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ANALYSIS OF THE BANKING SECTOR COMPETITION IN KOSOVO

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Abstract: This research paper aims to investigate the competition in the banking sector in Kosovo. For the research purpose, the secondary data from the Central Bank and commercial banks of Kosovo are used. Besides, the comparison methodology is used to analyse the banking sector for the years 2013-2017. The participation of commercial banks in the banking sector in Kosovo was compared and described, and the competitiveness of the banking sector was measured, using the HHI index and Concentration Ratio (CR_4). Based on the research results, we can conclude that the competitiveness in 2017 was at a moderate level, in 2016 at a low level. Whereas, in the previous years, there was no real competition in this sector.

Keywords: Competitiveness of the banking sector, Commercial banks, HHI index, CR_4.

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1. Introduction

The banking sector worldwide is facing a very competitive, complex and dynamic environment. According to Beerli et al. (2004), this dynamic environment has led this sector to a great transformation. In the present times, financial technology (Fintech) has enabled several financial service options without the traditional visit to banks' premises (Omodero, 2021). Banks are beginning to witness a significant reduction of a crowd in their banking halls due to the evolution of Fintech after the global financial crisis of 2008 (Omodero, 2021).

The major role of the entire financial system in any nation is fund appropriation through financial intermediation (Ademosu & Morakinyo, 2021). The banking sector is an integral part of an economy. According to Chaker (2015), the design of services in the banking sector differs greatly from the design of products in the manufacturing sector, for the fact that services are intangible while products are tangible.

Commercial banks provide financial services necessary for enterprises and household to undertake their business (Hyz, 2020) as they provide a means to hold and exchange financial assets. Banks make intermediate savings for productive investments by providing loans to businesses and consumers, which also enables the risk-sharing (Northcott, 2004).

The financial institutions needed to improve operational efficiencies and merely support existing processes with fewer resources in order to improve profit (Avdullahi & Fejza, 2015). The efficient operation of the financial system ensures a steady stream of income and expenditure in the economic circuit, whereas, an inefficient financial system causes large fluctuations in the product, employment and price levels in the economy (Hyz, 2020). A weak and underdeveloped banking sector not only jeopardizes the long-term sustainability of an economy but can lead to financial crises, which further lead to economic crises (Bhatt & Gor, 2012). When banks are functioning as expected, depositors' money is safe, active developmental roles banks are expected to play in the economy are not thwarted, little or no pressure is mounted on the government to bail out banks in crisis and most importantly banking operating activities are sustainably profitable (Sanni, Salami, & Uthman, 2020).

Banking competition is expected to provide welfare gains by reducing monopoly rents and cost inefficiencies, favouring a decrease in loan rates and then an increase in investment (Pruteanu-Podpiera et al., 2008). The fundamental importance for the growth of a well-functioning financial system in general, and a banking sector in particular, has been a topic of discussion and research for some time in the empirical literature (King & Levine, 1993; Levine, 1997). The economic arguments in favor of competition have mostly been transplanted from the industrial organization (IO) literature (Alhadeff, 1954; Fischer, 1968; Rhoades, 1982; Gilbert, 1984; Freixas & Rochet, 1997). It is argued that competition ensures that costs are minimized and the prices of banking services are such that resources are allocated efficiently (Allen et al., 2002). On the other hand, if banks gain market power, they can benefit by charging higher interest rates on loans, paying lower interest rates on deposits, and distorting savings and investment decisions for households and businesses (Allen et al., 2002). When a banking system does not work well, there is potential for financial instability. Lack of banking competition can negatively affect entry as well as the growth of new firms and leads to the delayed exit of old firms (Cetorelli, 2003). Besides, Petersen & Rajan (1995) argue that in markets with higher bank concentration growth rates in the number of new enterprises are higher.

The banking sector in Kosovo has been studied and analyzed by many researchers and experts. Fejza et al., (2018) investigated customer behavior in commercial banks of Kosovo. Besides, the quality management system and efficiency improvement in the financial sector were explored as well (Lleshi & Lani, 2017; Avdullahi & Fejza, 2015; Zogjani et al., 2018). The impact of capital adequacy on returns of assets aroused the interest of Shabani et al., (2019). Loan portfolio and nonperforming loans (NPL) in Kosovo and Western Balkan Countries were investigated by Tmava et al. (2018). There are few research papers regarding the banking sector competition in Central, Eastern, and Southeastern European countries (Mustafa & Toçi, 2018a; Mustafa & Toçi, 2018b), but none of them explored and analyzed the banking sector competition only in Kosovo. Therefore, this research paper aims to fill this gap in the literature.

2. Literature review

According to the banking literature, the lack of banking competition negatively affects the economy of a country, resulting in higher prices for financial products and services, and in this case start-ups and small firms are most affected as their access to finance is reduced (Cetorelli & Strahan, 2006; Beck et al., 2006). According to Allen & Gale (2004), a less concentrated banking sector is more prone to financial crises than a concentrated banking sector with a few banks. The U.S., with its large number of banks, experienced much greater financial instability than the U.K or Canada, where the banking sector is dominated by fewer larger banks (Allen & Gale, 2000). On the other hand, Boyd & De Nicolo (2005) confirm that centralized banking systems increase market power, which enables banks to charge firms with higher interest rates. Based on this they found a positive relationship between bank concentration and fragility, as well as the likelihood of systematic distress (Boyd & De Nicolo, 2005). Mishkin (1999) stressed that policymakers in a centralized banking system are more concerned about the failures of banks than in a competitive system. These implicit "too big to fail" policies enable banks to receive larger subsidies that intensify risk-taking incentives and thus increase the fragility of the banking system (Mishkin, 1999). Nabiyev et al. (2016) conclude that improvement in government effectiveness decreases the probability of a banking crisis. Given that the theory makes ambiguous predictions concerning the relationship between market structure and competition of the banking system as well as the stability of the banking sector, Beck (2008) in his research raises the question: Are Bank Competition and Financial Stability Friends or Foes?

According to a longitudinal estimation analysis in CIS countries, Nabiyev et al. (2016) found that the level of competition does not significantly affect the probability of banking crisis, whereas credit growth decreases the probability of banking crisis. On the other hand, higher inflation increases the probability of a banking crisis in the investigated countries Nabiyev et al. (2016).

The benefits from a competitive banking system for the customers and the whole society are lower prices and higher quality of financial products (Boyd & De Nicol´, 2005). Also, the influence of a competitive banking system on financial stability remains an ongoing debate in the literature (Tabak et al., 2012). Based on the findings from some research the competition pressures banks to operate with a minimum capital and thus, enhances risk-taking behavior of banks (Hellmann et al., 2000; Allen & Gale, 2004). Other authors have the opposite view, noting that crises are less likely to occur in competing banking systems (Boyd & De Nicol´, 2005; Beck et al., 2006). According to Tabak et al. (2012) competition affects risk-taking in a non-linear way, considering that high and low competition levels enhance financial stability, whereas average competition has the opposite effect. According to these authors, the relationship is essentially explained by the size and capitalization of the bank. This is mainly because the largest banks benefit more from the competition, as well as the greater capital ratio is beneficial for banks operating in collusive markets (Tabak et al., 2012).

The literature on banking competition methodologically can be divided into two major categories: studies under a structural approach and non-structural approach (Rafay & Farid, 2018). According to Baumol et al. (1983), the genesis of the structural approach comes from the classical theory of Industrial Organization (IO) which deploys the Structure Conduct Performance mechanism. Anzoategui et al. (2010) stress that the structural approach assesses bank competition by examining measures of market structure such as concentration ratios (the share of assets held by the top institutions) or indices such as the Herfindahl-Hirschman Index. Based on this approach it is asserted that the high concentration in the industry causes lower competition. The structural approach uses Herfindahl Hirschman Index (HHI) and concentration ratios to determine the level of industry competition (Berger & Hannan, 1989; Hannan, 1991; Rafay & Farid, 2018). On the other hand, the non-structural approach has been developed around new empirical organization theory. According to Rafay & Farid (2018), this approach asserts that using market indicators such as concentration indexes and measures of size and profitability to assess banking competition does not accurately describe the competition. The aforementioned variables are shaped up by multiple macro-economic variables like taxation, the judicial system and bank-specific micro factors like risk preferences and scale of operations (Baumol et al., 1983). However, according to Iveta (2012), the HHI index stresses the importance of larger banks by assigning them greater weight than smaller banks, and it incorporates each bank individually so that arbitrary cut-offs and insensitivity to the share distribution are avoided. In this research, we have focused on applying the structural approach, particularly the HHI index and Concentration Ratio (CR_4) to measure the competitiveness of the banking sector in Kosovo.

To measure the competitiveness of a particular industry or sector, the HHI index, or as known the Herfindahl Hirschman index, was used. The Herfindahl-Hirschman Index (HHI) has gained prominence in the industrial organization discipline since it was adopted by the U.S. Department of Justice in 1982 as the primary market concentration guide (Levin, 1990; Akomea & Adusei, 2013). In 1950, Herfindahl proposed the index for calculating market concentration, but without including in the formula the squaring of the market share of each firm that is part of a particular sector or industry (Diallo & Tomek, 2015). Later, in 1964, author Hirschman supplemented this formula given by Herfindahl, adding the squaring the market share of each industry firm as additional mathematical action within the formula, transforming it as can be seen into formula 1 (Hirschman, 1964).

$$HHI = \sum_{i=1}^{n} Si^2 \quad \text{......} \quad (1)$$

Wherein,
i - a firm in a certain industry or sector (" i " varies from 1 to n);
n - number of firms that make up a certain industry/sector;
Si - market participation of each firm in a given industry/sector

Therefore, in the literature, this index is referred to as the Herfindahl Hirschman Index (Diallo & Tomek, 2015). The participation of firms in the market can be measured through percentages or numbers, but they are expressed through percentages when we are dealing with the calculation of this index. Thus, if the market share of firms is expressed in percentage, then the maximum value that the H index can take is 100^2, or 10,000 (Diallo & Tomek, 2015). If the value of the HH index is 10,000, it indicates that Si = 1 and in a given sector or industry there is only one firm, as is the case with monopoly (Krasniqi, 2018). The smaller the value of the index is, the greater the competition (Diallo & Tomek, 2015). In other words, if the value of the HHI index is equal to zero, this indicates the case of full competition, i.e. the sector is made up of a large number of small firms (Krasniqi, 2018). Whereas, if the value of the index is between 100 and 1000, then this means that the market or sector is not concentrated, so there is no full competition, but there is a large number of enterprises in it (Diallo & Tomek, 2015). On the other hand, if the value of the index is between 1000 and 1800, then it means that a certain sector or market is to a certain degree concentrated, which means that it consists of a small number of enterprises. (Diallo & Tomek, 2015).

Another straightforward method is to calculate the share of the industry's output or assets that are owned by a few dominant firms (Park, 2016). One of the early indicators taking market concentration into account is the Concentration Ratio which is defined as the sum of market shares of the largest markets in the industry (Lijesen et al.,2002). The concentration ratio (CR) shows the degree to which an industry is dominated by a small number of large firms or made up of many small banks (Iveta, 2012). With that broad definition come CR_4, CR_8, CR_{10}, …. CR_k as can be seen in formula 2. The ratio commonly used is the concentration ratio of four companies - CR_4 (Akomea & Adusei, 2013). Summing over the market shares of the k largest banks in the market, it takes the form (Iveta, 2012):

$$CR_k = \sum_{i=1}^{k} S_i \quad \text{……} \quad (2)$$

Wherein,
i - a firm in a certain industry or sector (" i " varies from 1 to n);
k – number of the largest firms (banks) in the market;
Si - market participation of each firm (bank) in a given industry/sector.

CR gives equal emphasis to the k leading banks but neglects the many small banks in the market (Iveta, 2012). There is no rule for the determination of the value of k, so the number of banks included in the concentration index is rather an arbitrary decision (Iveta, 2012). The main problem with this indicator is the arbitrary character of its cut-off point (Lijesin et al., 2002). If the CR_k measure is less than 50 (indicating that the four largest firms own less than 50% of the market), then the industry is considered to be very competitive, with several other firms competing, but none owning a very large share of the market (Akomea & Adusei, 2013). On the other extreme, if the CR_k measure is 90, then one firm controls about 90% of the market and that is effective, a monopoly (Akomea & Adusei, 2013).

3. Research methodology

For the research purpose of this paper, secondary data are used and analyzed. These data are collected from the publications of official reports and documents of the Central Bank of Kosovo, commercial banks operating in Kosovo, from the literature reviewed by numerous authors and from many publications in scientific journals. To achieve the best concept, idea and understanding of the banking sector operating in Kosovo, historical, descriptive, analytical and comparative methods are used.

This research provides an overview of the banking system in the Republic of Kosovo. Whereas, initially is presented the structure of the banking system in Kosovo, as well as the commercial banks operating in Kosovo. The market share of commercial banks in the banking sector in Kosovo is compared and described, according to the total assets owned by each commercial bank. Whereas, the competitiveness of the banking sector was measured for the period 2013-2017 using the HHI index and the concentration ratio CR_4. Based on the literature review and research results, the conclusions are drawn.

4. Empirical results

4.1. The structure of the financial system and banking sector in Kosovo

The financial system in Kosovo has an important role in the country's economy. This system includes several different categories of financial institutions. Kosovo's financial system is moderately new that started operating at the end of '99, whereas previously there was no modern banking system in terms of providing financial intermediation based on circumstances of the market economy (Durguti et al., 2020). According to data from the Central Bank of Kosovo - CBK (2017), the financial system consists of commercial banks, pension funds, insurance companies, microfinance institutions and financial subsidiaries.

The number of financial institutions in Kosovo during 2017 is similar to previous years. According to data published in the Financial Stability Report (CBK, 2017), only among two sectors changes were recorded. In the sector of financial subsidiaries, there were three new entrant institutions. Whereas, one institution withdrew from the market in the sector of microfinance and non-bank financial institutions (CBK, 2017). When analyzing the trend of financial institutions for the last five years, we see that in 2013, there were only nine banks in the banking sector in Kosovo. Since 2014, this number reached ten, and until 2017 there were no changes in the market. On the other hand, based on the report of the Quarterly Assessment of the Financial System for the fourth quarter of 2017 (CBK, 2018), the value of the assets of the financial system in Kosovo at the end of 2017 was 5.92 billion Euros, which corresponds to an annual increase of 9.9%.

The structure of the banking sector in Kosovo is dominated by foreign-owned banks, where according to the financial stability report (CBK, 2017), three of the eight foreign-owned banks have their country of origin in Turkey, while the other five banks in Austria, Germany, Slovenia, Albania and Serbia.

The commercial banks in Kosovo mainly deal with loans and deposits. According to Tmava et al. (2018) loan participation in the GDP of Kosovo for the period, 2008-2015 was 34.16%, which presents the lowest participation of loans in GDP among the Western Balkan countries. Shijaku & Kalluci (2013) found that lending is positively linked to economic growth. Tmava et al. (2018) found that among the biggest banking challenges in Kosovo are Nonperforming loans (NPLs), although Kosovo's experienced the lowest NPLs level, throughout the Western Balkan region. The reasons for the high non-performing loans (NPLs) were multiple, starting from the legacies inherited from the centrally-planned economies, the poor corporate governance of the newly created banks, the weak institutions, and the poor macroeconomic performance (Mustafa & Toçi, 2018a).
The total value of assets of the commercial banking sector estimated until 2017, was 3.67 billion Euros, which represents an annual increase of 7% (CBK, 2017). This increase compared to that of the last 5 years in the same reporting period, can be seen from the data presented in figure 2. Hence, the total value of assets of the banking sector in 2017 increased by 2% compared to the previous year of the same reporting period, where the value of 5% was recorded. Whereas, only in 2014, the total value of assets of the banking sector was higher, with 9.8%

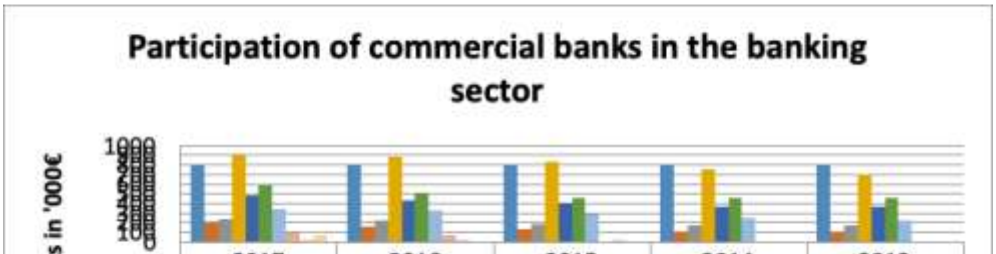
4.2. Market share of commercial banks in the banking sector in Kosovo

According to the Central Bank of Kosovo (CBK) data published on its official website (CBK, 2015), in Kosovo, there are 10 Commercial Banks, of which 8 are in foreign ownership, while only 2 of them are in local ownership. Banks that operate in the Kosovo market are:

- Bank for Business (BpB),
- Economic Bank,
- Raiffeisen Bank,
- Procredit Bank,
- TEB j.s.c.,
- NLB Prishtina,
- National Commercial Bank (BKT),
- Turkey IS Bankasi,
- Turkiye Cumhuriyeti Ziraat Bankasi,
- Commercial Bank j.s.c. Belgrade.

These banks offer a full package of banking products and services, such as loans, guarantees, current accounts, savings accounts, time deposits, domestic and international wire transfers, and services for the storage of valuables (CBK, 2015). In figure 1 are presented the total assets of all banks for the period of five years

(2013-2017) as well as a comparison was made to identify the ranking of banks participating in the market share according to the assets they possess.



	2017	2016	2015	2014	2013
PCB	793,2	801	792	802	791
BpB	204,8	163,4	133,9	115,2	113,5
B.Ek.	239,3	223	184	172	178,3
RBKO	900,9	879,6	831,4	760,8	698,1
TEB Sh.a.	488,5	429,3	410,6	369,3	372,4
NLB	584,1	516,1	464,7	463,5	464
BKT	345	328	289	246	220
IS Bank	99,8	74,3	0	0	0
Ziraat	24	17,8	11,3	0	0
KBAB	65,2	0	0	0	0

Figure 1 Participation of commercial banks in the Banking Sector in Kosovo
Source: Authors' calculations based on the balance sheets data of commercial banks in Kosovo from the CBK website.

As seen in the above chart, the dominant bank with its assets in the banking sector in Kosovo for three consecutive years is Raiffeisen Bank, with 24% of the market share. The second is ProCredit Bank, followed by NLB Bank, TEB bank, Economic Bank, BKT, Bank for Business, Turkiye IS Bankasi, Commercial Bank and Ziraat bank - which is ranked lowest for the year 2017. In the period from 2015 to 2017, there were no differences in the ranking of the participation of commercial banks in the banking sector.

4.3. The measurement of the competitiveness for the banking sector with the HHI index

The total assets of all banks for the period of five years (2013-2017) are presented in table 1. In 2013 and 2014, the dominant bank in terms of total assets in the banking sector was ProCredit Bank, followed by Raiffeisen Bank. While other banks have had almost the same ranking as in the last three years.

Table 1 Participation of commercial banks in the banking sector in Kosovo

(Thousands **€**)

Year	2017		2016		2015		2014		2013	
Bank Name	Total Assets	%	Total Assets	%	Total Assets	%	Total Assets	%	Total Assets	%
PCB	793.2	21.2	801	23.3	792	25.4	802	27.4	791	27.9
BpB	204.8	5.5	163.4	4.8	133.9	4.3	115.2	3.9	113.5	4.0
Economic Bank	239.3	6.4	223	6.5	184	5.9	172	5.9	178.3	6.3
RBKO	900.9	24.1	879.6	25.6	831.4	26.7	760.8	26.0	698.1	24.6
TEB j.s.c	488.5	13.0	429.3	12.5	410.6	13.2	369.3	12.6	372.4	13.1
NLB Bank	584.1	15.6	516.1	15.0	464.7	14.9	463.5	15.8	464	16.4
BKT	345	9.2	328	9.6	289	9.3	246	8.4	220	7.8
IS Bank	99.8	2.7	74.3	2.2	0	0.0	0	0.0	0	0.0
Ziraat Bank	24	0.6	17.8	0.5	11.3	0.4	0	0.0	0	0.0
Commercial Bank j.s.c BG	65.2	1.7	0	0.0	0	0.0	0	0.0	0	0.0
Total:	**3744.8**		**3432.5**		**3116.9**		**2928.8**		**2837.3**	

Source: Authors' calculations based on the balance sheets data of commercial banks in Kosovo from the CBK website.

Based on the data from the table1, we calculate the HHI index initially for all commercial banks operating in Kosovo for the year 2017 as follows:

$$\text{HHI} = \sum_{i=1}^{n} \text{Si}^2 = 21.2^2 + 5.5^2 + 6.4^2 + 24.1^2 + 13^2 + 15.6^2 + 9.2^2 + 2.7^2 + 0.6^2 + 1.7^2 = 449.4 + 30.25 + 40.9 + 580.8 + 169 + 243.4 + 84.7 + 7.3 + 0.36 + 2.9 = \mathbf{1609}$$

Since the value of the HHI index for 2017 is equal to 1609. Considering that the value is within the intervals 1000 and 1800, it means that the banking sector for 2017 is characterized as a market with moderate concentration, as well as with moderate competition, consisting of a not very large number of institutions. Similarly, as shown in figure 2 we have calculated the HHI index for all the years of the period 2013-2017.

In 2016, the value of the HHI index stands between 1000 and 1800, which indicates that competition in this sector is low.

According to the obtained results, the HHI index has exceeded the value above 1800 for the years 2015, 2014 and 2013, meaning that during these three years the banking industry was characterized by high concentration, as well as a smaller number of institutions that consist this sector, and with lower competition.

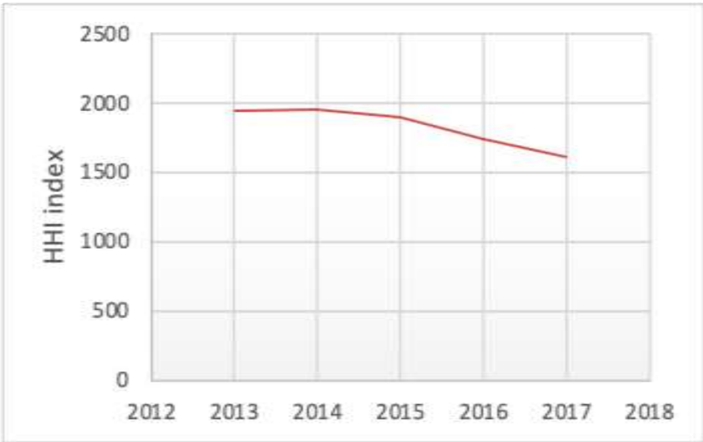


Figure 2 The measurement of the competitiveness for the banking sector in Kosovo with the HHI index

Source: Authors' calculations based on data derived from the CBK website for commercial banks in Kosovo.

4.4. Measurement of banking sector competition with Concentration Ratio (CR)

In this section, it is presented another measurement index of market concentration, known as Concentration Ratio (CR), which is one of the first indicators taking market concentration into account. Simplicity and limited data requirements make CR one of the most frequently used measures of concentration in the empirical literature (Iveta, 2012). To calculate the Concentration Ratio (CR) of the commercial banks in Kosovo, we have used data from table 1. Based on the literature review, the CR can be calculated for four, eight, or ten dominated firms in an industry. CR4 is widely in use (Akomea & Adusei, 2013). Considering, that in Kosovo there are four large banks, we have used data from these banks to calculate the concentration ratio (CR4) for the market concentration of the whole banking sector in Kosovo. According to the data presented in table 1, the largest banks in Kosovo from 2013 to 2017 are ProCredit Bank, Raiffeisen Bank, NLB Bank and Teb Bank. We calculate the CR4 for all commercial banks operating in Kosovo for the year 2017 as follows:

$$CR_4 = \sum_{i=1}^{4} S_i = 21.2 + 24.1 + 13 + 15.6 = \mathbf{73.9}$$

While the result of the calculated CR_4 in 2017 is 73.9, it means that the banking sector for 2017 is characterized as a market with moderate concentration, as well as

with moderate competition, consisting of a not very large number of institutions. This result indicates that those four largest banks own more than 50% of the market.
Below in figure 3 are presented, the calculation of the CR_4 initially for the research period 2013-2017.

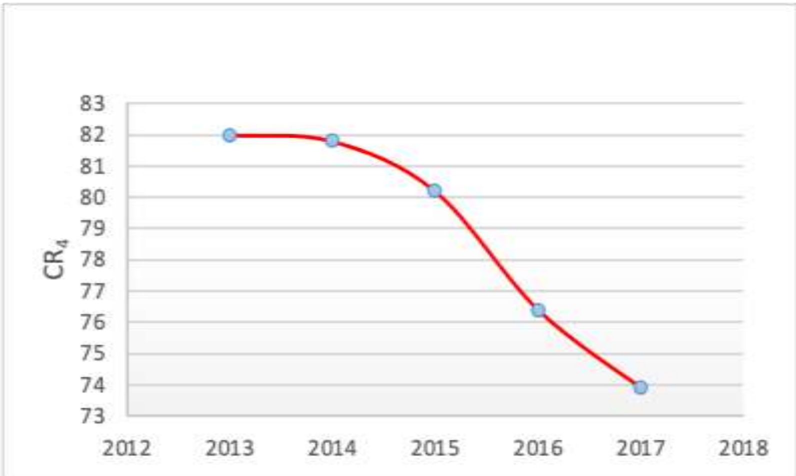


Figure 3 The measurement of the competitiveness for the banking sector in Kosovo with Concentration Ratio CR_4
Source: Authors' calculations based on data derived from the CBK website for commercial banks in Kosovo.

In 2016, the value of the CR4 resulted in 76.4, which indicates that competition in this sector for this year was also low. Based on the obtained results, the CR_4 has exceeded the value above 80 for the years 2015, 2014 and 2013, meaning that during these three years the banking industry was characterized by high concentration, as well as a smaller number of institutions that consist this sector, and with very lower competition.

5. Discussions

Based on the comparison of the results of the HHI Index and CR_4, both of them show a moderately decreasing trend over time. Whereas HHI Index decreased from 1940.6 in 2013 to 1609 in 2017, while the CR_4 decreased from 82 in 2013 to 73.9 in 2017. This clearly indicates that the market concentration of the banking sector of Kosovo continually decreased from 2013 to 2017. This decrease in market concentration came as a result of new entrants in the banking sector, considering that when new banks entered the market, the competition among commercial banks started to be more visible. Although according to the research results, the market concentration of the banking sector of Kosovo in the last years of the research period had experienced a gradual and moderate decline, still we can conclude that it is a highly concentrated market.

6. Conclusions

Based on the findings of this paper from the reviewed literature, as well as the applied calculations, it can be concluded that financial institutions that aim to survive and compete in today's dynamic and everyday increasing market, must attempt to change their development practices of this sector in general. There are only 10 commercial banks actively operating in Kosovo, which affects the competitiveness of this sector in general. According to the calculations applied in this research paper using the HHI index, it is observed that the competitiveness in recent years in the banking sector of Kosovo is at a moderate level, while in previous years, there was no real competition in this sector. The results confirm the argument, that the increases in the HHI generally indicate a loss of pricing power and a decrease in competition, whereas decreases imply the opposite (Chan et al., 2007). Similarly, to the HHI Index results, the values derived from the calculation of the Concentration Ratio for the four largest banks in the banking sector of Kosovo CR_4, show a trend of modest decrease, meaning that market concentration changed considerably over the sample period.

Our results are in line with research conducted by Iveta (2012) with a similar number of banks in the Czech banking sector, whereas the dataset of 15 Czech banks was used that covered about 90% of the Czech banking sector. The author found that the values of the HHI index show a trend of modest decrease, meaning that market concentration changed appreciably over the sample period (2000-2010) (Iveta, 2012). If a sector is not characterized by moderate-to-high degree competitiveness, then it cannot be considered an attractive sector for serious new entrants in this same sector. The banking sector in Kosovo must increase competitiveness, given that it facilitates the increase of differentiation of commercial banks by increasing the variety of offers, and products as well as the quality of banking services that are beneficial to customers. According to Mastromatteo & Esposito (2016); Giron et al., (2019), the best possible solution for the construction of a stable financial environment is to enforce a restriction on the absolute size of large banks. Mastromatteo & Esposito (2016), in their proposal, assert a view that pays more attention to regulation based on size restrictions, banking concentration, and the power of large financial groups through a) determining a ceiling, an absolute value for the amount of assets a bank is allowed to own, corrected annually for periodic inflation; or b) set a specific percentage of the national GDP that a bank's asset value may not surpass. If these regulations will be taken into consideration in Kosovo, the competitiveness of the banking sector in the future might experience improvement. The institutional factors have a significant influence on preventing banking crises (Nabiyev et al., 2016). Therefore, institutions need to create such macroeconomic policies which will lead to a sustainable financial system, otherwise, the regulatory policies and institutions that thwart competition are associated with greater banking system fragility (Beck et al., 2006) that will affect the whole economy of Kosovo. Whereas, the development of a sustainable financial sector, in general, would be of great benefit to customers who would gain from the increased competition in the banking sector, as they would be offered additional offers, lower interest rates, and increased customer care.

This paper attempted to fill the gap in the literature regarding the banking sector competition in Kosovo. In addition to all the contributions of this research paper, there is still room for completion and improvement. Some of the shortcomings and opportunities for improvement are listed below:

• This research paper is focused only on one approach: The structural approach. The critical perception of the structural approach is that increased concentration causes high prices and results in abnormal profits (Rafay & Farid, 2018). Also, the structural approach is focused only on the market share of firms and the number of firms that are part of an industry. The other macro-economic factors like the judicial system, taxation, etc., and micro-economic factors like risk preferences and scale of operations for banks, are not included in the calculation.

• Besides the HHI index and Concentration Ratio (CR), there are also other accurate measures of market power that can be used when applying the Structural Approach. According to Berger et al. (2009), the Lerner Index is a direct measure of competition because it focuses on the pricing power apparent in the difference between price and marginal cost thereby capturing the degree to which a firm can increase its marginal price beyond marginal cost. Therefore, we recommend further research to be conducted to investigate the competition of the banking sector in Kosovo by applying the Lerner index.

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Author Contributions

VFA conceived the study and was responsible for the design, data collection and development of the data analysis. VFA and AA were responsible for the literature review. VFA, AA, QT and ED were responsible for the data interpretation and conclusion section.

Disclosure Statement

The authors have not any competing financial, professional, or personal interests from other parties.

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