Structural and Qualitative Analysis of the Romanian Banking System

Anişoara Niculina APETRI
"Ştefan cel Mare" Univesity of Suceava
anisoarad@seap.usv.ro
Iuliana Oana MIHAI
Univesity Dunărea de Jos" of Galati
oana.anghel@ugal.ro
Camelia Catalina MIHALCIUC
"Ştefan cel Mare" Univesity of Suceava
cameliam@seap.usv.ro

Abstract
The banking sector, the predominant component of the Romanian financial system, had a relatively stable structure in the period 2005-2009 and has experienced significant consolidation, particularly in the years 2005-2006, this being sustained mainly by the restructuring and privatization process, but also by Romania's EU accession perspective and the competitive environment in this area. Given the new status of Romania as EU member country, the competition in the banking system has increased significantly, leading to both structural changes, but also to changes in levels of analysis indicators of banking structure and performance. Following this analysis, it appears that, recently, our country's banking system saw a dynamic and unprecedented diversification resulting from the economic development of the society and adaptation to EU requirements, and we can say that in Romania there is, now, a modern and competitive banking system, which provides circulation of the domestic economy and provides banking products and services in accordance with trends in the European banking sector.

Key words: banking structure, liquidity, solvability, banking performance, foreign capital

JEL COD: G21

1. Introduction

The deterioration of the general economic climate, especially since the end of 2008, put its imprint on the evolution of the Romanian banking system. Factors that have driven the overall context of international economic crisis, but have also influenced the performance of credit institutions, have been linked to rising unemployment and labor market uncertainty, reduced household income, restrict exports, reduced direct capital investment and decreases in market value of land and buildings. The main changes made in Romania's banking system aimed at changing the name of some branches, opening of foreign banks branches in Romania, the opening of a branch in Cyprus belonging to Banca Transilvania, authorizing the functioning of some banks (Millennium Bank).

2. Structural analysis of the Romanian banking system

As a result of these changes that occurred, it is noted that at the end of 2009, 42 credit institutions were operating in Romania (41 banks and the cooperative network CREDITCOOP), down from 43 in 2008, and the number of branches of foreign banks remained unchanged at end of 2009 compared to 2006 (10 entities), while the number of domestic banks decreased by one unit from 33 entities in 2008 to 32 in 2009. Regarding their distribution by type of capital, the situation at the end of 2009 was as follows: two banks were fully or majorly owned by the state (CEC Bank and Eximbank), 4 major domestic private capital (Transilvania Bank, Carpathian Commercial Bank, Libra Bank and RAILWAY Commercial Bank), 25 majorly foreign-owned and 10 branches of foreign banks. Also, within the components of the banking system, there is an authorized credit cooperative organization, respectively the Cooperative Central Bank CREDITCOOP with a network of 17 agencies and 50 cooperatives. Also noteworthy is that, with the EU accession and the liberalization of services at the end of 2009, a total of 207 foreign institutions have shown their intention to provide and directly conduct banking business in Romania, of which 192 banks, three non-bank financial institutions and 12 institutions issuing electronic money.

Table 1. The number of Romanian banks, grouped by type of social capital

	2005	2006	2007	2008	2009
Total banks, out of which:	33	31	31	32	31
Major or totally owned by the state	2	2	2	2	2
Entirely owned by the state	1	1	1	1	1
Major capital held by the state	1	1	1	1	1
Major or totally owned by privates	31	29	30	30	29
Total or major national capital	7	3	3	3	4
Total or major foreign capital	24	26	26	27	25
Number of foreign branches	6	10	10	10	10
Total banking system	39	41	41	42	41
CREDITCOOP	1	1	1	1	1
Total credit institutions	40	42	42	43	42

Source: www.bnr.ro, annual reports, 2006-2009

In the context of the aforementioned structural changes that took place, we find that the share of assets held by banks with major private capital in total assets of the Romanian banking system showed to be relatively steady at around 94 percent, observing a slight decrease of 2 percent in 2009, reaching 92 percent (and the weigh of assets shares with foreign banks or majorly foreign, including branches of foreign banks was 88 percent from 2006 to 2008 and in 2009 was declining at 85 percent), while banks with majority state owned capital held a share of about 5.5 percent, slightly up in 2009 reaching 7.3 percent.

Table 2. Market shares of banks and branches of foreign banks

	Balance sheet net asset									
	2005		2006		2007		2008		2009	
	mld.lei	%	**mld.lei**	%	**mld.lei**	%	**mld.lei**	%	**mld.lei**	%
Total Romanian banks, out of which:	48 391,7	**37,8**	19 710,3	**11,4**	30 330,5	**12,1**	36 448,6	11,6	47 922,4	14,5
Major capital owned by the state	7 644,4	**6,0**	9 492,9	**5,5**	13 535,8	**5,4**	16 452,6	5,2	24 185,3	7,3
Major capital owned by privates	40 747,3	**31,8**	10 217,4	**5,9**	16 794,7	**6,7**	19 996,0	6,4	23 737,1	7,2
Total foreign banks, out of which:	70 091,8	**54,7**	142 528,1	**82,8**	207 906,7	**82,9**	259 633,1	82,6	257 277,8	77,9
I. Total commercial banks	118 483,5	**92,5**	162 238,4	**94,2**	238 237,2	**95,0**	296 081,7	94,2	305 200,2	92,4
II. Foreign bank branches	9 606,1	**7,5**	10 058,7	**5,8**	12 545,6	**5,0**	17 663,7	5,6	24 199,3	7,4
Total banks with major private capital, including branches of foreign banks	120 445,2	**94,0**	162 804,2	**94,5**	237 247,0	**94,6**	297 292,8	94,6	305 214,2	92,5
Total banks with major foreign capital, including branches of foreign banks	79 697,9	**62,2**	152 586,8	**88,6**	220 452,3	**87,9**	277 296,8	88,2	281 477,1	85,3
Total banking system (I + II)	128 089,6	**100,0**	172 297,1	**100,0**	250 782,8	**100,0**	313 745,4	100,0	**329 399,5**	100,0

Source: www.bnr.ro, 2002,2003,2004,2005 Annual Reports

It may also be noted that the Romanian banking system remains well capitalized, although by the end of 2008 they began to feel the effects of the international financial crisis, especially on the external liquidity channel and of macroeconomic conditions tensioning. A positive aspect is the slowing of decrease trend of the solvency ratio, compared to previous years, based on raising of capital by shareholders of credit institutions and reduction of non-government credit growth. The stress test developed for the end of 2008 by the central bank together with the IMF to assess the ability of the Romanian banking system to exogenous shocks, revealed reduction to 10.6 percent in 2009 respectively, to 9.7 percent in 2010, of the aggregated solvency ratio. Late 2008 and early 2009 were marked by increases in capital by shareholders of credit institutions in order to maintain comfortable margins of solvency ratio. It should be noted that an important role in providing capital to the banking system was the commitment by the parent bank holding nine most important credit institutions in Romania (representing 70 percent of the Romanian banking system assets) to prolong credit lines for branches and recapitalize them if the situation requires.

Table 3: Weight of banks and branches of foreign banks in the total aggregated capital

	Social or endowed capital									
	2005		2006		2007		2008		2009	
	mld.lei	**%**	**mld.lei**	**%**	**mld.lei**	**%**	**mld.lei**	**%**	**mld.lei**	**%**
Total Romanian banks, out of which:	2 287,7	**31,1**	2 002,4	**21,2**	2 273,8	**20,6**	2 913,3	21,9	3 263,5	22,7
Major capital owned by the state	886,9	**12,0**	1 408,5	**14,9**	1 408,5	**12,8**	1 520,0	11,4	1 750,0	12,2
Major capital owned by privates	1 400,8	**19,1**	593,9	**6,3**	865,3	**7,8**	1 393,3	10,5	1 513,5	10,5
Total foreign banks, out of which:	4 561,2	**61,9**	6 702,3	**71,0**	8 060,4	**73,2**	9 477,6	71,2	10 448,8	72,6
I. Total commercial banks	6 848,9	**93,0**	8 704,7	**92,2**	10 334,2	**93,8**	12 390,9	93,1	13 712,3	95,3
II. Foreign bank branches	517,0	**7,0**	740,0	**7,8**	681,6	**6,2**	799,5	6,0	551,6	3,9
Total banks with major private capital, including branches of foreign banks	6 479,0	**88,0**	8 036,2	**85,1**	9 607,3	**87,2**	11 670,4	87,7	12 513,9	87,0
Total banks with major foreign capital, including branches of foreign banks	5 078,2	**68,9**	7 442,3	**78,8**	8 742,0	**79,4**	10 277,1	77,2	11 000,4	76,5
Total banking system (I + II)	7 365,9	**100,0**	9 444,7	**100,0**	11 015,8	**100,0**	13 190,4	100,0	**14 263,9**	100,0

2006 Annual Report, 2007

The first year of Romania's EU accession has brought Romanian banks in direct competition with foreign ones, with market players face to face with genuine competition.

Table 4 Foreign capital holdings of banks in Romania [*Share in total capital (%)*]

Country	**Period**				
	2005	**2006**	**2007**	**2008**	**2009**
Austria	21,8	23,9	22,0	18,4	16,9
Greece	12,4	16,4	21,7	22,4	26,6
France	5,6	4,4	5,0	4,2	3,9
Italy	5,8	6,7	3,9	4,8	2,7
Netherlands	8,2	7,4	7,7	9,2	9,0
USA	1,9	1,6	1,3	1,4	0,6
Hungary	2,6	4,7	4,9	4,3	4,3
Cyprus	1,3	1,6	1,8	2,1	2,4
EBRD - IFC	4,5	1,6	1,7	2,2	2,5
Germany	1,3	1,3	1,2	1,3	1,1
Great Britain	1,4	1,2	1,1	1,0	0,9
Other	2,1	2,3	0,3	0,5	0,9

Source: Annual reports processed by the author, 2003, p. 86, 2004 p, 92, www.bnr.ro,

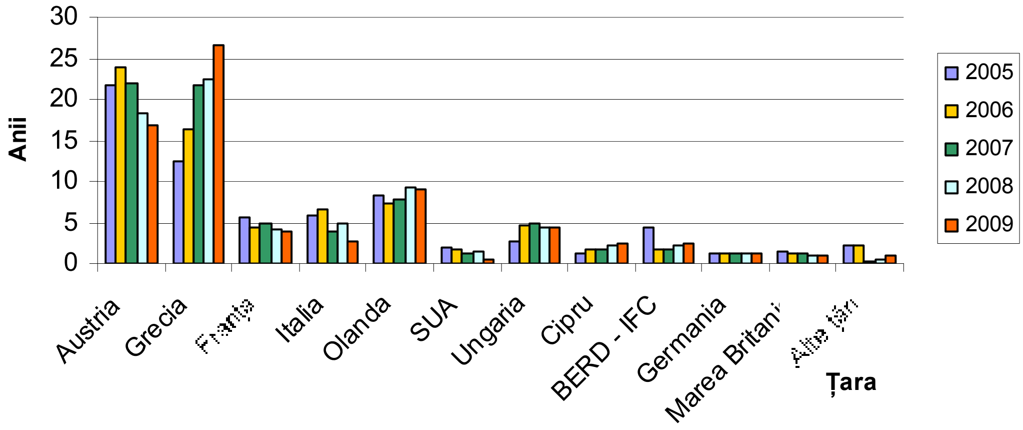


Figure 1. Graphical representation of foreign capital shares in the social capital of commercial banks

Moreover, obtaining EU membership by our country will spread its effects over time, but it requires new adjustments as are already observable in the local banking environment, where gaining market share at the expense of other competitors and customer loyalty are the major objectives of credit institutions. However, increasing competition on the Romanian banking market, banking privatization and the entry of foreign capital have turned Romania into one of the main scenes that face world class players.

The changes in 2009 at the level of shareholding did not produce major changes in the structure of the Romanian banking sector. Large banks with majority foreign capital have decreased slightly in market share aggregate assets, mainly due to sales of fixed and non-performing assets, but also reduced their activity on the interbank market. In early 2010, there were significant changes compared to June 2009, in terms of country of origin of capital invested in the Romanian, the Greek credit institutions retaining the first position (Figure). So far, the Greek-owned banks have successfully coped with the international crisis, partly due to more conservative prudential regulations the NBR initiated counter-cyclically in previous years. In 2009 and first half of 2010, there were notable changes observed in the structure of the Romanian banking sector in terms of number of credit institutions, the degree of concentration of ownership and sector. As a result of the economic crisis, credit institutions have stepped up efforts to cut costs by closing unprofitable units and reduce the number of employees. Amid economic crisis on lending, credit institutions decreased employees' number by 2068 persons and with 265 the number of units compared to the same period of the previous year (Figure).

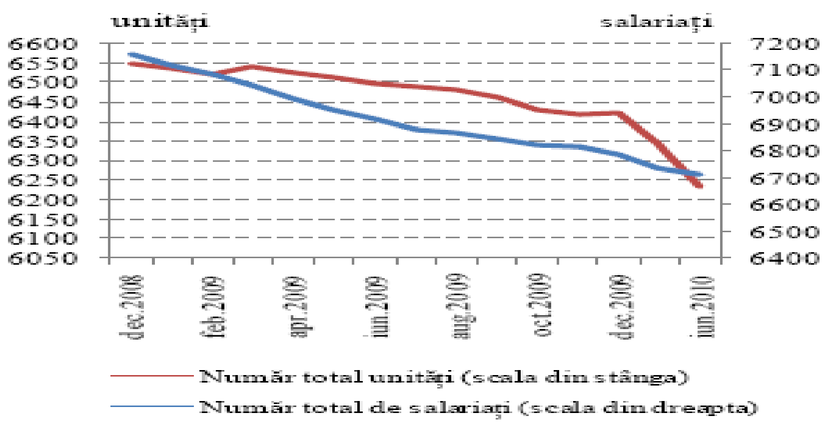


Figure 2. Evolution of the number of units and number of employees on the Romanian banking system

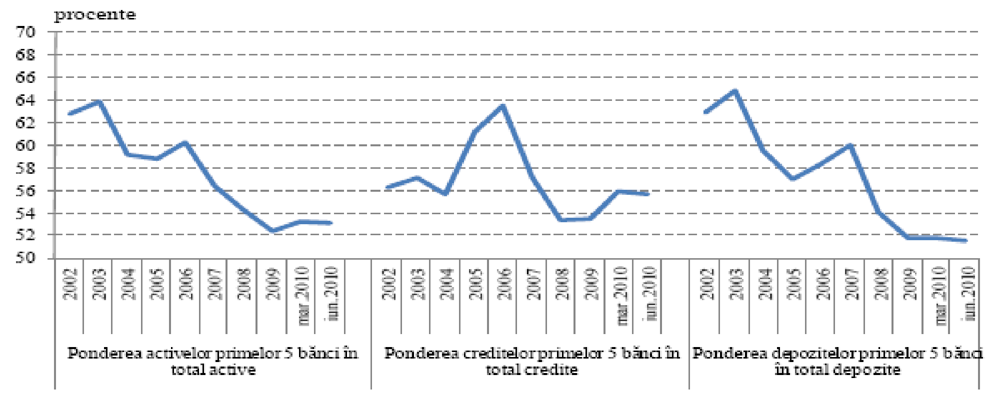
Source: SFR 2010 www.bnr.ro

Table 5. Structural indicators of the Romanian banking system

Indicator	2003	2004	2005	2006	2007	2008	2009	2010 Trim II
Number of credit institutions	39	40	40	39	42	43	42	42
Number of banks with majority private capital	36	38	38	37	40	41	40	40
Number of majority foreign-owned banks, of which	29	30	30	33	36	37	35	35
Branches of foreign banks	8	7	6	7	10	10	10	9
Share in total assets of banks with majority private capital	62,5	93,1	94	94,5	94,7	94,6	92,5	93,2
Share in total assets of majority foreign-owned banks including branches of foreign banks	58,2	62,1	62,2	88,6	88	88,2	85,3	86,1
Share of top five banks in total assets	63,9	59,2	58,8	60,3	56,3	54,3	52,4	53,1
Herfindahl-Hirschmann Index	1264	1120	1124	1171	1046	926	857	874

Source: www.bnr.ro, Financial Stability Report, 2010, p. 21

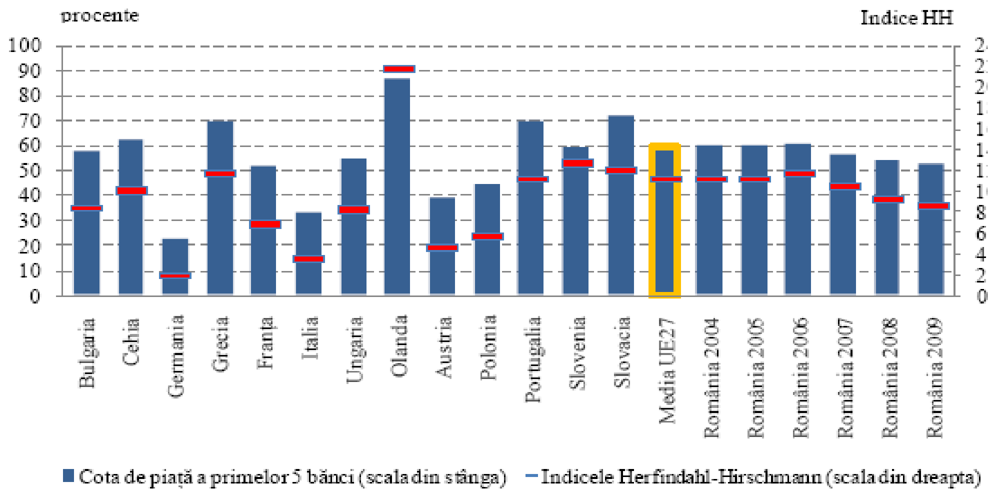
The Romanian banking system continues to be characterized by a relatively high degree of concentration. Although focusing is a natural phenomenon for the market economy, the banking sector expressed itself stronger in recent years due to the emergence and manifestation of banking crises and increased competitive environment. The top five banks (by asset value) held 56.3 percent of assets of the aggregated balance sheet, 57.1 percent of total loans, 60.0 percent of deposits, 55.7 percent of government bonds and 50.1 percent of equity in 2007, at the end of 2008 having 54.3 percent of the aggregated balance sheet assets, 63.5 percent of total loans, 58.4 percent of deposits, 34.9 percent of government bonds and 53.3 percent of the equity of Romanian commercial banks. While holding over half of banking assets, the top five banks by asset size have continued to reduce their shares in total banking system from 54.3 percent in December 2008 to 52.4 percent in December 2009, this reduction market share for smaller banks have been on account of options for outsourcing a portion of the loan portfolio, but also due to the increasing competition and the difficulties in lending. With the first quarter of 2010 there may be seen a consolidation of market share held by the first five banks, up to 53.1 percent of the total aggregated balance sheet assets.



Source: SFR 2010 www.bnr.ro

Figure 3. The concentration of the Romanian banking system

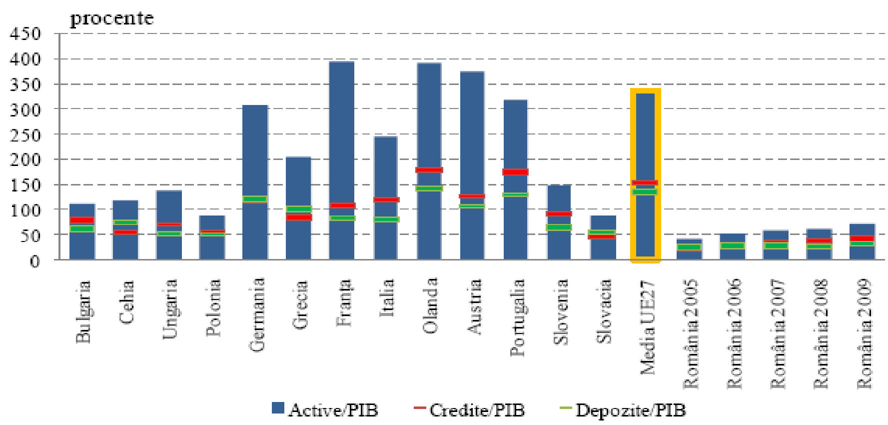
The concentration degree of the Romanian banking system is assessed as moderate, under the EU average, which was revealed also by the Herfindahl-Hirschmann index, and was placed on a downtrend, due to the attenuation of the top five offensive players' behavior in the market, a trend that started in 2005 and continued until the end of 2009, entering a slight increase in the first half of 2010. As from 2006, the Herfindahl-Hirschmann showed a slightly downward trend, indicating a moderate degree of concentration, the value of 857 points at 31 December 2009 ranking Romania below the average of 1120 points recorded in 2008 at the EU level.



Source: Financial Stability Report 2010, p. 24

Figure 4. The concentration degree (international comparison)

In terms of financial intermediation in Romania, this remains well below the European average and even below the values recorded in other new EU Member States (Figure). The increasing trend of the intermediation degree calculated as a percentage of bank assets in GDP was supported until 2008 largely by the high growth rate of non-governmental credit, but for 2009, the increase in this indicator is due primarily to the result of lower GDP and not to the increase of the assets' volume.



Source: Financial Stability Report 2010, p. 23

Figure 5. Intermediation degree (international comparisons)

Given that financial intermediation is still low and taking into consideration the share of bank assets to GDP compared to other countries in the region, the Romanian market potential remains quite high. Moreover, recent years have been characterized by a sharp boost of banking, the banking system's aggregate assets share of GDP increasing from 50.5 percent at end 2006 to 62.1 percent at the end of 2007

3. Qualitative analysis of the Romanian banking system

Table 6. The main analysis indicators of the banking system

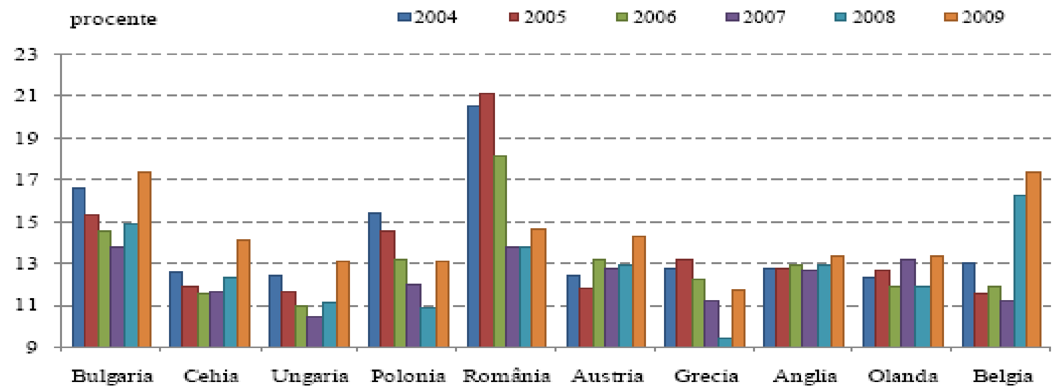
Indicator name	2005	2006	2007	2008	2009	Sept 2010
Solvability ratio (>8%)	21,1	18,1	13,8	13,76	14,76	14,59
Lever effect or rate of own assets, level one (Tier I own assets / Total assets)	9,2	8,6	7,3	8,13	7,55	7.89
Overdue and doubtful loans / Total loans portfolio (net value)	0,3	0,2	0,2	0,32	1,5	2.67
Total outstanding and doubtful debts / Total assets (net value)	0,2	0,1	0,2	0,29	1,01	1.82
Total outstanding and doubtful debts (Net) / Tier I own funds	1,4	1,5	2,3	3,19	11,78	n.a.
Total outstanding and doubtful debts (net) / Attracted and borrowed sources	0,2	0,2	0,2	n.a.	.n.a.	n.a.
Credit risk ratio*	2,6	2,8	4,0	5,95	13,53	20.24
General Risk Ratio	47,6	53,0	56,9	62,5	59,13	n.a.
Loans to customers / Deposits from customers			108,72	122,03	112,8	116.26
Liquidity indicator	2,59	2,3	2,13	2,47	1,38	n.a.
ROA (Net Profit / Total assets)	1,6	1,3	1,01	1,56	0,25	-0.19
ROE (Net Profit / Own Equity)	12,7	10,3	9,43	17,04	2,89	-2.13

** Unadjusted exposure and interest on loans classified as "doubtful" and "loss" / Total credits and interests, including off balance sheet items*
Source: www.bnr.ro

Regarding the dynamics of financial accounting and prudential indicators, what must be noted is that the slowdown was influenced by tempering lending, while maintaining still the values below par of the indicators on overdue and doubtful loans, the growth of capital, maintaining a high level of solvency, liquidity and financial performance indicators (ROA and ROE).

In a competitive economy governed by the principle of profitability, the credit institutions in the local banking landscape demonstrated to have acquired skills of effective financial risk management. In terms of ***overall risk ratio*** expressing the ratio of risk weighted assets and total assets at book value, this stood on an upward trend until 2008 inclusively (from 47.6 percent in 2005 - 62, 5 in 2008), registering a downward trend in 2009 (59, 13 percent in 2009). The steady upward trend registered by 2008 (47.6 percent in 2005, 53.0 percent in 2006, 56.9 percent in 2007, 62.5 percent at the end of 2008) was a reflection of policy expansion of lending and therefore a higher concentration of bank assets accounting in risk assets.

The increasing of the credit risk assumed by the banking system was accompanied though by a downward trend of the solvency rate (21.1 percent at December 31, 2005, 18.1 percent at December 31, 2006, 13.8 percent in 2007, 13.76 percent in 2008). Although declining, the solvency of the banking system lies above the regulatory minimum (8 percent since January 2007), which is influenced by the faster pace of growth of the risk weighted assets compared with that of equity. In all of 2009 and in early 2010, all credit institutions have recorded levels above the minimum solvency covered (all entities recorded a solvency ratio higher than the 10 percent threshold required in the supervisory process, the regulatory minimum in Romania, harmonized with the one of the European Union, being 8 percent), which means that they are adequately capitalized. The level of capital adequacy the Romanian banks have is higher than the solvency ratio (median) calculated for the large banking groups with complex activity in the euro area (13.3 percent in third quarter 2009), given that most countries in the European Union intensified efforts to improve capital adequacy of credit institutions, some countries using public funds for this purpose as a measure to counter the international financial crisis (Figure).



Source: IMF - Global Financial Stability Report (April 2010), NBR

Figure 6. Comparative evolution of the European Union solvency ratio

After going through a period where lending was the main option for banks to increase market share, the signs of a gradual deterioration of the indicators measuring the quality of loan portfolio began to be noticed, primarily manifested in the second half of 2008 as a result of the economic downturn and unemployment rising, currency depreciation, financial disintermediation and the high level of interest on loans. The negative trend that the quality of the loan portfolio was recorded, the effect of the global financial crisis and economic recession, were common to many developed and emerging countries in the European Union (Figure). A positive aspect for Romania is the lack of toxic assets in the balance sheets of credit institutions, and that no bank was in bankruptcy.

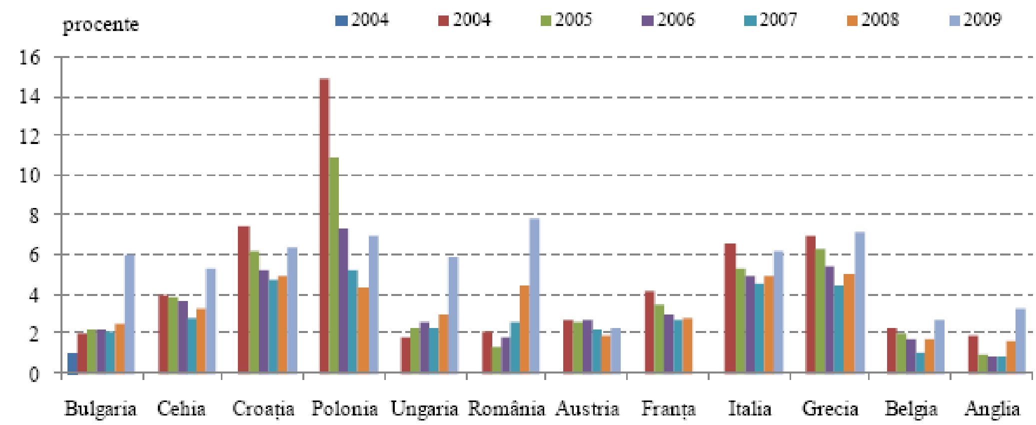


Chart 7. The quality of loan portfolios in European countries (non-performing loans as a percentage of total loans)

From the reports on the classification of ***loans, investments and related interest***, we may observe at the end of 2006 a slight increase in the key indicators of credit risk measurement, a trend that continued until 2008 and intensified in the coming period, the share of loans and exposure adjusted interest under "doubtful or loss" in total classified loans and related interest being 2.8 percent in 2006, 4.0 percent in 2007, 5.95 in 2008 and 13.53 percent in 2009.

A growing vulnerability of the Romanian banking system as mentioned above, observed since late 2007 is the deteriorating quality of the loan portfolio, something that proved to be more pronounced in 2009, mainly due to the economic recession and unemployment growth. Although bad debts are at a manageable level, the pace of growth is a concern in terms of financial stability, and for short-term the trend is anticipated to maintain current loan portfolio quality.

In terms of ***financial performance*** in the banking system, the two financial performance indicators showed lower levels by the year 2007 where ROA decreased from 1.6 percent in 2005 to 1.01 percent in 2007 and where ROE decreased from 12.7 percent in 2005 to 9.43 percent in 2007.

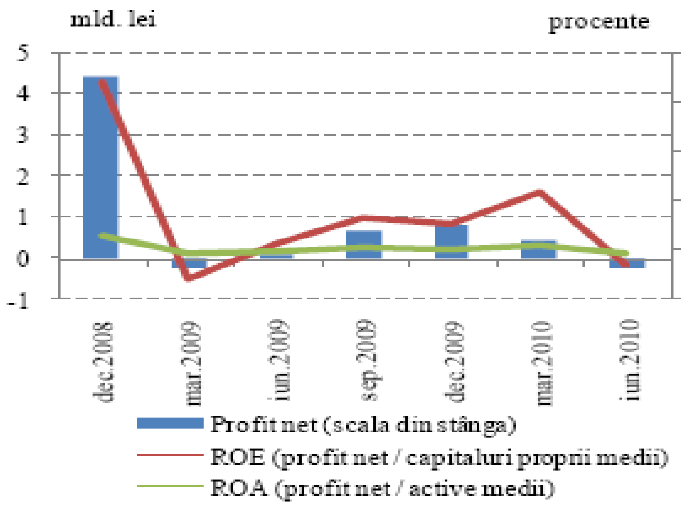


Chart 8. Evolution of net profit, ROE and ROA

At the end of 2008, the leading indicators of profitability (economic efficiency rate ROA - and the rate of financial efficiency - ROE) had a significantly higher level (1.56 percent and 17.04 percent) than in December 2007 (1.01 percent and 9.43 percent). This development was due on the one hand, to sales of holding share detained by four banks in the capital of insurance companies and, on the other hand, to the expansion in net interest income.

Faced with stagnation in lending, with the increase in provisioning requirements and increasing funding costs, banks have tried to mitigate the reduction of profits by scaling networks, expanded aggressively in recent years, doing the closure of units and personnel restructuring (in 2009 banks have closed 128 units and 3724 employees were fired). Although faced with these difficulties, the banking system was able to conclude 2009 with a profit of 680 million, an aggregate profit that fell more than 5 times the previous year, mainly due to unprecedented growth in provision expenses (from 7,593.9 mln lei to 14,972.7 mln. lei), due to the high level of nonperforming loans. In this context, the profitability indicators have recorded modest, but positive values: 0.25 percent for ROA (1.56 percent the previous year) and 2.89 percent for ROE (17.04 percent in 2008). The first half of 2010 marked the entry of profitability in negative territory, especially on fund raising necessary to provision expenses. Banks have initiated measures to control costs by scaling both the branch network and by delaying or reducing investment programs. The increase in interest margins on domestic and foreign currency, sale of fixed assets and purchase of government securities have been among the most common strategies implemented by banks for short-term improvement of their financial positions. It is anticipated that the profitability of the banking system will remain under pressure during 2010, mainly due to the growing needs for provisioning, expression of possible further deterioration of asset quality, under the conditions of reducing the banks' risk appetite and amid continuing economic adjustments based on persistent recession.

In order to avoid possible effects of financial crisis, the National Bank of Romania has consistently acting against the accumulation of risks in the banking system, mainly generated by the explosive growth of non-government credits, through a series of mitigation measures of lending activity, especially in currency. Thus, the emergence of rule changes on the classification of loans laid the groundwork to reduce currency risk exposure of loans to individual customers in a currency other than where they carry out their income, but also generated an increase in the cost of this credit category and thus a deceleration of its dynamics.

4. Conclusions

According to the latest developments, the Romanian banking system can be considered stable as a whole, with a level of capitalization, solvency and liquidity in accordance with prudential requirements, despite lending accelerated in recent years and the implications of deepening international crisis. In general, levels of prudential indicators do not produce major concerns, but the trend should be monitored closely in light of uncertain global economic outlooks. The stability of the banking system is revealed also by stress testing exercises on macroeconomic scenarios, conducted by the National Bank biannually, the last exercise of stress testing taking place in December 2009, covering a two-year horizon. Under the severe scenario, according to a major depreciation of the exchange rate, and to an economic downturn, the banking system would record a loss resulted in a decrease solvency ratio by about 2 percentage points on the analyzed horizon, due to weaker equity as a result of increasing non-performing loans. Due to the comfortable levels of solvency and liquidity of the banking sector, which is dominant in the system, it has absorbed shocks induced by the crisis well, but at the cost of diminished performance and particularly the risks of growing magnitude of the bad loans, the prolonged inhibition credit demand and relatively high dependence on external financing. It should be emphasized that a stabilizing factor was the funding agreement signed with the EU authorities, IFI and IMF. In the international context, a clear advantage was the prudent policy of recent years in central bank regulations, which made the banking sector to be stronger than in other countries. However, the perspective shows lower-performing banks and the short-term prospects for the banking sector in general and of the national financial system depend largely on restoring confidence, on the success of sustainable economic recovery and on international developments.

Refertences

1. *Cocriş V., Chirleşan, D., Economie bancară, Editura Universitații"Alexandru Ioan Cuza"Iaşi,2008*
2. *Căpraru, B., Banca centrală şi mediul economic, Editura Universitații"Alexandru Ioan Cuza"Iaşi,2009*
3. *Georgecu, F., Sistemul bancar in Romania – present şi perspective, noiembrie 2009, www.bnr.ro*
4. *Isărescu, M., Criza financiar- bancară şi economică: strategii, programe şi măsuri anticriză. Implicațiile şi perspectivle unei agende naționale, Braşov, 6 martie 2009*
5. *Raport anual , 2008, 2009, www.bnr.ro*
6. *Raport de stabilitate financiara 2009, 2010, www.bnr.ro*
7. *www.bankingnews.ro*