## FINANCIAL CRISIS AND BANK PROFITABILITY - THE CASE OF ROMANIA

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**Abstract:** The purpose of this paper is to provide a global perspective on the determinants of bank profitability in Romania and to examine the effects of the financial crisis on bank profitability. In 2009, the banking system began to sense the effects of the crisis due to stagnation in lending, increased provisioning requirements and higher funding costs. Banks have tried to mitigate profit decrease by resizing networks expanded aggressively in recent years. Although the financial results of banks were still positive, the total profit recorded was more than 5 times lower than in the previous year. A major concern for banks has been how to manage anticipated and increasingly recorded credit losses on the market. These issues are explored more in depth in this study.

#### JEL classification: G01, G21, G24

## Key words: financial crisis; Romanian banking system; bank profitability; return on assets; return on equity

#### **1. INTRODUCTION**

The financial crisis is a situation where the demand for money exceeds the supply of money. Thus, liquidity is quickly evaporated because available money is withdrawn from banks, forcing banks either to sell their assets and investments to cover the need, or collapse. Therefore, the financial crisis in most cases, leads to an economic crisis. The first signs of the current economic crisis occurred in late 2007, but became a widespread phenomenon during 2008 in the U.S. and then worldwide.

Due to the globalization trend, the financial crisis of 2007-2008 initially referred to as a "credit crunch" or "credit crisis" converted into an enormous global economic crisis affecting almost every country in the world. 2009 is considered the year of maximum intensity and extension of the financial and economic crisis with serious impact on the global economy.

Consequently, the crisis has deeply influenced the Romanian economy eventually. However, in terms of direct impact, the banking system was less affected at the beginning since it was not exposed to toxic assets. Moreover, the National Bank of Romania took certain prudential and administrative measures over the time to prevent negative effects. Nevertheless, starting with 2009 the banking system began to experience the effects of the crisis due to stagnation in lending, increased provisioning requirements and higher funding costs.

The paper was written based on the belief that nowadays banks play a critical role in economic growth in any economy. The fact that the rate of economic growth is directly affected by the efficiency characteristics of the financial services sector was established by many researchers (just to mention some: Stiglitz J., Greenwald B., Saunders A., Walter I., King R., Levine R., Singh C., etc.). As Joseph Stiglitz states<sup>1</sup>, well-functioning financial systems enable selecting the most productive recipients for these resources and ensure the use of these resources in high return activities. In contrast, poorly functioning financial systems often allocate capital in low-productivity investments. The differences in terms of growth and total factor productivity can be enormous.

In addition, a numer of researches studied over the last years the issue of how sensitive bank profits are to the business cycle. The key findings confirmed that bank profits are pro-cyclical and this pro-cyclicality is stronger for deep recessions than for mild ones. This asymmetric effect is found for aggregate and bank specific data. Among the different components of bank profits, net provisioning is the driver behind this asymmetry. Evidence was find that each percent contraction of real GDP during severe recessions leads to a 0.24 percent decrease in return on bank assets. Also, severe recessions are found to have a persistent negative effect on bank profitability for aggregate bank data<sup>2</sup>.

Banks as financial intermediaries are expected to provide basic financial services for everyone. A sound and efficient banking system is significant in achieving economic development. Thus, banks are essential for any modern economy, not only because of their turnovers but also because they provide a number of important functions for the national economy, being the main financier. The banking system, seen as a mirror of economic growth, can contribute to the economic development of the country in at least two ways: directly, through the increase of balance sheet elements and indirectly through financial services granted for clients.

## 2. OBJECTIVES AND METHODOLOGY

The present study is based on data from bank reports, regular and occasional publications of the NBR, studies and reports of certain institutions involved, foreign and Romanian literature or websites and other media sources. The purpose of this paper is to provide an overall perspective on the determinants of bank profitability in Romania (the evolution o profitability during 2008-2011, the main causes of negative financial results - deteriorating credit portfolio, the results of leading banks on the Romanian market). Thus, we try to analyze the main areas of the banking sector and its key indicators affected by the crisis. The methodology used in the paper concerns qualitative approaches. Extensive statistical data collected and factual observation processed using analytical tools provided by literature led to relevant results and appropriate findings which finally led to several conclusions.

## 3. ANALYSES OF THE IMPACT OF THE FINANCIAL CRISIS ON THE ROMANIAN BANKING SYSTEM

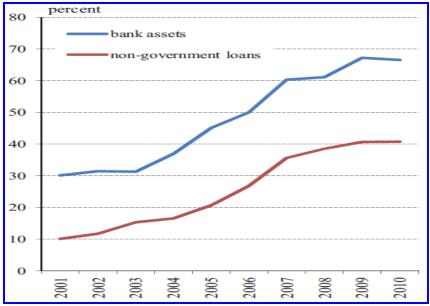
The Romanian financial system has been significantly tested in recent years by the effects of the global financial crisis. Even if it is very solid thanks to a conservative administration from shareholders and a prudent supervision from the central bank, the Romanian banking system did not remain outside the turmoil. The global financial and economic crisis has strongly influenced developments both in real and financial sectors

<sup>&</sup>lt;sup>1</sup> Stiglitz, J., The Role of the Financial System in Development, Fourth Annual Bank Conference on Development in Latin America and the Caribbean, San Salvador, El Salvador, June 29, 1998 <sup>2</sup> Bolt, W., De Haan, L. et al., Bank Profitability during Recessions, De Nederlandsche Bank

<sup>&</sup>lt;sup>2</sup> Bolt, W., De Haan, L. et al., Bank Profitability during Recessions, De Nederlandsche I Working Paper No. 251, July 1, 2010

especially between 2009 and 2010. Consequently, the dynamics of bank assets and nongovernment credit was reduced. In 2010 financial intermediation, calculated as the share of non-government loans granted by domestic banks in the GDP, remained unchanged at 41%<sup>3</sup>, the same as in 2009 (figure no.1).

In reality, the crisis affected the Romanian economy starting with 2009 when the economy entered into recession, reaching a high level mainly in 2010. Although banks operating on the Romanian market recorded in 2008 the biggest revenues from Central and Eastern Europe due to very high interest and fees, in 2009 the reduction in retained income hit bank profitability. In 2008 the Romanian banking system recorded a return on assets (ROA) of 2.65% and a return on equity (ROE) of 29.5%, double in comparison with the average EU member countries in Central and Eastern Europe. Romania was followed by the Bulgarian banking system which reached a level of 1.98% for ROA and of 17.3% for ROE (figure no.2).

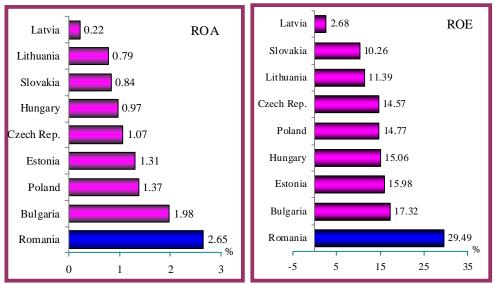


Source: NBR, Financial Stability Report, 2011

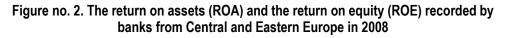
## Figure no. 1. Bank assets and non-government loans as a share in GDP

However, according to data provided by the General direction of macroeconomic analysis and financial policies, the descending trend of the percentage of bank branches and agencies that reported profit for the period 2007-2011 is obvious (71.7% in 2007, 56.9% in 2008, 47.5% in 2009 and 47.8% respectively in 2010). Simultaneously, the percentage of banks reporting losses increased from 28.3% in 2007 to 43.1% in 2008, reaching in 2009 52.5% from the total banking institutions (figure no.3). In 2010 the share of banks that registered losses remained close to the same level as in 2009 (52.2%). Although the market share of banks recording losses doubled in 2011 (from 21.9 to 44.6 percent), 21 out of 41 credit institutions from the Romanian banking system still reported profits at the end of the year.

<sup>&</sup>lt;sup>3</sup> NBR, Financial Stability Report, 2011



Source: processed based on data from the European Central Bank, 2009





Source: processed based on data from the General direction of macroeconomic analysis and financial policies, June 2012

## Figure no. 3. The share of banks that have recorded profit / loss

The evolution on profit taxation for commercial banks during  $2007-2011^4$  indicate an increase of 135% in 2008 compared with 2007, in 2009 the trend of revenues remained ascending (+75% compared with 2008), while in 2010 the revenues recorded a sharp decline (-77.4% compared with 2009). In 2011 the incomes remained relatively to the same level as in 2010, slightly increasing with 3.8% (table no.1).

<sup>&</sup>lt;sup>4</sup> The evolution of profit taxation for commercial banks during 2007-2011, General direction of macroeconomic analysis and financial policies, June 2012

	2007	2008	2009	2010	2011
Profit taxation (mil. lei)	10528.8	13039.9	10617.1	10090.9	10289.2
Profit taxation for banks (mil. lei)	298.4	701.3	1227.3	276.8	287.3
The share of profit taxation for banks in total profit taxation (%)	2.8	5.4	11.6	2.7	2.8

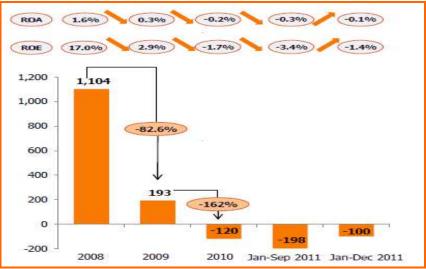
Table no. 1. The evolution of profit taxation for commercial banks during 2007-2011

Source: General direction of macroeconomic analysis and financial policies, June 2012

#### 4. THE ROMANIAN BANKING SYSTEM PROFITABILITY DURING 2008-2012

This increasing phenomenon of globalization has made the concept of efficiency more important both for the non-financial and financial institutions. Financial stability in an economy is largely dependent on the stability and the resilience of the banking system. To accomplish banking stability the banks are required to maintain quality bank assets that aid in achieving profitability<sup>5</sup>.

Since August 2011<sup>6</sup> the Romanian banking system profitability was in negative territory, mainly under the influence of high net expenditure with provisions, but also due to deterioration in operating results. Although a number of banks succeeded in reducing part of the previously accumulated losses at the end of 2011, the financial result was -777.3 million lei at the end of 2011. As of December 2011, the key profitability indicators, return on equity - ROE and return on assets - ROA, remained in negative territory, but improved somewhat against September 2011 (-2.6% versus - 3.4% and -0.2% from -0.3% respectively). At end-June 2012, both ROE and ROA displayed slightly negative levels at -1% and -0.1% respectively. The aggregated banking system's net profit up to September 2011 outpaced the negative result from the entire 2010 year and reached about -198 million EUR (figure no.4).



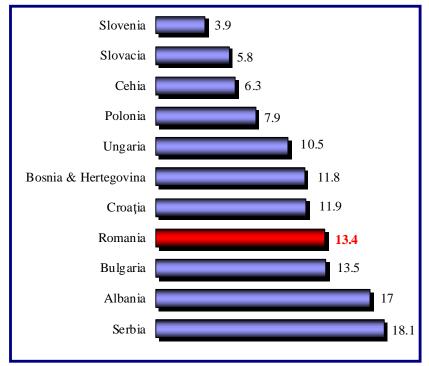
Source: Ensight Management Consulting Report, 2012

Figure no. 4. The profitability of the Romanian banking system

<sup>&</sup>lt;sup>5</sup> Swamy, V., Determinants of Bank Asset Quality and Profitability - An Empirical Assessment, August 8, 2012

<sup>&</sup>lt;sup>6</sup> NBR, Financial Stability Report, 2007-2012

Non-performing loans continued to put pressure on the Central and Eastern European banking system in 2011 as well. Thus, the level of non-performing loans continued to increase in some countries (like, for example, in Romania), even if at a lower pace than in 2010. In some other countries it already seems to have reached a peak compared to the values in 2010. On the other hand, there are countries like Slovenia that have very good credit quality compared to the other CEE countries<sup>7</sup> (figure no.5).



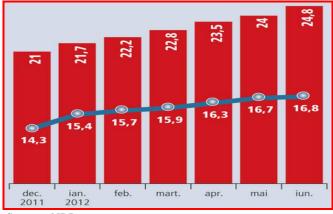
Source: Ensight Management Consulting Report, 2012

# Figure no. 5. The ratio of non-performing loans in Central and Eastern Europe (%, June 2011)

While on a global level, bankers are mostly preoccupied with the outlook of the world economy, Romanian bankers place credit risk at the top of their concerns. Thus, a major concern for banks has been how to manage anticipated and increasingly recorded credit losses on the market. Credit quality indicators have worsened in 2011 as well, even if the trend continued at a lower pace.

According to official data, the ratio of non-performing loans in December 2011 was 14.3%, while in June 2012 reached the value of 16.8%, compared to a value of 11.67% in September 2010 (figure no.6). According to the estimation of the National Bank Supervision Department, the ratio of non-performing loans will continue to grow and it is possible to reach the verge of 20% in mid-2013.

<sup>&</sup>lt;sup>7</sup> Ensight Management Consulting Report, 2012



Source: NBR

## Figure no. 6. The ratio of non-performing loans in the Romanian banking system

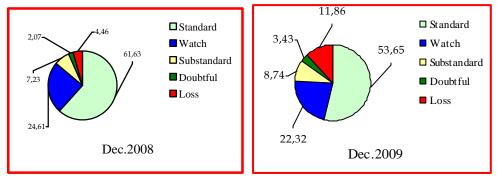
Due to further constraints on customers' financial standing and the still fragile economic growth the quality of the loan portfolio of banks registered an ongoing worsening. The assessment of credit quality based on prudential reports shows a further deterioration in loan quality that actually started in late 2008. Thus, the exposure throughout the entire banking system for 2009-2012 credits granted to customers outside the sector of credit institutions shows the increase of the share of "loss" and "doubtful" loans, while the share of "standard" and "watch" loans recorded a downward trend (table no.2, figure no.7).

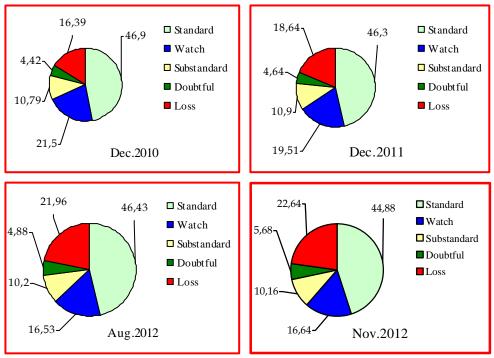
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	Standard	Watch	Substandard	Doubtful	Loss
Dec. 2008	61.63	24.61	7.23	2.07	4.46
Dec. 2009	53.65	22.32	8.74	3.43	11.86
Dec. 2010	46.90	21.50	10.79	4.42	16.39
Dec. 2011	46.30	19.51	10.90	4.64	18.64
Aug. 2012	46.43	16.53	10.20	4.88	21.96
Nov. 2012	44.88	16,64	10.16	5.68	22.64

Table no. 2. The evolution of the quality of the loan portofolio of banks

Source: processed based on data from the NBR's Monthly Bulletins, 2008-2012

Besides, with only a few exceptions, the worsening quality of loan portfolios remained a common feature of the European financial market in 2011 and 2012, given the depressed economic growth in the area and the losses induced by the sovereign debt crisis.





Source: processed based on data from the NBR's Monthly Bulletins, 2008-2012

Figure no. 7. The evolution of the quality of the loan portofolio of banks

## 5. FINANCIAL RESULTS FOR THE MAIN PLAYERS ON THE ROMANIAN BANKING MARKET

In 2011-2012 there were some changes among the Top 10 players on the Romanian banking market in terms of total net assets, but not significant. As all relevant banking indicators suggest, the banking market concentration is very high, the top five banks, according to their market share (BCR, BRD, Banca Transilvania, CEC Bank, UniCredit Tiriac Bank and Raiffeisen Bank) are the main players, holding 62,62% from the total assets (figure no.8).

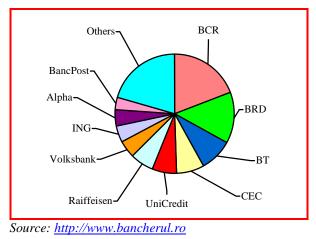
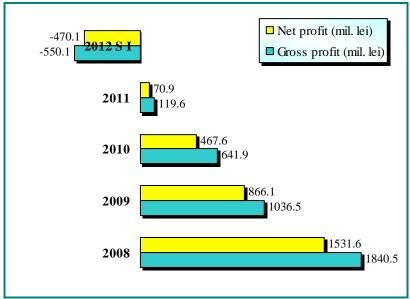


Figure no. 8. The market share of Romanian banks in terms of total net assets

BCR and BRD remained the biggest market players based on their market share, with no significant changes to their market shares in 2012 compared to 2011 or 2010 for that matter.

Although the financial result at the end of 2011 equalled -777.3 million lei, large banks generally reported positive financial results, thanks to somewhat lower credit risk costs and higher operating profit. Despite the severe recession the country suffered, Romania's largest banks continued to make profits in 2011, but significantly lower than in 2010.

**BCR**, the number one bank in the Romanian banking system based on market share hold in terms of assets, reported an unexpected loss in early 2012. At the end of 2011 the bank registered a positive result, but the profit was small, only 70.9 million lei (net profit) compared to the result achieved by rival BRD in the same period (498,48 milioane lei). BCR's profitability was considerably affected in 2012 and the bank posted a loss of -470.1 million lei in June 2012 (figure no.9).



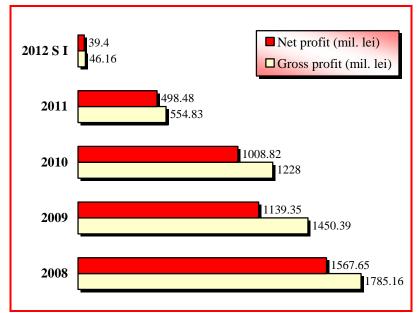
Source: processed based on data from BCR's financial reports 2008-2012

Figure no. 9. The evolution of profit for BCR, during 2008-2012

With the share of non-performing loans coming to nearly 17% at the end of September, BCR had provision costs that led to a 74 million lei net profit, accounting for just a third of the overall earnings reported for 2009. BCR expanded its loss to 762.5 million lei in the first nine months of this year, after a profit of 67.6 million lei in the same period of last year. The risk provisions of the bank increased considerably, to 2635.2 million lei, an increase of over 1000 million lei, reflecting the impact of a continuing weak performance of the Romanian economy on corporate and real estate business. The non-performing loans ratio was 25.8% of the total loans portfolio at the end of September 2012<sup>8</sup>. BCR hopes to return to profit next year after huge nine-month loss strongly impacted by prudent provisioning in a still adverse economic environment.

<sup>&</sup>lt;sup>8</sup> BCR, Financial results 9M 2012

In 2011 **BRD**, the second bank in Romania in terms of assets, focused on maintaining profitability without ignoring the particular conditions of the environment in which it operates and the increasingly complex European context. Thereby, BRD was the most profitable bank in the Romanian banking achieving a net profit of 498.48 million lei. The bank had also the most extensive distribution network, which actually placed it in a privileged position to the emergence of any funding opportunities. However, during the first half of 2012 the profitability of BRD registered a downward trend, reaching a level of only 39.4 million lei (net profit) (figure no.10). After the first nine months of 2012, BRD reported a net profit of 10.38 million lei down 98%, compared to last year's similar period. Operating expenses fell 4%, to 1 million lei, compared to September 2011, and the gross operating profit was 1.17 million lei, down 7%.



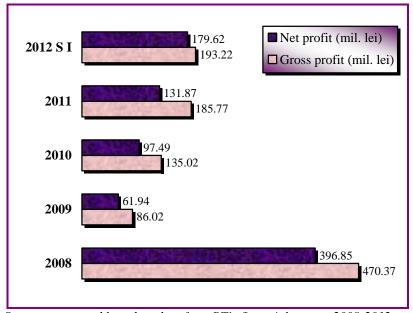
Source: processed based on data from BRD's financial reports 2008-2012

Figure no. 10. The evolution of profit for BRD, during 2008-2012

Another argument for BRD'S advantage is that in the last years the network of agencies had an important qualitative evolution thank to an innovative aproach that made the difference in a more and more competitive market. Broadly, optimisations of various activities were made in conjunction with the technological level reached by the network, as well as with the current and predictable level of demand for financing in the following period<sup>9</sup>.

**Banca Transilvania**, one of the six Romanian banks controlled by domestic investors, continued to increase the total net banking assets and thus gain market share in 2011 as well. It became the 3rd largest player on the market. Unlike BCR and BRD Banca Transilvania recorded a reversed trend managing to almost double net profit in the first half of 2012 compared with the results recorded in late 2010. Thus, in the first half of 2012, the gross profit of the bank represented 193.22 million lei, up 28.59% compared to the same period last year. Net income at the end of June 2012 was 179.62

<sup>9</sup> BRD, Annual Report 2011



million lei, up 47.1% from the same period of 2011 when it reached 122.10 million lei<sup>10</sup> (figure no.11).

Source: processed based on data from BT's financial reports 2008-2012

Figure no. 11. The evolution of profit for BT, during 2008-2012

## 6. CONCLUSIONS

The latest recession, initiated by the banking crisis of 2008, revived the issue of how sensitive bank profits are to the business cycle. The Romanian banking system, largely dependent on the economic and financial market dynamics of the euro area, was negatively affect in the last period. Thus, the profitability of the Romanian banking system as a whole has been in negative territory since August 2011, mainly due to large net provisioning costs, as well as to weaker operating profits. At the end of June 2012, the Romanian banking sector recorded a 192 million loss, although lending activity resumed. This was especially due to the fast impairment of financial assets and the effect of collateral revaluation. The major profitability indicators, returnon equity (ROE) and return on assets (ROA), reported negative values. The cost/income ratio in the first half of 2012 reflected a worsening of banks' capacity to earn operational profits.

Nevertheless, it is expected that in the near future the situation of overdue credit accounts will improve based on the gradual revival of economic activities and resumption of lending while improving domestic macroeconomic parameters, but banking profitability will remain low, given the time gap between economic recovery and its positive effects on the financial results of banks. Profitability will be hard to achieve, particularly as capital levels required by international regulators rise. The ability to attract funds and generate sufficient returns will test even the strongest banks.

<sup>&</sup>lt;sup>10</sup> Banca Transilvania, Financial results, 2012

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