

THE IMPACT OF THE COVID-19 PANDEMIC ON THE PROFITABILITY OF LARGE COMMERCIAL BANKS IN THE REPUBLIC OF NORTH MACEDONIA

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Abstract: *The purpose of this study is to investigate the impact of the current Covid-19 pandemic on profitability ratios of large commercial banks in the Republic of North Macedonia. By using data over the period 2004 – 2020, ten profitability indicators are examined. These indicators are investigated by comparing their values before and during the Covid-19 pandemic. Overall, the study reveals a preliminary evidence that large commercial banks are affected by the Covid-19 pandemic. So far, profitability of large banks has not changed significantly due to Covid-19 and they keep satisfactory profitability levels. However, this impact should be investigated furthermore in next studies because the current pandemic has long-term effects.*

Key words: *commercial banks, profitability ratios, North Macedonia, Covid-19.*

1. Introduction and Literature Review

Historically, commercial banks are an important link in the banking chain by intermediating between those who have surplus funds to those who have a shortage. Commercial banks play an important role in the development of firms, as well as in the overall country economy.

In countries such as North Macedonia where financial markets are in the early stage of development, the commercial banks' role becomes even more important. Due to the lack of real alternative possibilities, businesses and households rely mainly on financing through loans.

Looking back to the empirical data in the case of North Macedonia, no doubt that interest rates have decreased over the past decades. However, the financial intermediation (household loans) has not moved to the same extent, indicating that there is a room for lower effective interest rates.

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Profitability analysis of commercial banks remains relevant to several financial information users, either with direct or indirect business interest in the decision-making process.

In addition, commercial banks were the study object of a plenty of studies, being investigated from different perspectives. For example, Coyne (1973) suggests a method to calculate profits by function. Chong (1991) revealed that interstate banking benefits commercial banks in terms of increased profitability.

Further, Sufian and Fakarudin (2012) by examining 31 commercial banks in Bangladesh identified that capitalisation, non-traditional activities, liquidity, management quality, and size of the bank influence profitability in addition to growth in GDP, inflation, and concentration.

Thus, motivated from previous studies which examined banks (see e.g., Chaki, Chauhan and Daryal, 2019; Mustafa, 2014; Sarlin and Eklund, 2013; Hodder, Hopkins and Wahlen, 2006; Goddard, Molyneux and Wilson, 2004; Seiford and Joe, 1999; Angadi, 1986; Smirlock, 1985; Verghese, 1983), this study tries to provide an empirical preliminary evidence as well, with a special emphasis on Covid-19 effects.

In general, over the past years, the banking sector in North Macedonia was quite profitable. However, due to the current Covid-19 pandemic outbreak and its effects on overall national economy, it is common to be expected that financial ratios of banks are affected too.

Therefore, the study objective is to *investigate whether such effects are considerable with respect to profitability ratios of large commercial banks.*

The study is led by the research question: *do large commercial banks have performed better or worse during the Covid-19 period?*

The study focuses just on the case of large commercial banks due the importance that they have on the country banking sector. Hence, based on the above discussion, the following hypothesis is set:

H1: Profitable ratios of large commercial banks are affected by Covid-19.

2. Data, Analysis, and Discussions

Data used in this study are extracted from the web page (<http://www.nbrm.mk/>) of the National Bank of the Republic of North Macedonia (NBRNM, hereafter) and processed using Excel.

Actually, in the Republic of North Macedonia there are 14 commercial banks which operate, and they are classified according to NBRNM as follows (see Table 1).

Number of banks by group

Table 1

| Group of large banks (assets over 40.85 billion denars, as of 31.12.2020) | Group of medium-size banks (assets between 10.2 and 40.85 billion denars, as of 31.12.2020) | Group of small-size banks (assets under 10.2 billion denars, as of 31.12.2020) |
|---|---|--|
| Five banks | Six banks | Three banks |

Source: NBRNM

On 31.12.2020, the total assets of large banks captured 76.5% of the overall banking system assets in the Republic of North Macedonia. On the other hand, equity and reserves of these banks captured 77.6% of the overall banking system (for more see NBRNM). Due to this important fact, this study is focused only on the case of large commercial banks.

Further, in order to examine the effects derived from the current Covid-19 pandemic, the selected period is divided into sub-periods: before and during Covid-19. Quarterly data (as 31.12.) are used for each ratio. Table 2 presents the results before the Covid-19 outbreak as average values covering the period from 2004 to 2019; the values for the year 2020 regard the Covid-19 pandemic.

Profitability indicators

Table 2

| Ratios | Before Covid-19 | During Covid-19 | Difference |
|--|------------------------|------------------------|-------------------|
| Rate of return on average assets (ROAA) | 1.50% | 1.40% | -0.10% |
| Rate of return on average equity (ROAE) | 15.10% | 12.60% | -2.50% |
| Cost-to-income ratio | 51.40% | 43.70% | -7.70% |
| Salary expenses/Total regular income | 21.10% | 19.20% | -1.90% |
| Salary expenses/Operating costs | 41.10% | 43.80% | 2.70% |
| Impairment losses for financial and non-financial assets/Net interest income | 38.60% | 32.90% | -5.70% |
| Net interest income /Average assets | 3.50% | 2.70% | -0.80% |
| Net interest income/Total regular income | 62.10% | 62.00% | -0.10% |
| Non-interest income/Total regular income | 40.80% | 47.40% | 6.60% |
| Net interest income /Operating costs | 124.90% | 141.80% | 16.90% |

Source: NBRNM, processed by the author

As Table 2 shows, the selected commercial banks performed better before the Covid-19 pandemic hit the country economy. For example, the rate of return on average assets (ROAA) decreased from the average result 1.50% to 1.40%, whilst the rate of return on average equity (ROAE) experienced higher worsening. In turns, this implies that banks shareholders are affected much more than the banks themselves as business entities.

Further, the ratio cost-to-income ratio dropped from 51.40% to 43.70%, which represents a -7.70% decrease. Similar, the ratio of salary expenses to total regular income dropped by 1.90%, and impairment losses for financial and non-financial assets to net interest income dropped by 5.70%, whilst salary expenses to operating costs shows an increase by 2.70% difference.

Despite the net interest, income to average assets decreased by 0.80% (or 23%), the ratio of net interest income to total regular income remains less affected (a difference of -0.10%, or a drop by just 0.16%). This implies that banks still consider the interest income as the most relevant income, even if there is an increase of non-interest income to total regular income during the pandemic period. However, the net interest income captured the relevant portion of total regular income of commercial banks and this proportion remains almost unaffected due to Covid-19 effects.

Finally, the ratio of net interest income to operating costs shows a positive difference of 17% which can be the result of lower operating costs, higher net interest income, or a joint effect of both income statement articles. More specifically, large commercial banks increased net interest income by 0.54%, comparing the year 2020 with the year 2019. On the other hand, staff expenses were increased by 2.39% considering the same comparison (for more see NBRNM).

In addition, Figure 1 shows ROAA and Figure 2 shows ROAE over the period 2004-2020. As results show, commercial banks as business entities earned less compared to what shareholders received as returns from investments (see ROAE versus ROAA). Of course, this difference is emphasized more on commercial banks in contrast to non-financial entities due to banks specifics, i.e., used leverage levels etc.

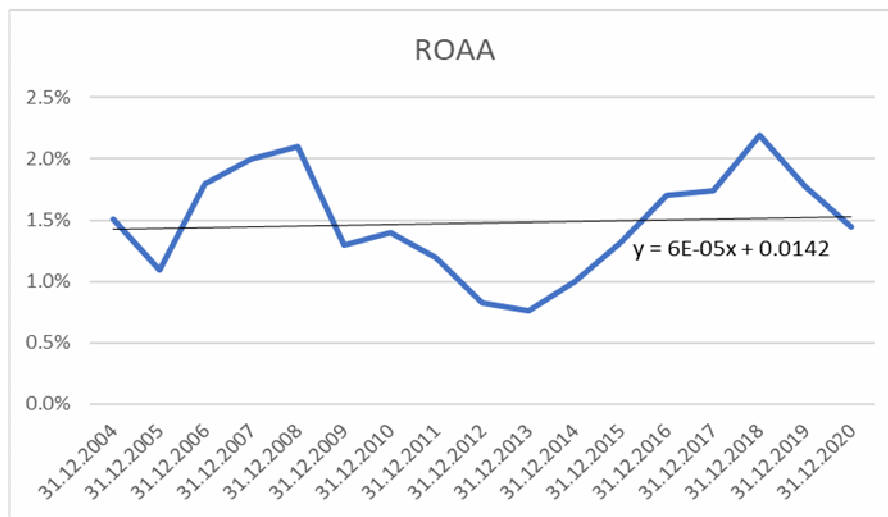


Fig. 1. ROAA, in %

Source: NBRNM, Statistical Web Portal, processed by the author.

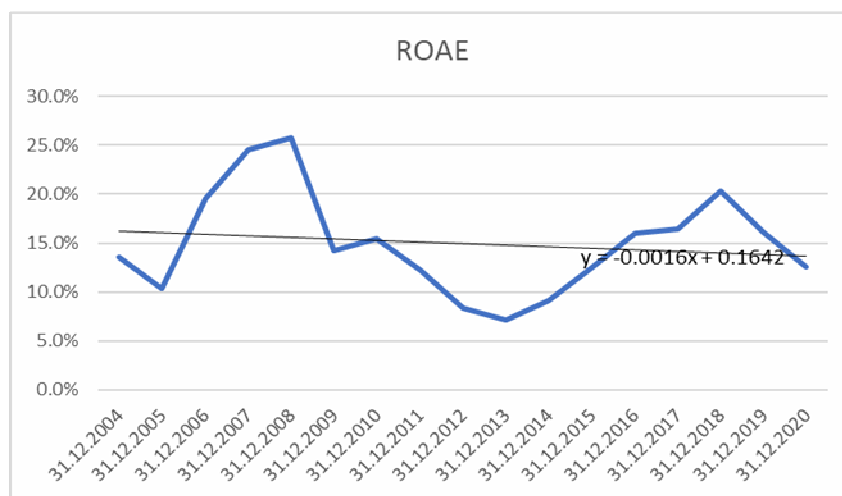


Fig. 2. ROAE, in %

Source: NBRNM, Statistical Web Portal, processed by the author.

Further, for these two main comprehensive indicators (i.e., ROAA and ROAE), trend lines are denoted. As it can be seen in Figure 1, ROAA, despite up-downs of percentages, still shows a weak positive trend line, whilst ROAE shows a weak negative trend line.

3. Conclusions

The study aimed to examine the profitability ratios of five large commercial banks in the Republic of North Macedonia. Thus far, the study provides a preliminary evidence by showing that effects of the current Covid-19 pandemic are present on profitability ratios. Some are affected more and some other less.

The analysis shows that ROAE, cost-to-income ratio, salary expenses/operating costs, impairment losses for financial and non-financial assets/net interest income, non-interest income/total regular income and net interest income/operating costs are more affected by the Covid-19 pandemic. However, large commercial banks still have good profitable ratios, as denoted by ROAA (1.40%) and ROAE (12.60%) despite negative effects from Covid-19.

Dealing with the present challenges and the related risks, it would be advisable that commercial banks should act more as risk-sharing. Further, the overall country banking system should support more businesses and households, and decrease the difference between active and passive interest rates remains a challenge to be solved.

This study has certain limitations since it is not able to deploy more advanced approaches because there is just only one annual observation during the Covid-19 pandemic (or four quarterly observations). This makes not capable to perform consistent if means are statistically significant through *Two-sample t test* and related analyses: before and during the Covid-19 pandemic.

For further studies is suggested a comparison of Covid-19 effects regarding to bank size, i.e., which commercial banks are more affected due to that: large, medium or small-sized banks.

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