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FINANCIAL SYSTEM TRANSITION IN SERBIA: THE FIRST DECADE OF XXI CENTURY

In transition economies, the construction of a financial system in accordance with the needs of the market economy required the restructuring of the banking sector and the creation of previously non-existent financial institutions – non-deposit financial intermediaries and exchange market. Structural changes in the financial system of Serbia increased the dominance of the banking sector. Although the domestic banking sector can be characterized as stable, non-diversified structure of non-deposit financial institutions and the shallow capital market stand for the mirror of economic conditions within the country. With the purpose of examining the current level of development of Serbian financial system, this paper analyzes banking institutions, institutional investors and the Belgrade Stock Exchange in the first decade of XXI century.

Keywords: *financial system, banking sector, non-deposit financial institutions, stock exchange, financial flows.*

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ПЕРЕХІДНИЙ ПЕРІОД У ФІНАНСОВІЙ СИСТЕМІ СЕРБІЇ: ПЕРШЕ ДЕСЯТИРІЧЧЯ XXI СТОЛІТТЯ

У статті доведено, що в країнах з перехідною економікою створення фінансової системи, що відповідає потребам ринкової економіки, вимагає реструктуризації банківського сектору і створення фінансових інститутів, які раніше не існували, – недепозитних фінансових посередників і валютного ринку. Структурні зміни у фінансовій системі Сербії посилили роль банківського сектору. Хоча банківський сектор можна охарактеризувати як стабільний, недиверсифікована структура недепозитних фінансових установ і слабкий ринок капіталу відображають економічні умови в країні. З метою вивчення поточного рівня розвитку сербської фінансової системи проаналізовано діяльність банківських установ, інституційних інвесторів та Белградської фондової біржі в першому десятиріччя XXI століття.

Ключові слова: *фінансова система, банківський сектор, недепозитні фінансові установи, біржа, фінансові потоки.*

Рис. 3. Табл. 2. Літ. 22.

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ПЕРЕХОДНЫЙ ПЕРИОД В ФИНАНСОВОЙ СИСТЕМЕ СЕРБИИ: ПЕРВОЕ ДЕСЯТИЛЕТИЕ XXI ВЕКА

В статье доказано, что в странах с переходной экономикой создание финансовой системы, соответствующей потребностям рыночной экономики, требует реструктуризации банковского сектора и создания ранее не существовавших финансовых институтов – недепозитных финансовых посредников и валютного рынка. Структурные изменения в финансовой системе Сербии усилили роль банковского сектора. Хотя банковский сектор можно охарактеризовать как стабильный, недиверсифицированная структура недепозитных финансовых учреждений и слабый рынок капитала отражают экономические условия в стране. С целью изучения текущего уровня развития сербской финансовой системы проанализирована деятельность банковских учреждений, институциональных инвесторов и Белградской фондовой биржи в первом десятилетии XXI века.

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Ключевые слова: *финансовая система, банковский сектор, недепозитные финансовые учреждения, биржа, финансовые потоки.*

Introduction

Financial system, as a component part of each economic system, directs funds to different groups of economic entities with greater or lesser efficiency depending on the level of economic and overall social development. Various research (Odedokun, 1996; Rousseau and Wachtel, 1998; Rousseau and Sylla, 2005; Burhop, 2006) has shown that the development of a financial system improves economic growth in general. However, some research (Calderon, Lui, 2003) has shown that the impact of the development of real sector on the development of financial sector is more pronounced in developed ones. On the other hand, financial intermediaries exert greater relative impact on economic growth in less developed countries than it is the case with more developed countries, which, in the long run, implies greater impact of the development of financial system on economic growth.

Levine (1998) finds statistically significant correlation between the development of the banking sector and long-term economic growth rates. Beck at al. (2000) add to the research of Levine et al. (2000) and investigate the channels through which the development of financial intermediation affects economic growth. Authors claim that financial intermediaries exert positive influence on the growth of total factor productivity which stimulates the growth of GDP. Favara (2003) claims that the impact of financial system's development differs among countries and that there is no fixed model that is applicable to certain geographic position, level of economic development and institutional features. The aforementioned studies support the conclusion reached by Al-Yousif (2002), on the basis of which the nature of correlation between financial development and economic growth differs among countries due to the fact that each country has its own specific economic policy whose success partly depends on the efficiency of institutions that implement economic policy measures.

In the second half of XX century the global financial system experienced numerous changes that contributed to the expansion of activities of financial institutions and the economic growth. In the last decade of the XX century, transformation of economic systems in former socialist countries implied radical changes of financial systems. Among other things, reforms included restructuring of domestic banks and entry of foreign banks into domestic markets, establishment of non-deposit financial institutions as well as revival of securities market. It is beyond any doubt that this had positive effects on the increased efficiency of investments and increased economic growth rate. However, global economic crisis resulted in the increased systemic risk, fall in investor confidence, expansion of financial instability and decrease of economic growth rate.

Taking all the aforementioned facts into consideration, the given research will be focused on the analysis of the structure of financial institutions in the financial system of Serbia. The aim of the research is to perform an all-encompassing analysis of the Serbian financial system in the first decade of XXI century. The key starting hypothesis of the paper is: in case of existence of a diverse structure of financial institutions, financial system provides investors with the opportunity to perform optimal allocation of free funds.

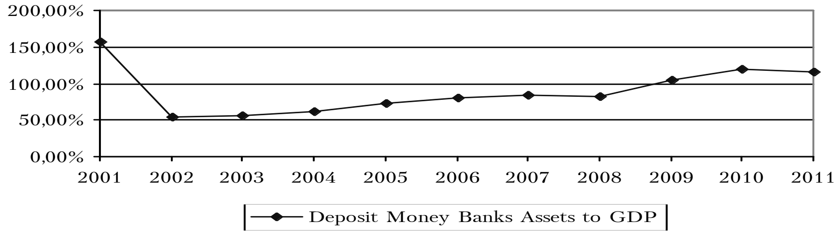
Analysis of banking sector operations

The process of transformation of the banking sector in Serbia started in 2001 with liquidation of the largest banks and entry of foreign banks into the market. At the beginning of 2001, Serbian banking sector was comprised of 86 banks. In the period from 2001 to 2002, the banking sector was characterized by high risk of uncollectible receivables, low level of interest-bearing assets, real insolvency of largest banks, high illiquidity as well as the lack of adequate system of risk control and management (NBS, 2001, p. 80). From 2003 to 2008, the banking system in Serbia was characterized by fast and stable growth, which resulted from the sale of the majority of domestic banks after general liberalization of the domestic market and its opening for investments. Entry of foreign banks into the domestic market brought about higher level of competition and modernization of banks in the process of provision of new services. During the observed period, the banks ownership structure significantly changed. The share of banks with majority domestic capital which equaled 73.3% in 2003 decreased to 26.3% in 2008, whereas the share of banks with the majority of foreign capital increased from 26.3% to 73.7%.

At the beginning of 2009 economic activities of the real sectors started to decline, which resulted in the fall of quality indicators of banking sector operations (Jaksic, et al., 2010). Lending activity of banks experienced an abrupt slowdown due to high indebtedness and illiquidity of key economic actors on the Serbian market. All this resulted in massive withdrawal of savings from banks. With the purpose of preventing financial panic in the banking sector, the Government of the Republic of Serbia adopted the first set of anti-crisis measures at the beginning of 2009. Among other things, the National Bank of Serbia abolished reserve requirements on new foreign borrowing until end-2010 and adopted a set of decisions including, among others, the decision to lower the referential interest rate (Kovacevic, 2012).

Under conditions of the global recession the Serbian banking sector remained relatively stable, liquid and relatively profitable. At the end of 2007, before the global recession, capital adequacy of banks reached 27.9% (NBS, 2007, p. 62). Increase of credit risk during the crisis resulted in the reduction of capital adequacy of banks. Nevertheless, capital adequacy equaling 19.1% at the end of 2011 exceeded the minimum proscribed by domestic regulations equaling 12%. Banks' liquidity indicators ranged from 1.2 to 2.7, which implied the satisfactory level of liquidity. Constant increase of ratio of non-performing loans to total loans resulted in decreased profitability. However, even during the crisis period the banking sector still managed to record positive financial results.

Banking sector has a dominant role in the financial system of Serbia. At the end of 2011, it accounted for 92.4% of the balance sheet total of the financial system subject to supervision by the National Bank of Serbia, thus standing for the key factor of financial system stability (NBS, 2011, p.45). The significance of financial services that commercial banks provide to the economy as a whole is shown by the indicator of the size of the banking sector, measured as the ratio of total consolidated assets of commercial banks to GDP (Figure 1).



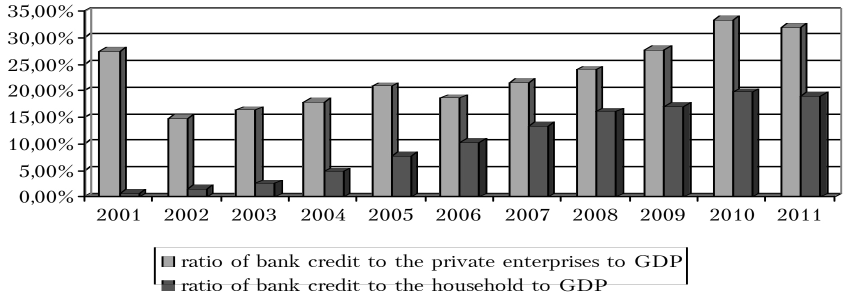
Source: National Bank of Serbia www.nbs.rs

Figure 1. **Size of the banking sector in the period from 2001 to 2011**

However, the size of the banking sector or the financial system in general is not always a good indicator of its development and ability to perform its basic financial intermediation function in an efficient way. If, for example, the majority of banks' assets is granted to public sector, there will be no effects on the increase of economy's efficiency that are expected to occur due to performance of functions related to resource allocation, management supervision and control, risk management and the like. Therefore, it is believed that the amount of banks' receivables from the private sector stands for a better indicator of the quality of banks' activity than it is the case with the indicators of size (Dalic, 2002).

If we take into consideration that the process of precise measuring of the banks' many-sided effects on economy is not simple, it can be said that this indicator indirectly points to the contribution of the banking sector to the improvement of economy's efficiency. The general hypothesis is that the loans granted to the private sector have a greater effect on the increase of investments and productivity than in the case with the loans granted to the public sector. In addition, loans granted to the private sector are characterized by rigorous conditions. Moreover, assessment of projects by financial institutions brings about higher quality of investments (Calderon and Lui, 2003).

Apart from the importance of the amount of commercial banks' total receivables from the private sector, the issue of the structure of those receivables is significant as well. For that reason, indicators of banks' activity are reflected in the ratio of commercial banks' receivables from economy to GDP and the ratio of commercial banks' receivables from the population to GDP (Figure 2).



Source: National Bank of Serbia www.nbs.rs

Figure 2. **Lending activity of banks in the period from 2001 to 2011**

In the period from 2002 to 2011, the ratio of banks' receivables from the economy to GDP was 22.7% on average, whereas the ratio of banks' receivables from the population to GDP was 11.3% on average. In comparison to the same indicators in the countries in the region (Bulgaria, Romania, Hungary and Slovenia), in which the ratio of banks' receivables from the population to GDP is around 16% whereas the ratio of banks' receivables from the economy to GDP is around 20%, it can be said that Serbian values of the given indicators are comparable to the situation in advanced countries in transition.

Structure and operations of non-deposit financial institutions

In comparison to banks, non-deposit financial institutions have a slight share in the structure of financial system. At the end of 2011, they accounted for 7.6% of the balance sheet total of the financial system.

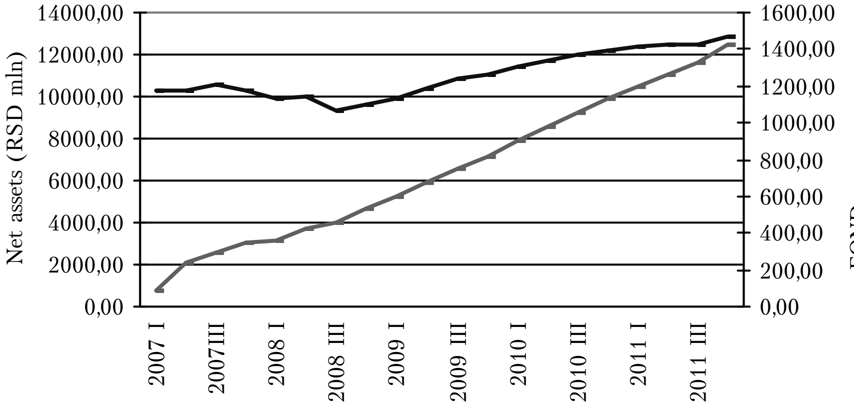
Insurance companies – During the pretransition period, insurance companies did not function as self-supporting and independent non-deposit financial institutions aiming at the protection of the insured. Insurance companies stood for the instrument of savings mobilization through obligatory insurance forms. For that reason, it was necessary to restructure the insurance sector in Serbia. The first step in this process was reflected in the passing of new Insurance Law in 2004.

In comparison to the development of insurance sector in the EU countries, the insurance sector in Serbia is undeveloped and, as such, remains below EU countries' average. In the period from 2005 to 2011, the ratio of total insurance premium to GDP was 1.9% on average, whereas in the EU countries it amounted to 8.5%. In addition, total insurance premium per capita in Serbia during the observed period was 98 US dollars, whereas the average amount of insurance premium in the EU countries during the same period was 2840 US dollars. 28 insurance companies operated in Serbia in 2011. If ownership structure is taken into consideration, 21 insurance companies are companies with foreign ownership, whereas 7 of them are companies with domestic ownership.

Development of the insurance market in Serbia, measured by the growth of total insurance premium, shows positive trend. The highest growth of the total premium was recorded in 2007, being 16.8% higher in relation to the previous year. The lowest growth of total premium was recorded in 2010, being 0.5% higher in relation to the previous year. Causes of the slowdown of the market's growth were reflected in the decrease in the number of newly concluded contracts and the problem of insurance premium payment related to the existent insurance contracts. At the beginning of the observed period (in 2005), the share of non-life insurance in premium structure equaled 90.5%, whereas the share of life insurance equaled only 9.5%. After continuous growth of life insurance rate during the observed period, at the end of 2011 the share of life insurance in the total premium equaled 17.4%.

If all the aforementioned facts are taken into consideration, there are some rough recommendations that could be given and that are related to some of the key areas the insurance companies should deal with. These are: corporate management, risk management, improvement of investment evaluation techniques, improvement of transparency and activities in the field of education of the potential insured. If insurance companies improve these areas, increase of trust in these companies and creation of conditions for the development of this segment of the financial system can be expected (Jaksic, Grbic, 2010).

Pension funds – With the purpose of creating institutional framework for the development of pension funds in Serbia, the Law on Voluntary Pension Funds and Pension Schemes was passed in 2005. Through the application of this law, the third pillar was added to the first pillar of pension insurance. At the end of 2011, the market of voluntary pension funds comprised 6 companies that managed the assets of non-voluntary pension funds. From the start of voluntary pension funds' operations, their net assets experienced constant growth (Figure 3). At the end of 2011, these funds' net assets equaled 12.45 bln. dinars, which was by approximately 26.3% higher in relation to the end of the previous year (NBS, 2011a: 8). Growth of net assets was mostly due to members' net payments and the funds' return. During the previous 5-year period, the structure of voluntary pension funds' assets was in line with the conditions on the financial market. At the end of 2011, state debt securities had the biggest share in the structure of funds' assets, which amounted to 74.9% (NBS, 2011, p. 68).



Source: National Bank of Serbia www.nbs.rs.

Figure 3. **Net assets dynamics of pension funds and FONDex**

One of the key indicators of voluntary pension funds' operations is FONDex, which index represents the dynamics of investment unit values of all voluntary pension funds on the market (Figure 3). On the day when the first pension fund started its operations, its value equaled 1000 points. At the end of 2011, FONDex index reached the value of 1470.1 points. The return of FONDex, which also stands for the weighted average of all funds' return, equaled 2.9% in the observed 5-year period, whereas the return in 2011 equalled 5.8% (NBS, 2011a, p. 4). The biggest influence on the movements of FONDex is exerted by return on state debt securities which also have the biggest share in the funds' portfolio.

Total assets of this sector are much lower than the banking sector's assets or the insurance sector's assets. The share of voluntary pension funds in the value traded on the Belgrade Stock Exchange is moderate as well. In the fourth quarter of 2011, these institutions' share in the total value traded on the Belgrade Stock Exchange was 3%. The significance of the sector of voluntary pension funds with respect to the scope of employment is 120 times lower than it is the case with the banking sector and almost 40 times lower than in the case with the insurance sector.

Finally, it should be pointed out that the development of "the third pillar" of pension insurance in Serbia will depend on the improvement of the population's living standard, macroeconomic stability, maintenance of stability of financial system that will increase people's trust in long-term savings institutions, expansion and deepening of the capital market, appearance of the competition in the system of voluntary pension funds and financial education of the people of Serbia (Jaksic, 2010).

Investment funds in Serbia – Institutional opportunities for domestic investors' investments in investment funds in Serbia were created in 2006 when the Law on Investment Funds was passed. Establishment of investment funds in Serbia started at the end of the first quarter of 2007. Their operations under relatively stable economic conditions lasted for only a few months. When the global recession commenced, the prices of securities on the Belgrade Stock Exchange went down, which resulted in the fall of investment unit values. Return of open-end investment funds in 2008 had mostly negative values. Maximum fall of return of investment funds equaled -55.55%. In 2008, the value of stock exchange index, BELEX15, fell to 75.62%, whereas BELEXline lost 68.72% of its value.

At the end of 2009, Securities Commission focused on the stimulation of development of investment funds and enabled them to invest their capital abroad. In 2010, positive trend was recorded on the investment fund market. Mild growing trend of the average investment unit value of all open-end investment funds was recorded in 2011 as well. From March 2007 to December 2011, negative average rate of return on investment unit of all open-end investment funds was recorded. On 31 December 2011, it amounted to -17.02%.

At the end of 2011, there were 20 active investment funds in Serbia. 15 of them were open-end, 2 of them were closed-end and 3 of them were private investment funds. This type of investment is much more developed in countries in the region. During the last year, Croatia had approximately 130 investment funds, Slovenia had 150 and Hungary had 300 investment funds. The share of growth funds in the structure of open-end investment funds' assets is dominant. Growth funds bring the highest return, but also the highest risk. Contrary to the situation in Serbia, Croatia and Slovenia deal more with balanced funds, which bring somewhat lower return, but also lower risk.

Efficient investment funds stand for an alternative to bank savings. Therefore, investment funds are becoming a significant factor of stimulating competition in the financial sector. For that reason, with respect to investment policy and the structure of funds, focus should be placed on less risky funds, such as money-market funds and income funds, with the purpose of encouraging existent and attracting new investors.

Operations of the Belgrade Stock Exchange

Organized market of long-term securities in Serbia has been functioning under the name of the Belgrade Stock Exchange since 1992. The size of Serbian capital market in relation to the countries in the region will be positioned with the help of market capitalization ratio. To put it more precisely, this indicator equals the total value of listed shares divided by GDP. Although big markets do not always function efficiently, this ratio is often used in literature as the indicator of stock market development under the assumption that the size of the stock exchange is in positive correlation with the possibility of capital mobilization and risk diversification (Levine and

Zervos, 1998). Table 1 shows market capitalization ratio of the observed countries in the region.

Table 1. **Comparative review of the capital market size of the countries in the region in the period from 2005 to 2011**

Country	2005	2006	2007	2008	2009	2010	2011
Bosnia and Herzegovina	52,76	106,36	80,75	44,65	47,40	45,00	29,39
Bulgaria	17,60	31,09	51,75	17,09	14,63	15,25	15,42
Croatia	28,82	58,18	111,19	38,32	40,41	40,94	34,14
Hungary	29,53	37,26	35,01	12,05	22,34	21,54	13,41
Macedonia	10,79	16,74	33,28	8,37	9,90	28,80	24,64
Montenegro	46,46	65,04	100,82	63,34	103,57	87,67	73,00
Serbia	21,43	37,59	61,44	25,47	28,70	25,22	18,57
Slovenia	22,11	38,98	61,22	21,56	23,99	20,10	12,77

Source: World Bank, Federation of Euro-Asian Stock Exchanges (FEAS)

On the basis of Table 1 it can be seen that by the end of 2007 all stock exchanges recorded growth of market capitalization ratio to GDP. However, the occurrence of recession in the second half of 2008 caused the decline in value of this indicator on the Belgrade Stock Exchange as well as on other markets in the region. Slowdown of the growth of the world economy and unfavourable macroeconomic tendencies in the EU countries caused further negative economic movements in Serbian economy. For that reason, it can be said that 2011 was for the market capital and the total economy of Serbia worse in relation to previous years. The ratio of market capitalization in gross domestic product in Serbia and countries in the region is by approximately 50% lagging behind the world's average.

Table 2 illustrates the level of liquidity of the Belgrade Stock Exchange by showing the ratio of value traded to GDP (value traded ratio) for the observed countries in the period from 2005 to 2011. These data clearly show that Hungary stands out in relation to other countries during the observed period from 2005 to 2011. However, on the whole, all markets are characterized by very low level of liquidity. Until 2007 the value of this indicator had been growing on all stock exchanges. Due to global recession starting in 2008, its growth drastically decreased.

Table 2. **Ratio of value traded to gross domestic product in the period from 2005 to 2011**

Country	2005	2006	2007	2008	2009	2010	2011
Bosnia and Herzegovina	3,90	5,31	8,52	1,56	1,10	0,44	0,58
Bulgaria	4,80	4,54	13,05	3,19	0,82	0,41	0,50
Croatia	1,78	3,66	6,89	4,92	2,24	1,70	1,58
Hungary	21,67	27,71	34,90	19,97	20,48	20,58	13,90
Macedonia	1,62	2,98	6,18	1,59	0,66	0,39	0,50
Montenegro	4,61	10,69	10,23	2,33	7,91	0,75	1,71
Serbia	2,64	4,59	6,55	2,61	1,40	0,62	0,74
Slovenia	2,21	2,62	5,74	2,58	2,08	0,58	1,03

Source: World Bank http://data.worldbank.org/indicator/CM.MKT.TRAD.GD.ZS

Total annual value of traded shares on the stock exchanges in the most developed world economies exceeds the value of their gross domestic product. In 2007 the indicator equaled 181.2% of GDP. In the same year in the EU it reached the record of 158.8%. Due to the global crisis that occurred at the end of 2008, this indicator started decreasing, which was especially reflected in the EU rather than the rest of the world. In 2011 in the EU, this indicator equaled approximately 38% of its 2007 value. In the same year the rest of the world recorded approximately 55% of its 2007 value. 2007 was the most successful year, when this liquidity indicator equaled only 6.5% on the Belgrade Stock Exchange. Due to the fact that the level of share market liquidity is one of the important factors in the process of making investment decisions, it is logical that the increase of liquidity stands for a necessary condition for attracting investors.

Conclusion

Through the analysis of the financial system of Serbia, the following conclusions could be drawn:

– The process of transition implied restructuring of the banking sector in accordance with the needs of market economy as well as the construction of non-existent parts of financial system – non-deposit financial intermediaries and capital market.

– According to the data analyzed, the banking sector in Serbia is comparable to banking sectors in advanced transition countries with respect to its size and activity. However, structural imbalance in the development of banks, non-bank financial institutions and capital market in Serbia is more pronounced than it is the case with other countries that passed through the process of transition.

– Banking sector has a dominant role in the financial system of Serbia and it accounts for more than 90% of the balance sheet total of the financial system. During the 10-year period, the number of banks more than doubled so that in 2011 the banking sector of Serbia comprised 33 banks.

– In the period shortly after the occurrence of the global crisis, there was a slowdown of lending activity of the banking sector, which was a response to increased investment risk under conditions of the crisis. With respect to this, Serbia is one of the few countries in the region which recorded the slowdown, rather than the fall in lending activity during crisis.

– Insurance sector exerts significant impact on the development of each country's economy and stands for an important factor of financial sector stability. The level of development of insurance sector in Serbia, measured by the amount of insurance premium per capita, is much lower in comparison to the European Union countries. In addition, premium to GDP ratio is far below the premium to GDP ratio of developed economies.

– The emergence of voluntary pension funds and investment funds shortly before the decline of total economic activity caused by global recession resulted in weak development of these funds in Serbia.

– In spite of its significant results, the Belgrade Stock Exchange is still insufficiently developed. Taking the variety of market elements, market capitalization value, value traded volume and liquidity into consideration, it can be said that the signs of expansion were evident by the end of 2007.

– Global recession blocked the progress of capital market development. Integration of the Belgrade Stock Exchange with regional stock exchanges is of crucial importance for further development of the capital market and the growth of its activity.

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