Applying Basel II Requirements in Romania

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ABSTRACT

The Basel II Agreement is a new stage in the development of prudential regulations. Compared to the initial agreement, Basel I, this one allows a more large and precise analysis of banking risks. The European approach of Basel II requirements aims to offer some common conditions for all the credit institutions. Secondly, in order to achieve the objectives of Basel II, an active implication of the supervisory authorities is needed, as well as a tighter cooperation between them in order to increase the financial integration at the European Union level. In what concerns Romania, that has recently joined the European Union, the implementation of Basel II requirements imply a new series of challenges both for credit institutions and for the Central Bank. These challenges, for the commercial banks, reside in adjusting the risk management techniques and the informational system, training the staff, obtaining the databases, etc. and for the Central Bank in both adapting the surveillance process and elaborating new regulations. This paper tries to analyze the main implications of implementing these requirements, both for the Romanian commercial banks and for the National Bank.

1. INTRODUCTION

The intensification of international banking activities, as well as the development of the international financial markets, have changed the order established at Bretton Woods, after the World War II. These facts have also determined supervision and regulation, that until than were a national matter, to become of international significance. So, it was felt the need for a harmonization of the banking prudential requirements, as well as an intensification of the supervision. In this way was organized the Basel Committee, which has put the basis of a first international agreement related to prudential regulation. The agreement has reached two important objectives. First, it has strengthened the stability and soundness of the international banking system, through establishing a minimum capital adequacy level and, second, it has removed the competitive inequity that came out because of the differences in national regulations. Bieri (2004) considers that the Basel process is a key element of the global financial system and plays an important role in coordinating the multilateral efforts of different committees that aim to strengthen the financial stability.

Following the publication of the first proposal for a new capital accord in June 1999, and two subsequent consultative packages in 2002 and 2004, the revised framework for the "International Convergence of Capital Measurement and Capital Standards", also known as Basel II was endorsed on 26 June 2004 by the central bank governors and head of the banking supervisory authorities of the G10 countries. The Basel II framework is meant also to form the basis for the legislative changes underway in the EU. The old EU rules, dating from 1988, were contained in the Capital Adequacy Directive (1993) and the Consolidated Banking Directive (2000). Recently, the European Parliament and the Council approved legislation transposing these rules into Community law and this legislation will, in turn, be transposed into national law. The European Central Bank (ECB) has an interest in these developments because of their possible implications for financial supervision, financial stability and financial integration.

In Romania, the national authorities have implemented successfully the Basel I capital adequacy framework, with some national differences. Given the change in the international legislation, and because beginning with 2007 Romania is a new member of the European Union (EU), the National Bank of Romania, together with other authorities in the financial sector, has tried to put into national laws the new capital adequacy framework, that is Basel II. This paper tries to point out what are the main challenges for this implementation, as well as the stage of implementation and the impact on both the banking sector and on the regulation authorities. First it starts by describing the core elements of the Basel II accord, passing on to describing the implementation process in Romania.

2. BASEL II REQUIREMENTS

2.1. What is the Basel II Framework?

The intensification of international banking activities, as well as the development of the international financial markets, have changed the order established at Bretton Woods, after the World War II. These facts have also determined supervision and regulation, that until than were a national matter, to become of international significance. So, it was felt the need for an harmonization of the banking prudential requirements, as well as an intensification of the supervision. In this way was organized the Basel Committee, which has put the basis of a first international agreement related to prudential regulation. The agreement has reached two important objectives. First, it has strengthened the stability and soundness of the international banking system, through establishing a minimum capital adequacy level and, second, it has removed the competitive inequity that came out because of the differences in national regulations. Bieri (2004) considers that the Basel process is a key element of the global financial system and plays an important role in coordinating the multilateral efforts of different committees that aim to strengthen the financial stability.

The first Basel Capital Accord was instituted in 1988 to coordinate global regulatory efforts and to institute minimum capital requirements to eliminate the threat posed by undercapitalized banks. This agreement this reached two main objectives: (i) to strengthen the international financial and banking system and (ii) to eliminate the competitive inequalities that appeared because of the differences in national regulation. So, a new framework was set in what regards the banks' capital and its adequacy. The capital adequacy ratio was set at 8%. The capital requirements were set relative to the total risk adjusted assets and off balance sheet items. There was prescribed a single measure of risk, which is the credit risk to determine minimal capital requirements. This was because the credit risk is one of the main risks with which the banks are confronted. – according to an opinion poll that the National Bank of Romania has performed in 2003, the credit risk was perceived to be a main reason for concern. Credit risk can be defined as a risk of consecutive losses, due to the probability of default.

To deal with the growing complexity of the financial industry and with the systemic threats, a new Capital Accord was proposed by the Basel Committee on Banking Supervision, to establish a more sophisticated framework for banks to measure risk and set aside sufficient capital to cover losses from market, credit, and operational risk. The new rules set out by the Basel Committee; improve the ability of banks to manage risks. The new capital adequacy ratio represents a more complex prudential component, which allows a more detailed approach to banking risks.

Basel II is based on three mutually reinforcing pillars: minimum capital requirements (Pillar I), the supervisory review process (Pillar II) and market discipline (Pillar III). A main innovation is that a set of increasingly sophisticated approaches is now available to banks to calculate their minimum capital requirements. There are two approaches for calculating capital requirements, a standardised approach based on external ratings (i.e. banks using this approach would have to risk weight according to the grids provided below) and an internal ratings based approach (IRB) to be used by the more sophisticated banks. Although the simplest method to calculate capital for credit risk is based on assessments by rating agencies, under the most advanced approaches, banks are allowed to use their own estimated risk parameters. Moreover, for the first time, banks are required to hold capital for operational risk.

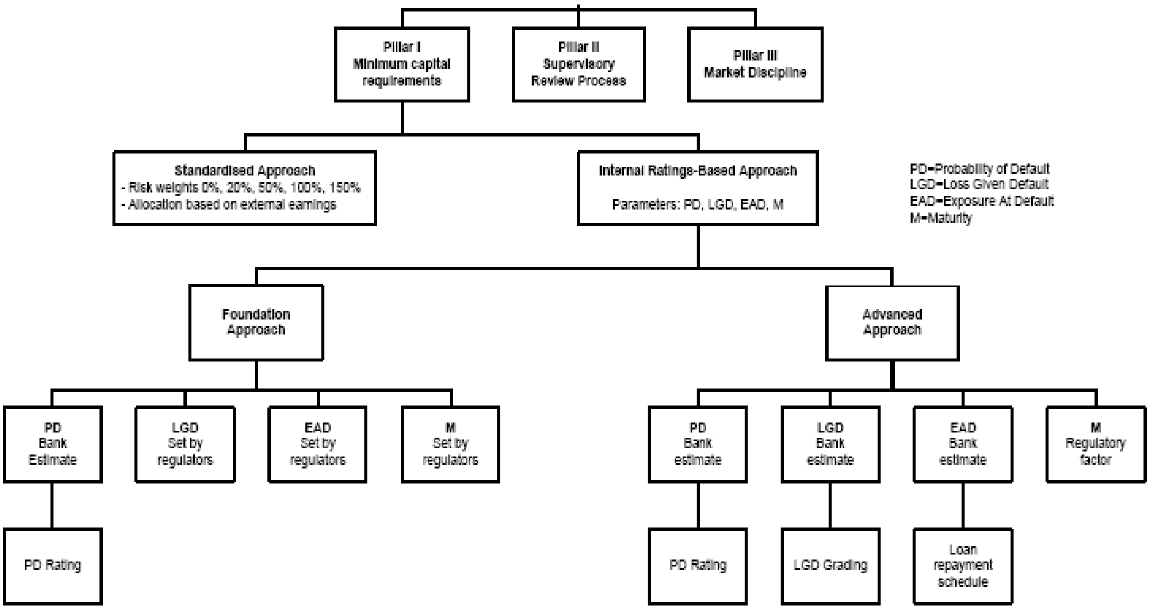

Figure 1 The structure of the Basel II Framework
Source: *Nomura Fixed Income Research*

2.2. Pillar I – minimum capital requirements

In what regards the credit risk there are two approaches that can be used: the standard and the internal-ratings based approach. The standardised approach is closest to the present capital rules. Exposures are classified into a set of standardised asset classes (see Figure 2) and a risk weight is applied to each class, reflecting the relative degree of credit risk. As under Basel I, off-balance sheet exposures are for capital purposes transformed into "assets" through the application of "credit conversion factors". The main changes compared to Basel I relate to the use of external credit ratings as the basis for determining the risk weights and the greater differentiation in possible risk weights.

Compared to Basel I, where all corporate exposures are weighted at 100%, there is now a considerable differentiation in the risk weights. The weight for investment-grade firms has declined considerably (e.g. to 20 % for AAA), whereas in the non-investment grade segment, a risk weight of 150% applies to firms rated below "BB-". Furthermore, unrated firms now obtain the same risk weight as that formerly obtained by all corporates under Basel I. For claims on banks, the former distinction between institutions from OECD (20% risk weight) and non-OECD countries (100%) is no longer applied. Instead, two options are available to national supervisors. Under the first option, the risk weights for banks are derived from the ratings of the country in which the bank is incorporated. Under the second option, the risk weights are determined on the basis of the bank's own rating. Retail exposures (75% instead of 100%) and mortgage loans (35% instead of 50%) are treated more advantageously than under Basel I. Exposures to small businesses may under certain conditions also benefit from the preferred retail treatment.

The internal ratings-based (IRB) approach to credit risk is one of the most innovative elements of the New Framework because it allows banks themselves to determine certain key elements in the calculation of their capital requirements. Hence, the risk weights – and thus the capital charges – are determined through a combination of quantitative inputs provided either by banks or supervisory authorities, and risk weight functions specified by the BCBS. The new methodology is designed to be suitable for implementation by banks of different size, business structure and risk profile.

Just like the standardised approach, the IRB approach distinguishes between asset classes to which different supervisory risk weight functions apply:

- Sovereign exposures
- Bank exposures
- Corporate exposures: exposures to small and medium sized enterprises, specialised lending, purchased receivables, other corporate exposures

- Retail exposures: residential mortgage loans; qualifying revolving retail exposures, purchased receivables, other retail
- Equity exposures

The calculation of capital requirements for a loan's default risk under Basel II requires four input parameters to the supervisory risk weight functions:

- *Probability of default (PD)*: Estimate of the likelihood of the borrower defaulting on his obligations within one year.
- *Loss given default (LGD)*: Loss on the exposure following the borrower's default, commonly expressed as a percentage of the debt's original nominal value.
- *Exposure at default (EAD)*: Nominal value of the borrower's outstanding debt.
- *Effective maturity of the loan (M).*

The use of the IRB approach is subject to an explicit supervisory approval, which depends on meeting certain minimum requirements from the outset and on an ongoing basis. These requirements are aimed at the IRB system providing an adequate assessment of the bank's exposures, a meaningful differentiation of risk and a reasonably good estimate of risk. In the practical implementation of the IRB system, validation of the models chosen by banks, i.e. the assessment of the soundness of the different system elements is a very important matter.

Operational risk has so far not been subject to capital requirements. When considering moving to Basel II, supervisors should be aware of the impact of this risk and understand that it is designed to provide incentives for banks to develop suitable approaches to operational risk measurement and ensure that banks are holding sufficient capital for this important risk. For the operational risk, three options of different levels of sophistication are introduced. First, basic indicator approach, implies that a bank's capital requirement to cover operational risk is equal to 15% of its average gross annual income over the previous three years. Second, the standardised approach, states that a bank's gross income (three year average) is divided into eight different business lines. The capital charge is then calculated for each business line by multiplying the respective gross income by a factor (determined by the Basel Committee) assigned to that business line. The total capital requirement for operational risk under this approach is the sum of the individual capital requirements of these eight business areas. And the last one, the advanced measurement approach uses sophisticated calculation method, under which the operational risk charge is calculated on the basis of the banks' own internal operational risk management systems.

In what regards the choice of approach, i.e. standardized or IRB it is worth noting that in some countries low rating penetration and the lack of domestic rating agencies may pose a challenge to implementation of the standardized approach, particularly in respect of corporate claims. The Basel Committee on Banking Supervision (BCBS) states that if external ratings are to be used, supervisors will need to evaluate the soundness and reliability of the institutions performing the assessments against the eligibility criteria set out in the new Framework. The regulatory infrastructure should enable supervisors to address the potential problems that may arise in environments when companies can inappropriately obtain good ratings. Supervisors should also discuss with banks hoe they intend to monitor changes in external rating or country risk scores, and how these will be reflected in systems for capital computation.

2.3. Pillar II – supervisory framework

Supervisors, including those who choose to retain the 1988 capital adequacy framework, are encouraged by the BCBS to move towards a system of risk-based supervision. The supervisory review process relies on four Principles.

- Banks should have a process for assessing their overall capital adequacy in relation to their risk profile and a strategy for maintaining capital levels.
- Supervisors should review and evaluate banks' internal capital adequacy assessments and strategies, as well as their ability to monitor and ensure compliance with regulatory capital ratios. If they are not satisfied with the result of this process, supervisors should take appropriate action.
- Supervisors should expect banks to operate above the minimum regulatory capital ratios and should have the ability to require banks to hold capital in excess of the minimum.
- Supervisors should seek to intervene at an early stage to prevent capital from falling below the minimum levels required to support the risk characteristics of a bank and should require rapid remedial action if capital is not maintained or restored.

The BCBS stresses that the supervisory process should contain a mixture of off-site and on-site inspection, periodic reporting and, discussions with senior management and board of directors. The supervisors should also shift their emphasis towards the quality of a bank's risk management process and ability to assess risk exposures properly. It has outlined some important issues to which both banks and supervisors should devote attention in the supervisory review process. These issues also include risk categories which are not directly addressed under Pillar I, such as the credit concentration risk.

2.4. Pillar III – market discipline

Under Pillar III, banks will be required to publish information focused on the key parameters of their business profile, risk exposure and risk management. Such disclosures are seen as a precondition for the effective working of market discipline on banks. For banking groups, the requirements apply to the top consolidated level of the banking group. Both qualitative and quantitative information must be disclosed. Disclosure of a bank's financial information in a timely and reliable manner fosters market discipline by permitting market participants to assess a bank's activities and the risks inherent in those activities, and to react accordingly. It strengthens the incentives for banks to behave in a prudent manner and thereby promotes financial stability. Market discipline based on adequate public disclosure is an effective complement to supervisory efforts to encourage banks to maintain sound risk management systems and practices. Supervisors should require banks to make periodic disclosures of information that are timely, accurate and sufficiently comprehensive to provide a basis for effective market discipline. The reliability of disclosed information should be assured by sound internal control and risk management systems and complemented by effective external and internal audit.

Supervisors should engage in a dialogue with banks regarding additional disclosure requirements and how they are to be effected. In some cases, the requisite information is captured in the bank's risk management system and used as an input to capital adequacy computations. In others, the information will already be disclosed to meet other accounting or regulatory requirements. For disclosures that are not mandatory or required under accounting or other external reporting obligations, banks may provide the information in a number of ways, such as via publicly accessible internet websites or in public regulatory reports filed with bank supervisors. To the extent that it is feasible, banks are encouraged to provide all related information in one location, or alternatively, indicate where the information can be found.

3. <u>BASEL II FRAMEWORK IN ROMANIA</u>

Basel II is being transposed into the European Union through the reconfiguration of the directives in this respect. These directives incorporate some differences from the Basel Committee requirements, as they appear as a result of negotiation between the member countries and are tailored to the specificities of the European economies. One of the differences is that, while the Basel II framework was addressed mainly to internationally active banks, the EU regulations are applied to all banks and and investment firms, irrespective of their dimension or geographic area in which they operate. Another difference is that Basel II applies at consolidated and sub consolidated level, while the European directives apply at both the individual and consolidated level.

In what regards Romania, due to its recent accession to the EU in 2007 and, because of the large number of banks part of an international group, alongside with the diversification of the banking operations, it also has to adhere to the international regulations and transpose the Basel Ii requirements into national legislation.

In Romania, the implementation of the new capital accord, poses a series of challenges both on the credit institutions and on the National Bank of Romania (NBR). The objectives of the NBR, regarding Basel II, consist of three main directions:

- The transposal of the new requirements into the national legislation
- The development of means of prudential supervision, adequate to the new context
- The development of risk management systems at the credit institution's level

The NBR's strategy for the implementation of the New Capital Accord consists of three phases.

Phase I – Initiating the dialogue and achieving the exchange of information with the banking sector. The principal activities are:

a. Achieving a general evaluation regarding the risk management tools and knowing the credit institutions position regarding the national options (standard approach or internal models based approach)

b. Establishing the dialogue and exchanging information with national authorities (Ministry of Public Finance, National Commission of Securities) and international ones (supervision authorities from other states)

c. Evaluation of requirements for training for the banking sector and the central authority.

Phase II – Development of instruments for achieving the banking supervision in conformity with the New Capital Accord standards. In this phase, the efforts will be focused on the following domains:

- transposing the European Directives in the national legal frame ;
- performing supervision activities from the central bank headquarters and missions to the credit institutions to verify the preparation stage for implementing Basel II;
- ensuring the premises for financial stability when the New Accord will be applied.

Phase III – Process of validation by the National Bank of internal rating models used by the credit institutions for customers evaluation and of existent credits portfolio.

Phase IV – Verifying how the New Capital Accord is applied in the banking sector.

For the implementation of the New Capital accord, the following measures must be taken**:**

- Regarding the legal frame – the two European Directives must be transposed in the Romanian legislation.
- Regarding the institutional frame, the central bank has to train the personnel, develop the databases regarding the credits, to auto evaluate the supervision capacity (pillar 2), to evaluate of the impact of macroeconomic evolutions on the financial stability. In the same time, the credit institutions have to include the Basel II requirements in the internal strategies and politics, to develop the corporative governance practices, to reconfigure the objectives for the customers' relationship and the banking products.
- The relationship frame is a very important one and consists in: collaboration between the National Bank, the Ministry of Finance, the Romanian Banking Association, the National Commission for Securities; cooperation accords with the supervision authorities from the origin states of the credit institutions having branches in Romania, enforcing collaboration at regional level regarding the experience in Basel II implementation, Development of the rating national agencies.

The Steering Committee is the main decision-making body for implementing Basel II and encompasses representatives of the National Bank of Romania (NBR), the National Securities Commission (NSC), the Ministry of Public Finance, and the Romanian Banking Association (RBA).

3.1. Legal framework

A question to be asked when trying to assess the implementation of Basel II requirements, is whether the framework is sufficiently robust to assure the effectiveness of credit risk mitigation techniques (e.g. what are the standards for loan security, security registration and foreclosure).

In Romania, the regulatory framework has been substantially reconfigured. The banking laws will have to be revised, in order to meet the Basel II criteria. The NBR has done some work in this respect. For the banking sector and the capital market the year 2006, was dominated by the transposure of the European legislation that ensure the implementation of the Basel II standards into the national legislation. The process of transposing the EC 2006/49 Directive, with respect to the adequacy of the investment firms and credit institutions' capital level, was of great significance. This exercise has joined the forces of the national competent authorities in the financial sector, such as the NBR and the NSC, the Ministry of Finance and the banking community and was finalized through the publication of the Government Emergency Ordinance (GEO) 99/2006 concerning credit institutions and capital adequacy. This regulation, accomplished through the application of the EC directive, for both credit institutions and financial investment institutions, has the advantage that it integrates the legal dispositions regarding all kinds of credit institutions, i.e. banks, mortgage banks, savings banks, which before were regulated separately.

In addition to the primary legislation, in the same period there were several secondary regulations published, with the aim to solution the transposure of the technical aspects stipulated by the EC. This approach insures a unitary treatment for the legal provisions applicable both to credit institutions and financial investment institutions. Table 1 best shows the laws and regulations that were modified and made compatible with the Basel II regulations.

The new capital adequacy framework became effective beginning with 1st of January 2007. The new legal context, together with the Romania's EU membership, favours the presence of some EU implementation particularities, of the capital standards applicable to credit institutions and investment firms.

Table 1

Transposure of EC directives into national regarding the capital requirements

	Provisions within Dir.2006/48/EC	ROMANIA National texts
I. Own Funds	Art.56 to 67	L:Government Emergency Ordinance No.99/2006 on credit institutions and capital adequacy (I)
		R:Regulation NBR- NSC No.18/23/2006 regarding own funds of credit institutions and investment firms (I)
II. Scope	Art.68 to 73	L:Government Emergency Ordinance No.99/2006 on credit institutions and capital adequacy (I)
		R:Regulation NBR- NSC No.17/22//2006 regarding the consolided supervision of credit institutions and investment firms (I)
III. Calculation of minimum level of own funds	Art.74 to 75	L:Government Emergency Ordinance No.99/2006 on credit institutions and capital adequacy (I)
		R:Regulation NBR- NSC No.13/18/2006concerning the determination of minimum capital requirements for credit institutions and investment firms
IV. Standardised approach	Art.78 to 83 and Annex VI	L:Government Emergency Ordinance No.99/2006 on credit institutions and capital adequacy (I)
		R:Regulation NBR- NSC No.14/19//2006 on credit risk treatment using the standardised approach, for credit institutions and investment firms (I)
V. IRB	Art.84 to 89 and Annex VII	L:Government Emergency Ordinance No.99/2006 on credit institutions and capital adequacy (I)
		R:Regulation NBR- NSC No.15/20/2006 on credit risk treatment using the internal models based approach, for credit institutions and investment firms
VI. CRM (credit risc mitigation)	Art. 90 to 93 and Annex VIII	L:Government Emergency Ordinance No.99/2006 on credit institutions and capital adequacy (I)
		R: Regulation NBR- NSC No.19/24/2006 on credit risk mitigation techniques used by credit institution and investment firms (I)
VII. Securitisation	Art.94 to 101 and Annex IX	L:Government Emergency Ordinance No.99/2006 on credit institutions and capital adequacy (I)
		R: Regulation NBR- NSC No.21/26/2006 on credit risk treatment regarding securitized exposures and securitisation positions (I)
VIII. Operational risk	Art.102 to 105 and Annex X	L:Government Emergency Ordinance No.99/2006 on credit institutions and capital adequacy (I)
		R: Regulation NBR- NSC No.24/29/2006 regarding the calculation of the minimum capital requirements for operational risk of credit institutions and investment firms (I)
IX. Large exposures	Art.106 to 119	L:Government Emergency Ordinance No.99/2006 on credit institutions and capital adequacy (I)
		R: Regulation NBR- NSC No.16/21/2006 regarding large exposures of credit institutions and investment firms (I)
X. Pillar II	Art.123, 124, 136 and Annex XI	L:Government Emergency Ordinance No.99/2006 on credit institutions and capital adequacy (I)
		R: Regulation NBR- NSC No.23/28/2006 on technical criteria concerning the organisation and treatmnet of risks, as well as technical criteria on review and evaluation by the competent authorities (I)
XI. Supervision and cooperation	Art.129 to 132	L:Government Emergency Ordinance No.99/2006 on credit institutions and capital adequacy (I)
XII. Disclosure by credit institutions	Art.145 to 149 and Annex XII	L:Government Emergency Ordinance No.99/2006 on credit institutions and capital adequacy (I)
		R: Regulation NBR- NSC No.25/30/2006 regarding the disclosure requirements for credit institutions and investment firms (I)
XIII. Internal governance	Art. 22 and Annex V	L:Government Emergency Ordinance No.99/2006 on credit institutions and capital adequacy (I)
		R: Regulation NBR- NSC No.23/28/2006 on technical criteria concerning the organization and treatment of risks, as well as technical criteria on review and evaluation by the competent authorities (I)
XIV. Counterparty Credit Risk	Annex III	R: Regulation NBR- NSC No.20/25/2006 on the treatment of counterparty credit risk of derivative instruments, repurchase transactions, securities or commodities lending or borrowing transactions, long settlement transactions and margin lending transactions (I)

* L-texts of laws; R-texts of regulations; A-administrative rules; applicable to credit intitutions-CI, investment firms-IF; I-applicable to both

Source: National Bank of Romania

3.2. The Supervisory framework

The new policy issues and banking supervision approaches have changed substantially the supervisory methodology, from a compliance-based approach to a risk-based assessment. The National Bank of Romania conducts supervision of credit institutions, Romanian legal persons, at both individual and consolidated levels, in case of competent authority designation and develops the necessary techniques for credit institutions supervision at individual level. It also concludes cooperation agreements with other authorities in Member States and other countries, in order to ensure:

- financial stability
- flexibility in adapting the ever changing cooperation framework
- uniform implementation of principles of Basel II Accord (especially in terms of risk management centralization at group level, outsourcing principles at group level)

At subsidiaries level, Romanian legal entities, the NBR allows group policies implementation in terms of risk management and individual capital requirements determination.

One key challenge for supervisors is enhancing the quality of supervision through a greater involvement of credit institutions' management in risk management, credit institutions' assessment focusing on their risk profile and consolidated supervision based on close cross-border cooperation, both between consolidating credit institutions and their corresponding supervisory authorities.

The NBR sets and discloses the general criteria and methodologies for risk strategies and profiles, risk management framework and internal control mechanisms, which should be enforced by credit institutions for prudential reasons, as well as for risk assessment. In order to establish the mentioned criteria and methodologies, NBR is complying with the following principles: (i) to meet convergence criteria in supervisory practices at Romanian supervisory authorities level and (ii) to ensure a sole risk supervisory approach for competent supervisory authorities.

New instruments have been set out for banking supervision under Basel II Accord, like Common Reporting (COREP), Financial Reporting (FINREP), prudential filters, benchmarks set by the supervisory authority needed for assessing banks' risk parameters in internal models.

The main changes in the new prudential supervision approach have been consisted by reducing the compliance supervision and enforcing a risk-based prudential supervision, focusing more on meeting corporate governance principles, assessment of the stability, soundness and efficiency of the risk management process of credit institutions, especially with regard to improving the quality of risk management strategy, setting-up and efficient functioning of specialized committees and management supporting committees, efficient functioning of an adequate internal control system and a sound and transparent management information system.

3.3. Capital adequacy, the credit risk, and market risk in the romanian banking sector

In 2006, the Romanian banking system remains adequately capitalized, although solvency indicators continued to decline on the back of non-government loans expansion. Furthermore, the stress test results, carried out by the NBR point out that the Romanian banking system is able to resist to some severe exogenous shocks.

Solvency ratio of total credit institutions stayed on the downward trend it had followed since 2001 and dropped 3.73 percentage points. However, its level of 17.34 percent recorded in December 2006 indicated the adequate capitalization of credit institutions, as it was higher than the level reported by the Euro zone (11.2 percent at mid-2006). So, it can be said that, although declining the solvency ratio is still higher than the one required by the Romanian legislation (12%).

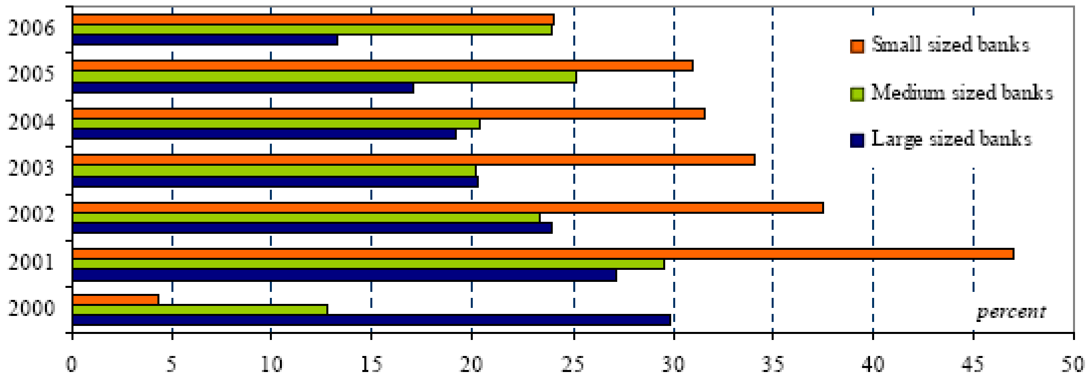

Figure 2. Solvency ratio by group of banks (2000-2006)
Source: *NBR, Financial Stability Report 2007*

Small banks show the tendency to record solvency ratios close to those calculated for medium sized banks, as a result of the increasingly active involvement in the lending activity. It is noteworthy that this development occurred amid the higher credit market concentration, with the market share of the top-five banks in total credit going up. As regards bank distribution in terms of solvency ratio, 2006 marked the continuation of banks' tendency to migrate towards lower capital adequacy levels, amid the persistently high growth rate of non-government loans. (NBR, 2007)

Credit risk is still the main risk Romanian banks have to cope with. In the short run, the NBR expects credit risk to increase, accompanied by fast-paced lending and advancement into the economic cycle**.**
Market risk across the Romanian banking system continues to be generally low. There are no signs indicating severe systemic implications arising from the market risk. As concerns the market risk category, the interest rate risk remains the main source of vulnerability facing the Romanian banking system. The direct exposure of credit institutions to the change in the interest rate, although on a slight increase, remains moderate, whereas direct exposures to the change in the exchange rate and the change in the share price are further less significant. Nevertheless, indirectly, the risk passes through to the loan portfolio quality

3.4. Specific features relating to the banking sector

For the provisions of the European Directive to be implemented, the Steering Committee adopted the method of exercising national discretions (specifications leaving to national discretion the manner of implementing some of the EU provisions). Options are circumscribed particularly to (credit, operational, and market) risks, own funds and supervision on a consolidated and unconsolidated level. The National Bank of Romania chose to take a prudent approach to national options.

Table 2 shows key changes to risk weights, as they result from exercising national discretions for the standardized approach. The key change will affect mostly retail exposures (individuals and SMEs treated as retail) and residential mortgage exposures. A simplified estimation reveals a reduction of nearly 16 percent in risk weighted assets (balance sheet exposures) in the case of retail-sector and corporate loans, which will lead to an increase in credit institutions' solvency. Last but not least, lending to regional and local governments could become more expensive under the new framework, although the financing requirements of such entities will grow sizably given the EU accession.

Table 2

Risk weights specific to standardized approach of Basel II compared to Basel I

Exposure	Risk weights associated with exposure (%)	
	Basel I	Basel II
Central banks and governments, financial institutions similar in nature (for exposures other than those denominated and funded in local currency)	0	50
Credit institutions (exposures longer than 3 months)	20	50
Local and regional governments	20	100
Retail exposures (including individuals and SMEs treated as retail)	100	75
Residential mortgage exposures	50	35
Higher risk categories	100	150

Source: NBR – Financial Stability Report, 2006

The structure of the banking system is much diversified. In the 2003 Financial Stability Assessment Report from the IMF it is stated that the Romanian banking system rather small compared to the economy's dimensions, but still holds more than 90% of the financial system's assets.

The Romanian banking sector is dominated by private foreign capital, which has (i) eased the access to foreign financing, (ii) led to an increased efficiency in risk management and overall and (iii) positively influenced the banking sector's stability. We can also notice that the assets of the banks with majority foreign capital in the total assets of the system has increased very much from 1999(47.5%) to 2006 (88.6%). The greatest increase was seen in 2006, of about 26.4%, compared to 2005. During the year 2006 there have occurred major changes in the shareholder structure, at the banking level,a large amount of foreign capital having entered the Romanian banking market, much of it coming from important international credit institutions. As a consequence the share that the domestic banks owned has significantly been reduced. The increased competition may lead to a reorientation from the small and medium sized banks in what concerns improvement of their financing capacity. This evolution stresses out the need for the harmonization of the national

For 2007, most banks decided not to apply the new regulations. For next year, there are signs that banks will largely take the standardized approach. Some of the domestic banks, particularly those belonging to European bank groups, expressed their intention of adopting as fast as possible the domestic models on determining capital requirements as a result of the need to take a unitary approach to risk management, at group level. Such developments are indicative of the fact that in 2007 both risk management processes and supervision practices have stayed to the provisions of Basel I. The explanation for the sluggish pace of switching to the new model lies with banks' weak interest, owing to the related costs that would reduce their profits and the overall banking context rife with excess liquidity which, even though requiring additional costs, prevents market players from seeking alternative resources.

Table 3

The approach indicated by credit institutions in Romania to be used starting 2007 for the calculation of capital requirements for credit and operational risk

Approach	Approach		
	07/2005	11/2005	05/2006
Credit risk			
Standardised (or simplified standardised) approach	13	30	31*
Internal ratings models – basic approach	3	2	2
Internal ratings models – advanced approach	1	0	0
Undecided credit institutions	17	2	0
Operational risk			
Basic indicator	11	17	20
Standardised approach	10	13	13
Advanced measurement approach	4	2	0
Undecided credit institutions	9	2	0

* Including also the banks that declared their intention to use Basel II approach in 2007 as well.

Source: NBR – Financial Stability Report, 2006

A study conducted by Ernst &Young together with The Economist magazine, on 300 European banks, among which 3 were Romanian, has concluded that the average cost for the implementation of Basel II IRB is at about 70 million dollars. For the smaller banks, which choose the standardized approach these costs may drop to under 50 million. The cost problem is very complicated, as it requires continuous investments in new technology, as well as training staff for using the new risk management techniques. One might think that this would be easier for the large international groups, but for them the problem is that they need to adapt to the local environment. What might work for one country does not necessary provide the same results in others. They have discovered that the strategy of the west European groups holding banks in Romania is to transpose the procedures just as they are. This is rather unrealistic, because of the national diversity and because even history has proven this to be wrong.

The banks are trying to find the best methods to calculate the cost for each contracted loan. The ones that are part of an international holding can borrow the methods from the mother bank, while the Romanian institutions must hire independent consultants. The implementation of the new capital framework generates high financial, human and time costs, which depend on the approach chosen.

Some annalists say argue that the new laws would select the potential credit borrowers more rigorously. This is of benefit for the reduction of the credit risk, i.e. exactly what Basel II is trying to reach, but, like any other regulation that restricts the banks activity with capital regulations, it limits the possibility for the bank to raise profits from the lending activity.

For a credit institution to be able to use another approach rather than the standardized approach in determining capital requirements, its internal models must be validated by the supervisory authority. The National Bank of Romania is drafting validation guides for each type of risk included in Pillar I, i.e. credit risk, market risk, and operational risk. The validation process hinges on the following principles: (i) primary responsibility during the validation process lies with the credit institutions, as the supervisor only assesses the manner in which the bank performed its own validation; (ii) validation basically constitutes an assessment of the predictability of a bank's risk estimates; and (iii) validation is a recurrent process which takes account of both quantitative and qualitative aspects

For the Romanian banking system, validation could be more difficult to implement from the perspective of the rating process and the rating system itself. As said before even though the model was designed by the parent undertaking and validated by the home supervisory authority, the local management must be able to prove that the model captures accurately the features of risks prevailing on the Romanian banking market. The model could well be reliable within the group, yet it may fail to capture the minor risks at aggregate level, which are relevant for Romania. Local management should not be a mere operator using an internal model as a black box but must know it satisfactorily. In fact, the management should have full control over the risks to which the entity it runs will be exposed.

Feeding models with databases is yet another challenge. Banks may need to implement substantial changes to their internal systems to prepare for appropriate data collection and revised reporting requirements. These changes may require systems integration, modification and new software. Banks will need to review the necessary system changes and develop a realistic implementation timetable to carry out such changes. Supervisors must encourage banks to consider their data needs very seriously and to comprehend fully the techniques they will need to use to derive appropriate estimates of risk based on those data. In practical terms, banks will be expected to have in place – or be actively developing - a data "warehouse", that is, a process that enables a bank to collect, store and draw upon loss statistics in an efficient manner over time. Data availability varies across portfolios, banks, jurisdictions and risk types. Supervisors may also wish to encourage private initiatives/processes for credit information sharing and for assessing comparability of pooled data with internal bank experience. Sharing of data is particularly useful when banks in a jurisdiction have a short data history. In these situations, supervisors and banks will have to deal with confidentiality considerations. Banks and supervisors may also draw upon collaborative supervisory efforts to facilitate data collection. At present, in Romania, there is no long-lasting track record for databases needed in quantifying capital requirements. Such imported databases must prove their capability of capturing the structure and the dynamics of risks to the Romanian banking market.

As a rule, the approval of an internal model to assess credit risk calls for the use of the rating system for at least three years. The National Bank of Romania exercised its option of reducing this period to at least one year provided that the credit institution chooses to implement the basic internal models by 31 December 2009 or to at least two years if the advanced approach is introduced by 31 December 2008. (NBR, 2006)

4. CONCLUSIONS

The first Basel Capital Accord was instituted in 1988 to coordinate global regulatory efforts and to institute minimum capital requirements to eliminate the threat posed by undercapitalized banks. This agreement thas reached two main objectives: (i) to strengthen the international financial and banking system and (ii) to eliminate the competitive inequalities that appeared because of the differences in national regulation. To deal with the growing complexity of the financial industry and with the systemic threats, a new Capital Accord was proposed by the Basel Committee on Banking Supervision, to establish a more sophisticated framework for banks to measure risk and set aside sufficient capital to cover losses from market, credit, and operational risk. The new capital adequacy ratio represents a more complex prudential component, which allows a more detailed approach to banking risks.

Following the adoption by the Basel Committee of new capital rules for banks, a process is now taking place in Romania to transpose the rules into national legislation. This paper gives an overview of the main issues that relate to the implementation. Alongside with the changes that have to be done in legislation, the NBR also needs to revise its supervisory framework, by changing the supervisory methodology, from a compliance-based approach to a risk-based assessment. One key challenge is enhancing the quality of supervision through a greater involvement of credit institutions' management in risk management, credit institutions' assessment focusing on their risk profile and consolidated supervision based on close cross-border cooperation, both between consolidating credit institutions and their corresponding supervisory authorities.

The implementation of the Basel requirements poses a few challenges both on the commercial banks and on the National Bank. Legislative modifications have been introduced to account for the specific legal and institutional setting, as well as for some features of the Romanian financial system. The objectives of the NBR, in what regards Basel II, consist of three main directions: the transpose of the new requirements into the national legislation, the development of means of prudential supervision, adequate to the new context and the development of risk management systems at the credit institution's level.

Having the right personnel will be critical to the successful implementation of Basel II. This may involve hiring more qualified staff and enhancing training programmes. In particular, for implementing the advanced approaches for Basel II, there is a need to retain both bank and supervisory personnel with the quantitative expertise and skills to understand banks' rating systems, models and capital assessment strategies in advance of Basel II implementation. Even for the simpler approaches, both bank and supervisory staff may need to upgrade their skills in the areas of credit risk mitigation and operational risk as well as capital adequacy assessment under Pillar 2. This raises new costs for both the NBR and the commercial banks.

Banks can choose from two approaches in order to calculate the capital requirements, which are the standardized approach, based on external ratings and the internal-rating approach. The costs of implementation show to be higher for the latter, which would means that it could be quite difficult for the small and medium-sized banks to undertake this approach. But even for the large banks, with international activities, and part of an international group, this can be a little difficult, as they cannot just take the framework from the mother bank, which has already developed it. This is because of the specificities of each national financial system.

For 2007, most banks decided not to apply the new regulations. For next year, there are signs that banks will largely take the standardized approach. The explanation for the slow pace of switching to the new model lies with banks' weak interest, owing to the related costs that would reduce their profits and the overall banking context rife with excess liquidity which, even though requiring additional costs, prevents market players from seeking alternative resources.

Feeding models with databases is yet another challenge. Banks may need to implement substantial changes to their internal systems to prepare for appropriate data collection and revised reporting requirements. These changes may require systems integration, modification and new software. This also affects banks in matter of costs.

But, no matter how difficult it is, or how big the costs are for the implementation of the Basel II framework, this just a new step in the international regulatory environment, step that has to be done by everyone irrespective of the costs involved, mainly due to the fact that the financial system is moving forward at a very quick pace. The new products and the new operations that the commercial banks get involved with, along with the continuous development of the financial market, poses higher risks on banks. Hence the banks need to have well developed techniques to assess the risks, so that they do not affect the soundness of the bank. Why this is important? It is important because of the great importance that the financial sector plays in the economy. Threats to financial sector stability are also threats to the whole economy and can easily start crises that can propagate from the national level to the international level, mainly through the financial sector.

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