

## The Efficiency of Banking Sector in Bosnia and Herzegovina in Comparison to Slovenia: Comparative Analysis

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**Abstract:** This paper analyzes the banking sector's performance of the two former Yugoslavian republics, Slovenia and Bosnia and Herzegovina. This study is the first study examining the efficiency of banking sector of two countries. Countries have formed their banking systems, with their central banks as central and main monetary institutions. Performance of the banking sector of the two countries is being examined, taking into account that one country is a post war country, while other succeeds to join to European Union. It is determined using the data on return on assets (ROA) as indicator of profit, and return on equity (ROE) as an expression of profitability of banking sector, then compared to nonperforming loans (NPL) in order to foresee the affect on future lending. Foreign direct investment is also being examined due to the large portion of it was initially made into banking sector. Financial health of the banking sector is analyzed by comparing deposits to loans figures, in several structural aspects. Based on data Slovenia's banking sector has higher return on equity throughout years, therefore it is more profitable. On the other hand Bosnia and Herzegovina's banking sector is more risk protected, since banks have higher adequate capital that offers protection against risk.

### KEYWORDS:

Banking sector, Bosnia and Herzegovina, Slovenia, Return on Assets, Return on Equity, Nonperforming Loans

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## **Introduction**

This study focuses on the banking sector of Bosnia and Herzegovina(B&H) in comparison to Slovenia, by analyzing macroeconomic indicators from 2006 to 2010. Bosnia and Herzegovina and Slovenia as former Yugoslavian countries are interesting to be compared since B&H is still strongly affected by post war problems, while on the other hand Slovenia succeeded to become a European Union member country.

All financial systems tend to evolve around banking sector with the major reason and that is efficient allocation of financial risk.Banks are the institutions which through capital accumulation projects, ensure higher returns and output growth.

The aim of this study is to identify and analyze factors that will help to increase efficiency of banking sector performance of B&H and Slovenia.

To reach this objective, countries being examined need to start implementing operations that will contribute to active operations optimizations. Key objectives are establishing adequate management of banks or intermediaries, along with credit loss avoidance methods and decreasing operational risks.

This paper is organized as follows:in the first section we present institutional framework and background of B&H and Slovenia. In the second section we compare economic development indicators and foreign direct investment (FDI) of two banking sectors. Third section examines bank performance indicators, through which the profitability analysis is achieved in order to measure the banking performance. Fourth section analyses coverage of bank loans with deposits, since loans are one of the instruments that banks use in order to generate the profit. Fifth section concludes the paper.

## **Background BiH and Slovenia**

Due to the war which took place in Bosnia and Herzegovina between 1992-1995 its economy suffered, and its consequences are still present and they are going to influence Bosnia's economy majorly for more years to come. Peace negotiations were held in Dayton, Ohio, and were finalized on the 21 November 1995. The current state of Bosnia and Herzegovina came into existence after a referendum on independence in 1992, which precipitated a devastating war that ended with the

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signing of Dayton peace Accords on the 14 December (Babić- Hodović and Tesche, 2006). The accords are known as the Dayton agreement.

According to Dayton Peace Agreement (DPA), B&H consists of a central authority, an autonomous district (Brčko district) and two autonomous entities, namely the Federation of Bosnia and Herzegovina (FBIH) and the Republic of Srpska (RS), which were formed as international protectorates under the supervision of the United Nations (Annex II of the DPA, 1995). Both entities and the district have established and operate their separate legislation and administration authorities and institutions based on the defined conditions of the DPA. In fiscal terms, these entities are autonomous. B&H is governed by the international community under a tutorship of the office of the High representative (OHR), though it is accepted as a parliamentary democracy. The state of Bosnia and Herzegovina is the central authority, but has only limited and specific powers like monetary policy (common currency and common central bank), external trade and customs, regulatory competence on telecommunications, the transport system and traffic control, foreign relations, interentity criminal laws and immigration policies. Bosnia and Herzegovina is being ruled with three-member presidency. With one confederation, two entities, ten canton in federation, five administrative areas in the Republic of Srpska, a special Brčko district, plus municipalities and local government unit presents a very complex political system in the world which conceals meaningful barriers and bureaucratic hurdles that will need to overcome to succeed (Petričević and Danis, 2007).

Because of destroying all economic capacity during the ethnical conflict period B&H was forced to follow another development path. In contrast to other transition economies where institutional transition has progressed further, a highly vexing regulatory environment in B&H has occurred inconvenient situations for investors and further success of the transition process (Petričević and Danis, 2007).

Republic of Slovenia was also a member country of former Yugoslavia. In the year 1990 more than 88% of the electorate voted for a sovereign and independent Slovenia which leads to its independence. The newly-formed state was attacked by the Yugoslav Army the very next day. War lasted for ten days, and in October 1991 the last soldiers of the Yugoslav Army left. In November a law on de-nationalization was adopted, followed in December by a new constitution. The European Union recognized Slovenia in January 1992, and the UN accepted it as a member in

May 1992. Slovenia joined the European Union on 1 May 2004. Slovenia has one Commissioner in the European Commission, and seven Slovene parliamentarians were elected to the European Parliament at elections on 13 June 2004. In 2004 Slovenia also joined NATO. Slovenia subsequently succeeded in meeting the Maastricht criteria and joined the Euro zone (the first transition country to do so) on 1 January 2007. Slovenia was the first post-Communist country to hold the Presidency of the Council of the European Union, for the first six months of 2008.

Slovenia became the first 2004 European Union entrant to adopt the Euro (on 1 January 2007) and has become a model of economic success and stability for the region. With the highest per capita GDP in Central Europe, Slovenia has excellent infrastructure, a well-educated work force, and a strategic location between the Balkans and Western Europe. Privatization has lagged since 2002, and the economy has one of highest levels of state control in the EU. Structural reforms to improve the business environment have allowed for somewhat greater foreign participation in Slovenia's economy and have helped to lower unemployment. In March 2004, Slovenia became the first transition country to graduate from borrower status to donor partner at the World Bank.

On the 21.07.2010. Slovenia became member of OECD (Organization for Economic Co-operation and development).

### **Institutional Framework of the Bosnia and Herzegovina and Slovenia Banking Sector**

After the implementation of the new monetary policy by the CBBH (Central Bank of Bosnia and Herzegovina) in 1997 and the market entry of foreign banks, the financial sector - in which the banking sector dominates –experienced a stabilization and consolidation process.

The Central Bank of Bosnia and Herzegovina was established in accordance with the Law adopted at the Parliament of Bosnia and Herzegovina on 20 June 1997.

The Central Bank started its operation on 11 August 1997. The main goals and tasks of the Central Bank are defined by the Law and in accordance with the General Peace Agreement in Bosnia and Herzegovina. Central Bank of Bosnia and Herzegovina maintains monetary stability by issuing domestic currency according to

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the Currency Board arrangement (1 KM: 0,51129 EURO) with full coverage in freely convertible foreign exchange funds under fixed exchange rate 1 KM: 0,51129 EURO. Central Bank defines and controls the implementation of monetary policy of Bosnia and Herzegovina. It supports and maintains appropriate payment and settlement systems. It also co-ordinates the activities of the B&H Entity Banking Agencies, which are in charge of bank licensing and supervision.

Although the Central bank is at state level, regulatory agencies are not. Each of the entities has its regulatory agencies, for Federation it is a Federation Banking Agency (FBA) and in Republic of Srpska it is Banking Agency (BARS).

The Bank of Slovenia is the central bank of the Republic of Slovenia. It was established on 25 June 1991 by the adoption of the Bank of Slovenia Act (BoSA).

It is a legal entity governed by public law. It is autonomous in disposal of its own assets. The Bank of Slovenia and the members of its decision-making bodies are independent and, pursuant to the BoSA, are not bound to any decisions, positions or instructions of state agencies or any other bodies, nor shall they seek their instructions or guidelines.

Since the introduction of the Euro on 1 January 2007 the Bank of Slovenia, in carrying out its tasks, fully abides by the provisions of the (European System of Central Banks) ESCB and European Central Bank (ECB) protocol on the statute.

As a member of the ESCB, in line with the Treaty establishing the European Community and the two statutes mentioned, the Bank of Slovenia carries out the following tasks: implements the common monetary policy, co-manages the official foreign reserves of the Member States in accordance with the Treaty on establishing the European Community, and promotes the smooth operation of payment systems. The Bank of Slovenia also carries out all other tasks pursuant to the BoSA.

### **Economic Development, FDI and Banking Sector**

Economic development of the two countries being analyzed is related to the period after they reached their independence. Both of the countries belong to the communist bloc countries of former Socialist Federal Republic of Yugoslavia (SFRY), which was a centrally planned economy. The largest part of the production in the countries was just to meet their own needs. By gaining independence they turned to market economies.

Table 1. Selected Economic Indicator for Bosnia and Herzegovina and Slovenia

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Bosnia and Herzegovina	2006	2007	2008	2009	2010
Nominal GDP(mill EUR)	9,900	11,100	12,600	12,300	12,500
GDP per capita (EUR)	2,564	2,898	3,289	3,194	3,258
Real GDP growth rate (%)	6.0	6.2	5.7	-2.9	0.7
Annual inflation rate (%)	6.1	1.5	7.4	-0.4	2.1
Annual unemployment rate (%)	31.0	29.0	23.4	24.1	27.2
Foreign currency reserves (mill EUR)	2,787	3,425	3,219	3,176	3,301
Trade balance (mill EUR)	-3,410	-4,140	-4,820	-3,480	-3,330
Population (in million)	3.84	3.84	3.84	3.84	3.84
Slovenia	2006	2007	2008	2009	2010
Nominal GDP(mill EUR)	31,050	34,562	37,280	35,311	35,416
GDP per capita (EUR)	15,464	17,120	18,437	17,295	17,286
Real GDP growth rate (%)	5.8	6.9	3.6	-8.0	1.4
Annual inflation rate (%)	2.5	3.6	5.7	0.9	1.8
Annual unemployment rate (%)	6.0	4.9	4.4	5.7	6.7
Foreign currency reserves (mill EUR)	7,484	8,833	80,891	-	-
Trade balance (mill EUR)	-0.8	0.1	0.2	-5.1	-5.0
Population (in million)	2	2	2	2	2

Source: Agency for Statistics of B&H, Central Bank of B&H, Slovenian Economic Mirror, Invest Slovenia, EBRD report on Slovenia

Selected economic indicators in Table 1 show strong post war recovery in B&H from 2006 to 2010. Inflation rate is stabilized at EU levels. By looking at GDP we can notice substantial economic growth. Nominal GDP in 2010 was EUR12,500 mill. At 2010 real GDP growth rate amounted to 0,7%, which is an improvement from the previous 2009 where the real GDP growth rate amounted -2, 9%. GDP per capita, as one of the measures of standard of living reached the highest value at year 2010 EUR3,258. Trade balance in 2010 was EUR-3,330 mill indicating that Bosnia and Herzegovina is still an importing country. One of the key imbalances in the economy of Bosnia and Herzegovina is its high trade deficit which is ultimately leading to a significant current account deficit in the balance of payments. Annual inflation in 2010 amounted to 2.1%. Annual unemployment rate in year 2010 amounted to 27.2%, which is significantly higher than the in previous year 2009 when it amounted to 24.1 %. Unemployment figures are showing a negative trend by increase in figures (more citizens are jobless), and the reason for it lies in economic crises.

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Key elements of Slovenia's macro stability lies in low inflation combined with maintained price stability and a commitment to low budget deficit. Overall inflation in developed economies was low in 2010, primarily as a result of the relatively low level of domestic household consumption.

Selected economic indicators for Slovenia shown in Table 1 are reflecting that Slovenia is in quite stable macroeconomic condition. One of the major reasons for the macroeconomic stability is a low unemployment rate which in 2010 was 6.7%. GDP per capita in 2010 amounted to EUR 17,286 mill, which indicates a high standard of living. Nominal GDP in 2006 amounted to EUR 31,050 mill, while in year 2010 it was EUR 35,416 mill.

Annual inflation rate is rather high taking into account that Slovenia is in euro currency zone, in 2009 it amounted 0.9%, and basic reason for it lies in the change of Slovenian Tolar to Euro currency. Trade Balance in year 2010 amounted to EUR -5.0 mills which imply that Slovenia imports more than it Exports. This figure is much lower in the previous years, as it was in 2006 EUR -0.8mills.

Foreign direct investment (FDI) made a big impact on the post war economy of Bosnia and Herzegovina, and it reached its peak in 2007. It helped a country to reintegrate and rejoin the world's economy.

Foreign direct investment can be described as a company from one country making a physical investment in another country. It is an investment abroad, usually where the company being invested in is controlled by the foreign corporation and be stayed in contrast with making a portfolio investment, which is considered an indirect investment (Ilgun and Coskun, 2009).

FDI is a component of a country's national financial accounts. It can be investment made into domestic structures, equipment, and organizations.

There is a large difference among countries of SEE (South Eastern Europe) to which Bosnia and Herzegovina belongs to and CEE (Central Eastern European countries) to which the Slovenia belongs, differing on various data and indicators.

Relation of FDI and Banking sector is important due the fact that large portion of Bosnia and Herzegovina's FDI goes to banking sector, and it is jet growing and an ongoing process.

In Slovenia on the other hand the situation is quite different. The stock of FDI is Slovenia stood at EUR 10,500.2 mill at the end of 2009. In 2009 foreign direct

investment was down for the first time since 2001, by 6, 6%. A decline in the net debt financing of foreign investors of 95% was the main factor in the decline in the total value of the FDI of EUR 736.1 million in 2009 relative to the previous year, while a decline of the value equity accounted for the remainder. The largest proportion of the FDI comes from EU states and Switzerland, while Slovenian investor favors countries of former Yugoslavia.

Bosnia and Herzegovina on the other hand is not in position to acquire any FDI but for the trade its major partners are Croatia, Serbia, and Germany which shows that former Yugoslavian countries are still dependent on each other.

Trade is often related with foreign direct investment. In order to illustrate relationship between the two countries, data in Table 2 represents Bosnia and Herzegovina's trade partners in exports and imports.

Table 2. BiH Import and Exports, in percentage

	Exports					Imports				
	2006	2007	2008	2009	2010	2006	2007	2008	2009	2010
Total										
EU 27, of which	59.7	57.3	55.2	54.2	54.5	53.0	47.8	48.0	49.1	45.9
Italy	13.8	13.1	12.6	12.7	12.1	9.0	9.0	9.3	10.1	8.9
Germany	12.9	12.8	13.6	14.7	15.3	12.4	12.5	11.8	11.3	10.5
Slovenia	12.2	10.9	9.2	8.4	8.6	7.6	6.4	5.9	6.1	5.9
SEE of which	32.9	35.8	37.1	38.1	35.9	28.0	29.1	28.9	26.8	27.1
Croatia	18.7	18.4	17.2	17.1	15.1	17.1	17.6	17.1	15.0	15.1
Serbia	13.2	11.7	14.0	13.4	12.6	9.8	9.4	10.6	10.4	10.5
Other countries	7.4	6.9	7.7	7.7	9.6	19.0	23.1	23.1	24.1	27.0

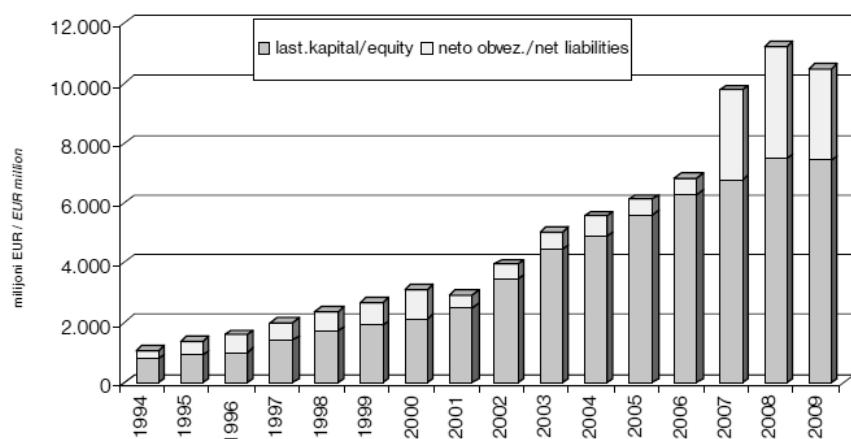
Source: Central Bank of Bosnia and Herzegovina

Bosnia and Herzegovina's main export trading partners were Germany and Croatia, and main importing partners were Serbia and Croatia. In 2010 exported goods and services to Croatia were 15.1% of total exports, while to Serbia were 12.6%. When comparing these figures of export to Slovenia which amounted 8.6% in year 2010, it can be concluded that it is a quite large amount of trade, taking into consideration greater distance than from neighbor countries, and economical political global position, difference in non EU member countries and EU member countries. Regarding the imports figures are showing that in year 2010, 10.5% of total imports went to Germany and Serbia, while 15, 1% of total volume of imports is performed with Croatia. In year 2010 Slovenian goods and services in terms of imports are

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taking only 5.9% of total imports. Reason for this trade preference is low purchasing power, therefore for Bosnia and Herzegovina's citizens, goods and services from neighborly non EU member countries are more affordable, than the Slovenian which is EU member. Taking all this into consideration it can be concluded that number and figures of trade between Bosnia and Herzegovina and Slovenia are quite significant.

Figure1. Structure of Foreign Direct Investment in Slovenia



Source: Bank of Slovenia

Figure 1 shows the structure of the FDI in Slovenia from 1994 to 2009. Foreign direct investment is composed of two components: equity and net liabilities. From 1994 to 2001 there is small increase in equity of FDI, while net liabilities insignificantly change. From 2001 to 2009 there is a continuous trend of growth in equity. Alteration occurs from 2007 and is repeated in 2008 and 2009 where not just equity rises, but also does the net liabilities, significantly especially compared to the previous years.

In case of Bosnia and Herzegovina growing FDI in services, specifically in the banking area, was influenced by the following points (Babić-Hodović and Burić, 2005):

- Globalization of the financial services industry which resulted in growing competition between different non-bank sources of credits and financial services of credits and financial services (especially in the insurance market) which, in turn, led to the continuing consolidation of banking system in both mature and emerging markets (Roldos, 2001) and even to the need to open new markets.
- Foreign banks' interest in emerging markets is partly explained by the potential economies if the scope from technological advantage as well as the advantage of early entry in product or service life cycle (Babić-Hodović and Burić, 2005).
- Regional marketing orientation, where many banks focused on specific region, guided by the language and cultural connections (Babić-Hodović and Burić, 2005).

### **Bank Performance Indicators**

The profitability analysis is achieved on a set of indicators in order to measure the banking performance. The indicators result and arise from the accounting dates, which illustrates the reference periods in the most synthetic expressions of balance sheet and the profit and loss account (Caruntu and Romanescu, 2008).

Likewise it is emphasized and studied the linkage between financial performance measured by return on assets (ROA) and return on equity (ROE) in the two countries will be discussed.

Return on Equity or profit to equity, is the most significant indicator for profit, which measures the banking management in all its dimensions, and offers an image over the way to use the capitals brought by shareholders, the effect of their retainer in bank's activity (Caruntu and Romanescu, 2008). Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested.

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$$ROE = \frac{Net\ profit}{Capital} * 100$$

Return on Assets (ROA) is an indicator of expression of rentability for the entirely activity of a banking society. ROA gives an idea as to how efficient management is at using its assets to generate earnings. This indicator measures the effect of management capacity to use the financial and real resources of bank in order to generate profit. It is appreciate that the return of assets indicator is the most exact measure of banking activity due the fact that expressed directly the result, accordingly to the specific management of banking intermediate, of active operations optimization, related to a volume of resources considered. Formula for ROA is:

$$ROA = \frac{Net\ profit}{Assets} * 100$$

The poor profitability of many banks can be explained by a low level of efficiency, specifically an excessive number of employees for the scale of their operations and substantial provisions for loan losses, accompanied by the costs of expanding their branch network (Babić – Hodović and Tesche, 2006). On the other hand, (Četković, 2011) states that high profitability potential in the Balkan Countries may have been a driving force behind the expansion of banks from EU member countries into the region.

Table 3. Return on Assets (ROA), and Return on Equity (ROE) in the Banking Sector, 2006 – 2010, B&H and Slovenia

	2009	2006	2007	2010	2008
<b>Bosnia and Herzegovina</b>					
ROA	0.9	0.9	0.4	0.1	-0.6
ROE	8.4	8.9	4.3	0.8	-5.5
<b>Slovenia</b>					
ROA	1.25	1.36	0.67	0.32	-0.19
ROE	15.10	16.30	8.10	3.90	-2.3

*Source: FBIH and RS Banking Agencies and CBBH, Bank of Slovenia*

As it can be seen from the Table 3 in each year from period 2006-2007 return on assets have been significantly higher in Slovenia than in Bosnia and Herzegovina. In year 2010 ROA in B&H was -0.6 which indicates low profitability of banks, and this number is significantly higher in the previous year, when it was 0.1. Reason for it lies in the fact that economic crises hit banking sector in this year more intensively than in previous years. In Slovenia ROA in 2010 was -0.19 which is rather low profitability indicator, but yet better than in the B&H at the same year.

Table 3 also shows data on ROE. ROE as most significant indicator of profit throughout all years is higher in Slovenia than in B&H. In 2010 in B&H it amounted – 5.5, while in Slovenia it was – 2.3.

By looking at Table 4 we can see the values of other indicators related to the performance of banking sector of two countries. Assets in Bosnia and Herzegovina, as the percentage of GDP in 2010 were 85.200 mills. Lending increased from -3.1% to 2.4%. Non-performing assets increase majorly from 3.9% in 2009 to 8.1% in 2010 with indicated large portion of debt unpaid, most probably due to the economic crisis and switch in currency. Assets in Slovenia as % of GDP in 2010 amounted to EUR139.5 bill which is significantly higher than in Bosnia and Herzegovina in the same year. Lending growth in Slovenia on the other hand in each of the years is lower than in Bosnia and Herzegovina. In year 2010 in Slovenia it amounted to 0.8% while in Bosnia it was 2.4%.

Banks have been and remained the most important financial intermediaries. The banks had total assets of EUR50.3 bill in 2010. The total assets of banks as a percentage of GDP were down, as a result of decline in total assets in nominal terms.

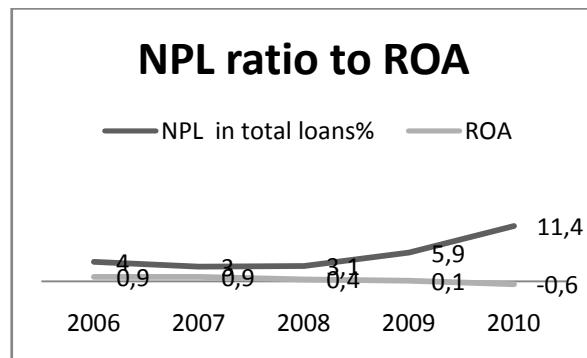
Banks in transition countries are likely to struggle with the high NPL ratios they have accumulated during the crises and the possible losses associated with loans.

During 2009, Slovenian banks significantly tightened their underwriting policies and reduced the average maturity of loans being written for corporate and SME customers, making it more difficult for them to roll over obligations.

Following Figures 2 and 3 are showing ratio of nonperforming loans (NPL) to return on assets (ROA) of two countries Bosnia and Herzegovina and Slovenia.

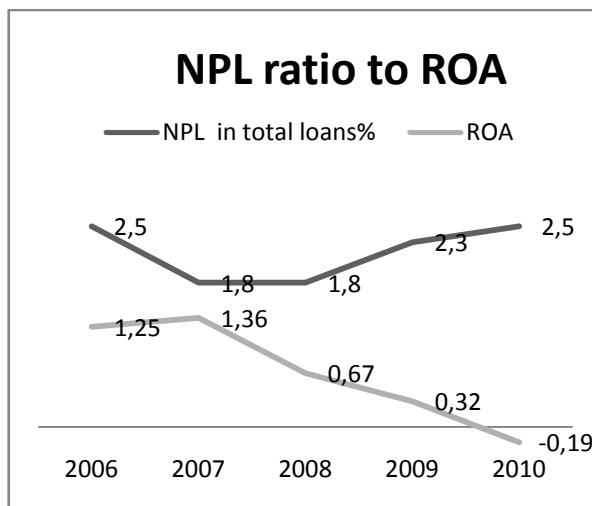
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Figure 2. Ratio of Nonperforming loans (NPL)/ Total Loans and (Return on assets)  
ROA in B&H



Source: Author's elaborations of BaH data on ratio of NPL to ROA, Central bank of Bosnia and Herzegovina

Figure 3. Ratio of Nonperforming loans (NPL)/ Total Loans and (Return on assets)  
ROA in Slovenia



Source: Author's elaborations of Slovenian data on ratio of NPL to ROA, Bank of Slovenia

Figure 2 shows decreasing number on ROA from 2006 to 2010, where in 2006 ROA amounted to 0.9 while in 2010 it amounted to -0.65, negative ROA indicates low profitability. NPL has also decreasing trend from 2006 where it amounted 4% of total loans to 3% in 2007. Onwards it has increasing trend, and it reaches its peak 11.4% of total loans in year 2010. By analyzing this data it can be concluded that increase in ROA is mostly affected by NPL, as a part of the net profit. Therefore when NPL increase net profits will decrease, assets remain same, but the end result shows decreased ROA, and vice versa. Drastically increase in NPL can be also described due to the global economics crises of 2008, which majorly damaged banking sector in year 2010 when the ratio of nonperforming loans increased to 11.4%.

ROA in 2007 was the highest which indicates in this year lending was most rentable, and this can be proven by analyzing data from Table 4 where lending in 2007 was 28.4 % of annual growth which is higher than in year 2006, 2009, and 2010. In year 2010 ROA was -0.6 % therefore in this year lending has high probability of decline.

Table 4. Selected Banking Indicators for Bosnia and Herzegovina and Slovenia

	2006	2007	2008	
<b>Bosnia and Herzegovina</b>				
Assets, as % of GDP (in mill)	76,300	89,600	85,200	87,100
Lending, (Annual growth in %)	23.4	28.4	21.8	-3.1
Non-performing assets	2.5	1.8	2.2	3.9
<b>Slovenia</b>				
Assets, as % of GDP (in mill)	109,100	122,500	127,700	145,900
Lending, (Annual growth in %)	3.3	3.4	2.3	NA
Non-performing assets	NA	NA	NA	NA

Source: Central Bank of Bosnia and Herzegovina, Bank of Slovenia

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According to data on Slovenia presented in the Figure 3 ROA a show increasing tendency from 2006 where it amounted from 1.25 to 1.36 in year 2007, and this is the point where it reached its peak, and lending increased due to the lower NPL 1.8% in year 2007 than in previous year 2006 when it was 1.25%. Although in year 2008 NPL is equal to as in 2009 amounting 1.8%, ROA drastically decreased. In 2010 ROA for Slovenia banking sector was -0.19, which indicates loss, while NPL where 2.5 % of total loans, indicating high probability of decline in lending.

### Coverage of Bank Loans with Deposits

Considering the fact that banks are mostly generating their profits through the placement of the loans, further analysis will show how those credits are financed, by using the figures that are comparing deposits gathered to loans placed.

Table 5. Deposits Structure in BiH and Slovenia (in millions of EUR)

Bosnia and Herzegovina	2006	2007	2008	2009	2010
Government	700	1,500	1,100	1,000	800
Non-Government	1,700	1,900	2,200	2,200	2,200
Households	2,000	2,600	2,600	2,900	3,300
Total	4,400	6,000	5,900	6,100	6,300
Slovenia	2006	2007	2008	2009	2010
Government	NA	NA	3.9	7.7	6
Non-Government	NA	NA	43.3	45.7	46.7
Households	NA	NA	27.7	26.7	28.4
Total	NA	NA	74.9	80.1	81.1

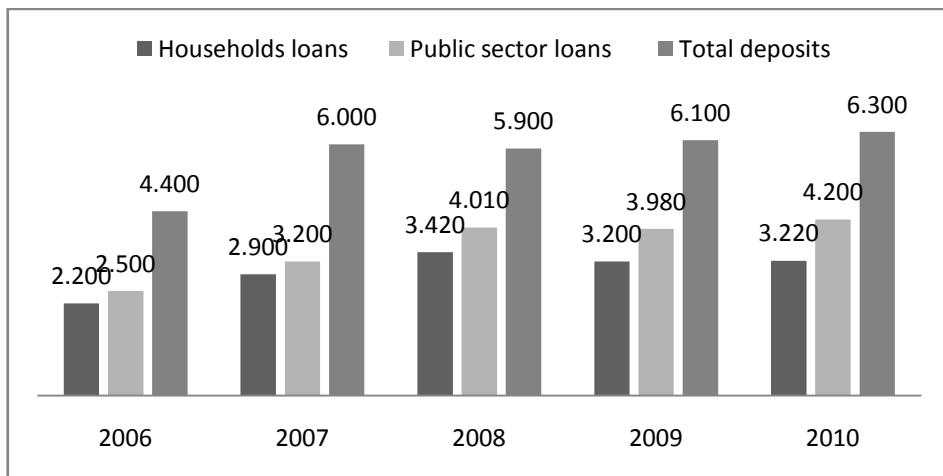
*Source: Central Bank of Bosnia and Herzegovina, Bank of Slovenia*

Table 5 shows thestructure of deposits in B&H. In 2010 total deposits amounted EUR6,300 mill which represented an annual increase of EUR 0,200 mill.

Out of EUR 6,300 mill deposits in 2010, EUR800 mill were government deposits, EUR2,200 mill were non-government deposits, and EUR 3,300 mill were household deposits. Therefore it can be concluded that 51% of total deposits were household deposits. Total deposits in year 2006 amounted EUR 4,400 mill, which is significantly lower than in 2010. From the aspect of crisis it can be concluded that in pre-crisis 2006 deposits were lower, and in years of current crises deposits are only experiencing slight increase of year 2008 to 2009 increase of a EUR200 mill.

Significant decrease in government deposits occurred in 2008 due to the crises it amounted EUR 1,100 mill and in previous 2007 it was EUR 1,500 mill, which is a decrease of EUR 400 mill. Nongovernment deposits through selected years are presenting insignificant change in deposits, they are quite constant.

Figure 4. Sectored Structure of Loans and Deposits in BiH (in million EUR)

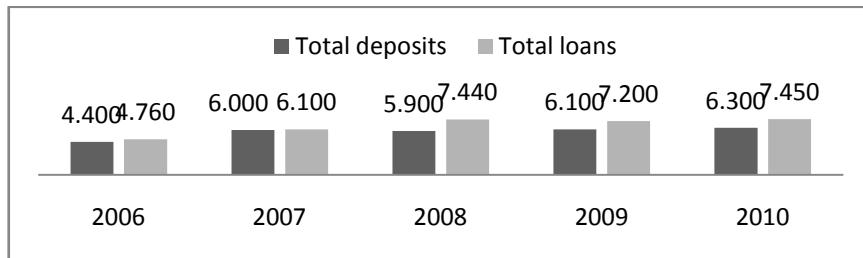


*Source: Author's elaborations of BiH data on loans and deposits, Central Bank of Bosnia and Herzegovina*

Due to the ongoing crises its impact on the economy of Bosnia and Herzegovina slowed growth of lending activities in 2010 to household sector and it amounted EUR 3,220 mill, compared to previous 2009 where it amounted EUR 3,200 mill it can be concluded that there is no increase in lending to the household sector (Figure 4Sectored structure of loans and deposits in B&H). Contrary to it public sector loans had increasing tendency during the selected period, in 2009 they amounted EUR 3,980 mill and in 2010 EUR 4,200 mill, meaning that public sector during the times of crises had to finance their operations through loans.

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Figure 5. Total deposits and Total Loans in B&H (in million EUR)

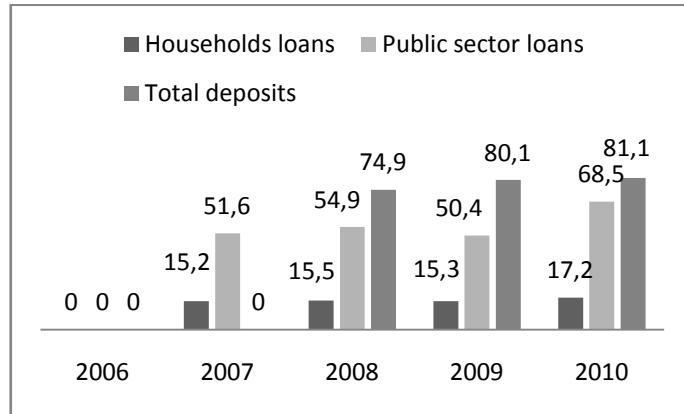


*Source: Author's elaborations of BiH data on loans and deposits, Central Bank of Bosnia and Herzegovina*

Figure 5 shows total deposits and total loans in BiH. By looking at the graph we can see that through out all year loans issued are higher than deposits. This difference was the slightest in year 2007 when total deposits amounted to EUR 6,000 mill and total loans EUR 6,100 mill. Highest difference between loans and deposits was in the year 2008 when the global financial crises started, when total deposits were EUR 5,900 mill and total loans were EUR 7,440 mill. In 2010 deposits increased to EUR 6,300 mill to EUR 7,450 mill which is significant progress in balance of the two ratios compared to previous year, and when taking into consideration that 2010 is the year in which economic crises is in its highest magnitude.

Table 5 represents the deposits structure in Slovenia. Data for years 2006 and 2007 is not available. At year 2008 governmental deposits were EUR 3,9 mill, while in the year 2010 they significantly increased to EUR 6 mill. Nongovernmental deposits are taking the highest share among total deposits. In 2008 they amounted to EUR 45.7 mill while in 2010 they increase only by EUR 3,4 mill which is insignificant increase for this structure. Households shown increase in deposits from EUR 26,7 million year 2009, to EUR 28,4 mill in 2010, when the global economic environment was more stable than in year 2008 and 2009 when crises stroke economies and households especially.

Figure 6. Sectored Structure of Loans and Deposits in Slovenia (in million EUR)

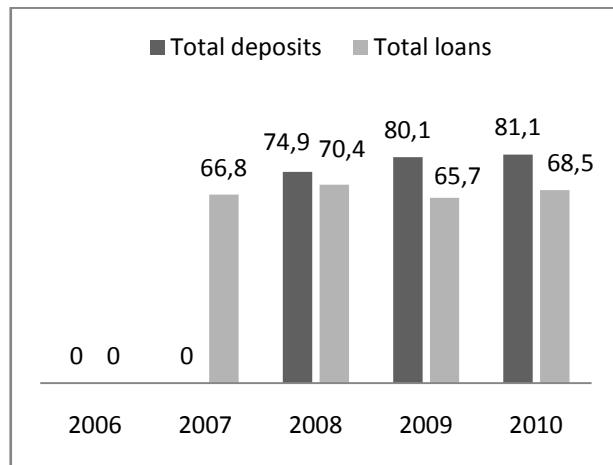


Source: Author's elaborations of data on Slovenia, deposits and loans, Bank of Slovenia

Sectored structure of loans and deposits in Slovenia (Figure 6) shows that in each of the year's public sector loans were higher than the household loans. In year 2008 household loans were EUR 15,5 mill, while in 2010 they increased to EUR 17,2 mill. Public sector loans had a decreasing point from 2008 when they amounted EUR 54,9 mill to 2009 when they amounted EUR 50,4 mill, which presents a decrease of EUR 4,5 mill, most probably due to the economic crises. In 2010 loans to households amounted to EUR 17.2 mill while loans to public sector increase from previous year to EUR 68,5 mill.

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Figure 7. Total Deposits to Total Loans Slovenia (in million EUR)



*Source: Author's elaborations of data on Slovenia, deposits and loans, Bank of Slovenia*

Figure 7 presents total deposits and total loans in Slovenia, where for the years 2008 to 2010 when data is available it can be concluded that deposits in each case were higher than loans, therefore loans could be completely financed through money generated from deposits. For instance in 2008 total deposits amounted EUR 74,9 mill, and total loans were EUR 70,4 mill. In year 2010 total deposits were EUR 81,1 mill and total loans were EUR 68,5 mill.

Table 6. Capital Adequacy Ratio in BaH and Slovenia in Percentages

Bosnia and Herzegovina	2006	2007	2008	2009	2010
<i>Capital adequacy ratio</i>	17.7	17.1	16.3	16.1	16.2
Slovenia					
<i>Capital adequacy ratio</i>	11.0	11.2	11.7	11.6	11.5

*Source: Central Bank of Bosnia and Herzegovina, Bank of Slovenia*

Table 6 represents Capital adequacy ratio in BiH and Slovenia. Capital adequacy ratio (CAR) is the measure which determines if a bank has an adequate capital that offers protection against the risk associated with a bank's credit's offering and other financial operations.

As shown in Table 6 in 2006 CAR in BiH stood at 17.7 %, while in 2010 is amounted to 16.2%. High CAR is considered to be better absorber of the risk, therefore banks were in BiH were better secured in 2006, and then they were in 2010. In Slovenia CAR stood at 11.5% in 2010, which present a decrease of 0.1% from previous year. Over whole time period examined (2006-2010) Slovenia shows lower CAR than BiH which indicates that banks in Slovenia are operating at higher risk tan ones in BAH. Maintaining capital adequacy has become more important than growth in lending.

Table 7. Asset and Liability composition in BiH and Slovenia in million EUR

Bosnia and Herzegovina	2006	2007	2008	2009	2010
Total Assets	14,698	19,519	21,048	20,918	21,076
Short-term assets	4,432	6,071	6,470	6,335	6,116
Long-term assets	10,266	13,448	14,578	14,583	14,959
Slovenia	2006	2007	2008	2009	2010
Total Assets	33,900	42,343	47,628	51,613	50,457
Short-term assets	1,049	604	1,243	1,454	811
Long-term assets	32,851	41,739	46,385	50,159	49,646
Bosnia and Herzegovina					
Total Liabilities	14,697	19,518	21,046	20,917	21,076
Foreign liabilities	4,032	5,159	6,309	5,747	4,782
Domestic liabilities	8,798	12,100	11,889	12,102	12,541
Government	1,456	3,069	2,303	2,005	1,664
Non-government	7,332	9,031	9,586	10,097	10,877
Other liabilities	1,867	2,259	2,848	3,068	3,753

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Tabele 7. (Continued)

Slovenia

Total Liabilities	61,677	42,343	47,077	51,612	50,452
Foreign liabilities	8,756	14,567	17,317	15,124	12,868
Domestic liabilities	15,141	19,381	20,061	23,570	23,352
Government	9,664	1,570	1,857	3,990	3,170
Non-government	5,477	17,811	18,204	19,580	20,182
Other liabilities	37,780	8,395	9,699	12,918	14,232

*Source: Central Bank of Bosnia and Herzegovina, Bank of Slovenia*

Table 7 represents Asset and Liability composition in BiH and Slovenia in million EUR. Total Assets are composed of short term assets and long- term assets.

At the end of 2010, total assets of all banks in BiH amounted to EUR 21, 076 million, which was an increase of EUR 157.5 mill or 0.8%. The bankingsector had a growth trend over the past years, but it was stopped in 2009 due to economic crisis. This presents significant increase when compared to 2006 when total assets amounted to EUR 14,698 mill. Out of total assets in 2010 short term assets amounted to EUR 6,116mill while long term assets amounted to EUR 14,959 mill.

In Slovenia in 2010 Total assets amounted to EUR 50,457 mill which is 2,3 times greater than in B&H in the same year. In 2010 short term assets amounted to EUR 811 mill while long term assets amounted to EUR 49,646 mill. This present's significant increase in 2010, compared to 2006 assets amounted to EUR 33,900 mills.

On the liability side in B&H total liabilities in 2006 amounted to EUR 14,697 mill, while in 2007 they increased to EUR 19,518 mill. In year 2010 they amounted to EUR 21,076 mill, out of which foreign liabilities were EUR 4,782 mill EUR, domestic liabilities were EUR 12,541 mill. In percentage terms domestic liabilities accounted for the greatest share of around 59.5%, while foreign liabilities accountedfor 22.7%, government liabilities wereEUR 1,664 mill, non-government where EUR 10,877 mill, other liabilities were EUR 3,753 mill.

On the liability side in Slovenia total liabilities in 2006 amounted to EUR 61,677 mill, and throughout years until 2008 had a decreasing trend where they amounted to EUR 47,077 mill. In 2009 they rapidly increased to EUR 51,612 mill and in 2010 it decreased to EUR 50,452 mill. Total Liabilities in year 2010 amounted to EUR 50,452 mill , and were composed of foreign liabilities amounted to EUR 12,868 mill, domestic liabilities EUR 23,352 mill, government liabilities EUR 3,170 mill, non-government EUR 20,182 mill, other liabilities EUR 14,232 mill.

### **Conclusion**

Bosnia and Herzegovina and Slovenia as former Yugoslavian countries succeeded to develop stable banking sectors regardless of unfavorable past events. Importance of the banks is unquestionable with its main role in the global economy, providing capital for innovation, infrastructure, job creation and overall prosperity. Due to the war that occurred, Bosnia and Herzegovina have faced destruction of overall economy, it succeeded to restructure quite fast, especially by opening to foreign direct investment, which reached its peak in 2007 amounting whole 12, 0% contributions to GDP.

The effect of increasing FDI in B&H has been positive. It results in confidence that society gain in banking sector, by more loans being acquired, and deposits made, effecting positive overall balance of payment. As the countries share joined history as former Yugoslavian countries there are still strongly orientated on each other in the terms of trade and investment.

Bosnia and Herzegovina major trade partner are its neighbor countries Croatia and Serbia, while Slovenia in terms of trade favors former Yugoslavian countries including BH and EU states and Switzerland. Based on data shown in paper GDP per capita, as key measure of development, is five times greater in Slovenia than in Bosnia and Herzegovina in 2010.

Bosnia and Herzegovina showed unenviable number in terms of unemployment 27.2% in 2010, while in Slovenia figures showed 6.7 % unemployed population.

Returns on assets is significantly higher in Slovenia than in Bosnia and Herzegovina, while returns on equity are almost in balance in both countries, meaning that corporations are generating their money efficiently, and profiting from it. Figures of return on average assets (ROA) are also showing that with its increase there is high

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probability that lending will increase, while nonperforming loans (NPL) are indicating presence of economic political crises made bad impact on both countries. NPL has indirect effect on lending fluctuations in the economy. Higher NPL means high probability that lending will decrease.

Both countries are financing their lending mostly through the deposits. By computing Capital adequacy ratio of the two countries, we can draw general conclusion that banks in BiH are facing less credit losses and operational risks than the ones in Slovenia.

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