Expansion of banking sector in Serbia, the result of regulatory reforms in financial system, has been followed by increased growth of capacities, productivity and profitability. Reduction in the number of banks, strengthening of the capital base and more efficient methods of management are the main characteristics of domestic banking during the past few years. Banking sector in Serbia encountered effects of the world economic crisis which was followed by the increase in bank interest rates, all increasing difference among interest rates at which banks launched their resources and referential interest rates of the European central banks, as well as crisis in trust of the citizens in the banking sector. Reduction of domestic savings on one hand and limited and expensive sources of financing in the world on the other resulted in narrower scope of business activities and increase in prices of banking services in Serbia. In order to bring about stabilization in banking sector in Serbia, the National Bank of Serbia and the Government took over a set of measures directed mainly towards perseverance of the level of the loan activities, increase in savings and attracting foreign investments.

Key words: Banking Sector, Capacity, Bank Profitability, World Economic Crisis

1. Structural characteristics of banking sector in Serbia

Modernization of domestic banking sector during the past few years is the result of regulatory reforms in financial system in Serbia. Foreign investors entered domestic bank market thus causing radical changes and leading to expansion of domestic banking. Reduction in the number of banks, strengthening of capital base and more efficient methods of management are the basic characteristics of the national banking system and direct consequence of foreign investments. National banking sector has experienced complete transformation followed by increased growth in capacities, productivity and profitability. Extremely huge growth rates refer to dynamic development of banking sector. However, final conclusions can be drawn after comparisons with neighboring countries and the EU countries.

Period of transformation of the bank system in Serbia is characterized by enlargement and consolidation of banks. Number of banks is one of the very significant indicators of the capacity of banking sector. According to the data of the National Bank of Serbia, if compared with the year 2003...
when there were 47 banks in operation, the last quarter of the year 2008 notes 34 banks. Reduction in the number of credit institutions, as the result of reforms that were taken in financial sector, was followed by spreading of their organizational network. The number of business units, affiliations, branch offices, counters, agencies and exchange offices in the last quarter of the previous year was 2,711, which indicates spreading of banks’ organizational network.

Significant indicator which shows how developed banking sector is, according to the European Central Bank methodology, is represented by the number of citizens per a credit institution and affiliation. Following up stipulated indicators in time and comparing them with other countries, it is possible to evaluate development of the capacities of banking sector of the observed country. According to the data provided by the ECB in 2007, in the EU27 countries there were 59,401 citizens per a credit institution and in MU13 countries this number amounted 52,098.\(^4\) In the same year, in our country there were 210.6 thousand citizens per a bank, which indicates significant drawbacks in terms of domestic banking sector capacities in comparison with developed countries. Another indicator of the capacity, the number of citizens per an affiliation, in the same year, led to almost similar conclusions. Although the number of citizens per an affiliation is reducing year in, year out, due to the increase in the number of affiliations, Serbia suffers drawbacks in comparison with developed countries. Stipulated indicators of development of the banking system in 2007 in Serbia amounted 3.027, while in the EU27 and MU13 countries it was 2.123 and 1.735 respectively.

Reduction in the number of banks, as main financial institutions and faster growth of the affiliation network, was followed by the increase in employment in banking sector. Domestic banks reform meant constant growth in the number of people employed with the banks. Data provided by the National bank of Serbia indicate that the trend of growth was continued in 2008 when there were 32,342 people employed in the banking sector in Serbia.

Development of domestic banking and its position in comparison with the developed countries can be estimated according to the balance sum per an employee in banking. Assets per an employee is the basic indicator of the capacity of the banking sector and, according to the ECB methodology, it is expressed as the ration between balance sum in Euro and the total number of employees in banking. Tendency of growth of the observed indicator in domestic banking in 2003 shows increase in capacities and development of financial intermediation of domestic banks. In 2007 assets per an employee in Serbia amounted to 651.7 thousand Euro. Although growth is evident year in year out, banking sector in Serbia, according to the key indicator of capacity, shows considerable drawback in comparison with the EU27 and MU13 countries. According to the data provided by the ECB and the NBS for the year 2007, it is evident that Serbia has a considerably less assets per an employee in comparison with the developed countries, even 19 times lesser (\(graph\) 1).

Along with the changes in terms of capacity, banking sector in Serbia went through the change in ownership structure. General feature of the domestic banking in the previous period is the domination of banks in which major owners are foreign shareholders. According to the report made by the NBS, 20 out of 34 banks which were doing business at the end of 2008 were mainly foreign banks, 6 out of 34 were the ownership of domestic natural and legal entities and 8 out of 34 whose majority owner was the Republic of Serbia. Foreign shareholders dominate not only in the number of banks in which they are majority owners but in assets they manage. In the total balance sum of the banking sector on December 31, 2008, 75.3% refers to banks with dominant foreign ownership.\(^5\) Having entered domestic banking market, foreign investors made access to the world financial markets easier through their parent foreign banks.

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\(^4\) EU27 stands for 27 countries which are members of the EU, MU13 stands for Monetary Union – 13 countries participating in the euro area.

\(^5\) Banks with major ownership of the Republic of Serbia refer to 16% of the total balance sum of the banking sector, while banks with mostly private ownership refer to 8.7%. Source: National Bank of Serbia.
How developed banking sector of one country is can be estimated according to different indicators of productivity. The National Bank of Serbia, in its quarterly reports on business operations of the banking sector, stipulates balance sum per an employee as an indicator of productivity, as well as total income per an employee, operating expenditures per an employee, loans per an employee and deposits per an employee.

**Graph 2. Deposits and loans per an employee in banks in Serbia (in mill dinars)**

*Graph 2* shows that productivity of the domestic banking sector, observed through loans and deposits per an employee, has a growing tendency. According to the report by the NBS, loans per an employee in 2008 increased 3.8 times in comparison with the year 2003 which undoubtedly leads to the conclusion that productivity of the domestic banks have increased. Similar tendency can be seen in deposits per an employee, where increase by 3.2 times is evident in 2008 if compared with the first year. Increase in previous indicators is the result of the increased deposit potentials and credit activities of banks in the whole period that was observed. Total deposit potential of banks in the last quarter of the last year, in comparison with the third quarter, indicates growth by 41.4 bill dinar, with the remark that citizens’ deposits were decreased while bank deposits were increased.
2. Profitability of banking sector in Serbia

Profitability of the banking sector in Serbia, observed through absolute amount of the achieved financial result, increased in the period 2005 – 2008. Domestic banks balances show that sector profit at the end of the year 2008 if compared to year 2005 increased 4.78 times (Table 1).6

<table>
<thead>
<tr>
<th>Financial result</th>
<th>31/12/2005</th>
<th>31/12/2006</th>
<th>31/12/2007</th>
<th>31/12/2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>7,3</td>
<td>16,5</td>
<td>23,5</td>
<td>34,9</td>
<td></td>
</tr>
</tbody>
</table>

The level of the achieved sector profit represents very significant information in estimation of profitability. However, bigger informative value in estimation of banking sector profitability has the amount of the achieved profit in relation to the average state of assets and ownership capital. Return on assets gives information whether the bank was well managed, that is whether assets were usefully and effectively engaged. Return on equity measures how successful business operations are thorough information on how high gain the bank achieves using assets invested by the owner. Fluctuation of ROA and ROE indicators of profitability of banks in Serbia for the period 2005 – 2008 was given in the table 2.

<table>
<thead>
<tr>
<th>ROA (%)</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,13</td>
<td>1,7</td>
<td>1,7</td>
<td>2,08</td>
<td></td>
</tr>
</tbody>
</table>

| ROE (%) | 6,46 | 9,67 | 8,54 | 9,28 |

Return on assets shows tendency of growth in the observed period and undoubtedly proves fast growth of the sector profitability. Decrease of ROE indicator in 2007 is the consequence of lower multiplier of the capital in that year compared to the previous one – according to the data provided by the NBS, the ratio of the average assets and capital in 2007 amounted to 6.54 and in 2006 to 7.46.

Graph 3. ROA and ROE banking sector profitability in 2008 (%)

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6 www.nbs.co.yu.
Although ROA and ROE indicators indicate growth of profitability in banking sector in Serbia, the final evaluation of the sector profitability can be done in comparison with neighboring countries. *Graph 3* shows values of the key indicators of profitability in Serbia and countries in transition which are members of the EU.\(^7\)

All observed countries members of the EU, except for Romania, in the year 2008 had lower ROA indicator of profitability than Serbia. Even though domestic banking sector has high values of ROA indicator, evaluation of sector’s profitability and development of domestic banking can be given according to information on the level of return on equity. ROE indicator in Serbia in 2008 was 9.28% while in all observed countries of the EU, apart from Slovenia, that indicator was above 10%. The biggest profitability is noted in Romania where ROE indicator totals 29.49%. Return on equity depends directly on the level of capital multiplier – even the countries with low ROA indicator can achieve high ROE profitability if they achieve high leverage, that is the ratio between assets and equity.

### 3. The effects of the world financial crisis on banking sector in Serbia

World economy has faced the most severe recession since World War II, which took over character of a global crisis, being a consequence of the process of globalization. Having started at the American mortgage market at the end of the year 2007, financial crises spread quickly throughout the world, affecting not only financial but real sphere as well in most countries.

Global recession has shaken economies of the most developed countries in the world. They encountered slow economic development and reduction in gross domestic product, while already vulnerable countries in transition faced great challenges, having in mind that capital inflow from global financial market was one of the main sources of economic development. Contrary to developed countries, countries in transition suffered indirect effects of the world economic crisis which entail low liquidity, difficulties in building up and reforming financial institutions, as well as slow economic growth. Under the condition of reduced inflow of financial means from abroad through loans granted by commercial banks, countries in transition are forced to take money from international financial institutions, first of all from IMF, EBRD and European Investment Bank.

In a great deal Serbia shares destiny of other countries of the Western Balkans. The problem lies in the fact that relatively stable growth rates achieved in Serbia during the past few years are due to inflow of foreign capital through foreign direct investments, privatization, taking loans at commercial banks and spending imported goods. Having in mind that the process of privatization in Serbia has almost been finished, significant income based on that cannot be expected. Also, most developed European countries introduced the policy of financial protectionism. Government of the Republic of Serbia was forced to find alternative financial sources. As a result, loan arrangements with IMF have been renewed as well as with other financial institutions.

Inflow of a significant amount of financial means in Serbia would ease off effects of the world economic crisis on country’s economy. IMF allowed Serbia a stand-by arrangement in the amount of 2.94 bill Euro until April 2011, providing a possibility to withdraw 2/3 of the granted amount in 2009 and the rest of the amount during 2010. Apart from that, inflow of financial means has been expected from the European Investment Bank in the amount of 250 mill Euro as a support to small and medium enterprises, then 338 mill Euro from the World Bank for Corridor 10, as well as 120 mil Euro as a support to projects of local self-government and education and 100 mill Euro as a support to budget from the European Union. On the other hand, additional borrowing would increase foreign debt of the country which already amounts 6.6 bill Euro.

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Effects of the world financial crisis on financial sector in Serbia were first evident on the stock exchange. In comparison with stock exchanges in the region, indices of Belgrade Stock Exchange fell greatly (BELEX line 68.72% and BELEX 15 75.62%). Uncertainty among investors and withdrawal of foreign capital caused low liquidity of the capital market and considerably marked up activities on Belgrade Stock Exchange.

First effects of the world economic crisis in banking sector in Serbia were evident through increase in interest rates, ever increasing difference among interest rates by which banks granted their means and referential interest rates of the European central banks, as well as crisis in trust by the citizens in banking sector. As a result of the limited access to free capital, loan taking and re-financing has become more expensive.

Money deficiency and the increase in referential interest rate of ECB caused increase of interbank interest rate of Euribor by 1 per cent point from March till October 2008. In the period from October 2008 till April 2009 Euribor was reduced from 5.5% to 1.8%, which in the countries in transition, thus in Serbia as well, has not caused the expected reduction in active bank interest rates, due to an increased risk in investments.

Having in mind the role and the importance of the banking sector in financial system of Serbia, the National Bank of Serbia and the Government took over a set of measures in order to ease off effects of the world economic crisis, as well as to prepare banking sector to face a huge number of external challenges. One of the major challenges is the provision of the increased inflow of foreign capital and perseverance of the existing scope of the granted loans.

As a result of the effort of Serbian government and IMF to preserve macro-economic and financial stability, the so-called Vienna initiative was created, according to which signatory banks are obliged not to reduce loan making till the end of 2010 and to keep liquidity indicators and adequacy of capital at the prescribed level. In return, NBS offers a whole range of advantages to banks such as: short-term dinar loans for perseverance of liquidity up to one year, swap buying and selling of foreign currencies between the National Bank of Serbia and business banks (new borrowings do not require mandatory reserve till the end of 2010) as well as the possibility of involvement of subordinated obligations in regulatory capital up to 75% of the capital.

Adequacy of capital (capital in relation to assets quality of the bank) in Serbia amounts 28.1% which is significantly above the value which this indicator has in the neighboring countries. Such structure of the capital and high level of mandatory reserves for new foreign currency savings (40%) are the indicators of security which are ensured to the depositors in Serbia.

In October 2008, having feared for their money with lessons learned during the 90s when savings were trapped in pyramidal and some state banks, citizens started to withdraw their savings from the banks. Scenario in which citizens keep their savings at home or in safe deposit boxes has become real again. Crisis in trust has been considered as one of the very dangerous effects of the world economic crisis in Serbia, especially having in mind difficulties that accompanied the process of regaining trust of the citizens in banking sector after unpleasant experience of the 90s. Mass withdrawals of the deposits, which are estimated to approx. one bill euro, endangered the main source of loan making in Serbia. Reduction in domestic savings on one hand and limited and expensive sources of financing in the world on the other, has resulted in reduced scope of business activities of the banks and increased prices of banking services in Serbia.

At the beginning of the year 2009 banking sector in Serbia faced great challenge so as to regain trust of citizens and stimulate increase in domestic savings. Measures taken by the Central bank and the Government of the Republic of Serbia have meant huge steps towards stabilization of the banking sector. By the suggestion of the European Commission, the amount of ensured deposit has increased
from 3000 to 50 000 Euro, which yet in January this year encouraged citizens to deposit 34 mill Euro on their savings accounts.

Trust in banking system has been regained as the result of measures taken over by the Central bank, the Government and business banks. In order to increase domestic savings from January 1, 2009 income from the interest on foreign currency savings are temporarily exempt from tax, and from 2010 it is planned to start calculating this tax but in the amount of 10% instead 20% as it was before. Tax on capital gain was also temporarily abolished as well as the tax on transfer of absolute rights in securities. Tax on capital gain (20%) is paid on the difference between buying and selling of shares, while the tax on transfer of absolute rights is calculated when shares are sold (0.35%)

In order to ease off situation in which business banks found themselves, under the circumstances of limited access to finances on the world financial market, the Central bank decided not to calculate mandatory reserves on means taken abroad as of October 1, as well as to change structure of depositing mandatory foreign currency reserves.

In order to keep loan making activities, Serbian government adopted a set of measures which should help companies to get more favorable loans with the subvention of the state for liquidity and investments, as well as citizens to get cheaper consumers’ loans for domestic commodity goods.

Banking sector in Serbia encounters challenges of stimulating savings. Each dinar and each Euro deposited with the bank is of a great importance. The scope of new loans and the scope of new savings are in a direct co-relation. Encouraging are the results which show that citizens bring back their deposits to banks and that the crisis in trust in banking sector has been diminishing. Savings by the Serbian citizens currently amount to 4.8 bill Euro. Interest rates on foreign currency deposits are considerably high and surpass 9% per annum, which on the other hand influence increase of interest rates on loans indexed in Euro. Dinar savings accounts are negligible in comparison with those in Euro currency, which is caused by very high referential interest rate of the National Bank, as well as by perception of the citizens about the stability of the national currency. Stability of dinar in a longer period of time would contribute to greater increase in domestic currency savings accounts.

4. Conclusion

It is generally believed that Serbia was more ready to encounter effects of the world economic crisis in comparison with other countries from the region, mainly due to restrictive monetary policy led by the National Bank of Serbia, with lessons learnt in the 90s, as well as due to preserving high levels of foreign currency reserves.

Government measures to further ease-off of the effects of the financial crisis have to be first of all directed towards increase of state income in the domain of fiscal policy and resolution of issues of over-indebtedness in the domain of monetary policy. Regular servicing of debt based on taken loans would be a kind of challenge for Serbian economy, having in mind new borrowing at IMF. Increase of liquidity of economy, perseverance of dinar stability and inflation within the planned framework would remain a priority goal of the economic policy.

Influence of the world economic crisis from financial to real sector in Serbia caused increase in capital outflow, deficiency in foreign investments and unavailability of financial resources. Capital deficiency caused increase in its value which would have negative effects on the scope of production and consequently slow down economic growth. Government of the Republic of Serbia has all but an easy task to achieve positive rate of economic growth, attracting foreign and domestic investments, stimulating exports, increasing production and employment, as well as strengthening private sector and SME sector.
Banking sector has been ready to encounter effects of the world economic crisis, although more could have been done in reducing panic spreading on the market. NBS and the Government showed responsibility and maturity and prevented with their measures realization of the most dangerous scenario for both banking sector and Serbian economy in general.

There are analyses which show that the world economic crisis reached its peak and that the world economies have already started to recover. In order to strengthen banking sector in Serbia, apart from providing liquidity, protecting savings and deposits and strengthening bank balances, the main challenge would be to regain trust in banking sector.

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