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## Banking concentration in the Baltic and Western Balkan states - selected issues

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**Institute of Economic Research Working Papers**

**No. 68/2015**

**Banking concentration in the Baltic and Western  
Balkan states – selected issues**

Katarzyna Kubiszewska

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## **Banking concentration in the Baltic and Western Balkan states – selected issues**

**JEL Classification:** *G10, G20, G21*

**Keywords:** *banking market consolidation, banking market concentration, the Baltic States, the Western Balkan states*

**Abstract:** In a rapidly changing economic environment companies deepen their cooperation, which entails in all sectors of the economy. The progressive increase in market concentration, especially in the banking sector, has a purpose, which is to increase the benefits from the operation of various enterprises, e.g. credit institutions. The purpose of this article is to compare the tendencies within market structures in various countries which origin from similar political systems and which have got experience in transformation of banking sectors. The research concerns the Baltic and Western Balkan states. The study revealed a distinct change in the growth rate of market concentration and the number of banks.

The article is divided into two main parts. The first part consists of an analysis of the literature on the concentration of the banking market. It presents a discussion on the effects of changes in market structures, leading to an increase in its consolidation. The second part is devoted to empirical research in relation to changes in the degree of concentration of the banking sectors (using concentration ratios) and the number of banking institutions operating there. These sectors are divided into two groups: selected member states of the European Union (Lithuania, Latvia, Estonia) and the Western Balkan countries (Croatia – new member of the EU, Serbia, Bosnia and Herzegovina). In this section there are detailed descriptions of the banking markets' structures.

## **Introduction**

In a rapidly changing economic environment companies deepen their cooperation, which entails changes in all sectors of the economy. The progressive increase in market concentration, especially in the banking sector, is driven by many factors, with an increase of the benefits resulting from operations of enterprises such as credit institutions as the most essential.

The purpose of this article is to present the changes taking place in the area of the banking sector consolidation, both in the EU member countries and these which are just applying for its membership. The research concerns economies from the East and Central Europe: the Baltic and Western Balkan countries. It is believed that similar changes in banking sector consolidation must have been recorded in the countries which had to transform their economies, including their financial systems. The study revealed a distinct change in the growth rate of market concentration and the number of banks in different groups of countries concerned.

The article is divided into two main parts. The first part contains the review of Polish and foreign literature on the issue of banking sector concentration. It presents a discussion on the effects of changes in market structures increasing their consolidation. The second part is devoted to empirical research in relation to changes in the degree of concentration of the banking sectors (using concentration ratios) and the number of banking institutions operating there. These sectors were divided into two groups: selected member counties of the European Union (Lithuania, Latvia, Estonia) and the Western Balkan countries (Croatia, Serbia, Bosnia and Herzegovina). This section also contains a detailed description of changes in the banking sector structures.

## **Methodology of the research. Content and Methods**

The first part of the article reviews the literature on the subject of markets consolidation, including the banking sectors. It presents the discussion carried out among the scientists, concerning the changes taking place in the practice of banking. The second part considers the situation in banking sectors of the researched countries with reference to the transformation and redeveloping the sectors, as well as the current condition of the banking markets' consolidation. Further, a method of analysis is presented. The author compares the changes within the sector concentration and changes in the number the credit institutions. Basing on the above facts differing group were selected. Despite the common history

and experience of transformation, the researched countries cannot be considered as the homogenous group. The reasons for it are discussed further in this subchapter. The following research methods were used to gather and to analyze the qualitative and quantitative data: document review, literature review and international study. Various documents were collected: reports, financial statements covering the performance and structure of the studied economies. The theoretical part of the article consists of publicly available literature and legal acts review. The empirical part of the article is based on comparative analysis and studies of various reports for the period up to 2013. Data are provided by Eurostat, European Central Bank and the central banks of the selected countries.

### **Literature review – definitions**

The issue of market consolidation has been discussed in the literature for a long time, providing various definitions. Poteraj (Poteraj, 2004, p.25) notes the difficulty in defining the concept of consolidation. He sees a discrepancy between Polish and English nomenclature, which makes it difficult to clarify the term. Discrepancies arise while trying to define the term more precisely. The most general and the least precise definition presents the term as the consolidation of union, fusion, the combination into a single whole, strengthening, consolidating. (Dunaj, 2001, p.406) Consolidation is not any combination, but is designed to strengthen economic performance of formerly separate entities.

Sector consolidation results from acquisitions which may have either friendly or hostile nature, as it was presented by Frackowiak. (Frackowiak, 2009, p.95) The author adds that the friendly acquisition is associated with a prepared program, common understanding of preliminary findings, and, above all, with exact explanation of reasons. Any decision in the case of such acquisitions must be commonly understood, discussed and communicated even to the smallest shareholders. Company operations, including suitability of employees is reviewed and adapted to the new conditions of its operation. In a friendly takeover, the evaluation of its effects will follow. In other types of purchase transactions, a company may be taken over with a use of one of two procedures. The more difficult one involves the gradual buyout of shares. The less risky procedure assumes submission of an offer directly to shareholders of a company. It can also be used to take over control, and to transform the company itself - mainly its board of directors. (Frackowiak, 2009, p.102)

Among the authors there is a significant discrepancy as to the hierarchy of various types of transactions. Helin and Zord (1998, p.3) distinguish between two types of transactions which result in sector consolidation.

These are mergers and acquisitions. The first one is defined as a combination of similarly sized entities, which establish a new corporation with evenly weighted shares. If this method is not applicable, the deal is recognized as an acquisition.

Sudarsan (1998, p.1-5) explains that merger and acquisition is a combination of two different organizational systems, with different cultures and values. Through this union of companies the expansion of an entity and, hence, its development is possible. The main objective is to connect companies to increase value of assets, sales and market share and to raise the value for shareholders. The merger is defined as the merging companies while sharing their combined resources, in order to achieve positive results of cooperation. As a result of the merger a new organization based on both united entities is created. The acquisition is a contract that gives one company an advantage and greater self-reliance. An acquired company becomes subordinated to a company making the acquisition. This view remains in accordance with definitions presented earlier by Bannock, Baxter, Davis (1992).

Poteraj, following Frąckowiak, divides purchase transactions into acquisitions and mergers. Acquisitions may take a form of share purchase, purchase of assets, powers of attorney, privatization, lease and joint ventures (Poteraj, 2004, p.30). Czekaj considers the consolidation as a form of fusion, in addition to mergers and acquisitions (Czekaj, Dresler, 2008, p. 244). According to his definition a fusion is a combination of companies, resulting in complete absorption of one company by the other, followed by the acquisition of assets and liabilities. Following the transfer, the acquiring company retains its name and legal entity, in contrast to the acquired company which ceases to exist as a separate legal entity (Poteraj, 2004, p.32). Consolidation is different from the merger because it forms a completely new legal entity. This means that participating companies lose their independence and cease to exist. An acquirer and an acquiree have a similar status and are in the same situation. Frackowiak uses another term to determine this case, which is the concept of incorporation. In his opinion, the acquisition can be considered as a loss of company control by one group of owners to another individual or to a group of people managing the company. It distinguishes the acquisition from the merger and consolidation that does not result in total loss of the acquired institution dependency. Poteraj adds that the acquisition may be a phase of the process of a complete fusion of interests by means of a merger or a consolidation. (Poteraj, 2004, p.31) In this way, he shows them as two separate processes. However, the author also presents distribution, in which the merged and the holding companies are elements in the consolidation processes. (Poteraj, 2004, p.34). Lichtarski recognizes the concept of holding as a concentration

form. (Lichtarski, 1999, p. 372) They are characterized by many restrictions of a company independence.

The above considerations show that there are many types of transactions resulting in an increase of a sector consolidation. Their features should be discussed, without taking into account their mutual dependence. It is considered to be reasonable to focus on the characteristics of different types of mergers, based on a few basic criteria. Each type of consolidation depending on legal form brings benefits for the involved companies. This may mean weaker market competition, takeover of the whole sector, smaller risk of growth of external company or opportunity to increase the market share while maintaining appropriate independence. For each acquisition method, however, there is an advantage which is highlighted at the beginning of this section. Consolidation in its assumptions is to improve the situation of the acquired business. Relations among enterprises may be of a more or less correct. Generally speaking, the process of market consolidation is related, on the one hand, to the need to achieve a high level of equity and the acquisition of skills (know-how), on the other hand – it is aimed to increase its market share in a short period of time.

### **Literature review – the case of banking sector**

In the field of finance a prevailing view is that only large banking institutions have a chance to grow and compete in the global banking sector. (Kowalewski, 2003) This view is based on several assumptions. Only large institutions are able to finance the construction of a modern system of distribution of financial products and services, taking into account the current technological development. Banking institutions can benefit from the scale only by achieving a certain operating level. In addition, modern banking groups, due to demand or benefits of specialization and synergies, need to be able to offer a very wide range of financial services and products. At the same time, changes in the environment of the financial sector force banking institutions to go out of local markets and build international presence. The increase in the scale of operations of banking groups increases demand for equity. Consequently, banks of the future will have a universal character, and will operate in international markets, offering all possible products and financial services to their customers using new distribution channels. (Freedman, Goodlet, 1998, p. 8-17)

Market concentration refers to the degree of dominance by large companies and their activities in the market. (Sathyam, 2002, pp. 7-20) The rise in the level of concentration may be caused by either growth of a parent company and / or by fall of the capacity of non-dominant firms in

the market. The decrease in concentration can result from decrease in the size of a parent company and / or increase the size of non-dominant firms. (Athanasoglou et al., 2008, pp. 121-136) In the literature this problem is widely discussed. The effects of the research result in the emergence of various theories in relation to the banking sector. These theories can be grouped into these in opposition and the ones that support the sector concentration .

Opponents to the sector concentration show that there is a correlation between the degree of its concentration and credit supply. Berger (1995) on the basis of the US banking system, demonstrated that the liberalization of the geographical limitation of bank asset growth in the banking market can be considered as a partial cause of the credit crisis in 1989 - 1992. In addition, a higher level of the local banking sector concentration results in higher profits of the entire sector, which is achieved through higher prices of products and services. This is due to the fact that in a less competitive environment, banks can levy higher interest rates on their customers. The first study on the degree of concentration and competition in the banking sector was conducted in 1954 by Alhadeff. With regard to the banking model based on SCP (Structure-Conduct-Performance) he argued that a higher degree of market concentration leads to higher prices. (Sharma, Ball, 2010, p. 95) If market concentration is positively correlated with market power of banks, the market concentration will increase the expected rates of return on assets (ROA). A relatively higher level of concentration is associated with lower level of socio-economic well-being and for this reason it is not desirable for the economy as a whole. Studies show that a monopolistic market power of banks, due to the increase of market concentration, increases the cost of capital and thus contributes to the increase in financing costs. And, in consequence, the lack of proper competition in the banking sector may negatively affect economic growth.

Another argument against the increase in sector concentration is the fact that more concentrated banking sector exposes banks to financial problems. Advocates of this view point out that larger banks are more likely to receive state support as a result of policy described as "too big to fall", which is not applied to small institutions. (Boyd, Runkle, 1993, s.47-67) On the other hand, supporters of the concentration of the banking sector indicate that thanks to effects of scale achieved through consolidation transactions, the efficiency of bank performance is improved (Demirgüç-Kunt, Levine, 2000, pp. 1-32).

A part of the literature expresses the view that too much competition can destabilize financial markets and credit institutions although competition itself does not create instability. Systemic risk may appear independently from competition and in various market structures. Therefore, the



relationship between stability and competition has been studied in the context of the consolidation of the financial sector by a Ferguson group. In the chapter of the Report on the consolidation of the financial sector, entitled "The impact of consolidation on financial risk", it is concluded that the only effective banks can survive in a competitive environment. It also indicates that the increase in competitive pressure may adversely affect the stability through the excessive increase of the risk by inefficient banks which are focused on maximizing their profits. There is a view that less concentrated banking sectors with a large number of relatively small banks are more vulnerable to financial crises in contrast to the highly concentrated markets where several large banking institutions operate. This is partly due to the fact that lower concentration is accompanied by stronger competitive struggle. Proponents of this opinion also add that larger banks can take advantage of diversifying their activities, which protect against potential financial perturbations (Allen, Gale, 2004, pp. 1-33).

Concentrated bank sectors achieve higher profits, with a higher level of resistance to the crisis. Relatively higher profits can create a specific financial buffer which can be used during potential problems in the market and which can contribute to the increase in the bank value, reducing the need to incur unnecessary risks in business. In addition, it is easier to monitor several large institutions than many small ones, therefore more effective market control is a characteristic feature of the strongly concentrated sector (Beck, Demirgüç-Kunt, Levine, 2003, pp. 26-27). Based on the empirical analysis of 47 banking crises in 70 countries Beck, Demirguz-Kunt and Levine showed that the concentration of the system is a stabilizing factor, and crisis probability is much lower in a concentrated banking system. In addition, more institutionalized market is also better integrated and it is associated with a lower vulnerability to a crisis. It proves the stabilizing effect of theories concerning competition in the banking sector.

Gelos and Roldós (2002), analyzing the level of competition in economies in transition (1994-2000), said that despite the decline in the number of banks in the analyzed period, "the level of concentration did not increase, but did not decrease either." According to the authors, in the researched countries (including Poland), the negative effects on competition related to the consolidation, were offset by the increase of market-share of foreign capital. In this study, the authors point out, however, that the process of consolidation, especially in the Central Europe, was not completed then and therefore it was difficult to form definite conclusions. (Gelos, Roldós, 2003, pp. 1-28)

This review of the literature shows how important it is to study the level of concentration of the banking sector. The consolidation processes on the

one hand can contribute to increased safety of the banking system by improving efficiency, but on the other hand - the effect of these operations may be opposite – it can increase the risk of doing business, and thus reduce safety. The final result depends on the concept of managing the process of mergers and acquisitions, and the condition of the business profiles of participants, along with individual decisions taken by operational managers . (Iwanicz- Drozdowska, 2002, pp. 29-36) As the degree of concentration of the banking sector and the competition affect its efficiency, it can be said that the degree of concentration can be recognized as a starting point for any analysis of the sector.

### **The banking industry in transition**

The analyzed countries, namely the Baltic States and the Western Balkan States, have got a rather similar history of economy. Before declaring their independence all were parts of bigger federal countries: Lithuania, Latvia and Estonia were republics of the USSR and Serbia, Croatia and Bosnia and Herzegovina were Yugoslavia. They could not decide about the growth of their economies, as most state institutions were underdeveloped. It also refers to their banking sectors. The centrally planned economy, introduced at the end of the 20s by Stalin and functioning for the next six decades, as well as particular socialist market economy in Yugoslavia (so called the Third Way put into effect in the 1960s) had common features. The state banking sectors were based on large institutions, which assisted by three or four special purpose entities, namely banks for agriculture, foreign trade and savings banks, with branches all over the country. The objectives of such financial institutions were limited to monitoring, facilitating and fulfilling credit plans. It meant that they could not run any independent policy and strategies since local politicians intervened in credit policies.

The first decisions during the process of transformation were: strengthening, widening and liberating financial sectors. The intention of such steps was to remove state from administration and distribution of capital, develop the banking sectors and allow them to accomplish their basic objectives. A common feature of the banking sectors in transition is that they are prone to crises. These crises are not caused by the liberalization of the legal environment, but its weakness and underdevelopment. The liberalization was demonstrated by a rather liberal policy towards formation of new banks. Another factor influencing the outbreak of the banking crisis was macroeconomic instability. It should be noted that the major reform - the privatization of the self-governed and the stated owned enterprises at the beginning of the 90s - was intended to

contribute towards the development of capital markets as a source for raising new capital. Throughout the 90s a weak banking system was recognized as one of the reasons behind the decline of the production sector, which, without a possibility of raising investment capital, could not restructure to face new market challenges. Although the causes of the crises differ between countries, two factors were common: the accumulation of bad, non-performing loans and inadequate system of regulation and supervision of the banking sector. This type of crisis was observed in Estonia in 1992, Lithuania and Latvia in 1995.

The same happened in the Balkan region. The crisis of the banking sector (by the state) first coincided with the civil war. Inefficiency of the banking sector was due to the civil war and the collapse of former Yugoslavia followed by vicious conflicts. During the war, the banking sectors and larger banks in particular, closely co-operated with governments in order to maintain functioning of the economy in relatively regular way. At the end of the war, the banks were reformed in various aspects : financially restructured, released from "bad debts" and capital-enhanced to be able to deal with forthcoming open market competition.

In Croatia, the first crisis, dating back to the early 90s, was the result of political, economic and legal instability as reminiscences of the vicious conflicts . It was caused by low responsibility level, meaning over-lending and low capital adequacy. In such a situation the government had to introduce the recovery plans based on "*consolidation*" programs to restructure the banking systems. While some banks went bankrupt others were turned around e.g. Zagrebačka and PBZ. (Jankov, 1999).

What is common for the economies in transition is the fact that all suffered from some kind of crisis. The reasons for another crisis are explained by typical market economy problems and loopholes in legislation, characteristic of developed countries and manifested in lack of capital adequacy . Literature presents a number of reasons for outbreak of the crisis. The first factor is insolvency in the sector, measured by the percentage of non-performing loans. The recent problem is lack of financial discipline, to some extent resulting from unpaid state debts, and the costs incurred on restructuring the financial sectors. A key role in the outbreak of the crisis was played by a whole series of elements such as low quality of the management of banking institutions, ineffective interest rates, underdeveloped capital market, no privatization of the banking sector leading to ineffective control of banks, as well as high costs of their operation.

In 1998 Croatian banking sector was hit by the second wave of crisis. Sonje and Vujcic (1999) emphasized that the problem had appeared as early as 1989 when the value of loans exceeded the capital value of the

sector. In 1991 almost half of the banks were insolvent (CNB, 1992). Because of deteriorating general economic conditions, the economy had to deal with problems of low-liquidity and generally not enough free capital to support restructurization and investment processes in the production sector. (Jankov, 2000) Three big banks, including Privredna banka, underwent government restructuring programs, in four basic steps. Non-performing loans were transferred from banks to government agencies. The second step was *recapitalization of the selected institutions*. Step three: the government took over the control and became their major shareholder, immediately announcing its intent to privatize the restructured banks, which was understood as calling them to foreign strategic investors. The last one was introducing new management in these institutions.

Fries and Taci point out that common features of the reforms in banking sectors in transition economies result from recommendations of the International Monetary Fund and World Bank along with so called Washington consensus that forced liberalization, restructuring and privatization of the banking sectors (Fries, Taci, 2002). Zoli (2001, p. 11-13) explained that government bailouts were performed to lift the burden of non-performing loans inherited from the socialist era, and worsened by the hyperinflation at the beginning of the 90s. She estimates that the fiscal costs of the banking sector reforms in some transition countries, namely Bulgaria (1991-94), Czech Republic (1991-93) and Hungary (1992-93) accounted respectively for 58%, 67% and 40% of GDP. Because of the weaknesses of early 90. consolidation programs, Zoli estimates the total costs are actually higher. In case of Croatia, these costs are estimated for around 30% of GDP (Škreb, Šonje, 2001 and Jankov 2000).

The main element of recovery programs was to strengthen legislation and by-laws to improve quality of the banking sector supervision. Having introduced new banking law, the central banks issued a number of decisions regarding methodology of measuring capital adequacy and risk-weighted assets, classification of balance sheet items, off-balance sheet items and the bank risk exposures. Liberalization of laws enabling increase of foreign investors engagement in local banking sectors led to a very high share of foreign capital in these sectors. This situation allowed to consider the foreign strategic investors as a remedy for several problems. Foreign investors were to compensate budget deficit problems and provide a new flow of investment capital to support economic growth and technological know-how (and owners' control) to the finally efficiently restructured banking industry.

## **The concentration of the banking sector in Europe**

A measure of market concentration includes not only the number of companies but primarily examines their relative size. In the literature a whole range of indicators can be found, which confirms that a comprehensive measure has not been established yet. The selection and their use depend on the needs and availability of data. This concerns mainly the concentration ratio (CR) and Hirschman-Herfindahl index, Gossack concentration dynamics, the Gini coefficient or the rate of entropy. As the further part of the study is based on the first two indicators, they will be explained in detail.

One of the basic indicators for the banking sector concentration is involvement of the largest credit institutions in the market (CRN), in relation to the size of assets or deposits. For this paper 5 major sector participants are considered – CR5. The main disadvantage of this indicator is that it excludes the participation of other institutions in the market, so that the indicator shows the degree of monopolizing the supply in the sector. O.Hirschman and J.Hirschman Index (HHI) is a measure of the concentration expressed as an index for an aggregate of the squares of the share values of individual companies in the market. The index can range from 0 to 10,000 (100%<sup>2</sup>). The closer the market to monopoly, the higher the concentration ratio. In monopoly, the company owns 100% of the market, so the HHI index reaches 10,000. HHI decreases with growing diversity in market share and growing number of entities. [Rogowski, 2001, p. 43-44] The entities whose market share is much higher than the arithmetic mean for that sector have larger impact on the index value. The HHI index illustrates the strength of the market, however - to estimate the HHI value requires the data about all entities operating in the sector, which often are unavailable to the public. [Hirschman, 1964, p. 761]

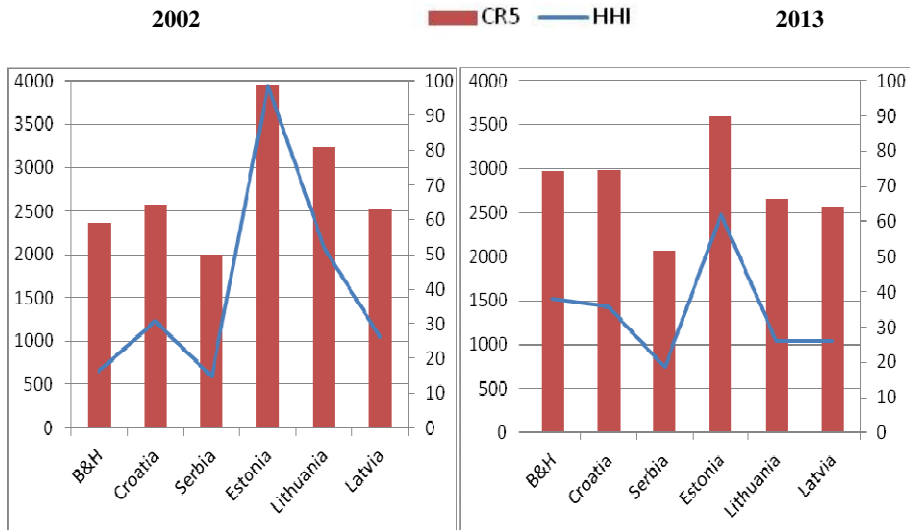
The dynamics of the consolidation process in the years 1985–1999 is shown by a decrease in the number of banks by 40% in the US, and by 25% in the EU. At the end of the 80s takeovers of the largest British and American investment banks by commercial banks were considered crucial. It should be added that at the same time the process of consolidation of European banks was believed to remain at the development stage and was stimulated by establishing of the Monetary Union and the Common Market. European integration forced European financial institutions to fight for the dominant position in a new, expanded market. [White, 1998, pp. 3-13] Summary data for 2013 for Member States of the European Union show a big diversity in banking sector concentration. The CR5 index in the sector for the EU (15) ranged from the lowest level of approx. 33% in Germany and Luxemburg to 80% and more in Finland and the Netherlands, with the

2013 average 52%. The concentration measured with HHI confirms the above results. The average value of HHI for the EU (15) was 909 points, while in 2013 the highest score was noted in the Netherlands (over 3000 points) and the lowest in Germany (approx. 300 points). What shall to be stressed is the upward tendency of the sector's concentration in most member states, excluding only Denmark and Austria. The situation in the countries which joined the EU after 2004, seems rather different. Although in most new member states the concentration level of this sector is decreasing, there is lower diversity in concentration levels, comparing to the EU (15). In the analyzed period, the level of concentration of banking sectors in the countries of the "new EU" clearly decreased: 6% for the CR5 and 20% for HHI. Only in three countries - Slovakia, Bulgaria and Latvia, concentration ratios showed slightly increasing values.

Comparing to other member states from the Baltic region, Lithuania and Estonia achieve the highest concentration level, measured with HHI and CR5 (see Figure 1). The highest share of the 5 largest credit institutions was recorded in Estonia, where in the studied period the ratio reached 96% of its assets (in 2013 - 89.6%) and HHI - 3,434 pts. (in 2013 - 2,483 pts.). This proves the model of banking industries in these countries became closer to the oligopolistic competition, and concentration of the sector was much higher than in other EU member states. The sector concentration in Lithuania does not vary much for the one in Estonia. Latvian banking sector is much less concentrated, both in terms of HHI (1,038 pts.) and CR5 (64%) which remains much closer to the results of the averages in the EU (15) with rather stable situation in 2002-2013.

In Western Balkan region, a relatively high level of concentration of the banking sectors was observed. After the chaos of the 90s the situation began to stabilize in the transformation process. Due to a successful use of tools, such as: separation of commercial activities from central banks tasks, the central bank interest rates liberalization, restructurization and privatization of state-owned banks, and opening the sector to foreign capital. This contributed not only to substantial inflow of foreign capital, but also to high concentration in these markets. Only in Serbia the level of sector concentration measured by CR5 did not exceed 50% in 2013. In other countries, it ranged 70-80% of total assets. Moreover, it must be stressed that the concentration level in the region kept increasing, as presented in the figure 1.

**Figure 1. Change of CR5 and HHI in the analyzed countries from 2002 to 2013\***

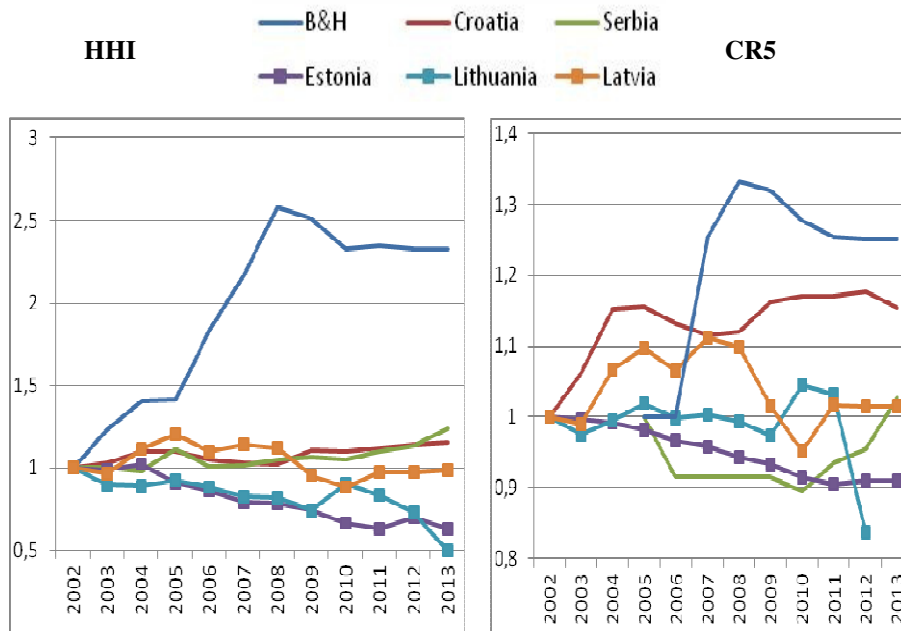


Reference: author's elaboration, based on data from ECB and central banks of the non-EU countries

\*The left axis presents HHI, the right – CR5

In the analyzed period, both groups of countries experienced diverse changes in concentration of their banking sectors. Sector concentration measured with HHI in the Baltic States decreased, but it rose in Western Balkans countries. In case of CR5 the general outlook is unclear and ambiguous. (Figure 2)

**Figure 2. Changes of indices of CR5 and HHI in the analyzed countries (2002 = 100%)**



Reference: author's elaboration, based on data from ECB and central banks of the non-EU countries

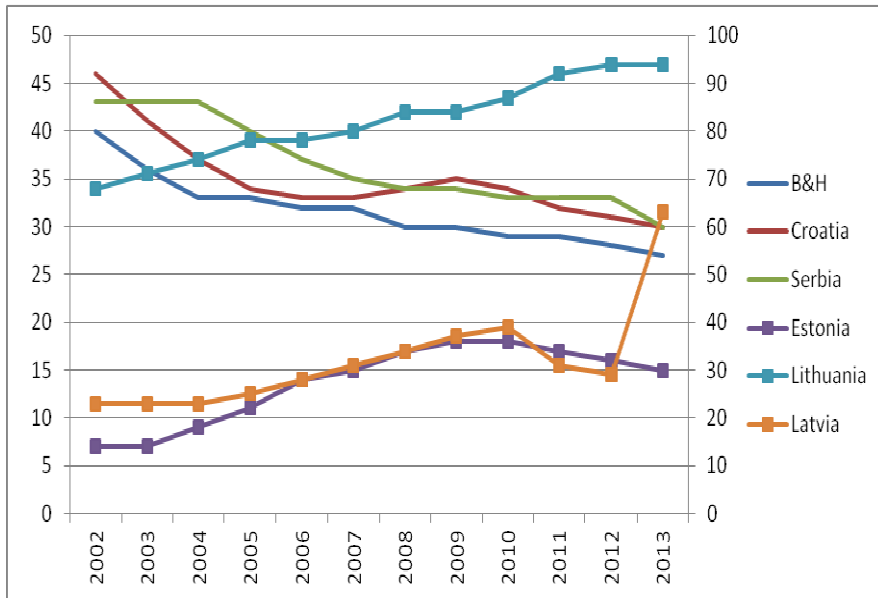
The Figure 2 depicts the differences in concentration processes in both analyzed groups. Firstly, the concentration level of the banking sectors in the Baltic States definitely decreased, both in terms of HHI and CR5. Latvia is the only example where the concentration level fluctuated and returned to the level achieved in 2002. In other countries in the region the concentration indices significantly decreased. Within the period of 11 years, the HHI dropped in Estonia by 38% and in Lithuania – almost by 50%. The decrease measured with CR5 is considerably lower: 9% in Estonia and by 20% in Lithuania.

The characteristics of concentration in the Western Balkans were radically different. Due to ongoing transformation of the banking sectors in these countries, the indices were increasing. The strongest rise was recorded in Bosnia and Herzegovina, where HHI more than doubled, while CR5 rose by almost 33%. In Croatia both concentration indices rose by 24%, while in Serbia HHI rose by 15%, and CR5 remained at the same level.



Another characteristic feature of the banking sectors were considerable variations in the number of institutions operating in the sector - Figure 3. It must be emphasized that the evolution of the banking sector in the Baltic States led to structural change in the number of active market institutions. It should be noted that previously in EU (12) the number of banks increased in 6 out of 12 member states as a consequence of the consolidation of the sector. In the recent years, new technologies, introduction of different types of innovation and changes in distribution channels had a great impact on the sector. In the Baltic States (like in another 3 new member states: Malta, Slovakia and Poland) the number of credit institutions increased. In Lithuania the number rose by over 25, while in Latvia and Estonia – by 10 and fewer entities. In the Western Balkan region the number of banks operating there dropped, from over 40 to fewer than 30 entities.

**Figure 3. Number of credit institutions from 2002 to 2013**



Reference: author's elaboration, based on data from ECB and central banks of the non-EU countries

The Fig.3 shows the data for Western Balkan countries on the left, the data for the Baltic States on the right side.

Next these countries were divided into groups, depending on the direction of changes in the level of concentration and the number of credit institutions. Table 1 shows the groups classified by the direction of the changes, for example, the A group includes countries where an increase in the concentration was accompanied by a decline in the number of institutions, and the I group, with countries where the concentration decreased in the absence of changes in the number of credit institutions.

**Table 1.**

<b>Concentration</b>	<b>Number of institutions</b>	<b>Group</b>
↑	↓	A
↓	↓	B
↑	↑	C
↓	↑	D
↔	↔	E
↔	↑	F
↔	↓	G
↑	↔	H
↓	↔	I

Reference: author's elaboration

Table 3 compares directions of changes in the number of participants in the banking sector and its level of concentration . It also presents dynamics of the above factors in 2013 compared to 2002. Table 2 shows the individual countries classified into appropriate groups, as shown in Figures 1-3.

**Table 2. Change of sector situation in 2013 in comparison to 2002**

	<b>CR5</b>	<b>HHI</b>	<b>Number of institutions</b>	<b>Concentration</b>	<b>Number of institutions</b>	<b>Group</b>
B&H	2,33	1,26	0,68	↑	↓	<b>A</b>
Croatia	1,15	1,15	0,65	↑	↓	<b>A</b>
Serbia	1,24	1,03	0,70	↑	↓	<b>A</b>
Estonia	0,63	0,91	2,14	↓	↑	<b>D</b>
Lithuania	0,50	0,82	1,38	↓	↑	<b>D</b>
Latvia	0,98	1,01	2,74	↔	↑	<b>F</b>

Reference: author's elaboration, based on data from ECB and central banks of the non-EU countries

In the group of countries that joined the EU in 2004 (Estonia, Lithuania and Latvia), dominated examples of a decline in the concentration with simultaneous increase in the number of institutions (D group). This meant new institutions weakened the sector concentration - as observed in Estonia and Lithuania. An increase in the number of institutions in the Baltic countries shows that there is still room for new institutions in the market. Within only one year in Estonia there were opened new banks: AS LHV Bank and Bank Snoras branch - the first foreign branch of the Lithuanian bank. New licenses were issued to the SEB Bank and Handelsbanken Bank branches in Lithuania.

In Latvia, the level of concentration remained unchanged despite an increase in the number of credit institutions (F group). The number of credit institutions changed only in 2013 as a consequence of the global financial crisis. The crucial fact is that such an increase did not impact negatively the level of concentration. It proves that new institutions were either small or their influence on the market was not significant. At the beginning of the transition period Latvia, comparing to other Baltic states, had the smallest foreign capital participation and liberal licensing policy. Licences were granted to Latvia Post Bank and the branch of Balti Pank Investeerigute group. It led to changes in the number of banks in the market. After a strong rise in 1993-1995, number of banks dropped by 20 only within two years as a result of consolidation processes, number of liquidation and bankruptcies. It should be noted that the largest banks in Latvia were established by consolidations. Latvijas Banka was recapitalized in 1995 by the Danish Unibank and adopting the name A / S Latvijas Unibanka. Later it became a member of consolidated SEB group in the Nordic market. In 1999 Rigas Komercbanka was taken over by Prima Bank, creating Pirma

Latvijas Komerbanka PLC. In 2003 Prima Bank was taken over by the German NORD / LB Latvija, and later in 2006 - by DnB NORD Banka (Markiewicz, 2011, p. 153-154). The number of banks in Latvia began to increase again, mainly due to the entry of foreign banks, as this market attracted Scandinavian investors. SEB took over the majority stake in Latvijas Unibanka, and Swedbank in Hansabanka. Foreign investors to Latvian banks came from Germany, Estonia, Finland and Russia.

In the early years of transition in Lithuania, thanks to the liberal licensing policies, many new banks appeared. In 1992-1994, there were 28 banks, which was a very large number for such a small country, therefore the number of them fell by half, including two out of three biggest banks. An important problem for the Lithuanian banking sector was too little confidence of among clients that had to be slowly, gradually rebuilt. Lithuania was the last Baltic State, where foreign banks emerged, only after 1996. However, due to further expansion of foreign investors, their participation in the total banking assets grew significantly, reaching 90% of sector assets in 2006. The most important credit institutions in the Lithuanian banking sector are related strongly to Scandinavian capital, and were formed as a result of consolidation. Two biggest banks - Vilniaus Bankas and Hansabankas – were taken over in the process of privatization, respectively by Skandinaviska Enskilda Banken (SEB Bank) and Swedbank. In 2011 their share in sector assets amounted to over 47%. Another bank with over 16% of total assets –Bank Nord/LB Lietuva – belongs to a DNB Bank ASA - the largest financial services group in Norway.

In the first stages of the transformation in Estonia the number of banks fell while the banking sector faced an increase in regulatory requirements, new rules of prudence and growing competition in the banking sector. Smaller banks with insufficient capitals were liquidated or merged with other entities in order to increase their capital base. For many years only seven banks operated, out of which two largest: Hansapank and Eesti Ühispank were originally private banks, and belonged to Waldenberg family from Sweden. The number of banks in Estonia started to increase only after the European Union accession. Estonian banks also experienced several consolidations. Eesti Ühispank as the first bank which entered the banking sector after transformation merged with North Estonian Bank (1997), with Talinna Pank (1998) and then was taken over by the financial group SEB (2005). Another bank - Sampo Pank, which in 2008 was acquired by Deutsche Bank, had undergone various M&A transactions. First, in 1996 Estonia Forexbank incorporated Raepank, and after two years it merged with Estonian Investment Bank, creating a new group called Optiva Bank. Then it adopted a new name Sampo Pank. In 2007 a

new bank Unicredit Tallin appeared, resulting from merging Estonian branches of Unicredit and HVB. In 1998 Hansapank merged with Eesti Hoiupank, later in 2005 privatized by Swedish investor Sparbanken Swedbank, which after 4 years became a sole owner. A few years later it was renamed for Swedbank AS - now it holds the biggest market share in the Estonian banking sector.

In Western Balkan countries, a deeper analysis shows their similarity to the countries of the "old" EU in reference to the direction of changes in the level of concentration and the number of banking institutions. Similarly to EU (15) countries, among the studied countries from the south a rise of concentration index prevails over a decline in the number of banks operating in the sector (A group). Such changes took place in all countries from this region. In Bosnia and Herzegovina, a decrease in the number of banks is due to the mergers of banks to meet capital requirements or license withdrawal by the central bank.

While the Baltic States banking sector is dominated by Nordic foreign investors, in the Western Balkan countries Greek and Italian banks are most active (Bastian, 2003, p. 81-107). Austrian and Italian banks were strongly engaged across the region (Breyer, 2004, p. 63-88). A high level of sector concentration coincided with high involvement of foreign inventors from neighboring countries. In Croatia, banking groups gradually developed during the 90s as a part of the process of sector consolidation and development. For the last decade the sector consolidation has been increasing through involvement of foreign capital in the national banking industry including the acquisitions of two biggest banks: PBZ (1999) and ZABA (2001) by two Italian bank groups: Grupo IntesaBCI and UniCredito Italiano. Before 1999 foreign banks access was allowed only in form of opening new branches. Acquisitions, both cross-border and domestic became dominant factors in forming sector structure after the second wave of turbulences . Since 2004, over 90% of the Croatian banking industry capital has been under control of eight foreign banking groups. Privredna banka and Zagrebačka banka are two biggest banks operating in Croatia. Together, counted by assets their sector share accounts for over 40% .

The Bosnian banking sector should be described not only by changing number of banks, but also by engagement of foreign investors. M&A transactions were main way of FDI in financial sector in this country. Looking at numerous foreign banks operating in B&H market, we can see that most of them chose acquisitions to start their operations. Very important motive for acquisitions, instead of new ventures, was the fact that all acquired domestic banks had a strong wide network of branches and appropriate workforce which a new venture could never get in the short

term. This trend, together with the legal requirement of minimum level of bank capital, forced small domestic banks to seek for foreign investors, which through mergers and acquisitions would allow to achieve the required level of capital and to survive in a highly competitive market.

While arguably still overbanked, by 2004 the number of banks in Serbia was cut to 43 - about one third of the 1995 peak (EBRD, 2005). Over the next few years, state ownership of the banking sector decreased and foreign banks increased their dominance. Through privatization, the share of state-owned banks declined to 15% of total assets in mid-2009. Privatization of banks resulted in foreign ownership of approx.75% of the banking sector, with subsidiaries of Austrian (27% ), Greek (16%), and Italian banks (15,4%) keeping largest shares. Foreign ownership and presence in the banking sector became a crucial part of bank privatization in transition countries (Bonin, Hasan and Wachtel, 2005, p. 31-53). There was a particular need to reestablish public confidence in banks in Serbia. Serbia started late with fully fledged bank privatization. EBRD support encouraging foreign banks to enter and the presence of foreign banks provided such strong signals to the economy and investors that helped to restore confidence (Bastian, 2003). In 2006 the EBRD acquired a 25% stake in Komercijalna Banka and National Bank of Greece bought Vojvidjanska Banka. Consequently, the market share of foreign banks rose. So far growth has been driven more by private consumption and FDI in Serbia than by domestic financial intermediation, but strong presence of foreign banks is likely to change this trend. In addition to the provision of financial services at market standards, foreign banks play a special role in meeting expectations by market participants, sending visible signals of change (Vives, 1996). For banks to fully reach their potential in bringing about healthy economic growth in Serbia, it was imperative to find a solution to the highly sensitive territorial issues, overcome the legacy of workers self management system and still pending enterprise restructuring.

## **Conclusions**

Concentration of the banking sector, as measured by both HHI and CR5 indices changed during the quoted period, as a result of the consolidation of the sector. Also the number of institutions operating in this sector changed. In EU member states, trend of decreasing sector concentration is observed, accompanied by increases and decreases in numbers of credit institutions. The situation in banking sectors in the Western Balkans differed significantly, which could be explained by strong economic ties, particularly with Germany and Austria. It should be noted that the organizational integration of the Western Balkan banks with banking

groups from Western Europe has not been accomplished to date. In terms of strategic decisions, acquisitions of local banks by foreign investors can be considered a harvesting strategy aimed at the benefits available in the sector which has not been fully developed yet. The relations between parent companies and their subsidiaries may evolve depending on the development of the general market conditions.

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