# Evaluation of Financial Performance of Banking Sector: Evidence from Bosnia and Herzegovina, Croatia, Serbia and Slovenia

Nađa Dreca

*International University of Sarajevo,Faculty of Business and Administration*

*71000, Sarajevo, Bosnia and Herzegovina*

E-mails: *nadja.dreca@students.ius.edu.ba, nadja_n88@hotmail.com*

**Abstract**

The objective of this study is to compare the financial performance of the banking sector in some ex- Yu countries: Bosnia and Herzegovina, Croatia, Slovenia and Serbia for period from 2005 to 2010. Banking sector of Yugoslavia was strong but because of the weakness and the collapse all these characteristics disappeared. The financial performance of banks is study on the basis of some selected financial variables and ratios, such as return on asset, return on equity, capital adequacy ratio, share of non-performing loans in total loans, participation of deposits, assets and loans in Gross Domestic Product of the country. All of the indicators improved in period until the beginning of the global crisis, but with the first signs of crisis the conditions in entire economy worsen as well as the situation in the banking sector. Data show that banking system of these countries suffers from problems largely influenced by its huge debt to IMF, political situation, financial crisis, internal situation and other political factors. The authorities of banking system in selected countries took some measures in order to improve financial position and to slowdown the negative consequences of the global crisis.

***Keywords:*** Banks, ROA, ROE, Non-performing loans, Reforms, Crisis

## 1. INTRODUCTION

The banking sector is considered to be an important source of financing for most businesses. Increase in the financial performance leads to more improved functions and activities of any organization. It has effect on total economy of the country, because banks are the sources of finance for better job opportunities; develop of new ideas; research and overall prosperity. The factors that influence performance of banks are: bank size measured by its assets, profitability measured by returns on assets and equity, size of deposits and loans, as well as the percentage of non- performing loans in the total loans.

## 2. BANKING SYSTEM

The Socialist Federal Republic of Yugoslavia (SFRY) was very important in each field, in economic and political. It had great impact on its member republics. All banks were nationalized. The system had social characteristics, introduced two-tier banking system in 60s when it left the Soviet style mono-banking system, and in 80s Yugoslavia was the most developed and the largest country in the region. The strong Yugoslavia represented a great base for development of the strong and healthy banking system. The system had social characteristics, introduced two-tier banking system in 60s when it left the Soviet style mono-banking system, and in 80s Yugoslavia was the most developed and the largest country in the region. In 1980s the Yugoslavia experienced crisis that were caused by a high exchange rate, a high fiscal deficit, and low performance in trade that were the consequences of the big recession and international crisis. During that period, national currency, Dinar, highly depreciated and it leads to the difficulties in repaying foreign loans that in previous century were taken. The government started to promote the Markovic anti-inflation program to make faster economic stabilization. The plan allowed the establishment of private and mixed firms. These new reforms were interrupted by the weakness and collapse of the SFRY. (Simon 2012)

The reforms of the banking system started in 1990s. Those reforms happened after the breaking the SFRY and separation of its republics. Separation started first in year 1991 with small military conflict in Slovenia, then Croatia (1991-1992) and Bosnia and Herzegovina (1992-1995). The military conflicts, hyperinflation, high unemployment rates and other reasons influence the flow of the political and the economic reforms. These negatively influence the position of all former republics and took away all advantages they had before as the part of the SFRY. ( Radzic and Yuce 2008)

Reforms in each country are made in order to make transformation of the socialist banking system into a new organizational form. The privatization of the banks was the most important element in the rehabilitation of the banking sector. Privatization was caused by the entrance of the foreign banks and increase in the capital shares. It was made to bring new capital and to help bank reconstruction. The foreign banks brought new way of business and new banking products on this market.

The main changes in banking system that reforms brought are:

The privatization of state owned banks and the closure of insolvent institutions

The writing- off of non-performing loans

The entry of foreign banks either by establishing an autonomous presence or by taking over local banks

The adoption of regulations according to international standards and practices

The implementation of tighter and more effective supervision exercised by the central banks and currency boards. (Stubos 2005)

## 3. ANALYSIS AND DISCUSSION

Whole economic situation in the country has impact on the banking sector. The period of crisis is marked by the worse condition in the economy. As the Table 1 presents each country experienced the decrease in these indicators in period of crisis.

Table 1: Key Economic Figures

| | B&H | | | Croatia | | | Serbia | | | Slovenia | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2005 | 2008 | 2010 | 2005 | 2008 | 2010 | 2005 | 2008 | 2010 | 2005 | 2008 | 2010 |
| Real GDP (%) | 3.9 | 5.7 | 0.7 | 4.2 | 2.2 | - 1.2 | 5.6 | 3.8 | 1.0 | 4.1 | 3.7 | 1.2 |
| Consumer prices (avg, %) | 3.8 | 7.4 | 2.1 | 3.3 | 6.1 | 1.1 | 16.5 | 11.7 | 6.5 | 2.5 | 5.7 | 1.8 |
| Unemployment rate (avg, %) | 44.0 | 41.5 | 43.2 | 18.0 | 13.2 | 17.4 | 20.8 | 13.6 | 20.0 | 10.1 | 6.7 | 10.7 |
| Budget balance (% of GDP) | 2.4 | -2.2 | -2.2 | -4.0 | -1.4 | -4.9 | 0.3 | -2.6 | -4.8 | -1.4 | -1.8 | -5.5 |
| Current account balance ( % of GDP) | -17.3 | -14.2 | -5.3 | -5.5 | -8.8 | -1.1 | -8.7 | -21.6 | -7.4 | -1.8 | -6.7 | -1.1 |
| Gross Foreign Debt (% of GDP) | 25.7 | 49 | 58.3 | 72.1 | 84.9 | 101.2 | 64.2 | 64.6 | 84.5 | 72.6 | 105.2 | 111.9 |

Source: National Sources, Raiffeisen RESEARCH

Number of the banks in the selected countries changed over the time. The number of banks in each country, in 2010 compared to 2005 decline mostly because many banks merge with each other or by some regulations some banks are closed. Foreign banks entrance was done either by acquisition of local banks or establishment of their own subsidiaries or branches. Foreign banks brought more confidence and safety in the banking sector, so that assets and deposits increased. (Ilgun and Coskun 2009)

Table 2: Number of Banks

| Year | B&H | Serbia | Croatia | Slovenia |
|---|---|---|---|---|
| 2000 | 55 | 96 | 43 | 25 |
| 2005 | 33 | 40 | 34 | 20 |
| 2006 | 32 | 37 | 33 | 20 |
| 2007 | 32 | 35 | 33 | 21 |
| 2008 | 30 | 34 | 34 | 19 |
| 2009 | 30 | 34 | 34 | 19 |
| 2010 | 29 | 33 | 33 | 19 |

Source: CBBH, CNB, NBS, BSI

As it is shown in Table 3 deposits of all countries grew, except in 2008 when it decreased due to first impact of financial crisis. Deposits of other three countries continue to grow after the crisis, but only Slovenia recorded negative deposit growth. Due to return of confidence in banks and increase in savings also the deposits of banks increased in last year. Deposits from households represent the key factor in the banking service. In period of crisis because of the large risk, citizens mostly did withdrawal from their accounts or they tried to do diversification of the risk, so they left some portion of their deposits on the accounts and part withdraw. The year 2008 is the year in which the citizens mostly lost the confidence in their banks and remove their deposits. Second part of Table 3 represents the share of the deposits of households in GDP. In 2009 the deposits increased due to reconstruction of confidence in banks, new policy of the banks to attract again back the depositors. Increase in deposits from households was creates opportunities for the increase in the supplied loans and brings stimulants in the lending activity.

Table 3: Total Deposits in % of GDP and Deposits from Households in % of GDP

| Year | B&H | Serbia | Croatia | Slovenia | Year | B&H | Serbia | Croatia | Slovenia |
|---|---|---|---|---|---|---|---|---|---|
| 2005 | 40.1 | 23.6 | 64.2 | 82.3 | 2005 | 18.6 | 12.3 | 36.8 | 35.9 |
| 2006 | 45.7 | 28.5 | 70.1 | 96.6 | 2006 | 21.3 | 14.6 | 38.5 | 35.7 |
| 2007 | 55.6 | 35.8 | 72.4 | 104.7 | 2007 | 23.7 | 18.4 | 38.3 | 34.1 |
| 2008 | 48.1 | 30.0 | 70.9 | 101.2 | 2008 | 21.1 | 15.4 | 39.4 | 34.5 |
| 2009 | 50.3 | 39.5 | 75.7 | 66.5 | 2009 | 23.6 | 22.7 | 42.1 | 38.1 |
| 2010 | 51.6 | 41.9 | 80.5 | 64.3 | 2010 | 26.8 | 26.5 | 45.6 | 38.1 |

Source: CBBH, NBS,CNB,BSI, Raiffeisen RESERCH, Author

Clients for the needs of financial activities use the banking services as dominant source of finance.

Table 4: Total Loans, Loans to Households and Loans to private enterprises in % of GDP

| Year | B&H | Serbia | Croatia | Slovenia | Year | B&H | Serbia | Croatia | Slovenia | Year | B&H | Serbia | Croatia | Slovenia |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2005 | 44.0 | 29.3 | 59.7 | 53.3 | 2005 | 20,2 | 7,8 | 29,5 | 14 | 2005 | 18,90 | 20,90 | 23,50 | 39,40 |
| 2006 | 48.3 | 29.3 | 67.6 | 64.7 | 2006 | 22,7 | 10,3 | 33,2 | 16,3 | 2006 | 18,90 | 18,60 | 27,30 | 48,40 |
| 2007 | 54.9 | 35.1 | 68.3 | 81.1 | 2007 | 26,1 | 13,3 | 35,4 | 16,5 | 2007 | 24,20 | 21,50 | 24,60 | 64,60 |
| 2008 | 58.9 | 36.7 | 72.0 | 89.4 | 2008 | 27,1 | 12,8 | 36,5 | 17,7 | 2008 | 27,30 | 24,00 | 25,60 | 71,70 |
| 2009 | 58.7 | 45.5 | 76.5 | 95.4 | 2009 | 26,3 | 16,6 | 36,5 | 20,1 | 2009 | 27,80 | 27,90 | 27,00 | 75,30 |
| 2010 | 60.1 | 53.4 | 82.9 | 93.9 | 2010 | 26 | 18,9 | 37,8 | 21,6 | 2010 | 28,60 | 32,20 | 29,90 | 72,30 |

Source: CBBH, NBS,CNB,BSI, Raiffeisen RESERCH, Author

Table above shows that loans have positive growth over the time.Banks started to implement more restrictive politics and it slowdown loans growth. The most significant factor that influence the limitation of the credit growth is the crisis that had impact on the entire economy and worse the condition in the real sector, then decrease in citizen`s spending, and more restrictive and prudent lending policies of banks. Due to the global economic crisis, consumption was reduced, as well as the volume of activities of domestic firms, which led to decline on demand for new loans. At the same time, credit conditions worsened and interest rate rose. Irregularity of debt servicing by clients increased and the banks put more attention to the credit risk exposure. Economic crisis influenced the demand for the loans. In the years when most people lost their jobs or salary decreased, their creditworthiness decrease and the banks impose more restrictive policy that leads to decrease in the growth of the loans. Growth rate in the loans to households is not high as it was before due to existence of risk on the financial markets, depreciation of currency and other factors that influence the decline in the growth rate of loans. Even if there was increase in this ratio, it is not caused by the new loans but taking loans to refinance existing one. The growth in credit provided to private enterprises was caused by the rise of the costs of performing business, increase in input prices and some other restrictive measures that crisis brought with itself. Increase in the loans to enterprises was mostly due to the needs of financing the working capital and refinance of the existing loans. Banks brought some measures in order to stimulate banking activities, lending and accumulation of deposits, change reserve requirements, make some exception on calculation of ratios, policy about currency ,they fund these changes partly from the internal sources as well as lending from external sources etc.

Table 5 illustrated for the listed countries the total assets of the banking sector as percentage of GDP in the period of 2005 to 2010. Slowing lending activities of the commercial banks resulted in a decline of assets on 2009. The banks` asset quality deteriorated considerably as a result of weakening creditworthiness of borrowers. The banking sector had a growth trend over the past years, but it was stopped due to economic crisis. The increase in balance sheet was partly due to bank recapitalization, the inflow of funds from stand-by arrangement, and requalification of bad loans. In 2010 assets again decreases because of high participation of non-performing loans and banks` loss.

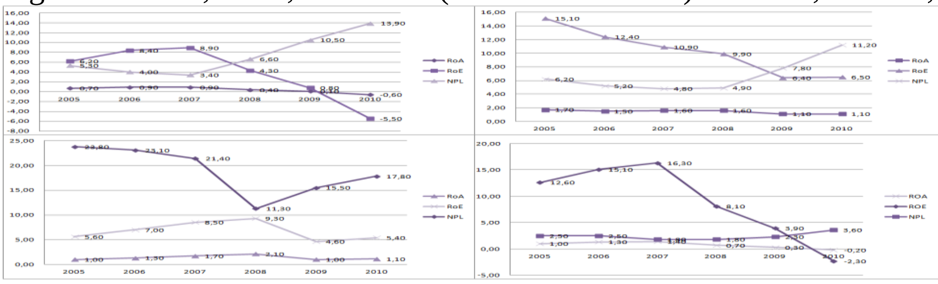
Table 5: Total Assets in % of GDP

| Year | B&H | Serbia | Croatia | Slovenia |
|---|---|---|---|---|
| 2005 | 69.3 | 54.3 | 98.7 | 99.1 |
| 2006 | 76.3 | 64.9 | 106.5 | 108.6 |
| 2007 | 89.6 | 73.6 | 108.4 | 122.1 |
| 2008 | 85.2 | 64.7 | 107.5 | 127.3 |
| 2009 | 87.2 | 84.4 | 113.0 | 145.4 |
| 2010 | 86.9 | 91.6 | 117.1 | 137.6 |

Source: CBBH, NBS,CNB,BSI, Raiffeisen RESERCH, Author

The sign of growth of ROA and ROE is changing over the time.

Figure 3: ROA, ROE, and NPL (% in Total Loans) in B&H, Croatia, Serbia and Slovenia



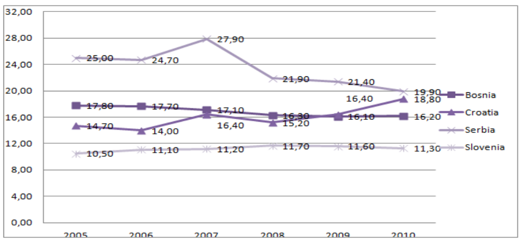

Source: CBBH, CNB, NBS, BSI, IMF

The banking sector was influenced by the economic crisis and recession, and one of the main characteristics of this sector in 2010 was a decrease in profitability of banks. The assets quality has the greatest impact on the profitability of banks. Decrease in ratio of NPL to total loans can be explained by the increase in loans especially because most loans are long term and also it influence the assets quality can be visible more in the long run. Increase in NPL had greatest impact on profitability of banks.

The reason for decrease in profitability was increase in loan loss provision, increase in loan delinquency, delay payments and downfall in interest and similar income. The profitability improvement is the result of reform and implementation of the adjustment of non-performing loans, introduction of modern banking techniques and increasing the rate of credit expansion. The percentage of NPL in the total loans in the mentioned countries increases over the time. The global financial crisis has large impact on this indicator.During the financial crisis there was downfall of asset quality and increase of non-payable claims, produced by difficulties in loan repayments. In 2010 banks did reclassification of the loans, and significant amount was moved from B to nonperforming, that results in the increase of the loan losses and had negative impact on financial performance. Due to poor performing receivables trend in delay in collecting the past due loan receivables from customers, there were activated some guarantees in a number of delinquent loans that had this type of insurance, so the burden of the loan repayment fall on the guarantors.

Capital adequacy ratio is significant indicator of financial soundness. Figure 3 shows Capital Adequacy ratio. As it is visible the ratio, all countries fluctuate over the time. Decrease in the capital adequacy ratio is caused by high participation of the risky asserts. It is always higher than minimum prescribed by law (Bosnia and Herzegovina and Serbia 12%, Croatia 10% and Slovenia 8%) and it represents satisfactory capitalization of the entire system and very strong basis and foundation to preserve its safety and stability. The restructure of state owned banks and the injection of capital by governments improved capitalization significantly. Decrease in CAR was due mainly to the increase in risk-weighted assets and increase of credit risk of them.

Figure 3: Capital Adequacy Ratio




Source: CBBH, CNB, NBS, BSI, IMF

## 4. CONCLUSION

This study provides analysis of banking sector performance measured by several indicators in the three countries that were part of ex – Yugoslavia, Bosnia and Herzegovina, Croatia, Slovenia and Serbia. Indicators show that banking sector is influenced by the global financial crisis. The performance of the banking sector in last years was under the strong impact of the global economic crisis and recession. This crisis produces many bad consequences and the adverse effects in banking sector of those countries, such as stagnation of sector, decline in profitability, increase of the non-performing assets and loans, past due receivables, loan loss provision and deterioration of other key indicators of banks` performance. In 2010 banking sector recorded the first signs of slight recovery but still there is no satisfactory condition to grow faster, so the recovery will be slow and lengthy. Each country records decrease in profitability ratios, merely due to decrease in profits, loss of provision, and increase in non-performing loans, slowing credit activity and worsening market conditions. In order to make financial situation countries took support from other sources, but in most cases it just increased debt level and makes conditions worse. In order to improve the situation in banking system better, banks should increase interest on deposits, decrease interest on loans especially for the less risky clients, to provide better banking products that help everyone in market, such as more credit cards with deferred payments on the markets; it helps everyone in way that everyone is better off, client pays without interest, it is on time payment, and bank tied client to the bank with issuing this product. More credits to small business should be provide, at the lower interest rate and economy should encourage investments domestic producers should be encouraged by more favorable conditions of borrowing also it will solve many economic problems, decline in unemployment rate by creating job opportunities, less domestic products, so it will decrease trade deficit, provide more income for domestic governments and decrease budget deficit, and country would be in better position to return the debt to IMF.

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