

Economic profitability evolution at the Carpathian Commercial Bank , in relation to aggregate values of calculated in the Romanian banking system in the period 2007-2010 and the need to identify banking risks

Medar Lucian-Ion,
Professor, Faculty of Economics and Business Administration,
Constantin Brancusi University, Targu Jiu
Motoniu Ioan Dumitru
Ph. D. Applicant, Valahia University, Targoviste

Abstract: The management of credit institutions must be concerned with identifying the internal and external risks of banking operations development, estimating their size and importance, assessing the possibility and imposing measures for their management. On the one hand, the identification, analysis, and mitigation of banking risks can cause reduction of inconvenient and uneconomical costs and realization of incomes with the role of shock absorber in profits reduction, and on the other hand, ignoring them can lead to loss reflected in the profit decrease, thus affecting the bank performance.

Keywords: risk managers, performance indicators, incomes, profit, ROA

1. Economic profitability rate , the main indicator that measures banking efficiency

Exposing the banking institutions to risks means an understanding of the risks the banking system is confronting. This increases the probability to identify the material misstatement risks as most of the risks afferent to activity development will finally have financial consequences, and therefore an effect on economic profitability, the main indicator of banking efficiency.

Defining performance as „measurable level of bank stability, characterized by low levels of all kinds of risks and a normal trend growth of profits from one period analysis to another ” (I. Bătrâncea, I. Trenca, A. Bejenaru S.Borlea, 2008, page.374), lead to the idea that we can talk about the developing a system of indicators for determining level of credit institution performance, only when bank's activity is one efficient. Otherwise (on nonperforming), performance analysis of the bank loses its meaning, performance level may be detected only on the bank balance sheet structure.

Thus, an unbalanced distribution of bank funds, a high level of reserves, a low level of capital in relation to obligations, are only a few elements indicating a bad bank management of the assets and liabilities and a bank's exposure to risk.

But performance is not limited to profitability, so to make a radiograph eloquent of bank performance, experts use an analysis model known as „Du Pont system”, which allows „comparison of bank profit with risk, by balancing gains and losses resulting after the risk materializes.” (Bătrâncea I., Trenca I., Bejenaru A., Borlea S., 2008, p. 375).

Making an assessment of possible risks to show at the level of bank, some specialists consider the financial risks as being the only risks which quantification can be performed through a system of indicators, which are a direct consequence of permanent imbalance, over which bank management has in control. In addition, another kind of risks that a bank is exposed, are non-financial risks (commercial environment), generated by external factors over which bank management has no control, or it is limited.

Still referring to profit as the main element of assessing the performance of a bank, he is nothing but an amount in absolute expression.

But, compared to elements that cause it, may reveals the interdependence in the evolution of banking performance and shed light on the levers to improve them. Thus, in assessment of banking performance are considered defining two indicators, *the rate of profits from assets* and *the rate of profits from capital*.

In this article we will focus only on the first indicator, „*the rate of return on assets* - ROA (**Return On Assets**)", that is, according to experts, the best measure of bank efficiency, because it directly expresses the result of active work to optimize operations, according to a certain volume of data resources.

An analysis of the various categories of risk affecting the bank, should be based on an analysis related of bank assets and liabilities, which requires constant adaptation bank balance at the level of risks considered acceptable.

As a source of unexpected expenses, analysis, quantification and reduction of risks can help to stabilize incomes over time, to cushion the shock damper, while, ignoring them can lead to losses which are reflected in profits decline, affecting the bank performance.

Referring further to the indicator, ‘economic rate of return’ calculated at the level of Carpathian Commercial Bank SA, we will review its progress between 2007-2010 compared to its evolution in Romanian banking system, as shown in table **no.2.1**.

Economic rate of return on assets (ROA), also known as return on assets, profit or assets, is the „expression of the overall profitability of banks and measure the managerial capacity to use financial and real banking resources to generate profit "(Bătrâncea I., I. Trenca, Bejenaru A., S. Borlea 2008, p. 382).

Starting from defining them as an expression of profitability asset use, or in other words, at how many assets use was obtained net profit, economic rate of return may be presented in relations no. 2.1 or 2.2 (Badea L., Socol A., Drăgoi V., Drigă I., 2010):

$$\frac{\text{Net profit}}{\text{Total incomes}} \times \frac{\text{Total incomes}}{\text{Total assets}} = \frac{\text{Net profit}}{\text{Total assets}}$$

No.2.1 Relation-Calculating the economic rate of return on assets

Or:

$$\text{Net profit rate} \times \text{Using assets rate} = \text{Rate of return on assets}$$

No.2.2 Relation-Calculating the economic rate of return on assets

The first term of the relation No. 2.1 - net profit rate ($PN = \frac{\text{Net profit}}{\text{Total incomes}} \times 100$) mainly depends on the ratio between bank income and costs, but also on their structure. In so far as both, the incomes and the costs, can be identified on activities (credit, financial operations, and others) than this indicator may be determined at the level of banking, so that it can be shown that the activity is more cost-effective and less profitable, or even loss- generating.

The second indicator - using assets rate ($AU = \frac{\text{Total operations income}}{\text{Total assets}} \times 100$) depends primarily on the level of active market interest, considering that credit is the main bank activity, and interest incomes share hold in total bank income and expressed total incomes obtained from the use of assets.

- million lei-

Banking financial performance indicators	Carpathian Commercial Bank				Average on banking system			
	2007	2008	2009	2010	2007	2008	2009	2010
ROA (%)	0.1	0.1	0.2	-0.9	1.3	1.7	0.2	-0.09
Net profit	3,5	4,5	6,5	-23,0	2746,6	4.681,9	815,9	-305,0
Total assets	2.245,0	2,918,5	2.735,8	2.439,3	211.276,9	275.405,9	330.183,5	341.946,3
Rate of net profit (%)	1.6	1.7	2.2	-9.9	17.6	21.7	3.5	-1.25
Net profit	3,5	4,5	6,5	-23,0	2.746,6	4.681,9	815,9	-305,0
Total incomes	216,9	265,1	295,1	231,8	15.605,7	21.581,1	23.609,7	24.318,0
Rate of asset use (%)	9.7	9.1	10.8	9.5	7.4	7.8	5.8	7.1
Total incomes	216,9	265,1	295,1	231,8	15.605,7	21.581,1	23.609,7	24.318,0
Total assets	2.245,0	2.918,5	2.735,8	2.439,3	211.276,9	275.405,9	407.950,5	341.946,3

Table No. 2.1 Evolution of financial performance indicators at Carpathian Commercial Bank against aggregate values calculated at the level of Romanian banking system

Source: Annual Financial Statements Carpathian Commercial Bank and Annual Reports NBR

2. The evolution of the net profit rate, respectively of the rate of use of commercial bank assets compared with those recorded in the Romanian Carpathian banking system in the period 2007-2010

Analyzing the evolution of the indicator economic rate of return (ROA) in the Carpathian Commercial Bank in the period 2007-2010 compared with the aggregate value at the level of Romanian banking system (**Table No.2.1**), can be drawn the following conclusion: - *Carpathian Commercial Bank activity was enrolled in the pattern of entire Romanian banking system activity, that, the first three years took from survey, bank activity was profitable as that of the level of aggregate banking system, with the only difference that in case of Carpathian Commercial Bank, year 2009 was the peak year of activity, unlike the banking system, where 2008 was assigned through the positive outcome of the banking activity, 2009 was a year characterized by a accentuated decrease activity.*

In this context, the indicator analyses had a similar evolution that it has been positive in the first three years, but 2010 is the year in which this indicator has value below 0. Should be noted that, the economic rate of return (ROA) determined at the level of bank was much lower than the aggregate banking system as in the first two years of the survey and in 2010, to record in 2009 equal levels (**Fig. no.2.1**). It is important to note that values of indicator were equalized in the conditions under which he grew up in the case of the bank, and fell very much at the level of banking system.

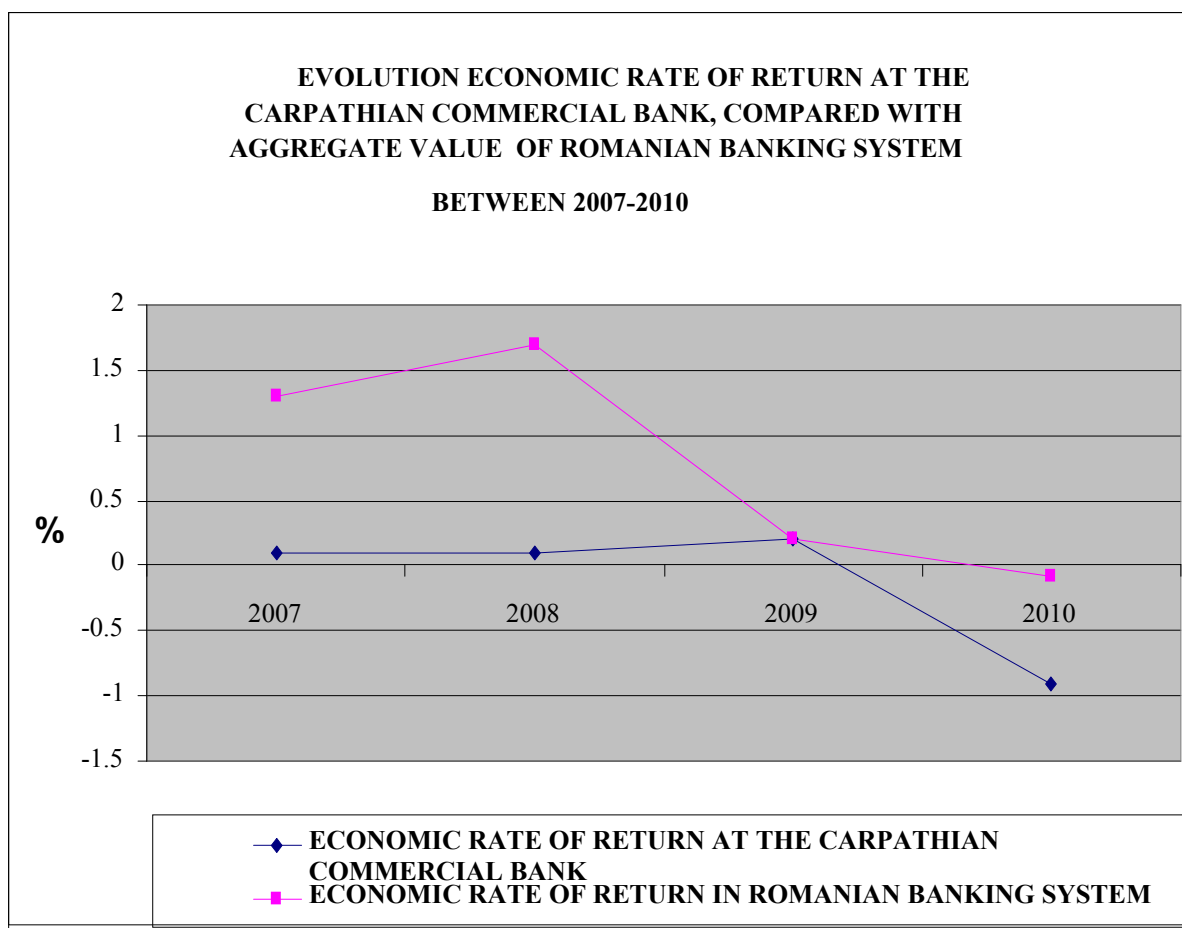


Fig. no.2.1 Evolution of economic rate of return for Carpathian Commercial Bank and the Romanian banking system

Source: Own projection based on data from Table no.2.1 and NBR Annual Reports

Analyzing the influence of net profit rate, respective using assets rate (the two factors which compose economic rate of return, according to relation no.2.2) on ROA, we can say that it was totally different for Carpathian Commercial Bank towards the banking system in the sense that: in case of the bank, the favourable development of economic profitability rate was exclusively from the using assets rate, whose level was even higher than the aggregate system level throughout the period analyzed (9.7% vs. 7.4% in 2007; 9.1% to 7.8% in 2008, 10.8% to 5.8% in 2009 and 9.5% to 7.1% in 2010), for the banking system the determining factor in the evolution ROA, was the rate of net profit, whose values were much higher than those recorded in the Carpathian Commercial Bank (**Table no.2.1 and Fig. no.2.2**)

Corroborating values recorded by the two indicators, using asset rate and the net profit rate, can be concluded that, at the level of Carpathian Commercial Bank although the rate using assets was greater than the average of the system, it was, however, that the profit reached by the end of each three years to be insignificant as a percentage of the profit recorded at the level of banking system and the net profit rate to be far below the average on the system.

This means that the bank's business costs have a significant weight and their evolution into a higher rate than income growth led to significant losses recorded in 2010.

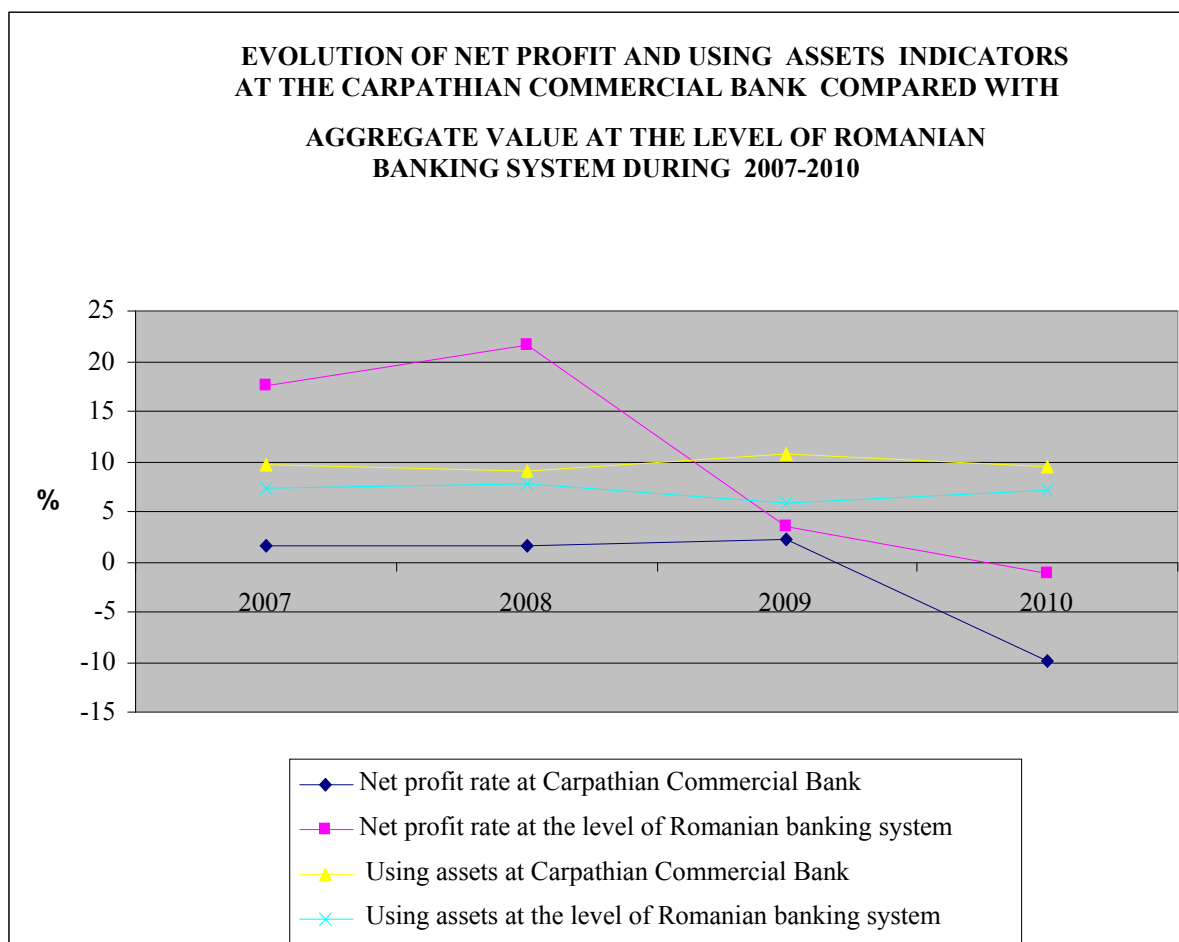


Fig. no.2.2 Net profit rate evolution and use of assets indicator of Carpathian Commercial Bank and at the level of the Romanian banking system

Source: own projection based on data table no.2.1 and NBR annual reports

3. Evolution of costs in a rate higher than income growth requires attention to banking risk management

Banking risk may be considered negatively by uncertainty, threat, an obstacle or on the contrary positively, *the opportunity* that leads to bank performance. Thus, through the strategy they adopt, the credit institutions assume some risks determined by their "rush" their profit after.

Given the financial crisis in recent years, the most important challenge will be for credit institutions to find a balance between **risk, cost and value**. Bank risk management during the economic crisis must achieve a **significant benefit** which determines as many positive results as possible with fewer resources and requires a clear setting of key risk the banking system is now facing.

Activity of Carpathian Commercial Bank in the period 2007-2010, was enrolled in the pattern activity of the entire Romanian banking system, meaning that, in the first three years of the survey, activity of the bank like whole activity of the banking system was one profitable. The only difference is that, in the case of Carpathian Commercial Bank, 2009 was the year of peak activity, while from the banking system, the year 2008 was detached by the favourable result of the banking activity, 2009 being a year characterized by a drifting of the activity, which heralded denouement that would be in 2010, the first year after 1999 when the activity of the

Romanian banking system resulted in loss, which can be found and at the level of Carpathian Commercial Bank.

In this context the indicator of performance analyzed had a similar evolution, it has been positive in the first three years, and the 2010 was the year in which the registered loss at the aggregate level of the Romanian banking system and also at Carpathian Commercial Bank, caused negative values of the indicator of performance .

It should be noted that the value of the analysis indicator, determined at the level of Carpathian Commercial Bank, was much lower than the aggregate value of the banking system, also in the first two years of the survey and in 2010, but the 2009 the values was, if not equal, at least close, due to their growth at the level of the bank, and greatly decreasing at the level on banking system.

Even if the first three years of interval analysis were characterized by a profitable activity at the level of Carpathian Commercial Bank, the recorded profit at the end of each year was reduced negligible as a percentage of within profit recorded of the banking system, which led to values much lower from the indicator of performance at the aggregate level of Romanian banking system.

This means that the bank's business costs have a significant weight and their evolution into a higher rate than incomes growth led to significant losses recorded in 2010, leading to the idea that, management capacity at Carpathian Commercial Bank, in terms of using financial resources to generate profits, are modest.

Therefore, to detect the causes which led to increased spending, credit institutions must review *"the procedure for the preparation and updating of risk register"* in the light of recommendations of the Basel Committee III. Based on this procedure or others similar, risk managers will impose an *"Action Plan to minimize the inherent risks identified"*. They can also monitor and find *"Status of implementation of mitigation measures and residual risk assessment"* to ensure bank liquidity and increased performance.

Bank management based on activities involves a comprehensive strategic decision-making process which starts with setting priorities regarding planning and performance management - taking into account the objectives and available resources of the credit institution

Banking process involves identification, assessment and ongoing monitoring of risks and perform daily activities necessary to take control of exposure to an acceptable level. The best banking practice identifies risk management as part of general management process of credit institutions

Banking Risk management acts as an awareness exercise and as a forum for exchange of views at all levels within the credit institutions

The risk manager informs and instructs the bank's management and performance staff and increases the probability of success in achieving the services performance objectives, mobilization of availabilities of placement the banking products

The risk manager creates opportunities and establishes tools necessary to evaluate, prioritize and decide before performing an activity, to allow credit institutions to obtain insurance in order to achieve objectives with reasonable value for money.

Among the multitude of banking risks, the risk manager continuously monitors the activity of placing banking products influenced by the credit risk. This is the most important risk which can bring high-income to credit institutions or on the contrary rather large losses. As recommended by the Basel credit risk is pursued by:

- **standard approach** by which a credit institution gives a coefficient of risk to each asset and off-balance items and totals assets according to these risk factors. Individual credit risk coefficients depend on the category of borrower (sovereign states, banks, companies). Risk coefficients will be redefined according to the rating issued by a specialized rating agency. For example, for a business loan, the agreement provides for four categories of

risk factors with values of 20%, 50%, 100% and 150% according to the classification of loans, debt service based on performance indicators.

- ***Internal rating of credit institutions*** through which the banks can use their own estimations and models to assess the credibility of the debtor. Different analytical methods are provided for different types of exposure. For example, lending companies and individuals whose risk characteristics are different calculation procedures are different

Banking processes must be developed so that they can identify all risks and devise a new system of control and monitoring of the most significant ones. A success factor in implementing the risk management in the banking system is the general interest of the management of all credit institutions in this exercise. Risk management should be on the agenda of each credit institution to develop its own system of risk assessment and to increase bank performance.

BIBLIOGRAPHY

- Badea L., Socol A., Drăgoi V., Drigă I, *Banking risk management*, Economic Publishing House, Bucharest, 2010;
- Bătrâncea I., Trenca I., Bejenaru A., Borlea S., *Analysis performance and banking risks*, Risoprint Publishing House, Cluj-Napoca, 2008;
- Borlea, Sorin Nicolae, *Economic and financial analysis & financial audit of banking financial institutions in Romania*, Risoprint Publishing House, Cluj-Napoca, 2009;
- Helfert A. Erich, *Techniques of financial analysis*, BMT Publishing House, 2006;
- Petrescu S. *Accounting financial analysis and diagnosis*, CECCAR Publishing House, Bucharest, 2008;
- Medar Lucian-Ion, Motoniu Ioan Dumitru, Performance analysis of the institutions from Romanian banking system based on ROA indicator on the example of Carpathian Commercial Bank between 2007-2010, ECOTREND-2011, “Constantin Brâncuși University of Târgu Jiu
- National Bank of Romania, Financial Stability Report -2007;
- National Bank of Romania, Financial Stability Report -2008;
- National Bank of Romania, Financial Stability Report -2009;
- National Bank of Romania, Financial Stability Report -2010;
- www.bnro.ro 2007 Annual Report of the National Bank of Romania;
- www.bnro.ro 2008 Annual Report of the National Bank of Romania ;
- www.bnro.ro 2009 Annual Report of the National Bank of Romania;
- www.bnro.ro 2010 Annual Report of the National Bank of Romania;