The Impact of COVID-19 pandemic on Banks' Profitability: Evidence from North Macedonia

Tatjana Spaseska[1] **Dragica Odzaklieska**[2] **Ilija Hristoski**[3]

Aneta Risteska-Jankuloska[4] **Fanka Risteska**[5]

[1] Associate Professor at the Faculty of Economics – Prilep, tatjana.spaseska@uklo.edu.mk

[2] Full Professor at the Faculty of Economics – Prilep, dragica.odzaklieska@uklo.edu.mk

[3] Associate Professor at the Faculty of Economics – Prilep, ilija.hristoski@uklo.edu.mk

[4] Associate Professor at the Faculty of Economics – Prilep, aneta.risteska@uklo.edu.mk

[5] Associate Professor at the Faculty of Economics – Prilep, fance.risteska@uklo.edu.mk

Abstract: The COVID-19 pandemic caused economic disruptions across the world, including financial markets and institutions in all imaginable dimensions. Although indirectly, the banks were also under pressure, since the banking sector has a crucial role in supporting firms and households during the period of lower revenues and incomes. In this regard, the main objective of this paper is to examine the impact of the COVID-19 pandemic on banks' profitability in North Macedonia. To reach this goal, data for financial stability reports and the reports on the risks in the banking system in the Republic of North Macedonia was used. The findings of our research have shown that the Macedonian banks faced many challenges during the prolonged COVID-19 crisis, but the banking sector maintained stability and solvency, even they supported the firms and individuals to alleviate the consequences of the crisis and achieved higher profits compared to the previous period.

Keywords: banking sector, profitability, COVID-19, North Macedonia

1. INTRODUCTION

The COVID-19 pandemic has caused a convulsive shock of global economic activity. The extensive measures taken by the policymakers on a global level contributed to fast markets stabilization and prevented risk transmission to the financial sector. The global financial system remains stable and has shock resilience, supporting facilitated funding conditions which have resulted in maintenance of the credit cycle and economic recovery. However, the recovery is accompanied by extremely high uncertainty having in mind the fact that the pandemic is still active throughout the world.

The pandemic is already radically worsening the economic outlook for North Macedonia, with a negative growth of almost 5.5% in 2020. The trade structure of North Macedonia remained in deficit, −16.7% of GDP. The industrial production index fell by −10.6% y-o-y on average in the first eleven months of 2020. However, the decline in employment (−1.8% year-on-year) remained moderate, mainly due to government support measures to mitigate the impact of the crisis on employment (OECD, 2021b).

It is already certain that North Macedonia is faced with the most serious global shock with strong negative consequences for the economic growth, for the companies' performance, and the households, which would have transfer effects on the operation of the domestic banks.

To mitigate the negative effects of the global pandemic, the National Bank of North Macedonia has taken timely and appropriate monetary policy and financial sector measures and decisions that have contributed to maintaining the financial stability of the country. Namely, the central bank cuts its policy rate by 0.25% to 1.75%. It has also revised its credit risk regulation to encourage banks to restructure loans temporarily and has relaxed the loan classification standards for NPLs. In addition, it has reduced the base for the reserve requirement by the amount of new loans to firms in the affected sector (OECD, 2021a).

As a result of all these undertaken measures by the central bank, the credit support maintained on a very solid level and has contributed to mitigating the consequences of the crisis on the Macedonian economy and to maintaining financial stability.

Having minded the previous, the main objective of the research in this paper is to analyze the consequences of the global pandemic on the profitability of Macedonian banks.

The rest of the paper is organized as follows. Section 2 deals with some previous work on the effect of the COVID-19 pandemic on banks' profitability in different countries worldwide. Section 3 briefly introduces the reader to the profitability analysis of the Macedonian Banking System. Section 4 provides insights into the data, methodology, and results of the analysis, and explains the economic significance and messages of the obtained results. The last section concludes and recommends.

2. LITERATURE REVIEW

The COVID-19 pandemic is a global phenomenon with unprecedented impact on individuals, communities, and organizations. There is no doubt that there is no segment of the society that was not under the pressure of the global pandemic.

Banks were also affected by COVID-19 since their borrowers, businesses, and households were faced with decreased revenues and incomes as a result of the big lockdown to slow down the spread of the pandemic. The consequences of COVID-19 on banks' performance are likely to be worse in developing countries, where banks play a dominant role in capital financing and are the engine of economic growth. All this considered, the ongoing health of the banking sector remains a primary concern for economic policymakers, since banks' credit lending has a crucial role in supporting the real sector.

Since the emergence of the COVID-19 pandemic at the end of 2019, a considerable number of studies focused on assessing the impact of COVID-19 on the macroeconomic situation of countries and regions. Some of them attempt to examine the implications of the global pandemic on the banking system worldwide.

According to IMF (2020), the profitability of the banks in several advanced economies has been a persistent challenge since the global financial crisis. Namely, despite the challenges faced by banks as a result of the coronavirus (COVID-19) outbreak, a persistent period of low-interest rates is likely to put further pressure on bank profitability over the medium term. A simulation exercise conducted for a group of nine advanced economies indicates that a large fraction of their banking sectors, by assets, may fail to generate profits above their cost of equity in 2025. Once immediate challenges recede, banks could take steps to mitigate pressures on profits, including by increasing fee income or cutting costs, but it may be challenging to fully mitigate profitability pressures. Over the medium term, banks may seek to recoup lost profits by taking excessive risks. If so, vulnerabilities could build in the banking system, sowing the seeds of future problems. Authorities can implement several policies to help mitigate vulnerabilities arising from excessive risk-taking and ensure an adequate flow of credit to the economy, including the removal of structural impediments to bank consolidation, the incorporation of a low-interest-rate-environment scenario on banks' risk assessments and supervision, and the use of macroprudential policies to tame banks' incentives for excessive risk-taking (IMF, 2020).

Similar results were obtained by the research made by the Demirgüç-Kunt *et al*. (2020). To assess the impact of the COVID-19 pandemic on the banking sector, this study examines bank stock prices around the world, such as the role of financial sector policy announcements on the performance of bank stocks. The findings indicate that the crisis and the countercyclical lending role that banks are expected to play have put banking systems under significant stress, with bank stocks underperforming their domestic markets and other non-bank financial firms.

The results of the study conducted by OECD (2021) indicate that bank NPL ratios would increase under a single-hit scenario in both advanced and emerging market economies, and culminate under a double-hit scenario. Nevertheless, extensive monetary and fiscal support measures would reduce the severity of the impact of the COVID-19 crisis on bank NPL ratio in all regions. Notably, projected peaks would stand below previous crises levels in most jurisdictions. In contrast, without monetary and fiscal support measures, the increase in NPL ratios would be more substantial under the two scenarios and projected peaks would surpass previous crises levels in many jurisdictions (OECD, 2021b).

The findings of the study made by Barua & Barua (2021) have shown that all banks are likely to see a fall in risk-weighted asset values, capital adequacy ratios, and interest income at the individual bank and sectoral levels. Their study also indicates that the decline of all three analyzed dimensions in the paper-firm value, capital adequacy, and interest income will increase disproportionately if NPL shocks become larger. Furthermore, their estimates show that larger banks are relatively more vulnerable (Barua & Barua, 2021). Another related study was done by Aiyar *et al*. (2021). Their finding indicates that while banks remain broadly resilient, some of them might struggle to meet their threshold for the maximum distributable amount (MDA), which could create funding pressures related to hybrid capital. Effective policies are powerful in reducing both the extent and variability of capital erosion under stress.

According to Sugiharto *et al*. (2021), Sharia commercial banks in Indonesia were considered to have adequate resilience in facing economic shocks caused by pandemics such as the ongoing COVID-19 pandemic. Similar results were obtained with the study made by Wahyuni *et al.* (2021). They investigated the credit risk and the profitability of the banks in Indonesia and their findings show significant differences in nonperforming loans (NPL) and banks' profitability before and after the COVID-19 pandemic in conventional banking.

On the other side, Kozak (2021) in his study analyzes the impact of the shock increase, in the value of nonperforming loans, on the equity level and profitability of 141 banks in 18 countries of Central Eastern South Europe (CESE). The findings indicate that the banks in CESE were well-capitalized and could maintain capital requirements with a 12% increase in nonperforming loans. The resilience of domestic banking sectors varies, and it is higher in non-EU countries. Smaller and non-public banks show a greater ability to preserve the appropriate level of equity, although there is a risk that they may postpone the time of provisioning credit risk and additionally increase lending to lower the NPL ratio. Larger banks are more profitable in times of crisis. The results of the research are important for assessing the stability of the banking sector in CESE during the crisis and can be used by the financial supervision of the region's countries and banking market analysts.

As per the Republic of North Macedonia, there are limited studies focused on the impact of the COVID-19 pandemic on the banks' profitability. Notable among them is the study conducted by Georgieva Svrtinov *et al*. (2021).

3. OVERVIEW OF THE BANKING SYSTEM IN THE REPUBLIC OF NORTH MACEDONIA

The banking system is the most important part of the financial system in North Macedonia since 80.5% of the total financial system assets belong to the banks. It consists of 14 banks and 2 savings houses. 10 of the banks are mainly in the ownership of foreign shareholders, while 6 of them are subsidiaries of foreign banks. The Macedonian banks are mainly owned by private capital, especially the big and medium banks. The foreign capital in the banking sector is of special importance. Namely, the participation of foreign capital in the total banking system in North Macedonia is 75.7% (NBRM, 2020a). The constant increase of the foreign capital share in the Macedonian banks is a result of the foreign portfolio investors' interest in trading with their shares, and their interest in participating in this profitable sector.

Depending on the volume of the total assets, the banks are grouped into three groups, i.e. big, medium and small banks. The differences between banks in terms of their share in total assets of the banking system remain big. To be precise, the bank with the highest share participates with 22.7% in total assets of the system and the bank with the lowest share participates with 0.5% in total assets of the system. The share of the three largest banks in the system reaches a level of 57.3%, which indicates a high concentration of the banking system in North Macedonia. The high concentration sets apart several banks that have systematic importance, which realizations have a crucial role for the total banking system and domestic economy.

In 2020, the banking sector faced many challenges, yet showed appropriate preparedness for responding to risks. In conditions of strong health and economic crisis, the banking system maintained its stability and contributed to mitigating the consequences of the COVID-19 crisis, registering solid growth of activities. On one hand, this is a result of the public trust in the banking system, amid strong capital and liquidity positions with banks, but on the other hand, it arises from the National Bank's rapid reaction. Thus, the banks provided strong credit growth of 4.1%, supported by the further increase in deposits by 6.2%, and by the National Bank's monetary measures undertaken to release additional liquidity of banks to support the Macedonian economy. The solvency of the banking system is improved. The capital adequacy is twice higher than the minimum recommended by the law and it is 16.7%, which is 0.4 percentage points higher compared to the end of 2019. In 2020, the banks' liquidity position further improved, due to the growth of liquid assets. Consequently, most of the indicators used to monitor and assess liquidity improved. The share of liquid in total assets increased by 0.6 percentage points, to a level of 32.5%, while the coverage of household deposits to liquid assets improved by 2.2 percentage points, reaching a level of high 64.4%. Also, the indicators of credit risk materialization improved. Specifically, non-performing loans decreased by 26.5%, reducing their share in total loans by 1.4 percentage points, to a level of 3.4%. There was also a decline in non-performing corporate loans (−31.4%) and non-performing household loans (−12.6%). Therefore, the share of non-performing loans to companies in total corporate loans decreased by 2.5 percentage points, to a level of 5.2%, while the share of non-performing to households in total household loans decreased by 0.4 percentage points, to a level of 1.6%. The domestic banking system achieved higher profit from its operation (by 8.5%), compared to the previous year. Analyzed by structure, the growth in the financial result is mostly due to the increase of the capital gain realized from the sale of foreclosures, as well as due to realized profits from the collection of written-off claims. There was certain, but relatively small influence of the decrease of operational costs and the growth of net interest income, over the growth of profit. Moreover, growth of impairment losses of financial and non-financial assets is registered, as well as decrease of income from commissions and fees (affected by the health crisis, the banks cut the commissions for part of their services, mostly those related to e-banking) (NBRM, 2020b).

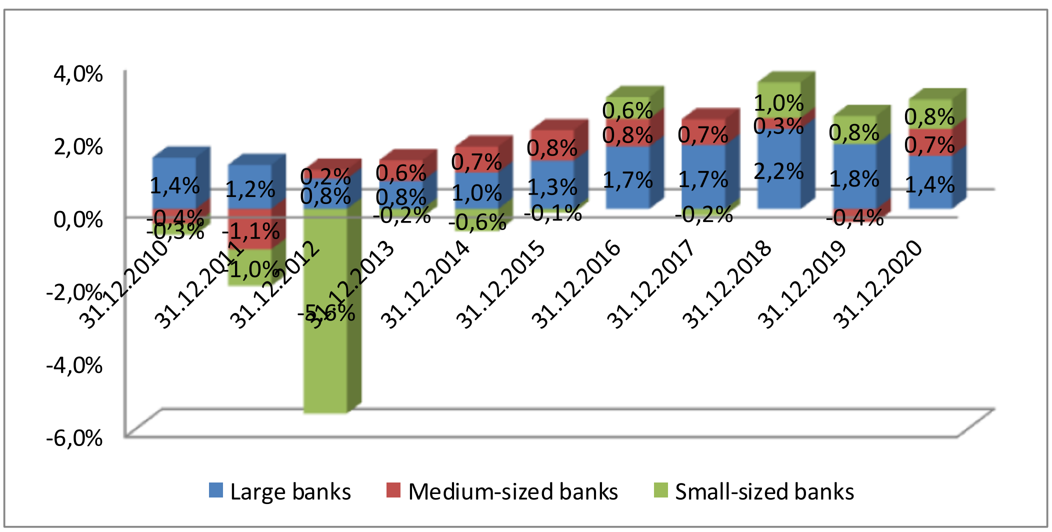
4. MACEDONIAN BANKS' PROFITABILITY BEFORE AND DURING THE COVID-19 PANDEMIC

In the literature, the profitability of banks is generally measured by return on asset (ROA), computed as a ratio of the net profit to the total assets of the bank, return on equity (ROE), computed as a ratio of the net profit to equity and net interest margin (NIM), defined as the net interest income divided by total assets.

Return on assets (ROA) is an indicator of the management efficiency at using banks' assets to generate earnings. It is the most commonly used benchmark for bank profitability since it measures the company's return on investment in a format that is easily comparable with other institutions (Puspitasari *et al*., 2021). This proxy of the banks' profitability gives investors information on how effectively the bank manages its assets to produce a profit. Higher levels of ROA indicate high bank efficiency since it earns more money with less investment. Compared to ROE, the use of ROA takes into account the risks derived from the leverage and is the key bank profitability ratio (Athanasoglou *et al*., 2005). Return on equity (ROE) as a ratio of net income returned to shareholders equity, measures a corporation's profitability by revealing how much profit a bank generates with the money shareholders have invested (Spaseska *et al.,* 2018). Besides ROA and ROE, another bank profitability indicator is Net Interest Margin (NIM). This variable is defined as the net interest income divided by total assets and it reflects the difference between interest income on banks loans and interest expense on deposits.

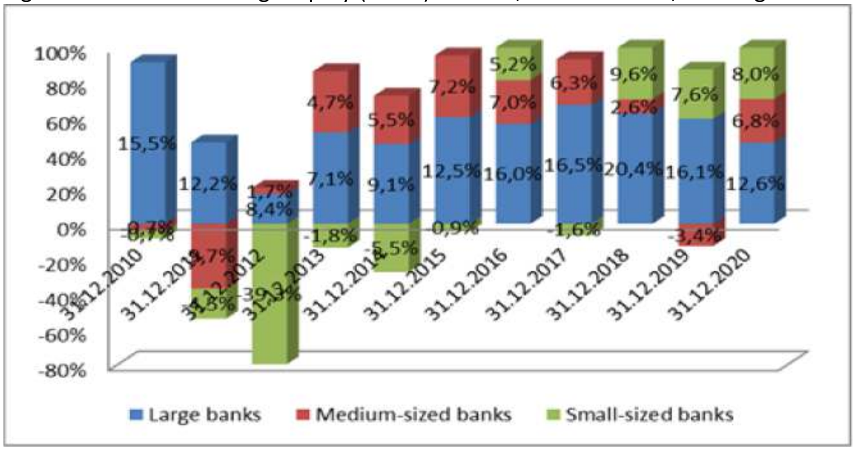
In terms of performance, the Macedonian banks have been highly profitable over the last decade. The performance of Macedonian banks as measured by the return on assets and return on equity ratio is illustrated in Figure 1.

Figure 1: Return of Average Assets (ROAA) of small, medium-sized, and large banks during 2010-2020



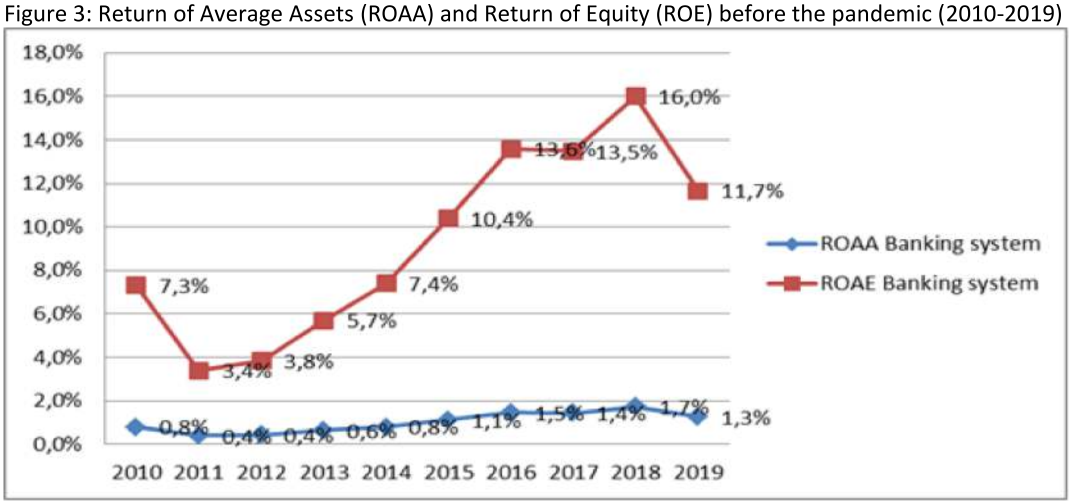
Source: Authors' compilation from the banks' profitability indicators, NBRM

Figure 2: Return of Average Equity (ROAE) of small, medium-sized, and large banks during 2010-2020



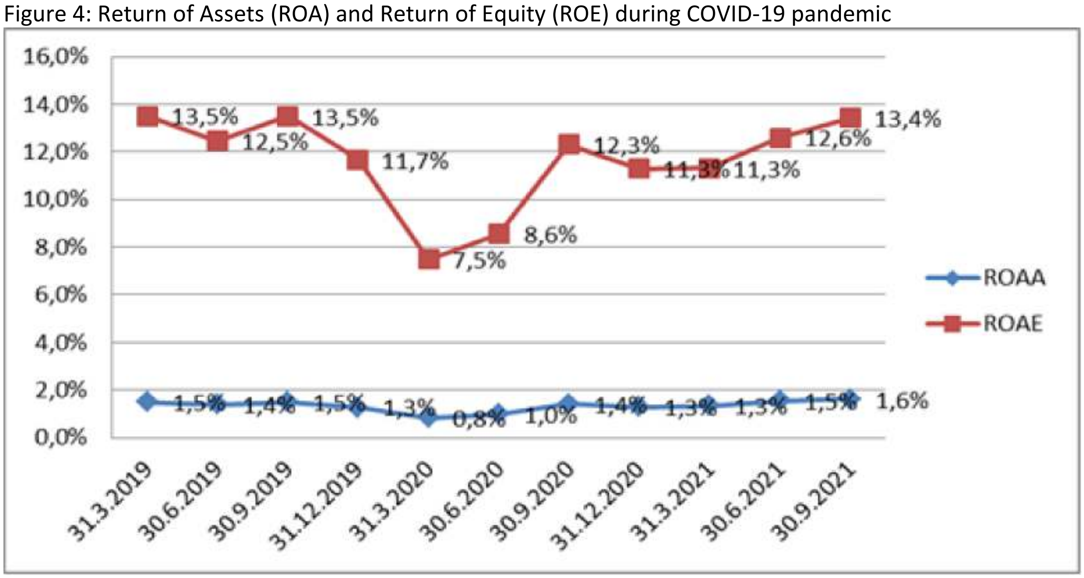
Source: Authors' compilation from the banks' profitability indicators, NBRM

Figure 3: Return of Average Assets (ROAA) and Return of Equity (ROE) before the pandemic (2010-2019)



Source: Authors' compilation from the banks' profitability indicators, NBRM

Figure 4: Return of Assets (ROA) and Return of Equity (ROE) during COVID-19 pandemic



Source: Authors' compilation from the banks' profitability indicators, NBRM

Analysis of the banks' profitability at the beginning of the COVID-19 pandemic has shown that the domestic banking system in the first quarter of 2020 remains profitable but with a significantly lower profit (by 39.6%). Consequently, the indicators of return on capital and assets decreased significantly, compared to the same period of 2019 (ROAE –13.5%; ROAA –1.5%), reaching levels of 7.5% and 0.8%, respectively. However, in the third quarter of 2020, there are positive movements in these indicators of banks' profitability, and in 2020 the domestic banks finished with higher profit from its operation (by 8.5%), compared to the previous year. Such growth in the financial result is mostly due to the increase of the capital gain realized from the sale of foreclosures, as well as due to realized profits from the collection of written-off claims. But, profit growth in 2020 was not sufficient to improve the rates of return on average assets and average equity. The rate of return on average assets remained at the same level of 1.3%, same as in 2019, while the rate of return on average equity and reserves is slightly lower, amounting to 11.3% on an annual basis. A similar trend was noticed in the first half of 2021, when the banking system achieved higher operating profit, compared to the same period of the previous year. More precisely, Macedonian banks achieved a profit which is higher by 66.8% compared to the same period last year. Such higher profits in the banking sector were a direct consequence of the banks' non-interest income that is as a result of increased income from the collected written-off claims and higher commission and fee income. Rates of return on average assets and average capital and reserves improved compared to the end of 2020 and reached levels of 1.5% and 12.6% respectively.

5. CONCLUSIONS

The COVID-19 pandemic has caused a convulsive shock of the global financial markets and institutions. The banks as the most important financial institutions in the financial system were also affected by COVID-19 and faced with a significant threat to their sustainability.

So, the main objective of the study is to investigate the impact of coronavirus (COVID-19) on the profitability of the Macedonian banking system. To reach the goal we used the financial stability reports and reports on the risks in the banking system of the Republic of North Macedonia, such as the banking system indicators issued by the National Bank of the Republic of North Macedonia.

The results of the research indicate that Macedonian banks were considered relatively resilient in dealing with economic distortions posed by the Covid-19 pandemic. Namely, in conditions of strong health and economic crisis, the banking system maintained its stability and contributed to mitigating the consequences of the COVID-19 crisis, registering solid growth of activities.

According to the data of the National bank of the Republic of North Macedonia, in 2020 the banks achieved a high profit of 118 million euros, i.e. 9 million euros more than the previous year. This trend continued in the first half of 2021, e.g. the Macedonian banks gained a profit of 74.2 million euros, which is 29.7% more than the same period last year. In the third quarter, the profit of domestic banks increased by an incredible 43 million euros. Such positive movements in the banks' profit resulted in higher indicators of the banks' profitability. More precisely, rates of return on average assets and average capital and reserves improved compared to the end of 2020 and reached levels of 1.6% and 13.4% respectively. Based on the results of the conducted research in this paper we can conclude that despite the COVID-19 pandemic, Macedonian banks continue to gain high profits.

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