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Comparative Analysis of Levels of Banking Sector Markets Concentration in CEE Region

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ABSTRACT *– Banking sector is an important development factor of the total financial and economic system. Number of banks and dispersion of their individual shares defines competitive structure of banking sector, manifested by its concentration. Market concentration may be presented as a function of a number of enterprises competing in a market and their individual comparative market shares. Concentration analysis is significant with regard to the fact that the level of concentration demonstrates relations among competitors in a market, as well as influence each competitor has on consumers, branch and economy as a whole. Starting from 2008 crisis, domino effect of which hit banking sector and has had a huge impact on it, authors of this paper aimed at establishing a level of market concentration of the banking sector in Serbia and countries in the region in 2015 by application of a large number of market concentration indicators.*

KEY WORDS: *market concentration, banking sector, CEE region, competition*

Introduction

Market of a country is as developed as its competition is able to function on it. Competition has to be constantly stimulated and protected by mechanisms in line with the European integration processes and policy focused on market economy development. Competition as such has been a particularly sensitive issue in transitional countries such as Serbia and countries in the region. Initial structural changes brought about raising an issue and need for a higher competiveness level in Serbia and elsewhere. Every country aspiring to join the EU and integration processes ought to develop legal norms and apply EU regulations.

Theory of competition has been developing together with economic sciences. Complexity and dynamics are two main characteristics of every economic system. However, every economic system and its specifics differ from state to state and depend on the period in time in question; hence competition occurs in different forms in practice. Competition concentration and intensity ratio has been grounded on Harvard and Chicago School

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findings. Naturally, other schools have had an influence on understanding this relation, however economists from the above mentioned schools have had the most powerful impact on application of antimonopoly policy in America.

Establishing whether a commercial entity has a market power or not depends not only on the market structure but on a number of other factors as well, such as: number and market power of a competitor, substitution in consumption capacity, price character, barriers in getting in and out of the market, technological development, innovations, etc. (Labus, 2008, pp. 177).

Central and East European financial system has been rapidly developing last couple of years, contemporary regulations have been introduced and new financial institutions have been established contributing to maintenance of macroeconomic stability in the region. Nonetheless, macroeconomic sector in the region, underdeveloped even before the recession took place, has been a highly risky place for investments and unstable in comparison with the Western Europe.

Certain reforms were carried out in 90s in the CEE region. They included privatization of state run banks and opening of local financial sectors towards foreign investors. Banks thus lost their primary role, free assets mobilisation function, public trust in baking system was weakened due to inability of deponents to have their assets at their disposal, as well as because of bad experiences with several pyramidal banks during that decade (Erić, Jović, 2012, pp. 6).

World economic crisis has spilt over to Europe through financial institutions (banks in the first place) present in American financial market. The first world crisis signs in the region reflected in both drop in liquidity in financial sector and hindered reform of financial institutions as well. Slowed down economic activities came as a result of withdrawal of deposits from banks by citizens, hindered credit activities of banks towards economy and population, increased foreign investment costs, reinforced pressure on foreign exchange rate, as well as credit risk uplift (Bošnjak, 2008, pp. 14). Lack of capital increased the value of financial assets, already limited, which has thus slowed production and economic growth down.

Shortage of innovativeness in financial sector has been present in Serbia and neighboring countries (Western Balkans ones in particular) due to shallow and underdeveloped market, political, economic and credit risk, high poverty rate, underdeveloped stock exchange business element, currency oscillations, a high inflation level and other microeconomic indicators, such as: foreign trade deficit, public debt, foreign direct investment flow, etc. In addition to this, transitional countries share common banking sector issues: instability of industrial structure, nonexistence of firm rules, narrowed assortment to key services only, excessive capital price, absence of clear strategic objectives (Tipurić, Kolaković, Dumičić, 2002, pp. 470).

Levels of concentration

Considering the fact that market power and market share concepts are often used as synonyms in economic literature, market power measurement procedures are most frequently reduced to measuring market concentration, while a firm's market share scope is

a main indicator of market power. This paper continues analyzing concentration level in the market and indicators measuring it, which have most often been applied to the banking sector.

Branch offer concentration is a very important feature of market structures and holds a prominent position in studying them. The offer concentration implies a level total range of offers or sale in one market is concentrated on a smaller number of firms (Jakšić, et al., 2006, pp. 327).

In order to establish offer concentration level market shares of individual participants have been most often used. Individual firms are constantly trying to increase their market shares due to a positive correlation between market share and profitability. A higher market share leads to a higher level of offer concentration (Amato and Wilder, 2004, pp. 412). A huge number of factors have an impact on offer concentration levels in a market. They can however be divided into main ones, crucial for determining a concentration level, and auxiliary, bearing less importance in definition of offer concentration. Main factors determining offer concentration level are the following:

1. number of competitors doing business in the market,
2. dispersion of market shares among competitors, and
3. entry and exit barriers from a branch.

This research will focus on impact the number of participants in the market have and dispersion of the market share among them. Indicators used to measure concentration level need to take these elements into consideration pertaining to markets with more than one participant on the offer side. There is no need to measure offer concentration with classic monopolies since there is only one firm with 100% market share. Each offer concentration indicator is at the top level in this type of market (Šaj, 2005, pp. 171).

Methodology

This research has analyzed concentration levels in banking sectors of the Republic of Serbia, Croatia, Bulgaria, Montenegro and Bosnia and Herzegovina through a comparative analysis. It is important to underline that previous empirical research has proved that application of one market concentration indicator may lead to relatively contradictory conclusions on banking market concentration level since each indicator applied in this paper has both its advantages and disadvantages. Aiming at obtaining the clearest possible picture of banking sector concentration, one needs to apply a whole range of indicators. Applied indicators have been used against granted loans and collected deposits sums of each individual bank, as two main items in a bank's balance sheets.

Herfindahl – Hirschman index is a sum of the squares of market share of firms within an industry (Martin, 2002, pp. 336). Generally speaking, a higher numeric value of HHI indicates lower competitiveness intensity, i.e. a greater economic power of market participants. HHI, due to its set-up, has analytical advantage over concentration ratio, which has been reflected in the fact that this index gives higher ponder to larger firms. It can be presented by the following equation (Šaj, 2005, pp. 172):

$$HHI = \sum_{i=1}^{N} S_i^2$$

Where '*si*' stands for market share of *'i'* firms, and *'N'* stands for a total number of firms in the market.

Importance of this index is reflected in the fact that even though it looks at individual market shares of all firms in a branch, it recognizes separately presence of firms with large market shares, significantly increasing its value (Lipczynski and Wilson, 2001, pp. 110).

Theoretically speaking, this index can have values between 0 and 10000. In case of atomized offer when there is a huge number of producers and when each offer is around 0 and index value is around 0. Index value with monopolies is 10000, since a monopoly firm's offer equals whole branch's offer (Begović, et al., 2002, pp. 33).

Figure 1. Market types by HHI values

HHI index value	***Offer concentration value***
HHI < 1000	***Low concentration value***
1000 ≤ HHI ≤ 1800	***Medium concentration value***
1800 ≤ HHI ≤ 2600	***High concentration value***
2600 ≤ HHI ≤ 10000	***Very high concentration value***
HHI = 10000	***Monopoly concentration value***

Source: Begović, B., Bukvić, R., Mijatović, B., Paunović, M., Sepi, R. and Hiber, D., 2002, pp. 35

Low index value therefore suits competitive industry without dominant players. Should all firms have equal shares, then reciprocal index value reflects a number of firms in a given industry. When shares differ, reciprocal index value indicates 'equivalent' number of firms in the industry.

Applicability of the statistics (statistical measure) aiming at disclosure and further prevention of harmful monopolies setting up, is however directly linked to a respective market definition (which primarily relies on substitution concept) (Hanić, 2011, pp. 5).

Share index of an 'n' firm or a concentration ratio is an indicator, i.e. a sum of market shares of 'n' largest firms on the market and is a very simple to understand as such (Waldman and Jensen, 2001, pp. 95). It can be presented as a following formula (Savić, 2000, pp. 4):

$$CRn = \sum_{i=1}^{n} Xi$$

Where 'Xi' stands for individual market share of an 'I' firm:

$$Xi = (qi/Q)100$$

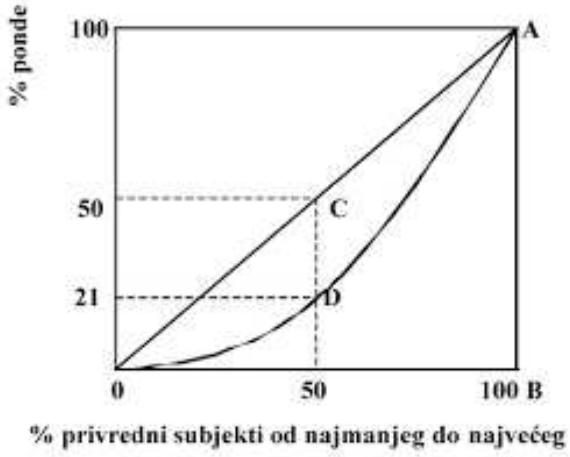
Where 'qi' is an offer of 'i' firm and 'Q' is an offer of whole branch. 'N' in practice is a number between 4 and 10. Government's agencies in charge of following offer concentration levels in a country stipulate a number of firms that would be calculated against this indicator, using this coefficient as an official indicator (Martin, 2002, pp. 337).

In case of an atomized offer when there is a limitless number of producers, its share is around zero hence index values is a round zero, too. Contrary situation is with a monopoly, when there is one producer only, the production of which equals the total branch production and index value is 100 (Waldman and Jensen, 2001, pp. 95). A borderline between low and high levels of branch offer concentration, measured by this index, cannot be unified and largely depends on the market itself. EU considers a high level of offer concentration when CR4 index exceeds 25. Unlike the EU, in the US borderline CR4 index value is 50, hence markets with index above 50 are considered to be high concentration ones; those between 25 and 50, moderately concentrated, and the ones below 25, non-concentrated markets (Savić, 2000, pp. 6-8).

Level of concentration can be established by Lorenz curve as well, which is an important instrument used in statistical analysis. It was named after American economist Lorenz who designed this curve first. It was initially applied only when studying equality of distribution of financial profits among members of a society (a state) (Šolak, 1996, pp. 38).

Application of Lorenz curve in reviewing levels of offers' concentration in a market, aims at illustrating equality in distribution of market shares among firms.

Figure 2. Lorenz curve



Source: Lipczynski, J., Wilson J., 2001, pp. 109 (% offer; % business entities from the smallest to the largest)

X axis shows firms from the smallest to the biggest (in percentages), and Y axis shows percentage of offer at firm's disposal in interval from 0 to 100% offer. Line 0A at 45 degrees is seen as a total equality line, i.e. balanced distribution of offers among producers.

If firms are along this line, then all firms are of same size. Therefore, for example point C shows that 50% of firms looks after 50% production and offer on the given market. It then implies that remaining 50% firms looks after 50% production and offer on the same market

(Lipczynski and Wilson, 2001, pp. 110). To conclude, competition on this market is made of firms of identical size. Distribution of market share is balanced among individual firms and this is somewhere halfway between a total equality and a total inequality of market shares.

Main disadvantage of Lorenz curve is the fact that it is primarily focused on unbalanced distribution of market shares among individual firms. Number of firms in establishing concentration level does not play an important role hence one firms with 100% market share and ten firms with 10% market share each will be at the same 45 degrees curve.

Gini coefficient as a concentration measurement tool has been based on Lorenz curve's underpinning logic. Starting from the given Lorenz curve chart, Gini coefficient can be defined by the following equation (Bajec, et. al., 2005, pp. 17):

$$G = \frac{2}{\mu n^2} \sum_{i=1}^{n} (r_i - \frac{n+1}{2}) q_i$$

Where 'n' stands for a number of firms, 'μ' is an average firm's sale on the given market, 'ri' is a rank an 'i' firm is holding (firms are ranked by sale scale or marker share from the smallest to the biggest) and 'qi' is sale scale of an 'i' firm.

Main disadvantage of this indicator is the fact that it neglects number of firms and is exclusively focused on inequality in offer among them. Industrial branch with two firms of identical size has the same Gini coefficient value as industry with 100 firms of same size, even though competition structure of these two industries is completely different (Lipczynski and Wilson, 2001, pp. 110). It is particularly difficult to establish coefficient for a market with one firm only. Result will be 0 for this market if the above written equation is strictly applied, which implies that offer is equally distributed among firms (one in this case).

Entropy coefficient is a sum of market shares of individual firms and natural logarithms of their reciprocal values as in the following formula:

$$EI = \sum_{i=1}^{n} Xi \ln \frac{1}{Xi}$$

Where 'Xi' stands for market share of an 'i' firm expressed in relative numbers.

Coefficient value is defined between two extreme cases: value EI =0 where one firm sets up the whole offer and value EI = log (n) when in on branch there are n firms of the same size.

Entropy coefficient reflects a level of stability in a branch. Market stability is assessed from a seller's viewpoint. Market is stable when buyers have difficulty in or cannot change a seller at all. This is a monopoly situation when one firms sets up the overall branch offer.

Market is unstable when buyers can relatively easy change a seller which is a case when there is a large number of offer making participants on the market. Entropy coefficient value, unlike other analyzed concentration indicators, is inverse to the concentration level (smaller entropy coefficient implies a higher level of concentration on the market and vice versa).

This indicator has been taken from theory of information where it was used to assess certainty level of a decision. In addition to this, it can be used to measure uncertainty in different market structures. When there is one firm only on the market, uncertainty for a monopolist to keep a buyer is a minimal, since the buyer has neither options to choose a different sellers, nor can he/she find a substitute to meet his/her needs.

Opposite scenario is with a full competition and a maximal uncertainty, due to a huge number of firms with equal market shares, so that consumers can choose who they will buy a product from, as well as which product they will be using to meet their needs (Ilić, et. al., 2003, pp. 213).

Main advantage of entropy coefficient is reflected in the fact that it can be divided into components unlike other concentration indicators. This is most often done when there are groups of firms belonging to different clusters by size, different industries or different countries. Thus entropy coefficient can be established within different groups as well as among different groups.

Results and discussion

Next table shows maker shares of leading banks, five leading banks and ten leading banks from selected CEE region countries. Serbia has the lowest value CR1 concentration coefficient with Banca Intesa has the largest market share in granted loans and collected deposits of 15.7% out of 30 banks. Bulgaria and Montenegro follow. In Bulgaria leading Unicredit bank has the largest market share of 17,8% in loans, i.e. 18,66% in deposits. Montenegrin Commercial Bank AD Podgorica has a similar share in the marker when it comes to loans and deposits, i.e. 18,12% and 17,00% respectively. Leading banks in Croatia and Bosnia and Herzegovina have a far larger share on banking markets in these countries. Unicredit bank Mostar participates with 24,85% in the total amount of granted loans in B&H and 25,88% in collected deposits. Zagrebačka bank Zagreb has the largest market share of all, 26,82% in loans and 24,87% in deposits. Application of CR1 coefficients underlines that there are two groups of leading banks, firstly those taking up almost one fifth of the overall banking market and secondly those that take up one fourth. Unicredit bank, present in three out of five analyzed markets, is a leading in Bosnia, but second largest in Serbia by market share size.

Table 1. Banking sector concentration ratio in 2015

Country	CR1		CR5		CR10	
	Loans	Deposits	Loans	Deposits	Loans	Deposits
Serbia	15,75	15,73	55,17	55,19	77,53	77,58
B&H	24,85	25,88	70,23	71,44	92,31	91,28
MNE	18,12	17,00	66,92	69,12	96,12	96,79
Croatia	26,82	24,87	74,43	73,15	93,58	92,65
Bulgaria	17,80	18,66	59,05	55,11	82,92	79,57

Source: Authors

Out of 30 banks in Serbia and 28 in Bulgaria, the first five banks have a sum market share of 55,17% in loans and 55,19% in deposits, i.e. 59,05% in loans and 55,11% in deposits respectively. There is an equal number of banks in B&H and Montenegro, 17, and five largest ones in B&H have a sum market share of 70,23% and 71,44%, while in Montenegro that figure is slightly smaller, 66,92% in loans and 69,12% in deposits. Out of 27 banks in Croatia, market share of five leading ones has the highest value in comparison with previously analyzed countries, 70,23% in loans and 71,44% in deposits. Application of CR5 coefficient underlines that out of two groups of banks, one with 17 banks in banking market and the other with 27-30 banks, five leading banks on Croatian banking market has the highest market share.

Application of CR10 coefficient leads to approximately same results. Market shares of ten leading banks in Croatia, B&H and Montenegro take up 91-96% of total banking market in loans and deposits; in Bulgaria ten leading banks participate with 82,92% in the total amount of granted loans and slightly less, 79,57% in total amount of collected deposits. Based on the results, it can be concluded that ten leading banks have the smallest sum market share in the Serbian banking market in comparison with leading banks from analyzed countries, i.e. 77,53% total loan market and 77,58% total deposit potential market.

Table 2. Herfindahl-Hirschman index of CEE region banking sector in 2015

Country	HHI		1/HHI	
	Loan	Deposits	Loans	Deposits
B&H	1342	1476	0,0007	0,0007
Serbia	817	814	0,0012	0,0012
MNE	1137	1158	0,0009	0,0009
Croatia	1472	1386	0,0007	0,0007
Bulgaria	921	865	0,0011	0,0012

Source: Authors

Based on the results obtained by application of Herfindahl-Hirschman index, it may be concluded that selected countries can be divided into two groups of markets, non-concentration and medium concentration markets. Serbia with HHI value of 817 in loans and 814 in deposits belongs to the first group, i.e. low concentration level market. Similar market structure is to be found in Bulgaria as well, with HHI values for loans and deposits are 921 and 865 respectively. Three remaining countries, B&H, Montenegro and Croatia have much higher values of applied HHI on loans and deposits, which puts them into the second group of countries with a medium concentration.

B&H has the highest HHI values for loans – 1342 and 1476 for deposits and Croatia with almost inverse values - 1472 for loans and 1386 for deposits. Montenegro has somewhat lower HHI values than previous two countries, i.e. 1137 for loans and 1158 for deposits, nonetheless belongs to the same group as B&H and Croatia – medium concentration markets. Having in mind a negative correlation of this index with the level of competition, it may be concluded that there is a lower level of competitiveness in Bosnian, Montenegrin and Croatian banking markets than in the Serbian and Bulgarian one. Sub-columns within 1/HHI

column show how many banks would be able to reach given HHI values, provided there are equal market shares.

Table 3 shows entropy coefficient and relative entropy values against loans and deposits of the CEE regional banking sector in 2015. Column log (n) illustrates maximal entropy values, namely values providing that all banks have equal market shares. Obtained entropy values for loans and deposits are contrasted to maximal entropy in order to establish dispersion of market shares, i.e. levels of instability and uncertainty. Total entropy has certain shortcomings when entropy in a number of countries in banking sector is reviewed. When there is a different number of banks in analyzed countries, entropy coefficient should be adjusted and made comparable among countries. Relative entropy coefficient is to be calculated in this context. Calculated entropy E and maximal entropy for a given number of banks ratio provides for relative distance concentration indicator, ranging from 0 (the highest concentration) to 1 (the lowest concentration). This indicator takes differences in number of banks in analyzed countries into consideration and is a significant corrector of results obtained on the basis of the total entropy.

Table 3. Entropy coefficient and relative entropy of the CEE region banking sector in 2015

Country	Entropy			Relative entropy		
	Loans	log (n)	Deposits	log (n)	Loans	Deposits
B&H	1,00	1,23	0,99	1,23	0,80	0,80
Serbia	1,21	1,47	1,20	1,48	0,81	0,82
MNE	1,00	1,14	0,99	1,14	0,87	0,86
Croatia	0,98	1,43	1,01	1,43	0,69	0,70
Bulgaria	1,16	1,44	1,19	1,44	0,81	0,82

Source: Authors

Relative distance concentration results underscore that there is a high level of instability and uncertainty present in almost all analyzed countries, i.e. bank services beneficiaries have significant substitution possibilities. Relative distance concentration is the only indicator in this group of applied indicator in a positive correlation with competition, i.e. a higher value of this indicator implies stronger competition in the market. Advantage of this coefficient is reflected in the fact that enables comparison among countries having taken differences in number of banks into consideration. The results show that banking market structure is a low concentration one, pointing at a high level of competition. The strongest intensity of competition is to be found on Montenegrin banking market with relative entropy amounts at values of 0,87and 0,86 for loans and deposits respectively. Bulgaria and Serbia follow with same relative entropy values, namely 0,81for loans and 0,82 for deposits for Serbia and 0,80 for both in Bulgaria. The lowest level of competition in banking markets in comparison with all analyzed countries is present in Croatia based on relative entropy values results.

Table 4. Gini coefficient of the CEE region banking sector in 2015

Country	Gini coefficient	
	Loans	Deposits
B&H	54,59	55,57
Serbia	59,24	59,28
MNE	43,28	44,73
Croatia	72,63	71,35
Bulgaria	60,87	57,18

Source: Authors

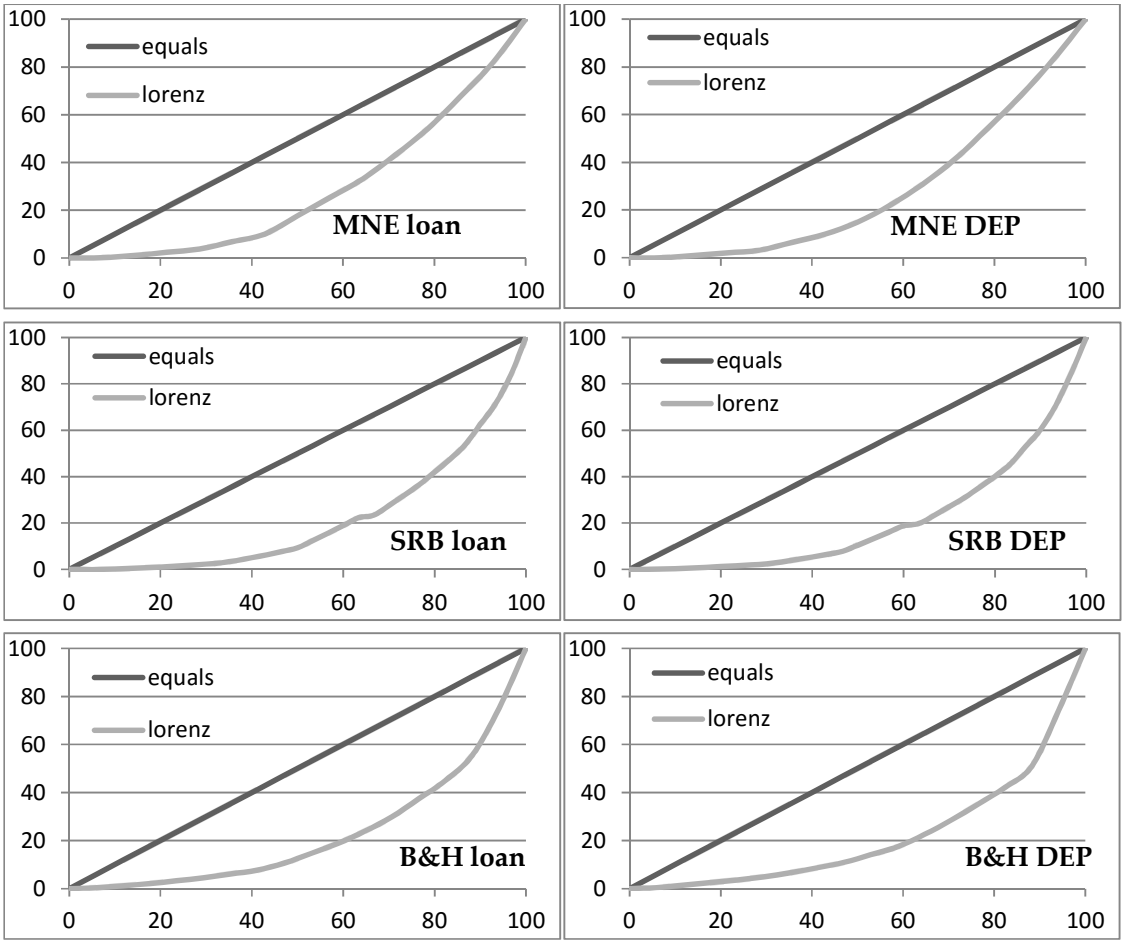
It may be concluded by application of Gini coefficient and analysis of the results presented in the table above that Croatia with values of 72,63 for loans and 71,35 for deposits is in a group of high concentration markets, i.e. that there is a group of banks with large market shares and a group of banks (a larger group than the first one) with small market shares. Main issue with this coefficient is that it fails to take a number of banks into consideration. However, value of this coefficient closer to 100 indicates presence of several leaders in the market, i.e. those with large market share, and that rest of the market is divided into a large number of individual small market shares of other business entities. In line with this, it can be concluded that these two groups of market shares are quite equal in Serbia, Bosnia and Herzegovina and Montenegro. Gini coefficient for Bulgaria is 60,87 for loans and 57,18 for deposits, which points at a slightly larger dispersion of market shares than in other countries. This is however smaller than on the Croatian banking market.

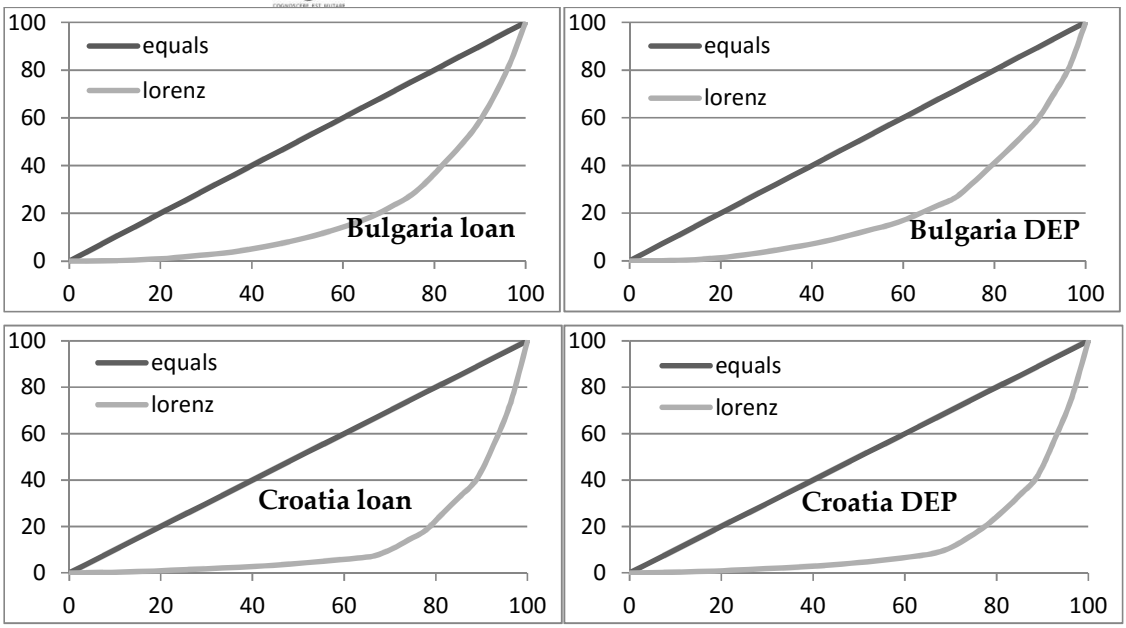
Bearing on mind that Gini coefficient does not take differences in numbers of business entities, i.e. banks into consideration, it is important to have in mind number of banks on the market when analyzing this coefficient so that values are correctly interpreted. Values can otherwise lead to misconception and misinterpretation of results. In order to avoid making this mistake, it is recommended that Lorenz curve is created, the logic of which is a foundation for this coefficient, and which offers a clear graphic illustration of market shares dispersions.

Charts 1-10 show Lorenz curves against market shares of loans and deposits of the CEE region banks in 2015, clearly illustration marker shares dispersion. X axis shows market shares of banks from the smallest to the highest (in percentages), and Y axis shows percentage of offer (granted loans and collected deposits)at banks' disposal in their balance sheets, in intervals from 0 to 100%. Charts illustrate that market distribution between loans and deposit is a very similar one, therefore it will be further on analyzed together. Should we take 20% of the best ranked banks into consideration (i.e. 20% of banks with the highest market shares), 20% of largest banks in Montenegro has 20% of the market, 60% of markets in Serbia, Bulgaria and Bosnia and Herzegovina, while 20% of the best ranked banks in Croatia has a share of up to 80%, which has been reiterated by the previous Gini coefficient analysis. If the curve at the beginning is closer to x axis, from left to right, it implies presence of banks with a very small market share (1% each and smaller), and a number of these banks depends on the length of the curve near x axis.

40% of the best ranked banks in B&H and Serbia have 80% market shares; the same group of banks in Montenegro has around 75%. Two fifth of the best ranked banks in Bulgaria have 85% share of the total Bulgarian banking market, while in Croatia, the same percentage of the best ranked banks totals to even 95% of the market share, implying that remaining 60% banks 'share' no more than 5%. It can be noted in all charts that a point on the curve above number 40 (representing 60% of the best ranked banks) is close to x axis. This, further on, points at the fact that 40% of the worst ranked banks 'share' rest of the market. 40% of banks in Montenegro with the lowest market shares share around 10% of the total market share. The curve is at approximately same distance from x axis in case of Serbia, Bulgaria and Bosnia and Herzegovina. Accordingly, 40% of the worst ranked banks in above countries total to only 5% of the overall banking market. Croatia's 40% of the worst ranked banks share only a couple of percentages of the total banking market considering loans and deposits. What is significant with Lorenz curve and visible at first glance is that the larger the surface on the right, the more market leaders present, i.e. groups of banks (proportionally smaller) with a significant market shares in the overall banking market. Contrary to this, larger surface on the left implies presence of proportionally larger number of banks sharing a very small percentage of the total marker share.

Chart 1. Lorenz curves – loans and deposits, CEE region, 2015





Source: Authors

Conclusion

Herfindahl-Hirschman index values describe two levels of market concentration, i.e. low concentration and medium ones. Even though HHI values obtained in Montenegro, Bosnia and Herzegovina and Croatia are above 1000, which groups them among medium concentration market structures, these values fail to reflect a genuine competitiveness bearing on mind presence of market leaders contributing to a higher index value with their marker shares.

Application of CR1 concentration ratio demonstrates a huge difference among market shares of leading banks, ranging from 17-27%. Unicredit bank runs business in three out of five analyzed banking markets and is a leading one in Bosnia and Herzegovina and Bulgaria, while in Serbia it comes second best after Banca Intesa.

Gini coefficient shortcomings, providing an incomplete picture of market concentration, have been overcome by creation of Lorenz curves, graphically presenting differences among banking sectors market structures in the CEE region. Serbia, Bulgaria and Bosnia and Herzegovina have the most similar distribution of market shares. Montenegro results show the smallest proportional number of banks in relation to the total number of banks with market share up to 1% and at the same time banks with a significant market share. The most striking dispersion and deviation, in comparison with other analyzed countries, has been found on Croatian banking market, where 11 banks share 3% of the total market, while 6 out of 27 share up to 80% of the market.

It could be concluded that banking sector market structures of these selected countries are similar with a high competitiveness level by the CEE regional market concentration level analysis applying a cluster of selected indicators. Even though some coefficient values are contradictory and once their shortcomings are removed – taking a number of banks into

consideration, presence of market leaders and putting obtained and maximal values into ratio – comparative analysis among countries proves feasible, providing a realistic picture of banking sector market structures individually.

Aiming at drawing good quality conclusions about market structure (nature of the market and relations among respective competitors) in banking sector, qualitative assessment of common and specific elements typical for this sector is necessary along with a level of concentration quantitative analysis.

In dealing with this topic, various reports by organizations and institutions have been studied, based mainly on analysis of one or maximum two most frequently applied concentration indicators (CR and HHI). Aiming at obtaining the clearest possible picture of market competition in financial sector, it is recommended that decision makers in respective institutions and regulatory bodies incorporate analyses of a maximal number of concentration indicators in their reports on level of concentration in financial sector.

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Komparativna analiza nivoa tržišne koncentracije bankarskih sektora CEE regiona

REZIME *– Bankarski sektor je značajan faktor razvoja ukupnog finansijskog i ekonomskog sistema. Brojnost banaka i disperzija njihovih pojedinačnih udela određuju konkurentsku strukturu bankarskog sektora, koja se iskazuje koncentracijom. Koncentracija tržišta se može predstaviti kao funkcija broja preduzeća koja međusobno konkurišu na tržištu i njihovih pojedinačnih relativnih tržišnih učešća. Analiza koncentracije je bitna s obzirom na to da stepen koncentracije ukazuje na odnos među konkurentima na određenom tržištu kao i na uticaj koji svako od konkurenata ima na potrošače, granu i privredu u celini. Počevši od krize 2008. godine koja je domino efektom pogodila bankarski sektor i imala veliki uticaj na isti u ovom radu autori su želeli da utvrde nivo tržišne koncentracije bankarskog sektora Srbije i zemalja u regionu u 2015. godini upotrebom većeg broja pokazatelja tržišne koncentracije.*

KLJUČNE REČI: *tržišna koncentracija, bankarski sektor, CEE region, konkurencija*

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