



Munich Personal RePEc Archive

## **Coordonatele auditului in marketingul financiar-bancar - situatia din Romania**

Codruta Dura and Imola Driga

University of Petrosani

17. April 2007

Online at <http://mpa.ub.uni-muenchen.de/3221/>  
MPRA Paper No. 3221, posted 17. May 2007

## **AUDIT COORDINATES IN FINANCIAL-BANKING MARKETING – EVIDENCE FROM ROMANIA**

**Ph. D. Lecturer Codruta Dura  
Ph. D. Lecturer Imola Driga  
UNIVERSITY OF PETROSANI, ROMANIA**

*Abstract: If forming and consolidating a favorable image of the bank among service consumers represents a marketing problem, then solving it requires numerous instruments from the marketing policies; the most important role is attributed to the audit. The final goal of the marketing audit is drawing up a table regarding the performances and the efficiency of the bank, in relation to the risks involved by financial institutions and its operations. In this respect, specialists in banking management have come up with different models of calculations and rating systems in their trials to obtain the most accurate scan of the “state of health” of the banks, and moreover in their trials to identify the institutions which face financial and operational difficulties leading to bankruptcy.*

*The uniform bank rating system is a specific instrument for the supervising activity and has its origins in the USA<sup>1</sup>; it has later been borrowed by German, Italian, Great Britain authorities, which use influential components in their banking system; later on, their system was adopted by most central banks within the European Union. In Romania, the uniform bank rating system has been implemented by N.B.R. (the National Bank of Romania) since 2000; the specific components that were analyzed are: the capital adequacy (C), the quality of assets (A), the management (M), profitability (P), liquidities (L) and sensitivity (S) starting from the year 2005. For short, this system is called CAMPL. The evaluation of these specific elements represents an important criterion for establishing a compound rating, which means assigning scores to each bank. The compound rating for the banking system is established based on economic – financial indicators and prudence indicators.*

The general term of internal audit was established in relation to the financial accounting activity; the major task of the traditional auditor was to carry out analysis and diagnoses based on historic facts, which had already been gathered. This notion was gradually replaced by a new approach which expands the sphere of the audit so that the preoccupation for the future is very important for any audit activity. Moreover, the audit function is open to the entire company: we do not refer only to a mere examination of a company's accounting documents, but also to the quality audit, information technology audit, marketing audit, etc.

The general notion of marketing audit is relatively new, as it was introduced in the specialized literature at the beginning of the 5<sup>th</sup> decade of the past century. Schuchman (1959) is one of the first people who have tackled the importance of the audit in the marketing activity and who have indicated its contents. According to his

---

<sup>1</sup> Roxin, L. – *Banking Risks Management*, Didactic and Pedagogic Publishing House, Bucharest, 1997

conception, *the marketing audit represents an examination and an assessment of the marketing activities: of the objectives and marketing policies, as well as of the methods, techniques, strategies and of the activity of the personnel towards reaching the objective.* Other authors set this new concept in a wider context of the management control, referring to the marketing audit as *a way to support the management in evaluating the efficiency of marketing operations within the company* (Tirman, 1971). The main flaw of this definition is that the sphere of the audit is limited to the post-factum analysis of the marketing activity indicators and it does not include the diagnosis of the organizational systems, of the operating procedures, of the decisional processes and of the marketing strategies, etc.

The famous American specialist Ph. Kotler is the one who lays the large foundations of the audit in marketing, proving that this represents *a complete, systematic, independent and periodic examination of the environment, of the objectives, strategies and activities of a company, in order to identify the fields who raise problems and to recommend remedial measures to improve its marketing efficiency.*<sup>2</sup>

The efforts to delimitate the concept of marketing audit have led to a clear definition of this term, which was widely accepted; however, they were parallel to the theoretic debates regarding the appearance and the development of marketing services. The only approach that tries to extend the concept of audit to wards services belongs to Wheatley (1983), who elaborates the so-called *model of marketing service planning*<sup>3</sup>. This deals with a set of self-evaluating techniques which are materialized into *guide lists*, destined to marketers. The strong point of this action is the connection of marketing audit to the service sector; on the other hand, the main flaw of this action lies in placing the audit tasks into the hands of marketers within the organization; this fact compromises, at least partially, the objectivity of the researches performed.

Although this new concept of marketing audit for services is useful, Wheatley's approach focuses exclusively upon professional services, so that the financial – banking marketing – autonomous specialization of service marketing - is still an unexplored territory from this point of view. It is, however, obvious that the audit can be an extremely important instrument in encouraging the executive management to identify and cover the risks that are likely to appear within the activities of financial – banking institutions. Ultimately, the situation/position of the bank, reflected with the help of a system of performance and efficiency indicators, represents the *nucleus* of its image. Hence it follows the important role of marketing, in general and mainly of the audit in the complicated network of relations between the bank and its clients.

Thus, if forming and consolidating a favorable image of the bank among service consumers represents a marketing problem, then solving it requires numerous instruments from the marketing policies; the most important role is attributed to the audit<sup>4</sup>.

The final goal of the marketing audit is drawing up a table regarding the performances and the efficiency of the bank, in relation to the risks involved by financial institutions and its operations. In this respect, specialists in banking management have

---

<sup>2</sup> Ristea Ana Lucia (coord.), *Marketing. Selection of terms and concepts*, Expert Publishing House, Bucharest, 2002

<sup>3</sup> Brânză Aurel, Niță Constantin, Luca Florin, *Audit in Marketing*, Ecran Magazin Publishing House, Bucharest, 1999

<sup>4</sup> Olteanu Valerică, *Financial Banking Marketing*, Ecomar Publishing House, Bucharest, 2005

come up with different models of calculations and rating systems in their trials to obtain the most accurate scan of the “state of health” of the banks, and moreover in their trials to identify the institutions which face financial and operational difficulties leading to bankruptcy. This refers to the category of banks which needs a special attention from the supervising authorities.

The uniform bank rating system is a specific instrument for the supervising activity and has its origins in the USA<sup>5</sup>; it has later been borrowed by German, Italian, Great Britain authorities, which use influential components in their banking system; later on, their system was adopted by most central banks within the European Union. It has proved to be a useful system for the countries it is being applied to, considering the fact that it is a mathematical model which works with balance sheets and periodic reports supplied by banking institutions to central banks. The only precarious component is the management, which is judged based on figures.

In Romania, the uniform bank rating system has been implemented by N.B.R. (the National Bank of Romania) since 2000; the specific components that were analyzed are: the capital adequacy (C), the quality of assets (A), the management (M), profitability (P), liquidities (L) and sensitivity (S) starting from the year 2005. For short, this system is called CAMPL. Each of its components is assigned scores between one and five, where one stands for a financial indicator that describes a strong financial standing and a score of five for a poor standing. The evaluation of these specific elements represents an important criterion for establishing a compound rating, which means assigning scores to each bank. The compound rating for the banking system is established based on economic – financial indicators and prudence indicators.

According to the director of Bank Surveillance Department within N.B.R., the general risk rate in the Romanian banking system has gone, in the last couple of years, below 50%, compared to the states of the European Union, where it reaches 60%; this is an advantage for Romania in its process of adhering to the EU. The risk rate is the average of the individual bank risk, calculated according to the amount of credits and to the degree of exposure to risk.

In 2002, taking into consideration the set of criteria set by the N.B.R. within the bank rating system, the system was concentrated on its higher levels (it included banks which scored 1 and 2 points). The Bank Surveillance Department within N.B.R assigned the score one to only one Romanian financial institution. Although they formed the majority by the end of 2002, the banks with a score two lowered their weight (from 76.4% in 2001 to 62.6% in 2002) in favor of banks which scored three points (from 16% to 19.2% during the same period of time)<sup>6</sup>.

According to the classification made by the N.B.R in the Annual Report for 2004 regarding the evaluation of financial institutions based on the Uniform Bank Rating System, only 90% of the banks are considered of rating 2, on condition that the best level of classification is rating 1. According to the criteria established on December, 31st, 2004 and at the end of 2003 by the N.B.R. within the bank rating system, there was no bank which could meet all the requests imposed by the maximum rating<sup>7</sup>. In 2004, in comparison to year 2003 major changes could be noticed in categories 2 and 3, meaning

---

<sup>5</sup> Roxin, L. – *Banking Risks Management*, Didactic and Pedagogic Publishing House, Bucharest, 1997

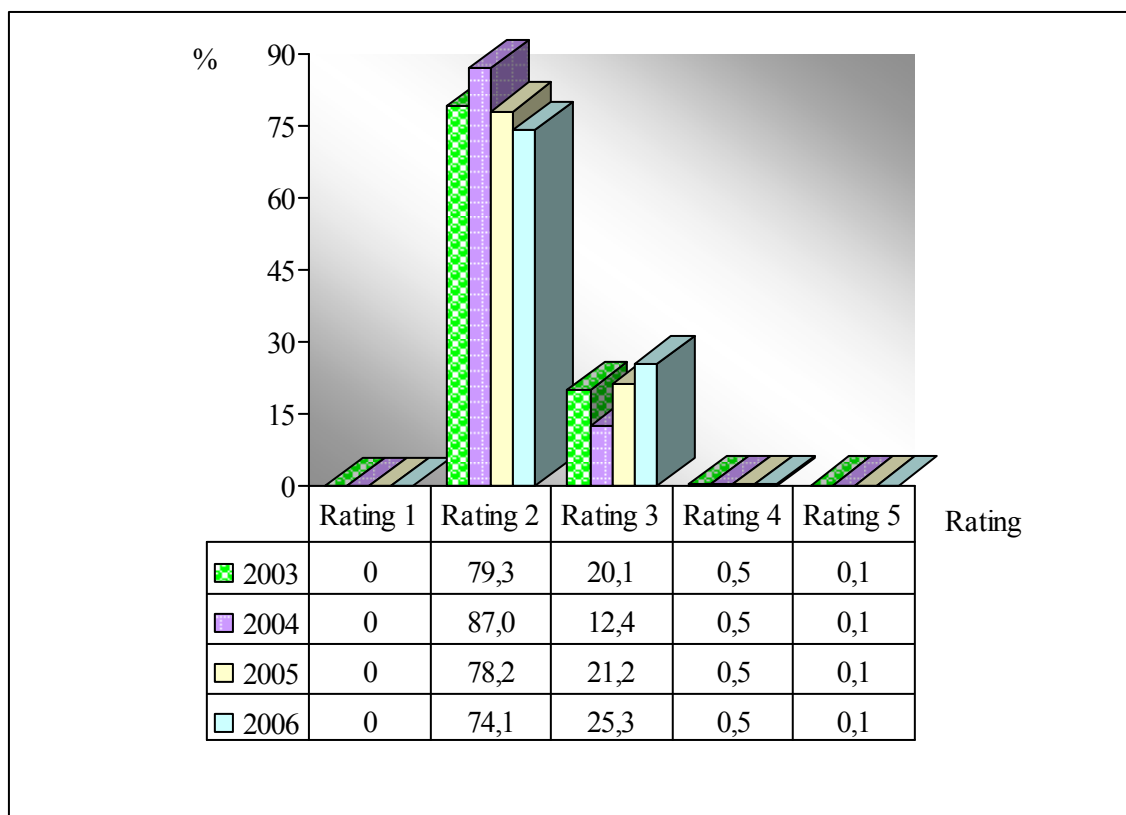
<sup>6</sup> Annual report of the N.B.R. for the year 2002

<sup>7</sup> Annual report of the N.B.R. for the year 2004

that some banks passed from rating 3 to rating 2; the balance sheet of banks with a score of three showed a decrease by 7.7%, continuing to 12.4%, in favor of banks with a score of two which increased their weight by 87%. (Figure no. 1)

This analysis takes into consideration some specific components, such as: capital adequacy, shareholding quality, asset quality, management, profitability and liquidity; as a consequence, 14 financial institutions scored 3 points, a medium rating level characteristic for 12.5% of the bank assets. The last place in the top is held by a bank of rank 4, which holds 0.5% of the bank assets, and it is currently under the observation of the National Bank of Romania as far as the shareholding quality is concerned.

The lowest score is 5, and only one financial institution which holds 0.1% of the total bank assets falls into this category.<sup>8</sup> This bank has restrictions regarding the granting of credits and depositing money from the population; according to the regulations of the central bank it is allowed to grant credits that amount to 50% of its own funds. In case a bank of score 5 does not increase its capital, it is very likely to lose its licence, according to NBR regulations. Specialists say that under these circumstances, the bank should reduce costs and it should diversify its services and widen the range of products; it should increase its capital; it should not borrow money from the market and instead it could find cheap financial sources.



**Figure no. 1:**  
***The situation of Romanian banks based on the main prudential indicators according to the volume of assets***

<sup>8</sup> Monthly NBR report no.1/2005

By the end of 2005, a new bank rating indicator had been introduced – sensitivity to market risk, in accordance with Basel II regulations, which defines the nature of the surveillance activity and it shows the bank's reactions towards various systems shocks. Sensitivity has joined the other operational components necessary in the analysis of a bank. In this respect, NBR has not demanded from the financial institutions to complete additional financial reports; the new indicator is used to evaluate, through econometric models, the possibility that a bank should register losses as a consequence of the variation of some shock factors brought about by the decrease of the interest, of the currency, by the liberalization of the stock account. The first step in this direction was taken in 2003, when the International Monetary Fund (IMF) created a soft, which would be used to evaluate the impact of some slight shocks upon the banking system: both the direct effect and the indirect ones (which are felt by the economic agents, financed by the banking system).

According to the criteria set by NBR regarding the bank rating system, no bank could meet the requirements imposed by the maximum rating by the end of 2005 and 2006. Significant changes could be noticed in the case of banks which scored 2 and 3 within the rating system. Thus, by the end of 2005, the asset weight of the banks of rank 3 has increased by 8.8% compared to the year 2004, to the detriment of the banks of rank 2; by the end of 2006, the asset weight of banks which scored 2, decreased by 4.1% (down to 74.1%), in favor of banks of rank 3, the weight of which went up to 25.3%<sup>9</sup>.

NBR and Ernst & Young consulting firm (with which NBR has signed a contract at the end of 2003 for the improvement of the bank rating system; it was financed by the European Union through the Phare programme) finalized in December 2004 the methodology for the implementation of the new bank surveillance indicator, how it is calculated and interpreted. An IT system was developed, an ergonomic calculation matrix which can determine the sensitivity of the banking system based on various elements. During the last part of 2004, the last testing phase took place; banks were grouped into rating categories.

The analyzed matrix comprises own funds, liquidity, solvency, general risk rate, currency risk, as well as the impact of some exterior phenomena upon the banking system. The shocks came from a sudden increase of the interest, of the exchange rate. Thus, the consequences upon the banks' joint stock, upon their own funds and upon the solvency indicator were closely observed. Using the simulation method, it was noticed that a series of banks, with capital paid in foreign currency, reach their limit regarding their own funds, and this imposes an increase of the capital<sup>10</sup>. It can be assumed that the implementation of this new indicator will improve the knowledge about the banking system with the help of the inputs received from external factors; this means, in fact, to be aware of the sensitivity of the Romanian banking system.

Considering the Bank rating and the early warning system elaborated by the Surveillance Department within NBR and the data from the balance sheet and the profit and loss account of the Romanian Commercial Bank, we can characterize the quantifiable CAPL components which help determine the global risk position of the Romanian Commercial Bank.

---

<sup>9</sup> Monthly NBR report no.1/2006 and 12/2006

<sup>10</sup> Monthly NBR report no.1/2005

## 1. Capital adequacy (C):

- Solvency ratio 1 (> 12%)

$$Rs_{12003} = \frac{F_p}{A_p} \cdot 100 = \frac{2695695600}{10588892200} \cdot 100 = 25.46\%$$

$$Rs_{12004} = \frac{F_p}{A_p} \cdot 100 = \frac{3120185200}{14647675000} \cdot 100 = 21.30\%$$

- Solvency ratio 2 (> 8%)

$$Rs_{22003} = \frac{C_p}{A_p} \cdot 100 = \frac{3289988300}{10588892200} \cdot 100 = 31.07\%$$

$$Rs_{22004} = \frac{F_p}{A_p} \cdot 100 = \frac{3743910700}{14647675000} \cdot 100 = 25.56\%$$

- Rate of capital

$$Ep_{2003} = \frac{C_p}{TA} \cdot 100 = \frac{3289988300}{18472482000} \cdot 100 = 17.81\%$$

$$Ep_{2004} = \frac{C_p}{TA} \cdot 100 = \frac{3743910700}{24489292300} \cdot 100 = 15.29\%$$

- Capital and joint stock ratio

$$Cp / Cs_{2003} = \frac{C_p}{C_s} \cdot 100 = \frac{3289988300}{2119692500} \cdot 100 = 155.21\%$$

$$Cp / Cs_{2004} = \frac{C_p}{C_s} \cdot 100 = \frac{3743910700}{2119692500} \cdot 100 = 176.63\%$$

- Net patrimony

$$Pn_{2003} = TA - S_{ai} = 18472482000 - 15182493700 = 3289988300 \text{ RON}$$

$$Pn_{2004} = TA - S_{ai} = 24489292300 - 20745381600 = 3743910700 \text{ RON}$$

## 2. Asset quality (A):

- Credits granted to clients in total assets

$$Cr_{cl} / TA_{2003} = \frac{Cr_{cl}}{TA} \cdot 100 = \frac{7882238300}{18472482000} \cdot 100 = 42.67\%$$

$$Cr_{cl} / TA_{2004} = \frac{Cr_{cl}}{TA} \cdot 100 = \frac{10288778000}{24489292300} \cdot 100 = 42.01\%$$

- Credits granted to clients in total attracted and borrowed sources

$$Cr_{cl} / S_{ai2003} = \frac{Cr_{cl}}{TP - C_p} \cdot 100 = \frac{7882238300}{18472482000 - 3289988300} \cdot 100 = 51.91\%$$

$$Cr_{cl} / S_{ai2004} = \frac{Cr_{cl}}{TP - C_p} \cdot 100 = \frac{10288778000}{24489292300 - 3743910700} \cdot 100 = 49.60\%$$

- Deposits and credits at other financial institutions in total assets

$$Cr_{bc} / TA_{2003} = \frac{Cr_{bc}}{TA} \cdot 100 = \frac{784532100}{18472482000} \cdot 100 = 4.25\%$$

$$Cr_{bc} / TA_{2004} = \frac{Cr_{bc}}{TA} \cdot 100 = \frac{751640100}{24489292300} \cdot 100 = 3.07\%$$

### 3. Profitability (P):

- Return on assets (ROA)

$$ROA_{2003} = \frac{Pr_n}{TA} \cdot 100 = \frac{274233100}{18472482000} \cdot 100 = 1.48\%$$

$$ROA_{2004} = \frac{Pr_n}{TA} \cdot 100 = \frac{631423400}{24489292300} \cdot 100 = 2.58\%$$

- Return on equity (ROE)

$$ROE_{2003} = \frac{Pr_n}{C_p} \cdot 100 = \frac{274233100}{3289988300} \cdot 100 = 8.34\%$$

$$ROE_{2004} = \frac{Pr_n}{C_p} \cdot 100 = \frac{631423400}{3743910700} \cdot 100 = 16.87\%$$

- Rate of profitability of the basic activity

$$Rrab_{2003} = \frac{V_e - V_p}{Ch_e - Ch_p} \cdot 100 = \frac{1759914900}{1216383100} \cdot 100 = 144.68\%$$

$$Rrab_{2004} = \frac{V_e - V_p}{Ch_e - Ch_p} \cdot 100 = \frac{2142894000}{1104952300} \cdot 100 = 193.94\%$$

- Rate of profit

$$Rpr_{2003} = \frac{Pr_b}{VT} \cdot 100 = \frac{382280100}{1759914900} \cdot 100 = 21.72\%$$

$$Rpr_{2004} = \frac{Pr_b}{VT} \cdot 100 = \frac{831533600}{2142894000} \cdot 100 = 37.80\%$$

- Total debt ratio

$$Ri_{2003} = \frac{S_{ai}}{TP} \cdot 100 = \frac{15182493700}{18472482000} \cdot 100 = 82.19\%$$

$$Ri_{2004} = \frac{S_{ai}}{TP} \cdot 100 = \frac{20745381600}{24489292300} \cdot 100 = 84.71\%$$

### 4. Liquidity (L):

- Immediate liquidity

$$Li_{2003} = \frac{D_{bc} + T}{S_{ai}} \cdot 100 = \frac{7805882300}{15182493700} \cdot 100 = 51.41\%$$

$$Li_{2004} = \frac{D_{bc} + T}{S_{ai}} \cdot 100 = \frac{11292001700}{20745381600} \cdot 100 = 54.43\%$$

- Credits granted to clients / the clients' deposits



$$Cr_{cl} / D_{cl2003} = \frac{Cr_{cl}}{D_{cl}} \cdot 100 = \frac{7882238300}{13953887900} \cdot 100 = 56.50\%$$

$$Cr_{cl} / D_{cl2004} = \frac{Cr_{cl}}{D_{cl}} \cdot 100 = \frac{10288778000}{17597087700} \cdot 100 = 58.50\%$$

Table no.1.

**Establishing the rating of the Romanian Commercial Bank according to the analysis indicators of the four CAPL quantifiable criteria**

No.	Indicator	Level of indicator (%)		Rating	
		2003	2004	2003	2004
<b>I. Capital adequacy (C)</b>					
1.	Solvency ratio 1 (> 12%)	25,46	21,30	1	1
2.	Solvency ratio 2 (>8%)	31,07	25,56	1	1
3.	Rate of capital	17,81	15,29	1	1
4.	Capital and joint stock ratio	155,21	176,63	1	1
<b>II. Asset quality (A)</b>					
1.	Credits granted to clients in total assets	42,67	42,01	1	1
2.	Credits granted to clients in total attracted and borrowed sources	51,91	49,60	1	1
3.	Deposits and credits at other financial institutions in total assets	4,25	3,07	1	1
<b>III. Profitability (P)</b>					
1.	Return on assets	1,48	2,58	4	4
2.	Return on equity	8,34	16,87	2	1
3.	Rate of profit of the basic activity	144,68	193,94	2	1
4.	Rate of profit	21,72	37,8	2	2
<b>IV. Liquidity (L)</b>					
1.	Immediate liquidity ratio	51,41	54,43	1	1
2.	Credits granted to clients / the clients' deposits	56,50	58,50	1	1

The analysis of the data presented in table 1 proves the fact that, both in the year 2003 and in the year 2004, all the quantifiable components of the Uniform Bank Rating System scored 1, except for the profitability; this also shows that the Romanian Commercial Bank has a strong capital in comparison with the bank's risk rate, that the quality of assets and the credit administration policies are adequate, that the identified deficiencies are minor and the exposure at risk regarding capital protection is modest. Rank 1 liquidity indicates the fact that the Romanian Commercial Bank has strong liquidities and highly developed fund administration policies. This financial institution has ready access to the necessary sources in order to generate favorable funds for the present and anticipated liquidities. Rank 2 profitability refers to satisfactory income

which is considered enough to cover the cost of operations, to maintain the capital adequacy and the allocation levels necessary to ensure the quality of assets, their increase and other factors that affect the quality, the quantity and the trend of the income.

## Bibliography

1. Acharya, V. - *A Theory of Systemic Risk and Design of Prudential Bank Regulation*, University of New York, 2001
2. Acharya, V.; Yorulmazer, T. - *Too Many to Fail - An Analysis of Time-inconsistency in Bank Closure Regulation*, London Business School, 2004
3. Branza, A.; Nita, C., Luca, F. - *Audit in Marketing*, Ecran Magazin Publishing House, Bucharest, 1999
4. Bessis, J. - *Risk Management in Banking*, John Wiley and Sons Ltd, 2nd Edition, 2002
5. Chami, R.; Cosimano, T. - *The Nature of Capital Adequacy Constraints under the Basel Accord*, University of Notre Dame, 2003
6. Cetină I. - *Financial - Banking Marketing*, Economic Publishing House, Bucharest, 2005
7. Drigă, I. - *Managerial Risk in Romanian Banking*, Ph.D. Thesis, 2006
8. Elsinger, H. - *Risk Assessment for Banking Systems*, University of Vienna, 2004
9. Greuning, H.; Bratanovic, S. - *Analyzing and Managing Banking Risk*, The World Bank, Washington, 2003
10. Hoggarth, G. - *On the Resolution of Banking Crises: Theory and Evidence*, Bank of England, 2004
11. Iliescu, C. - *Risk Management*, Dacia Publishing House, Cluj-Napoca, 2003
12. Münstermann, B. - *Basel II and Banks Key Aspects and Likely Market Impact*, Nomura Credit Research, London, 2005
13. Olteanu V. - *Financial - Banking Marketing*, Ecomar Publishing House, Bucharest, 2005
14. Roxin, L. - *Controlling Banking Risks*, Didactic and Pedagogic Publishing House, Bucharest, 1997
15. Sidenberg, M.; Schuermann, T. - *The New Basel Capital Accord and Questions for Research*, Federal Reserve Bank of New York, 2003
16. Schröder, M.; Schüler, M. - *The Systemic Risk Potential in European Banking*, Centre for European Economic Research, Mannheim, 2003
17. Schüler, M. - *How Do Banking Supervisors Deal with Europe-wide Systemic Risk?*, Centre for European Economic Research, Mannheim, 2003
18. Schüler, M. - *The Threat of Systemic Risk in European Banking*, Centre for European Economic Research, Mannheim, 2003
19. Vlaar, P. - *On the Influence of Capital Requirements on Competition and Risk Taking in Banking*, Bank of the Netherlands, 2003
20. \*\*\* - Annual NBR Report, 2002-2005