performance, being one of the five EU Member States that did not resort to the use of public funds or other government support schemes to save the banking system. (Eurostat, 2019).

Next, we presented the national framework in the field of banking resolution, that is based on Law no. 312/2015 on the recovery and resolution of credit institutions and investment firms, transposing the relevant European Directive (BRRD). This law designated the National Bank of Romania as the resolution authority and established a Bank Resolution Fund, administered by the Bank Deposit Guarantee Fund (FGDB). The resolution instruments are those provided in BRRD, respectively: a) sale of business; b) bridge bank; c) asset separation; d) bail-in.

Regarding the deposit guarantee scheme, Romania has a relatively consistent experience in this field gained in the 24 years of continued operation of FGDB. The current legal basis is

represented by Law no. 311/2015 on deposit guarantee schemes and FGDB, which transposes Directive 2014/49 / EU and partially repeals Government Ordinance no. 39/1996 on the establishment and operation of FGDB. The law designates the NBR as the competent administrative authority that determines whether deposits from a credit institution have become unavailable.

It is noteworthy that the available financial resources of FGDB are very high, compared to the minimum target level provided by the relevant European Directive (DGS) of 0.8% of the value of covered deposits, but also with the situation in neighboring countries with which Romania usually compare in international statistics. Thus, based on data published by FGDB, we estimated that a coverage level is 2.95% of the total value of covered deposits at the end of 2019. For comparison, neighboring states recorded the following levels of this indicator (author's calculations based on data published by the European Banking Authority): Bulgaria - 1.18%; Czech Republic - 1.28%, Croatia - 2.87%; Hungary - 0.2%; Poland - 1.8%.

A special section was dedicated to the presentation of the institutional framework in the field of macroprudential supervision in Romania. Thus, at national level, in 2007 the National Committee for Financial Stability was established, based on a cooperation agreement in the field of financial stability and financial crisis management, concluded between the Ministry of Economy and Finance, NBR, National Securities Commission, Supervisory Commission of Insurance and the Supervisory Commission of the Private Pension System. This structure had a transitory character until the adoption of Law no. 12/2017 on the macroprudential supervision of the national financial system, establishing the National Committee for Macroprudential Supervision (NCMS), an inter-institutional cooperation structure that exercises the macroprudential mandate in Romania.

According to the “NCMS Strategy”, most of the intermediate objectives of the macroprudential policy in Romania are within the competence of the NBR. Thus, as sectoral supervisory authority, the NBR aims to prevent excessive growth of lending and borrowing, reduce excessive mismatch of maturities and illiquidity in the market, limit the concentration of direct and indirect exposures, limit the systemic impact of incentives misaligned to reduce moral hazard, strengthen the resilience of financial infrastructure and increase the financial intermediation and inclusion. The NBR will identify, monitor and assess systemic risks and will identify the institutions and structures of the financial system that are systemically important. At the same time, the NBR will periodically establish, monitor and review the

intermediate objectives of the macroprudential policy and its instruments in order to reduce the risks to the stability of the national financial system.

In the European Union, the ESRB had the great merit of acting as a catalyst, mobilizing Member States through its recommendations towards shaping and then implementing a clear and unified strategic framework in the field of macroprudential policy. Among the ESRB's recommendations, two have a special relevance in this matter, having an important impact on the financial architecture in Romania:

- The ESRB Recommendation of 22 December 2011 on the macroprudential mandate of national authorities (ESRB/2011/3), which I mentioned earlier, and
- The ESRB Recommendation of 4 April 2013 on intermediate objectives and macro-prudential policy instruments (ESRB/2013/1).

In Romania, instruments of the nature mentioned in recommendation ESRB/2013/1, namely *debt-service-to-income* (DSTI) and *loan-to-value* (LTV), have been used since 2004 to temper exaggerated increase in retail credit (Neagu et al., 2015). From this perspective, Romania has had a pioneering mission in this field at EU level.

Afterwards, we presented the main macroprudential instruments and detailed the manner they were calibrated and implemented by the NBR, respectively:

a) Loan/value ratio (LTV) requirements and loan /income ratio and debt (debt service) / income ratio requirements;
b) The set up for a more prudent treatment of the solvency indicator of credit institutions;
c) The capital conservation buffer, the anti-cyclical capital buffer, the systemic risk buffer and the capital buffer related to other systemically important institutions.

Summary of Chapter III: Approaches of the Member States with a derogation as regards participation in the Banking Union. The case of Romania

The Banking Union was imagined from the beginning as a project dedicated to the Eurozone, the participation of the Eurosystem member states being mandatory. For Member States that have not yet adopted the common currency, the option of joining this creation has been left, on a voluntary basis, through the close cooperation procedure. This open approach, which is in fact a reflection of the new concept of "Europe with variable geometry", has the advantage of taking into account the different stage of economic and financial development and the different degree of convergence of Member States with a derogation, while maintaining the premises for Single Market in the banking sector.

In a first phase, when the reflection process on this project was launched, namely June - September 2012, all Member States, including those with a derogation, expressed their open and enthusiastic support for this project. Subsequently, after the details of the edifice were settled, the statements of the official representatives of the Member States became more nuanced and some of the Member States with a derogation distanced themselves from this project, the main reason being related to differences in treatment.

In this chapter of the paper, we presented the positions adopted by the eight Member States with a derogation regarding their future participation in the Banking Union. To this aim, we examined the specificities of each national banking sector, in order to fully understand the context and arguments that laid the ground for these options. Thus, it was observed that the states with banking systems most affected by the global financial crisis (Romania, Bulgaria and Croatia) were also those that firmly expressed their desire to join the Banking Union.

In the second part of this chapter, an empirical study was conducted in order to investigate whether there is a correlation between the option of states with a derogation to participate or not in the Banking Union and their level of political and social development, based on the model proposed by Méró and Piroska (2016). In this sense, a composite index of "good governance" was used as an explanatory variable, calculated based on four relevant indicators, which reflect a dimension of the state's capacity to apply good public administration measures, selected from the Bank's database. World Bank - The Worldwide

Governance Indicators, namely “Government Effectiveness”, “Regulatory Quality”, “Rule of Law” and "Control of Corruption".

The graphs representing the dynamics of these indicators highlight the following aspects: *i*) the two Nordic states (Denmark and Sweden) stand out at a great distance from the rest of the group, as an example of good governance, being clear that they are part of another league; ii) at the opposite pole, Romania, Bulgaria and Croatia constantly occupy the places at the bottom of the ranking; iii) in the case of Hungary there is a gradual but persistent deterioration of the four indicators that reflect the dimensions of the state's capacity.

The options of Member States with a derogation concerning the Banking Union was reflected by a dummy variable, which received the value 1 in the case of states in favor of participating in the Banking Union in the near future and 0 for the others. Thus, a Pearson correlation coefficient of -0.73 was obtained between the composite index of good state governance and the options vis-à-vis the Banking Union. In conclusion, we can appreciate that there is a strong, negative correlation, statistically significant, between the intention to participate in the new European project and the quality of the governance in the Member States. Thus, the lower the quality of the governing act, the greater the inclination of national authorities to be part of the supranational structure of the Banking Union. The explanation for this phenomenon lies in the fact that the Banking Union is perceived as an anchor of stability and credibility, and the decision makers in these states understand that the transfer of supranational powers in terms of supervision and, if necessary, resolution of credit institutions, provides better results than maintaining and exercising them at national level.

As shown in the previous section, Romania has expressed interest in participating in the Banking Union since the launch of this project. In the decision-making process related to the participation in the Banking Union before the adoption of the euro, both the advantages and the disadvantages, the problems / risks must be taken into account. Among the arguments in favor of rapid integration into the Banking Union are the following:

a. "Having a seat at the table"- The Banking Union has produced and will continue to produce effects on the banking sector in Romania, regardless of our country membership in this "club". Consequently, it is preferable and rational to participate as an active player in the decision-making process that will fully affect the Romanian banking sector anyway (Cărămidariu, 2015). In addition, the Banking Union is not a fully completed project. Pillar III – EDIS is still being under construction, while the

other components are being continuously improved. From this point of view, it is preferable to participate actively in the construction of a mechanism that you will have to join at some point. In addition, UK's exit from the European Union (Brexit) has substantially weakened the influence of the group of states with a derogation within the Union, increasing the danger of their marginalization, which could soon be considered the "periphery of the EU";

b. ***The Banking Union would be a key step towards the adoption of the euro.*** The experience of Bulgaria and Croatia proved that accession to ERM II, which is the antechamber to the adoption of the euro, is also conditioned by the entry into the close cooperation procedure with the ECB (Eurogroup, 2019);

c. Membership in the Banking Union is expected to represent an ***anchor of stability*** for the Romanian banking sector, that could strengthen the confidence of financial markets in the financial system and implicitly in our country's economy, contributing to supporting a sustainable growth of credit and economic activity.;

d. It could ***remove a possible incentive for disintermediation*** from the part of large European banking groups and lead to a more competitive market by reducing distortions and barriers to market entry;

e. ***Stronger supervision of the large banking groups***, in line with the highest relevant standards (performed from a stronger ground). Participation in the SSM could lead to more effective supervision, by improving access to information, reducing friction between supervisors and eliminating parallelism in the supervision of banking groups considered significant, originating in the Eurozone, and by eliminating the possibility of regulatory and supervisory arbitrage.

However, the membership in the Banking Union alone does not guarantee superior results in the banking sector, just as the adoption of the euro does not automatically lead to an increase in economic performance. Disadvantages and risks include the following:

a. Reducing the importance and relevance of the responsibilities preserved at national level in the area of prudential supervision and banking resolution. Additionally, there is a fear of national authorities of becoming irrelevant. Given that the banking sector in Romania is extremely small compared to the countries that make up the core of the Eurozone, namely Germany, France, Italy, Spain and the Benelux countries, it is

possible that the ECB will focus more on large banking groups in located in the core of Eurosystem and give less importance to banks in Member States with a derogation;

b. Possible pressure to transform subsidiaries into branches;

c. Possible erosion in the medium term of the prudential indicators in non-euro area Member States, which are now above the levels recorded in the home states of the parent banks;

d. New costs for banks operating in Romania, related to supervision fees, which will eventually be transferred to customers.

In order to have a hint regarding the level of these supervision fees, we estimated them for the first three most important banks in Romania (according to the assets value for 2019), that could have qualified as "significant", respectively: 1) Banca Transilvania SA - 1,078,597 euro; 2) BCR S.A. - 953,854 euro and 3) BRD - Groupe Société Générale S.A. - 821,015 euro. Next, the supervision fees were calculated for the following three banks that, assuming Romania's participation in the Banking Union, would have been part of the category of "less significant" credit institutions: UniCredit Bank - 117,698 euro, Raiffeisen Bank - 106,498 euro and CEC Bank - 72,818 euro;

e. Increasing the administrative burden for the NBR, as well as the complexity of the decision-making process for the activities regarding the supervision, recovery and resolution of credit institutions. The analysis carried out regarding the variation of the staff employed in the national competent authorities responsible for prudential supervision in the Eurozone shows that the organizational structure of these authorities did not decrease after the operationalization of the SSM, but on the contrary it increased significantly, by an average of 7%;

f. The existence of an imbalance in terms of rights and obligations between Member States that have adopted the euro and those with a derogation. Thus, states with a derogation are not represented on the Governing Council of the ECB, the supreme decision-making body of the SSM, nor do they have access to the ECB's Emergency Liquidity Assistance Facility (ELA), in the hypothetic situation that banks operating in their territory face euro liquidity difficulties;

g. It is possible that the Romanian banks that will be considered significant will reduce their lending activity in order to reduce their balance sheet and thus improve their

prudential indicators of capital adequacy, this phenomenon being observed in the Eurozone as well;

h. Entry into the close cooperation procedure with the ECB is conditional on the prior comprehensive evaluation, which involves additional costs and efforts for both the NBR and the selected credit institutions to fall within the scope of the evaluation.

Next, we detailed the process for a Member State to enter in the close cooperation procedure with the ECB. Before making the procedural steps to initiate this process, the Romanian authorities must prepare legislative changes in order to transfer some prerogatives to the supranational level. This effort is expected to be complicated and time-consuming, given the complexity of the national legislative framework, as well as the large number of institutions and authorities involved. Following the analysis performed on the primary legislation, we identified the following legislative acts that need to be amended in order to adjust them to the SSM:

- Law no. 312/2004 on the Statute of the National Bank of Romania (NBR Statute);
- GEO no. 99/2006 on credit institutions and capital adequacy, with amendments and completions brought by Law no. 227/2007;
- GEO no. 98/2006 on the additional supervision of credit institutions, insurance and / or reinsurance companies, financial investment services companies and investment management companies in a financial conglomerate, as amended and supplemented by Law no. 272/2013;
- Law no. 311/2015 on deposit guarantee schemes and the Bank Deposit Guarantee Fund;
- Law no. 312/2015 on the recovery and resolution of credit institutions and investment firms, as well as for amending and supplementing normative acts in the financial field;
- Law no. 12/2017 on the macroprudential supervision of the national financial system;
- Law no. 129/2019 for preventing and combating money laundering and terrorist financing, as well as for amending and supplementing some normative acts.

In addition to the legislative acts mentioned above, the regulations that make up the secondary legislation will have to be identified and amended. This whole process can take several years, as shown by the case of Bulgaria, where at the end of 2019, this process of amending secondary legislation had not been completed yet, given that Bulgaria applied to participate in the SSM in July 2018.

Based on the outline of the indicative calendar, presented by the NBR in 2014 (Georgescu, 2014), and taking into account the experience of Bulgaria and Croatia, a series of considerations were presented regarding the chronology of the accession process to the Banking Union through the close cooperation procedure:

- The scenario of the NBR's entry into the close cooperation procedure with the ECB over a two-year period, although it can be considered ambitious, is still feasible, provided that all the institutions involved are adequately mobilized and there is a strong political will;
- As regards the duration of the comprehensive assessment, a reasonable period could be 12 months. In Bulgaria it actually lasted 9 months, but one must not forget that Bulgaria had previously gone through such an exercise, so that both the national supervisory authority and the credit institutions already had relevant experience in this kind of exercise, and the banking sector in Bulgaria is smaller than the Romanian one;
- Two other aspects should be taken into account, which do not appear on the calendar sketch of the NBR: i) the preparation period of the comprehensive evaluation exercise; and ii) the post-assessment period, which is important if capital deficits are identified for banks within the scope of the assessment exercise.

We also made some recommendations for adjusting in the near future the "National Plan for the adoption of the euro", assumed by the Romanian Government in December 2018, to explicitly highlight the fact that joining the Banking Union is one of the essential stages of the technical process of adoption of the euro by Romania.

Summary of Chapter IV: Comprehensive assessment of the banking sector – preliminary condition for participation in the Banking Union

According to the provisions of Art. 33, para. (4) of the SSM Regulation, before taking on direct supervisory tasks, "the ECB may request the competent national authorities to provide all relevant information to enable the ECB to carry out a full assessment, including on the balance sheet, of credit institutions in participating Member State". This assessment exercise referred to in the regulation is now known as the "Comprehensive Assessment" and its main objective is to provide a true and fair view of the health of the banking sector in question, but especially of credit institutions that ECB is to take over in direct supervision, considered "significant" (a form of "due diligence"). By the time of writing this thesis (June 2020), the ECB had completed five such exercises: the first and most important in 2013-2014, two in 2015, one in 2016 and one in 2018-2019, the results of which were presented in detail in this chapter of the paper.

From the methodological point of view, the comprehensive evaluation process comprises two components, as follows:

a) An ***Assets Quality Review*** (AQR) component designed to identify any hidden problems related to the real value of assets recorded in banks' balance sheets, including those related to non-performing loans;

b) A ***stress test*** exercise aimed at verifying the ability of credit institutions to deal with hypothetical macroeconomic situations, represented by two common macroeconomic scenarios, one baseline scenario and one adverse scenario.

The results of the evaluations are materialized in potential capital shortfalls, calculated by reporting the CET1 ratio to three minimum thresholds: in the case of AQR and the stress test on the baseline scenario credit had to maintain a CET1 rate of at least 8%, and in the case of the adverse scenario of at least 5%.

In total, the comprehensive assessment exercise in 2013-2014 identified a capital shortfall of EUR 24.6 billion concentrated in 25 participating banks. From the perspective of the way in which this capital deficit was distributed to banks and countries, the following can be noticed:

- In nominal terms, most of the capital deficits identified as a result of the comprehensive assessment process was concentrated in Italy (EUR 9.7 billion), followed by Greece (EUR 8.7 billion) and Cyprus (EUR 2.4 billion);
- However, in relation to the value of banking assets (relative value), Cyprus ranks first (6.1% of total risk-weighted banking assets), Greece second (4.1%), Portugal third (0.9%), and Italy in fourth place with 0.8%;
- In terms of the number of banks that were identified as having capital deficits, Italy is in first place (9 banks), Greece and Cyprus in second place (3 banks each), Slovenia and Belgium in third place (2 banks) every).

The first comprehensive evaluation exercise significantly improved the transparency of the financial situation of euro area banks and succeeded in harmonizing the definition of non-performing loans and highlighting the hidden losses behind these exposures (De Groen, 2014). According to the study of Homar et al. (2015), the comprehensive assessment and in particular its AQR component has the merit of applying for the first time precise and objective measures for the identification and assessment of problem loans, which, however, were not classified as non-performing.

In 2015, two exercises of comprehensive evaluation took place, but on much smaller scale. The first exercise took place between March and November 2015 and included nine banks operating in the Eurozone, which had recently become or were to become “significant” credit institutions, according to the criteria of Art. 6, para. (4) of the SSM Regulation, and thus qualified to come under the direct supervision of the ECB. The second exercise of 2015 included four significant banks in Greece, with total assets of EUR 296 billion, representing 90% of total banking assets in the Hellenic Republic. In this case, the comprehensive evaluation process was triggered by the political decision taken by the Heads of State and Government at the Eurozone Summit on 12 July 2015, when Greece's request for financial support for the recapitalization of the banking sector was discussed.

Between March and November 2016, the ECB conducted another comprehensive evaluation exercise involving four Eurozone banks, that were about to enter the ECB's direct supervisory scope. Of these, one did not give its consent for the publication of the results of the evaluation. For the other three banks, which agreed to publish the results, no capital deficits or significant asset valuation issues were identified.

As mentioned in the previous chapter, dedicated to the positioning of Member States with a derogation vis-à-vis the Banking Union, Bulgaria has been taking steps to participate in this European project since the summer of 2018, when it applied to the ECB to enter the close cooperation procedure. Based on this request, the ECB launched in November 2018 a comprehensive assessment of the Bulgarian banking sector. In the scope of this exercise, six credit institutions were included. The results indicated the existence of a capital deficit totaling EUR 314.7 million, concentrated in two of the banks assessed.

Although most authors considered the comprehensive evaluation exercises launched by the ECB since 2013 to be remarkable progress, much more credible than the stress tests previously coordinated by EBA, there were many critical voices challenging the methodology and results of these evaluations.

In their study related to the lessons learned during the comprehensive evaluation from 2013-2014, Barucci et al. (2018) concluded that a double standard was used, respectively that AQR was more severe for banks operating in countries outside the hard core of the Eurozone, an opinion shared by other authors. Vestergaard (2014) argued that the results of the 2014 comprehensive assessments projected an unrealistic picture of the soundness and health of the banking sectors in Germany and France, which would in fact proved to be undercapitalized if instead of CET1 rate ECB would had been used an indicator relating to the level of equity and total assets. In a 2013 paper, Vestergaard and Retana appreciated that many euro area credit institutions had been using strategies to optimize the "risk-weighted assets" indicator, and European supervisors had been very tolerant in allowing banks to extend the scope of CET1 (Vestergaard & Retana, 2013).

In addition, although De Groen (2014) appreciated the overall benefits of the comprehensive assessment, he disapproved the ECB's approach. Namely, he criticized the solution of relying exclusively on a single capital indicator, namely the basic Tier 1 capital ratio, that had proved over time to have a very limited predictive capacity in terms of bank failures and that had been to some extent dependent on internal rating models. This was likely to raise suspicions about the application of sufficiently high standards for rigorous diagnosis and problems in the banking sector. According to his estimates, if the valuation had been based on an alternative indicator, namely on the leverage ratio (which is not calculated based on risk-weighted assets), capital deficits would had been more substantial and evenly distributed in the Eurozone.

Moreover, the issue of the exclusive use of the CET1 rate and the extent to which this indicator is appropriate as a basic benchmark in assessing the European banking sector was also raised by Acharya and Steffen (2014). They showed, based on data published by the ECB following the first comprehensive assessment exercise, that there is a high degree of heterogeneity between European banks in terms of the risk weighting assets. Thus, while in the case of German banks almost 84% of assets are considered and reported as not being affected by any risk, in France this level was only 24.5%. Such differences in methodological approach, which are to some extent at the discretion of national regulators, may compromise the statistical and even prudential significance of the notion of "total risk exposure" of credit institutions and implicitly of other indicators that are calculated on its basis, as is the case for CET1. In a 2014 paper, Mariathasan and Merrouche showed, based on the analysis of a panel of 115 credit institutions in OECD member states, that the value of risk-weighted assets declined as soon as banks received permission from the national competent authority to move from the standard approach to internal rating models for the calculation of the capital requirement related to the loan portfolio, without any change in the structure of the balance sheet. In the opinion of the two researchers, this phenomenon proves that there are consistent red flags related to the possibility of manipulating the indicator “total risk exposure” (Mariathasan and Merrouche, 2014).

Based on the results of these evaluations, in the second part of this chapter two types of quantitative analyzes were performed, in order to identify the determinants of capital deficits and to make an extrapolation to the situation in Romania.

The first analysis was conducted at the macroeconomic level, at the country level, and aims to determine the correlations between the features of the banking sector and the aggregate level of capital deficits. In the second analysis, we examined these relationships at the microeconomic level, from bank to bank.

The first analysis showed a series of correlations between the aggregate nominal level of capital deficits and a number of explanatory variables. Of these, the following correlations had an important statistical significance:

- strong, positive correlation between the relative level of capital deficit (calculated by relating the aggregate nominal level of capital deficits to the aggregate value of banking sector capital) and the level of non-performing loans;

- a correlation of moderate intensity, of negative sense, with the level of CET1, which shows that a high level of own funds is associated with a lower value of capital deficits;
- a correlation of moderate intensity, of negative sense, with the profitability indicators, which means an association between the low profitability and the high level of capital requirements; low-intensity, negative correlation with real GDP developments, indicating that the economic recession is associated with a high level of capital deficits.

A novelty element of this paper is related to the fact that it identified a statistically significant correlation, of negative meaning, between the capital deficits in the banking sector and the indicators of good governance of the home state. This finding, which was also confirmed by the analysis at the microeconomic level, shows that the political and social development of a state is ultimately reflected in the balance sheet of its banks, and the propensity of the authorities regarding on the quality of regulations, law enforcement and corruption control creates the preconditions for a stable and healthy banking system.

Subsequently, two regression equations were estimated, based on which the capital deficit for Romania was predicted, in a counterfactual scenario, assuming that our country would have entered the comprehensive evaluation exercise in the same time with Bulgaria in November 2018, and the assessment would have taken into account the financial statements of banks as of December 31, 2018. Thus, based on the two regressions, the capital deficit for the Romanian banking sector for 2018 was estimated to be between 69 and 114.45 million euro. Therefore, the capital deficit would have been insignificant. This result is primarily due to the substantial reduction in the level of non-performing loans, the increase in the profitability of the banking sector and the reduction in the spread to CDS 5Y, on the background of the robust economic growth registered by Romania in the last five years.

The second analysis is focused on the examination of the individual situation of each bank that has been the subject of a comprehensive assessment from 2014 to the present (individual data from 152 credit institutions were used), aiming to investigate whether there is typology of credit institutions with capital shortage, starting from the model used by Barucci et al. (2018). Thus, the statistical analysis showed that there is a low correlation, not statistically significant, between the level of capital deficits and the capitalization and solvency indicators (nominal value and ratio of CET1, leverage ratio, total value of risk exposure, total level of assets).

However, there is a significant, positive correlation between capital deficits and the stock of non-performing loans, both at the level of individual credit institution and on the banking system of the home state as a whole. In addition, we identified statistically significant correlations between these deficits and real GDP, long-term interest rate (reflected by the yield of 10-year government bonds), the spread of CDS on 5-year benchmark government bonds issued by the home state, and the index of good governance. In the next stage of the analysis, two regression equations were determined, based on which we tried to estimate the capital deficit for the top 10 banks in Romania by asset value (situation at the end of 2018), in the counterfactual scenario that our country would have been subject to a comprehensive assessment together with Bulgaria (end of 2018). Since both the R-squared and adjusted R-squared for the two regression equations are relatively low, we need to look with caution at the values obtained from the extrapolation, as they have rather the ability to give some guidance and indicate the banks that could face a higher deficit in the event of a potential comprehensive assessment. From this perspective, the regression equations pointed to Banca Transilvania S.A., UniCredit Bank S.A. and CEC Bank S.A. These estimates were confirmed by recent developments in real life, for all these three credit institutions being launched capital increase operations in the period 2019-2020. In 2019, Banca Transilvania increased its capital by about 84.4 million and CEC Bank with almost EUR 200 million, UniCredit Bank announcing that it intends to allocate part of the profit obtained in 2019, respectively about EUR 20 million, in order to consolidate its capital and improve its solvency rate).

The conclusion that emerges from the two analyzes is that in 2018 there is a very high probability that a possible comprehensive evaluation exercise will identify additional capital needs in the Romanian banking sector. However, the downward trend in non-performing loans, as well as the above-mentioned measures to increase the capital of some major banks, may be a reason for optimism for the future. On the other hand, Romania records negative results for a number of other indicators that have been proved to be correlated with capital deficits, such as the public governance, the long-term interest rate on 10-year public debt and the CDS spread for medium-term government debt.

The research was also of an practical nature, aiming to identify concrete, pragmatic elements that authorities should take into account when preparing the process of accession to the Banking Union, such as the logistical and financial aspects involved in the comprehensive evaluation exercise. For example, in its 2016 activity report, the ECB explicitly stated that the fees paid for external consultants who participated in the comprehensive assessment of

that year (only four credit institutions) reached EUR 8.2 million (ECB, 2016). A journalistic investigation by the Financial Times in 2014 (Financial Times, 2014) concluded that the ECB and the national authorities involved in conducting the comprehensive assessment 2013-2014 paid a total of approx. EUR 487.7 million for consultancy services. The largest contributions were made by Germany - EUR 240 million, France - EUR 80 million, the Netherlands - EUR 61.7 million, Austria - EUR 31 million, Ireland – EUR 18.3 million, ECB – EUR 14 million.

Therefore, the costs of the comprehensive assessments are significant and those amounts must be planned in the budgets of the competent national authority. In the case of Romania, the respective authority is the NBR. Considering that, according to Law no. 312/2004 on the Statute of the NBR, it is a public institution, it must follow the procedures provided by the public procurement legislation, and therefore the entire procurement process should be thought out in advance and rigorously planned.

Regarding the impact of comprehensive assessment on the banking sector, Sahin & De Haan (2015) showed that neither the share price of the banks assessed nor the spread of CDSs reacted significantly to the disclosure of the results, not even in the case of banks with capital deficits. This finding indicates that much of the information on the results were already incorporated in investment decisions, in line with financial market expectations. The same conclusion emerged from our analysis. We showed that capital deficits are correlated with the spread of CDS for 5 years benchmark government bonds with the yield of long-term government bonds (10 years) of the Member State where banks operate. Therefore, we concluded that investors have a deep understanding and realistic expectations as regards the financial and prudential situation of the credit institutions.

However, the comprehensive assessment exercise is not bulletproof, nor is the Single Supervisory Mechanism a panacea. The fact that most banks have gone through this evaluation process without any problems, without identifying capital deficits, is not a guarantee of their financial health. An eloquent example is the case of Banco Popular Español S.A. (Banco Popular) from Spain. This credit institution entered the perimeter of the first comprehensive assessment because of its large balance sheet (it had at the end of the financial year 2013 assets of EUR 147 billion, being the sixth bank in Spain by value of assets). According to the detailed results of the assessment, published by the ECB, Banco Popular was not identified as having a capital deficit, although the level of non-performing loans was quite high (14.31%) and the bank had significant exposures to the Spanish

residential sector, which was collapsing. Three years later, on 7 June 2017, the bank entered into resolution procedure and it was sold for 1 euro to Santander.

Conclusions and research perspectives

There are several models for organizing the architecture of financial supervision that emerged at the global level, and the preferences of states for one variant or another are determined by tradition, the legal system and the level of economic, political and social development. All these models have a solid theoretical foundation and they are well represented, including at the level of the European Union. However, when we talk about the European architecture we refer to the Union option as a whole, and this is based on the sectoral model, with distinct authorities for the banking, insurance and capital market sectors.

The global financial crisis has highlighted the need to strengthen the financial regulation and supervision framework, leading to important changes in the European financial supervision architecture, by adding new components to prevent systemic risk (macroprudential policy) or reduce its impact, with the aim of creating a "financial safety net" (resolution function, bank deposit guarantee schemes or investor compensation schemes, in the case of the capital market). As a result, banks have become more resilient and the authorities have effective tools at their disposal, covering a number of gaps that have proven to be sources of vulnerabilities.

Following the analysis, we consider that the current model in Romania is generally in line with these trends. Nevertheless, we pointed out a distinct issue related to the national institutional arrangement to ensure the consumer protection for banking services and to monitor the business conduct of credit institutions. From this perspective, we consider that the option of allocating these complex responsibilities exclusively to an authority that is not specialized on banking issues is not an optimal solution, being in contradiction with the practice in the European space.

The construction of the Banking Union is considered the most ambitious European project, being obviously a key milestone in the process of deepening financial integration at European level. The Single Supervisory Mechanism remains the most important pillar of this building, its proper functioning being a precondition for the efficiency and effectiveness of pillars two and three, which represent the "financial safety net" of the Eurozone banking sector. However, it is precisely this idea of a "safety net" that has given rise to dilemmas about the appropriateness of these mechanisms, as it is associated with a problem of moral hazard that encourages riskier behavior on the part of credit institutions. A greater focus on

prevention is the solution to mitigate that risk and it could be achieved throughout prudential supervision. Prudential supervision will reduce the likelihood of banks going bankrupt and the need for deposit guarantee schemes to compensate depositors. However, if a large credit institution faces major difficulties that jeopardize financial stability, early intervention and resolution are required to avoid the risk of a disastrous bankruptcy that could disrupt the financial system and the real economy. The new resolution procedure aims to limit the moral hazard and to address the problem of credit institutions considered too big to be allowed to go bankrupt (too big to fail). Through the resolution mechanism, any banking institution, regardless of its size and network of interdependencies, will be able to be removed from the market without undermining the financial system, while preserving the claims of small depositors who have deposits secured up to the level of EUR 100,000. When resolution measures are applied, the financial contribution of the Deposit Guarantee Scheme will not be higher than in the case of ordinary insolvency proceedings. Normally, the interventions of deposit guarantee schemes will be substantially diminished, taking place only to compensate depositors in the event of the insolvency of a small bank for which no resolution is required or in the context of the resolution procedure by partially financing the resolution costs.

As far as we are concerned, following the analysis undertaken, we appreciate that the Banking Union has already demonstrated its viability, and its contribution to the consolidation of the financial edifice of the Eurozone is indisputable. However, there are a number of vulnerabilities that, if not corrected in time, could weaken the new institutional construction. One of these stems from the fact that although the supervision of credit institutions has been transferred to the ECB, the burden of managing the banks in difficulty or even bankruptcy has remained at national level. This generates a disconnection of responsibilities between the supervisor and the one who bears the costs of supervisory errors, which over time could undermine the legitimacy of the Banking Union. The second is related to the fact that the current crisis management framework makes micro-prudential supervision more difficult. Typically, when dealing with troubled banks, supervisors are forced to make a compromise, balancing between strict enforcement of the rules and threatening the financial stability for which they are responsible. In the absence of a fully functioning bank resolution mechanism, including from the perspective of funds availability, supervisors may be tempted to delay the application of the necessary measures, which could aggravate long-term problems. As Ignazio Angeloni, a former member of the ECB's Supervisory Board,

argued, there is a functional dependence between the supervisory and the resolution function, in the sense that rigorous supervision should be supported by a strong crisis management framework. If the latter is vulnerable, the supervisor's approach should be more tolerant to avoid creating instability at the system level through his actions (Angeloni, 2020). However, at this moment, the Single Rulebook has a number of weaknesses that could compromise the rigorous application of the Single Supervisory Mechanism.

The initiative to build the European Banking Union was initially welcomed by all Member States, but as the technical details became available and it was clear that there would be differences between the Eurozone and the countries with a derogation, some of the latter became more reluctant to participate in the new project. The hesitations come mainly from countries that have overcome the global financial crisis and enjoy a high quality of public governance. As shown in the paper, there is a strong, negative correlation between public governance and the option of transferring the prerogatives of banking supervision to the supranational level.

As for Romania, the authorities have explicitly expressed their desire to join the Banking Union before adopting the common currency. The experience of Bulgaria and Croatia on this path shows us that participation in the Banking Union will in any case be a mandatory condition for the adoption of the euro, which must be met simultaneously with the entry into ERM II.

In our opinion, the arguments in favor of participating in the Banking Union are more numerous and more consistent than those against this option. However, authorities must be realistic in their approach; they must be aware that the accession process, through the close cooperation procedure with the ECB, is a lengthy one, which requires adjusting the relevant legal framework and conducting a comprehensive assessment of the banking sector. The results obtained so far from the ECB's similar exercises show that there are statistically significant correlations between capital deficits and indicators that characterize the performance of the credit institutions, such as non-performing loans and CET1. It has also been shown that there is a certain degree of correlation with a number of macroeconomic indicators of the home state, such as GDP, the long-term interest rate on 10-year government securities, the CDS spread for medium-term government debt, but also indicators of good public governance.

In the hypothetical situation where Romania would have gone through a comprehensive assessment of the banking sector at the same time with Bulgaria (at the end of 2018), it is very possible that additional capital needs would have been identified. However, the downward trend in non-performing loans, as well as recent measures to increase the capital of some major banks, may be cause for optimism in the future. On the other hand, Romania has notable counter-performances in terms of several indicators that are correlated with the capital deficit, such as good public governance, long-term interest on 10-year government bond and the CDS spread for public debt on medium term.

The final conclusion that emerges from the research is that the national prudential supervision architecture is in full accordance with the new European vision in this area and all the preconditions are created for Romania's successful accession to the Banking Union.

Regarding the research perspectives, I propose to continue the study in the direction of analyzing the opportunity to change the current institutional framework related to consumer protection of banking products and services, taking into account the new responsibilities recently acquired by EBA, but also the fact that Romania is the only EU Member State where the micro-prudential supervisory authority does not exercise any powers in this field.

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