





SERBIAN BANKING SECTOR: CURRENT TRENDS AND PERSPECTIVES

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Abstract:

The aim of this paper is to analyze the banking sector of the Republic of Serbia from 2019 to 2023. In recent years, there have been significant changes in this sector. Therefore, the paper will primarily focus on mergers and acquisitions in the banking industry over the past five years. Given the decrease in the number of banks operating in the Republic of Serbia, the paper will utilize key concentration indicators, such as concentration ratios and the Herfindahl-Hirschman Index, to provide a comprehensive analysis of the sector. Additionally, the basic profitability indicators, ROA and ROE, will also be examined.

Keywords:

banking sector, profitability, concentration.

1. INTRODUCTION

The Serbian banking sector has undergone significant changes in recent years, influenced by global economic trends, regulatory developments, and the evolving needs of customers. There has been a wave of consolidation in the Serbian banking sector, with larger banks acquiring smaller or less profitable ones. This trend aims to increase market efficiency and reduce operational costs. A significant portion of Serbian banks is owned by foreign financial institutions. This foreign presence has brought more stability, modern banking practices, and capital into the sector. The adoption of digital banking solutions has accelerated, driven by customer demand for convenient and accessible financial services. Banks are investing heavily in digital platforms, mobile apps, and online services. Also, banks are collaborating with fintech companies to offer innovative products and services like digital wallets, online lending, and automated financial advice. Serbia is aligning its banking regulations with EU directives as part of its EU accession process. This includes stricter capital requirements, risk management practices, and consumer protection standards. The National Bank of Serbia (NBS) has implemented measures to ensure financial stability, including maintaining adequate liquidity and capital adequacy ratios among banks. Banks in Serbia are increasingly incorporating environmental, social, and governance (ESG) criteria into their operations. The digital transformation will continue to be a central focus, with banks investing in advanced technologies like artificial intelligence, blockchain, and cybersecurity to enhance customer experiences and operational efficiency and to further personalize banking services.

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The trend toward consolidation is expected to persist, leading to a more concentrated market. This consolidation could result in a stronger, more resilient banking sector that can compete better regionally.

2. LITERATURE REVIEW

The Serbian banking sector has undergone significant transformation over the past five years, influenced by global economic shifts, regulatory changes, and technological advancements. Several studies highlight the consolidation process within the Serbian banking sector as a key trend in recent years. Stojanović and Stojanović (2019) examine the wave of mergers and acquisitions that has reshaped the sector. They argue that the consolidation has resulted in a more concentrated banking market, with a few dominant players controlling the majority of assets. This trend has been driven by a combination of factors, including the need for efficiency, compliance with stricter regulatory requirements, and the aim of achieving economies of scale. Foreign ownership remains a significant feature of the Serbian banking sector.

Digitalization has been identified as one of the most transformative trends in the Serbian banking sector over the past five years. Petrović et al. (2021) discuss the rapid adoption of digital banking services, including online and mobile banking, in response to changing consumer preferences and the impact of the COVID-19 pandemic. Their study shows a marked increase in investments in digital infrastructure, with banks prioritizing customer-centric digital solutions to improve the user experience and operational efficiency. Bulatović and Popović (2020) emphasize the role of fintech in driving digital innovation in Serbian banking. They note that banks have increasingly partnered with fintech companies to offer innovative services such as digital wallets, contactless payments, and automated financial advice. The collaboration between traditional banks and fintech firms is seen as a strategy to stay competitive in a rapidly evolving financial landscape.

Ljumović and Dukić (2018) discuss the impact of regulatory changes on the banking sector, noting that the implementation of stricter capital requirements and enhanced risk management practices has contributed to greater financial stability. These changes have been driven by the EU accession process and the need to mitigate systemic risks. The National Bank of Serbia's (NBS) policies have focused on ensuring the sector's stability. The NBS (2020) has introduced measures to maintain liquidity and capital adequacy ratios, making the banking sector more resilient to external shocks. Studies indicate that these measures have improved the overall soundness of the sector, reducing the risks associated with non-performing loans (NPLs) and enhancing credit growth.

Recent literature shows a growing focus on sustainable and green banking in Serbia. Pavlović and Jovanović (2021) explore how banks are increasingly incorporating environmental, social, and governance (ESG) criteria into their operations. They argue that this shift is a part of a broader global trend toward responsible banking and is driven by both regulatory pressure and changing customer expectations. The NBS (2022) has encouraged banks to adopt sustainable finance practices, promoting green loans and investments in environmentally friendly projects. This transition toward sustainability is still in its early stages, but studies suggest it will become a more significant aspect of banking strategies in the future.

Janković and Milošević (2020) discuss the need for further digital transformation, suggesting that advanced technologies like artificial intelligence (AI) and blockchain could enhance customer experience and operational efficiency. However, they caution that banks must also invest in cybersecurity to protect against digital threats. The literature also points to a potential entry of new players, such as digital-only banks and non-traditional financial institutions, which could disrupt the market and increase competition. In this context, traditional banks are encouraged to innovate and adapt to changing market dynamics.

Kaličanin and Terzić (2023) have found that, between 2017 and 2021, Serbia's banking sector is slightly less concentrated than those of Croatia and Montenegro, largely due to recent mergers and acquisitions that have reduced the number of banks in the region.

3. RESULTS AND DISCUSSION

At the beginning of the analysis the banking sector of the Republic of Serbia, it is important to note the changes that occurred in the observed period between 2019 and 2023 and which include mergers and acquisitions of certain banks as well as the obtaining and revocation of the license to operate by the National Bank of Serbia. The mentioned changes directly affect the number of market participants, which in turn has an impact on the market structure itself, which characterizes the banking sector in the observed years. Primarily, with the decrease in the number of banks operating in the Republic of Serbia, the level of market concentration increases and vice versa. The information is taken from reports for the banking sector published by the National Bank of Serbia (NBS) and the annual special issues of the journal Banking published by the Association of Serbian Banks (ASB).

In 2019, OTP bank Serbia a.d. Novi Sad at the end of April 2019 completed the merger process of Vojvođanska bank a.d. Novi Sad and continued to operate as Vojvođanska bank a.d. Novi Sad. After that, OTP bank Serbia a.d. Novi Sad in 2019 bought Societe



Generale bank Serbia a.d. Belgrade and continued to operate as OTP bank Serbia a.d. Novi Sad, which reduced the number to 26 banks.

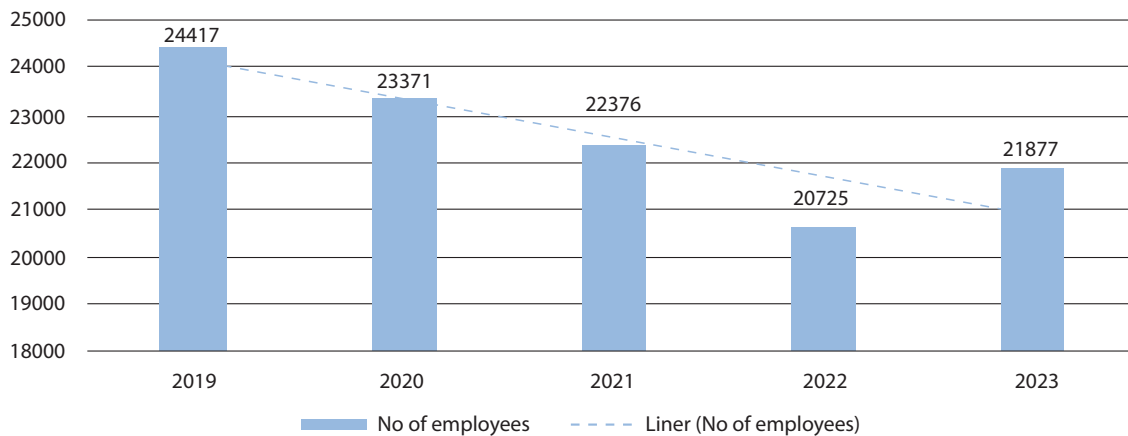
In 2021 there were two acquisitions and one merger. First, Eurobank a.d. Belgrade has acquired Direktna bank a.d. Kragujevac and mts bank a.d. Belgrade was taken over by Bank Poštanska štedionica a.d. Belgrade. Finally, Vojvođanska bank a.d. Novi Sad was merged to OTP bank Serbia a.d. Novi Sad so, at the end of the year 23 banks were left operating.

In 2022 NLB Bank a.d. Belgrade and Komercijalna bank a.d. Belgrade merged and continued to operate under the name NLB Komercijalna bank a.d. Belgrade. Sberbank Serbia a.d. Belgrade was taken over from AIK bank a.d. Belgrade. At the end, Credit Agricole bank Serbia a.d. Novi Sad was taken over from Raiffeisen Bank a.d. Belgrade - at the end of the year, a total of 20 banks were operating and the same number was maintained in the following year. The reduced number of banks also affected the number of employees in the banking sector which is shown in the Graph 1.

As it can be seen in the Graph 1 the number of employees has dropped in the observed period. On a yearly basis, there were approximately a thousand employees less in the banking sector. In 2023, there were about twenty-one thousand employees which is about 1000 more compared to 2022. Most of the banks employed more people in 2022 compared to 2023, i.e. only six out of twenty banks had less employees: Erste bank, Eurobank Direktna bank, Yettel bank, 3bank, Unicredit bank and NLB Komercijalna bank.

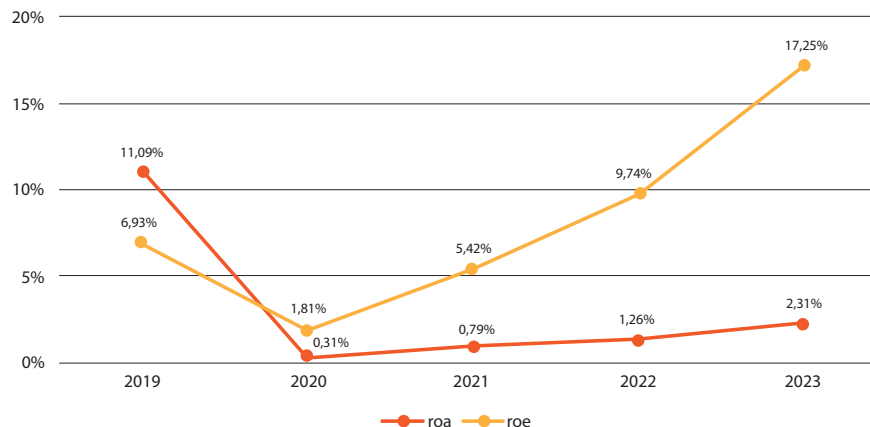
For the first time, in 2023 the banking sector of the Republic of Serbia had a profit of more than one billion euros. This result was achieved despite the limitation of interest rates on housing loans, which was adopted by the NBS in September. Graph 2 shows return on assets and return on equity for the banking sector 2019-2023. For the observed period return on assets reached its minimum value in 2020 – 0,31% and the maximum was reached in 2019 – 11,09%. Considering return on equity, its minimal value was also in 2020 – 1,81% and the maximum value was in 2023 – 17,25%.

Graph 1. Number of employees in the banking sector, 2019-2023.



Source: Authors' using NBS and ASB.

Graph 2. ROA and ROE, 2019-2023.



Source: Authors' using NBS and ASB.



After a series of years with low interest rates and in some years negative Euribor, inflation from mid-2021 forced central banks to raise interest rates. This explains higher profitability in the recent years.

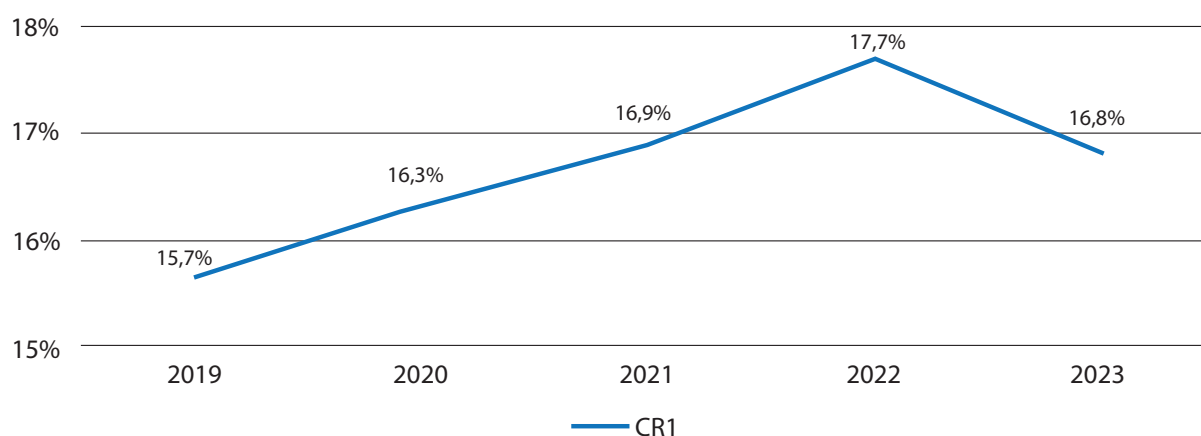
As an indicator that is derived from the total market shares of the biggest companies on the market, the index of shares of n companies, also known as the concentration ratio, is very simple to comprehend (Waldman and Jensen, 2001). It is often used in practice because of its easy application and simplicity and CR1 is primarily calculated to see the market share of market leader - in the case of monopolies, the value of the index is 100 (Grubišić, Kamenković & Kaličanin, 2021). Higher CR reflects a more concentrated market (Stavárek & Řepková, 2011).

If we consider the bank with the highest market share on the market that would be Banca Intesa. But, recently as long as OTP bank expanded their business taking over Vojvođanska bank and Societe Generale and if we consider loans and receivables from clients from the balance sheet, OTP bank has become the leader on the market (Banca Intesa still has the highest value of assets) from

2021. Graph 3 shows the concentration ratio of the leading bank based on loans and receivables from clients for the period between 2019 and 2023. The average value of the ratio for the observed period is 16.7% and the highest market share OTP bank had in 2021 – 17.7%.

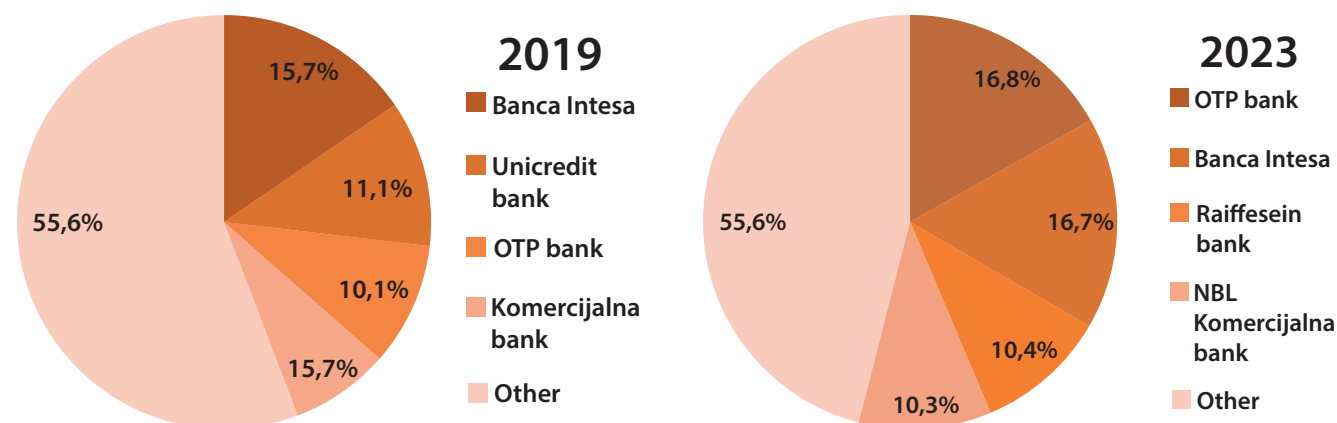
Graph 4 shows the concentration ratio for the four leading banks in the market for the total loans and the other market share up to 100%. As it can be seen in 2019 Banca Intesa was the leader and had 15,7% followed by Unicredit bank – 11.1%, OTP bank – 10.1% and Komercijalna bank – 7.6%. As long as there were 16 banks that operated in 2019 the other 22 banks shared about 56% of the loan market. In 2023 the leader was OTP bank with 16.8% market share followed by Banca Intesa 16.7%, Raiffeisen bank – 10.4% and NLB Komercijalna bank 10.3%. Considering decline in the number of the banks that operated, in 2023 the other refers to the number of sixteen banks, i.e. the other sixteen banks in the market shared about 46% of the loan market in the Republic of Serbia.

Graph 3. CR1 for total loans, 2019-2023.



Source: Authors' using NBS and ASB.

Graph 4. CR1 for total loans, 2019-2023.



Source: Authors' using NBS and ASB.

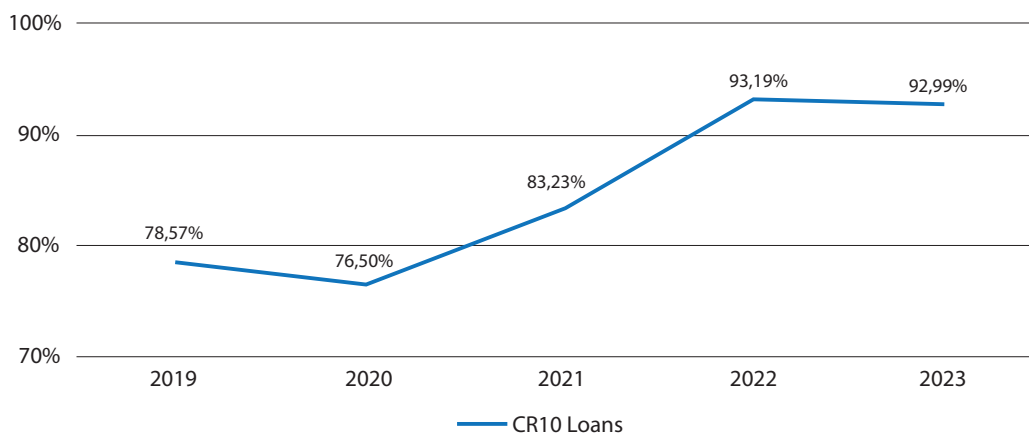


As far as the results are concerned, American and European standards differ. The acceptable value for the CR4 is 25 percent of total industry, but it can go up to 30 percent in accordance with European regulations. As per the widely used Keynesian divide in the United States, markets classified as unconcentrated have ratio values less than 25 percent, markets classified as moderately concentrated have values between 25 and 50 percent, and markets classified as highly concentrated have values greater than 50 percent (Đuranović & Filipović, 2021).

Graph 5 shows the cumulative value of the market share of the first ten banks with the highest market share in the banking sector for the observed period. As it can be seen on the graph this ratio has had an upward trend since 2020. Its minimal value was 76.50% in 2020 so it can be concluded that sixteen other banks shared about 24% of total loans. In 2022 and 2023 this ratio was above 90%, so the other ten banks shared less than ten percent of the loan market. It can be concluded that the banks with high market share additionally increased their market share and the group of the banks with small market share decreased its market share.

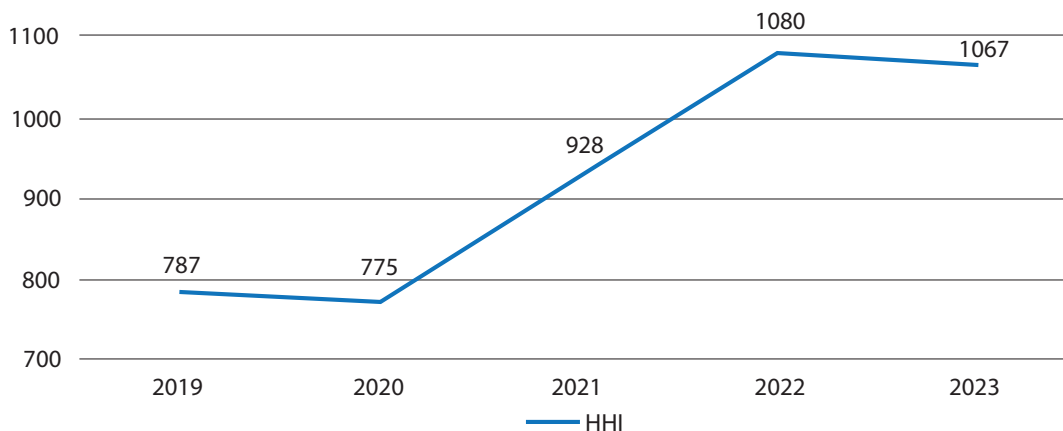
As a consequence of the mergers and acquisitions and downward trend of the number of the banks, the level of the market concentration in the banking sector in the Republic of Serbia has risen. Graph 6 shows the Herfindahl-Hirschman index for the loans and receivables from clients from the balance sheet in the observed period 2019-2023. The banking sector of the Republic of Serbia was characterized by a non-concentrated, i.e. low-concentrated offer - when the HHI value is <1000. The significant growth trend of HHI since 2020 is very noticeable and if we look at the value of the index measured by the total amount of loans to clients, which in the last two years is 1080 and 1067, respectively, it can be concluded that the credit banking market is characterized by a moderately concentrated offer.

Graph 5. CR10 for total loans, 2019-2023.



Source: Authors' using NBS and ASB.

Graph 6. Herfindahl-Hirschman index for total loans, 2019-2023.



Source: Authors' using NBS and ASB.



4. CONCLUSION

As demonstrated by the analysis, significant changes have occurred in the banking sector of the Republic of Serbia. Notably, the number of employees has been declining over the past decade; however, for the first time in 2023, the number of employees have increased compared to the previous year. Additionally, the banking sector's profitability in 2023, which surpassed 1 billion euros, has been a point of interest for experts and researchers. The analysis of profitability ratios showed a notably high ROE of 17.25% in 2023. The reduction in the number of banks, mainly due to mergers and acquisitions, has affected market shares and led to increased market concentration. For the first time, the Herfindahl-Hirschman Index (HHI) exceeded 1,000, indicating a moderately concentrated loan market.

5. LITERATURE

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