# THE IMPACT OF THE FINANCIAL CRISIS ON BANK PROFITABILITY

### IMOLA DRIGĂ, CODRUȚA DURA, LOREDANA CRISTEA \*

**ABSTRACT:** The purpose of this paper is to provide a perspective on the impact of the financial crisis and credit-risk exposure management on bank profitability. The global financial crisis had affected the financial system and financial stability all over the world. Banks' specific characteristics and domestic and external adverse macroeconomic developments had a great impact on bank profitability. Moreover, a major concern for banks was the increase of credit losses on the market. As non-performing loans have a significant negative impact on bank performance, issues of loan portfolio quality and NPLs are explored more in depth in the paper.

**KEY WORDS:** financial crisis, credit risk, non-performing loans, bank profitability, bank management.

JEL CLASSIFICATIONS: G21.

#### 1. INTRODUCTION

To be able to analyse the causes of the banking crisis it is essential to start from the basics of banking. Banks are dealing with borrowing on short term and lending on long term, creating credit that allows the real economy to grow and expand. However, this credit creation service induces an inherent fragility of the banking system (De Grauwe, 2008). The last great banking crisis occurred in 2007 had significant effects for the real economy and for the banking system. The recent financial crisis had repercussions especially on the financial markets, spreading relatively quickly on national economies through transmission channels, amplifying the risk manifestation framework. The main victims were the emerging economies that show a weak capacity to spread the adverse effects of the crisis, vulnerability determined by the

<sup>\*</sup> Assoc. Prof., Ph.D., University of Petroşani, Romania, <u>imola.driga@gmail.com</u> Assoc. Prof., Ph.D., University of Petroşani, Romania, <u>codrutadura@yahoo.com</u> Economist, University of Petroşani, Romania, <u>crs.loredana@yahoo.com</u>

underdevelopment of the economic, financial and institutional structures (Tomuleasa, 2014).

The crisis officially started on August 9, 2007, when tensions arose on the money market followed by the worsening of the situation on the financial markets, as investors began to fear more about the solvency problems than the liquidity problems in the banking system. The crisis reached its climax due to the collapse of Lehman Brothers Bank on September 15, 2008 and the entry of the global banking and financial system into a spiral of mistrust, liquidity and bankruptcy. The entire Western banking system became undercapitalized and illiquid in the US, in the UK and across Europe.

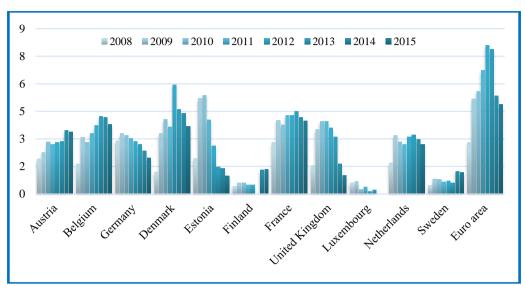
#### 2. OBJECTIVES AND METHODOLOGY

The purpose of the paper is to provide an overall perspective on the main aspects of credit risk, loan portfolio quality, non-performing loans and addresses issues related to bank profitability. The methodology used in this study concerns qualitative approaches. The study explores data available from reports and studies of credit institutions, periodicals and occasional publications of the NBR, database and research of the World Bank, Eurostat and other international organizations and consulting companies, as well as foreign and Romanian literature or websites and other media sources. Factual observation and extensive statistical data collected led to relevant results and appropriate findings on bank profitability which finally allowed to draw some general conclusions.

## 3. THE IMPACT OF THE FINANCIAL CRISIS ON THE EUROPEAN BANKING SYSTEMS

The financial crisis, that began in the summer of 2007, led to a prevailing inability of borrowers to pay back their loans, as more companies and people faced payment difficulties and even bankruptcy. Subsequently, the crisis had generated a great impact on non-performing loans (NPLs) all over the world. Thus, many countries with a booming banking sector were faced with a sudden and significant decrease in lending. In European, the banking industry faced a trend of continuous deterioration of credit quality, a common feature in the field of financial transactions due to the economic downturn caused by the financial crisis.

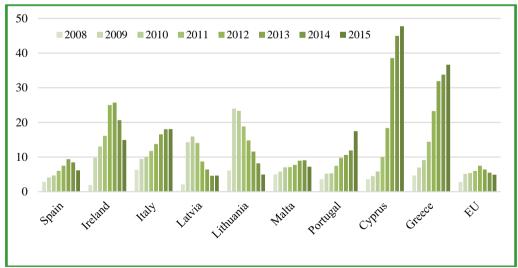
The last financial and economic crisis has hit the financial sector disproportionately producing unequal effects on national economies. The financial sector of developed countries was less affected by the crisis. Unlike most EU member states, where banks have recorded a dramatic increase in the volume of NPLs, there have still remained strong banking systems in Europe, such as Luxembourg, Nordic countries, Estonia, UK, Germany, Belgium, Austria, France (Figure 1). Generally, euro banking systems have managed to maintain a good quality of loan portfolio and a reduced rate of non-performing loans, well below the average of the area (Drigă & Dura, 2015).



Source: based on data from the World Bank's database, http://databank.worldbank.org/Note: Luxembourg 2014, 2015 – N/D, Finland 2013 – N/D.

Figure 1. NPLs ratio in EU countries, 2008-2015

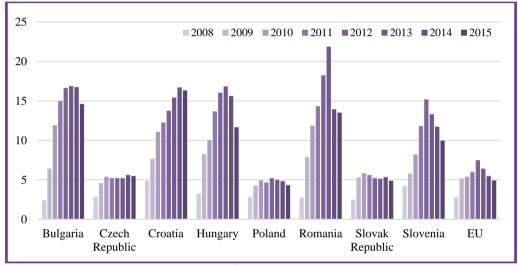
Even if several EU banking systems (in Spain, Malta, Italy, Portugal) recorded values slightly above the EU average, non-performing loans in most EU countries continued to decline due to the difficult market environment across Europe (Drigă & Dura, 2015). Banking systems in Ireland, Greece and Cyprus recorded an unusually high volume of non-performing loans and the rate of NPLs has reached alarming figures in the past three years (Figure 2).



Source: based on data from the World Bank's database, http://databank.worldbank.org/

Figure 2. NPLs ratio in EU countries, 2008-2015

Central and Eastern European banking systems had been suffering a downward spiral since the crisis, highlighted by subdued bank lending, weak or negative economic growth, and high levels of non-performing loans. The trend of deterioration in the quality of loan portfolios was mostly a common characteristic of CEE banking market. In these countries, NPLs grew rapidly reaching levels comparable to those generated by previous financial crises (Figure 3). Some countries, such as Poland, the Czech Republic and Slovakia, registered lower values of NPLs (being stable in post-crisis or even showing some improvement), while in other countries (such as Slovenia, Croatia, Hungary, Bulgaria and Romania) NPLs ratio were substantially higher showing weak signs of improvement (reaching significant figures in 2013: Slovenia - 13.31%, Croatia - 15.43%, Hungary - 16.74%, Bulgaria - 16.88%, Romania - 21.87%).

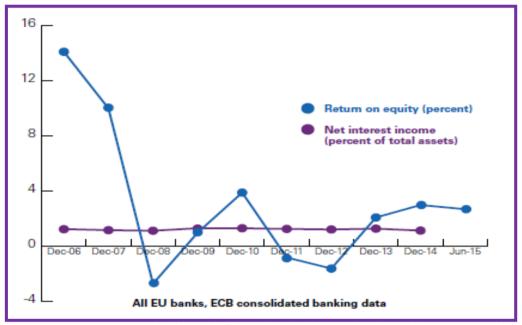


Source: based on data from the World Bank's database, http://databank.worldbank.org/

Figure 3. NPLs ratio in CEE countries, 2008-2015

After several years of increases, NPLs have declined since 2013, reaching an average level of 12% in the area. But, if we rule out the healthier banking systems from Poland, the Czech Republic and Slovakia, CEE figures for 2013 show an average of nearly 17% for the NPLs ratio. According to experts, such particularly high values, delay the return to a sound lending activity and economic growth (Deloitte, 2014). In this year, the highest rate of NPLs from the CEE countries was recorded by the Romanian banking system (21.87%), almost twice the area average. But the numbers improved in 2014 and 2015. In fact, signals of levelling the growth of non-performing loans have emerged in most Eastern and Central European countries, but the turning point seems to have not been reached yet, despite the efforts of regulatory authorities and bank management. In 2015, Slovenia, Hungary and Romania have made major progress regarding the rate of non-performing loans, recording values well below the reference level of 2013. However, NPLs still remained high in CEE countries in comparison with figures recorded by the advanced economies of Western Europe.

Increased non-performing loans in Europe since 2008 had a negative impact on bank profitability through several channels (unpaid loans and interest, raising provisions, losses on sold or restructured assets). In fact, since the financial crisis, due to poor economic environment, high cost to income ratios, undermined bank lending and high levels of NPLs, the profitability of many European banks became low and low profitability weakened further the overall economy as the ability and willingness of banks to finance the wider economy became weak.

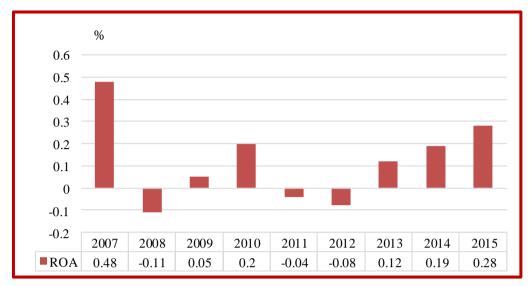


Source: KPMG International, The profitability of EU banks: Hard work or a lost cause? October 2016

Figure 4. Net interest income and return on equity in Europe, 2006-2015

The main profitability indicators of the banking sector include two ratios: the return on assets ratio (ROA) and the return on equity ratio (ROE). The first key indicator, ROA, is used for bank profitability since it measures the bank's return on investment in a format that is easily comparable with other institutions, pointing out how efficiently a bank can manage its assets to produce profits. The other ratio to assess the bank sector's attractiveness, ROE, is commonly used by shareholders as a measure of their return on investment and it measures the amount of a bank's income that is returned as shareholder equity.

The ROA across EU countries straggle after the burst of the financial crisis. The ROA of European banks was 0.28% in 2015 for EU-28, up from 0.19% in 2014, but it is still far from the 0.48% registered in 2007. In the same time, the ROE across EU countries also straggle after the burst of the last economic and financial crisis. The ROE of European banks was 4.35% in 2015 for EU-28, up from 3.2% in 2014, but it is still far from the 10.02% registered in 2007 (Figure 5 and 6).



Source: based on data from Eurostat, https://ec.europa.eu/eurostat/data/database

% 12 10 8 6 4 2 0 -2 -4 2007 2008 2009 2010 2011 2012 2013 2014 2015 ■ROE 10.02 -2.8 -0.78 1.02 3.9 -1.57 2.1 3.2 4.35

Figure 5. Return on assets for EU-28, 2007-2015

Source: based on data from Eurostat, https://ec.europa.eu/eurostat/data/database

Figure 6. Return on equity for EU-28, 2007-2015

Many European banking systems have faced low profitability since the financial crisis and bank profitability still remained at low levels in 2015 and the first half of 2016. Furthermore, weak bank profitability is one of the key challenges faced even by the euro area banking sector as weak profitability among banks is a key risk to financial stability.

#### 5. CONCLUSIONS

During and after the recent financial crisis, credit risk is one of the most important subjects of financial studies. Both foreign and Romanian literature acknowledge that one of the essential reason of significant problems for banks is the poor quality of the loan portfolio. According to experts, given that lending is the fundamental business of every bank, credit quality is the main indicator of financial reliance and health of the banking system.

Loans are generally the most important source of income for a bank, but they also are the main source of risk, which was highlighted by the recent financial crisis once more. Several EU countries were faced with a sudden set-back of lending and registered extremely high levels of non-performing loans due to a continuous deterioration of the quality of loan portfolios. As a result, bank profitability was severely affected, both ROA and ROE straggled across EU countries after the burst of the economic and financial crisis.

Despite clear improvements and many positive results in handling non-performing loans, NPLs represent still a significant challenge in some EU member states and continue to put pressure on the European banking system. Therefore, as credit risk management have inverse relation with bank performance and excessive risk taking is the prime cause of bank failure, the main problem for bank management still remains the need to be cautious about non-performing loans.

#### **REFERENCES:**

- [1]. Akin, I. (2016) Factors Influencing the Profitability of EU Banks' Before and During the Financial Crisis, İstanbul Gelişim Üniversitesi Sosyal Bilimler Dergisi, 3(2), pp. 151-184
- [2]. Cernohorska, L. (2015) Impact of Financial Crisis on the Stability Banking Sectors in the Czech Republic and Great Britain, Procedia Economics and Finance, 26, pp. 234-241
- [3]. De Grauwe, P. (2008) *The Banking Crisis: Causes, Consequences and Remedies*, Centre for European Policy Studies, Policy brief, 178, November
- [4]. Drigă, I. (2012) Produse și servicii bancare, Editura Sitech, Craiova
- [5]. Drigă, I. (2013) Financial Crisis and Bank Profitability The Case of Romania, Annals of the University of Craiova, Economic Sciences Series, 1, pp. 34-45
- [6]. Drigă, I.; Dura, C. (2015) Loan-Portfolio Quality and Managerial Efficiency in Banking, Annales Universitatis Apulensis Series Oeconomica, 17(2), pp. 22-30
- [7]. Drigă, I.; Dura, C. (2014) The Financial Sector and the Role of Banks in Economic Development, 6<sup>th</sup> International Multidisciplinary Symposium "Universitaria SIMPRO 2014, Field IX Economics and Public Administration, Petroşani, pp. 598-603
- [8]. Drigă, I.; Guță, A.J. (2009) Romanian Bank Lending during the Financial Crisis, Revista Tinerilor Economiști (The Young Economists Journal), 7(2), pp. 22-27
- [9]. Epure, M.; Lafuente, I. (2015) Monitoring Bank Performance in the Presence of Risk, Journal of Productivity Analysis, 44(3), pp. 265-281
- [10]. Escudero, V. (2009) Effects of the crisis on the financial sector: Trends and policy issues, International Institute for Labour Studies, Discussion Paper 197
- [11]. Nagy, A.; Benyovszki, A. (2013) *Provocările crizei asupra sistemului bancar*, Economie teoretică și aplicată, 20(4), pp. 4-25

- [12]. Nistor I., Pintea M., Ulici M. (2010) The Implications of the Global Crisis on the Financial Performances of the Romanian Banking System, Scientific Annals of the Alexandru Ioan Cuza University of Iaşi, pp. 149-159
- [13]. Njanike, K. (2009) *The Impact of Effective Credit Risk Management on Bank Survival*, Annals of the University of Petroşani, Economics, 9(2), pp. 173-184
- [14]. Socol, A.; Dănulețiu, A.E. (2013) Analysis of the Romanian banks' Performance Through ROA, ROE and Non-Performing Loans Models, Annales Universitatis Apulensis Series Oeconomica, 15(2), pp. 594-604
- [15]. Tomuleasa, I.I. (2014) Bank Performance and Soundness in the New EU Member States, Management Intercultural, 16(2), pp. 499-512
- [16]. Wilms, Ph.; Swank, J.; De Haan, J. (2014) Determinants of the real impact of banking crises: A review and new evidence, De Nederlandsche Bank, Working Paper No. 437, August
- [17]. Deloitte (2014) Restructuring Central Europe. NPL markets to gain momentum
- [18]. KPMG International (2016) The profitability of EU banks: Hard work or a lost cause?, October
- [19]. Eurostat, Data base, https://ec.europa.eu/eurostat/data/database
- [20]. National Bank of Romania (2008-2016) Monthly Bulletins
- [21]. National Bank of Romania (2009-2016) Financial Results Financial Stability Reports
- [22]. World Bank, Data base, http://data.worldbank.org/