

## THE IMPACT OF THE COVID-19 CRISIS ON THE BANKING SYSTEM IN ROMANIA

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### Abstract

*The banking sector is one of the most important sectors for the economy of a country, being the one that supports the functioning of the market and that contributes to the achievement of economic growth. In this paper, we proposed that, starting from the statistical data published in the databases regarding Romania, to characterize the functioning of the banking system during the Covid-19 pandemic. The data were processed and analyzed with the help of some statistical indicators used in the analysis of time series (absolute change with a fixed base, absolute change with a chain base, the dynamic index with a fixed base, the dynamic index with a mobile base and the rhythm of the dynamics) and stood at the basis for formulating conclusions regarding how the banking system in Romania faced the challenges of the 2018-2020 period. At the same time, the strengths and weaknesses that characterized the banking system were identified, so that in the future, measures can be taken to avoid the risks resulting from the emergence of economic, health, social, etc. crises.*

**Key words:** banking system, efficiency, Covid-19

### INTRODUCTION

The banking system is one of the pioneers of the functioning of the economy and therefore its functioning influences the economic policy, the way of doing business, the level of financing of investments, but also the way of lending to natural persons in order to satisfy their own needs.

The Covid-19 pandemic, as an event that triggered the last crisis of proportions of these years, influenced the entire economic, financial, social activity, etc.

Some sectors suffered more, such as tourism, transport, construction, etc. [3, 13], just as among the countries of the world, some were more affected than others, depending on the degree of spread of the virus [7, 8].

Regarding the banking system, although the Covid-19 crisis led to an erosion of bank assets as a result of payment delays that occurred both in the case of companies and in the case of natural persons who had contracted loans, this was not as strongly affected as other sectors of the economy [2,

11]. The risks and causes of their participation were in this case exogenous, they were due more to the health crisis than to a financial crisis [4], but they could have had serious influences on the performance of the financial sector [1, 6]. These risks were manifested on both sides, because non-performing loans led to a decrease in cash flows within the banks, to an increase in default rates, which leads to an increase in risk and requires the establishment of provisions by banking institutions, and on the other hand increases the risk of borrowers by increasing bank expenses.

However, the Covid-19 pandemic also caused a crisis in the banking system as a result of the fact that it had not fully recovered after the economic crisis that began in 2008 [12]. However, at this moment, the advantage was represented by the fact that it benefited from a higher capitalization and a higher liquidity compared to the previous crises [17]. However, the Covid-19 crisis has shown that there are still vulnerabilities in the banking system, and their anticipation can only be realized starting from an overall analysis of

the causes and the effects produced. Choosing the right measures and solutions can contribute both to a better management of the existing situation in the banking system, but also to offering faster solutions to both companies and the population.

For many banks, the risk reduction measures that were applied during this period will constitute measures and practices that will be extended and continued with the aim of serving their clients effectively, with the aim of shaping culture and reputation [9]. Other authors consider that the mistakes made during periods of economic growth are visible only during crises, so these crises are a good moment to reflect on the way of developing and applying financial and monetary policies, in the choice and application of business strategies [2, 5].

Another important aspect that must be mentioned is that if in the crises that have affected the world economies over time banks were considered the causes of their outbreak, at this moment, of the Covid-19 crisis, the banks were considered to be the reason for overcoming it [10].

Romania, for its part, faced the inherent problems that accompanied the Covid-19 pandemic. The banking system, however, started from a stable position, doubled by a proactive policy, elements that allowed a better absorption of the problems faced by the banks' clients, a way of thinking about lending that had sustainable bases and the fact that there was an availability of funds resulting from an advanced savings system. At the same time, the Covid-19 pandemic led to an acceleration of digitization not only at the level of the banking system, but at the level of the entire society, which contributed not only to the efficiency of the activity, but also to the increase of transparency. Moreover, in the banking system, digitization allowed a better control of risk management [20].

The Romanian banking system went through a process of consolidation following some merger or acquisition processes and is currently made up of 34 credit institutions that hold assets of approximately 630 billion lei. Of these, approximately 71% are owned by

institutions with foreign capital. The role of the banking system is to ensure the resources necessary for the functioning of the economy, but at the same time to protect the savings of natural and legal persons.

The statistical data show that in Romania the banking institutions have sufficient resources for lending, registering sufficient solvency for their operation, so that, at the moment, there are no worries about the functioning of the banking system.

## MATERIALS AND METHODS

The research methodology assumed the use of time series analysis indicators, both absolute indicators and relative indicators. Starting from the level indicators that show the value of the characteristic at a certain moment in time ( $y_i$ ), and which are results from the primary statistical data, all the other analysis indicators of the time series were then calculated, analyzed and interpreted: the absolute change with fixed base, the absolute change with a chain base, the dynamics index with a fixed base, the dynamics index with a mobile base and the dynamics rhythm [19]. The analyzed period included the time period 2018-2021.

The absolute change with a fixed base allowed us, starting from the same comparison base, to determine the evolution of the phenomenon between different moments of time, according to the following relationship:

$$\Delta_i = y_i - y_1 \quad (1)$$

where:

$y_i$  – level index

$y_1$  – the value of the characteristic  $y$  at a moment in time.

The absolute change with the base in the chain allowed us to compare each phenomenon in relation to the previous year, using the following formula:

$$\Delta_{i/i-1} = y_i - y_{i-1} \quad (2)$$

where:

$y_i$  – level index

$y_{i-1}$  – the value of the characteristic  $y$  at a moment in time.

The dynamics index with a fixed basis was used in the case of the terms of the time series compared with a single basis, being calculated as follows:

$$I_{i/1} = y_i/y_1 \quad (3)$$

The chain-based dynamics index allowed us to compare each term of the series with the previous term, being calculated as follows:

$$I_{i/i-1} = y_i/y_{i-1} \quad (4)$$

The pace of the dynamics allowed us to quantify the change relative to the value we used as the basis for comparisons, being calculated as follows:

$$R_{i/j} = \Delta_{i/j}/y_j \quad (5)$$

## RESULTS AND DISCUSSIONS

In the banking system in Romania, out of the 34 existing banking institutions in 2021, 25 ended their activity with a profit, and 9 registered losses. Compared to the previous period, there is a decrease in the banking institutions that recorded losses. Because if in 2018 their number was 14, in 2019 their number was 10, and in 2020 it was 12. The ratio of own funds or the Solvency indicator also shows that it increased from 19.84% in 2018 to 24.62% in 2021 this is due to the increase in net asset values.

These assets increased in 2021 by 33% compared to 2018 (Figure 1).

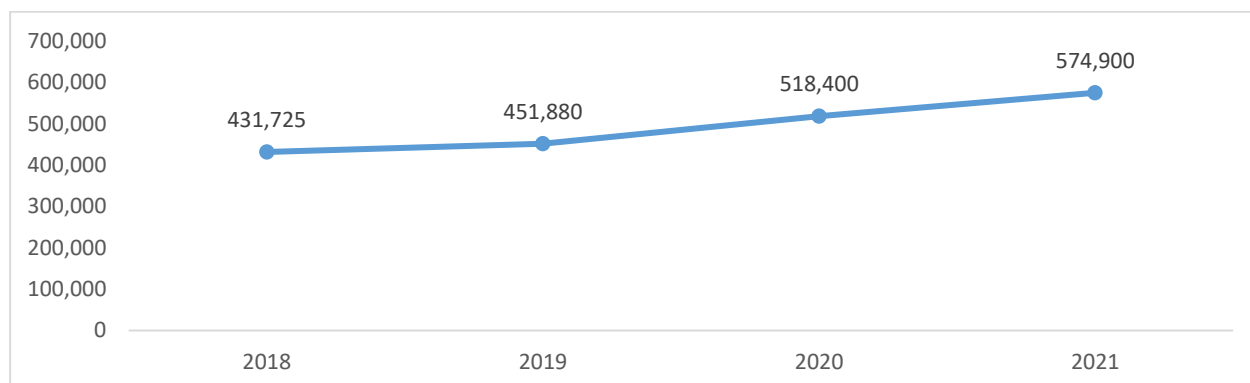


Fig. 1. Evolution of net banking assets  
 Source: own processing [14, 15, 16].

At the same time, there is also an increase in the net result obtained by the banking institutions. In 2018, it amounted to 1.767

million lei, the increase in 2021 being approximately 7%, the absolute amount being 1.887 million lei.

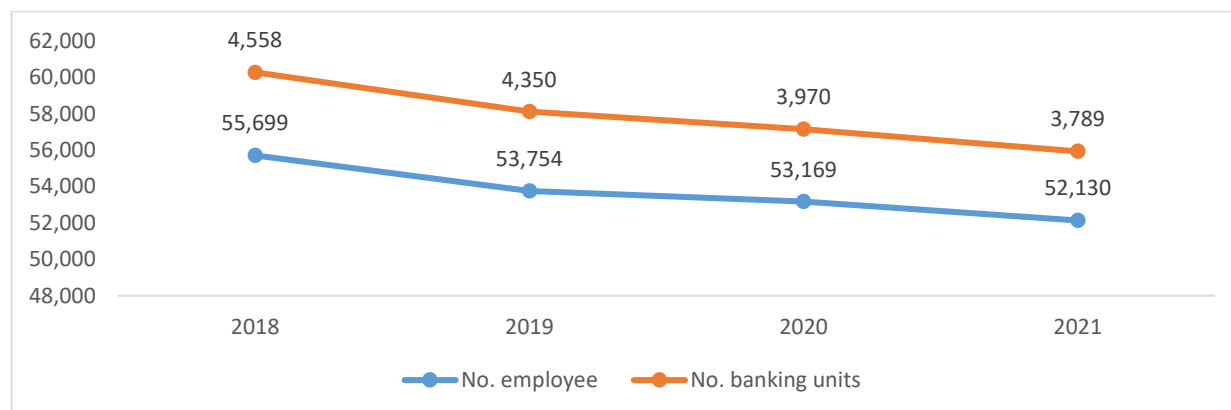


Fig. 2. Situation of the number of employees and banking units (2018-2021)  
 Source: own processing [14, 15, 16].

Regarding the number of existing banking units in Romania, there is a decrease in their number, due to the computerization of the banking system and accentuated by the Covid-19 pandemic. If in 2018 the number of banking units was 4,558, in 2021 their number was 3,789. At the same time, there was a 6% decrease in the number of employees in the banking system ( Figure 2).

As we show above, the reason for ensuring the cash flow necessary to finance the activity in the period 2018-2021 was represented by the high degree of savings. Statistical data prove this, given that during the analyzed period the ratio between loans and deposits was between 66 and 75%. The highest degree of savings was recorded in 2018, decreasing from one year to the next (74.8% in 2019, 71% in 2020 and 66% in 2021). The health

crisis led to the reduction of jobs and the decrease of incomes [13, 18], which was also reflected on the level of savings.

Analyzing the loans and deposits of non-banking customers, we notice that in the period 2018-2021 they increased. In 2018, the increase in the total value of loans granted increased by 7% compared to 2018, while the value of deposits increased by 8%. In 2020, compared to the previous year, the value of loans increased by 8%, and the value of deposits by 23% as a result of the increase in the degree of responsibility, but also of concern about the consequences of the health crisis and the worsening of the economic crisis. The decrease in purchasing power, the increase in inflation caused the value of deposits to increase by 6% in 2021, while the value of loans increased by 7% (Table 1).

Table 1. The situation of loans and deposits to non-banking customers, 2018-2021 (Millions lei)

<i>Indicator</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>
Loans of non-banking customers	248,811	265,842	286,002	305,694
Deposits of non-banking customers	330,246	355,396	436,687	460,536

Source: own processing [14, 15, 16].

Regarding the efficiency of the banking activity, it is noted that they had a supra-unitary ratio of revenues and operational expenses. The 2019-2020 period actually brought a decrease in this ratio, which was due to the fiscal measures taken by the Romanian state in accordance with the European rules regarding the postponement of instalments related to credits borrowed by both individuals and legal entities. After the 11% decrease in 2019 and 10% in 2020 compared to 2018 in the revenue/operational

expenses ratio, we note that the return in 2021 is close to the situation in 2018 (Figure 3).

It can thus be observed the dependence between the amount of interest and commissions collected by banks concomitant with the increase in the value of the loans granted. At the same time, the cost savings made by banks on the basis of digitization, which led to the replacement of employees in the banking system, to the decrease in the number of banking units, led to an increase in the operational profit recorded by banks.

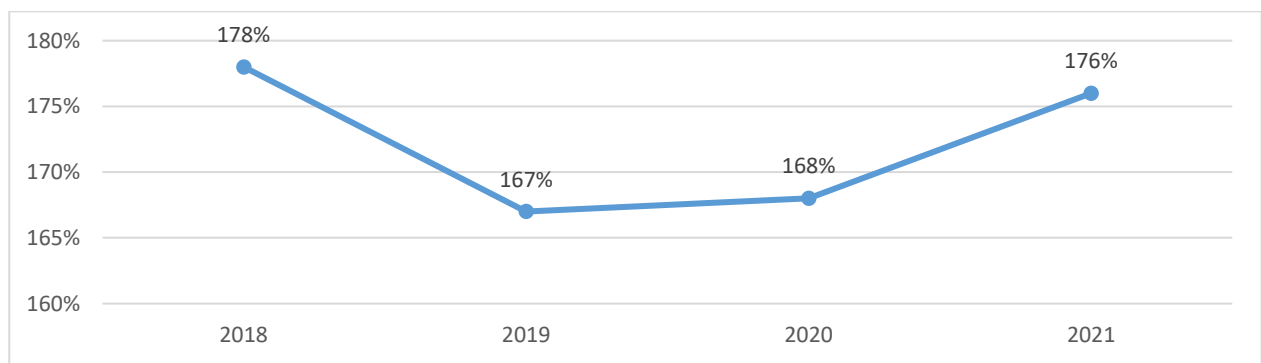


Fig. 3. The ratio between revenues and operating expenses

Source: own processing [14, 15, 16].

As a result of these measures, the rate of deferred payment of non-performing loans decreased. According to ABE data, this rate recorded the value of 6.16% in 2018, but it decreased reaching 4.9% in 2019 and 3.94% in 2020 and 2021. This is also due to the increase in the responsibility of borrowers, but also to the strengthening of financial discipline, because the Covid-19 meant an increase in responsibility on all levels, a moment of reset for many activities, but also for the way of managing business, thinking, etc.

Another fact that should be noted is the way in which the situation of appealing to new consumer loans and mortgage loans has evolved among the population, because after their value decreased in 2020, it is noted that in 2021 they recorded the most great value from the last 15 years. This was influenced by the desire to relocate following the outbreak of the Covid-19 pandemic (for mortgage loans), but also the decrease in income and the need for financing (consumer loans) (Figure 4).

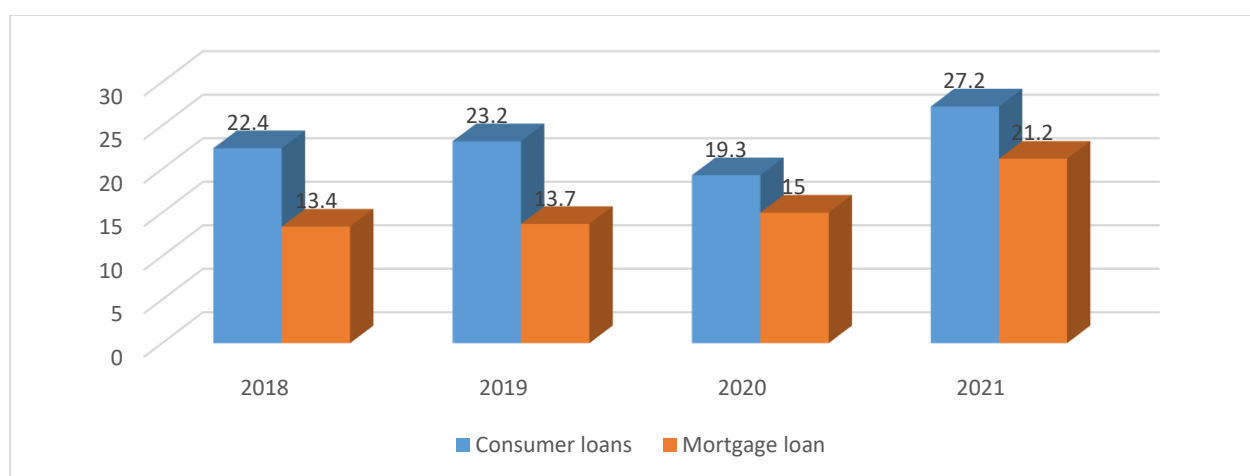


Fig. 4. Evolution of consumer loans and mortgage loans (2018-2021)  
Source: own processing [14, 15, 16].

It is thus established that if in 2018 consumer loans, granted either in lei or in Euros, had a total value of 22.4 billion lei, in 2021 they reached a value of 27.2 billion. Regarding the value of mortgage loans, if in 2018 they amounted to 13.4 billion lei (both for loans granted in lei and for those in Euros), in 2021 they increased by 58% compared to 2018, reaching a value of 21.2 billion lei. It is also the highest growth rate of consumer loans and mortgage loans in the last 10 years.

On the other hand, the value of the loans we granted to both individuals and legal entities totaled 84 billion lei in 2021. Even though the economy had a decrease of approximately 4%, non-governmental credits increased. The degree of financial intermediation was also increasing, in 2020 this intermediation was almost 27%, up by 2% compared to the previous year, which indicates a maturation of these categories of investments on the part of

companies and the population. However, Romania is not in a very good position compared to other neighboring countries, members of the European Union (Bulgaria has a degree of financial intermediation of 52%, Hungary of 35%, Poland of 48%). Therefore, the increase in the degree of financial intermediation must be increased, but this must be done on a sustainable basis, so that it can lead to financial advantages for investors,

Regarding the possibility of payment suspension, the data published in the BNR reports show that only in the first three months of 2021, almost 21 thousand requests were registered, of which only 4% were requests from companies, the rest coming from individuals. This aspect is correlated with the number and value of non-performing loans. However, as seen from the data presented above, the share of these credits

decreased considerably in 2021, which translates, from the banks' point of view, into an increase in additional capital. In the case of legal entities, at the level of 2020, the rate of non-performing loans decreased from 7.2% to 6.6%, to reach around 4% in 2021 [14].

By sector of activity, it is found that the largest share of lending is held by natural persons (which varied around the share of 39% in the period 2018-2021), followed by the service sector (approximately 24%), by industry (approximately 16%), constructions (approximately 7%).

Agriculture had a share of approximately 4.5%, maintaining its dynamic pace of growth. The increase from October 2020 compared to October 2019 was 12%, due to the fact that in absolute value in 2019 the value of credits granted to the agricultural sector was 18.7 billion lei, and in 2020 they were 20.9 billion lei. In 2021, their value was 23.7 billion lei. The data show that compared to the other sectors of activity, agriculture ranked first in accessing credits, followed by public administration and services.

In 2022, however, this advance held by agriculture began to increase, in March of this year the value of the credits was 23.9 billion lei. Thus, the financial intermediation sector took the first position with a variation compared to the previous year of 49.1%, followed by the public administration sector with a variation of 12.7%.

In agriculture, the credit system is dictated both by the need for modernization, by the expansion of the agricultural areas owned or leased by the economic entities in this field, but also by the access to European funds that come to support investments in agriculture.

## CONCLUSIONS

The Covid-19 pandemic has determined changes at the level of the entire economy, including changes in the banking system whose major role is to finance the business environment, but also to support the population in making investments.

What can be seen from the case study is that, especially in the case of natural persons, the

behavior regarding the reality with the banking institutions has changed, both with regard to saving, but also with regard to lending. Regarding the degree of saving, it decreased in favor of investment operations in financial instruments, and regarding the degree of crediting, a preference for mortgage loans is noted in favor of consumer loans.

The companies in their turn became more responsible, they started to think much better about their investment strategy or making investments.

After the year 2020 was characterized by a decrease in economic activities, the year 2021 recorded a return to the level of all economies, including in Romania, economies that had to be supported by the banking system.

Unlike other EU countries or the world, Romania has benefited from a favorable situation regarding the banking system, which, although it also presents certain vulnerabilities (the deterioration of the national currency, the increase in inflation, financial instability, more recently the outbreak of the war in Ukraine) manages to ensure sufficient liquidity to support the economic environment.

At the same time, the pandemic meant a modernization of the banking system, a much faster transition to digitalization, both on the part of banking institutions and among companies or individuals.

Through the actions carried out, the banks managed to fulfil their role in this period, that of supporting the economy.

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