Implementation of Basel III: Challenges for Macedonian Banks

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Abstract: Banking institutions have crucial importance for each national economy functioning. The financial sector stability is determined by the safety and solvency of the banking institutions. As the banks' capital is one of the most important determinants of their financial safety and stability, the adequate capital base represents safety network for various risks to which each banking institution is exposed during its working. The capital optimization and the capital adequacy minimal rate are in function of synchronization between the banks' long-term safety and stability, from the one hand, and the investments yields expected by the shareholders, on the other hand. Here, the banks management's strategic task should be providing of optimal capital level, not only from a point of view of their long-term aims and tasks of their business and financial policy, but also from a point of view of the limitations defined by the regulatory authorities and bodies in different level of banks' working regulation.

Having in mind the importance of the financial stability, each banking institution's effective working and safety, the aim of this study will be the Basel agreements, with a particular focus on the Basel III implementation into the banking sector of the Republic of North Macedonia.

Key words: capital adequacy, Basel Standards, Global Financial Crisis

1. Introduction

The capital is one of the key factors that should be taken into account when the safety and financial stability of some banking institutions are assessed. The adequate capital base is a safety net for various risks on which the banking institution is exposed during its working. The capital has crucial importance in creating the business policy of the banking institutions, because it determines the possibilities for growth, profitability and provides protection against working losses. Because of that, the banks' capital is in the center of the regulatory bodies' attention, that have set some conditions in the view of the capital structure, and in the view of the minimal capital adequacy ratio.

The banks' capital adequacy ratio has influence on the working success of the banking institutions, and at the same time on that what kind of risks the banks can taken. In this way, the capital adequacy ratio indirectly influences the banks' financial results. Namely, the bank's capital increasing contributes to risk decreasing in the direction of amortization of the incomes that are not stabile, with some restriction of the possibility for increase or failure in the work, and decreasing the dividend for the shareholders, due to the reason that the capital is more expensive than the debts. On the other hand, by decreasing the capital, the risks increase, and also the possibilities for failure. The banks that have higher capital are in a position to approve credits with lower interest rates, to lend money with lower interest rates and to extend its working through opening its branches or complete business units in other towns and abroad. That means, the bigger the bank's.

2. The capital structure in the banking institutions

The banks' capital structure has been of special importance for the institutions that regulate the banking work in all countries for decades. The basic task of these institutions is to protect deponents' and creditors' resources and to provide stabile and safe banking system. Although in a larger part, some elements, such a liquidity and interest sensibility are more important for the banking system stability, the capital adequacy ratio, after all, is the biggest challenge for the regulatory institutions, because it shows how high risks one bank can take and is an indicator for the growth, maintenance and the bank's existence in the competitive and fast-growing financial market.

From the aspect of the regulatory bodies, the capital serves as a warranty for the fund for deposits security, should the bank fails. That means that the capital will be used for paying off the deponents in the amount of the secured deposits and will enable the banks' easier sale. The deponents paying-off or the sale of the bank will be easier if the capital of that bank has been high. Besides that, the capital owners are always motivated to protect their wealth, and they do that by limiting the managers not to take high risks, because the price for that will be the shares' value decreasing in the security market, and on the other hand, increasing of the crediting costs (B. Mitchell, 2011).

3. Need for a change in the banking regulative

Basel I and Basel II are regulatory frameworks which basic aim is to assess the bank's capital adequacy, and to define the rules for the most effective way of covering the banks' exposure to various kinds of risks. These capital agreements have two basic goals. The first goal is to make stronger banking system, while the second one is to assist in balancing the cross-border competition among the banks through elimination of the competitive advantages that come out of the different regulative for the capital adequacy in different countries.

However, the financial crisis (2007-2009) took on the surface all weaknesses of the Basel II in regard to the banking sector. Namely, the fall of very big and complex financial institutions during the financial crisis that began in 2007, caused destabilization of the financial system globally, and in the real sector eventually. Then, some states took significant interventions in order to maintain the financial stability, which usually included use of budget resources. As an answer to the crisis, the Basel committee on banking supervision adopted a series of reforms of international capital standard (so called Basel III), which first of all refer to strengthening the capital demands, the liquid position of the banks and application of macro-prudent instruments for increasing the banking system resistance to financial and economic shocks (National Bank of Republic of North Macedonia, 2019).

Basel III is an internationally agreed set of measures developed by the Basel Committee on Banking Supervision in response to the financial crisis of 2007-09. The measures aim to strengthen the regulation, supervision and risk management of banks. Like all Basel Committee standards, Basel III standards are minimum requirements which apply to internationally active banks. Members are committed to implementing and applying standards in their jurisdictions within the time frame established by the Committee (Bank for International Settlements, 2016).

The essential features of Basel 3 that distinguish Basel 2 norms are explained below (Rakesh Gupta, 2017):

1. *Focus on core capital* – The predominant form of tier 1 capital should consist of common equity and retained earnings. The minimum requirement for common equity rose by more than double from 2% before deductions to 4.5% after deductions. The instruments qualifying for recognition as tier 1 or tier 2 capital are also restricted substantially. In another move, distinction between upper tier 2 and lower tier 2 has been eliminated.
2. *Introducing capital buffers* – A CCB of 2.5%, comprised of common equity tier 1 is designed to ensure that banks build up capital buffers outside periods of stress which can be drawn down as losses are incurred. CCB effectively raises total common equity

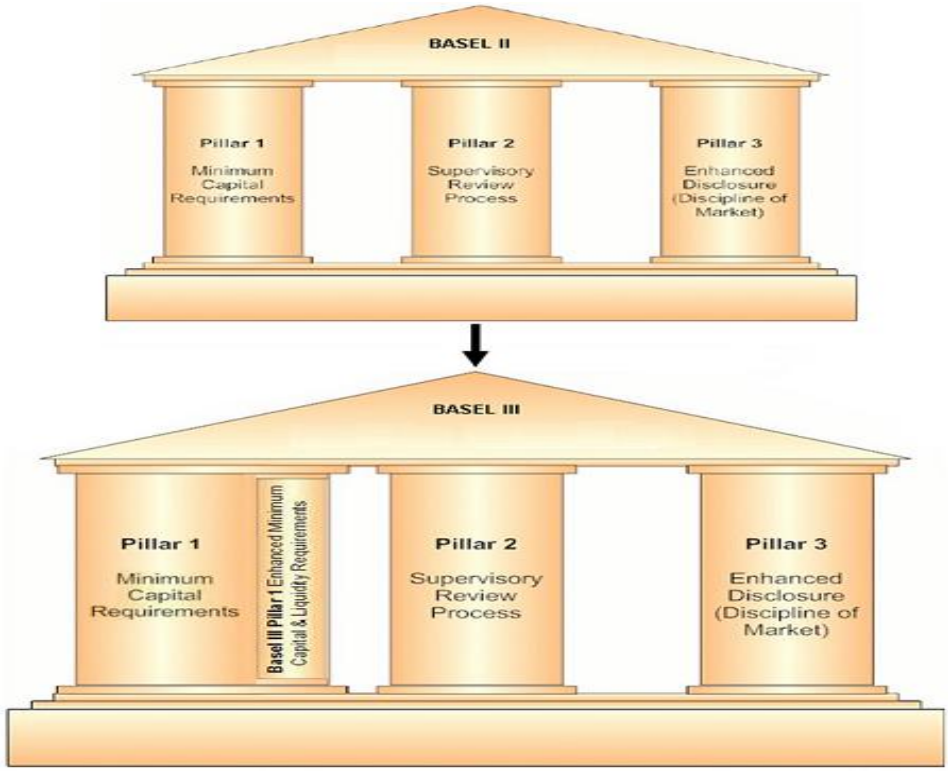
requirement to minimum of 7%. However, in practice, banks are likely to hold more than 7% common equity to avoid falling into buffer zone. In case a bank breaches buffer, it must retain percentage of earnings (i.e., distributable profits prior to regulatory deductions).

3. *Countercyclical capital buffer* – The countercyclical buffer consider the macrofinancial environment in which banks operate. It will be deployed by national jurisdictions when excess aggregate credit growth is judged to be associated with a build-up of system-wide risk to ensure the banking system has a buffer of capital to protect it against future potential losses. However it varies between 0 and 2.5% of risk weighted assets.
4. *Regulatory deductions and other adjustments* – The Basel Committee 3 also made specific provisions for deductions in case of goodwill and other intangibles, deferred tax assets (DTAs), cash flow hedge reserve, shortfall of provisions to expected losses should be deducted from common equity tier 1. In case of gains on sale from securitisations, other provisions included cumulative gains and losses due to changes in bank's own credit risk on fair valued financial liabilities, defined benefit pension fund liabilities included on balance sheet, defined benefit pension fund asset etc. must be deducted from common equity tier 1. The guidelines also provide for Investments in own shares to be deducted in the common equity tier 1. Banks are required to apply a 'corresponding deduction approach' to reciprocal investments in the capital of banking, financial and insurance entities. The report also prescribes threshold deductions from equity capital for different components.
5. *Supplementing the risk-based capital requirement with a leverage ratio* – The Basel 3 reforms introduced a simple, transparent, non-risk based leverage ratio to act as a credible supplementary measure to the risk-based capital requirements. This has been implemented from 1 January 2013, and will proceed with public disclosure starting 1 January 2015. Any final adjustments to the definition and calibration of the leverage ratio will be made by 2017, with a view to migrating to a Pillar 1 treatment on 1 January 2018 based on appropriate review and calibration. The committee will continue to test a minimum requirement of 3% for the leverage ratio during the parallel run period.
6. *Introducing a global liquidity standard* – To promote short-term resilience of a bank's liquidity risk profile by ensuring that it has sufficient high quality liquid resources to survive an acute stress scenario lasting for one month is the primary objective of introducing global liquidity standard. It may also facilitate to promote resilience over a longer time horizon by creating additional incentives for a bank to fund its activities with more stable sources of funding on an ongoing structural basis. The net stable funding ratio (NSFR) has time horizon of one year.

The Basel agreement – Basel III was brought in the period from 2010 to 2011, while its implementation should have been from 2013 to 2015. However, with the amendments of the agreement in April 2013, its implementation was prolonged up to the end of 2018 (Basel Committee on Banking Supervision, Bank for International Settlements, 2011).

The graph no.1 shows how the new regulatory framework strengthens the three pillars of Basel II, especially those that refer to the capital demands and liquidity.

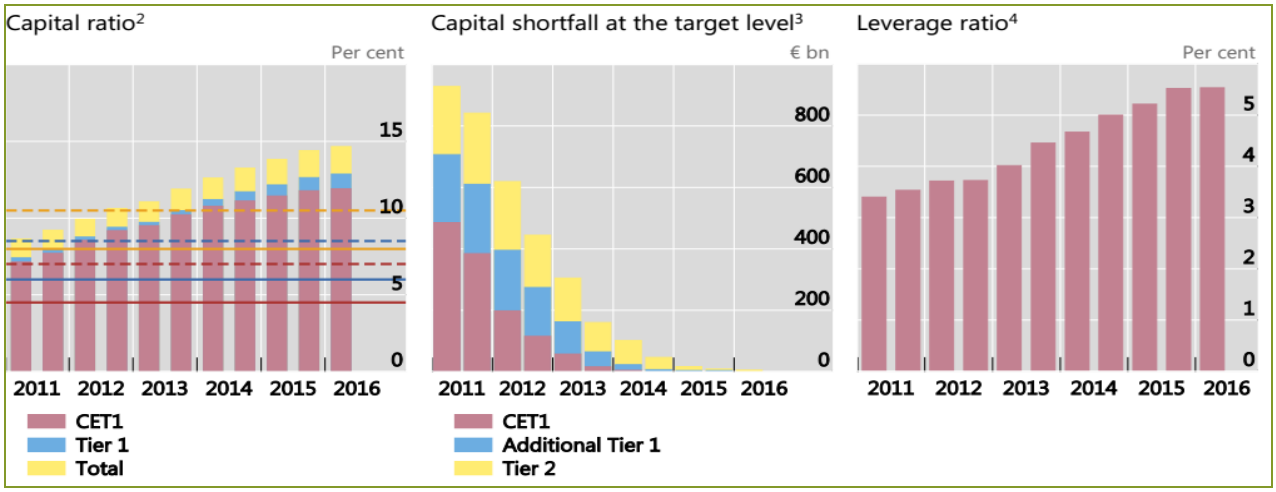
Graph 1: Pillars of Basel II and Basel III



4. Results of Basel III implementation on a global level

In order to get a picture of the Basel agreement implementation, we will take the indicators of the capital, the lack of capital and the indebtedness rates with several internationally active banks from the countries –members of the Committee.

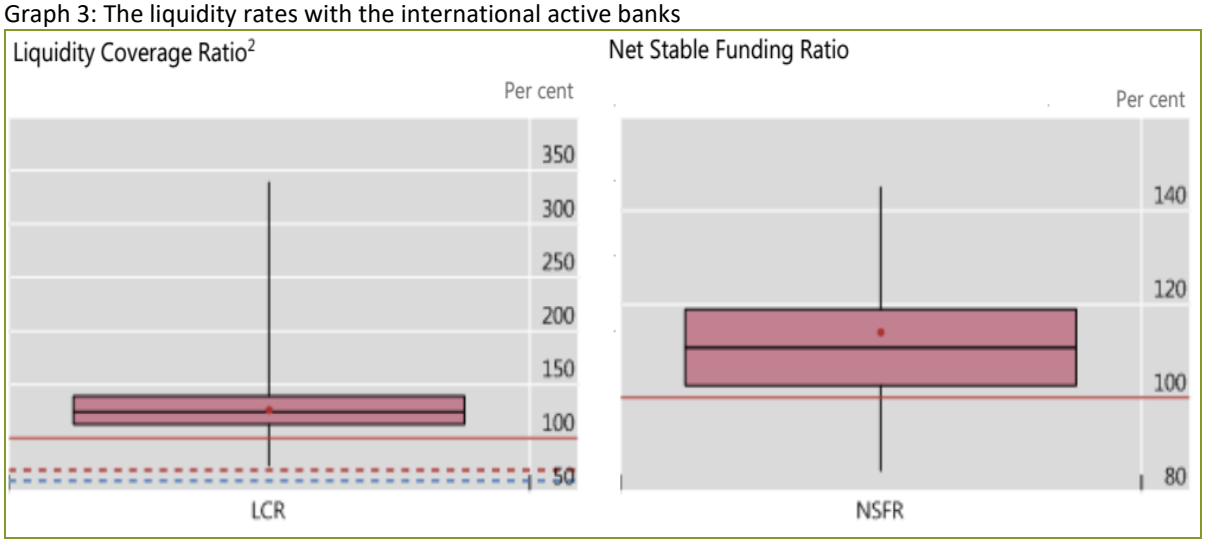
Graph 2: Average capital rates, lack of capital and indebtedness rates with big internationally active banks[5]



Source: Basel Commette for Banks Supervision, Basel III Monitoring Report, February 2017, www.bis.org/bcbs/publ/d397.htm

From the graph above, it can be noted that the average capital rate with internationally active banks from 2011 to 2016 was in continued growth, while the lack of capital was permanently decreasing in that same period. As for the indebtedness rate, it is 5.6% in average for these banks. It means that in the period from 2011-2013, there was a significant advancement with the internationally active banks in relation to the capital strengthening and maintaining the indebtedness on a normal level.

Graph 3: The liquidity rates with the international active banks



Source: Basel Commette for Banks Supervision, Basel III Monitoring Report, February 2017, www.bis.org/bcbs/publ/d397.htm

Concerning the liquidity rates, according to the graph above, the liquidity rate with the internationally active banks is in average 126.2%, while the average rate of the net stabile financing sources is 114%. However, some banks should work on increasing the minimal demands for liquidity up to 100%.

If we make general analysis of the results from the implementation of Basel III, it can be seen that from the beginning of the implementation, in each following year there has been a progress in meeting the capital and liquidity demands. All internationally active banks meet the minimal capital demands, the demands for providing capital protective layers, and the liquidity demands.

3. Implementation of Basel III in Republic of North Macedonia

The implementation of Basel 3 into the banking system of the Republic of North Macedonia, started in October 2016, by the changes in the Law for Banks, and by the changes and supplements to the regulative for the methodology for defining the capital adequacy from December 2016. In that way, harmonization of the national regulative and the requests of Basel III, was enabled, in the view of the obligation for keeping protective capital layers and the structure of the banks' own resources, and with the appropriate provisions of the European regulative 575/2013 on prudent demands for the credit institutions and investing firms.

The specific change of the regulative in Macedonia refers to introducing an obligation for the banks for keeping the capital protective layers.

There are four types of capital buffers prescribed with the amendments i.e.: (Capital Buffers, National Bank of Republic of North Macedonia):

1) Capital conservation buffer determined at the level of 2.5% of the risk weighted assets;
2) Countercyclical capital buffer which may amount up to 2.5% of the risk weighted assets, or higher, depending on other systemic indicators and aims to limit risks associated with the credit growth. The countercyclical capital buffer can be

different for the exposures in the Republic of North Macedonia and for exposures in other countries. The National Bank is authorized to determine the level of both rates, where the countercyclical capital buffer for exposures in the Republic of North Macedonia is defined based on the methodology prescribed by the National Bank

3) Capital buffer for systemically important banks which may range from 1.0% to 3.5% of the risk weighed assets and which should be allocated by the banks that are identified as systemically important banks based on the methodology prescribed by the National Bank; and
4) Systemic risk capital buffer which may range from 1.0% to 3.0% of the risk weighted assets and is introduced by the Governor of the National Bank in order to limit the risk of disrupting the financial system or the national economy. This capital buffer can be different for different banks or groups of banks.

The changes of the regulative referring to the capital requirements and the capital conservation buffer, predicted a change in the structure of the banks' own resources as well. The change that advocated for synchronization with Basel III, meant that the banks would allocate capital in the amount of 8% of the assets weighted according to risks, in so doing 4.5% should be share capital and 6% Tier1 capital. Besides that, improvement of the banks' own resources quality for defined positions was predicted, in order to meet the conditions for the banks own resources. As for the additional Tier1 capital, it comprises instruments, which, besides the other things, contain a clause for their transformation into instruments of the regular basic capital or for their write-off temporary or permanently in concrete cases.

4. The capital structure with Macedonian banks after synchronization with Basel III

In order to get clear picture of the new regulative framework implications in our country, i.e. the introduction of the capital conservation buffer, it is necessary to analyze the banks' real state and the capital adequacy ratios they have, before and after Basel III implementation. Namely, the capital adequacy ratio on the level of the banking system in R. North Macedonia, according to the data of NBRNM in 2008, before the start of the financial crisis was 16.2%, while after the crisis in 2013 it was higher or 16.8%. Such continuity in maintaining high ratio of the capital adequacy (much above 8% according to the regulative of NBRM) remains in the first half of the current year and it is 16,9% (Analysis of Electronic Journal - E-bankar, 2014).

Table 1: Capital Adequacy Ratio

	Big banks	Medium banks	Small banks	Banking System
31.12.2008	13.4%	16.7%	61.9%	16.2%
31.12.2009	13.8%	17.4%	48.1%	16.4%
31.12.2010	14.1%	17.0%	54.7%	16.1%
31.12.2011	15.0%	17.2%	38.6%	16.8%
31.12.2012	15.3%	22.2%	18.8%	17.1%
31.12.2013	15.8%	18.8%	17.6%	16.8%
31.12.2014	14.6%	18.0%	18.7%	15.7%
31.12.2015	14.9%	16.3%	18.7%	15.5%
31.12.2016	14.6%	16.6%	19.2%	15.2%
31.12.2017	15.2%	17.2%	17.2%	15.7%
31.12.2018	16.4%	16.7%	16.5%	16.5%

Source: Indicators on the Banking System in Republic of North Macedonia, National Bank of the Republic of North Macedonia, 2018

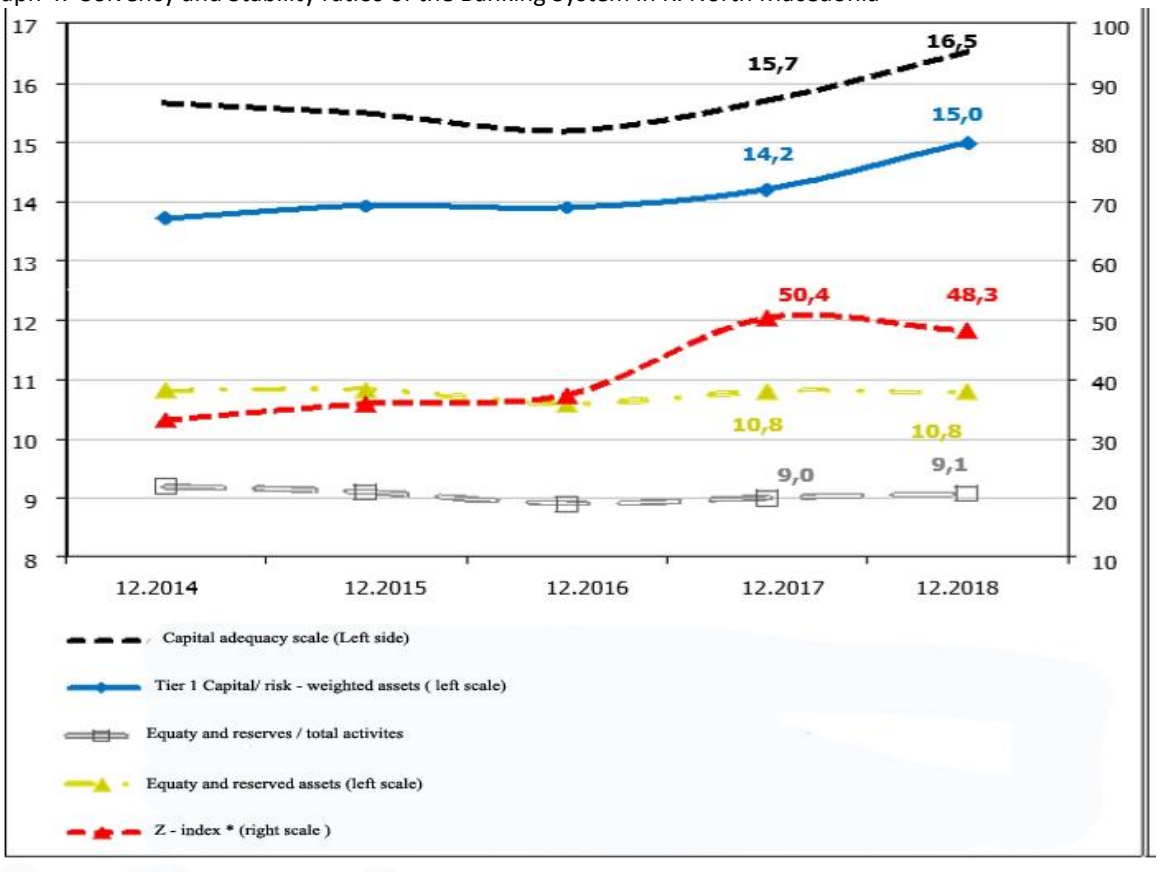
As it can be seen in the previous table, the small banks have the highest decline of the capital adequacy percentage. Such percentage decline moves by an accelerated dynamics from too high 61.9 in 2008, to 18.2% in the second quarter of 2019.

The situation with the big banks remained unchanged after the crisis, and there has been a continued increase after the crisis up to 17.4% in 2019. That situation confirms the fact that they are immune to the big cyclic changes in the financial markets, and is, of course, a good indicator for the banking system. On the other hand, the medium banks show the most satisfactory results in the view of the capital adequacy ratio.

Therefore, as a common characteristic for the banking system as a whole, is that it is resistant on the cyclic market flows and shows the capital adequacy ratio that is able to respond to the new capital regulative of the new capital agreement – Basel 3.

Solvency and capitalization ratios of the banking system somewhat increased in 2018, largely due to the faster growth of capital positions, mostly as a result of retained earnings and banks' issuance of new subordinated instruments. At the end of 2018, the capital adequacy ratio equaled 16.5%, which is by 0.8 percentage points higher compared to 31 December 2017. In fact, not only that the condition for providing the capital adequacy ratio of 10.5% (including all capital buffers) is met, but they also have higher ratio and more quality capital, with which the risks covering is very high.

Graph 4: Solvency and Stability ratios of the Banking System in R. North Macedonia

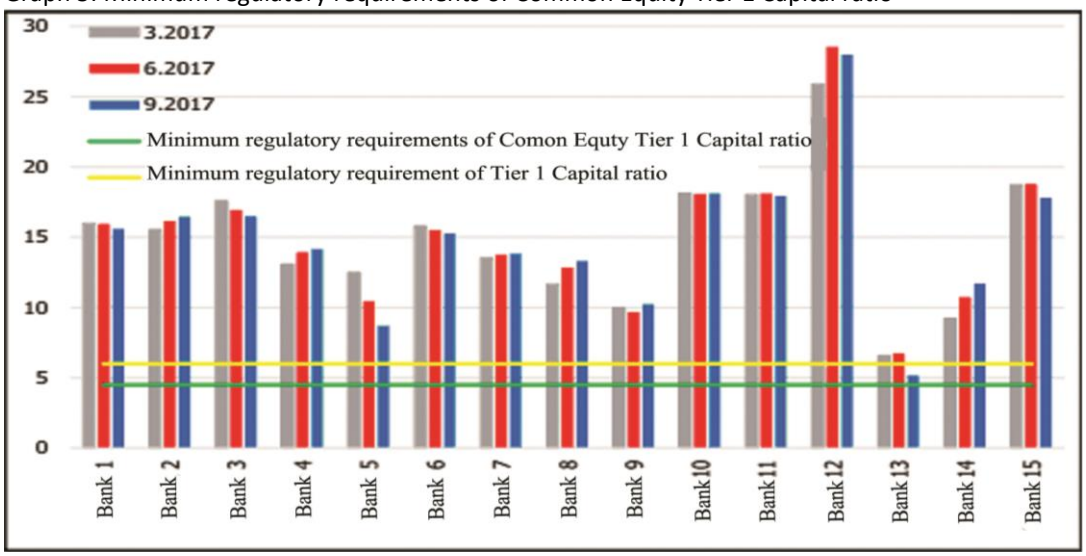


Source: Financial Stability Report for the Republic of North Macedonia, 2018, National Bank of the Republic of North Macedonia

In 2017, banks in the Republic of Macedonia successfully met the challenge of complying with the new regulatory requirements that relate to the capital component of Basel 3. Thus, since March 2017, banks' have been required, besides capital adequacy ratio of 8%, also to calculate and maintain Tier 1 capital of 6% and Common Equity Tier 1 capital of 4.5%. In addition, all banks have been required to maintain a capital conservation buffer of 2.5% of the risk-weighted assets. Moreover, seven banks designated as systemically important banks by the NBRM have been required to fulfill the capital buffer for

systemically important banks. The countercyclical and systemic capital buffers are two additional macro prudential tools that are available in accordance with the regulation, but there is still no need to be introduced. Since the second half of 2017, banks have been reporting on the leverage ratio, which is also one of the new requirements set by Basel 3. Finally, according to pillar 2 of the Basel Capital Accord, a capital supplement according to the risk profile of each bank has been determined throughout the supervisory assessment and evaluation process, which in 2017, ranged from 1.6 to 9.5% by bank. The relatively high amount and quality of banks' own funds ensured solid capacity for compliance with the new capital requirements. Thus, as of 31 December 2017, the share of "free" capital of the banking system over the minimum regulatory and supervisory requirements was 8.8% of total own funds.[1]

Graph 5: Minimum regulatory requirements of Common Equity Tier 1 Capital ratio

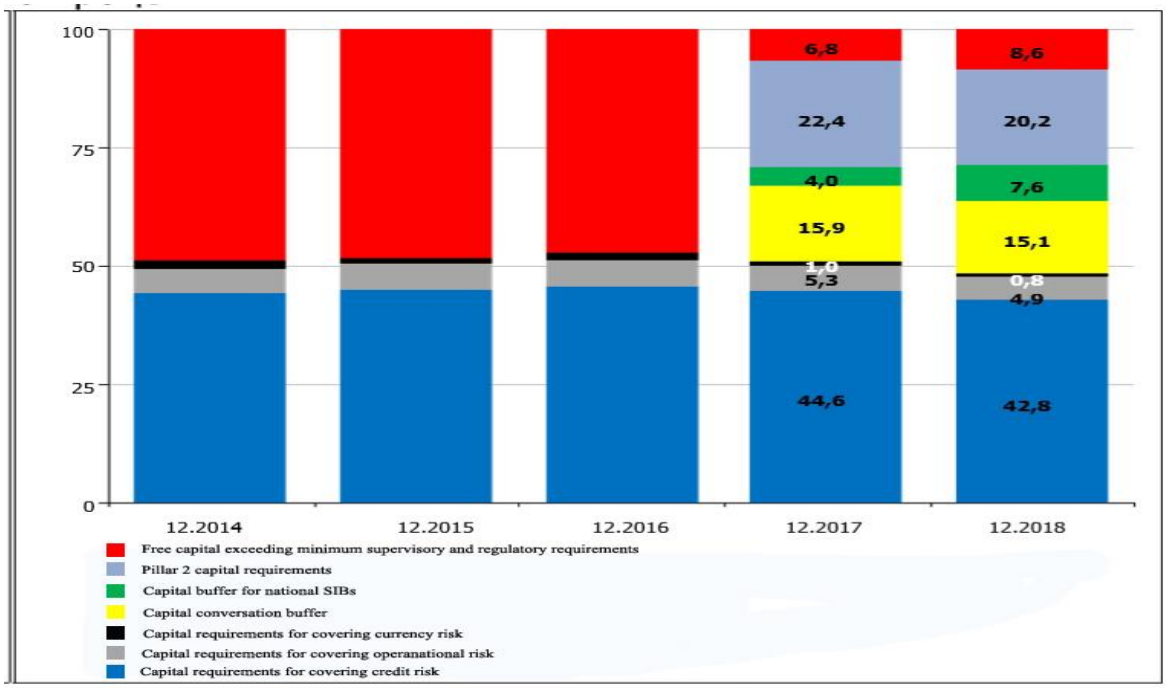


Source: Financial Stability Report for the Republic of North Macedonia, 2018, National Bank of the Republic of North Macedonia

The separate analysis of the Tier1 capital ratio with the banks, i.e. the common equity Tier1 capital, shows that with all 15 banks, the obligation for allocating minimal ratio on a regulatory minimum of the Tier1 capital ratio of 4.5% has been met.

[1]The average leverage ratio in the last six months of 2017 was 10.1%. Analyzed by bank, this ratio ranges from 4.9% to 17.4%. The regulation does not set the lower threshold of this limit, but only a requirement to report to the NBRM. According to the international standards, the leverage ratio should not fall below 3%.

Graph 6: Structure of the own funds, by purpose



Source: Financial Stability Report for the Republic of North Macedonia, 2018, National Bank of the Republic of North Macedonia

According to the graph above, we can see that the capital at the banks' disposal in the analyzed period is above the minimal requirements. So, it is significantly exceeded in 2016, while in 2017 part of the amount exceeding the minimal stipulated requests is reassigned to a protective layer for the capital keeping. Since the beginning of 2017, Macedonian banks have been providing the conservation capital buffer, ranging from 15.1 to 15.9% of the total capital during 2017.

As for the risks covering, we can see that the largest part of the capital is allocated for protection against a credit risk, i.e. 43.2-45.5% of the total allocated capital, while the smallest percentage is allocated for protection against currency risk, from 0.9-1.4% of the total capital.

CONCLUSION

The global financial crisis in 2008 has pulled out on the surface the imperfections of the both Basel agreements Basel I and Basel II. In fact, the world experiences have shown that poorly formulated regulative may lead to catastrophic consequences on a global level.

Such negative experiences should not be forgotten, but they should be a base for further improvement of the banking regulative, but also for its expansion to other non-banking financial institutions which are an important segment and factor of stability for the financial system in the developed market economies.

In fact, the analysis of the capital adequacy ratio in Republic Macedonia has shown that the banks are able to tackle the risks, in accordance with the available capital, and at the same time, to meet the capital demands of the standards incorporated in the three Basel agreements.

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