THE CONSEQUENCES OF THE FINANCIAL CRISIS ON THE ROMANIAN BANKING SYSTEM

Nicolae PETRIA [1]

"Lucian Blaga" University of Sibiu, Romania

Abstract

The financial globalization determined the amplification of financial interconnections, increased the system complexity and efficiency, sped-up the undergoing financial flows, but also led to the rapid transmission of shocks and negative consequences of the crisis affecting the banking system. Europe and especially the Eurozone are confronted with the most severe banking crisis since the introduction of EMU and until now. The financial and banking crisis in Europe has turned into a powerful sovereign debt crisis affecting all EU economies. Due to the strong ties between the Romanian banking system and European banking groups, the former took over and is still taking some of the negative effects of the European crisis. In this context, our study aims to emphasize the impact of financial and banking crisis on the Romanian banking system. In the first part of the study the analysis is made through assessing the level and evolution of some structural and capital adequacy indicators, risk, asset quality, profitability and bank liquidity indicators. In the second part, the study brings forward the measures imposed by the regulator and banking oversight entity in order to maintain and strengthen the system's capacity to cope with shocks and challenges of the persistent crisis. Finally the study presents an estimate of the capacity of the Romanian banking system to remain stable and cope with future shocks and challenges.

Key words: banking crisis, Romanian Banking system, banking oversight, liquidity, solvency

JEL classification*:* G15, G2

1. INTRODUCTION

[1] *Faculty of Economics, nic_petria@yahoo.co.uk*

Banks represent the backbone of the financial system providing the financing for the economy through capital funding for innovation, development and investments, creating jobs and achieving general prosperity. Also, banks ensure the proper conduct of attracting funds and savings, payments and settlements within financial system, significantly contributing to establishing and maintaining the stability of the financial system as a whole. Any disruption of the smooth functioning of banks and banking system, leads to the loss of confidence in the system and significantly affects the stability of the entire financial system. The financial crisis triggered in 2007 strongly hit banking systems around the world, but especially those in the developed countries and led to the outbreak and accentuation of global scale crisis. The European Union's banks where among the hardest hit recording significant financial and confidence losses. This imposed intervention measures of the states in order to bail banks, interventions that subsequently led to triggering sovereign debt crises that presently grind EU and especially the euro area. Due to the deepening of the regionalization and globalization process, the banking systems are highly interconnected enabling rapid transmission of shocks and negative effects from a system to another.

The Romanian banking system makes no exception from this process and, being strongly interconnected with the European banking systems, assumed exogenous shocks due to financial crisis at European level. Based on these considerations, this study aims to analyze and emphasize negative effects and shocks faced by the Romanian banking system due to financial crisis and contagion effect. The analysis is done by assessing the level and evolution of a set of indicators of structure, level and dynamics, which express the dimension and structure of the system, its quality and profitability. Also, the second part of the study highlights the measures imposed by the regulatory and supervisory authority to maintain and enhance system stability and results. Finally the study aims to estimate the capacity of the banking system to cope with future challenges and shocks.

2. THE IMPACT OF FINANCIAL CRISIS ON EUROPEAN BANKING SYSTEM

The recent financial crisis had a significant negative impact on the banking systems of all countries but mainly on those of the developed ones. This impact manifested though lower stock prices of banks, massive losses from loans, bonds and structured products, de-capitalization of banks and credit institutions. In addition, governments were forced to assume various intervention and bail programs to assist the financial system, programs that generated significant fiscal costs that led to a sovereign debt crisis. It is not exactly known the cost determined by the financial crisis in the banking system. There are a series of estimates made by various organizations and various researchers, estimates that vary according to the perspective from which the issue of crisis cost was approached. As an example, according to a study made by Deutsche Bank[2], the direct fiscal cost of the financial crisis in the banking system may be 2% of the GDP in the USA and 1% of the GDP in Germany. The International Monetary Fund which measured the fiscal costs of 25 systemic banking crises, mainly involving advanced economies estimates this cost to approximately 5.4% of the GDP of any developed country. A report of the American Treasury[3] indicates that only the Treasury invested around 245 trillion dollars to bailout the U.S. banks. The estimate cost of the US TARP program (Troubled Asset Relief Program) varies from 341 trillion dollars, according to Office of Management and Budget, and 356 trillion dollars, according to Congressional Budget Office. U.S. banks were forced to bring out nearly 400 trillion dollars additional capital in order to cover unexpected losses and financial shocks[4]. What interests us in this study is to identify the impact of crisis on European banks and especially on the banks that have subsidiaries in Romania and whose problems can contagion the Romanian banking system. According to an European Commission document[5], only between 2008 and October 2011, the Commission spent 1.6 trillion euro, 13% of EU's GDP, in order to support the financial institutions, of which: for providing guarantees and liquidity 1.2 trillion euro, 9.8% of GDP; and for recapitalization and impaired assets 409 billion euro.

According to the study of ECB[6], *"between 2008 and 2014 governments acquired financial assets in an amount of 5.3% of euro area GDP in gross terms, two-thirds of which were purchased in the first three years of the crisis. When taking into account the fact that part of the assets has*

[2] Deutsche Bank Research, Direct Fiscal Cost of the Financial Crisis

[3] the financial crisis response in chart, april 2012, http://treasury.gov/resource-center/data-chart-center/documents/20120413_financialcrisisresponse.pdf

[4] ibd

[5] commission staff working document, impact assessment, accompanying the document, proposal for a directive of the european parliament and of the council, http://ec.europa.eu/internal_market/bank/docs/crisismanagment/2012_eu_framework/impact_ass_summary_en.pdf

[6] the fiscal impact of financial sector support during the crisis, /www.ecb.europa.eu/pub/pdf/other/eb201506_article02.en.pdf

in the meantime been divested without losses, the net acquired assets amounted to 2.9% of GDP in 2014. Among the acquired assets, debt securities and equities together accounted for the bulk (around 90%) of the acquired assets, while new loans were used to a much lower degree over the period 2008-14. The net acquisition of financial assets was particularly pronounced in Germany, Ireland, Greece, Cyprus, Luxembourg, Portugal and Slovenia, with acquisitions being well above 5% of GDP".

For the purpose of the study, it is interesting to note what was the impact of crisis on the cross-border banks acting in Romania. The banking market in the European Union is strongly integrated and interconnected, being dominated by large pan-European banking groups and, as a consequence, 39 cross-border large banking groups own 68% of banking assets. Some of these groups operate on the Romanian market through their subsidiaries and, under these conditions, shocks suffered by this groups can pass to the Romanian banking system through the credit, capital and exchange rates channels.

Financial crisis significantly impacted the European banking system as a whole and also the banking groups operating in Romania. The impact consisted in the reduction of the level and quality of the assets, decreased profitability and increased need for capitalization in the system, making the system vulnerable to shocks. According to The Banker[7], before the crisis in 2007, Western Europe owned 58.3% of banking assets and 46.2% of the profit generated by them. By the end of 2011 the ratio was 45% of the assets and only 6.3% of the profit. In 2011, out of 49 banks that at a global level turned to loss, 13 banks were from the euro zone. The profit of the banks from the euro area decreased from 85.5 billion Euros in 2010 down to 2.1 billion Euros in 2011. In many euro zone countries (Greece, Portugal, Spain, Italy) pressure on banking systems is high considering the need for additional capitalization as a consequence of the registered losses. Only Spain needs 100 billion Euros to inject capital into banks. A ranking table by regions shows how low is the profitability within the Eurozone system as a consequence of crisis effects (table 1).

[7] Top 1000 World Banks 2012 Cover Story, http://thebankerdatabase.com/files/pdf_downloads/Top1000WorldBanksIntoduction.pdf

Table no.1 Regions by total Tier 1 capital/total assets/total pre-tax profits

Country	Tier 1($bn)	Assets($bn)	Pre-tax profits($bn)
US	1051.9	13,341.0	131.5
Eurozone	1721.6	40,895.0	2.1
China	781.5	13,533.2	206.3
Japan	600.9	13,075.5	60.0
UK	440.8	9999.5	32.9
Brazil	123.8	1729.2	33.1

Source: www.thebankerdatabase.com

Also, a ranking of the 25 largest losses registered in 2011 by the Top 1000 Banks, 23 banks are from Europe and 9 of them are operating in Romania.

Table no.2 Banking groups that operate in Romania ranking in Top 25 losses as of 2011

Rank in top 25	Top 1000 rank	Bank	Country	Latest profit ($m)
1	160	National Bank of Greece	Greece	-17,364
3	28	Intesa Sanpaolo	Italy	-12,428
4	21	UniCredit	Italy	-9,998
5	239	Piraeus Bank Group	Greece	-9,674
7	187	Alpha Bank	Greece	-9,674
14	302	Bank of Cyprus	Cyprus	-1,749
15	153	Millennium bcp	Portugal	-1,581
17	273	Osterreichische Volksbanken	Austria	-1,153
23	75	Erste Group	Austria	-417

Source: www.thebankerdatabase.com

In a ranking regarding the quality of banking assets, calculated as a percentage of impaired assets over operating income, made by The Banker, out of the top 25 banks with poor asset quality, 23 are from EU and amongst these, 6 are operating in Romania. Thus, the National Bank of Greece has a share of total impaired actives in total operating incomes of 348.17%, Piraeus

Bank Group 267.99%, Alpha Bank 262.59%, Bank of Cyprus 139.84%, Osterreichische Volksbanken 123.18%, Millenium BCP 85.03%. These weights show reduced capabilities of banks to cover losses from impaired assets from operating income and indicate the need for new capital injections. In order to cove losses registered by Greek banking groups due to restructuring of the Greece's sovereign debt and of other losses registered during the crisis years, these groups must bring tier 1 capital as follows: National Bank of Greece $8.928bn, Alpha Bank $2.458bn, Piraeus Bank Group $6.0167bn, Bank of Cyprus $207m - large amounts, difficult to be provided. All these data emphasize only some of the impact of the crisis on the banking system, national, regional and global. The negative effects registered by the banking groups that operate in Romania are willy-nilly transmitted to Romanian banking system. Therefore, we will try in the following lines to evaluate the impact of the crises on the state and evolution of the Romanian banking system.

3. FINANCIAL CRISIS HAS HAD AND IMPACT ON THE ROMANIAN BANKING SYSTEM?

Financial crises effects started to show as of 2008 but mainly in 2009. Given the strong interconnection with the banking system from the EU and the existence of strong banking groups from the Eurozone that operate on the Romanian market, the crisis effects started to transfer to the Romanian banks. The sovereign debt crisis from the EU intensified the contagion phenomenon and still represents the main threat to the stability of the Romanian banking system. In the following pages we will highlight the impact of crisis on the Romanian banking system by analyzing the evolution of the system structure and of certain indicators considered significant for assessing the system status. Thus we will analyze the capital adequacy, asset quality, risk indicators, system profitability, and liquidity. We will present the measures undertaken by the regulatory and oversight authority in order to strengthen the system capacity to cope with internal an external shocks.

4. DEVELOPMENTS IN THE ROMANIAN BANKING SYSTEM STRUCTURE

Analysis of the structure development and dynamics of the banking sector between 2007-2015 emphasize that the crises effects occurred in the system but were not at a very large scale. Table 3 presents suggestive data in this respect. The number of banks decreased by four units, the number of branches reached 7 and the share of bank assets of foreign banks started to decrease as of 2008 and reverse in 2013.

Table no.3 Structural Indicators of the Romanian Banking System

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Number of credit institutions	40	43	42	42	41	41	40	40	36
Number of banks with majority private capital	42	41	40	40	39	39	37	37	34
Number of banks with majority foreign capital, *of which:*	36	37	35	35	34	34	34	34	30
- foreign banks branches	10	10	10	9	8	8	9	9	7
Assets of banks with majority private capital / Total assets (%)	94,7	94,6	92,5	92,4	91,6	90,7	91,3	91,3	91,7
Assets of banks with foreign capital / Total assets (%)	88,0	88,3	85,3	85,0	83,0	81,2	90.0	89.9	90,3
Assets of top 5 banks / Total assets	56,3	54,3	52,4	52,7	54,6	55,2	54,9	54,2	57,7
Herfindahl-Hirschmann Index	1046	926	857	871	879	866	821	797	802

Source: NBR

Table no.4 The Structure of Assets of Credit Institutions Operating in Romania (% in total assets)

	2008	2009	2010	2011	2012	2013	2014	2015
Domestic assets, which	98,5	96,9	97,5	98,1	98,2	98,1	95,3	99,1
Claims on NBR and credit institutions which:	23,8	18,6	16,5	15,3	13,9	13,5	13,7	14,1
- claims on NBR	21,8	15,7	14,2	13,7	12,3	12,7	13,1	13,3
Claims on domestic non-bank sector, which;	63,4	67,5	70,4	74,5	75,6	75,8	75,7	75,6
- claims on government	5,0	12,7	15,8	17,7	19,8	19,7	19,9	19,8
- claims on corporations	29,2	27,3	28,0	30,3	29,9	29,2	29,1	29,2
- claims on households	29,2	27,5	26,6	26,5	25,9	26,5	26,7	26,9
Other assets	11,3	10,8	10,4	8,3	8,6	8,5	8,4	8,6
Foreign assets	1,5	3,1	2,7	1,9	1,8	1,8	1,9	1,9

Source: NBR

The banks with Austrian majority ownership hold, as in previous years, the largest market share (38 percent as of June 2012- 27,2 percent as December of 2014). Due to the problems incurred by parent banks in Greece, the Greek banks group operating on the Romanian market riced its market share from 16.3% to 17,5%, being surpassed by the banks with Romanian capital whose share in the assets aggregate increased to 18.3 percent. The Romanian banking system has a high interconnectivity with the European banking system, is mostly owned by foreign capital, by banking groups from the Eurozone (34 credit institutions with foreign majority owned over 81.2% of the Romanian banking system assets as of June 2012). This makes the system vulnerable to external shocks. The crisis effects were felt in the system and it was forced to respond by restructuring which led to the decrease of banking units and personnel. Between 2009 and 2015 the number of banking units decreased by 1079 and the number of personnel in the banking system fell with 7,893 employees. Consequently the banking system in Romania has continued to remain below the European average in terms of number of territorial units, respectively, of credit institutions per 100,000 inhabitants. Another consequence is that the banking intermediation fell significantly below the European average. Concentration remained relatively moderate below the European average.

5. CAPITAL ADEQUACY

Financial crisis has led to worsening of the financial and economic conditions and put pressure on the Romanian banking system to maintain a high level of capital adequacy in order to cope with internal and external shocks. The Central Bank continued to closely monitor the evolution of capital adequacy indicators reported by credit institutions in the still fragile domestic macroeconomic context, with risks coming from the euro zone through the sovereign debt crisis channels and facing declining confidence in the external markets. The Central Bank forced banks to increase their capital and required to a number of 13 banks to maintain a minimum solvency ratio of 10% compared to the governed indicator of 8%. As a consequence, banks were forced to bring fresh capital into the system in order to cover the losses incurred in the loan portfolio deterioration. The increase in capital amounted to 325 million euro in 2009, 650 million euro in 2010, 110 million euro in 2011 and 394 million euro in 2014. Consequently to these measures, capital adequacy in the banking system was maintained at a comfortable level for the system. Evolution of solvency is indicated in table 5.

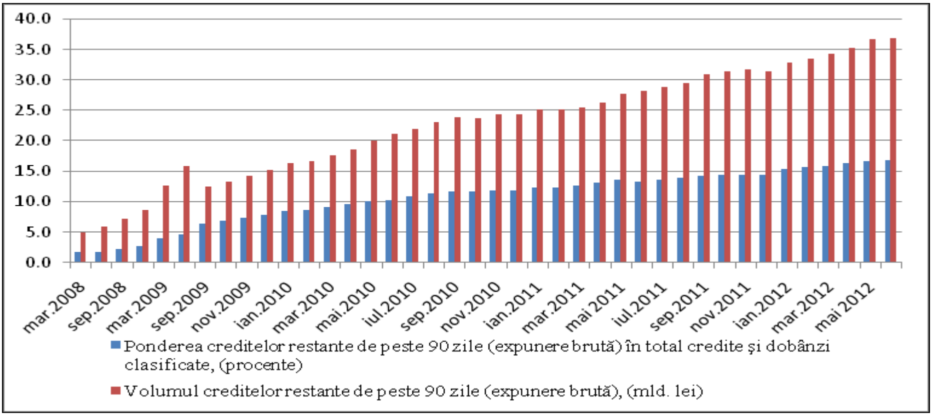
Table no.5 Evolution of Solvency Ratio

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Solvency ratio	13.78	13,76	14,67	15,02	14,87	14,66	15,5	17,59	17,51

Source: NBR

6. EVOLUTION OF ASSETS QUALITY

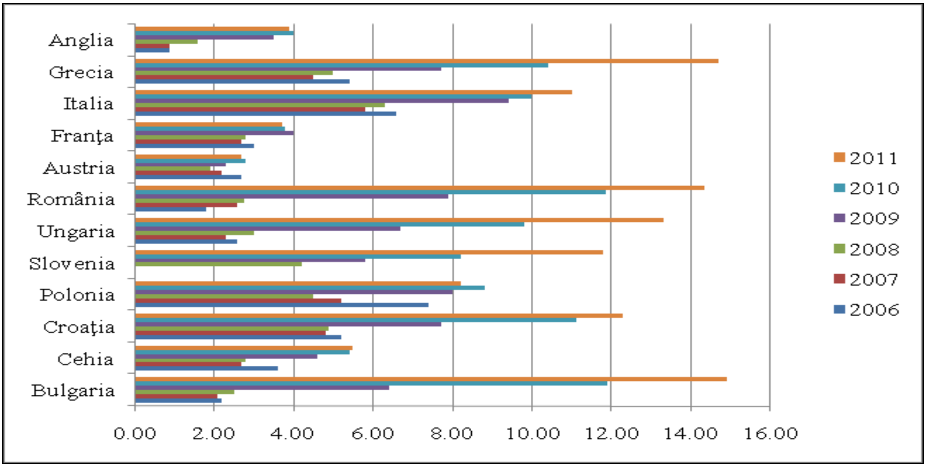
The impact of the financial crisis was felt by the reduction in quality of the banking assets, especially through the increase of the share of nonperforming loans, as shown in the graphic no.1



Source: NBR

Graphic no.1 The Evolution of Nonperforming loans in the banking system in 2008-2012

Making a comparative analysis of Romanian banks' credit portfolios against the ones from other member states of EU, we can observe a sharp deterioration in 2009-2011 comparing with 2006-2008, when the Romanian banking sector was competitive from this point of view in relation with other states from the Region or even from Western Europe. The volume of outstanding receivables over 90 days and/or where judiciary proceedings were introduced to the operation or to the debtor, as reported by credit institutions continued to increase in 2008-2012, but the pace slowed (+ 28.9 percent in December 2011 compared with 59.8 percent in 2010 and 77.9 percent in 2008). The main reason for the mentioned evolution was represented by the continued existing constraints over the client's financial situation, in the context of an economic growth well under its potential. With few exceptions, the deterioration trend of credit portfolios quality continued to be a common characteristic for European banking market in 2011 (Graphic no.2). In the context of a reduced level of growth in the region, the status of the credit institutions was worsened due to the losses generated by the sovereign debt crisis (the loss of value of Greek government bonds being one of the elements that mostly affected many of the cross-border banks).



Source: NBR

Graphic no.2 The Credit Portfolio Quality in some EU Countries (nonperforming loans as a percentage of total loans

7. PROFITABILITY

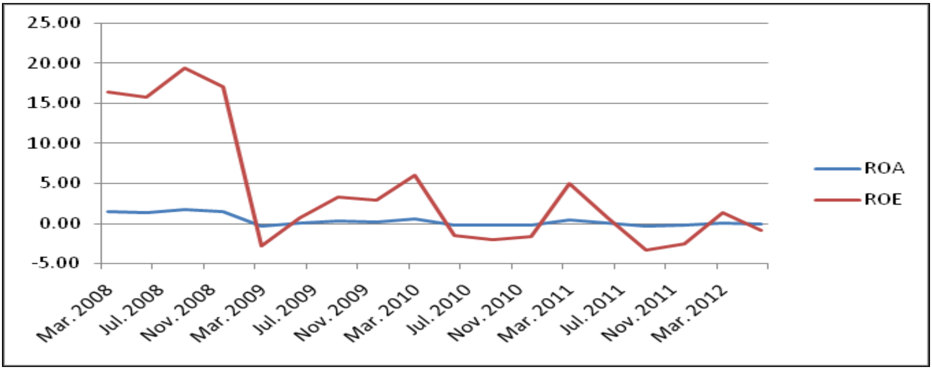
The deterioration of assets quality as a consequence of crisis inevitably led to rapid and consistent deterioration of profitability within the system and imposed capital increases. The profitability evolution is summarized in table no.6 and graphic no.3.

Table no.6 Profitability of banking system

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
ROA	**1,28**	**1,01**	**1,56**	**0,25**	**-0,16**	**-0,23**	**-0,6**	**0,01**	**-1,32**	**1.35**
ROE	**10,24**	**9,43**	**17,04**	**2,89**	**-1,73**	**-2,56**	**-5,9**	**0,1**	**-12,45**	**12,82**

Source: NBR

The Romanian banking system profitability was in negative territory since May 2010, mainly under the influence of high net expenditure with provisions, but also due to deterioration in operating results. From a profit of around 1 billion euro in 2008 it turned to losses of 120 millions in 2010, 176.5 millions euro in 2011, 511 millions euro in 2012 and 1014 million euro in 2014. Profitability recovery of the system is imperative in order to take over shocks generated by deleveraging and of the decreasing quality of banking assets. Otherwise, the requirements to increase capital by shareholders will be maintained.



Source: NBR

Graphic no.3 The Evolution Return-On-Equity (ROE) –average, and Return-On-Assets (ROA) –average, in Romanian Banking Sector

8. ROMANIAN BANKING SECTOR LIQUIDITY

The financial crisis has left its mark on the liquidity of the Romanian banking sector as a consequence of the reduction in external financing lines on one hand, and increasing of the short-term component of external bank debt on the other hand. Comparing with the period preceding 2008, liquidity entered a downward trend between 2009-2015. However, due to Central Banks policy and interventions, the liquidity in the system remained at comfortable levels and never endangered the stability of the system.

Table no.7 Evolution of Liquidity Ratio

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Liquidity ratio	2.13	2.47	1,38	1,35	1,36	1,39	1,68	1,69	1,94

Source: NBR

The liquidity ratio in the system decreased starting with 2009, but remained over regulatory level of 1% (Table no.7). Though it remains in question a certain vulnerability regarding the parent bank's commitment to support their subsidiaries in Romania.

9. Measures Imposed by the Regulatory Authority

On the background of the manifestation of the crisis on the banking system, the Central Bank adopted a proactive policy aimed to strengthen the discipline within the sector, to temper the lending in foreign currency, to increase coverage with provisions and reserves, to increase capital adequacy and to provide solutions for the troubled banks. Thus, as of 2009 it amended the prudential banking regulations related to:

- determination of bank's equity according to European Directives;
- determination of liquidity by detailing the needs regarding the liquidity reserve;
- revision of the classification regulations of established loans, and provision regularization.

Also, the banking oversight authority, imposed to a number of 13 banks a minimum solvency level of 10% vs. the governed 8% indicator, and to a number of 19 banks imposed the monthly submission of certain reports referring to capital adequacy. On yearly basis, stress tests were undertaken based on an IMF methodology aimed to evaluate the system capacity of coping with the shocks. In 2012 the legal framework of credit institutions was completed by introducing provisions for stabilization that may be adopted by the Central Bank for banks in difficulty, by adding special administration to the existing legal framework. The stabilization measures under that regulation are aimed at:

a) total or partial transfer of assets and liabilities of a credit institution to one or more eligible institutions;
b) the involvement of the Deposit Guarantee Fund in the banking system as a managing director, and where appropriate, as a shareholder, if

previously was imposed the measure of suspending the voting rights of the shareholders controlling the respective credit institution;

c) the transfer of assets and liabilities of a credit institution to a “bridge-bank” established for this purpose.

All these measures were aimed at strengthening the prudential supervisory framework in order to prevent and limit the negative impact of crisis on the Romanian banking system.

10. CONCLUSIONS

Financial crisis had a negative impact on the Romanian banking system affecting in various proportions the quality of assets, the return and profitability of the system, the capital adequacy, the system’s liquidity, the structure and dimension of the banking network and its personnel, the governance and supervision in the system. However, the banking sector remains stable and with a relative good capacity to cope with future adversity. Meanwhile, due to a high degree of connectivity with the European banking system, it remains sensitive and vulnerable to external and internal shocks generated by the European banking system vulnerability caused by problems registered in the European Union and in the euro zone.

11. REFERENCES

1. Direct fiscal cost of the financial crisis, Deutsche Bank Research, http://ebookbrowse.com/direct-fiscal-cost-of-the-financial-crisis-probably-much-lower-than-feared-pdf-d305431418;
2. The Financial Crisis Response in Chart, april 2012, http://www.treasury.gov/resource-center/data chartcenter/Documents/20120413_FinancialCrisisResponse.pdf
3. The Financial Crisis Response in Chart, april 2012, http://www.treasury.gov/resource-center/data chartcenter/Documents/20120413_FinancialCrisisResponse.pdf
4. Commission Staff Working Document, Impact Assessment , accompanying the document, Proposal for a directive of the Euroean Parliament and of the Council,http://ec.europa.eu/internal_market/bank/docs/crisis-management/2012_eu_framework/impact_ass_summary_en.pdf;
5. Top 1000 world banks 2012 cover story, http://www.thebankerdatabase.com/files/pdf_downloads/Top1000WorldBanksIntroduction.pdf;
6. The fiscal impact of financial sector support during the crisis, /www.ecb.europa.eu/pub/pdf/other/eb201506_article02.en.pdf
7. NBR, Financial Stability Reports, 2010,2011,2012, 2013,2014,2015
8. Annual Report, NBR, 2009,2010,2011,2012,2013,2014