CONDITION OF THE BANK LOAN MARKET IN BULGARIA

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Abstract: While not all domestic businesses are growth-oriented, at some stage of their development they need capital to improve their competitiveness and adaptability to changes of their business environment. The access to affordable bank loans is crucial for the development of many Bulgarian businesses, which face increasing external and internal competition. This is due to the fact that there are virtually no alternative sources of financing in our country. The present study aims to present an analysis of the credit market in the country in view of the key importance of bank monetary resource, which is a major factor for strengthening the competitive potential of Bulgarian enterprises. The article presents an analysis of the domestic bank loan market in terms of the key importance of banks' financial resource, which is a major factor for raising the competitiveness of the Bulgarian enterprises.

Keywords: bank financing, credit market, economic development. **JEL:** E41, G21, O10.

Introduction

acilitating the access to bank financing is a priority issue in the public agenda and a subject of discussion and analysis in various scientific and business forums, economic studies, sectoral economic development strategies and so on. The non-conventional forms of financing, such as leasing, factoring, forfaiting, equity-based financing (risk financing), and SWORD (Stock and Warrant Off-Balance Sheet R&D),² are considered

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² A new form of financing designed to assist biotech start-ups to access funding. It enables young companies with little capital on hand to undertake development projects by sharing the risk between the company and the investor.

auxiliary to bank financing as sources of consumption and investment funding. Therefore, the growing public expectations for the role of the domestic banking sector as a factor for establishing a competitive and efficient business environment in the country are more than reasonable.

The article aims to present an analysis of the domestic bank loan market in terms of the key importance of banks' financial resource, which is a major factor for raising the competitiveness of the Bulgarian enterprises.

Analysis of the domestic bank loan market

In 2017 and 2018, the global economy was growing steadily and Bulgaria's micro- and macroeconomic indicators followed suit with this general positive trend of development. The bank financing sector adapted successfully to these changes, which means that banks reacted to the upward trend by facilitating the access to loans. However, it is worth noting that the expectation that bank financing will be a key factor for the general economic development is considered too unrealistic (Yosifov, 2018, p. 120). This opinion is based on various arguments, one of which is the fact that commercial banks and their activities are subject to strict regulations and supervision by the central bank. This implies that in periods of prolonged economic stagnation they are required to maintain a minimum level of capital adequacy which limits the amount of loans they can provide. Conversely, in times of economic growth, the banks can maximize their profits by providing more loans, but at the cost of higher risk exposures.

Figure 1 shows the amount of loans to non-financial corporations, households and NPISHs in the country.

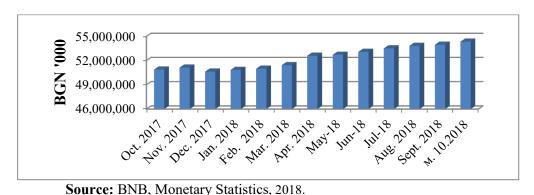


Figure 1. Loans to Non-financial Corporations, Households and NPISHs³, Oct. 2017 – Oct. 2018

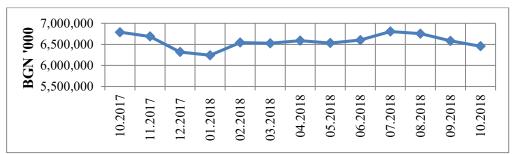
³Non-profit institutions serving households.

The empirical data lead to the following important conclusions:

- First. Over the whole period under review, there is a trend of steady growth of the total amount of bank loans to the three main types of borrowers non-financial enterprises, households and NPISHs. This fact supports the opinion that the amount of bank financing depends mainly on the current economic cycle phase.
- **Second.** The rate of increase of the volume of bank loans became more rapid in the beginning of the second half of 2018. This result corresponds to the positive macroeconomic development of the country and the government's medium-term expectations for stable economic growth, employment levels, consumption and investments.
- Third. The increase of the volume of loans to households and NPISHs is due mainly to the growing demand for mortgage loans. This, on the one hand, is indicative of the positive medium- and long-term expectations of households and, on the other hand, increases the exposure to default risk, should the labour market situation worsen. In such case the impairment costs of all domestic banks will increase.

The volume of bank financing is indicative for both the state of the national economy and the potential of the commercial banks to affect the economic activities. Therefore, the quality of the loan portfolios of the commercial banks is of paramount importance.

Figure 2 illustrates the quality of the loan portfolios of the domestic commercial banks during the period.



Source: BNB, Monetary statistics, 2018.

Figure 2. Bad and restructured loans to non-financial corporations, households and NPISHs over the period Oct. 2017 – Oct. 2018.

The above statistics show that the increase of the volume of bank loans is not accompanies by an increase in the volume of bad and restructured loans. This fact on the one hand indicates that the banks have high-quality asset portfolios, i.e. their credit risk management is efficient, and on the other hand reflects the favourable situation on the labour market, i.e. high

employment rate and growing incomes both in the private and the public sector.

Obviously, the increase of the volume of loans stimulates the aggregate demand for consumer and investment loans. Bulgarian National Bank's (BNB) inability to implement a comprehensive monetary policy strengthens the role of commercial banks as a main drive of the economy. This implies that the behaviour of the banks and their clients is crucial for the level of money supply in the country.

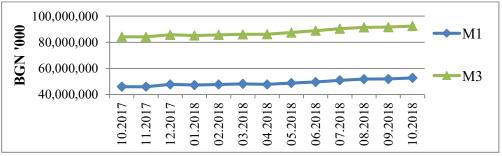
The ability of commercial banks and their clients to influence the money circulation is associated with the money multiplier, i.e. the ratio of commercial bank money to the monetary base. Commercial bank money include money that is not held as deposits in reserve by the bank. The reason for distinguishing the commercial bank money from the monetary base is that the former is associated with open market operations carried out by each central bank, i.e. these funds complement the active part of the balance sheet of the bank regulator. Thus, the Central Bank has a strict control over the base money but a very limited control over the money created by commercial banks. Although the commercial banks have the financial capacity to increase the broad money supply, this increase is not proportional to their demand deposits because they can use this resource for purposes other than lending, i.e. for activities which do not increase the broad money supply.

The money supply in a country is traditionally measured using "money aggregates". These broad categories include the monetary liabilities of the banking system to households and businesses and are in the form of banknotes and coins in circulation, term and short-term savings deposits. The monetary base comprises the entire circulation of banknotes as well as sight deposits held by commercial banks at the CB.

Figure 3 shows the dynamics of the so-called "broad money", referred to as M3 monetary aggregate.⁵

⁴ The adoption of a currency board on 01 Jan. 1997 made BNB unable to follow a comprehensive monetary policy. It can only affect the broad money supply by setting reserve requirements for the commercial banks.

⁵ M3 includes the M1 and M2 monetary aggregates (M₁+QUASI-MONEY) as well as some less liquid assets such as time deposits, short-term repurchase agreements, short-term institutional participations in investment funds operating on the monetary market.



Source: BNB, Monetary statistics, 2018.

Figure 3. Money supply dynamics, Oct. 2017 – Oct. 2018

The analysis of the empirical data shows that there were no significant changes of the monetary aggregates over the period. However, it is worth noting that the broad money (M3) increased with 9.7 per cent at the end of the period. The increase of the monetary supply in the last quarter of 2018 can be explained with the increase of household savings, which in turn led to a higher rate of growth of broad money during the first eight months of 2018. Moreover, the report of the Central Bank shows that as of August the M3 monetary aggregate had a growth rate of about 9.6 percent on an annual basis, which is due mainly to the increase of the volume of overnight deposits. ⁶

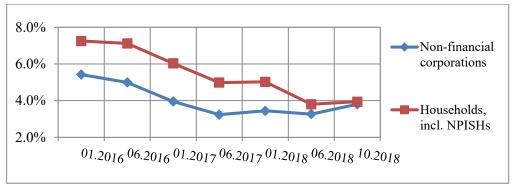
Another factor for the growth of money supply is the increase of savings of enterprises and households mainly in current bank facilities. These investments provide an easier, faster and cheaper lending resource and have a direct effect on the overall bank liquidity and lending expansion. On the other hand, bank savings limit the amount of cash in circulation, which has the highest level of liquidity. This is confirmed by the increase of the volume of the M1 aggregate, which increased with 14.8 percent by the end of the period. The author believes that although there are many factors that influence the choice of "consumption at the expense of investment and vice versa", the main reasons for the growth of money outside banks remain the global economy growth and the optimistic consumer expectations. These factors are complemented by a favourable labour market conditions, income growth, growing consumption rates and low domestic investment costs. Another very important factor is the good state of public finances of the country. The projected annual budget surplus for 2019 is expected to reach BGN 3 billion and implies an opportunity for more substantial growth of public sector incomes, which is one of the targets of the government's budget program. The projected increase of public sector incomes should be followed by an increase

⁶ Unsecured bank deposits in national currency with next-day maturity.

⁷ For more details see BNB, Economic Review, 03/2018.

of the incomes in the private sector, which is the intention of the employer organizations as well. This implies that in 2019 consumer spending will remain the main drive of Bulgaria's economy, and the banking system has the necessary potential to support financially the aggregate supply and demand.

Borrowing cost is an important element of bank lending. Figure 4 shows the average annual interest rate on long-term loans in BGN to Non-financial corporations and Households⁸, including NPISHs.



Source: BNB, Monetary statistics, 2018.

Figure 4. Dynamics of the interest rates om long-term loans

The data on the change in the price of the borrowed capital show a clear tendency for reduction of interest rates on investment and consumer loans in the country. The dynamics of changes in the cost of borrowed capital lent for investments and consumption should be considered a logical result of the favourable economic conditions and increased external and internal consumer demand as well as increased competition among the commercial banks.

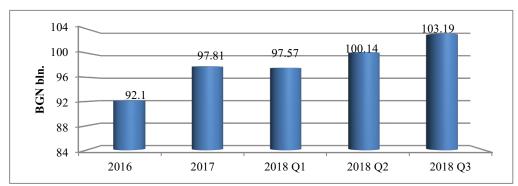
Particularly significant is the change in business spending on interest on working and investment loans. From January 2016 until October 2018, the average cost of investment loans decreased by nearly 30 percent. Moreover, there was a significant decline in the cost of home equity mortgages. Over the same period, the average percentage of long-term mortgage loans decreased by almost 40 percent. This decline can be explained, on the one hand, by the increase of housing prices⁹, and on the other, with the growth of the employment rate and the nominal labour income. The author believes that the favourable labour market conditions in the country, combined with the low cost of bank financing, create real prerequisites for speculatively high housing prices, which exposes the country's banking sector to significant risks.

⁸ Including the average interest rate on consumer loans.

⁹ At the end of 2018, the housing prices in the country reached their levels of the precrisis 2007.

Another factor that should be considered is that the expected future slowdown of the global economy, for which there are some indications from the last quarter of 2018, could increase significantly the exposure to credit risk exposures and the associated costs for impairment of large amounts of bank assets. A more conservative bank lending policy would limit the rate of profitability in the system, but can be considered "healthy" in terms of maintaining high capital adequacy and liquidity of commercial banks in the country in the medium and long term.

In the context of credit expansion, the issue of maintaining the sustainability of the banking system in the country is especially pertinent with respect to the cash and cashless operations performed by commercial banks and the cost of refinancing their operations. In other words, their profit is a function of the ratio of their proceeds, which are primarily formed by the assets held, to the costs related mainly to the accumulation of borrowed capital to finance their lending activities.

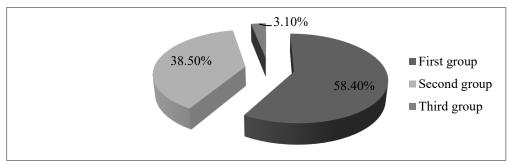


Source: Association of Banks in Bulgaria, The Economy and the Banking Sector in Bulgaria - Q3 2018, p. 11.

Figure 5. Total assets of the banking system

The data confirms the market reality that, in a context of economic growth, bank financing supports increased consumer and investment demand. The figure above clearly shows that from the beginning of 2017 to the end of the third quarter of 2018, the assets in the banking sector ware growing. This is mainly due to the fact that 62.5% of the assets in the banking system were in the form of loans and receivables, totalling BGN 64.5 billion. At the end of the period, the assets in the banking sector amounted to almost BGN 104 billion, which is an increase of 5.8 per cent on an annual basis, while share of total assets of all 26 banks, operating in Bulgaria, to the projected annual gross domestic product (GDP) for 2018 was 95.4%.

Most of the assets in the banking system are held by the banks categorized in the first and second group according to the "own assets" criterion.



Source: Association of Banks in Bulgaria, The Economy and the Banking Sector in Bulgaria – Q3 2018, p. 12.

Figure 6. Market share in terms of assets as of the end of Q3 2018

The analysis of assets in the banking system leads to the conclusion that loans and receivables play a key role for the formation of GDP and hence - the growth of the national economy. The fact that the share of loans and receivables to the forecasted GDP for 2018 was 50% is indicative for the importance of financial intermediation and, in particular, bank financing for the economic development and the efficiency and quality of the economic processes.

The analysis of assets in the country's banking system is not sufficient to provide a more comprehensive assessment of the system's capital capabilities. Therefore, an analysis of bank liabilities and, more specifically, the dynamics of their historical development is needed. According to BNB, at the end of the third quarter of 2018, the total liabilities in the banking system amounted to BGN 90.7 billion, which is an increase of 9.5 per cent compared to the end of the third quarter of 2017. The liabilities of the banks from the three groups were:¹⁰

- First group BGN 52.5 billion (58% of all liabilities);
- **Second group** BGN 35 billion (38.6% of all liabilities);
- Third group BGN 3.12 billion (3.4% of all liabilities).

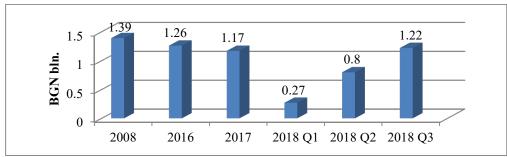
The growth was driven by the increase in deposits, which comprised 97.6% of the total liabilities. From the statement of financial position of the system it was evident that the amount of deposits grew by 8,8% on an annual basis to BGN 88.57 billion.

¹⁰ For more details, see: Association of Banks in Bulgaria, The Economy and the Banking Sector in Bulgaria – Q3 2018, p. 12.

The share of the provisions for loan losses which includes unsettled legal issues and lawsuits, credit commitments, guarantees, pensions, etc., accounted for 0.2%, or BGN 222.5 million in absolute terms. The share of financial liabilities, held for trading and other liabilities were respectively 0.1% and 0.9%. The share of all other remaining liabilities is negligible, complementing the sum up to 100%.

At the end of June 2018 the amount of equity was BGN 12.05 billion and increased by of the end of September 2018 to BGN 441 mln. (3.7 per cent) mainly due to the increase in profit. The equity of the banks amounted respectively:

- **First group** to BGN 7.76 billion;
- **Second group** to BGN 4.65 billion¹¹



Source: Association of Banks in Bulgaria, The Economy and the Banking Sector in Bulgaria – Q3 2018, p. 12.

Figure 7. Net profit of the banking system

In Q3 2018 the banking sector registered a decrease in the net profit by 21.6% on quarterly basis reaching to BGN 418.6 million compared to BGN 533.8 million reported in Q2 2018. For comparison, in the third quarter of the previous year the net profit was BGN 211.4 mln.

Another interesting trend is observed for the dynamics of net profit since the beginning of 2018. As of the end of September, 2018 the net profit was BGN 1.22 billion compared to BGN 871.8 million for the period January-September 2017, which is an increase of 39.9% on an annual basis.

The main reason for the financial performance of the system was the credit expansion of the banks. Impact on the profitability of the credit institutions had also the lower level of the interest rates on liabilities and the lower impairment costs due to the decrease of the amount of bad and restructured credits in the second half of 2018.

¹¹ ibid., pp. 12-13.

The net profit at Q3 2018 by groups of banks was:

- The first group of banks generated 69.7% of the profit at the end of Q3 2018 (compared to 70.9% for the same period in 2017);
 - The second group of banks generated 27.6%;
 - The third group of banks generated 2.7%.

Conclusion

Considering the dynamics of the economy, the business environment and the challenges faced by modern economies, the role and importance of bank financing is rightly considered the main drive of economic development. Therefore, the banking sector is defined as a key economic and social factor. It is particularly important for Bulgaria's economy, which is considerably less competitive than the economies of the countries of Western and Central Europe, and the average labour income in the country lags far behind the EU average. (Vladikov, 2012, p. 5).

The analysis of our country's banking system leads to several main conclusions grouped into four main aspects:

• First. The nature of the Bulgarian economy, which is relatively small and is affected strongly by external demand, determines its strong dependence on the development of the world economy and hence on consumer and investment demand in the countries importing the output of Bulgarian enterprises. Consequently, the current phase of the economic cycle and the expected slowdown in the growth of the global economy have a negative effect on the development of long-term business financing. Despite these expectations, the market behaviour of the domestic commercial banks since the beginning of 2016 have logically been affected by the strong external demand combined with the high employment rate and the growing labour incomes in the country. The survey shows that the volume of bank loans to non-financial corporations, households and NPISHs kept increasing throughout 2018 and especially during the second half of the period, which can be explained with the positive expectations for the economic development of the EU and the national economy in 2019. The main factor behind the growth of bank lending was the state of the labour market in the country. Another positive factor was the optimistic economic forecast for 2019 published by the Ministry of Finance, which expected the trends for full

employment and income growth both in the public sector and the manufacturing sector of the economy will remain unchanged in the short run.

- Second. The positive expectations for maintaining the pace of credit expansion in 2019 are based on the stable financial position of the commercial banks in the country and are supported by the continuing decrease of the amount of bad and restructured loans and therefore, the amount of costs incurred by these banks for impairment of bank assets and loan collaterals. The positive trend of economic development, combined with the estimated inflation rate of about 3 per cent for 2019, have a positive effect for the sustainability, liquidity and efficiency of the banking sector in the country.
- Third. The decrease of the cost of capital borrowed by banks since the beginning of 2016 is indicative of their reaction with regard to the general situation and their expectations regarding the economic development of the country, viz. low cost of borrowed capital and increasing market demand for bank loans. The large commercial banks, which hold the bulk of the banking system's assets and have significant financial capacity, are expected to play a particularly active role in maintaining a positive lending growth in the context of a low ratio between receivables and refinancing costs.
- Fourth. Along with the positive findings, there are some justifiable concerns which the author considers to be realistic and significant and which may slow the pace of bank financing growth in the medium run. One of these concerns is the fact that a credit expansion over a long period may overheat the economy. i.e. the aggregate demand may outpace the aggregate supply and create price (inflation) pressure. A positive detail in this respect is the awareness of the risks that are inherent to this phase of the economic cycle. The senior management of the banks shows a high level of realistic awareness of the potential dangers of excessive bank lending growth. Another reason for optimism in this regard is the strict regulation of the Central Bank in compliance with the mandatory Basel 3 requirements that limit commercial banks' exposure to material risks without creating unreasonable prerequisites for a considerable reduction in the level of bank lending. Accordingly, the CB has planned stress tests for six commercial banks (four of which have the greatest market shares in the country) to be conducted in 2019 in the context of the country's intention to join the precursor to euro zone membership, the ERM-2 exchange rate mechanism. The tests aim to check the quality of some banks operating on the domestic market and will be based on the methodology of the European Central Bank. They are expected to confirm the good financial status and high capital adequacy of the tested banks.

References

- Association of Banks in Bulgaria, The Economy and the Banking Sector in Bulgaria Q3 2018.
- BNB, Economic Review, 03/2018.
- Yosifov, T. (2018) Disproportsii pri razpredelenieto na razhodite za nauchnoizsledovatelska i razvoina deinost v Bulgaria.
- Izvestiya. Spisanie na Ikonomicheski Universitet Varna. 62 (2). pp. 112-127.
- Vladikov, A. (2012). Individual monetary returns from investing into human capital accumulated in the tertiary education /the case of Bulgaria, Collection of Papers from the 5th Forum of PhD Students International Seminar Bratislava, Slovak Republic, October 20-22, 2011, pp. 4-5.

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