

## THE CONSEQUENCES OF THE CAPITAL REGULATION IN CREDIT INSTITUTIONS ACCORDING TO THE BASEL I AGREEMENTS

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### **Abstract:**

*Capital is one of the key factors to be considered when the safety and soundness activity of bank is evaluation. An adequate capital based serves as a safety network for a variety of risks to which a bank is exposed in the course of its business. It absorbs the possible losses and provided a basis for maintaining depositor confidence in bank. Also, the capital is the ultimate determinant of a bank's lending capacity. A bank's balance sheet cannot be expanded beyond the level determined by its capital adequacy ratio. Therefore, the availability of capital consequently determines the maximum level of assets.*

**Keywords:** bank, capital adequacy ratio, capital's bank, solvency,

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## **INTRODUCTION**

In this article we have proposed ourselves to show the influence of the capital adequacy regulation over the crediting activity, because the banks, when taking the decision of placing their money under some type of credit, they must take into consideration the amount that will be placed as well as the risk that comes with it, in such a way that they don't brake the minimum level established for the solvency index and their objective of profit maximization.

### **1. THE CONCEPT OF BANKING CAPITAL**

The capital represents the wealth of the banks owners, or the richness owned by the shareholders or associates in a bank. The primary role of the capital is to keep the bank open, so it can continue its activity, thus time an profits can absorb the losses, and the public doesn't losses it trust in the bank. More than anything, trust is important for the bank's shareholders and clients. To sustain the high levels of assets and deposits, a bank must posses an adequate capital. The adequacy of the capital has been a constant essential preoccupation of the banking management and profile regulation, because of its significance regarding the bank's solidity and safety of deposits. Further more, the adequacy of the capital has an important competitive dimension; well capitalized banks are more likely to attract resources: either form deposits, either from advantageous loans. In the bank's policy of measuring the banking capital adequacy, very important is the determination of the extent to which the capital can be available to serve other objectives and functions for the capital funds, even though it is invested in buildings and equipments, like covering the effects of the credit risks, market risks, and other types of risks hanging over the financial condition of the bank.

Thus, the capitalization level determines directly the credit institution's capacity to absorb losses generated either by exogenous shocks induced by the macroeconomic internal and international framework, either by inadequate practice of administration over the endogenous risks in the banking activity.

### **2. THE REGULATION OF THE BANKING CAPITAL**

In order to encourage safe management of the risks associated to this unique structure of the balance sheet, the authorities have introduced in most countries certain demands of capital adequacy. The capital adequacy of the banks means that maintaining a level of capital adequate to the nature and the risk profile of the bank. To establish the adequacy level of the capital, one must



titles owned in credit institutions over 10% from their social capital, as well as the participations in insurance companies (through participation we understand 20% or more from the capital).

The denominator of the solvency indicator –assets and elements outside the balance sheet adjusted according to risk- known also as net exposure, means that the assets are attributed with credit risk grades in percentages. Thus, the value from the balance sheet of each asset will be multiplied with the adequate percentage to obtain the adjusted value according to risks. According to the legal legislation at hand we have four percentages of risk: 0%, 20%, 50%, 100%, which are distributed to assets by taking into consideration the nature of the debtor, its origin country or the nature of the operation.

Thus, the value of the weighted average sum according to the risks of the assets is the denominator of the solvency

Due to the self-owned fund's structure in credit institutions on both components, of level 1 and 2, banking solvency can be calculated through two formulas which are:

- The solvency index calculated as a ratio between the level of self-owned funds and the net exposure

$$\text{Solvency} = \frac{\text{Funds own (Tier 1 and 2 Capital)}}{\text{Risk weighted assets}} \times 100 \quad (1)$$

- The solvency index calculated as a ratio between the self-owned capital and the net exposure.

$$\text{Solvency} = \frac{\text{Primary capital (Tier 1 Capital)}}{\text{Risk weighted assets}} \times 100 \quad (2)$$

The "ratio of the self-owned funds of level 1" index reflects the measure in which the credit institutions are financing their activity.

Until 31 dec 2006, the prudential norms which apply in Romania established a minimum ratio of solvency of 12%.

In 2007, the credit institutions have calculated the solvency ratio according to the Basel I principals, respectively the BNR legal norm no 12/2003 regarding the supervision of the solvency and high exposures of the credit institutions, with the following modifications and completions. After this date, the minimum limit of the index was toned with that applicable on European level, which is 8%. This year the decreasing trend from the past few years registered by the aggregate solvency report, calculated for credit institutions, has emphasized, the index losing 5,4% percentage points in comparison to the level registered in December 2006, up to 12,7%. It is considered that the main factor responsible for this evolution is the continuing growth of the non-governmental credit, in terms in which the self-owned funds of the credit institutions have registered an inferior growth rate. Nevertheless, the solvency report maintains itself at an adequate level, superior to the minimum threshold imposed by the banking prudence regulations stated in Romania ever since 2007 and also, on European and international level (8%).

#### 4. THE BANKING SOLVENCY ANALYSIS

The main objective of the capital management is to fulfill the external demands regarding capital, maintaining healthy capital rates to support businesses and maximizing the shareholder's value. The bank administers the structure of the capital and makes the necessary adjustments in order to align to the economical conditions and to the characteristic risk of its activity.

The bank will maintain a level of self-owned funds that can be used at any time and with priority to cover the unavoidable risks from its activity, which don't implicate fixed costs for the bank and are effectively at the bank's disposal, respectively they are fully paid.

The regulation authorities have their role in implementing banking capital administration. The regulation authorities are forcing banks to have a capital, which they consider adequate in order to protect the deponents and the banking system.

Thus, the prudential restrains of first rank, between which the solvency ratio influences to a considerable extent the banking strategy and balance sheet administration. Their impact can be analyzed in strategic, commercial or financial terms.

**Strategic:** From strategic point of view, the most obvious effect of the prudential regulations was creating a strong restraint on the balance sheet dimension, leading to the banks orientation towards objectives such as profitability and risk control. The restraints on the balance sheet were generated by the solvency ratio, which on strategic plan leads to a limitation of the activity's capacity to evolve. In order to respond the prudential demands, banks can, from strategic point of view to: either increase self-owner funds, either to reduce the activity volume, orientating towards less demanding activities or to give out certain assets (through transfer of titles, transfer claims, subunit transfer)

According to the BNR studies, the analysis of the solvency ratio evolution calculated on groups of banks according to the assets owned criteria shows the continuation of the drawback trend from the past few years. In the context of competition for market share, it has been shown that big banks (those banks whose assets are more than 5% in the total assets) continue to have the lowest levels of solvency- 10,8% at the end of 2007, in drawback with 3,3% from the level registered at the end of 2006, inferior to the average of the banking system. Also, for the second year in a row, the level of calculated solvency for the group of small banks (those whose assets are less than 1% out of the total assets) equal that of the medium banks (those whose assets own a share between 1 and 5% in the total assets) – 19% at the end of 2007, in drawback with 6 % from the level registered in December 2006, showing their further more active implication in the crediting activity. The discrepancy of approximately 3% in the calculated solvency ratio drawback for big banks comparative to the other two groups is reflected also in the drawback of the concentrating level in the Romanian banking system. Thus, contrary to the registered evolutions during 2006, the market share of the top 5 banks in the total portfolio of credits has downsized with 6,4 %, down to 57,1% at the end of 2007, and in the total aggregate assets with 45 , down to 56,4%.

**Commercial:** The incidence of prudential regulations for capitals on the commercial policy is evident in selecting the clients and some activities low on self-owned funds consumptions. From the selection of the customers' point of view, we must remark that banks have the interest of selecting the credits distributed according to the ratio given to them according the solvency coefficient.

In a strategy based on saving the self-owned funds, which are a rare resource, banks are preoccupied in developing some activities, who are from a regulatory point of view, weak on self-owned funds consumption. Commercializing financial products and administrating assets are activities whose needs for self-owned funds are limited, thus allowing the growth of commercial relationships with the clientele without the bank having to increase its risks.

Of an increased importance is also the growth of the market activities and those outside the balance sheet, considering as being incorrect the substantiation of the exceptional development on the financial market only on the restrictions of the prudential regulation. Taking into consideration the needs of self-owned funds and of the cost of these funds, has lead to the localization of banking administrators' interest towards the profitability of these activities and products. The new sectors of activity might conciliate finding an accelerate growth with a strong profitability, while respecting the prudential demands.

It is known that comparing to the previous periods, solvency has reduced itself in 2007, because the rhythm of crediting has increased more than the one of bank's self-owned funds. Thus, for the first time in eight years, three banks have reported a level of the solvency index between 8% and 10%, while other three banks have registered a level between 10% and 12%. The biggest

concentration is found between the intervals of 12% -16%, in which fits the solvency index of 12 banks. At the end of 2007, only 5 banks were still registering a solvency level bigger than 30%, in comparison to the situation in December 2006, when a number of 8 banks were reporting such a level. Continuing the same crediting policies will mean also the adequate increase of the self-owned funds for the banks that have their solvency ratio near the minimum limit of 8%.

**Financial:** From the financial strategy point of view, we must say that a long period of time, banks played an essential role in structuring the short and long term financing, after which the increased demands of the shareholders for obtaining a satisfying remuneration of their contributions and the guidelines of the prudential regulations have changed banking strategies. The application of the solvency ratio had as an immediate effect the banks search for methods to fast and significant increase of the self-owned funds. Banks have made increases in capital or have resorted to releasing subordinate titles.

Now, banks have reached a new stage in which they use new, sophisticated techniques: using title operations, derived instruments regarding credits (derivate credits), which has created the opportunity of making new operations without having to bare the cost of the prudential regulations. Parallel to these operations, the needs for self-owned funds have been able to be better appreciated, and certain banks have decided to regain their shares and distribute important dividends instead of increasing their capitals.

For example, according to the BNR studies in the year 2007 there was an increase of the self-owned funds belonging to Romanian juridical persons and respectively of their main component level 1 self-owned funds, in a rhythm inferior to that of the previous three years. Analyzing the financial grade's evolution of the credit institutions activity from self-owned funds (reflected by the self-owned funds of level 1 ratio), in the year 2007, we can see that it continues the trend of drawback down to 6,8%, with approximately 2 % less than last year. Also, we still have differences between the financing level from self-owned funds at the disposal of the groups of banks according to the size of their assets. Thus, big banks continue to dispose of the most restricted level of the self-owned resources (5, 6% at the end of 2007, in dropdown with 1 percentage as to December 2006). In exchange, the proportion of self-financing for small and medium banks has maintained at the level registered last year (approximately 10%).

Also, the structure of the self-owned funds belonging to Romanian juridical persons has registered a series of modifications in 2007. The position of the self-owned funds of level 1 has consolidated itself, fact stated by the increase of its contribution to financing the self-owned funds up to 77%. At the same time, it has been registered a drawback of the self-owned funds of level 2 ratio down to 30% from the volume of self-owned funds of level 1, respectively with 5% under the one last year. In these terms, the growth potential of the self-owned funds of level 2, which include secondary sources of capitalization of the credit institutions, stay high still. Among the components of the self-owned funds of level 1, the social capital stays the most important element, next to the net profit of the current exercise. The position of social capital has straightened itself in 2007, trough increasing its ratio up to 65%, in comparison to 63% registered during 2004 - 2006. It is remarkable though that, from a number of 40 credit institutions Romanian juridical persons and subsidiaries of the foreign credit institutions who were engaging activities in Romania (three of these being newly established), only 15 (13 banks Romanian juridical persons, a subsidiary of a foreign bank and the co-operative organization for credit CREDITCOOP) have increased their social capital in the year 2007 in comparison to the previous year, when 23 credit institutions have registered new contributions of capital.

Regarding the profit resulted from the banking activity; the year 2007 has marked revitalization, reflected in a real annual growth rhythm of 14% (in comparison to 4% in December 2006). This evolution has lead to the increase of the profit contribution in sustaining the self-owned funds of level 1 with 1 percent in 2007 up to 16%, inferior ratio to that registered during 2003 -2005.

Among the self-owned funds of level 2 components, the subordinate loans contracted by banks have registered an outlined growth the past two years (27% in 2007 and 69% in 2006), in

such a way that in December 2007 they were sustaining 70% out of their volume. Accordingly, the contribution of the reserves from the patrimony's reevaluation in financing the self-owned funds of level 2 has diminished.

## CONCLUSIONS

In conclusion, we can appreciate that, although the year 2007 has registered the outline of the drawback trend of the regulated solvency report, this evolution is due to the increased degree of financial intermediation assured by the banks in Romania, which is situated still a lot below that registered in countries of the European Union. The Romanian banking system stays well capitalized, and on short term the level of solvency won't cause problems, given the comfortable reserve of the aggregate level of this index number in comparison to its regulated minimum. Never the less, for many of the Romanian banks whose solvency ratio is near the minimum limit of 8%, winning and consolidating the market share will depend on the increase of the self-owned funds (through new contributions of social capital brought by shareholders, engaging subordinate loans, increasing reserves, etc.). It remains difficult to measure exactly, at this moment the impact of coming into effect of the new banking prudential regulations regarding capital adequacy, which impose the application of the Basel II principals starting January 1<sup>st</sup> 2008. On short term, we can appreciate never the less, that the level of solvency won't be a problem, given the comfortable rate of it in comparison to the regulated one, for most banks in the system. From 2008 the central bank will give up the 12 % level and will align the Basel II regulations of 8%, which contains an improved methodology regarding risk management.

## BIBLIOGRAPHY:

1. BNR Regulation – CNVM 18/23/2006 regarding the self-owned funds of the credit institutions and investment firms, M. Of. no. 1034bis from 27/12/2006.
2. BNR Regulation – CNVM 22/27/2006 regarding the capital adequacy of the credit institutions and investment firms, M. Of. no. 1035bis from 28/12/2006.
3. BNR norm no.12/2003 *regarding the solvency supervision and large exposures of the credit institutions*, M. Of. no.
4. [www.bnr.ro](http://www.bnr.ro)