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Contact: katarzyna.kubiszewska@zie.pg.gda.pl, Gdańsk University of Technology, Gabriela Narutowicza 11/12, 80-233 Gdańsk. Poland

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**Katarzyna Kubiszewska**

*Gdańsk University of Technology, Poland*

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

**JEL Classification:** *G10; G20; G21*

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

**Abstract**

**Research background:** In a rapidly changing economic environment companies deepen their cooperation, which occurs in all sectors of the economy. The progressive increase in market concentration, especially in the banking sector, is caused by various reasons.

**Purpose of the article:** The purpose of this article is to compare the tendencies within market structures in few countries which origin from similar political systems and which have got experience in transformation of banking sectors.

**Methods:** The research concerns the Baltic and the Western Balkan States. Concentration of the banking sectors, as measured by both HHI and CR5 indices changed during the quoted period, as a result of the consolidation of the sector. The study revealed a distinct change in the growth rate of market concentration and the number of banks, and is based on data provided by the local central banks and the European Central Bank.

**Findings & Value added:** The situation in banking sectors in the Western Balkans differed significantly, which could be explained by strong economic ties, particularly with Germany and Austria. In this region, the raising concentration of the banking markets is related to the decreasing number of banks, while in the Sea Baltic States the increasing number of institutions is accomplished by the falling concentration ratio.

The paper concerns the developments of the banking sectors which are not yet well described and do not belong to the mainstream of research in the Polish literature, meaning the region of the Western Balkans.

## **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 literature on the issue of banking sector concentration, presenting a discussion on the effects of changes in market structures. The second part is devoted to empirical research in relation to changes in the degree of concentration of the banking sectors and the number of banking institutions operating there. These sectors were divided into two groups: the Baltic Sea States and the Western Balkan countries. This section also contains a detailed description of changes in the banking sector structures.

## **Content and research methodology**

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. The author compares the changes within the sector concentration (measured with the concentration ratio of five biggest bank, CR5, and Hirschman-Herfindahl index, HHI) and changes in the number the credit institutions. Basing on the above facts, differing groups were selected. Despite the common history and experience of transformation, the researched countries cannot be considered as a 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 a 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 — the case of banking sector**

The problem of banking concertation has been discussed in the literature for a long period. There are few directions of the carried out bodies of research and theories developed. The first dispute concerns doubts about the level of concentration of the banking sector: to increase or to decrease the counteraction level (Sathyam, 2002, pp. 7–20; Athanasoglou *et al.*, 2008, pp. 121–136). The other discussions concentrate on the positive and negative results of the counteraction level and its impact on the banking market.

For many years it has been believed that growing concentration shall be accepted as one of the ways to banking markets' development. The large banks would have been able to finance the construction of a modern system of distribution of financial products and services, taking into account the current technological development. Large banking institutions could 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, needed 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 forced banking institutions to go out of local markets and establish international presence. The increase in the scale of operations of banking groups increased demand for equity (Freedman & Goodlet, 1998, pp. 8–17). Unfortunately, the crisis which began in 2008 revealed a number of weaknesses of such an enthusiastic approach to concentration. These doubts were pointed out also by the European Commission, which suggested that although in the period of stability development banking groups are the result of effective allocation of capital within the single market, and during crisis they may be conducive to risk diversification, they may also facilitate contagion, also within those groups, which is a typical symptom of systemic risk (*European Financial ...* 2012). Possible solutions to the problem of TBTF banks raised in many reports and scientific publications (Ratnovski, 2013, Fernández *et al.*, 2013).

Another crucial issue is the impact of concertation degree on the market. The concentration level in a banking sector influence various issues,



but there is no compliance regarding to the final effects. One of the most frequently mentioned aspects is the competition in the sector. The report of the World Bank (*Rethinking...*, 2013) shows that competition can lead to greater efficiency, but the prerequisite is a proper supervision and appropriate regulation system. 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). When it comes to the EU banking sectors, the conducted body of research concerning the changes in concentration and competition proved that concentration in these sectors continued to grow both before and during the crisis. However, the results regarding its impact competition between banks are ambiguous (Bikker *et al.*, 2012; Weill, 2013). These results demonstrated a decreasing trend in competition after the crisis and convergence in the measure of competition before the crisis between EU-15 and EU-12 countries. EU-12 countries experienced an increase in competition before the crisis and a slight decrease during the crisis (Clerides *et al.*, 2013; Efthyvoulou & Yildirim, 2013).

Another important aspect of the banking sector is its stability. A part of the literature expresses the view that too much competition can destabilize markets, although competition itself does not create instability. It means that less concentrated banking sectors with a large number of relatively small banks are more vulnerable to crises in contrast to the highly concentrated markets. This is explained by the fact that lower concentration is accompanied by stronger competitive struggle, and larger banks can take advantage of effects of scale by diversifying their activities, which protect against potential financial perturbations (Demirgüç-Kunt & Levine, 2000; Allen & Gale, 2004, pp. 1–33; Beck *et al.*, 2006; Wheelock & Wilson 2012). Furthermore, from a financial stability perspective, it is clear that in highly concentrated sectors large banks may limit the effects of the financial crisis by taking over institutions in a difficult situation, as it did during the international financial crisis 2007–2009 (Liikanen *et al.*, 2012). The higher degree of stability may be achieved by more concentrated banking sectors thanks to higher profits, which can create a specific financial buffer for period of potential problems in the market and which can contribute to the increase in the bank value (Beck *et al.*, 2003, pp. 26–27).

Other results were formulated by Uhde and Heimeshoffa (2009), who clearly support the hypothesis about the negative impact of the increase in the concentration on the stability of the banking sectors, basing to research conducted between 1997–2005 for banks operating in the European Union using index Z-score as a measure of financial stability. Boyd *et al.* (2009)



proved that banks operating in markets with higher HHI were more vulnerable to bankruptcy (lower index value of Z-score indicators and equity ratios). De Nicolo and Loukoianova (2006), Jimenez *et al.* (2006) or Berger *et al.* (2009) presented a positive relationship between the level of market concentration and having more risky loan portfolios.

A growing part of the literature has focused on economies in transition. Gelos and Roldós (2002, 2004), 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." The further empirical evidence reveals that the banking industry in the region operates under monopolistic competition (Mamatzakis *et al.*, 2005). More recent research differentiated the direction and strength of the dependence between concentration and stability in Central and Eastern Europe (Kil, 2015).

This review of the literature shows that 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. As the degree of concentration of the 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 further analysis.

### **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, they were all 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, as well as particular socialist market economy in Yugoslavia (the so called Third Way put into effect in the 1960s) had common features. The state banking sectors were based on large institutions, which were 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, to develop the sectors and to allow them to accomplish their basic objectives. A common feature of the banking sectors in transition is that they are prone to crises, which 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 crisis was macroeconomic instability. It should be noted that the major reform — the privatization of the self-governed and the stated owned enterprises — was intended to contribute to 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 a 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 among countries, two factors were common: the accumulation of bad, non-performing loans, and inadequate system of regulation and supervision of the sector. This type of crisis was observed in Estonia in 1992, and in Lithuania and Latvia in 1995.

The same happened in the Balkan region. The crisis of the banking sector first coincided with the civil war. Inefficiency of the sector was due to the civil war and the collapse of former Yugoslavia followed by vicious conflicts. The banking sectors and larger banks in particular, closely cooperated with governments in order to maintain functioning of the economy in a relatively regular way. Eventually, 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.

What is common for the economies in transition is the fact that they 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. 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.

Fries and Taci point out that common features of the reforms in banking sectors in transition economies result from recommendations of the Interna-



tional Monetary Fund and World Bank along with so called Washington consensus, which forced liberalization, restructuring and privatization of the banking sectors (Fries & Taci, 2002). Zoli (2001, pp. 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 in 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 for 58%, 67% and 40% of GDP, respectively. 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 at around 30% of GDP (Škreb & Šonje, 2001; Jankov, 2000).

The main element of recovery programs was to strengthen legislation and by-laws to improve the 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 for 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**

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).

Comparing to EU 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. The sector concentration in Lithuania does not vary much for the one in Estonia. The 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 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, restructuring 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, did the concentration measured by CR5 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.

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. 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, 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.

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. 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 contains the countries where the concentration decreased in the absence of changes in the number of credit institutions.

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.

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 new banks were opened: 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. Licenses were granted to Latvia Post Bank and the branch of Balti Pank Investeerigute group. It led to changes in the number of banks on the market. After a strong rise in 1993–1995, the number of banks dropped by 20 only within two years as a result of consolidation processes, a number of liquidations, 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 Komerbanka 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, pp. 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, by Skandinaviska Enskilda Banken (SEB Bank) and Swedbank, respectively. 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 EU 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 to 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, pp. 81–107). Austrian and Italian banks were strongly engaged across the region (Breyer, 2004, pp. 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 had been 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. A 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 had been 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 have 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 *et al.*, 2005, pp. 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 significantly in every of the studied banking sector during the quoted period, as a result of the consolidation of the sector. The most visible change is recorded in Bosnia and Herzegovina, where the CR5 doubled, while HHI hoisted by over one fourth. Simultaneously, in Lithuania CR5 dropped by half and HHI — decreased by almost one fifth.

Also the number of institutions operating in this sector changed. In Baltic Sea States the trend of decreasing sector concentration is observed, accompanied by increases in numbers of credit institutions. The situation in banking sectors in the Western Balkans differed opposite, which could be explained by strong economic ties, particularly with Germany and Austria. The number of operating institution has decreased by almost one third. 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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## Annex

**Table 1.** Groups, depending on the direction of changes in the level of concentration and the number of credit institutions

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

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

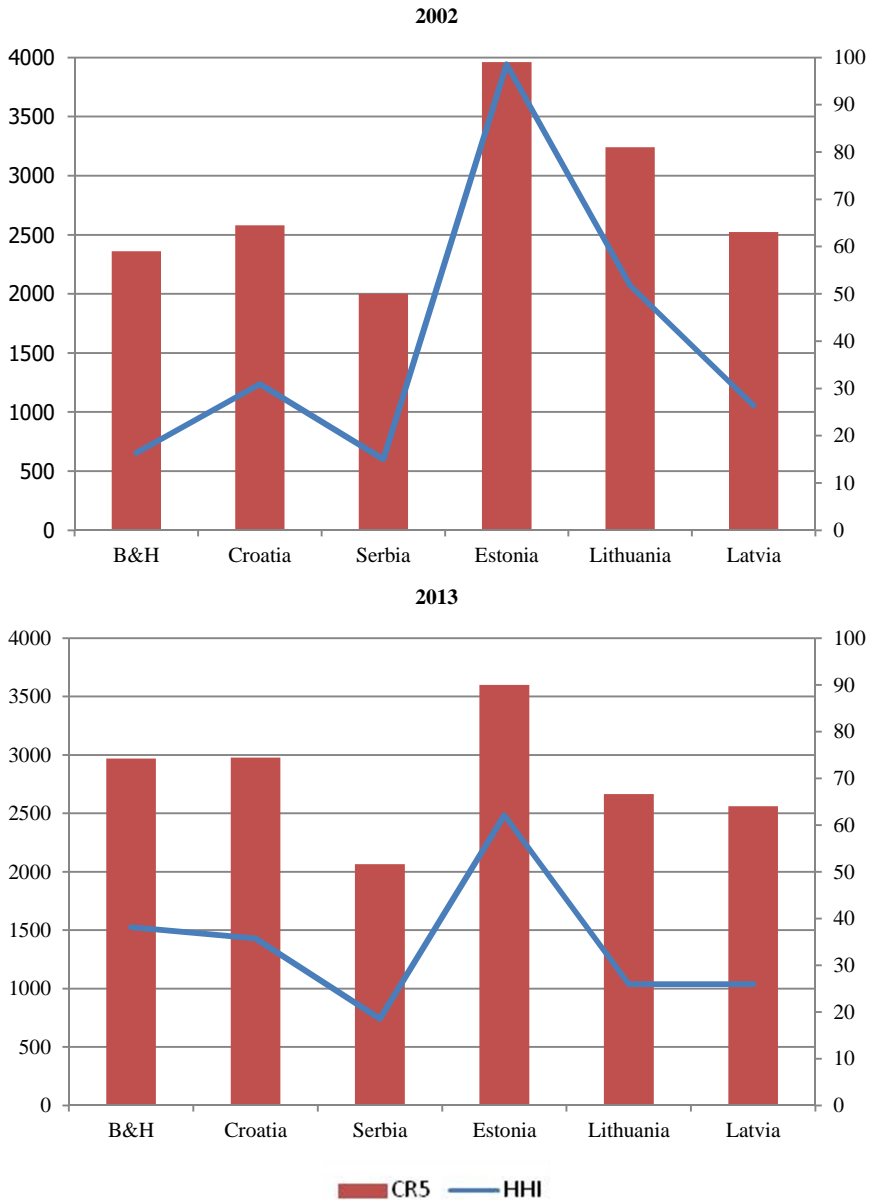
	CR5	HHI	Number of institutions	Concentration	Number of institutions	Group
B&H	2,33	1,26	0,68	↑	↓	A
Croatia	1,15	1,15	0,65	↑	↓	A
Serbia	1,24	1,03	0,70	↑	↓	A
Estonia	0,63	0,91	2,14	↓	↑	D
Lithuania	0,50	0,82	1,38	↓	↑	D
Latvia	0,98	1,01	2,74	↔	↑	F

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





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

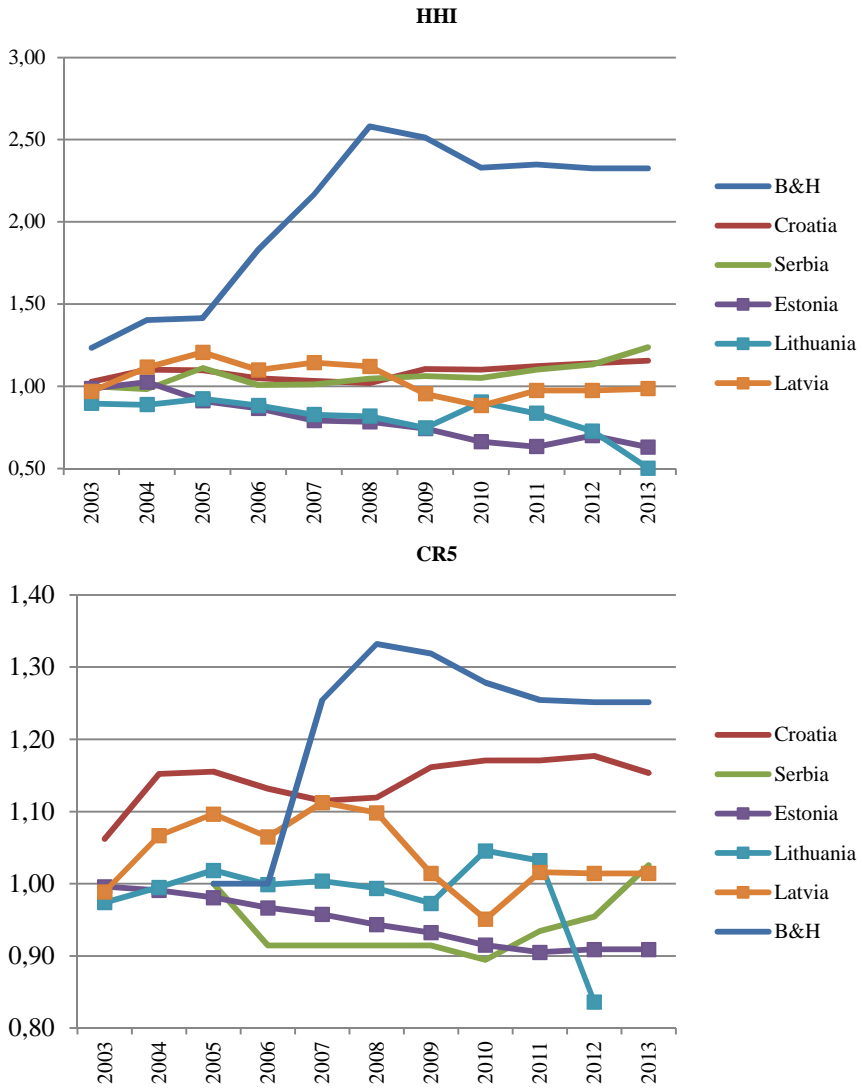


\*The left axis presents HHI, the right – CR5

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



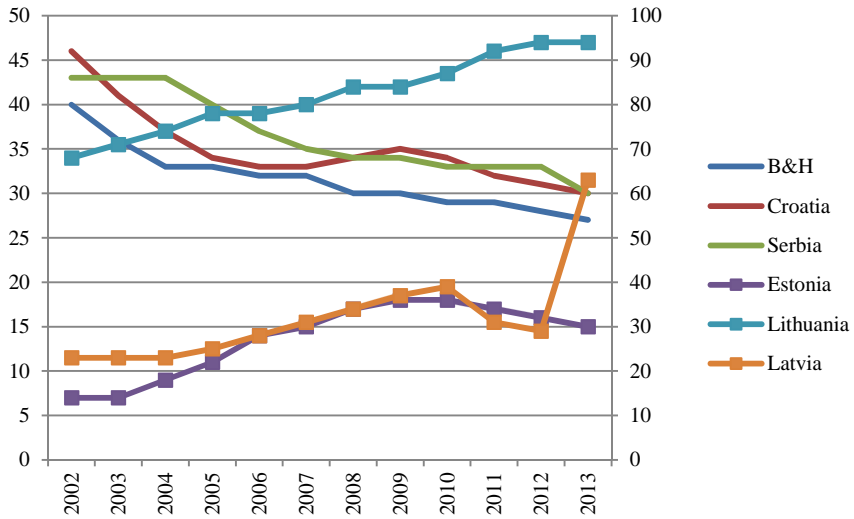
**Figure 2.** Changes of indices of CR5 and HHI in the countries (2002 = 100%)



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



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



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

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

