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

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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. The banking sector of these countries experienced reforms after the separation from the Yugoslavia. The financial performance of banks is studied on the basis of some selected financial variables and ratios that are either obtained from different sources either calculated by author.During this period the banks become privatized and there is increase in the presence of the foreign owners on the Balkans.This is mostly descriptive research that explains and provides some insights about situation in banking of the selected countries. Financial performance in this study is measured by selected indicators, such as return on asset (ROA), return on equity (ROE), capital adequacy ratio (CAR), share of non-performing loans (NPL), participation of deposits, assets and loans in Gross Domestic Product (GDP) of the country.Data show that banking system of these countries suffers from problems in the banking sector, largely influenced by its huge debt to IMF, political situation, financial crisis, internal situation and other political factors*

KEYWORDS:
Banks, Return on Assets (ROA), Return on Equity(ROE), Non-performing loans (NPL),Reforms, Crisis

ARTICLE HISTORY
Submitted: 03 March 2012
Resubmitted: 07 July 2012
Resubmitted: 07 November 2012
Resubmitted: 08 December 2012
Accepted: 24 December 2012

JEL codes: *G21*

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, development 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.

This study is organized as follows: the next section following the introduction discusses the characteristics of banking sector. Methodology of study is described in third section. The forth section provides details of the results and analysis of the available data, and final section presents the main conclusion.

Banking system

The Socialist Federal Republic of Yugoslavia (SFRY) was very strong in each field, in economic and political meaning. It had great impact on its member republics. The banking system was different than the system of other planned economics. Banks had participation in all activities for enterprises, in commercial and financial activities. All banks were nationalized.

The banking system of Yugoslavia in period from 1960 to 1980 was one of the most advanced banking systems in Central and Eastern Europe in that period. 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 National Bank of Yugoslavia controlled short-term loans, issued currency, performed general banking and agency services for government and served as a clearing house for the entire economy. The Bank through its branches had a monopoly of all commercial banking operations in the whole country.

In 1985 in Yugoslavia there were 170 banks and in one decade from 70s to 80s there was no bank liquidation or bankruptcy. 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. It negatively influenced the banks` portfolio and the growing debt of the country. Getting the agreement with Paris and London Club the debt was postponed. Failure of the reforms that were made in order to solve the crisis leads to the bringing new banking law in 1989. The government started to promote the Markovic`s 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.

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)

In order to perform better and to make system stronger there were introduced some measures such as implementation of solvency ratio, limiting the total amount of the assets to less than fifteen times the equity, also to decrease the risk exposure the ceilings on the foreign credits were imposed. National Bank of Yugoslavia had right to issue for bank licenses. It could initiate rehabilitation procedures if losses exceed permanent bank reserves. Yugoslav financial system was characterized by widespread substitution of dinars by hard currency such as German Mark (DM). Citizens started to use more foreign currency to keep their savings and for making transactions and dinar lost its role as a store of value. It leaded to loss of control by monetary authorities over the domestic money supply. (Simon, 2012)

Reforms in each country are made in order to make transformation of the socialist banking system into a new organizational form.

Reconstruction of the banking system in Bosnia and Herzegovina started after the Dayton Agreement, after which Bosnia is divided in two entities, Federation of Bosnia and Herzegovina (FBiH) and Republic of Srpska (RS). The entities got the authority over the privatization and supervision of the banks. The reforms started in

1997 in FBiH, and in RS in 1998. The reforms were faster in Federation B&H. The most important step toward the reforms was the establishment of the entities banking agencies, in the end of 1996 Federal Banking Agency, and Agency for Banking RS in 1998. Their main activities of agencies are to issue and to revoke license to banks and their supervision.In accordance with the concluded agreements, Central Bank of Bosnia and Herzegovina(CBBH) continued to act as the banking and fiscal agent of the Banking Agency of the Federation of Bosnia and Herzegovina (FBA) and the Banking Agency of the Republic of Srpska (BARS). Banking Agency functions are directed towards a strong and stable banking system, as market-oriented and based on the international standards of performance and supervision of banks. The main tasks of FBA include: issuance of banking license, adoption of regulations, supervision of banks, microcredit organizations and leasing companies and measures taken in accordance with the Law, including initiation of provisional administration and liquidation in banks, initiation of bankruptcy procedure over banks.

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. Western banks have the largest share. The foreign banks entered this market because of the new opportunities for business and good market conditions to offer their products. The foreign banks brought new way of business and new banking products on this market.

Reforms in Slovenia stated in 1991 by establishing the Bank Rehabilitation Agency (BRA) to help the implementation of reforms. The largest Slovenian banks past through the rehabilitation process and they showed the positive results such as a decrease in non-performing loans, increase in profits, and institutional and organizational improvements. Also the privatization of the state –owned banks was key factor in reforms. Banks are governed by Bank of Slovenia.

Reforms in Serbia started mostly in 2002 when Serbia decided to liquidate the four the largest banks because of highly unrecoverable losses, large decrease in the deposits, and people's loss of the confidence in the banks. National Bank of Serbia is responsible for banks in Serbia.

The banking reform in Croatia had three stages: financial reconstruction, writing off debts and transfer of bad loans to workout agency, changes in management and operational restructuring and the privatization by foreign owners. (Bonin, 2001) Also Croatian reforms included big bonds issued in response to problems with bank insolvency and bonds for old currency savings accounts. Reforms also include privatization of banks. National Bank of Croatia governs the banks in Croatia.

In 1996, in Bosnia and Herzegovina there was 53 banks mainly private owned, 23 banks were state-owned. The decrease of the number of the banks was due to bankruptcy, consolidation and the merging the banks. In 2005 there were 33 banks. Most banks become in the foreign ownership.
In 1998 the number of banks in Croatia was 96 mostly in private ownership. The decrease in the number of the banks was mainly caused by the bankruptcy and the mergers. In 2005 there were 34 banks.
In 1997 the number of the Serbian banks was 106 and it decreased to 40 banks in 2005 due to privatization and merging.
In 1995, 41 banks were licensed for operation in Slovenia.

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, G. and Tsikripis, 2004,2005)

Methodology

This research paper will use the cross-country comparison methodology and examine the following aspects:

- Size and structure of the banking sector, measured by the number of the banks
- Loans and Deposits as the percentage of Gross Domestic Product
- Profitability of the banking sector, measured by return on assets (ROA), return on equity (ROE), total assets as percentage of GDP and capital adequacy ratio (CAR)

Data has been analyzed and interpreted using the financial indicators, financial ratios, references and personal judgment. In order to find the trend of behavior of the ratios, the average value of ratios in period from 2005 to 2007, before crisis and for period during and after crisis, from 2008 to 2010 were calculated and compared. Data are obtained from the sites of Central Banks of selected countries and from their financial reports, annual reports for period 2005 to 2010, EBRD, IMF and WB. I also used some graph to analyze my findings. This is descriptive research because it describes information which is taken from annual reports and other reports. Also research is quantitative because there is analyze of numerical data.

Analysis and Discussion

This section represents the discussion about analysis of the banking sector. It analyzes the size of the sector, financial performance through number of banks, assets, loans and deposits, and profitability ratios such as Return on Assets (ROA), Return on Equity (ROE), Non-performing Loans (NPL) and Capital Adequacy Ratio (CAR) of the banking system of the selected countries.

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 Figure

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

Source: National Sources (period 2005 to 2010), Raiffeisen RESEARCH

The real GDP growth of selected countries is declining and even reached negative sign. In each county in 2009 the growth was negative, and in 2010 only Croatia still has negative growth rate of GDP, while others show slightly positive change. The reason of the decrease in GDP is increase in unemployment, decrease in wages, decrease in production and consumption, as well as the trade deficit.

The average consumer price indicator was high in period crisis, but in last year it is decreasing, but still there is so high influence of crisis on the well being of the citizens. Because of the crisis the prices of imports increases, especially because these countries are mostly import oriented. Serbia records the highest inflation rate of 6.5%

As everywhere, also in these selected countries the crisis brought unemployment. The highest average unemployment rate has Bosnia and Herzegovina (43.2%) compared with other countries from sample. It is caused because most companies are closed, decrease in the number of working places, worsening working conditions.

Each county recorded the negative budget balance. The reason for this might be the bad collection of the government income and high debt and expenditure. The worst budget balance in 2010 has Slovenia (-5.5%) compared with Bosnia and Herzegovina that still has deficit, but it is lower than in other countries (-2.2%).

The external debt of each country increased over the period, especially in Bosnia and Herzegovina because of the Stand-by-arrangement with IMF, and Slovenia as the EU country and suffers from European crisis.

Number of Banks

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. Most of the banks are in the foreign ownership. It is the result of the increasing competition and it increase strength and safety and soundness of banking institutions. Foreign banks have better position because of their access to the financial markets and they are able to obtain borrowings with the financial support of their parents` banks. The privatization of state owned banks was a critical element in the process of banking reforms. Foreign banks entrance was done either by acquisition of local banks or establishment of their own subsidiaries or branches. Banks are most in the ownership of Austria and other West countries. In 2010 the highest foreign share in Bosnian banks had Austria and it represents the dominant owner with a share of 64.4%, and it increased compared to 2005 (45%). Some studies say that foreign banks in developing countries generate more profits, have higher interest rates than domestic banks, the presence of these banks increase competition in the market and it can also increase the costs of the domestic banks. Also in the countries with higher level of foreign bank participation, firms easier access to the credits. Study shows that foreign banks are more efficient than domestic banks. Foreign banks brought more confidence and safety in the banking sector, so that assets and deposits increased. Entrance of the foreign owned bank helped the process of the reformation in these countries.. (Ilgun and Coskun, 2009)

In 2005 the market share of foreign owned banks (% of total assets) in Slovenia was 38.6%, Serbia 69%, Croatia 91.3% and in Bosnia and Herzegovina 90.7% compared to 2010 with market share in Slovenia 37.1%, Serbia 72.5 % , Croatia 90.3 and Bosnia and Herzegovina with 96.6%. It can be concluded that the highest participation of foreign owned banks is in Bosnia and Herzegovina. Participation of the foreign banks in Bosnia and Herzegovina and Serbia increased compared to 2005, while in Croatia and Serbia there was slight decrease.

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(2005 -2010)

Deposits

Deposits represent the important part of the banking. By the size of the deposits in banking system the power of the system can be measured and it serves as good indicator of the health of system. The deposits represent the key factor in starting the business and health of banking system.

Table 3. Total Deposits in % of GDP

Year	Bosnia and Herzegovina	Serbia	Croatia	Slovenia
2005	40.1	23.6	64.2	82.3
2006	45.7	28.5	70.1	96.6
2007	55.6	35.8	72.4	104.7
2008	48.1	30.0	70.9	101.2
2009	50.3	39.5	75.7	66.5
2010	51.6	41.9	80.5	64.3

Source: CBBH, NBS, CNB, BSI,(2005 to 2010)Raiffeisen RESERCH, Author

According to the table 3 it is seen that deposits as the percentage of GDP has positive growth rate, except in year 2008.In each country in 2008 there was decrease in the deposits, especially because of the global financial crisis that has effects on the finance in those countries. In the last years, deposits again grow in these countries, slightly because of some measures taken by governments to make financial situation better, but in Slovenia it did not recover and it has negative growth rate since 2008. During beginning years of the financial crisis most of the citizens withdraw their deposits from banks and it explains the decline in the deposits level in those countries. The European crisis has large impact on the deposits.

In Bosnia and Herzegovina the deposits grew in period from 2005 to 2007, and average share of deposits in GDP in period from 2005 to 2007 was 47.1%, in period during and after crisis the participation of deposits in GDP on average was 50%. It shows that average deposit share in last three years is larger than in previous by 2.9 %.During the financial crisis in 2008 deposits fall from 55.6% to 48.1% or by 7.5%.The deposits are growing after the crisis, but not at the same rate as before and it has not reached the level of 2007. The deposit share in GDP in 2007 is higher than in 2005 by 15.5 %, while in 2010 it is lower than in 2007 by 4%. The highest deposit share was in 2007 due to privatization and increase in government deposits.
Share of Deposits in GDP of Serbia increased in period before the crisis and average share was 29.3% before the crisis, and after crisis it is 37.1% and there is increase in the average share by 7.8%. Deposits in 2007 compared to 2005 increased from 23.6% to 35.8% or by 12.2%, while in 2010 compared to 2008 the deposits increased by 11.9%. The deposit share in year 2008,declines merely because of the withdrawal of savings. Deposits in 2010 have the highest value and it is higher than in 2007 by 6.1%.Increase of deposits in last two year was caused by increase in savings, or by restoration of savings and returns of confidence in banks.

In Croatia the average deposit participation in GDP in period before crisis was 68.9% and deposits were growing until 2007 then in 2008 it decreased due to financial crisis. Compared to 2005, the share of deposit in GDP in 2007 increased by 8.2%, from 64.2% to 72.4%. In 2008 deposits decreased to 70.9% and again it started to grow in the next years. The average share of deposits in GDP of Croatia after crisis was 75.7% and compared to period before crisis it increased by 7.8%. The share of deposit in 2010 compared to 2008 increase by 9.6% and it has higher value than in 2007.

Slovenia is the EU country that according to the data shows large decrease in participation of deposits in GDP. In period before crisis it has positive growth rate and in 2007 it accounted for 104.7% of GDP and it was higher by 22.4 %then in 2005. In period of crisis it started to decrease and in 2008 it had value of 101.2% of GDP while in 2010 it decreased by 40.4% of GDP. Average value of share of deposit before crisis in period from 2005 to 2007 was 94.5%, and in period after crisis average participation of deposits in GDP decreased to 77.3%. One of the reasons for this lies in the fact that is that Slovenia as the EU country was most hurt by global crisis

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. The average deposits in Serbia and Croatia in period after crisis grow by 7.8% compared to pre crisis period, and in Bosnia and Herzegovina by 2.9%, while in Slovenia it fall by 17.2%. Due to return of confidence in banks and increase in savings also the deposits of banks increased in last year.

Table 4. Deposits from Households in % of GDP

Year	Bosnia and Herzegovina	Serbia	Croatia	Slovenia
2005	18.6	12.3	36.8	35.9
2006	21.3	14.6	38.5	35.7
2007	23.7	18.4	38.3	34.1
2008	21.1	15.4	39.4	34.5
2009	23.6	22.7	42.1	38.1
2010	26.8	26.5	45.6	38.1

Source: CBBH, NBS, CNB, BSI,(2005 to 2010)Raiffeisen RESERCH, Author

Deposits from households represent the key factor in the banking service. It provides funds for loans that are the main source of financing many needs, private and business needs. The global crisis influenced the households` deposits in the banks. 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. Table 4 represents the share of the deposits of households in GDP. Bosnia and Herzegovina and Serbia recorded small decrease in households` deposits, 2.6% and

3.0% respectively. The average deposit share in period before crisis in Bosnia and Herzegovina was 21.2% and in period after crisis it increased to 23.8%. Serbia has the highest change in deposits before and after crisis, there is increase by 6.4%, from 15.1 % in period from 2005 - 2007 to 21.5% in period after, from 2007 to 2010. Also Croatia recorded the high change in average deposits; it increased from 37.9% to 42.4%. Slovenia has the smallest increase in the average participation of the deposits from households in the GDP, it just increased by 1.7%. In 2009 the deposits increased due to reconstruction of confidence in banks, new policy of the banks to attract again back the depositors, so the deposits raised in year 2009 compared to 2008 as following: in Bosnia and Herzegovina by 2.5%, Serbia 7.3%, Croatia 2.7% and in Slovenia 3.6%.

Increase in deposits from households was creates opportunities for the increase in the supplied loans and brings stimulants in the lending activity.

Loans

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

Table 5. Total Loans in % of GDP

Year	Bosnia and Herzegovina	Serbia	Croatia	Slovenia
2005	44.0	29.3	59.7	53.3
2006	48.3	29.3	67.6	64.7
2007	54.9	35.1	68.3	81.1
2008	58.9	36.7	72.0	89.4
2009	58.7	45.5	76.5	95.4
2010	60.1	53.4	82.9	93.9

Source: CBBH, NBS, CNB, BSI, (2005 to 2010) Raiffeisen RESERCH, Author

Table above shows that loans in Croatia, Slovenia and Serbia have positive growth over the time. Only in B&H during 2009 the loans slightly decline especially because most people lost the job, and they were afraid of financial crisis so they took fewer loans. Later in 2010 the loans start to increase and achieved level at 2008. Also 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. The lending activity decreased in the course of 2008, as a continuation of the trend began in late 2008. 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.
In Bosnia and Herzegovina the share of loans in GDP increased over the time. Total loans participation in GDP was lower only in 2009 by 0.2 percent point compared to 2008. Participation of loans in 2007 compared to 2005 was higher by 10.9%, while in 2010 compared to 2007 by 5.2%, and it is twice less. The highest increase was in 2007 or by 6.3% compared to 2006. Average participation of loans in period after crisis was 49.1% and after it, the share was 59.2 or there was 10.1% increase. Loans in pre crisis period has larger growth rate, then in period after. In order to make position of clients better, bank did reprograms of existing loans. The reason for this is more restrictive banks condition to obtain credit and increase in interest rates.

Participation of loans in GDP of Serbia increases over time and in 2007 it had value of 35.1% and in 2010 it increased to 53.4% so there was increase by 18.3%. Average participation of loans in period before crisis was 31.2% and it increase by 14% in period after crisis. The reason for increase in total loans is better conditions to obtain credit and responds from banks, increase in the prices of real estates and increase in collaterals. The highest increase was in 2009 or by 8.8% compared to 2008. Lending of the banking sector slowed in response to increased investment risk in crisis conditions.

Loans in Croatia grow over time and the highest increase was in 2010 by 6.4% compared to 2009. The average participation of loans before crisis was 65.2% and it in period after it increased to 77.1% or by 11.9%. Increase in loans participation in 2007 compared to 2005 was 8.6% while in 2010 compared to 2008 it increased from 72% to 82.9% or by 10.9%.

Slovenia also experienced the growth in loans participation in GDP until 2010 when it decreased by 1.5% compared to 2009. Average participation of loans in pre crisis period was 66.4% and it increased to 92.9% in period after or by 26.5%. Total loans participation of loans in GDP in 2007 was 81.1% and it is higher by 27.8% than in 2005, while in 2010 compared to 2007 it increased by 12.8%, more than two times less than in first three years. The low growth in loans was result of low creditworthiness, rising cost of loan collateral.

Among these four countries Slovenia experienced the largest growth of average participation of loans in GDP on the annually basis. The share of loans in GDP in period after crisis increases by 26.5%, in Serbia 14%, in Bosnia and Herzegovina it is 10.1%, and in Croatia 6.9%. All countries, except Slovenia recorded the growth in the selected period. Slovenia reports decrease in 2010 by 1.5% compared to previous year.

Table 6. Loans to Households in % of GDP

Year	Bosnia and Herzegovina	Serbia	Croatia	Slovenia
2005	20.2	7.8	29.5	14.0
2006	22.7	10.3	33.2	16.3
2007	26.1	13.3	35.4	16.5
2008	27.1	12.8	36.5	17.7
2009	26.3	16.6	36.5	20.1
2010	26.0	18.9	37.8	21.6

Source: CBBH, NBS, CNB, BSI, (2005 to 2010)Raiffeisen RESERCH, Author

Today loans are the key factor of financing many activities, such as ordinary purchase or purchase of home, starting business or some other activities that need lots of funds. Due to high destruction in economy of ex-Yu countries, the citizens in order to obtain more in their life take many loans. 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. Serbia had decline in loans to households by 3.8% in 2008 compared to 2007.Bosnia and Herzegovina after 2008 has negative growth rate of loans to households, while other countries has slight increase in loans. Banks implemented more restrictive policies in approving new loans, which was one of the biggest limiting factors for the placement of new loans, in addition to reduced consumption and slowing economic activity. Average participation of loans in the period after crisis is higher than in period before. The average participation of loans of households in GDP in Bosnia and Herzegovina increased by 3.5%, in Serbia 5.6%, in Croatia by 4.3% and in Serbia it increased by 4.2%. Reason for increase is decrease in the reserve requirements ratio in Bosnia and Herzegovina. 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 currencyand 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.

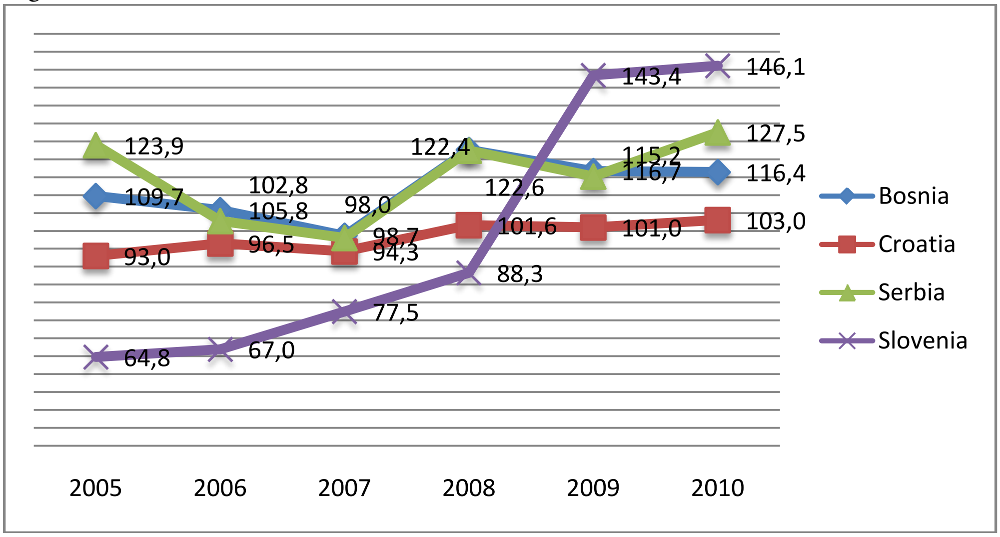
Table 7. Loans to Private Enterprises in % of GDP

Year	Bosnia and Herzegovina	Serbia	Croatia	Slovenia
2005	18.9	20.9	23.5	39.4
2006	18.9	18.6	27.3	48.4
2007	24.2	21.5	24.6	64.6
2008	27.3	24.0	25.6	71.7
2009	27.8	27.9	27.0	75.3
2010	28.6	32.2	29.9	72.3

Source: CBBH, NBS, CNB, BSI,(2005 to 2010) Raiffeisen RESERCH, Author

Loans to enterprises are very important factor for the entire economy of the country. It creates funds for establishing business, creating new job opportunities, support business and help the improvement in working condition. The global crisis also influence the credit to private enterprises, because some of the companies are closed due to severe conditions on the market, decrease in demands for their products, lower supply, while the input prices raised. Table 7 shows that the loans to enterprises had positive growth, but in some countries during the crisis period it was slow growth. 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. Banking sector of selected countries reported the growth of the average participation of the loans to private enterprises in GDP of countries. This increase in period after crisis compared to period before was in Bosnia and Herzegovina by 6.8%, in Serbia by 7.7%, in Croatia it is increase by 2.4% and among these countries Slovenia has the highest increased by 22.3%. Slovenia as the European country needed to inject large capital to support its private sector due to severe consequences of crisis in the Europe. In 2009 the banks in Bosnia and Herzegovina makes reprogram of the loans possible to households and corporate in order to continue with their activity. It influenced the increase in the loan supply. Serbia implements the policy of the subsiding loans. Increase in the loans to enterprises was mostly due to the needs of financing the working capital and refinance of the existing loans.

Figure 1. Total Loans in % of GDP



Source: CBBH, NBS, CNB, BSI, (2005 to 2010)Raiffeisen RESERCH, Author

Main source of the financing the loans are the deposits. In most cases they are not enough to cover all loans so the banks find new sources to provide new loans. It is done either by borrowing from other sides, from their parents` banks or by some other policy that will increase loans` supply. In these selected countries in some periods the deposits could not be enough to satisfy the demand for loans. In the period from 2005 to 2008, in Croatia and Slovenia the deposits were enough to cover loans, but in next period as well as in other countries banks deposits were lower than demand for loans, so the banks used other funds to provide additional loans, and to cover the difference. In Bosnia and Herzegovina decrease in minimum reserve requirement ratio helps the supply of the loans so the banks had more available funds for loans. Bosnia and Herzegovina records the largest ratio of loans to deposits in 2008, and Serbia, Slovenia and Croatia in 2010. Average loans to deposit ratio in period after crisis is higher than in period before crisis. The highest change is in Slovenia. It increased from 69.8% to 125.9% or by 56% and it is really large changed compared to other selected countries. In Bosnia and Herzegovina it increased by 13.9%, in Serbia by 13.5% and in Croatia by 7.3%.

In period after crisis to correct for the consequences of the crisis, 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.

Assets

Assets serve as a good measure of the size of the banking sector. They are key factor in determination of the banks value.

Table 8. Total assets in % of GDP

Year	Bosnia and Herzegovina	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, (2005 to 2010)Raiffeisen RESERCH, Author

Table 8 illustrated for the listed countries the total assets of the banking sector as percentage of GDP in the period of 2005 to 2010. It is seen that assets of Croatian Banks and Serbian has almost always the positive growth rate over the period, but in 2008 these three countries experienced the decrease in the total assets. Later it increased. The reason for negative growth is financial crisis, high participation of non-performing assets and it leads to the decrease in the total assets of the banking sector.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.

Bosnia and Herzegovina in period from 2005 to 2007 recorded the growth in assets, then in 2008 it decreased and again in later years it starts to increase. In 2007 the assets share was the highest because of the inflow of capital from the privatization of Telecom RS. Decrease in NPL had positive impact on the growth of assets, because the share of nonperforming assets in total assets decreaseduntil 2007. The share of assets in 2007 compared to 2005 was higher by 20.3%. In 2008 the share of NPL increased and it negatively influenced the total assets and it decreased by.3.6

percentage points compared to 2007. Decrease in credit activity in leads to decrease in assets. 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.

Average asset participation in GDP in period after crisis was 86.4% and compared to period before it is higher by 8%. In 2010 assets again decreases because of high participation of non-performing loans and banks` loss.

Serbia also experienced the increase in asset share in GDP. In period before crisis the average participation of assets in GDP was 64.3% and it period after it increased to 80.2%. In 2008 the assets decreased by 8.9% and later it continues to grow. The highest increase in asset participation was in 2009 by 19.7% compared to 2008. In 2010 the asset participation grew to 91.6% from 64.7% in 2008. Increase in assets was caused by the increase in loans in period 2009 and 2010.

Increase in assets in Croatia was related to the increase in loans in period from 2005 to 2007. Increase in assets` share in GDP in 2007 compared to 2005 was 9.7% and in 2010 compared to 2008 it increased from 107.5% to 117.1% Average participation of assets in GDP in pre crisis period was 104.55 and it increase to 112.55 in period after

Slovenia shows increase in the participation of assets in GDP over the time but in 2010 it reports decline in share of assets by 7.8%. Participation of assets in first three years was 109.9% and in after crisis period it is 136.8% or it increased by 26.9%. Asset share in 2007 compared to 2005 increased by 23%. The highest increase in asset participation was in 2009 and it is higher by 18.1% compared to the previous year. The main reasons for decline in total assets were the banks` continuing debt repayments to banks in the rest of the world, the repayment of funding obtained in Eurosystem and the withdrawal of government deposits.

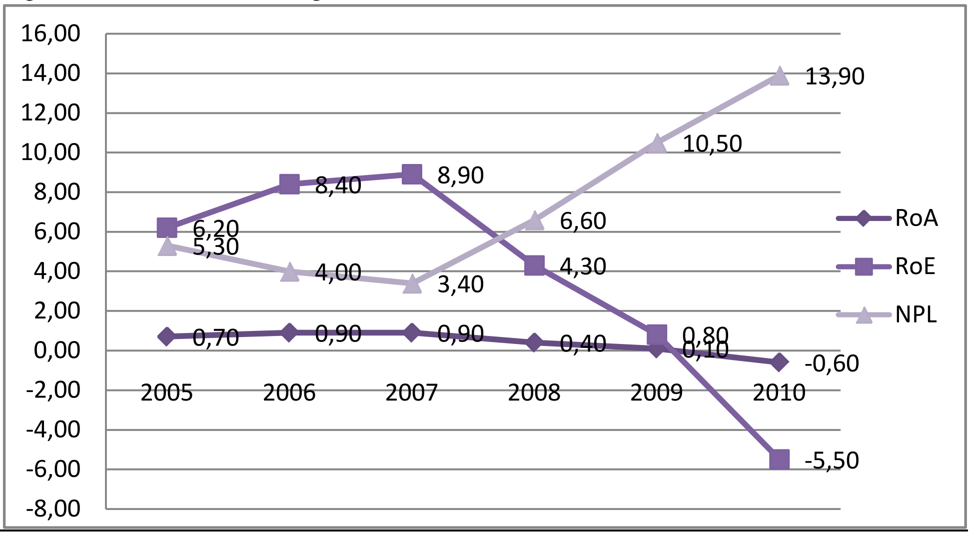
All countries experienced the growth of asset participation in the period before crisis. Assets share of Serbia and Croatia continues to grow after fall in 2008, while in Slovenia it decline only in 2010. Bosnia records positive growth in 2009 after crisis, but in 2010 it had slightly decreased.

ROA, ROE and NPL in Bosnia and Herzegovina, Croatia, Serbia and Slovenia

The profitability indicators Return on Assets (ROA) and Return on Equity (ROE) are very important in order to measure how the system performed over the time. Many other variables have high impact on these ratios, not only profits or loss, but also the structure of assets, participation of non- performing loans (NPL), value of deposits, depreciation of currency, income from interest etc.

The figure 2 represents the profitability indicators of banking sector in Bosnia and Herzegovina. As it is seen, there is increase in the non-performing loans and decrease in the profitability indicators over the time.

Figure 2. Bosnia and Herzegovina: ROA, ROE and NPL (% of Total Loans)



Source: CBBH, IMF(2005 to 2010), Author

The sign of growth of ROA always change. In B&H it has the highest in 2006 and 2007 then starts to diminish and in 2010 it reaches negative sign of 0.60 because the banking sector register the loss. The sign of the growth of ROE is changing over the time, in Bosnia it is almost always declining then in last year it shows negative sign -5.50% because the system report the loss and it is 6.30% less compared to 2009 or 14.4% less compared to 2007. The share of non-performing loans to total loans increased to 13.90 % in 2010, which was 3.4 percentage points more compared to the end of 2009. The banking sector in Bosnia 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. In 2010 the banking sector recorded a negative financial results and banks reports the loss in business. The reduced value of ROE was caused by decrease in profits and losses of the business in the banking system.

Return on Assets was -0.6% at the end of 2010 and there is decrease of 0.7 percentage points relative to the end of the 2009. The assets quality has the greatest impact on the profitability of banks.Increase in profitability ratios is caused by increase in the profits.

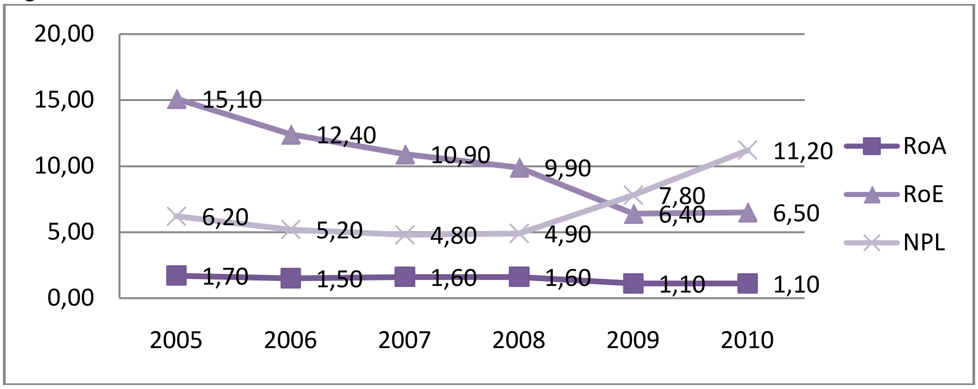
Until the end of 2007 the NPL decreases by 1.9 percentage points compared to 2005 and this decrease in ratio of NPL to total loans can be explained by the increase in loans especially because most loans are long term and also it influence the assets quality can be visible more in the long run.

Average increase in ROA in period after crisis was 0.83%, while in period after crisis it has negative sign and value of -0.03%. There is drop of average value ROA in period after crisis by 0.86% compared to period before.

Same happened with average value of ROE. In pre crisis period it had value of 7.83% and in period after crisis it declines by 7.96% to -0.13%.

Increase in NPL had greatest impact on profitability of banks. During period 2005 to 2007 NPL decreased, and average value was 2.93% and in period after crisis it is 10.33% so it increased by 7.4%. In 2010 the participation of NPL in total loans was 13.90% what is by 10.50% higher than in 2007 or four times more.

Figure 3. Croatia: ROA, ROE and NPL (% of Total Loans)



Source: CNB, IMF, (2005 to 2010), Author

The situation in Croatian Banking system is similar as in the other Balkan`s countries. The profitability of banking sector over the time decreased mostly because of the loss of the provision, high loans which payments are delayed, participation of non-performing loans, and decrease in deposits. Compared to 2005, ROE in 2010 more than two times declines, while percentage of non- performing loans in total loans almost doubled in 2010 compared to 2005. ROA declines over the time because of the participation of non-performing assets and decrease in deposits.

Decrease in ROE was connected with recapitalization of the banks in 2007 from 12.4% to 10.90%.

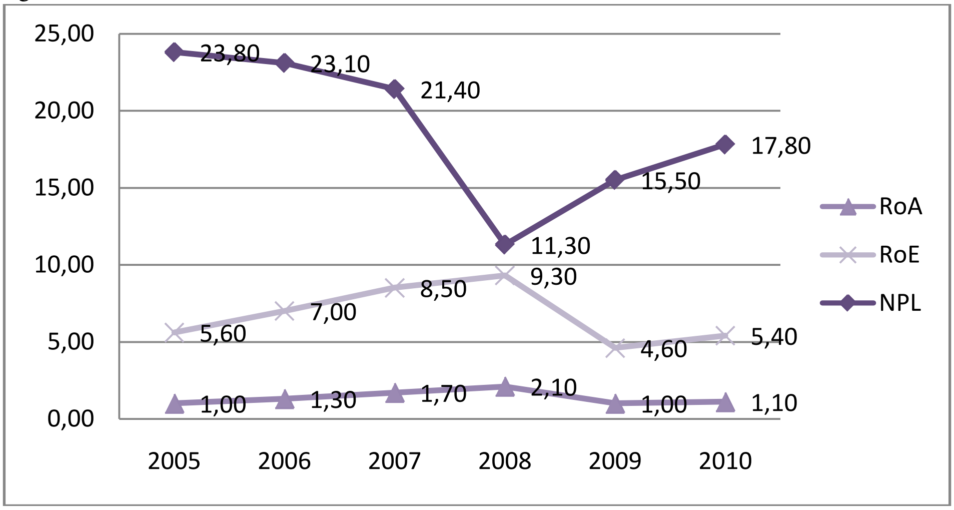
Average value of ROA in period from 2005 to 2007 was 1.6% and it decreased in last three years from 2008 to 2010 to 1.27% or by 0.33percentage points. ROA oscillates over the time, and in last two years it had value of 1.10% and it is less than 2008 by 0.5%

Value of ROE on average for the period 2005 to 2007 was 12.8% and it decreased to 7.6% in period after crisis, so there was drop by 5.2%.ROE decreased over the time, and it shows slightly increase in 2010 of 0.1 % compared to 2009. But there is decrease in ROE in 2010 to 6.5% from 15.10% in 2005.

Average participation of NPL in total loans in pre crisis period was 5.4% and in period after crisis it increased by 2.8% to 8% on average. In period before crisis NPL participation was decreasing and in 2007 it decreased by 1.4% compared to 2005. In crisis period the NPL started to increase and in 2010 it had value of 11.2% or 6.3%

more than in 2008. This increase merely due to high loans level and delayed payments because of the problems in entire economy caused by the change in economic indicators.

Figure 4. Serbia: ROA, ROE and NPL (% of Total Loans)



Source: NBS, IMF, (2005 to 2010), Author

The banking system of Serbia experienced the same situation as it is in other countries. Financial crisis has large impact on the financial performance. The profitability of banking sector increased until 2008 then again it reports negative growth. Until 2008 the percentage of non-performing loans decreased and it leaded to the increase in the profitability ratios, ROA and ROE. It increased the quality of assets and equity, as well as the profits in the sector, then again in the last years of financial crisis the system slowdown and reports lower ratios and decrease in financial performance because of the increase in the non-performing loans. The highest impact on increase in ROA and ROE was due to large collection of income from interest.

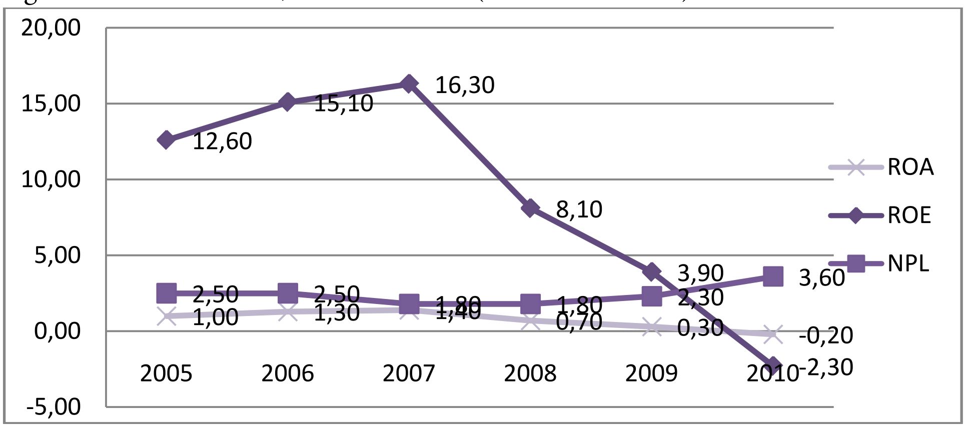
ROA before the crisis on average had value of 1.33% and in period after crisis it increased to 1.4%. The highest ROA was recorded in 2008 and had value of 2.1% what is by 0.4% higher than ROA in 2007 and by 1.1% then in 2009.

Return on Equity worsted from 9.30% in the 2008 to 4.6% in 2009. Average ROE in period 2005 to 2007 had value of 7.03% and in period after crisis it decreased to 6.4%. The highest value of ROA was in 2008 until when the ROE increased and had value of 9.30% that is 3.7% higher than in 2005, and in 2010 it decreased to 5.40 or by 3.9%. As the other countries suffer from losses in period crisis, also Serbia banking sector recorded losses and it influence its profitability indicators.

NPL decreased until the 2008 and it had value of 11.3% compared to 23.8% in 2005. Under the impact of the crisis, the share of bad loans rose significantly. It start to grow again and in 2010 it reached value of 17.8% what is by 6.5% higher than in 2008.

As it happened to the other three countries from this study, also it happens in Slovenia negative effects of the global financial crisis. From Figure 5 it can be seen that until 2008 the system reports positive changes, while under the effect of crisis it slowdown, and profitability decreased as the participation of bad loans increases. In last year the system reports loss and it leads to the negative profitability ratios in the banking system of Slovenia. In 2010 compared to 2005 the ROA decreased more than 5 times. ROE in 2008 had sharp decline compared to the previous year. It decreased twice.

Figure 5. Slovenia: ROA, ROE and NPL (% of Total Loans)



Source: BSI, IMF, (2005 to 2010), Author

Slovenia also as the result of the global financial crisis experienced the decline in profitability ratios. Domestic demand and investment remain weak, unemployment remains high.

Average value of ROA before the crisis was 1.23% and in period after it decreased to 0.27% or by 0.96% until 2007 ROA grew and then it starts to decline and in 2010 it had value of – 0.2% so there was decline of 1.6% compared to 2007. Increase in NPL had negative impact on ROA.

Average value of ROE in pre crisis period was 14.7% and it decreased to 3.2% in period from 2008 to 2010 or by 11.5%. In pre crisis period ROE grew and it increased to 16.30% in 2007 what was 3.7% higher than in 2005. In 2008 the ROE decline more than twice from 16.3% to 8.10%, then again twice in 2009 from 8.10% to 3.9% and in 2010 it reached negative value of - 2.3% and there was decrease by 18.6%% compared to 2007.

The average participation of NPL in total loans did not have large average change before and after crisis, the value of ratio before crisis was 2.27% and after 2.57%. In period until 2008 it decreased and again starts to decrease and in 2010 it had value of 3.6% twice than in 2008 and 2007.
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. Most of the people lost the job, and the value of NPL increases over the time.

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- category (Bank`s classification of loans due to time of default) 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

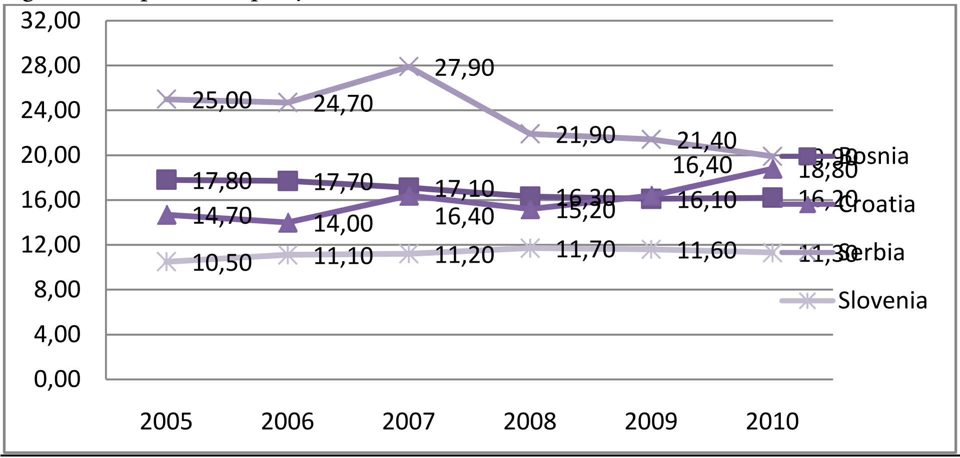
Capital adequacy ratio is significant indicator of financial soundness. It represents net capital over total weighted risks.

Figure 6shows Capital Adequacy ratio. As it is visible the ratio, all countries fluctuate over the time. In Bosnia it has diminished as well as in Serbia. 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.

Capital adequacy ratio increased over period in Bosnia and it shows positive effects. The increase in the capital adequacy ratio during the observed period was due to growth in banks' own funds, the change in methodology of exposure calculation.

In Serbia the CAR reached 21.4% in 2009 and it was lower by 0.5% percentage points relative to 2008 due to faster growth in risky assets. Decrease in CAR was due mainly to the increase in risk-weighted assets and increase of credit risk of them.

Figure 6. Capital Adequacy Ratio



Source: CBBH, CNB, NBS, IMF(2005 to 2010)

Average value of CAR in Bosnia and Herzegovina before the crisis period was 17.53% and in period after it decreased to 16.20%. The highest CAR was in 2007 because of high capital inflow from privatization and in 2010 it decreased by 8% compared to 2007.

Serbia CAR also decreased over time; in period from 2005 to 2007 it had value of 28.87% and it lower to 21.07 % in period 2008 to 2010.

Croatia shows increase in average value of CAR. In period from 2008 to 2010 the average value of CAR was 16.8% and it is by 1.8% higher than in period 2005 to 2007.

Slovenia also records increase in average value of CAR in period after crisis and it had value of 11.53% what is by 0.6% higher than in period before crisis.

These countries record the decrease in CAR because most of the capital was withdrawn and the quality of assets is deteriorating, so the participation of risky assets decreases the ratio. But each country keeps ratio above the minimum prescribed.

Conclusion

This study provides analysis of banking sector performance measured by several indicators in the four 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. Bosnia and Herzegovina records the lowest indicators. Bosnian financial sector is influenced by many problems inside the country, not established government, large money outflow, huge loans by IMF, with entire situation in country. Croatia is better compared to the other countries. It has to make good steps in each sector because of its aim to become EU member. In Serbia situation is similar to the Bosnia. The financial sector is influenced by political situation. Banking sector in Slovenia is also influenced by the global crisis, but also effects of the European crisis are significant.

The performance of the banking sector in last year 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 what comes as the conclusion from the data and analysis presented above

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.
In order to compete for customers and greater market share banks enter into acquisition and integration process through mergers.

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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