The Role of Capital Requirements on the Stability of Kosovo Banking Sector

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Abstract: After the failure of the Bretton Woods system, it was more than necessary to create a stable, acceptable and strong banking system. The way to achieve this was to form the Basel Committee on Banking Supervision. The committee has set a number of requirements that banks should fulfil in order to be a part of the banking sector. These rules have been adopted by many countries on an individual basis; one of the countries which has adopted the Basel regulations on banking supervision is Kosovo. Based on the committee's regulation on capital adequacy, the Central Bank has created the Local Capital Regulation. The aim of this adoption is to completely integrate the Basel regulation in the near future. The major harmonisation was performed in 2012, when the new law on banking supervision was enforced. This paper provides us information on the impact of the new law requirements on capital adequacy ratios.

Keywords: CAR – Capital Adequacy Ratio; Tier 1; Tier 2; Operational Risk

JEL Classification: E580; E50; G20

1. Introduction

The regulation on Capital Adequacy in banking sector is considered to be a crucial part of a healthy banking sector as well as for economy. The Basel Regulation is the only way generally accepted for Capital Adequacy Ratio after the failure of the Breton Woods system.

The history of the Basel start with the Basel I. Basel I was the motivated by two interacting concerns – the risk posed to the stability of the global financial system by low capital levels of internationally active banks and the competitive advantages accruing to banks subject to lower capital requirements. (Tarullo, 2008)

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After a long negotiation Basel I never departed from the promise that the capital ratios of the banks need to rise, in order to have a secure banking sector. After a long tentative on 1983 the Congres mandated the regulation on Capital Adequacy by adopting the Basel Regulation.

The Basel Committee on Banking Supervision is an institution created by the central bank Governors of the Group of 10 nations (G10) (Belgium, Canada, France, Italy, Japan, the Netherlands, the United Kingdom, the United States, Germany and Sweden). The Basel Committee formulates broad supervisory standards and guidelines and recommends statements of best practice in banking supervision (Basel II Accord, for example) in the expectation that member authorities and other nations' authorities will take steps to implement them through their own national systems. The purpose of the committee is to encourage convergence toward common approaches and standards. (Alina, 2012)

Based on Basel Committee regulation on Capital Adequacy the Central Bank has created the Local Capital Regulation on Bank Capital Adequacy. The aim of this adoption is to integrate completely the Basel Regulation in the near future. The major harmonization has been done on 2012 when the new law on banking supervision was enforced. This paper gives us the information on the impact of the new Law Requirements on Capital Adequacy Ratios.

2. Literature Review

There are a number of works that analyze the effects of the capital adequacy requirements in the banking credit cycle and the performance of the bank. In the thesis carried out by a team led by Patricia Jackson (April 2009), the Basel Committee assessed the impact on the credit activity of banks in the implementation of the new Basel regulation. Basel rules also pushed commercial banks to make their investments in markets with the highest ranking and lowest risk. Also searches made inform the impact on the domestic economy was very positive in the long term compared to the short term. In the short term this agreement led to the reduction of economic activity also in the termination of some funds and high-risk companies and all this created a discipline in the securities market, ie banking financial market.

Estrella (2004), Hellman et al. (2000), Repullo (2004) and Repullo and Suarez (2004), offer their analysis on the application of bank capital in different countries, and generally agree that these rules directly affect banks' risk reduction. On the other hand Blum (1999) and Calem and Rob (1999) show how the capital requirements may increase the risk in some situations and at certain times while Diamond and Rajan (2000), develop a theory about banking capital requirement

which stated that long-term adequacy requirements Basel impact on growth and development banks.

Blum and Hellwing (1995) through their model reveals the macroeconomic implications of requirements relating to capital adequacy depends on whether the pro-cyclical effects, which they promote and are stronger or weaker than the pro-cyclical effects of the existing rules. Kunt, Detragiache and Merrouche (2010) in their paper tested in equity returns in the case of banks raising capital, and have come to the conclusion that capital levels did not affect the returns on capital during the crisis, the highest level Capital has brought a higher level of return in particular to large banks, higher quality capital to capital especially first class had the highest impact. Having more capital a bank is expected to have flexibility in the event of shocks that can cause unexpected losses. Disruptive effects of the recent global crisis has created the need for banks to be capitalized on to be more protected during crises.

However, the capital increase is costly for a bank. This high level of capital level will affect the bank's changing risk behavior. It depends on the bank's approach to risk and reward, and contributes to their situation and the role of mediation in the economy. Many previous empirical research have tried to show the involvement of the bank's capital level in the bank's intermediary role in the economy. (Peek & Rosengren, 1995; Blum & Hellwig, 1995; Furfine, 2001; Diamond & Rajan, 2000; Chiuri, Hell & Majnoni, 2001; Yudistira, 2003) Most researchers conclude that demand for capital will worsen the bank's intermediary role in the economy, reducing the level of lending and economic production. These findings are also supported by the result of the macroeconomic impact assessment that bring sustainable capital requirements. (Macroeconomic Assessment Group-BIS, 2010) The banking industry is centered in Kosovo constantly to harmonize rules on the banking sector, the Basel rules. Giant step towards this harmonization was made in 2012 when Kosovo came into force the Law 04/L-093 on Banks, Mirkofinanciare institutions and non-banking financial institutions.

The Banking Sector in the Republic of Kosovo

The banking sector in Kosovo is rated among the sectors with the best performance in the economy. Bank deposits and loans are increasing, while the level of financial services is expanding. The Central Bank of Kosovo has the authority to license, supervise and regulate financial institutions in the territory of Kosovo. The commercial banks sector consists of 8 banks. Commercial banks provide a full range of banking services, including: loans, guarantees, current accounts, savings accounts, term deposits, transfers at home and abroad, as well as services for the preservation of valuable assets since 2009, these banks raise share capital by 9.3%, rising to € 159.4 million.

The banking sector, which represents the largest part of Kosovo's financial sector, was characterized by an increase in the level of financial intermediation. In 2009, loans issued by the banking sector reached 1.4 billion euros, which is 7.7% higher than in the previous year. The structure of loans continues to be similar and dominated by loans in the trade sector. Regarding the duration, longer-term loans continue to increase their share in total portfolio. Significant growth was also noted in deposits, which amounted to 1.74 billion euros, which is 21% higher than in the previous year. The main source of deposits continues to be households, while in terms of maturity, short-term deposits dominate. The increase in the level of financial intermediation to a certain extent is the result of increased competition in the banking sector, which among other things has been manifested with interest rates more favorable to customers and higher quality of services. Kosovo's banking sector continues to be profitable, liquid and solvent. The good state of liquidity and solvency of the banking sector is also shown through the results obtained through the "stress test" model which tests the banking sector's sensitivity in different scenarios. Positive performance was also observed in other financial sectors. The insurance industry has shown that it is an attractive sector for new investors since in 2008 another company entered the market. Moreover, in addition to increasing activity with existing products, the insurance industry in Kosovo began offering a new service - life insurance. Insurance companies in Kosovo are stable with a satisfactory level of capitalism. In 2009 we have a growth plus two microfinance institutions that continued to support the local economy through lending this year. Loans issued by micro financial institutions amounted to 57.500 million euros representing an annual growth of 14.6%. "Financial Stability Report - Ministry of Economy and Finance Kosovo"

The financial sector in Kosovo consists of commercial banks, microfinance institutions, non-bank financial institutions, insurance companies, pension funds and the securities market. In the first half of 2016, this sector was characterized by a steady annual growth rate of 7.3% "Financial Stability Report – Central Bank of Kosovo 2016", whereby the total amount of assets amounted to 501 billion euros. This increase was mainly due to the expansion of banks' activity and the positive performance of pension funds, but the microfinance and insurance sector also contributed, albeit at a lower rate.

Kosovo's banking sector consists in commercial banks activity. (Hoti & Livoreka, 2014)

The banking sector with high foreign ownership, 8 out of 10 banks in total, dominates the structure of the financial sector in Kosovo.

Banks operating in the territory of Kosovo are:

1. NLB;

2. BPB;
3. ProCredit Bank;
4. TEB Bank;
5. Raiffeisen Bank;
6. BKT;
7. Turkiye Cumhuriyeti Ziraat Bankasi;
8. Banka Ekonomike;
9. Turkiye IS Bankasi;
10. Komercialna Banka Ad Beograd – Mitrovica Branch.

CBK's Financial Stability Report for the period until June 2016 shows that the assets of the above-mentioned banks realized an annual growth of 5% reaching the value of 3.43 billion euros, which was mostly affected by the rapid growth of credit portfolio. Loans, as the main components of banks' assets, have the largest concentration in the enterprise (64.8%), while households account for 35% of all loans. Loans to households were dominated by consumer loans, which contributed most to the total increase in loan demand. On the other hand, the average interest rates recorded a downward trend.

Referring to the abovementioned report, it is noted that the pension sector was also characterized by an increase in the value of assets reaching the value of 1.33 billion euros, which marks an annual growth of 12.4%. Much of this value is represented by the Kosovo Pension Savings Trust (99.5%) while the rest from the Slovenian-Kosovo Pension Fund. As a result of the positive return on investments and the increase in the value of both funds, this sector marked a positive performance in the first half of 2016.

For the above mentioned period, the insurance sector reached the value of assets of € 163.6 million, dominated by cash and deposits. The insurance sector has a 90.4% share of non-life insurance, while the remainder is represented by life insurance. Such a division corresponds to a total of 12 companies offering non-life insurance and 3 companies offering other types of insurance. The main concern of such companies is the decline of 1%, which suffered their profits compared to the previous year, while the costs increased by 24%. As a result, the loss of this market realized by June 2016 amounted to 11.5 million Euros.

3. Research Methods and Assumptions

In order to conduct the analysis we have used the secondary data from the annual report of Kosovo Banks. The period used for this paper is the period from 2011-2013.

There are two years before enforcement of the new law on banks, and two years after enforcement of the new law on banks and new regulation on bank capital adequacy.

In order to have an appropriate result we will adjust our data with the specific change on policy in order to compare with after regulation data.

The test that will be performed is T-test, which will compare the two means. Mean of adjusted data's and mean of unadjusted data's.

Impact of New Law on Bank on Capital Adequacy Ratio

Central bank is the regulator which implies rules and regulation on the respective countries. In which elements is central bank involved? The answer is all, some directly and some indirectly. (AP Feaure, 2013)

The new Basel regulatory requirements, raising the quality, the consistency and the transparency of the capital, require banks more than ever to use their capital as efficiently as possible, understanding how much should properly be allocated to offset credit risk. (Oricchio & Vitale, 2011)

Changes in the level of regulatory capital are largely explained by changes in the law.

The new law on banks which introduced a new regulation on capital adequacy of the banks became effective as of December 2012. According to this regulation, the method of Tier 1 capital calculation has changed, subtracting not only the intangible assets and goodwill, but three other positions. The first additional position to be subtracted in Tier 1 capital calculation is the "investments on other banks' equity or lending institutions"; the second position is the "Deferred tax asset" while the third position is "Lending to bank-related persons". The subtraction of these three positions from the Tier 1 capital is performed in order to accurately assess the level of the core capital, which represents the main pillar for absorbing the potential losses of the sector. As a result of these subtractions, the overall regulatory capital is decreased to euro 31.1 million "Central Bank of Kosovo, (2014) Financial Stability Report.

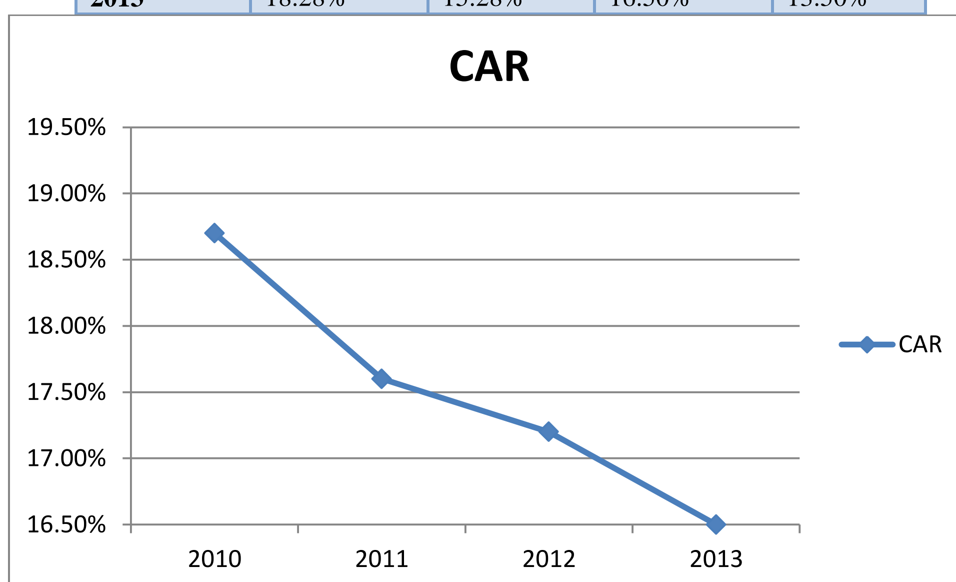
For conduct of the analysis we have used two capital ratios (Tier 1 Capital Ratio and Total CAR)

In order to verify the impact of related parties' transaction after the new law implementation we have adjusted our Tier 1 Ratio as ADJTIER1 by adding the

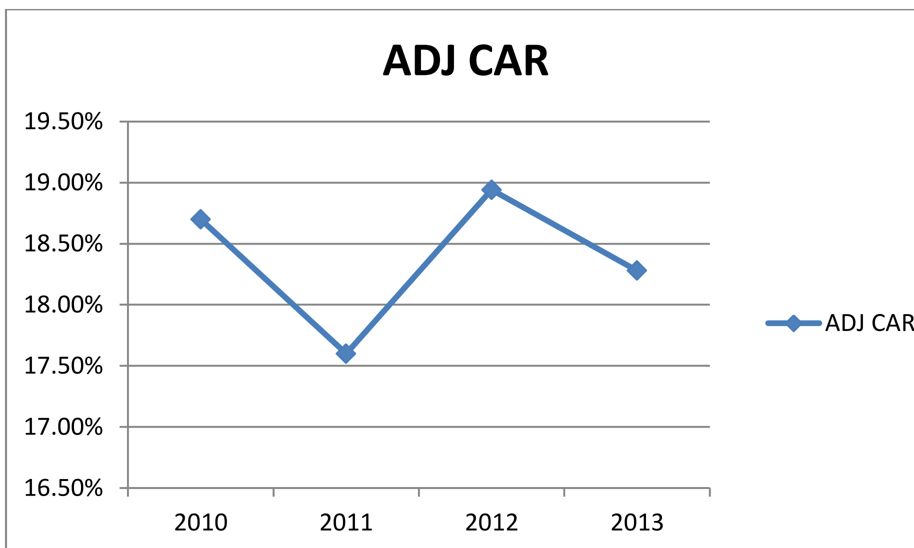
deducted value of related parties and Adjusted Total Capital Ratio as ADJCAR. We will perform the one sample T-test.

Table 1. Capital Ratios and Adjusted Capital Ratios

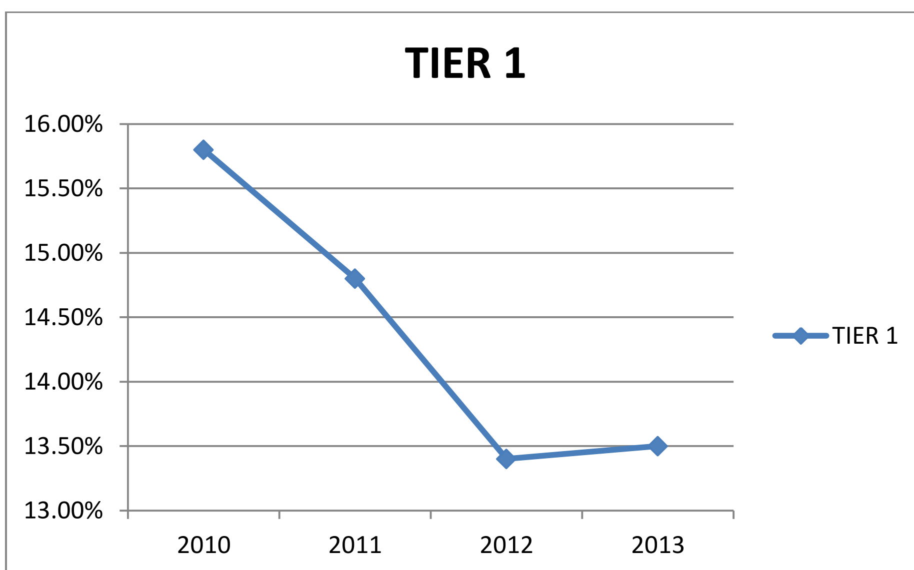
YEARS	ADJ CAR	ADJTIER1	CAR	TIER 1
2010	18.70%	15.80%	18.70%	15.80%
2011	17.60%	14.80%	17.60%	14.80%
2012	18.94%	15.45%	17.20%	13.40%
2013	18.28%	15.28%	16.50%	13.50%



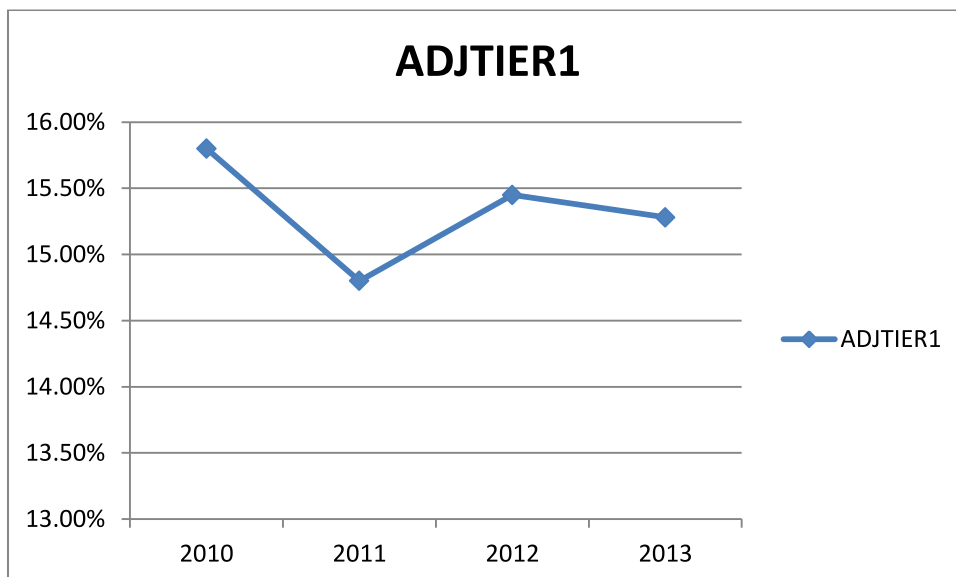
Graph 1. CAR – Total CAR during the period 2010-2013



Graph 2. Adjusted CAR – Total Adjusted CAR during the period 2010-2013



Graph 3. TIER 1 – Tier 1 capital ratio trend during the period 2010-2013



Graph 4. Adjusted TIER 1 – Adjusted Tier 1 capital ratio trend during the period 2010-2013

On the table and the graphs above we have presented the four year Capital Ratios of the Kosovo Banking Sector. The Tier 1 Capital Ratio presents the report of Tier 1 Capital and Risk Weighted Assets, while CAR presents Total Capital Ratio which is the report between Total Capital and Risk Weighted Assets. Having the information that new regulation which is in force from end of 2012. On Capital Adequacy request the deduction of the related parties' transactions from the Bank Capital we have adjusted the value by adding back the sum of related parties in order to perform the test.

Statisctical Results

Table 2. SPSS Output, One sample test

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
CAR	4	.1775	.00957	.00479
ADJCAR	4	.1850	.00577	.00289
TIER1	4	.1450	.01291	.00645
ADJTIER1	4	.1525	.00500	.00250

Table 3. SPSS Output, One sample test continued

One-Sample Test						
	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
CAR	37.079	3	.000	.17750	.1623	.1927
ADJCAR	64.086	3	.000	.18500	.1758	.1942
TIER1	22.463	3	.000	.14500	.1245	.1655
ADJTIER1	61.000	3	.000	.15250	.1445	.1605

From the results of the T test we can see that the Standard Deviation from the Total Capital (CAR) ratio is higher than in adjusted CAR ratio. The STDV on CA is .00975 while on Adjusted CAR the STDV is .00577

Also from the above result we can see that the STDV on TIER1 Capital Ratio is .1291 while on Adjusted TIER 1 is .005.

4. Conclusion

Governments have faced difficulties through the years in applying a proper regulation on banking, particularly on bank's capital adequacy. Introducing the Basel regulations has brought a new era in banking supervision. Capital adequacy requirements were clearly defined by: rules, standards, and other requests.

In Kosovo's banking sector, the first steps towards the adoption of the Basel regulations were seen in the early years, after the consolidation of its Central Bank. In 2012, the new law on banks, as well as the new regulation enforced supplanted the existing regulation. Thus, this replacement affected the capital adequacy ratio by lowering the capital ratios by the amount of exposure towards related parties.

In order to measure and verify the impact of the new regulation, we have compared both the data via t-test, by comparing the standard deviation of both (in other words, adjusted the ratio by adding back the balance with related parties and the non-adjusted ratio).

Based on the results received from this paper, we can conclude that the change on the new law and the new regulation on banking sector gave a negative impact on Capital Ratio Trend on short term periods, but have contributed on a sounded and more secure banking system, which now a days is showing a profitability of around 90 million euro, liquidity level of 36,3%, Capital Adequacy Ratio 18.2% well above the minimum of 12% and a level of 3.4% of Non Performing Loans. (Banking Sector Report, CBK, 2018)

All these ratios presented above contribute to a final conclusion, that the impact of the changes on the law on banking sector, as well as on Capital Adequacy Calculation, gave a strong long term positive impact on the stability of the Kosovo Banking Sector.

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