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PERFORMANCE ANALYSIS OF THE BANKING SECTOR OF SERBIA IN TERMS OF CRISIS[4]

Serbian banking sector was not immune to the global financial crisis. The first blow of the crisis was felt by the banks in October 2008, when there was a large-scale withdrawal of the deposits and the growth of the banks` interest rates. However, compared with the neighbouring countries, Serbian banking sector met the crisis adequately capitalized and highly solvent, due to the anti-cyclic monetary policy and the undertaken prudential measures by the National Bank of Serbia. The aim of this paper is the analysis of the state of the banking system in Serbia in the circumstances of the global financial crisis and its future prospective in the circumstances of the increased instability and turbulence.

Keywords: *financial crisis; banking sector; profitability; liquidity; capital adequacy.*

JEL classification: *G2.*

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АНАЛІЗ ЕФЕКТИВНОСТІ ДІЯЛЬНОСТІ БАНКІВСЬКОЇ ГАЛУЗІ СЕРБІЇ В УМОВАХ КРИЗИ

У статті показано, що сербська банківська галузь не була застрахована від світової фінансової кризи. Перший удар кризи по банках припав на жовтень 2008 р., коли відбулося великомасштабне вилучення депозитів і зростання процентних ставок банків. Проте в порівнянні з сусідніми країнами сербська банківська галузь зустріла кризу достатньо капіталізованою і з високою платоспроможністю завдяки антициклічній грошово-кредитній політиці і пруденціальним заходам Національного банку Сербії. Проаналізовано стан банківської системи в Сербії в умовах глобальної фінансової кризи та позначено її перспективи в умовах підвищеної нестабільності і турбулентності.

Ключові слова: *фінансова криза; банківська галузь; рентабельність; ліквідність; достатність капіталу.*

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АНАЛИЗ ЭФФЕКТИВНОСТИ ДЕЯТЕЛЬНОСТИ БАНКОВСКОЙ ОТРАСЛИ СЕРБИИ В УСЛОВИЯХ КРИЗИСА

В статье показано, что сербская банковская отрасль не была застрахована от мирового финансового кризиса. Первый удар кризиса по банкам пришелся на октябрь 2008 года, когда произошло крупномасштабное изъятие депозитов и рост процентных ставок банков. Однако по сравнению с соседними странами сербская банковская отрасль встретила кризис достаточно капитализированной и с высокой платежеспособностью, благодаря антициклической денежно-кредитной политике и предпринятым Национальным банком Сербии пруденциальным мерам. Проанализировано состояние банковской системы Сербии в условиях глобального финансового кризиса и обозначены ее перспективы в условиях повышенной нестабильности и турбулентности.

Ключевые слова: *финансовый кризис; банковская отрасль; рентабельность; ликвидность; достаточность капитала.*

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1. Introduction. The main factors that shape the modern banking trends include, primarily, the deregulation process, the use of modern information and communication technologies and the globalization. The current period of business banking, also, characterizes the continued effect of the global financial crisis in 2008, whose effects are still felt. In the uncertain conditions and crisis disturbances at the world market, the performance measurement and evaluation efficiency of the banking sector especially are given importance of an early insight with an aim to observe changes in performance positions of individual banks.

The first major financial crisis in the XXI century, including "sensitive instruments, careless authorities and restless investors," quickly spread to the real economy and affected the whole world. The presence of global connection that caused the current financial crisis has far-reaching consequences on the world economy and finance. This caused a global recession followed by decline in living standards, increasing unemployment, rising inflation and growing budget and trade deficit. Of course, Serbian banking sector was not immune to the impact of the global financial crisis.

This paper analyzes the intensity and the character of the influence of global trends on the performance of the banking sector of Serbia. The fact that the banking sector is relatively more developed compared to other sectors in Serbia leads to the assumption that this sector will be of crucial importance for the stabilization and further development of Serbian economy.

2. Performance measurement concept. Performance measurement is the central component of the economic system of any organization. This is because performance measurement reveals how well the organization realizes the defined goals (evaluation and accountability), and identify desired improvements (planning and control). For evaluation and accountability, it is necessary before measuring, to understand the strategy, organization and processes of a company. This requires the identification of specific goals and objectives and provides relevant information for monitoring them. Performance measurement, however, is not the end in itself. It will have no meaning if it fails to take action because of these performance measures (Domanovic, 2010).

Generally, there is a survey of the various performance measurement definitions. Pun and White (2005) accentuated the opinions of several authors about the performance measurement process, among of which is Zari (1994), who defined performance measurement as a systematic determination of the numerous activities and pointed out that the aim of the measurement is to get the information which will be useful for numerous problems and situations and Buxton and Ward (1998), who accentuate that performance measurement encompasses different measures which are connected with the performance management through setting the aims, standards and targets for the enterprise performance improvement. Neely et al. (1995) accentuates that performance measurement is a process of the quantifying the efficiency and effectiveness of the actions that lead to the performances. According to Sinclair and Zair (1995), performance measurement is directed to the determination how successful are enterprises in achieving their aims, while the performance measures are numerical or quantitative indicators which show at what extent each aim is realized.

Chenhall (2005) identified integrative information as a key dimension of the strategic performance measurement systems, which assists managers to deliver positive strategic outcomes. A successful performance system is a set of performance measures (that is, a metric used to quantify the efficiency and effectiveness of action) that provides an enterprise with useful information that helps to manage, control, plan and perform the activities (Domanovic, 2010, p. 74). The information retrieved from the performance measurement systems must in turn be accurate, relevant, timely (provided at the right time) and easily accessible for the persons who need it. Furthermore, performance measures must also be designed to reflect the most important factors influencing the productivity of the different processes at an enterprise. Designing such a performance measurement system is a difficult task and what can be considered the optimal performance measurement system differs from case to case (Tangen, 2005).

It is crucial to understand how the performance measurement systems have to evolve and to be integrated into the management models of organizations. Throughout its history, there have been numerous performance measurement and management models (Taticchi et al., 2010), which might be classified into 3 groups (Tangen, 2005). The most prominent model in the last decade is the Balanced Scorecard model. The success and the excellence of an organization is the result not only from the performance management in the four-balance scorecard's perspectives, but from measuring and managing its intangible resources. Recognizing that in the XXIth century intellectual capital as a set of organizational intangible and knowledge asset affects enterprise's value creation processes, it is necessary to find out the way to measure intellectual assets.

Therefore, the main objectives of prudential control and banks supervision consists of an early insight of performance deterioration position of individual banks (principally, large banks in a system), in order to take certain actions to such banks and prevent the growth of bankruptcy crisis of individual banks and the real sector of economy. Banking supervisors have available range of techniques to detect problem banks, in other words, banks that do not take business in accordance with prescribed regulations. Apart from the periodic supervision, using computerized monitoring system (based on quarterly banking data), regulators also perform field-testing of commercial banks, at least once a year. Bank control is conducted with the aim of timely correction of identified serious issues in banking. Of course, any bankruptcy prevented by regulators increases the trust in the overall banking system.

The most important part of the testing, which requires the most of the time refers to the evaluation quality of a bank's loan portfolios. It analyzes whether the loans were approved in accordance with the prescribed regulations (for example, whether the considered limits of maximum quantity of loans that can be given to a debtor are respected). Furthermore, the quality of a loan is examined, basing on which their classification is performed into one of the four categories: satisfactory, sub-standardized, distrustful and loan loss. Finally, a significant part of the regulatory test procedures refers to the evaluation quality of a bank's organizational structure. In addition, supervisors evaluate the ability of the managing board as well as the internal control of business banking.

No matter which approach to performance measurement — stakeholder or shareholder approach — is chosen, it is necessary to transmit the chosen strategy into the set of specific goals and objectives. According to the stakeholder approach, the dimensions of performances that will apply for monitoring strategy will be defined in financial and non-financial terms (such as BSC), and the shareholder approach will be defined only as financial metrics (CAMELS).

3. Banking sector performance analysis in terms of crisis. The banking sector in Serbia in 2010 recorded slight nominal and real annual growth indicators of financial position and strength (Table 2), but with a marked slowdown in the trend values of key indicators.

Table 1. **Indicators of financial position and strength (in bln. RSD)**

Indicator	31.12.2008.	31.12.2009.	31.12.2010.	Index of growth for 2009 3/2	Index of growth for 2010 4/3
1	2	3	4	5	6
Total balance sheet size	1776,9	2160,4	2533,5	122	117
Total capital	419,9	447,5	498,0	107	111
Credit activity	1027,6	1278,3	1685,4	124	132
Deposit activity	1024,7	1301,2	1505,8	127	116

Source: Bank control – Report for the fourth quarter in 2010. Department of Banks Control of National Bank of Serbia, *http://www.nbs.rs/internet/latinica/55/55_4/kvartalni_izvestaj_IV_10.pdf*.

At the same time, the banking sector of Serbia is adequately capitalized. Although lower than in the previous two years, an indicator of capital adequacy, as a ratio of capital to risk weighted assets, is still considerably better than the required regulatory minimum (20% at the end of 2010), which is the result of good risk management in banks and anti-cyclical regulatory policy of the National Bank of Serbia.

Seen from the point of size of the domestic deposits in total liabilities (78%), it can be said that the banking sector in Serbia has a stable structure of resources, at the end of 2010 year. Combining it with a high amount of capital, it is clear that the balance sheet structure of banks in Serbia is better than of the banks of a large number of European countries. In addition, the banking sector in Serbia has adequate foreign currency structure of the deposits (79% of total deposits are foreign currency deposits). However, the term structure is not satisfactory, the dominant share of short-term deposits (95%) in total deposits. Therefore, the mismatch of sources and investments is large (long-term investments increased by up to 5 times compared to the long-term sources).

Liquidity position of the banking sector can be characterized as satisfactory. At the end of 2010, the liquidity indicators of the largest number of banks moved between 1.5 and 2.5[5], which points to the sufficient level of liquidity in the banking sector. However, in December 2010, the indicators of individual banks stood at 4, 5 or even 6, indicating a lack of efficiency in use of total commitments. At the same time, the ratio of loans and deposits at the end of 2010 was at relatively conservative level (Table 3), despite the upward trend during the year.

The banking sector of Serbia finished the business year 2010 with positive financial results (11 banks showed a loss of business, for the total of 9083 mln. dinars,

[5] An average regulatory liquidity indicator of the banking sector at the end of 2010 was not changed in relation to the 2009 and was 1,96. According to: Bank Control, Report for the fourth quarter in 2010, Department of Bank Control of National Bank of Serbia, p. 20.

which accounts for 17% of the banking sector assets). However, the efficiency of resources use is insufficient, reflecting the still low rate of return on total assets employed — ROA (1.0%) and on equity — ROE (5.1%) at the end of 2010. The banking sector in Serbia still holds the lower rank of profitability compared to neighbouring countries. A high rate of immobilization of the financial potential of banks from mandatory reserves, as well as an inadequate management of funds by bank managers have great impact on capital use efficiency.

Table 2. **Indicators of banking sector liquidity**

Period	Regulatory indicator of liquidity	Credit and deposit ratio in %
31.12.2008.	1,80	104
31.12.2009.	1,86	92,3
31.12.2010.	1,96	108,5

Source: Quarterly reports on the control of banks in 2008, 2009 and 2010.

Despite the unfavourable macroeconomic trends, caused by the global financial crisis and the internal weaknesses of the financial system (inflationary pressure, the depreciation of the dinar exchange rate), it is evident that the stability of the banking is preserved in 2010. However, the structural imbalance between banks in terms of financial strength and performance is a challenge to further development of the banking sector. At Serbian banking market, there are few banks with a leader position and the relatively large number of banks with modest results in business. In addition, there are banks with high losses. Losses recognized in the balance sheets of the first 4 banks make the 71.3% of the total loss in the sector. In addition, 73.1% of the realized profit is the result for the 3 banks, what makes 53.9% of the total profit of the sector.

Generally, the overall condition of the banking sector in Serbia is much better than the real sector, according to the results of operations, balance sheet growth, changes in legislation, compliance with international standards in accounting of business performance and risk measurement.

Conclusion. Bank restructuring, which was conducted with the active role of the state, has created a quite stable banking sector, which even in times of global crisis had a brilliant profitability, adequate capitalization and corporate performance as well. First, there were no direct risks associated with investing in securitized mortgages and other high-risk financial instruments, which are in the basis of the global financial crisis. In addition, by its anti-cyclic monetary policy, the National Bank of Serbia relatively quickly mitigates the negative induced psychological factors that led to a massive withdrawal of deposits, at the outset of the crisis. Since the banks effectively responded to citizen requests for deposits withdrawal, in December 2008 the outflow not only stopped, but was followed by an influx of new deposits. This is practically preserved confidence in the banking sector.

Although the good capitalization of banks represented a major factor of the resistance of the banking sector of Serbia to affect the global financial crisis, the priorities for future development must be based on further strengthening the capital base, improved maturity of compliance resources and more efficient total risk management in the banks.

Although the banking sector of Serbia at the end of 2010 recorded the slightly increased indicators of financial strength and performance, caution still must not give way to excessive optimism. Recessive economic trends at the global level and the fact that there is a high functional dependence between the economic and banking sectors are the main challenges to the stability of banks in Serbia. It should be noted that the major risks to the sector are caused by the recession and rising credit risk, because of debt of companies and citizens in foreign currency (in the structure of banks' loan portfolio, 75% are the loans in foreign currency). In this regard, we expect an increase of non-payable loans in 2012.

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