THE PROFITABILITY OF THE BULGARIAN BANKING SYSTEM IN THE CONTEXT OF THE DIGITAL TRANSFORMATION

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Abstract

The banking system is essential for the functioning of a country's economy. The stability of the banking system is based primarily on maintaining profitability and good liquidity. Bank profitability is one of the most important issues for the economy of any country and its bank security. It has a significant impact on key economic measures, such as gross domestic product, disposable income, development of the business environment and etc. This imposes the need to consider the dynamics and trends in the profitability of the banking system. This study examines the dynamics and causal links in the profitability of the Bulgarian banking system, for the period: from the country's accession in the European Union to the country's accession in the forefront of the Exchange Rate Mechanism (ERM II). As a result, the trend in the profitability of the banking sector in Bulgaria is positive, despite the hardships, the country faces, during the period 2007-2019.

Keywords: Bulgaria, banks profitability, banking system, European union, ERM II, digital transformation

JEL Classification: E42, G21

INTRODUCTION

Subordinate to European economic cycles and the strong level of dependence on the development of processes in the euro area, the banking sector in Bulgaria was faced with significant changes in many respects. The low values of bank profitability have been repeatedly highlighted in reports of the European Central Bank [1], as a key risk to the stability of the financial sector in the euro area, which the country is striving for. After the inclusion of Bulgaria in the so-called waiting room of the euro area (ERM II) on July 10, 2020 [3], maintaining a stable banking system and good level of banking security in the country has become one of its main priorities. Striving for sustainable development of the banking sector [6] and maintaining good profitability, the effects of deviations from its optimal values can be significant. Low levels of profitability over a long period of time can have a significant impact on economic growth. At the same time, higher values [2] of above-average profitability can be considered a problem and an indication of financial stability and an impending financial crisis. Keeping banks within sustainable levels of profitability is key, provided that the aim is to maintain the stability of the whole sector. The digitalization of banking services is increasingly playing a significant role in the implementation of banking processes. The need to ensure security, speed and accuracy in banking services has grown sharply in recent years. In the payment statistics of Bulgaria, the number of non-cash payments has increased significantly over the years. The trend of turning traditional banks into digital is growing. Information systems and cybersecurity in the banking sector are extremely important. Automation and speed in operations are essential to meet customer demands, but the bank needs to meet both regulatory requirements and internal laws in their performance. In the Bulgarian banking system, the entry of digitalization of services is at an early stage. More significant penetration of digital services in Bulgaria is observed precisely after the country joins the European Union following the good European examples in the banking system. Some banks can be

classified as "digital champions", which provide a wide range of products and services in digital format (personal finance management; online opening/ closing a bank account; remote service; online transactions; repayment of debts on loans, payments, etc.), others still rely on traditional service methods. In addition to the wide range of digital products and services, the "digital champions" [4] are ahead of competing traditional banks in terms of return on capital and cost to income ratio, which is an important factor that compares the costs of current operations with related incomes.

STATE OF THE PROFITABILITY OF THE BULGARIAN BANKING SYSTEM

Bank profitability is directly related to the economic activity in the country, and is influenced by innovative approaches in the industry. Impaired economic prospects [5] can have a negative impact on it by reducing the levels of credit activity. Achieving a positive financial result, both in the banking sector and in any other business area does not in itself mean that there is an effective economic result. Indicative measures of profitability are the variations for measuring profitability. It is most often based on profit, assets and equity. The determinants of profitability according to [8] can be classified into indicators measuring the profitability of the business and indicators that calculate its efficiency. The scope of the report includes the fundamental measures of bank profitability - the cost / income ratio; return on assets and return on equity.

The cost to income ratio is a coefficient that measures the value of the costs necessary to generate income. The financial logic of the indicator is based on the statement that the lower the value of the ratio, the more profitable the bank's work. Respectively, the high ratios of the indicator show that the values of the operating bank expenses are high and it is necessary to take regulatory actions in order to prevent it. Reducing cost levels could be achieved through the capabilities of digital technologies and online banking. It is through them that the efficiency of banking processes can be increased, which will contribute positively to income levels. The values of the indicator around 70-80% are considered optimal [7].

The study of key measurable indicators in banking, incl. return on assets (ROA) gives an idea of the assessment of the credit and investment policy conducted by the banking system in the country. The ratio is calculated by dividing the net profit by the total average value of bank assets. Higher values of this ratio are a positive feature of banking management.
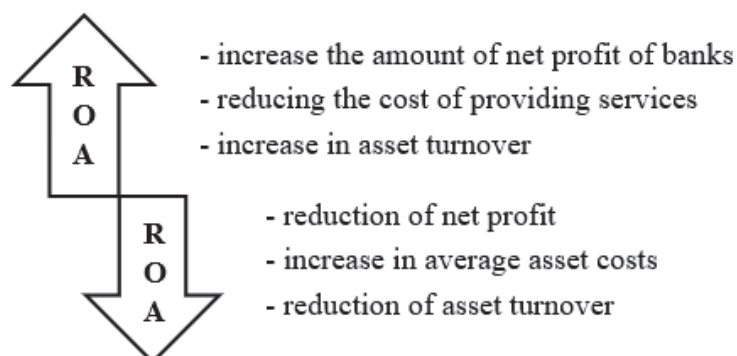
**Figure 1. Effects of changes in return on assets (ROA)**

Return on equity (ROE) is a measure by which one can track how effectively equity is used to generate profit. It is considered one of the most used indicators for assessing the

level of profitability of the bank. For the High values of the ratio show that the respective banking institution increases its ability to make a profit, respectively and vice versa.
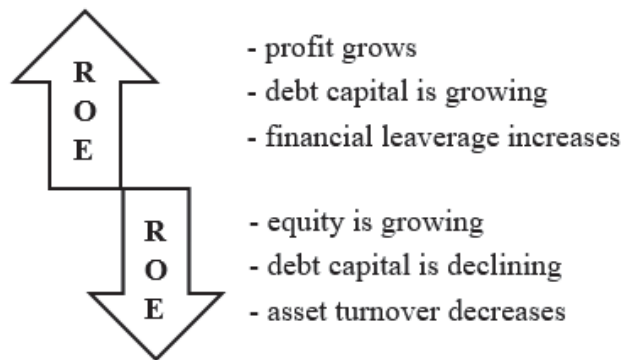
**Figure 2. Effects of changes in return on equity (ROE)**

It is considered that the normal limit of development of the ROA indicator is between 0.5% and 2%, and for the optimal value of ROE - between 10% and 20% [7].
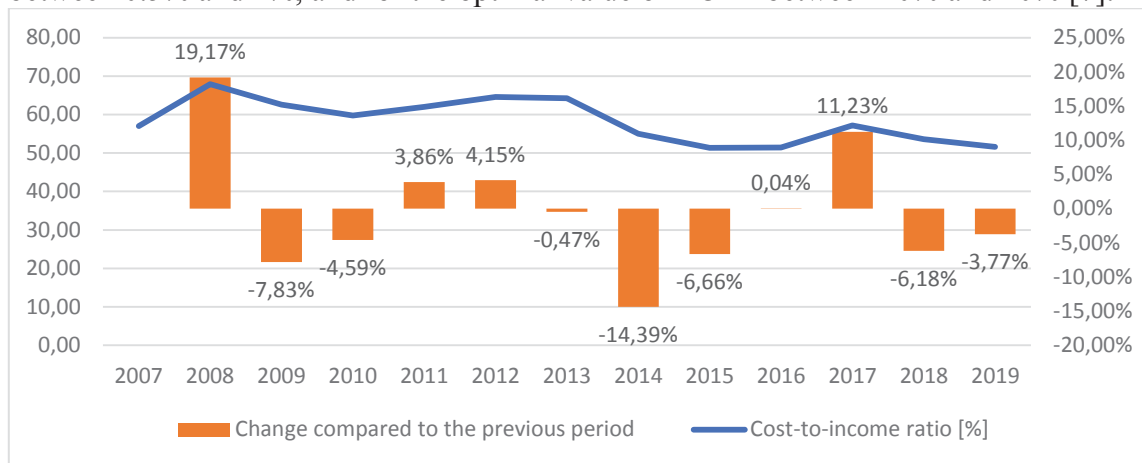
**Figure 3. Cost to income ratio of the banking system of Bulgaria
for the period 2007-2019**
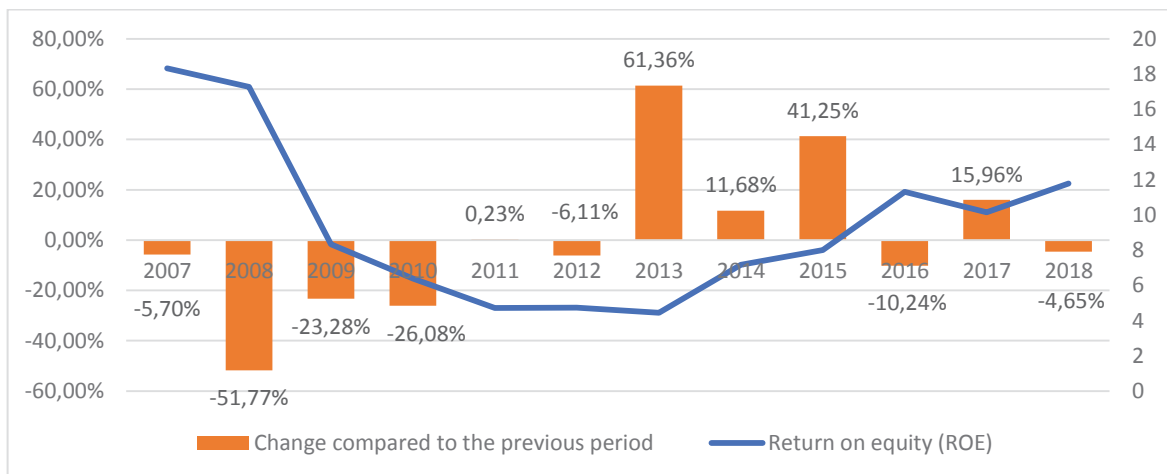*Source: European Central Bank (Statistical Data Warehouse) and author's calculations*

Figure 3 can be observed the dynamics and the percentage change of the cost / income ratio, based on the net income from interest, fees and dividends, comparing them with the administrative costs in the banking system of Bulgaria for the period 2007-2019. As can be seen from the data (left scale) is that the coefficient ranges from 51% to 68%. The low values reflect the operational efficiency of the banking institutions. After 2008, there has been a gradual recovery of the sector, which has been affected by the effects of the ongoing global financial crisis. The gradual growth of income from banking operations after 2015 is primarily due to the growing income from banking operations. The classic measures of profitability - ROA and ROE are reflected in figure 4 and figure 5.
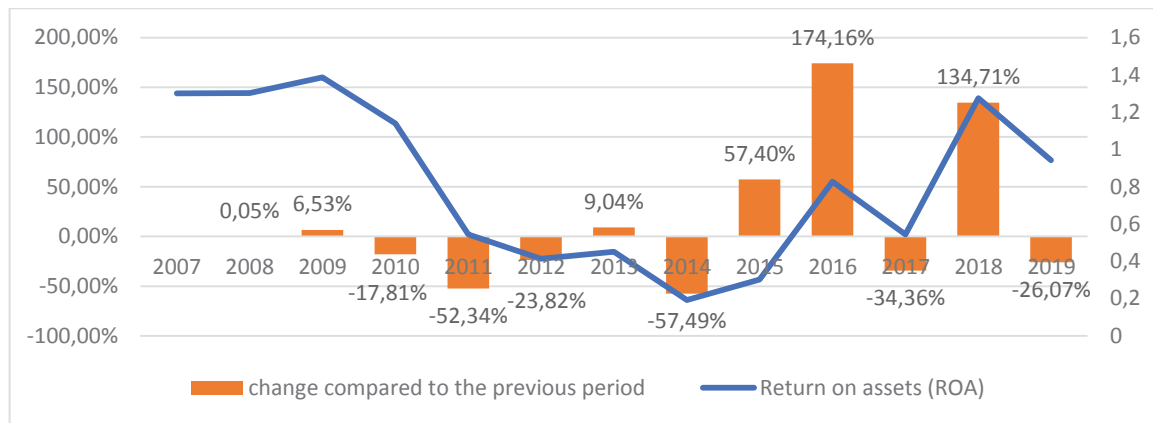
Figure 4. ROA of the banking system of Bulgaria for the period 2007-2019

Source: European Central Bank (Statistical Data Warehouse) and author's calculations

Figure 4 presents the profitability of bank assets. The dynamics of the indicator during the period shows the adherence of the banking system to the optimal values (right scale), except for the period 2012-2015 when the country is undergoing many political and economic processes, which have their negative effect. Banks often operate with significantly more borrowed capital than most other financial sectors. In this regard, when analyzing the profitability, attention should be paid to the ROE indicator, reflected in fig. 5. As can be seen from the figure (right scale) is the adherence of the indicator to the optimal limit of 20% in 2007 and its shaking in the period 2008-2015, which is due to a decrease in profit and to a greater extent the formation on a protective capital buffer in a large part of the banking institutions. In practice, the above two ratios express the ability of banks to turn their own capital and assets into profit.

Figure 5. ROA of the banking system of Bulgaria for the period 2007-2019

Source: European Central Bank (Statistical Data Warehouse) and author's calculations

CONCLUSION

The trend in the profitability of the banking sector in Bulgaria is positive, despite the general decline in market interest rates in recent years. Given the country's accession to ERM II in 2020 and the current COVID-19 pandemic, the need for regular diagnostic analysis of annual profitability, cash flow, liquidity and solvency in order to comply with

European banking regulations and standards set in the European economic and monetary union. The profitability of the banking system reflects the economic health of the country. Given the current health crisis and the partial closure of the country's economy, bank profitability is expected to remain weak. As a key element of the country's economic system, the banking system is fundamental to helping the economy recover from the global pandemic, as many business customers will look for ways to finance and recover.

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