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Banking management in the prism liquidity – profitability interrelation

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Abstract. *Within a banking company, an important task is to estimate and cover the liquidity needs of the bank. In fact, achieving and maintaining this goal requires real art, as a low level of liquidity leads to significant cash reductions and the need to attract additional resources at high cost, resulting in a decrease in bank profits and excessive liquidity. The return on assets decreases, resulting in poor financial performance. Within a banking company, the most important banking activity is the attraction of money on the market in order to grant loans, thus aiming to obtain as much profit as possible. Any banking activity is accompanied by risks. These risks have negative effects on the bank's activities, such as: deterioration in business quality, impairment of the bank's functionality, decrease in profit, loss, entry into insolvency, bankruptcy.*

Keywords: bank, liquidity, management, profitability, risk.

JEL Classification: G21, G33.

Introduction

In the literature, in a broad sense, the liquidity of assets expresses their ability to be converted quickly and with minimal cash costs or cash into current accounts (Haseeb and Hussain, 2019). In a narrow, specialized sense, bank liquidity represents the ability of banks to meet their financial obligations and expresses the ability of assets to be converted quickly and with minimal expenses into liquidity. Bank liquidity must be analyzed in the light of the relationship between loans and deposits (Andreou and Philip, 2016). In other words, if the demand for loans is higher than the demand for deposits, the bank will need liquidity, and if it registers excess liquidity, it will be able to make other profitable investments (Mihai, (2003).

Within a banking company, the most important banking activity is the attraction of money on the market in order to grant loans, thus aiming to obtain as much profit as possible. Any banking activity is accompanied by risks (Badea, 2010). These risks have negative effects on the bank's activities, such as: deterioration in business quality, impairment of the bank's functionality, decrease in profit, loss, entry into insolvency, bankruptcy.

Risk, in a general sense, means the variability of the result obtained under environmental pressure (Fiordelisi and Minnucci, 2020).

More precisely, it can be appreciated that the risk represents the potential damage to which the assets, the interests and the activity of the economic agent are exposed (Moinescu and Codirlașu, 2009).

One of the risks that can affect the activity of a banking company is the liquidity risk (Bătrâncea, 2013).

2. The liquidity-profitability relationship in banking in the Romanian banking system

In order to be able to observe whether a bank is profitable, we must analyze its activity in the light of the profitability indicators associated with those of the risk to which the bank is subject. In other words, the management team of a bank must be concerned with both the realization of the profit and the management of the risk assumed, in our case, the liquidity risk (Harb et al., 2022).

Liquidity risk is the opposite of performance, and its materialization leads to a decrease in profit; for this reason, the risk must be managed and maintained within limits considered normal and controllable by banking specialists (Dedu, 2008). For example, if a bank manages to attract short-term resources that it wants to invest in the long term and at a higher interest rate in order to make a profit from this activity, it assumes a liquidity risk, it diminishes the ability to honor the short-term withdrawals requested by customers, as well as an interest rate risk, both of which affect the expected realization of the expected profits.

If the bank manages to attract long-term resources and makes investments mainly in the short term, the liquidity risk is diminished, but also the realized profit is lower (Drigă, 2012).

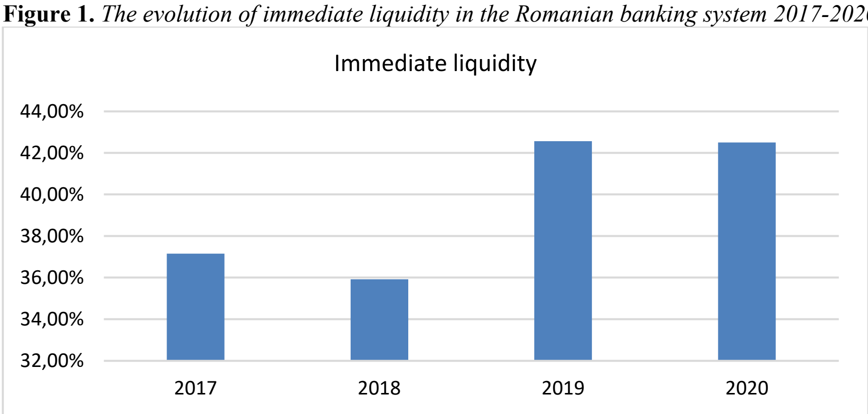
In order to be able to make a future forecast of the bank liquidity-profitability relationship, bank managers must be involved in an extensive process of documentation and planning, going through the following phases (Legowo et al., 2020):

- documentation and analysis of the methods and techniques used by other banks that have made similar decisions in terms of profit and liquidity risk;
- comparative analysis of the level of profitability and liquidity risk indicators with those of other banks;
- setting reasonable, mobilizing and achievable objectives, starting from the previous profitability of the bank, from the performances of the competing banks, from the possibilities offered by the banking environment.

In order to substantiate and adopt decisions on the liquidity-profit relationship, the bank's management team must go through the following steps (Stoica, 2009):

- measuring the rates of return for liquidity and profit and making reasonable estimates of how increasing/decreasing liquidity risk would influence the bank's profitability;
- assessing the soundness of the bank's management and determining the strengths and weaknesses of the market;
- determining the heterogeneity of the risk objectives under the conditions foreseen in the future, given that the combined risk must lead to the achievement of the profitability that the bank aims to achieve;
- the adoption of an effective liquidity risk control system which must contain techniques for identifying, assessing and reducing the effects of its occurrence;
- assessing the quality of liquidity risk management.

Figure 1. *The evolution of immediate liquidity in the Romanian banking system 2017-2020 (%)*



Source: NBR Annual Report 2017-2020.

From the analysis of Figure 1 it can be seen that this indicator has the lowest value in 2018, due to the increase of debts by 1.7% and the decrease by 2.2% of the total value of cash, bank deposits, free government securities pledge and denominated bonds. In 2019, the immediate liquidity increased by 5.7% compared to 2018 due to the decrease of debts by 1% and the increase by 14.8% of the total value of cash, bank deposits, Government securities free of collateral, bonds denominated in foreign currency and RON. In 2020, the value of the indicator is similar to that of 2019 and highlights the comfortable position of liquidity of institutions in the Romanian banking sector.

Table 1. *Evolution of the liquidity indicator on different maturities 2017-2020 (%)*

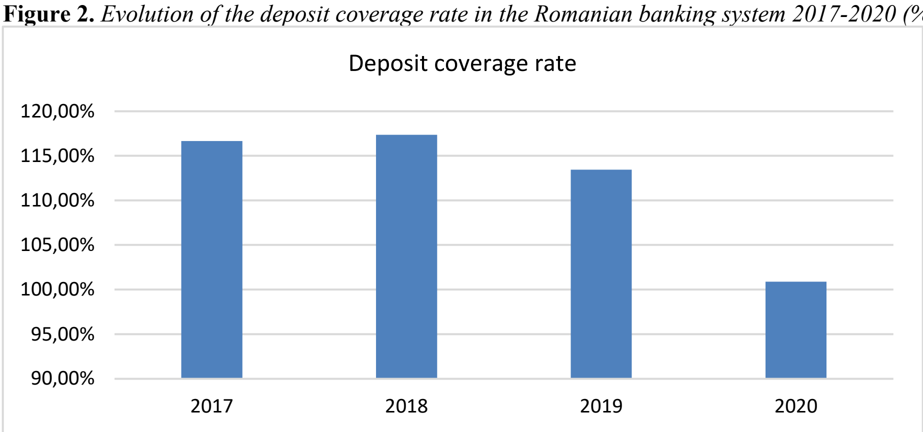
Year	< 1 month	1-3 months	3-6 months	6-12 months	>12 months
2017	1,46	3,55	5,95	5,68	2,14
2018	1,56	3,97	5,12	5,69	2,36
2019	1,67	4,45	6,68	5,62	2,73
2020	1,68	4,65	7,56	6,18	3,24

Source: NBR Annual Report 2017-2020.

From the analysis of this table it can be seen that the liquidity indicator for the period 2017-2020 and on all maturity bands have lower values than those for the period 2019-2020, due to the decrease in confidence of domestic depositors in banks and, implicitly, the non-renewal of deposits after they have reached maturity. This situation has changed since 2019, with the population moving towards saving.

Also, the liquidity indicator established according to the regulations in force issued by the National Bank of Romania, calculated for all operations in RON equivalent, on maturity bands, was placed at a comfortable level higher than the one regulated on each maturity band in the entire studied period.

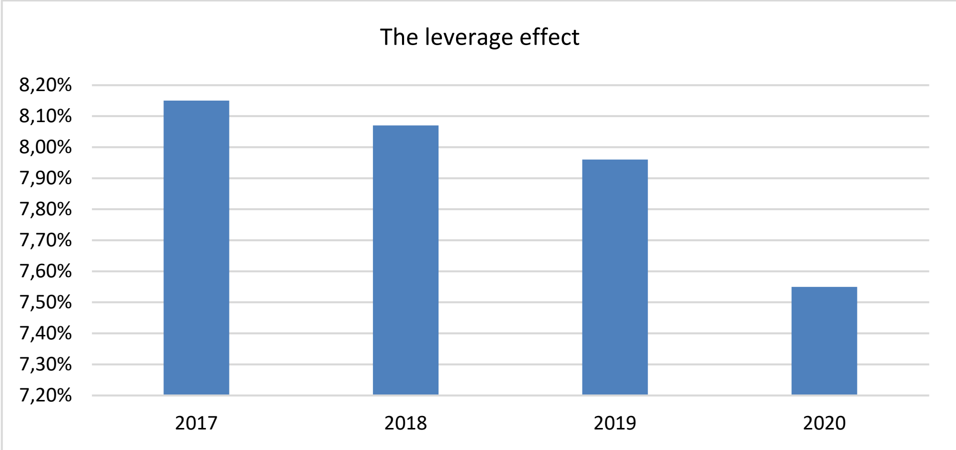
Figure 2. *Evolution of the deposit coverage rate in the Romanian banking system 2017-2020 (%)*



Source: NBR Annual Report 2017-2020.

From the analysis of Figure 2 it can be seen that the coverage rate of deposits in the Romanian banking system has the highest value in 2018, which reflects a riskier banking activity in terms of the liquidity risk assumed. In 2019, the ratio between loans to non-bank customers at gross value and deposits attracted from non-bank customers showed a downward trend, approaching the equilibrium level, amid a decrease in the stock of loans while increasing the volume of deposits attracted. In 2020 we notice that the value of attracted deposits has increased far above the value of loans granted, leading to excessive liquidity and lower performance.

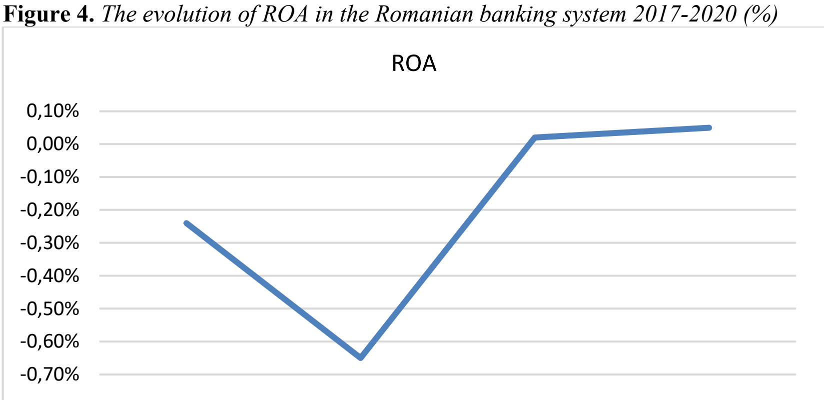
Figure 3. *Evolution of the leverage effect in the Romanian banking system 2017-2020 (%)*



Source: NBR Annual Report 2017-2020.

From the analysis of Figure 3 it can be seen that the leverage effect registered a constant level at the end of 2017 and 2018, in the context of the increase of average assets by 8.4% and own funds by 8.2%. In 2019, this indicator shows a slight decrease, given that the decrease in Tier 1 equity by 5.3% was offset by the reduction of average assets by 4.6%. In 2020, this indicator reflects a high degree of capitalization relative to the level of banking assets at book value.

Figure 4. *The evolution of ROA in the Romanian banking system 2017-2020 (%)*



Source: NBR Annual Report 2017-2020.

From the analysis of Figure 4 we notice that in the period 2017-2020 the values of profitability indicators have negative values due to the depreciation of financial assets and the effect induced by the revaluation of credit guarantees.

In 2019, these indicators improved slightly above zero due to the return of the financial result in the range of positive values, as well as the increase in operating profit obtained by banks at the end of 2018. In 2020, ROA and ROE deteriorated compared to year 2019 due to the increase of the expenses with the provisions, which exceeded the operational profit, due to the fact that the banks had to assume the losses resulting from the non-performing loans.

If we summarize to make a correlation between liquidity-profitability for 2020, it can be said that the Romanian banking sector benefits from adequate liquidity, because the level of indicators assessing liquidity risk indicates the existence of reserves that can cover possible imbalances if the issue of withdrawal anticipated funds. Ensuring liquidity for this year is the result of depositors' confidence in banks, and the result was the extension of maturing deposits.

Conclusion

In conclusion, it can be said that two of the major objectives that banking companies must meet are: ensuring adequate liquidity and optimizing profits. Within a banking company, one of the most important tasks to perform is to estimate and cover liquidity needs (Lupulescu, 2011).

Bank liquidity can be defined in many forms, such as: it represents the ability of banks to meet their financial obligations and expresses the ability of assets to be converted quickly and with minimal expenses into cash, or it represents the ability of a bank to cope with effectively withdraw deposits and maturity of other debts and cover the need for additional financing.

In order for banking companies not to be in a position to procure the necessary financial resources and to meet their commitments at some point, they need to be prepared in the event of a liquidity risk. Liquidity risk is the risk that a banking institution will not have sufficient funds to meet its obligations to customers due to the deviation of the proportion between long-term and short-term loans and the mismatch with the structure of the bank's liabilities, but also an inability to finance current banking operations. Liquidity risk can arise from the following causes, such as: the situation of the real economy, the influences of the media through negative publicity, the financial indiscipline of the economic agents, the non-correlation between the maturities of deposits and loans.

For banking companies, liquidity risk is a cost issue that results from the comparison of immediately liquidated bank assets with depositors' deposits. We can say that one of the problems facing the management of a banking company in ensuring liquidity lies in the fact that very rarely the demand for liquidity is equal to the supply of liquidity at a given time, the banking company being either in excess of liquidity or in deficit liquidity.

The lack of liquidity forces the banking companies to resort to loans on the interbank market or to refinancing from the NBR in order to be able to meet the payments, which means additional costs for the banks and, implicitly, the decrease of the bank profit.

In the market economy, banking companies appear as receiving and distributing capital companies, and in their capacity as financial intermediaries, they carry out both activities to mobilize the resources of legal and natural persons, temporarily available, and to distribute them in the form of loans, within a relative balance between own and liabilities (Subanidja et al., 2020).

One of the fundamental objectives of commercial banks is to optimize profits, the performance of banking being an indication of the stability and confidence of depositors.

The increase in bank profits is closely linked to attracting customers. To do this, banks will need to bring their bank counter as close as possible to the customer's home or office. Although banks have diversified their business by offering a wide range of financial products and services, the interest income charged has the largest share of a bank's total profit. However, by diversifying the portfolio, banking companies can reduce their liquidity risk to a lower level, but by dispersing the risk, the financial results can be flattened leading to a lower profit. In order to be able to observe whether a bank is profitable, we must analyze its activity in the light of the profitability indicators associated with those of the risk to which the bank is subject.

In order to make a future forecast of the bank liquidity-profitability relationship, bank managers must be involved in a comprehensive process of documentation and planning, analyzing the methods and techniques used by other banks that have made similar decisions in terms of profit and loss, liquidity risk, comparing the levels of profitability and liquidity risk indicators with those of other banks, setting reasonable and achievable targets, etc.

At the level of the Romanian banking system, we analyzed the following liquidity and profitability indicators: immediate liquidity, liquidity indicator, deposit coverage rate, leverage effect, financial profitability and economic profitability.

If we analyze the liquidity-profitability correlation for 2020, it is observed that the Romanian banking sector benefits from adequate liquidity, because the level of indicators assessing liquidity risk indicates the existence of reserves that can cover possible imbalances if the issue of early withdrawal of funds. Ensuring liquidity for this year is the result of depositors' confidence in banks, and the result was the extension of maturing deposits.

Banking companies need to properly manage these risks in order to survive competition and perform. Liquidity risk is considered by specialists to be a major one, hence the importance of the task of a bank's management in making a correct estimate of liquidity needs and, implicitly, in covering them.

In other words, the liquidity risk requires the bank's management to analyze the liquidity situation continuously and to examine how the financing requirements may evolve in various situations.

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