THE IMPACT OF THE BASEL III AGREEMENT ON THE BANKING SYSTEMS

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Abstract: *In the light of the current financial crisis, some deficiencies of the financial supervision system were highlighted. The former Basel II Agreement needed to be reformulated to achieve more stability of the banking systems. The new Basel III launched tight regulation regarding both banking solvency and liquidity and the leverage ratio. These regulations imply more costs for banks. Many bankers didn't agree because of the decrease of the profitability of banks. Still, even the current crisis wasn't surpassed yet, the financial authorities have already claimed another improved agreement Basel IV.*

Key words: *prudential supervision, banking system, Basel III.*

JEL Classification Codes: **E44, E58, G21, G28**.

1. INTRODUCTION

The Committee on the Banking Supervision of the Bank for International Settlements has developed in December 2010, the Basel III international framework for measurement, standardization and monitoring of the liquidity risk.

Basel III represents a review of the regulatory and supervision framework of the banking industry in the future, with the purpose of strengthening the stability of the financial system.

The motivation for introducing Basel III accord is based on the following considerations:

- The negative effects of the banking crises. The economic literature shows that the result of the banking crises is consistent to the loss of the economic production which is equal to about 60 % of GDP, during the period prior to the economic crisis.
- The frequency of the banking crises. Since 1985, there have been 30 banking crises in the member states of the Basel Committee.
- The benefits of the Basel III accord are superior to the costs of implementation, because a stable banking system is the foundation of the sustainable development which has long-term benefits.

According to the promoters of the new agreement, Basel III attempts to combine the micro and macro-prudential supervision, establishing both a risk management framework at the individual bank level (taken from Basel I and Basel II) and a systemic risk management framework, at the whole banking system level (Bajenaru A., 2013).

The purpose of Basel III Agreement represents more than a regulation for the financial institutions. It represents the strengthening of the stability of the banking system by correcting the deficiencies outlined by the current crisis.

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2. THE IMPACT OF THE BASEL III ACCORD ON THE EUROPEAN BANKING SYSTEM

The impact of the new rules is a significant one, because in the absence of any mitigating actions, both Europe and the Unites States are likely to face a capital shortfall of 1.050 billion euros, respectively of 600 billion euros. The scarcity of both capital and liquidity for both Europe and the United States will be quite serious the expecting long-term financing should partially dampen the liquidity deficit (Figure 1).

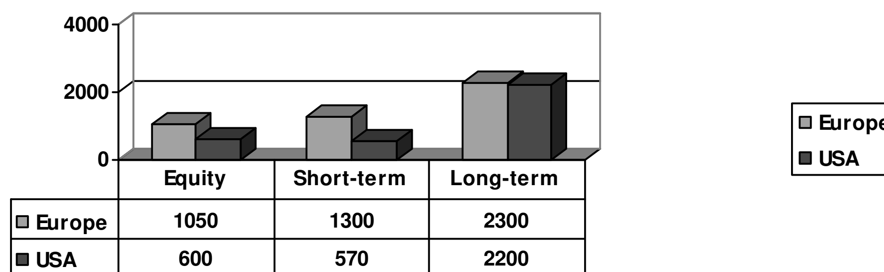

Figure 1: Equity and Liquidity deficit in Europe and USA (forecasts for 2019)

Source: Härle et al. "Basel III and European banking: Its impact, how banks might respond, and the challenges of implementation", 2010, p.4-6.

Considering that all the measures provided by the Basel III agreement will be implemented until the year 2019 and prior to any mitigation actions, the ROE indicator before the tax of the European banks would decrease by 3.7 to 4.3 percentage points from the 15 % level, recorded before the crisis period (Härle et al., 2010).

Analyzing the various transitional periods, it is considered that the decline of ROE will reach 1.6 points. The ROE decline comes after the new requirements which desire to improve the quality of the capital base, to introduce the leverage effect and the minimum liquidity standards at the global level. The task of the credit institutions is very difficult because banks face a significant challenge in order to achieve the technical compliance of the new standards, while the main goal is to obtain successful results (Figure 2).

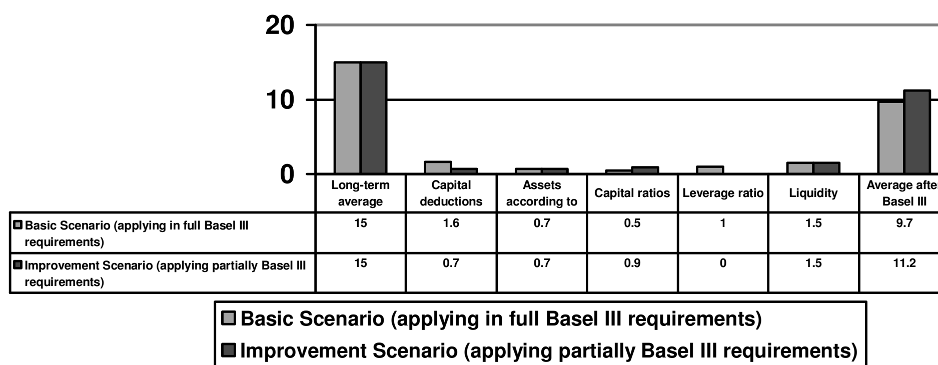

Figure 2: Return on equity – impact on the European Banks

Source: Härle et al. "Basel III and European banking: Its impact, how banks might respond, and the challenges of implementation", 2010, p.4-6.

Basel III was developed to restrict both the frequency and intensity of the financial crises. Studies show that the agreement will reduce the significant economic costs of the crises. The impact of Basel III on the most important retail banking business segments, corporate and investment banking is different. The retail banking and corporate activities are affected by those provisions of Basel III which are detrimental to the entire bank, especially the higher capital and liquidity requirements. Some retail establishments will also be affected by the measures which aim at the quality of the capital base (silent deduction participations in Germany). In the case of the retail products, the effects of Basel III are less relevant, but the new requirements will affect a lot of the standard banking products dedicated to the corporate industry, by increasing the financing costs. Of the three segments, the investment banking and, in particular, the capital markets undergo most changes under the impact of new capital ratios.

At a first analysis, the impact of Basel III on the banks in the Unites States seems to be similar, although slightly improved. This is due to the smaller size of the U.S. banking sector, in terms of asset value compared to Europe.

Regarding the capital, the deduction of the mortgage rights has a greater role in the U.S. than the one in Europe, while the minority interests are less important. Taking into account the fact that a lot of American banks have not yet implemented Basel II, the capital ratios of these institutions may be more harmed by the simultaneous transition to Basel II and, respectively to Basel III.

3. THE IMPLICATIONS OF BASEL III ON THE BANKING SYSTEM IN ROMANIA

The impact of the introduction of new capital requirements of Basel III on the Romanian banking system is considered to be insignificant. In mid-2011, at the level of the Romanian banking system, Tier 1 own equity represents 80 % of total equity and the hybrid capital instruments are inexistent. This structure of equity helps to alleviate the potential impact of the implementation of the Basel III capital requirements. Currently the banks in the Republic of Moldova comply with Basel I. There are no regulations on the implementation of Basel III (Nucu A., 2011).

The aggregate leverage effect represents the value of 6%. So the impact of introducing the new requirements will insignificantly affect the Romanian banking system. Furthermore, the analysis of equity (total and Tier 1) shows that the banks in the system comply with the new system standards of Basel III regarding the capital adequacy. The value of total equity was of 14.2 % of the total risk-weighted assets and the value of the weight system at Tier 1 total risk-weighted assets represented 13.6 % at the end of June 2011 (Table 1).

For reasons of financial stability, the central bank decided that the liquidity supervision of the branches should be assigned to the authority in the host Member State and the liquidity standards should to be applied at the individual level, although they are met at the consolidated level. The credit institutions will react differently to the new standards, according to the transition period necessary to meet the requirements. For a shorter transition period, banks may choose to restrict the supply of the credit in order to increase the level of capital, changing the structure of the assets. The gradual implementation of the new standards can improve the impact, banks can therefore adapt by capitalizing their profits by issuing shares or by changing the structure of liabilities.

Table 1. Evolution of the equity and the solvency ratios for the Romanian banking system (2008-2012)

	dec. 2008	dec. 2009	dec. 2010	dec. 2011	mid. 2012
Percentage of the total equity:	100.0	100.0	100.0	100.0	100.0
Equity 1, of which:	77.3	78.6	80.8	80.7	83.2
Share capital	44.5	47.2	54.4	57.9	67.7
Capital primes	4.1	4.6	6.6	5.5	5.8
Legal reserves	34.1	32.2	30.1	28.6	48.9
Current profit	-	3.7	2.4	2.2	0.2
Current loss	-1.3	-4.4	-6.5	-6.5	-3.3
Equity 2, of which:	22.7	21.4	19.2	19.3	6.8
Reevaluation reserves	8.1	6.0	5.5	5.2	2.2
Subordinated borrowings (net)	15.8	16.9	15.3	14.7	16.9
Subordinated borrowings (gross)	17.8	19.9	19.8	19.4	22.0
Solvency ratio (>8%)	13.8	14.7	15	14.9	14.7
Ratio of equity 1 according to the credit risk	11.8	13.4	14.2	14.3	16.4
Ratio of equity 1	-	-	12.1	12.0	13.7

Source: National Bank of Romania, ”Report on the Financial Stability”, 2012.

There are a number of measures that the credit institutions could adopt so that the impact to the alignment to the new standards to be insignificant:

1) **adjusting the business model**. Banks will reassess the profitability indicators within a higher regulatory environment. Furthermore, the evaluation of some business segments will be based on the "affordability" criteria, taking into account the scarcity of the funding and capital in the future. The credit institutions shall adjust their products and services so that they continue to meet the needs of the customers, while optimizing the capital and bank liquidity.

The adjustment of a range of products can be produced as it follows:

- banks may turn their attention towards the products that meet the customer needs, but, which at the same time, involve lower capital requirements;
- the launching of some product package that combine the stages of financing and savings, banks could raise funds in the form of deposits from the households or small and medium enterprises;
- Banks may increase the share of loans granted in the short term in order to reduce the financing costs (for example, the orientation towards the revolving loans to the expense of the mortgage loans).

2) **the restructuring of the banking balance sheets.** The Basel III accord relies on the integrated management of the assets, capital and financing, as the credit institutions cannot optimize the assets and liabilities in an independent way.

The new rules on the quality of the capital are different from those of Basel II and give banks little opportunities to try different strategies, as they are forced to infer (Caracota R., 2012):

- the capital belonging to the insurance subsidiaries which overcome the 10 percent threshold, thus diminishing their possibility to reuse much of this capital in the activity of the consolidated entity;
- the value of any type of defined benefit of the pension fund assets; the investments in the unconsolidated financial institutions above the threshold of 10 percent.
- Banks provide a number of measures in order to mitigate the impact that the implementation of Basel III would have. Therefore, banks:
- can optimize the scope of consolidated capital through the purchase of minority shareholdings or by restricting the excess of the capital of bank branches;
- can optimize their holdings in the financial institutions by placing unconsolidated investments below the thresholds defined by the regulatory authority for the capital deductions;
- can reassess the pension contracts and requires an accurate value of assets that can be withdrawn from the fund and thus becoming eligible for validation in the regulatory capital.

Besides the effort to align the balance to the new capital requirements, banks must continually invest in their management capacity. Banks face a number of significant challenges: a clearly defined timeline, important results after implementing a major complexity of the measures and interdependence.

The challenge comes from three areas: design, data quality and complexity of the reporting activity:

► *The complexity of the design.* The exceptional standards of Basel III are based on the shortcomings of the previous agreement. The complexity results mainly from the key elements of "the newly established" regulation (introducing the anti-cycle capital buffer and also the fixed capital conservation) and the additional requirements of Basel II, represented by:

- Establishing an integrated view of the credit risk and for the transaction portfolio. In the case of Basel II the regulatory capital for credit risk was treated only in the banking portfolio;
- the development of the methodologies used for calculating the VAR value and the elementary risk rate. In the previous treaty, they were not provided;

- increasing the tax for the securitization of the banking portfolio which are mentioned by the Basel II accord and the transaction portfolio.

► *The data quality and the complexity of reporting activity*. High quality data is essential to the effective functioning of the processes related to the bank risk;
► *The operational complexity*. The efficiency of the bank corporate governance is represented by the first step towards the successful implementation of Basel III. Also, internal auditors play a very important role, because they must critically analyze all the operations and therefore, recommend the improvements of the internal control framework.

According to the latest press release of the Basel Committee-January 2013, gold could benefit from a favorable treatment from the point of view of its liquidity by including metal among the assets with high liquidity, with an adjustment of 50 %. This decision would give rise to a competition between gold, cash and government securities, banks being able decide what to possess. If banks can choose most of the investments imposed by the liquidity requirements could seriously turn to gold (BIS Standards, 2013).

Moreover, some of the most significant provisions of the Basel III accord are related to the degree of capital adequacy, " as it is recommended" on this occasion that banks should triple their current capital from 2.00 % currently to 7.00% until 2019. According to the estimates made by Basel, the fulfillment of this requirement would lead to an increase of capital by 370 billion euros.

Despite the fact that Basel III measures enter into force only in 2019, the central banks are already active buyers of gold. One example could be Turkey, which purchased 123 tons of gold for its reserves in the last year and a half. And Mexico has bought more than 100 tons since February 2011 until today. The German Central Bank has repatriated gold from the U.S. and France, and Venezuela has decided to repatriate 211 tons of gold from Switzerland, Great Britain and Canada. However, Cyprus will sell gold because it possesses large reserves (Dedu and Nitescu, 2012).

4. CONCLUSIONS

Even though the deadline for implementing Basel III is still far away, that is 2019, it already can be noticed the need for a new agreement "Basel 4", according to KPMG, it is estimated that the largest banks in the United Kingdom will have to have a capital with 50 billion pounds higher than the one they currently possess. The regulators around the world- and the banks themselves- have quickly followed the implementation of Basel 3 as a safeguard against another financial crisis, increasing the level of capital that banks must hold. But there are strong signals that lead us to the next iteration within the capital standards or "Basel 4". This fact is demonstrated by:

- The successful implementation of Basel III requirements in some countries, including Great Britain and the United States;
- Some countries go beyond Basel III, requiring banks to hold capital reserves in order to absorb the impact derived from the stress tests, above and below the minimum of the capital requirements imposed by Basel III and to keep a minimum rate of debt beyond 3%;
- Concerns among the market analysts regarding the shaping of the domestic bank and the accuracy of the risk-weighted assets;

- A lot of works dating from the last two months conceived by the Basel Committee, which go beyond Basel III;
- For euro banking areas, the European Central Bank's future actions regarding the supervision, regulation and macro-prudential authority.

These developments are likely to lead to three changes that could form the basis of future Basel 4.

First of all, we are dealing with limited advantages for banks when it comes to the use of internal models in order to calculate the capital requirements. This could take the form of some limits on the extent to which risk weights based on internal models might deviate from the risk weights under the standardized approach or to reduce the complexity of the internal models of the banks.

Secondly, banks are required to increase the minimum level of the leverage effect (over 3 %).

Thirdly, banks have become a subject more openly debated. To the extent that banks are allowed to use complex models this fact would require banks to explain and justify why their risk weights based on internal models differ from the standardized risk weights.

Some commentators require a higher minimum level of the leverage effect, arguing it as follows (KPMG, 2013):

- In a world characterized not only by risk but also by uncertainty, it would be better for the policymakers to follow a simple rule rather than trying to match the complexity of the world. Indeed, the attempt to fight against the rules which are increasingly complex, can be disastrous if the complex rules are based on the estimated relationships that break down;
- Simple rules (such as the leverage effect or market capitalization) would detect the banks which are prone to falling into the trap of the current financial crisis;
- The minimum level of 3% of the leverage effect established by the Basel III Accord might be too low. Some regulators, academics and commentators require a minimum level much higher, somewhere around the level of 6-8%. It was even proposed a level of 15 % for the largest U.S. banks.

Basel IV is characterized by the following:

- An increase in the minimum level of the leverage effect which is set out in Pillar I;
- Stricter limits on the benefits of the banks to use the internal models for the calculation of the minimum capital requirements;
- A tougher approach regarding the stress tests;
- Greater openness of the banks.

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