

## THE IMPACT OF NEW REGULATION ON FOUR EUROPEAN BANKING SYSTEMS. A BASEL III APPROACH

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### **Abstract:**

*One of the solutions designed to rebuild the banking system is the reconfiguration of the regulatory framework. Still active, the episodes of liquidity shortage and bank failure ask for solid measures in order to increase the solidity of individual institutions, to protect the financial stability of the banking systems and to maintain confidence on the markets. The aim of this paper is to analyze the situation of four European banking systems (Czech Republic, Poland, Romania and Croatia) in terms of Basel III standards. Structured on three parts, the study points out the real concerns regarding Basel III effectiveness; analyzes the evolutions of capital, leverage and liquidity indicators and highlights the future possible scenarios/actions for aligning to the new regulation. To conclude, we determine the white and the black spots of the selected banking systems related to Basel III implementation. The results show good levels of capital in Poland, Czech Republic, Croatia and Romania, and some liquidity issues in Poland. The Czech and the Croatian banking systems are the best prepared for shocks.*

**Key words:** Basel III, banking system, risks, liquidity, crisis

**JEL classification:** G01, G21, G32

### **INTRODUCTION**

The stability of the banking system is a precondition for financial stability, but deficiencies and weaknesses of supervision ask for efficient instruments in order to prevent and manage shocks in the interbank network. The construction of a crisis is based on excessive liquidity, credit expansion and low capital levels.

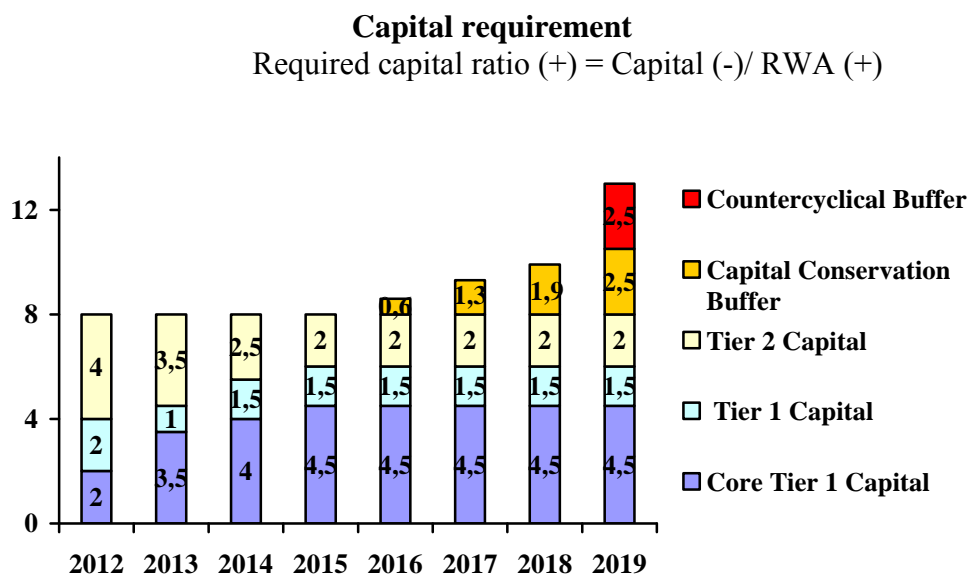
In December 2010, Basel Committee on Banking Supervision developed a new agreement: Basel III - *International framework for liquidity risk measurement and A global regulatory framework for more resilient banks and banking systems (BIS, 2010)*. The three main directions of Basel III are related to new capital minimum requirements, banking supervision and market discipline.

In this paper we propose to analyze the implications of Basel III implementation in four European banking systems and to find the best actions for future activities.

### **THE EFFECTIVENESS OF BASEL III**

The fundamental changes between Basel I-II and Basel III consist of the orientation to both individual and macro risks. The question is: how effective are new measures expected to be? Some voices argue that implementation of Basel III standards may affect domestic financial markets with negative effects on credit growth and economic activity. In 2000, Greenspan sustained in an interview that regulation will be the subject of future changes which could lead to reduction of living standards on long-term. After 12 years this topic might be very realistic in the lights of future demands. Restrictive capital requirements have positive impact: high capital stocks are designed to absorb losses generated by financial crises and to maintain market confidence [1]. Greenspan argues that such dimensioning of capital against risks which appear once in 50-100 years is inappropriate because will lower the living standards. Méaulle (2011) presents several hypothesis that might find inappropriate the implementation of Basel III: first of all, it should be a clear distinction between illiquid banks and insolvable banks, it is clear that the requirements will differently affect the financial institutions; secondly, new capital standards will decrease the possibility of systemic risk manifestation, but still, banks can be very well capitalized and can create the occurrence of systemic risk. Nicholas Le Pan (2008) points out other aspects, such as: differences between global banks

and small banks regarding complexity and approach of new regulation; the types and the characteristics of financial supervisors in European Union countries and in non-EU countries or the business models of banks.



**Figure no. 1 The Calendar of Basel III Capital Requirements**

Source: [8]

Minimum capital requirements (figure no. 1.) are completed by leverage ratio (minimum 3%) considered flexible enough to be used as micro and macro instrument or as a countercyclical tool. As advantages, leverage reshapes the balance sheet volume, limits the excessive exposure, it is easy to monitor, its implementation does not imply significant costs and complex procedures. The main disadvantage is considered the reduced potential of growth, with effect on economic growth. Another danger is that banks are more exposed to risks, considering the fact that there is no distinction between risky assets and the balance sheet may be vulnerable. Also, there is no universal definition of financial leverage and for some banks competitive advantages may appear.

### **Leverage Ratio**

$$\text{Tier 1 Capital/Exposure} > 3\% \quad (2)$$

Basel III liquidity standards (*Liquidity Coverage Ratio and Net Stable Funding*) are designed to protect banks from short-term and long term liquidity issues [7].

### **Liquidity Coverage Ratio (LCR)**

$$\frac{\text{Stock of high-quality liquid assets}}{\text{Total net cash outflows over the next 30 calendar days}} = 100\% \quad (3)$$

### **Net Stable Funding Ratio (NSFR)**

$$\frac{\text{Available amount of stable funding}}{\text{Required amount of stable funding}} > 100\% \quad (4)$$

The implementation of the liquidity standards generates concerns, considering the followings:

- ✓ The new definition of high-liquid assets reduces the stock of liquidity. There is a gap between the characteristics of refinancing instruments used by central bank and the features of the new requirements.
- ✓ The situation of cross-country liquidity support is uncertain. The application of liquidity standards was proposed for the consolidated level, but the European Commission advised to be implemented also in the host countries. Applying liquidity standards at the national level

may lead to shortages of internal liquidity transfers and to large gaps between banking systems from Euro zone and the other banking systems;

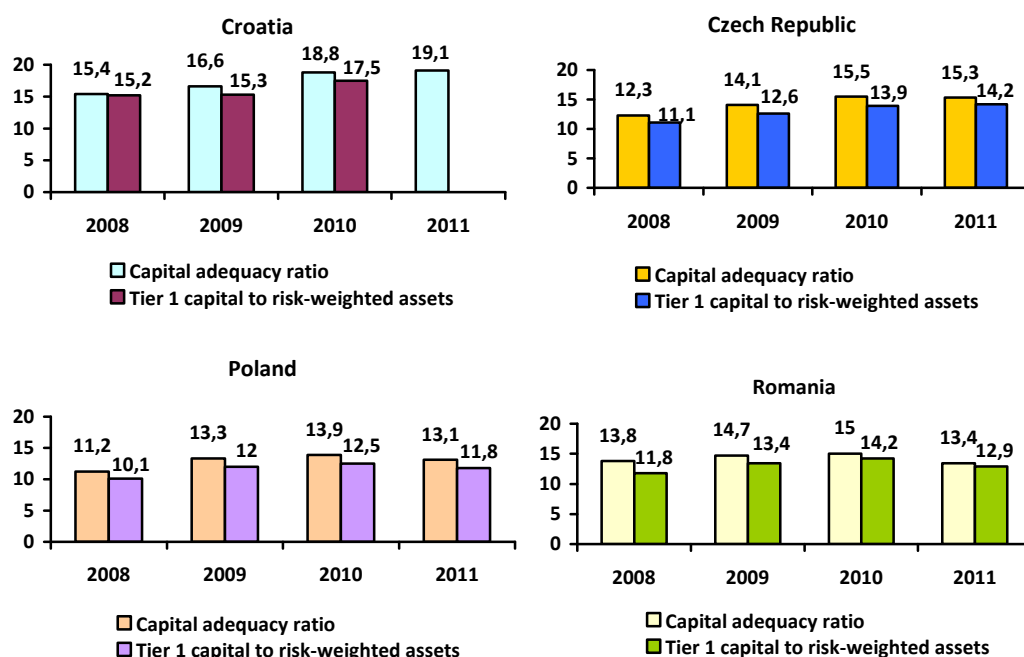
- ✓ Reduction of growth and development role of cross-country banking groups. Considering Basel III liquidity requirements, the funding relations between mother banks and subsidiaries will be less fluid, with effects on increasing fragility of liquidity management inside capital markets [2].

From a rational point of view, the liquidity standards aim to prevent banks from relying solely on anticipated inflows, but for some banks liquidity is trapped at a certain level even if the inflows exceed outflows and the indirect effect can be seen on profitability.

## CASE STUDY

Discussions on Basel III concluded the real impact of its implementation on European banking. Differences are to be seen considering the banking models, practices and activities. For the analysis we choose four European banking systems (Croatia, Czech Republic, Poland and Romania) based on both similarities (the membership in the European Union, Croatia will be integrated in July 2013) and differences (national regulation and standards).

*Increasing quality, consistency and transparency of bank capital* as an important Basel III goal starts with a capital redefinition: while under Basel II capital was divided in Tier 1, Tier 2 and Tier 3, now, banks have to align to 6% minimum Tier 1 capital and 8% Tier 2 capital until January 2015, Tier 3 capital being no longer used.

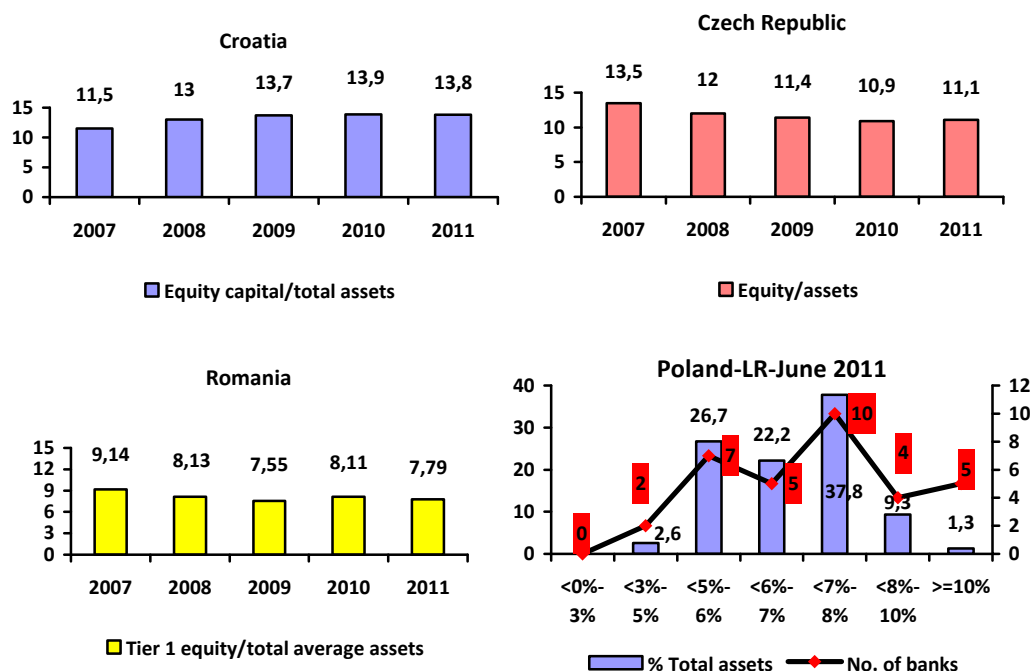


**Figure no. 2 The Evolution of Capital Adequacy Ratio (CAR) and Tier 1 Capital in the Selected Banking Systems during 2004 and 2011**

Source: [12]

The evolution of capital ratios in the selected banking system shows good levels of capital, above the minimum requirements. Croatian banking system is the most well capitalized, the increasing trend being determined by the growth in loans to domestic government units which led to a fall in the average credit risk weight and capital requirements. However, in June 2011 one bank reported CAR below 12%, the legal standard. The Czech banking system has similar evolutions, most banks having high quality of capital; the Basel III requirements will have a limited impact on banking activity. In Poland, capital ratios have comfortable levels, increased capital and liquidity requirements have boosted buffers to deal with credit and liquidity risks that could arise if the zloty

depreciates. The impact of new capital standards in the Romanian banking system will be limited as well. In June 2011 Tier 1 capital ratio represented 80% of total capital and CAR was 13.4%, far above the minimum 8% required (figure no. 2.). Still, banks should make adjustments of the business profile in order to increase liquidity and profitability.



**Figure no. 3 The Evolution of Leverage Ratio (LR) in the Selected Banking Systems**

Source: [10] - [11] - [13] - [14]

According to figure no. 3, the Polish banking sector is much less leveraged compared to the rest of selected banking systems. In June 2011, 10 banks representing 37.8% of total assets had leverage ratios between 7% and 8%. Basel III 3% minimum requirement is not a concern because during 2007 and 2011, the indicator registered high values.

**Table no. 1 Liquidity Standards in the Polish Banking System - June 2011**

LIQUIDITY COVERAGE RATIO (%)							
%	0-50	50-80	80-100	100-150	150-250	250-400	>400
No. of banks	6	3	2	8	2	4	8
% Total assets	6.4	8.2	6.7	58.8	15.6	2.8	1.4
NET STABLE FUNDING RATIO (%)							
%	0-70	70-90	90-100	100-110	110-120	120-140	>140
No. of banks	4	6	7	7	4	2	3
% Total assets	7.5	10.5	38.2	18.8	13.5	10.3	1.1

Source: [10]

A survey based on a sample of 33 Polish banks representing 60% of the banking sector shows that one of the main problem regarding Basel III implementation is the liquidity standard. As we can see in the Table no. 1, in June 2011, 11 banks had LCR<100%, while more than half of the questioned banks did not achieve the long-term liquidity requirement (NSFR<100%). For several years, lack of long-term liquidity, a deficiency of the Polish banking system, caused a significant liquidity gap. In the Croatian banking system, liquidity risk is determined by significant dependence on parent banks for financing. Local banks are exposed to risks through higher funding costs and lower inflows. High level of liquidity in the Czech banking system is evidenced by low loan-to-deposit ratios (75% in September 2011) and limited currency mismatches in the balance sheet.

## BASEL III SCENARIOS

A short analysis of the selected banking systems strengths and weaknesses presented in table no. 2 is the preface in determining the best individual actions for Basel III implementation.

**Table no. 2 Strengths and Weaknesses of the Selected Banking Systems**

Strengths	Weaknesses
<b>Czech Republic</b>	
<ul style="list-style-type: none"> <li>- One of the lowest loan-to-deposit ratio in the European Union (73% in 2011);</li> <li>- The position of net creditor to the parent-banks in Euro area;</li> <li>- Capital adequacy ratios far above the minimum requirements.</li> </ul>	<ul style="list-style-type: none"> <li>- Credit contraction (to zero in late 2009);</li> <li>- Deterioration of assets quality (but still at comfortable levels compared to other European countries).</li> </ul>
<b>Croatia</b>	
<ul style="list-style-type: none"> <li>- Foreign ownership;</li> <li>- Internal minimum capital requirements set at 12%;</li> <li>- Experience in many types of commercial banking activities;</li> <li>- Extensive branch systems with positive effects on business (easy access to clients and potential clients).</li> </ul>	<ul style="list-style-type: none"> <li>- Balance sheet exposures to foreign currency risk;</li> <li>- The pressure of external debt on banking growth;</li> <li>- Contagion and liquidity risks arise from dependence on foreign banks for funding.</li> </ul>
<b>Poland</b>	
<ul style="list-style-type: none"> <li>- Low interest in risky foreign transactions;</li> <li>- Limited lending expansion ex-ante the financial crisis;</li> <li>- Low dependency on loans in foreign currency.</li> </ul>	<ul style="list-style-type: none"> <li>- Reduced access to credit for Small and Medium Enterprises (SMEs);</li> <li>- Liquidity and funding issues;</li> <li>- Increasing borrowing costs.</li> </ul>
<b>Romania</b>	
<ul style="list-style-type: none"> <li>- Good levels of solvability and liquidity indicators (above the minimum requirements);</li> <li>- Agreements for maintaining the exposure of parent banks;</li> <li>- The support of National Bank of Romania (liquidity reserves, monetary and prudential measures, interventions for sustaining exchange rate deviation).</li> </ul>	<ul style="list-style-type: none"> <li>- Higher costs of external financing;</li> <li>- Deterioration of portfolios quality;</li> <li>- Risk accumulation (contagion risk and credit risk);</li> <li>- Credit contraction;</li> <li>- Reduction of profitability.</li> </ul>

Source: [1] - [14]

As possible scenarios, the responses to Basel III changes can be operational, tactical and strategic. For example, in Poland, the new liquidity standards will probably lead to a reorganization of banking balance sheet and the withdrawal of certain products considered unprofitable. For the long-term issues, urgent expansion of local sources of financing is required. In Romanian banking systems, the reactions could be related to the alignment period to Basel III requirements: banks will implement tactical measures as asset restructuring (credit reduction in order to increase capital levels).

**Table no. 3 Possible Scenarios to Basel III Changes**

Response Indicator	Operational	Tactical	Strategic
Orientation	+Efficiency -Costs	+Profitability (Short-term)	+ Profitability (Long-term)
Directions	<ul style="list-style-type: none"> <li>• Processes</li> <li>• Methods</li> <li>• Data</li> </ul>	<ul style="list-style-type: none"> <li>• Pricing</li> <li>• Funding</li> <li>• Asset Restructuring</li> </ul>	<ul style="list-style-type: none"> <li>• Business Model</li> <li>• Group Organization</li> <li>• Equity</li> </ul>
Actions	1. <i>RWA Optimization</i>	1. <i>Risk-sensitive pricing</i> 2. <i>Orientation to long-term</i>	1. <i>Sale of units</i> 2. <i>Restructuring process</i>

	<i>2. Rethink of Credit approval</i>	<i>funding 3. Lower exposure</i>	<i>(HR, business units, activity)</i>
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Source: [6]

Czech banking system will apply tactical measures as well considering that in 2011 profitability decreased 4% (a good evolution compared to other banking systems). Asset quality improved based on high degree of resilience in terms of liquidity and a reduced level of indebtedness integrated in a conservative business model.

## CONCLUSIONS

Basel III was designed to protect banks from future crisis, setting new rules for capital, liquidity, leverage and risks. Apart from its benefits, Basel III generates concerns, as follows: forcing banks to maintain higher capital ratios may make them reluctant to expand credit, potentially undermining the recovery, even lower the living standards; new liquidity requirements will lead to a decreasing trend of profitability, reduction of banking activity and higher costs.

According to our analysis, the selected banking systems will not be massively affected by the new approach, but there are some problems to be solved. The new liquidity standards are going to be a real challenge for the Polish banking system. The main threats in the near term are connected with potential funding problems and with a possible deterioration of asset quality. According to financial indicators, Croatian and Czech banking systems are the most stable and prepared to face shocks. The Romania banking system deals with a credit contraction, but has good levels of capital and liquidity. A mix of operational, tactical and strategic measures must be applied in order to meet Basel III standards.

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