

**A COMPARATIVE ANALYSIS OF PERFORMANCE AND SOUNDNESS  
INDICATORS OF THE MAIN ROMANIAN BANKS**

Alin Marius ANDRIEȘ\*

**Abstract**

*The economic literature grants a great attention to bank performance analysis, expressed in terms of competition, concentration, efficiency, productivity and profitability. The main reason for this special attention is the central role of banks in financial intermediation. The efficiency and competition degree at the level of banks and other financial institution are difficult, if not even impossible to directly observe, because the information regarding the production prices (or of credit rates) are not available. In this paper we analyze the performance and soundness indicators of the main Romanian banks, compared with main banks in the Czech Republic and Hungary.*

**Key words:** banking performance, soundness indicators, profitability

**JEL classification:** G21

**1. Introduction**

Through the activity they perform, as part of the business world, banks are preoccupied in carefully “buying” the cash resources and in using them with a maximum of turnover, considering all possible risks, in order to obtain profits as large as possible [Cocriș and Chirleşan, 2007, 129].

The global performance of a bank characterizes its overall results, being given by the level of profitability correlated with its variation depending of the resources assumed by that bank [Olteanu, 2003, 335-336].

In the literature in the field the bank performances, both on system and on credit institution level, are expressed with through the operations, soundness and risk indicators. The use of risk indicators in the analysis of bank performance has gained in the past decades a special attention because the control on bank risks is one of the most important factors the profitability of the bank depends on. The computation of the risk indicators allows for their interpretation through the prism of causes, consequences and effects in time on the profitability of the bank [Stoica, 1999, 176].

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## 2. Literature Review

The economic literature grants a great attention to bank performance analysis, expressed in terms of competition, concentration, efficiency, productivity and profitability. The main reason for this special attention is the central role of banks in financial intermediation. The efficiency and competition degree at the level of banks and other financial institutions are difficult, if not even impossible to directly observe, because the information regarding the production prices (or of credit rates) are not available. The authors of numerous studies have tried to quantify unobservable variables through several different methods, but until now no method has proven to be entirely conclusive or unchallenged. Aside from the theoretical deficiencies, a concrete problem is the fact that these different methods offer different results.

The shareholders of a bank are the most interested ones in maximizing the performance of the bank because they are the final beneficiaries of the profits registered by that bank. The maximization of the bank profit can be achieved either by maximizing incomes, or by minimizing costs. Also, depending on the market power of the bank, they can equally increase the prices of bank products, mainly the interest charged for loans, or decrease the prices of resources, especially the interest for deposits.

The economic theory tells us that in a perfectly competitive market, the maximization of profit is equivalent with the minimizing of costs. But in practice, the maximization of profits and/or the minimization of costs is not always possible. The inability of banks to maximize their profits can be explained by the existence of two categories of disturbing factors. In the first category is a series of exogenous factors such as the regulation in the banking sector and economic shocks, factors that can determine obtaining a below optimal performance [Bikker and Boos, 2008, 6].

A second category of factors that determine a deviation from the maximization of profits is the one of endogenous factors. In this category are two types of factors: incorrect incentives and inefficiency.

Incorrect incentives determine banks to defer from pure policy of minimization of costs and/or of maximization of profits. The imperfect competition provokes a situation in which the profits are maximum at a level where the average level of the costs is not minimized. Another reason that determines shareholders to deviate from the maximization of profit and minimization of costs is the degree of aversion to risk. If the shareholders of a bank are homogeneous and have a high aversion to risk, they will make decisions that determine the decrease of the performance of the bank [Tirole, 1993, 35].

The impact of incorrect incentives on the bank performance depends on the management and control method of the bank and is independent from the structure of the banking market [Dewatripoint and Tirole, 1994]. In the absence of some complete information, the agency theory says that the inability of shareholders to adequately monitor the bank management and induce a non-optimum behavior, that is the obtained profits are not maximum and/or registered costs are not the minimum ones. This means that the asymmetrical information between principal and agent that was used by Diamond [1984] in order to explain the fact that banks exist because they reduce the audit costs for creditors, now also explains the fact that banks can suffer because of moral hazard. In the past years pecuniary and non-pecuniary methods were developed, in order to decrease the agency problems and at the same time to maintain a certain confidentiality of the strategy and policy followed by managers [Bikker and Boos, 2008, 7].

The confidentiality of the banking strategy is very important because on the level of the banking sector there is strongly manifested the phenomenon of free-rider and an excess in transparency can lead to a decrease of the gain opportunities of the bank and to a decrease of the comparative advantages in relation to the competing banks. Confidentiality is affected by certain mechanisms such as: the external control performed by the supervision and control institutions, external audit, contracting loans from the bonds market and making merges or takeovers [Tirole, 1993, 35].

Considering the fact the banks act in a competition environment, where a strong competition is manifested both in quality, but especially in price and that the bank products are replaceable, which creates a strong competition pressure on the bank management, the shareholders can determine the obtaining of an optimum bank performance by creating a management reward system based on performance [Freixas and Rochet, 2008, 95]. Another mechanism for eliminating the agency problems is the bank rating system which signals the possible side-slips of management.

Another factor that determines the obtaining by banks of a under-optimum performance is inefficiency. Inefficiency is defined as the use of too large quantity of inputs to obtain a given level of outputs or the obtaining of a too little quantity of outputs by using a given quantity of inputs. A bank can produce at lower costs and with a higher profit than other banks if it will better use the inputs and transform them into outputs in the cheapest way possible.

Molyneux, Altunbas and Gardener [1997, 9] underlined the importance of efficiency in the European bank system and showed that a higher efficiency can “lead to the improvement of the financial products and innovations and of the risk management ability, if the profits generated by the increase of efficiency are used for the improvement of adequacy of capital”. Banking efficiency is very important in explaining and interpreting banking performance. Berger and Humphrey [1992] claim that the increase of efficiency determines the decrease of prices for bank products and an improvement of the services provided by banks.

A healthy bank system is built on profitable and adequately capitalized banks. A full understanding of the profit sources and of the changes in the structure of incomes/profits both of a bank and of the entire bank system, overall, is important for all those involved in the risk management process. The supervision authorities have to see the profitability of the bank as a clue of stability and as a factor that contributes to the trust of deponents. That is why, maximum sustainable profitability must be encouraged, because a competition healthy for profits is a clue of an efficient and dynamic financial system [van Greuning and Bratanovic, 2004, p. 55].

### **3. Performance and soundness indicators of the romanian banking system**

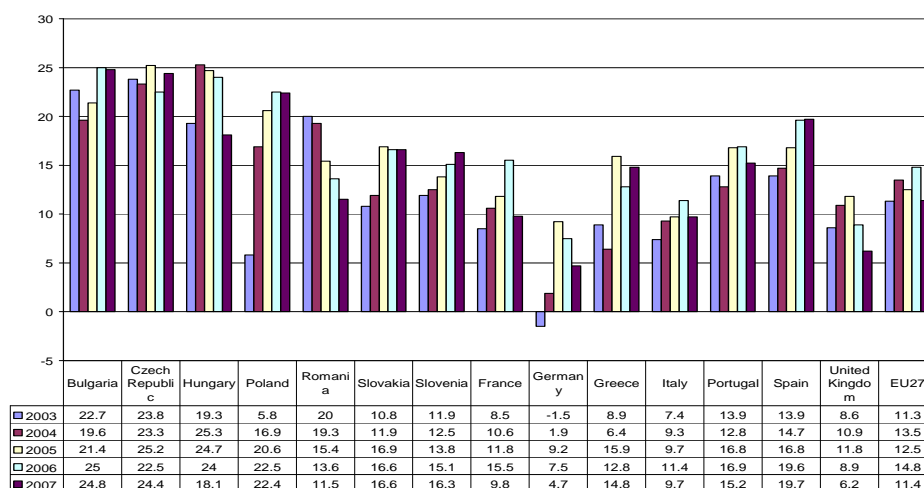
Bank management pursues by nature to obtain profit, which is a higher banking performance. Stability and the trends of the increase profit are the best synthetic indicators of the performances of a bank or of the entire banking system, both in the past, as well as in the future. The bank performance measuring and rendering instruments are different, but, in the end, one of the most efficient ones is the financial indicators' system. The bank performance indicators show how the bank is at a given time, which allows for managers to take measures as appropriate, for keeping the performance if the indicators are positive, or for improving the performance if the indicators are not at the level proposed by the bank.

The bank performance and soundness appreciation indicators are the most used by the supervision authorities and in the literature in field and they can be grouped into: *profitability indicators; indicators for the appreciation of the quality of assets and capital adequacy indicators.*

**Profitability** offers clues about the ability of the bank to undertake risks and to expand its activity. The main indicators used in the appreciation of the bank profitability are: Return on equity ROE (Net income / Average Equity), Return on Asset ROA (Net income / Total assets) and the indicator of financial leverage or (Equity / Total Assets) [Dardac and Barbu 2005, 306].

The indicators are submitted to observation along a period of time in order to detect the tendencies of profitability. The analysis of the modification of the various indicators in time shows the changes of the policies and strategies of banks and/or of its business environment [van Greuning and Bratanovic, 2004, 63]. *Return of equity – ROE* constitutes the most significant expression of profit, which highlights the results of bank management in its entirety and indicates to shareholders the efficiency level of the investments they made in the banking activity [Cociș and Chirleşan 2007, 129].

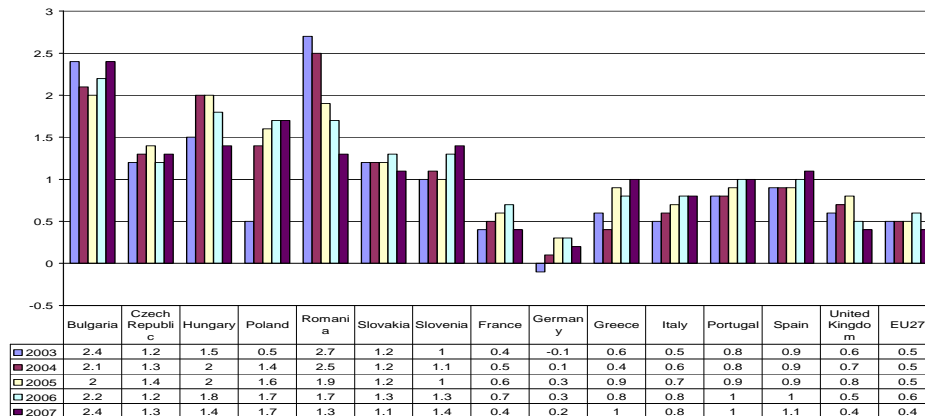
It can be seen from the chart below that in the period analyzed at the level of the Romanian banking system there was registered a level of the Return on equity slightly above the average of the countries in the European Union, lower than in the ex-communist countries, but above the countries with a developed banking system. There can be noticed a declining trend of this indicator, a first explanation for this phenomenon could be the increase of competition in the banking system and the decrease of inflation which lead to the decrease of the interest rates and implicitly of the income of the banks.



Source: IMF - Global Financial Stability Report, Financial Soundness Indicators, April 2009

**Figure no. 1. Evolution of the indicator Return on equity – ROE on the level of European banking systems in the period 2003-2007**

Return on asset – ROA is an indicator that best reflects how efficient the managerial team works, because it reflects the bank's management ability to use the resources the bank disposes of for the purpose of optimizing profit [Stoica 1999, 174]. It measure the way in which all assets of the bank are involved in profitability [Olteanu 2003, 340].



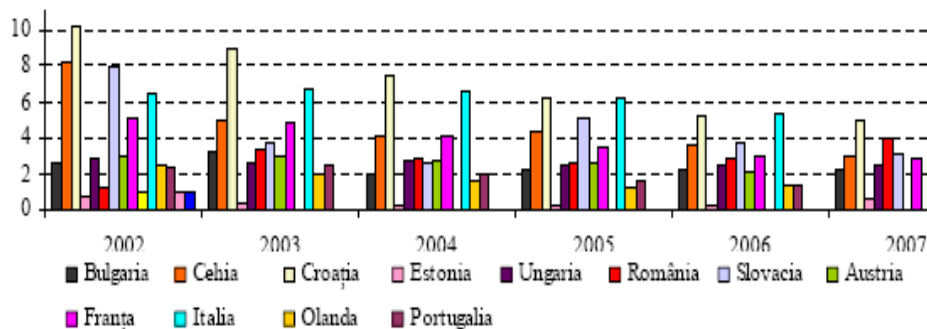
Source: IMF - Global Financial Stability Report, Financial Soundness Indicators, April 2009

**Figure no. 2. Evolution of the indicator Financial rate of return – ROA on the level of European banking systems in the period 2003-2007**

In the case of the Rate of return on assets also there is found a decreasing trend for the period analyzed on the level of the Romanian banking system. Although it has registered a significant decrease in the analyzed period the rate of return on assets of the Romanian banking system remains a lot higher than the average rate of the banking systems in the European Union, sensibly equal to the level registered in the other ex-communist states.

*Asset quality* reflects the potential risk that the loans granted by the banking institution can generate, as well as the inherent risk of other assets and of the extra-balance sheet operations [Dardac and Barbu 2005, 294]. The quality of the banking assets is influenced by a series of factors such as: the level of nonperforming loans, the appropriateness of provisions, the methods and instruments used in administering loans and the level of extra-balance sheet transactions and their afferent risk.

The most used indicators in the analysis of the quality of assets are: *nonperforming loan rate* and *nonperforming loan covering degree*. The nonperforming loan rate is calculated as a ratio between the nonperforming loans and total gross loans and it expressed the efficiency of the crediting activity of the bank [Stoica 1999, 175].

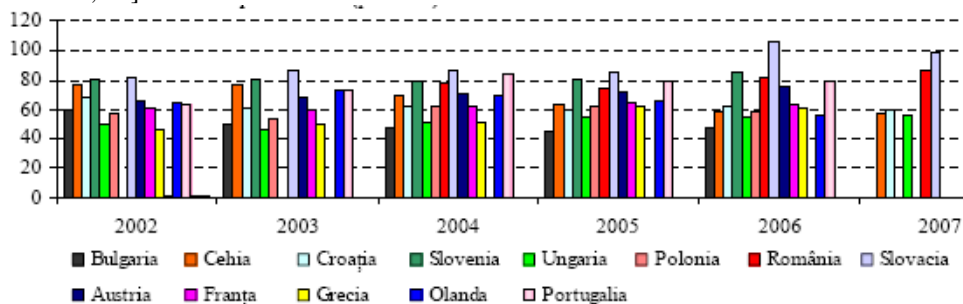


Source: IMF - Global Financial Stability Report, Financial Soundness Indicators, April 2009

**Figure no. 3. The evaluation of the indicator nonperforming loan rate on the level of the European banking systems in the period 2003-2007**

The quality of the loans found in the portfolios of Romanian banks is maintained at a level comparable to the one of many countries in the European Union.

After a period of four years in which the covering degree with reserves and provisions of the risk-weighted exposure afferent to the bank and non-bank loans, interbank placements and to the interests corresponding to them classified in the categories “substandard”, “doubtful” and “loss” was maintain relatively constant, in the year 2007 it registered a backset of 55 basis point, up to 117 basis point at the end of December. This evolution was registered under the conditions when the adjusted value afferent to the debts classified in the categories “substandard” and “doubtful” registered a faster increase than the volume of the provisions constituted for these categories of assets, the criteria for framing into the mentioned classes being represented by the financial performance of the clients and duty service. [BNR-RSF2008, 37].



Source: IMF - Global Financial Stability Report, Financial Soundness Indicators, April 2009

**Figure no. 4. The evaluation of the indicator Covering degree of subprime loans on the level of the European banking systems in the period 2003-2007**

Still, the covering degree with provisions of the nonperforming loans found in the portfolios of Romanian banks is located at a level higher to that of many countries in the European Union.

**Capital** represents one of the key factors that must be considered when the safety and good functioning of a bank is evaluated [van Greuning and Bratanovic 2004, 66]. In order to identify the degree of adequacy of capital the most used indicators by the supervision institution and by the bank rating agencies are: *the solvency ratio and the leverage effect*.

*The solvency ratio* is the best known indicator of bank prudence, having as main objective, the guaranteeing of the ability of credit institutions to handle the debtor's inability to pay and to attenuate the competition inequalities between the different national systems.

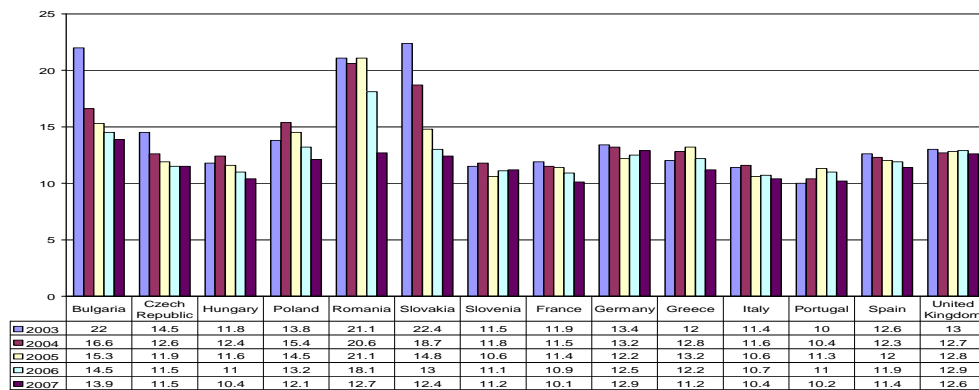
The solvency ratio, the one for capital adequacy requirements, has constituted a permanent preoccupation of the bank management and of the prudential regulations, because of its significance regarding the soundness of the bank and the safety of the deposits. Moreover, it also has an important competition dimension, the well capitalized banks being more attractive in attracting resources and more competitive in expanding the activity.

According to the Norm of the National Bank of Romania no. 12/2003, regarding the supervision of solvency and of large exposures of the credit institution, the solvency indicator expresses the owner's funds as proportion from the total of assets and elements outside the balance sheet, net from provisions, adjusted depending on the degree of risk. The solvency indicator is calculated at the level of each bank, individually or consolidated, in the

case of the group and reported to the central bank, on a trimester basis for the individual indicator, respectively on a semester basis for the consolidated one.

The numerator of the solvency indicator is represented by owner's funds, and the denominator represents the risk-weighted assets and elements outside the balance sheet. The owner's funds, according to the Norm of the National Bank of Romania no. 11/2003 regarding the individual and consolidated supervision of owner's funds, are composed of the owner's equity and the additional capital. The owners' equity is formed, in turn, from the initial capital (the initial registered capital, the bonuses concerning the capital, the legal reserve, the statutory reserves, the reserves afferent to the redeemed debentures, other reserves, the reported result, the net positive current result) and the fund for general bank risks.

The relevance of the solvency indicator was contested, because through the initial methodological conception, the market risk is ignored. Norm 5/2004, modified by Circular 18/2005 regarding the capital adequacy of credit institutions, represents the implementation into the Romanian banking legislation of Directive 93/6/EEC regarding the capital adequacy of the investment companies and credit institution, modified by Directive 98/31/EC and Directive 98/33/EC. According to this, banks will be able to calculate the capital requirements for their trading book activities.

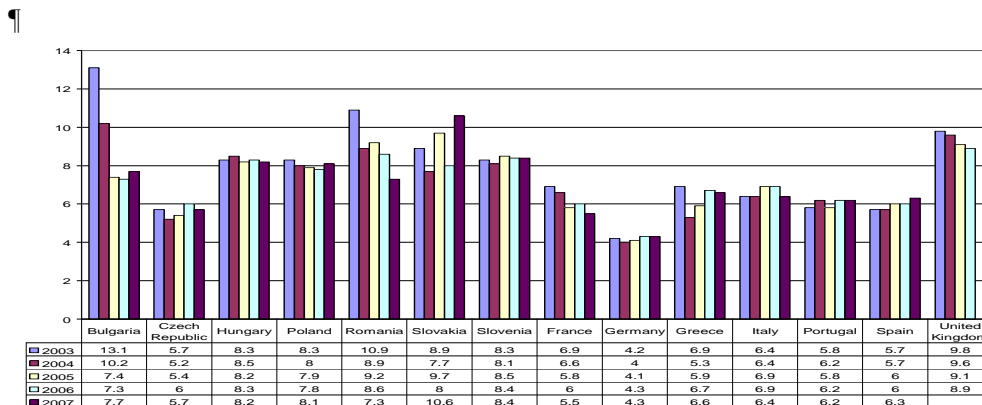


Source: IMF - Global Financial Stability Report, Financial Soundness Indicators, April 2009

**Figure no. 5. The evolution of the indicator Solvency ratio on the level of the European banking systems in the period 2003-2007**

A high solvency level is the expression of an efficient capital adequacy and of a competitive position on the market because of the high future development ability of the performed banking activity.

In 2007, the aggregated solvency ratio calculated for the credit institution in Romania, as well as at the level of the other European status, continued the decreasing trend recorded in the past years, the indicator losing 5,4 percentage points compared to the level registered in December 2006, until 12,7 percent. The main factor responsible for this evolution is the continued expansion of the non-government loan, under the conditions when the owner's funds of credit institution registered an inferior growth rhythm. Still, the solvency ratio is maintained at an appropriate level, being superior to the minimum threshold imposed by the bank prudence regulations applicable in Romania starting with 2007 and, also, on an European and international level (8 percent).



Source: IMF - Global Financial Stability Report, Financial Soundness Indicators, April 2009

**Figure no. 6. The evolution of the indicator Equity ratio (Equity / Total assets) on the level of the European banking systems in the period 2003-2007**

Compared to the situation in the previous years, when, on the background of a relatively low degree of intermediation, the aggregated solvency ratio calculated for the Romanian banking system was significantly higher than that of many countries in the region, the year 2007 locates Romania at level comparable to the other member states of the European Union [BNR – RSF 2008, 27].

Direct and indirect credit risks are rising, and the banking system is increasingly dependent on foreign funding. Real private credit expanded by some 50 percent in 2007, and has increasingly been funded by foreign borrowing, mainly through parent banks, rather than domestic deposits [IMF 2008, 10].

The self-financing degree of Romanian banks, calculated at aggregated level, expressed through the indicator Equity ratio (Equity/Total assets), remains comparable or even higher than the one afferent to many countries in the European Union.

#### 4. Performance and soundness indicators of the main banks in Romania, Czech Republic and Hungary

In this subchapter we wish to analyze the performance and soundness indicators at the level of the main banks in Romania, Czech Republic and Hungary.

The data used in the analysis are taken from the Annual reports of the banks for the period 1998-2007 and from the Fitch IBCA's BankScope database. The data set comprises 12 banks in Romania: *Alpha Bank, Banca Românească, Banca Transilvania, Bancpost, Banca Comercială Română, Banca Română pentru Dezvoltare, CEC Bank, Citibank Romania, Piraeus Bank, Raiffeisen Bank, UniCredit Tiriac Bank, Volksbank Romania*; 9 banks in the Czech Republic: *Ceska Sporitelna, Citibank Czech, CMSS, CSOB, GE Money Bank, HVB Bank, Komerční Banka, Raiffeisenbank Czech, Stavební Sporitelna*; and 6 banks in Hungary: *CIB Közép, K&H Bank, MKB Bank, OTP Bank, RaiffeisenBank Hungary, UniCredit Bank Hungary*.

The structure of the sample was determined by the availability of the data on the level of the banks in the 3 national banking systems, the selected banks own more than 60% of



the assets of the national banking systems. In the case of the Romanian banking system the 12 elected banks owned at the end of the year 2007, 82.70% of the net balance sheet assets of the banking system. The data set is not equilibrated, this being caused by the fact that in the case of some banks there are not the information afferent to some years in the analyzed period.

The analysis is focused on the level of four classes of indicators: asset quality, capital adequacy, operations results and liquidity of banks.

#### 4.1. Analysis of indicators regarding the quality of assets

The quality of assets reflects the potential risk that the loans granted by the banking institution can generate, as well as the inherent risk of other assets and of extra-balance sheet operations and is influenced by a series of factors such as: the level of nonperforming loans, adequate provisions, methods and instruments used in management of loans and the level of extra-balance sheet transactions and their afferent risk.

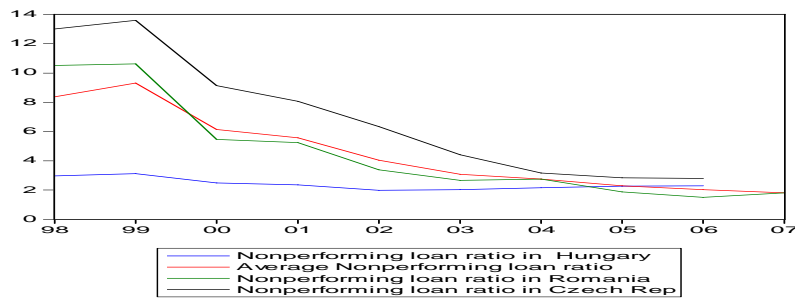
The indicators most used in the analysis of the quality of assets are: *nonperforming loan ratio* calculates as ratio between Nonperforming loans to total gross loans and *the nonperforming loan covering degree*.

Table no 1. Analysis of the indicators regarding the quality of assets

Year	ROMANIA		CZECH REPUBLIC		HUNGARY	
	Non performing loans/ Total gross loans	Non performing loan covering degree.	Non performing loans/ Total gross loans	Non performing loan covering degree.	Non performing loans/ Total gross loans	Non performing loan covering degree.
1998	10.5250	21.3900	13.0000	76.1250	2.9620	12.6325
1999	10.6175	20.1329	13.6033	53.9633	3.1200	19.7000
2000	5.4625	28.0214	9.1429	22.4960	2.4720	7.6425
2001	5.2325	8.0638	8.0629	15.9725	2.3600	6.3220
2002	3.3850	1.1036	6.3329	-7.3667	1.9817	9.1100
2003	2.6586	8.8073	4.3971	-10.6633	2.0317	13.1383
2004	2.7410	7.8630	3.1633	3.0750	2.1617	15.1683
2005	1.8591	9.0682	2.8244	4.2317	2.2617	14.3650
2006	1.5067	9.1275	2.7950	9.0200	2.2750	20.1667
2007	1.8150	14.9242				
Avg.	3.4323	11.5379	6.4489	19.9881	2.3768	13.2596

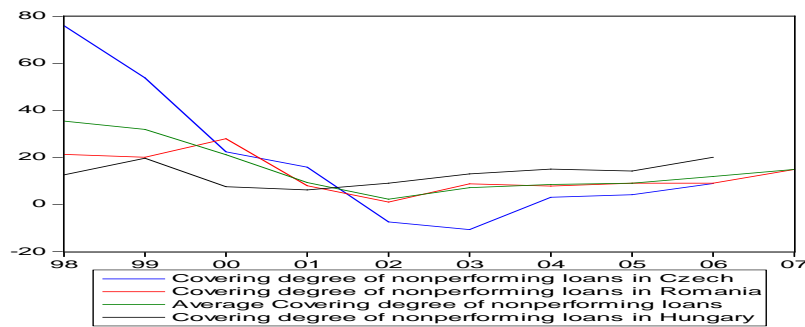
Source: Annual report of banks 1998-2007

From the analysis of the data regarding the indicator *nonperforming loan ratio* on the level of the banks in the 3 banking system emerges that the evolution of the nonperforming loan ratio was on an increasing trend in all 3 banking system in the analyzed period, this being owed to the restructuring of the banking systems and to the coming of foreign banks into these markets. It is noticed that the nonperforming loan ratio at the level of the banks in Romania is below the level reached in the Czech Republic. In 2007 there was manifested a phenomenon, also signaled by the National Bank of Romania, of increase of the nonperforming loan ratio with the accelerated, unsustainable increase of crediting.



**Figure no. 7 . The evolution of the indicator nonperforming loan ratio in the period 2003-2007 on the level of the main banks in Romania, Czech Republic and Hungary**

The covering degree of the nonperforming loans at the level of banks in Romania is found at a level comparable to the one registered by the banks in the Czech Republic and Hungary. Also at the level of this chart there is noticed a positive trend in the last part of the analyzed period, this increase of the level of provisions was caused by the legislative changes imposed by NBR in the method for calculation of provisions.



**Figure no. 8. The evolution of the indicator covering degree of nonperforming loans in the period 2003-2007 on the level of the main banks in Romania, Czech Republic and Hungary**

In the analyzed period at the level of the Romanian banking system, the bank with the lowest level, as annual level (0.05%) and as average level (0.442%), of the indicator *Nonperforming loan ration* was Volksbank. A first justification of this fact would be that the bank recently entered the market in Romania (10.04.2000) and the structure of the granted loans (especially mortgage loans).

*Table no. 2. Analysis of the indicators regarding the quality of assets at the level of the banks in Romania*

Bank		Nonperforming loans/ Total gross loans	Nonperforming loan covering degree.
Alpha Bank	Average	.5200	2.0389
Banca Romaneasca	Average	1.9250	10.8980
Banca Transilvania	Average	1.3833	9.4350
BANCPPOST	Average	2.8250	11.4520

<b>BCR</b>	Average	8.1230	17.2130
<b>BRD</b>	Average	5.5060	14.7890
<b>CEC</b>	Average	.9790	2.7460
<b>CITIBANK ROMANIA</b>	Average	.9367	4.7740
<b>Piraeus Bank</b>	Average	1.6900	19.9600
<b>Raiffeisen Bank</b>	Average	1.7267	8.3067
<b>UniCredit Tiriac Bank</b>	Average	5.9770	28.4767
<b>Volksbank Romania</b>	Average	.4420	9.8143

At the opposite pole is Banca Comercială Română, the bank with the highest level of the subprime loan ratio (8.1230%). The high level of this indicator is caused by the very high levels registered by the bank in the years 1998 (20.05% the highest level registered by any bank in the sample for the analyzed period) and 1999 (15.85%). An explanation of this very high levels could be the crediting policy carried by the bank until its privatization and the fact that on the date of 21.10.1999 the bank merged through absorption with Banca Romana de Comerț Exterior (Bancorex) S.A.

#### 4.2. Analysis of the indicators regarding the capital adequacy

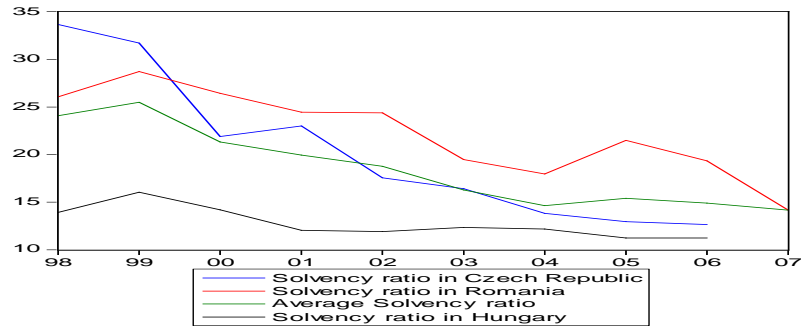
Capital adequacy and availability ultimately determine the robustness of financial institutions to withstand shocks to their balance sheets [IMF 2006, 242].

The capital represents one of the key factors that must be considered when the safety and good functioning of a bank is evaluated. For the identifying of the degree of capital adequacy indicators most used by the supervision institution and by the bank rating agencies are: *Solvency ratio*; *Equity ratio*, the indicator *Equity /Debts* and indicator *Equity/Total loans*.

Table no 3. Analysis of the indicators regarding the capital adequacy (%)

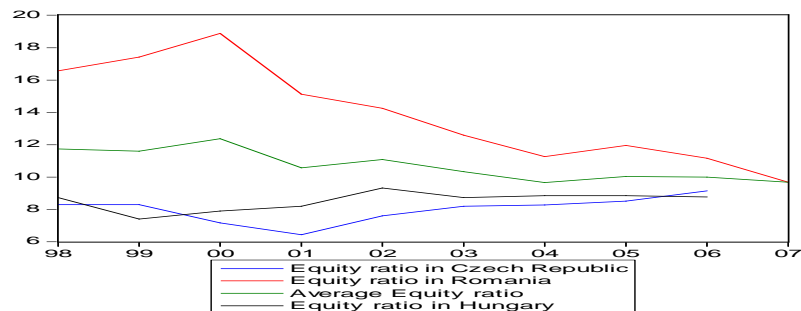
Year	Romania			Czech Republic			Hungary		
	Solvency ratio	Equity ratio	Equity /Debts	Solvency ratio	Equity ratio	Equity /Debts	Solvency ratio	Equity ratio	Equity /Debts
1998	26.0667	16.5533	20.3950	33.6667	8.2875	9.2075	13.9175	8.7260	9.9940
1999	28.7000	17.4143	21.5614	31.7250	8.2933	9.2500	16.0500	7.3940	8.2860
2000	26.4400	18.8744	24.6089	21.9000	7.1686	7.8729	14.2100	7.9020	8.7560
2001	24.4600	15.1111	17.9344	23.0000	6.4400	6.9643	12.0450	8.1880	9.0460
2002	24.3833	14.2545	16.7636	17.5800	7.5986	8.4914	11.9050	9.3300	10.4667
2003	19.4667	12.5836	14.5582	16.4000	8.1900	9.2800	12.3300	8.7233	9.7300
2004	17.9500	11.2582	12.8491	13.8333	8.2678	9.4356	12.1800	8.8350	9.8550
2005	21.4857	11.9564	13.9427	12.9571	8.5000	9.8656	11.2267	8.8400	9.9000
2006	19.3500	11.1633	13.0450	12.6500	9.1500	10.7625	11.2483	8.7733	9.8967
2007	14.1556	9.6817	11.0442						
Avg.	21.4371	13.4122	16.0052	18.7705	8.0125	9.0688	12.6067	8.5612	9.5900

The analysis of the Solvency ratio shows the fact that all banks in the sample respect the condition to have a Solvency ratio  $> 8\%$ . The solvency ratio of the banks in Romania is much above the one registered by the banks in the Czech Republic and Hungary which shows the soundness and ability of banks to overcome the crisis moments.



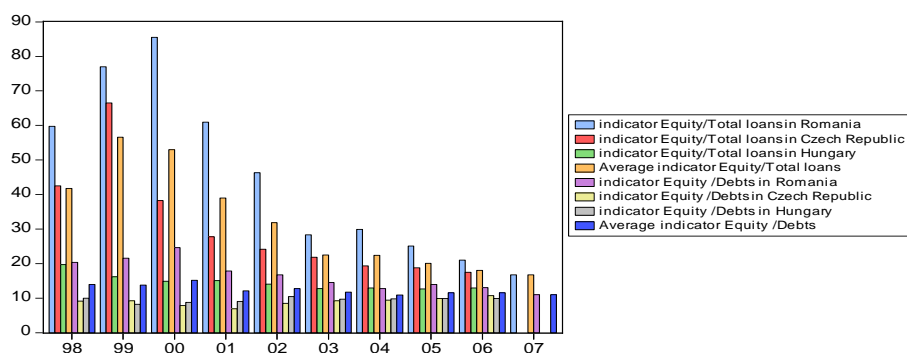
**Figure no. 9. The evolution of the indicator solvency ratio in the period 2003-2007 on the level of the main banks in Romania, Czech Republic and Hungary**

From the analysis of the indicator Equity ratio we notice that the banks in Romania register a low level compared to the banks in the Czech Republic and Hungary. A first conclusion we can draw also considering the values of the solvency ratio is that the banks in Romania own assets with a lower degree of risk and have no considerable exposures on extra-balance sheet elements.



**Figure no. 10. The evolution of the indicator Equity ratio in the period 2003-2007 on the level of the main banks in Romania, Czech Republic and Hungary**

The analysis of the indicators Equity/ Net loans and Equity /Debts shows us the fact that the banks in Romania are well capitalized the decreasing trend of these indicators in the past years is owed to the significant increase of crediting in Romania.

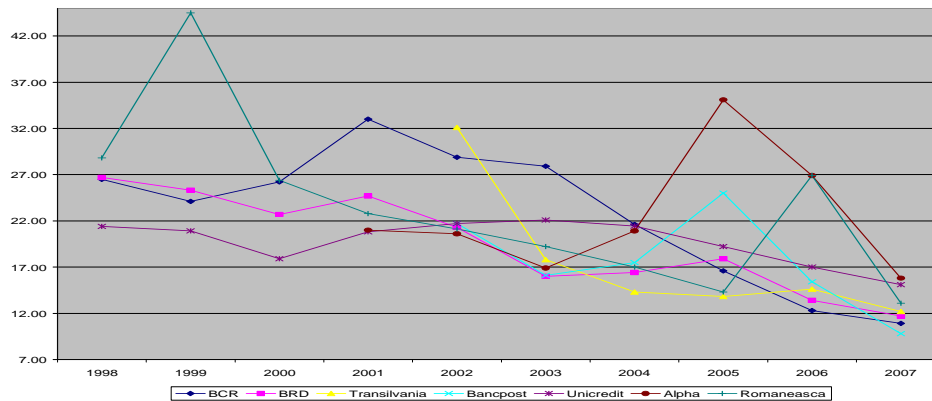


**Figure no. 11. The evolution of the indicators Equity/ Net loans and Equity /Debts in the period 2003-2007 on the level of the main banks in Romania, Czech Republic and Hungary**

*Table no 4. Analysis of the indicators regarding the appropriateness of the capital at the level of the banks in Romania*

Bank	Solvency ratio	Equity ratio	Equity /Debts
Alpha Bank	22.4571	12.7589	15.0133
Banca Romaneasca	24.2250	14.2810	17.1140
Banca Transilvania	17.4667	12.0900	13.9833
BANCPOST	19.9750	14.9570	18.4570
BCR	22.8000	15.0160	17.9200
BRD	19.6100	15.1820	18.4010
CEC	37.7000	13.2330	15.3090
CITIBANK ROMANIA	25.1333	11.3075	12.7738
Piraeus Bank	18.2000	13.5450	16.0600
Raiffeisen Bank		8.7867	9.8833
UniCredit Tiriatic Bank	19.9857	12.8130	14.8380
Volksbank Romania		14.4188	18.9363
Total	21.4371	13.4122	16.0052

The Romanian bank institution, from the selected sample, with the highest solvency ratio at the level of the year 2007 was Alpha Bank. On average the banks in Romania registered in the past years a depreciation of the capital appropriateness indicators, but they still remain to values above the ones recommended by NBR.



**Figure no. 12. The evolution of the indicator Solvency ratio in the period 2003-2007 at the level of the main banks in Romania**

#### 4.3. Analysis of the indicators regarding the operational results

In order to understand how well a bank functions we must analyze the incomes and expenses of the bank, because they affect the profitability of the bank [Mishkin and Eakins 2006, 443]. The operational results reflect the net effects of the policies and activities of a bank in a financial exercise. Stability and its growing tendencies are the best synthetic indicators of the performances of a bank, both in the past, and in the future. The main indicators regarding the operational results are *Return on Average equity (ROAE)*, that measures the profitability rate of the investment of the shareholders and *Return on Average assets (ROAA)*, that measures the efficiency of the use of the potential of the bank [van Greuning and Bratanovic 2004, 63]. Other indicators used in the analysis of operational results are: *Net interest margin*, *Net interest incomes/Average assets*, *Other operational incomes/Average assets*, *Non-interest expenses/Average assets*, *Cost/income ratio*.

It can be noticed in the table below that for the analyzed period on the level of the Romanian banking system there was registered a level of ROAA comparable to that registered at the level of the banks in the Czech Republic and Hungary. At the level of the ROAE indicator it is noticed that the banks in Romania register on average slightly lower values than the banks in the other analyzed banking systems. It is noticed from the analysis of the two profitability indicators that the results of the banks in the three systems are heterogeneous, some banks obtaining very good results while other registered even losses.

*Table no 5. Analysis of the indicators regarding the profitability of banks in Romania, Czech Republic and Hungary*

Year	Romania		Czech Republic		Hungary	
	Return on Average assets (ROAA)	Return on Average equity (ROAE)	Return on Average assets (ROAA)	Return on Average equity (ROAE)	Return on Average assets (ROAA)	Return on Average equity (ROAE)
1998	2.5750	15.1117	-9.2700	-14.1367	.9400	11.5340
1999	1.2157	6.2371	-.3567	-7.5167	.0520	-10.0540

2000	.2400	1.7589	.7714	9.1543	1.4340	16.9280
2001	1.7267	11.2967	1.0286	15.3229	1.3560	16.8520
2002	1.3082	7.7609	1.2243	18.8929	1.5083	16.8433
2003	.9000	6.3100	1.4514	17.3657	1.5000	16.6117
2004	2.1991	18.8655	1.2778	15.4278	1.8317	20.3400
2005	1.5091	13.3018	1.5011	18.2278	1.7033	18.6550
2006	1.3983	13.2233	1.5213	16.5563	1.6017	17.9167
2007	1.6950	17.7883				
Avg.	1.4531	11.4403	.4577	12.2697	1.3556	14.3700

From the analysis of the chart below it can be seen that on the level of the Romanian banking system Banca Română pentru Dezvoltare has registered the highest level of the ROAA indicator in the past 4 years. At the level of the entire analyzed period, the bank with the highest average level of the ROAA indicator was Banca Comercială Română (2.6010 %), and the highest value for this indicator was reached by Bancpost in 1998 - 6.93%.

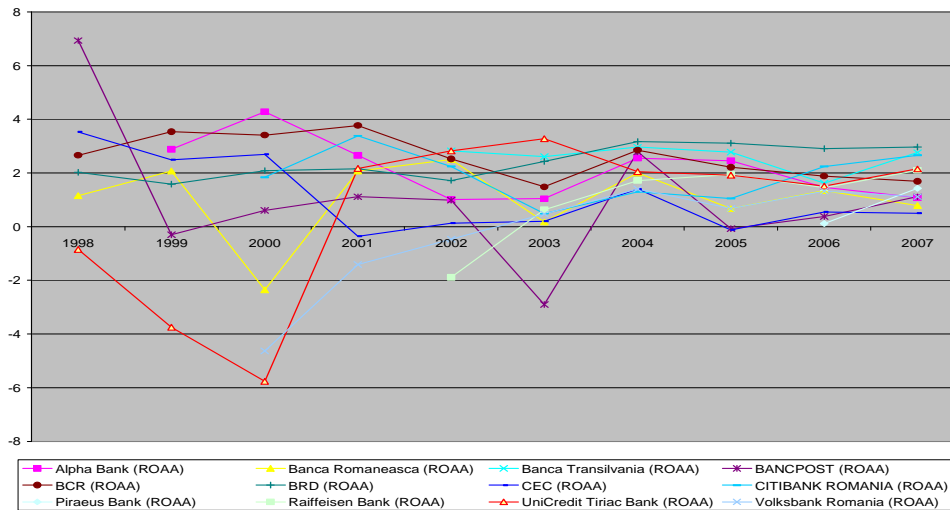
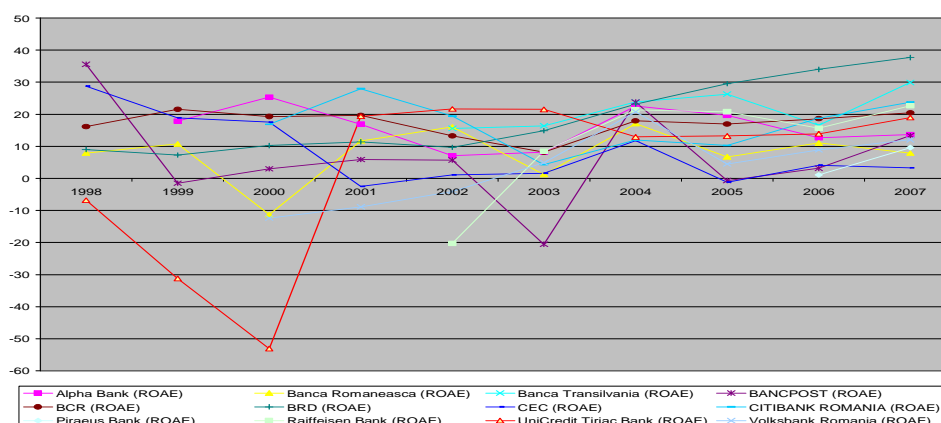


Figure no. 13. The evolution of the indicator Return on Average assets (ROAA) in the period 2003-2007 at the level of the main banks in Romania

At the level of the ROAE indicator also Banca Română pentru Dezvoltare is located on the first place in the past 3 years with values above 29%. At the level of the entire analyzed period the highest average value of the ROAE indicator was achieved by Banca Transilvania (21.4483%).



**Figure no. 14. The evolution of the indicator Return on average equity (ROAE) in the period 2003-2007 at the level of the main banks in Romania**

From the data presented in the table below it is noticed that the banks in Romania registered incomes (reported to assets) higher than the banks in the Czech Republic and Hungary, but also a level of expenses much higher than the banks in these states.

*Table no 6. Indicators regarding the operational results of the banks in Romania, Czech Republic and Hungary*

Country	Year	Net interest margin	Net interest incomes/ Average as- sets	Other opera- tional incomes/ Average assets	Non-interest expenses/ Average as- sets	Cost/ income ratio
<b>Romania</b>	1998	17.2717	13.3233	2.5017	11.4733	59.8867
	1999	12.9971	10.1614	3.6500	10.7786	67.5643
	2000	8.9944	6.8789	4.5933	10.0333	87.2556
	2001	9.5600	7.1033	4.0433	8.4300	71.3667
	2002	8.0973	5.9364	3.7873	7.7536	80.7600
	2003	8.2627	5.9836	3.1909	7.3964	75.8455
	2004	9.1936	6.3455	3.2009	6.9055	67.7664
	2005	6.7436	4.6891	2.8027	5.8309	73.2445
	2006	5.4475	3.8600	2.6475	4.9500	70.8583
	2007	4.8408	3.6125	2.8300	4.5475	62.4092
	<b>Avg.</b>	<b>8.4882</b>	<b>6.2533</b>	<b>3.3012</b>	<b>7.3857</b>	<b>72.0491</b>
<b>Czech Republic</b>	1998	4.3275	3.6850	1.5250	14.5025	274.122 5
	1999	3.8883	3.4033	1.8100	5.3300	65.3917
	2000	3.2457	2.9200	1.6500	4.0200	75.1771
	2001	2.8871	2.6314	1.7586	3.5729	73.8871



	2002	2.8586	2.6100	1.7671	2.6343	61.8429
	2003	2.9629	2.6871	2.2957	2.7886	61.6271
	2004	2.8678	2.6456	1.9844	2.7711	62.0100
	2005	2.8722	2.6689	1.9256	2.5478	54.2044
	2006	3.1238	2.9025	1.9638	2.7763	55.5938
	<b>Avg.</b>	<b>3.1402</b>	<b>2.8461</b>	<b>1.8775</b>	<b>3.9247</b>	<b>76.3634</b>
<b>Hungary</b>	1998	5.0480	4.6060	.8720	4.3860	78.7400
	1999	4.0320	3.6640	2.9540	6.5860	87.3440
	2000	4.2720	3.9280	2.7360	5.0300	71.3200
	2001	3.8980	3.5960	2.2060	4.2500	70.3620
	2002	4.0733	3.7917	2.3383	4.2933	63.6883
	2003	4.1583	3.8150	2.5333	4.4817	62.0617
	2004	4.5683	4.1033	2.4400	4.3883	58.4767
	2005	4.1350	3.7083	2.4100	4.0183	57.9500
	2006	3.9733	3.5567	2.3817	3.9950	56.8050
	<b>Avg.</b>	<b>4.2340</b>	<b>3.8564</b>	<b>2.3292</b>	<b>4.5664</b>	<b>66.6544</b>

The indicator Net interest margin shows us that the banks in Romania practice a spread (the difference between the interest perceived for loans and the interest for deposits) much higher than the banks in the Czech Republic and Hungary, at the level of this indicator it is noticed at the level of the three banking system a decreasing trend owed to the joining to the European Union. There can be noticed that the average of Other Incomes is lower at the level of the banks in Romania than at the level of the banks in the other analyzed banking systems.

It is found that at the level of the banks in Romania the level of the indicator *Cost/income ratio*, at the level of the last years in the analyzed period, is above the level registered by the banks in the Czech Republic and Hungary.

Table no.7. Indicators regarding the operational results in the period 2003-2007 at the level of the main banks in Romania

Bank	Year	Net interest margin	Net interest incomes/ Average assets	Other operational incomes/ Average assets	Non-interest expenses/ Average assets	Cost/ income ratio
<b>Alpha Bank</b>	2004	5.9700	5.2300	1.9400	3.8200	48.8800
	2005	4.1500	3.9000	2.0200	3.1600	50.4600
	2006	3.1700	2.9500	1.5400	2.8000	62.3400
	2007	2.2700	2.1700	1.3200	2.2900	62.1300
	<b>Media</b>	<b>5.7078</b>	<b>4.9378</b>	<b>1.8600</b>	<b>4.0456</b>	<b>59.5400</b>
<b>Banca Româneasca</b>	2004	10.5700	7.2000	5.5500	10.1200	75.9300
	2005	7.6700	5.2200	4.0300	8.3000	81.9600
	2006	6.0400	4.2000	1.7400	4.4300	76.3700
	2007	4.5200	3.3500	1.5300	3.9300	75.0600

	<b>Media</b>	<b>11.6380</b>	<b>8.2160</b>	<b>5.4080</b>	<b>11.8960</b>	<b>79.8360</b>
<b>Banca Transilvania</b>	2004	12.1400	8.4000	5.2000	9.7800	67.6100
	2005	9.5800	6.6600	4.6000	8.1200	67.5200
	2006	7.8500	5.4200	4.8100	8.3100	75.2300
	2007	5.4800	3.9000	3.9200	6.0700	64.4300
	<b>Media</b>	<b>10.0950</b>	<b>7.0483</b>	<b>4.4550</b>	<b>8.4800</b>	<b>69.0900</b>
<b>BANCPOST</b>	2004	12.4400	7.5300	3.2400	7.7700	70.9400
	2005	8.6900	5.5600	1.7800	7.7700	100.5300
	2006	5.9700	3.7700	2.5100	6.3900	98.4000
	2007	5.2400	3.5700	2.9700	5.5500	74.6500
	<b>Media</b>	<b>11.0890</b>	<b>7.1450</b>	<b>4.8610</b>	<b>10.1230</b>	<b>80.7330</b>
<b>BCR</b>	2004	8.9400	6.5100	3.5900	6.3500	53.7800
	2005	7.0900	4.6600	3.2800	5.3700	61.9300
	2006	6.1300	4.1300	2.1700	4.0300	57.8200
	2007	5.2500	3.5400	2.1000	3.6200	58.8900
	<b>Media</b>	<b>9.3460</b>	<b>7.3850</b>	<b>3.1460</b>	<b>6.7830</b>	<b>52.5760</b>
<b>BRD</b>	2004	13.8100	8.2300	3.0100	6.6500	50.3100
	2005	10.9400	6.1800	2.6000	4.9400	49.6600
	2006	7.9900	4.9000	2.7200	4.3300	52.8500
	2007	6.5000	4.3700	2.9300	3.7300	45.3600
	<b>Media</b>	<b>10.0290</b>	<b>7.0650</b>	<b>3.6870</b>	<b>6.9380</b>	<b>53.2930</b>
<b>CEC</b>	2004	10.8000	5.4800	.9800	5.7600	88.5400
	2005	5.2800	3.1500	1.4700	4.7900	102.6400
	2006	5.3200	4.2000	1.4100	5.2200	85.0600
	2007	5.1900	3.9300	1.3400	4.8900	84.2800
	<b>Media</b>	<b>11.3740</b>	<b>8.2230</b>	<b>1.3440</b>	<b>7.3740</b>	<b>81.5440</b>
<b>Citibank Romania</b>	2004	6.5900	5.0900	.9800	4.2100	69.4400
	2005	4.1100	3.0500	1.9300	3.6700	73.0900
	2006	6.2600	4.2600	2.5600	4.2400	54.7100
	2007	5.5400	4.7500	3.4700	5.0000	54.5200
	<b>Media</b>	<b>6.2850</b>	<b>4.8838</b>	<b>1.3238</b>	<b>3.7025</b>	<b>59.0750</b>
<b>Piraeus Bank</b>	2006	3.6300	2.6000	2.5200	4.9700	95.1200
	2007	6.9600	4.9700	3.3000	6.3400	54.9900
	<b>Media</b>	<b>5.2950</b>	<b>3.7850</b>	<b>2.9100</b>	<b>5.6550</b>	<b>75.0550</b>
<b>Raiffeisen Bank</b>	2004	5.7400	4.8600	4.6600	8.5300	85.9800
	2005	4.9900	4.6000	4.3100	7.5400	77.8500
	2006	4.5200	4.1900	4.5500	7.0500	70.4200
	2007	4.7700	4.4000	5.1000	6.8600	64.3400
	<b>Media</b>	<b>4.8567</b>	<b>4.0717</b>	<b>4.9367</b>	<b>8.1467</b>	<b>87.5000</b>
<b>UniCredit Țiriac Bank</b>	2004	10.7600	8.3000	3.5500	8.8900	63.3100
	2005	8.4100	5.9800	2.9400	6.6600	69.1700
	2006	4.6400	2.9900	3.5800	4.6400	64.2400
	2007	4.7100	3.2300	3.9000	4.3600	57.5400

	<b>Media</b>	<b>8.1260</b>	<b>6.2710</b>	<b>3.5900</b>	<b>8.7000</b>	<b>71.9370</b>
<b>Volksbank România</b>	2004	3.3700	2.9700	2.5100	4.0800	70.7100
	2005	3.2700	2.6200	1.8700	3.8200	70.8800
	2006	3.8500	2.7100	1.6600	2.9900	57.7400
	2007	1.6600	1.1700	2.0800	1.9300	52.7200
	<b>Media</b>	<b>2.7950</b>	<b>2.2788</b>	<b>2.1200</b>	<b>4.4925</b>	<b>104.4450</b>

From the data presented in the table above it is noticed that the banks that own a high market share and perform their activity since the start of the 90's in the Romanian banking system (BCR, BRD, CEC, BANCPOST, Banca Românească) register an average level in the analyzed period of the indicator Net margin from interests much higher than the level registered by the banks with a lower market share or that recently came into the Romanian market (Volksbank, Piraeus Bank). This difference was reduced significantly in the past years, especially because of the decrease of the interest rates at the level of the Romanian banking system. At the level of the year 2007, the lowest level of the indicator net margin of interest was register by Volksbank România (1.66%), and the highest level was registered by Piraeus Bank (6.96%).

The indicator *Net incomes from interests / Average assets* oscillates at the level of Romanian banks for the analyzed period between 1.17% and 17.97%, registering an average level of 6.25%, and the indicator *Other operational incomes/Average assets* oscillates between -0.63% and 9.78% and registers an average level of 3.30%. Both indicators register a decreasing trend in the last years of the analyzed period.

From the data presented in the table it is noticed that the banks with a significant market share (BCR and BRD) register the lowest average levels of the indicator *Cost/income ratio*, this can be owed to the scale economies registered by these banks.

#### 4.4. Analysis of the indicators regarding the liquidity of banks

Liquidity is the property of assets that expresses their ability to be transformed quickly, with a minimum expense, into cash or availability in the current account.

Liquidity is necessary for banks for the providing of funds necessary for development, as well as for compensating expected and unexpected balance sheet fluctuations. Through the liquidity of a bank we understand its ability to efficiently handle the withdrawal of deposits and the due-date of other debts and to cover the additional financing necessary for the loan and investment portfolio. The liquidity risk, for a bank, is the very expression of the probability of losing this ability for financing. One of the most important tasks of the management of a bank is to estimate and to cover correctly the bank liquidity needs.

In the long term, the profitability of a bank can be affected negatively if the bank owns in the portfolio too many liquid financial assets in relation to its needs, because the assets with a high liquidity offer a low efficiency rate. On the other hand, too little liquidities can create severe financial problems, especially for small banks and can generate even the bankruptcy of the credit institution. The price of liquidity is influenced by the market conditions and by the market perception on the level of risk of the debtor institution.

The adequate liquidity of each bank in the system is also extremely important for the minimizing of the systemic risk because of the risk of contagion through the interbank payment system.

The liquidity of banks can be analyzed with the help of three classes of indicators:

- 1) *Interbank ratio* expresses the ratio between the amounts borrowed to other banks and the amounts borrowed from other banks, in percentages. If this ratio is higher than 100 it means that the analyzed bank is a net creditor on the interbank market and thus is more liquid than other banks.
- 2) *Net Loan percentage* which can be calculated in relation to the total of the assets owned by the bank, with the deposits and funds attracted for the short term or with the total of the borrowed funds. This indicator shows us what percentage of the attracted resources is placed in the shape of loans, assets with a low liquidity. The higher the value of these indicators the less liquid the bank.
- 3) *Liquid assets percentage* that indicates how much of the deposits and funds attracted for the short term or from the total of the borrowed funds can be paid in case the phenomenon of bank panic is manifested. The higher the value of these indicators the more liquid the bank.

Table no. 8. Indicators regarding the liquidity of the banks in Romania, Czech Republic and Hungary

Country	Year	Net loans/ Total As- sets	Net loans/ Deposits and funds on ST	Net loans / total borrowed funds	Liquid assets / Deposits and funds on ST	Liquid assets / total borrowed funds
Romania	1998	30.7467	40.9750	39.9700	8.3033	8.1067
	1999	30.8143	40.4843	39.9429	7.8457	7.7614
	2000	35.2811	46.8344	44.4783	13.0489	11.2117
	2001	40.7567	50.6056	48.6057	14.4611	12.9729
	2002	39.6036	49.1673	48.6560	20.5973	16.6710
	2003	52.7291	63.4427	62.3700	20.8445	20.8710
	2004	49.3436	64.1455	56.9491	29.1855	26.5536
	2005	49.1873	63.8264	60.0840	22.0645	21.4250
	2006	54.3733	70.5750	65.4973	26.1108	25.0436
	2007	59.4967	75.0483	68.6242	22.2258	19.8050
	<b>Avg.</b>	<b>45.9642</b>	<b>58.5867</b>	<b>55.6448</b>	<b>19.7170</b>	<b>18.3994</b>
Czech Republic	1998	35.4525	48.9625	41.3150	24.5850	23.5125
	1999	28.2817	36.1617	33.7583	34.8633	34.5833
	2000	25.0300	31.6829	30.5500	31.7000	31.5471
	2001	26.3929	32.0600	31.4314	33.0114	32.9314
	2002	30.3329	37.7757	37.0157	33.5171	33.3600
	2003	35.4743	43.7243	42.7086	34.6957	34.2314
	2004	41.9667	51.7500	50.0975	21.1400	18.1700
	2005	43.8433	56.2022	55.5988	20.4900	18.9250
	2006	51.4150	66.1363	55.7117	12.7913	9.4500
	<b>Avg.</b>	<b>36.1831</b>	<b>45.7841</b>	<b>42.3265</b>	<b>26.7967</b>	<b>26.3250</b>
Hungary	1998	43.4740	59.8000	52.0320	21.0980	20.0400
	1999	45.8220	62.3300	54.4620	19.6180	18.3140
	2000	54.3800	68.0040	64.2120	17.3360	16.3700
	2001	57.0900	68.6120	66.4620	13.1480	12.8500
	2002	67.1600	87.2500	78.7983	9.0533	8.5750
	2003	69.6250	87.5800	80.2083	6.4650	5.9383
	2004	69.4400	89.1683	79.9733	8.0633	7.1000

	2005	71.2517	90.1200	82.8000	6.1317	5.5717
	2006	69.0083	87.9450	80.6667	6.8450	6.2483
	<b>Avg.</b>	<b>61.6548</b>	<b>78.9222</b>	<b>72.0104</b>	<b>11.5070</b>	<b>10.7694</b>

The values of the Indicators *Net loans/Total assets*, *Net loans/Deposits and funds on Short Term* and *Net loans/total borrowed funds* registered at the level of the main banks in the banking system in Romania, the Czech Republic and Hungary presented in the table above show us that the banks in Romania register on average a higher liquidity than the banks in Hungary and a lower liquidity than the banks in the Czech Republic. Another phenomenon that is observed in the presented data, is the fact that on the level of the 3 banking systems there is registered in the last years an increase of the three analyzed indicators which is equivalent with a decrease of the liquidity of the credit institutions this depreciations of the liquidity of banks is caused by the decrease of the foreign investments in these countries and, thus, the decrease of the funds available in the financial markets.

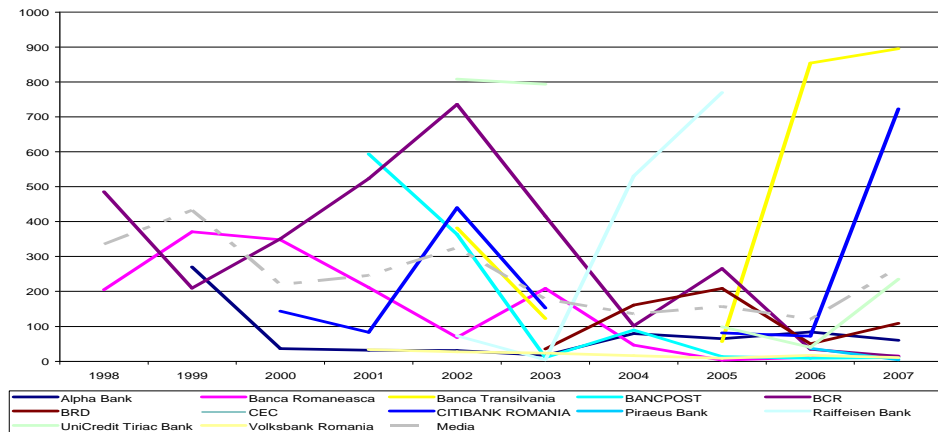
From the analysis of the indicators *Liquid assets / Deposits and funds on Short term* and *Liquid assets / total borrowed funds* results that the banks in Romania are more liquid than the ones in Hungary and less liquid than the ones in the Czech Republic. The evolution of these indicators at the level of the three analyzed banking systems is in a decreasing trend for the analyzed period.

Table no 9. Indicators regarding liquidity for the period 2003-2007 at the level of the main banks in Romania

Bank	Year	Inter bank ratio	Net loans/ Total Assets	Net loans/ Deposits and funds on ST	Net loans/ total borrowed funds	Liquid assets / Deposits and funds on ST	Liquid assets / total borrowed funds
Alpha Bank	2004	78.8700	66.8600	87.2300	77.9600	2.0600	1.8400
	2005	65.1200	54.0200	71.3400	67.1400	1.3600	1.2800
	2006	83.7400	52.0200	62.6700	61.2800	1.0200	1.0000
	2007	60.3100	62.9500	70.4900	69.7700	1.0500	1.0400
	<b>Avg.</b>	<b>74.8233</b>	<b>61.2011</b>	<b>74.5000</b>	<b>72.5411</b>	<b>3.2756</b>	<b>3.2178</b>
Banca Românească	2004	46.0300	52.0800	69.3100	59.0400	40.9100	34.8400
	2005	3.7800	63.3000	71.0600	70.5000	30.6400	30.4000
	2006	11.5600	62.7800	79.5300	79.2500	35.1700	35.0500
	2007	15.4300	67.5200	76.7400	76.7400	24.3100	24.3100
	<b>Avg.</b>	<b>148.9200</b>	<b>49.0970</b>	<b>63.9760</b>	<b>59.0410</b>	<b>30.6120</b>	<b>27.5700</b>
Banca Transilvania	2004		55.1900	75.3600	63.4100	37.6600	31.6900
	2005	56.2100	59.3600	83.7500	67.9800	38.9300	31.6000
	2006	853.9800	59.6400	87.1400	70.6900	46.8300	37.9900
	2007	895.1500	62.3600	77.8200	70.8500	37.2200	33.8800
	<b>Avg.</b>	<b>461.8880</b>	<b>56.1583</b>	<b>75.2483</b>	<b>65.6667</b>	<b>37.3950</b>	<b>32.6200</b>
Bancpost	2004	89.9200	46.5000	64.4700	53.5000	29.5600	24.5300
	2005	13.4800	42.7900	55.3900	51.9700	37.0400	34.7500
	2006	8.5400	57.2100	70.2200	67.3600	36.9000	35.4000

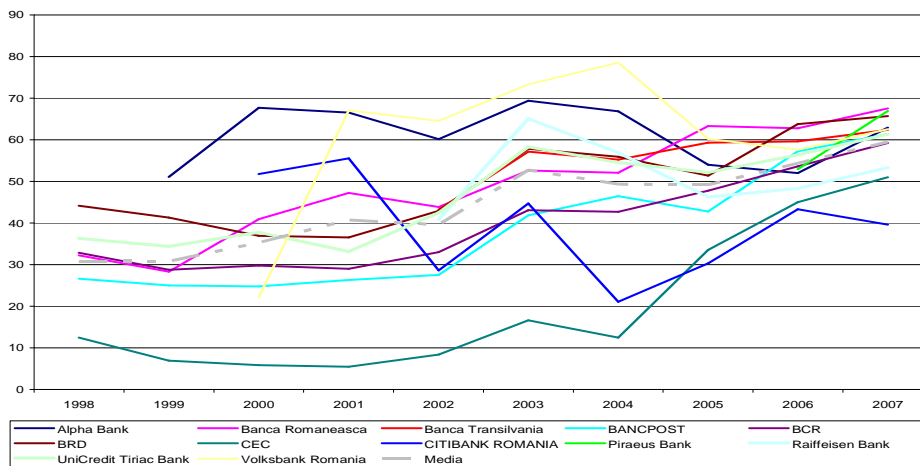
	2007	10.8900	61.3600	70.7700	69.6900	28.6900	28.2500
	<b>Avg.</b>	<b>220.1925</b>	<b>37.9870</b>	<b>49.1010</b>	<b>47.1420</b>	<b>19.5000</b>	<b>18.5590</b>
<b>BCR</b>	2004	101.5700	42.6900	57.6700	51.0400	40.6200	35.9400
	2005	265.4900	47.7300	70.9700	54.9600	37.0400	28.6800
	2006	34.1500	53.5900	67.2600	60.5200	35.8400	32.2500
	2007	14.4400	59.2500	68.8700	66.4300	31.7500	30.6200
	<b>Avg.</b>	<b>313.6160</b>	<b>39.9560</b>	<b>51.3950</b>	<b>50.5588</b>	<b>30.3130</b>	<b>27.7700</b>
<b>BRD</b>	2004	160.5600	55.9500	75.0500	64.5900	41.5300	35.7500
	2005	208.9800	51.3800	66.0900	58.3500	50.3100	44.4200
	2006	49.7700	63.7800	86.4000	71.7400	39.9100	33.1400
	2007	108.6600	65.7300	91.8700	73.6200	39.2400	31.4500
	<b>Avg.</b>	<b>201.1850</b>	<b>49.6490</b>	<b>67.0660</b>	<b>60.1380</b>	<b>22.5480</b>	<b>19.6200</b>
<b>CEC</b>	2004	64.5400	12.4300	14.4200	14.4000	53.7100	53.6400
	2005	-	33.5200	37.7500	37.7200	.9300	.9300
	2006	-	44.9800	54.2300	53.8500	1.1700	1.1600
	2007	877.2100	51.0300	60.9400	60.5300	1.6400	1.6300
	<b>Avg.</b>	<b>470.8750</b>	<b>19.7600</b>	<b>23.4150</b>	<b>23.3310</b>	<b>12.7550</b>	<b>12.7460</b>
<b>Citibank Romania</b>	2004		21.0500	23.6000	23.6000	46.4700	46.4700
	2005	81.0100	30.3100	34.0900		3.0900	
	2006	71.6500	43.3000	50.4900		1.9500	
	2007	723.1600	39.6000	50.0000	44.7900	1.9200	1.7200
	<b>Avg.</b>	<b>242.0514</b>	<b>39.3588</b>	<b>45.7200</b>	<b>34.1950</b>	<b>14.6463</b>	<b>24.0950</b>
<b>Piraeus Bank</b>	2006	37.6300	52.9200	62.3300	62.3300	7.4000	7.4000
	2007	4.7600	66.9700	83.3400	83.3400	7.9600	7.9600
	<b>Avg.</b>	<b>21.1950</b>	<b>59.9450</b>	<b>72.8350</b>	<b>72.8350</b>	<b>7.6800</b>	<b>7.6800</b>
<b>Raiffeisen Bank</b>	2004	530.2600	56.9500	79.4600	67.1900	5.0100	4.2400
	2005	769.2900	46.2300	62.5200	53.6900	4.9400	4.2400
	2006		48.2700	63.6600	55.6600	5.0000	4.3700
	2007		53.2800	65.8600	62.9000	5.9800	5.7200
	<b>Avg.</b>	<b>344.0625</b>	<b>51.7767</b>	<b>67.2433</b>	<b>59.8267</b>	<b>7.5933</b>	<b>6.8383</b>
<b>UniCredit Tiriac Bank</b>	2004		54.5400	72.6600	65.3400	3.5100	3.1500
	2005	98.6200	52.1800	71.6300	61.0300	3.2300	2.7500
	2006	40.1000	56.4000	91.8700	66.6900	52.6100	38.1900
	2007	235.3100	61.3400	112.7600	73.7100	45.8100	29.9400
	<b>Avg.</b>	<b>381.9283</b>	<b>46.6830</b>	<b>63.9080</b>	<b>56.9511</b>	<b>14.8520</b>	<b>11.7044</b>
<b>Volksbank Romania</b>	2004	16.1000	78.5400	86.3700	86.3700	20.0000	20.0000
	2005	9.0000	60.2400	77.5000	77.5000	35.2000	35.2000
	2006	17.2700	57.5900	71.1000	71.1000	49.5300	49.5300
	2007	10.7600	62.5700	71.1200	71.1200	41.1400	41.1400
	<b>Avg.</b>	<b>19.5429</b>	<b>60.7450</b>	<b>71.8238</b>	<b>71.8238</b>	<b>26.7800</b>	<b>26.7800</b>

From the analysis of the indicator *Interbank ratio* at the level of the year 2007 it shows that banks such as: *Banca Transilvania*, *BRD*, *CEC*, *Citibank Romania*, *UniCredit Tiriac Bank* are net creditors in the Romanian interbank system, while banks such as *Alpha Bank*, *Banca Românească*, *Bancpost*, *BCR*, *Piraeus Bank* and *Volksbank Romania* are debtor banks. The bank with the highest indicator *Interbank ratio* among the banks analyzed at the level of 2007 was *Banca Transilvania* (895.15%), which means that the value of the loans granted by Banca Transilvania to other banks is approximately 9 times higher than the loans borrowed from other banks.



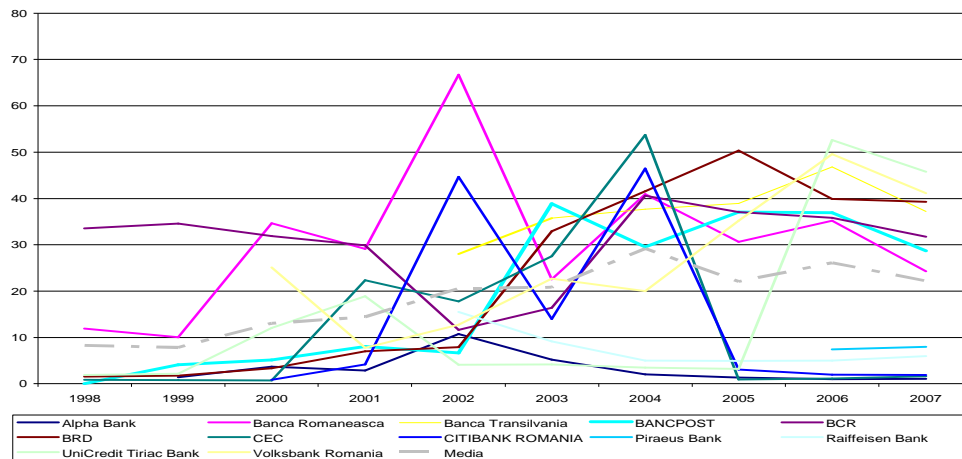
**Figure no. 15. The evolution of the Interbank ratio in the period 2003-2007 at the level of the main banks in Romania**

From the analysis of the indicators regarding *Net Loans Percentage* at the level of the main bank in Romania at the level of the year 2007 results that almost all banks, except Citibank România (39.60%), own more than 50% of the total assets in the shape of granted loans.



**Figure no. 16 The evolution of the indicator Percentage of the net loans in Total assets in the period 2003-2007 at the level of the main banks in Romania**

The banks Alpha Bank, CEC and Citibank Romania registered at the level of the year 2007 a very low level of the indicator *Percentage of liquid assets in Short term Deposits and funds* (1.05%, 1,64%, respectively 1,92%) which means that only maximum 2% of the deposits and funds attracted on short term could be reimbursed in case the bank panic phenomenon occurred.



**Figure no. 17. The evolution of the indicator Percentage of liquid assets in Short term Deposits and funds in the period 2003-2007 at the level of the main banks in Romania**

In turn banks such as UniCredit Tiriac Bank, Volksbank Romania, BRD, BCR and Banca Transilvania registered in the year 2007 levels of the indicator *Percentage of liquid assets in Short Term Deposits and funds* of more than 30%, which ensures a good liquidity of these banks even in the situation of the occurrence of some systemic risks and the deterioration of the market conditions.

## 5. Conclusions

From the analyze of the performance indicators of the main romanian banks results that in the period analyzed at the level of the Romanian banking system there was registered a level of the ROE slightly above the average of the countries in the European Union, lower than in the ex-communist countries, but above the countries with a developed banking system. There can be noticed a declining trend of this indicator, a first explanation for this phenomenon could be the increase of competition in the banking system and the decrease of inflation which lead to the decrease of the interest rates and implicitly of the income of the banks. In the case of the Rate of return on assets also there is found a decreasing trend for the period analyzed on the level of the Romanian banking system. Although it has registered a significant decrease in the analyzed period the rate of return on assets of the Romanian banking system remains a lot higher than the average rate of the banking systems in the European Union, sensibly equal to the level registered in the other ex-communist states.

The quality of the loans found in the portfolios of Romanian banks is maintained at a level comparable to the one of many countries in the European Union.



After a period of four years in which the covering degree with reserves and provisions of the risk-weighted exposure was maintain relatively constant, in the year 2007 it registered a backset of 55 basis point, up to 117 basis point at the end of December. Still, the covering degree with provisions of the nonperforming loans found in the portfolios of Romanian banks is located at a level higher to that of many countries in the European Union.

In 2007, the aggregated solvency ratio calculated for the credit institution in Romania, as well as at the level of the other European status, continued the decreasing trend recorded in the past years, the indicator losing 5,4 percentage points compared to the level registered in December 2006, until 12,7 percent. The main factor responsible for this evolution is the continued expansion of the non-government loan, under the conditions when the owner's funds of credit institution registered an inferior growth rhythm. Still, the solvency ratio is maintained at an appropriate level, being superior to the minimum threshold imposed by the bank prudence regulations applicable in Romania starting with 2007 and, also, on an European and international level (8 percent).

Compared to the situation in the previous years, when, on the background of a relatively low degree of intermediation, the aggregated solvency ratio calculated for the Romanian banking system was significantly higher than that of many countries in the region, the year 2007 locates Romania at level comparable to the other member states of the European Union.

Direct and indirect credit risks are rising, and the banking system is increasingly dependent on foreign funding. Real private credit expanded by some 50 percent in 2007, and has increasingly been funded by foreign borrowing, mainly through parent banks, rather than domestic deposits.

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