National Bank of the Republic of North Macedonia
Financial Stability and Macroprudential Policy Department

REPORT ON RISKS IN THE BANKING SYSTEM OF THE REPUBLIC OF NORTH MACEDONIA IN THE SECOND QUARTER OF 2024

September 2024

Contents

I. Summary

In the second quarter of 2024, the banks were operating in the macroeconomic environment characterized with acceleration of the domestic economic growth and further gradual deceleration of the annual inflation rate, while the geopolitical context was still unstable creating uncertainty and increased risks for the following period. The National Bank made no changes in the policy rate i.e. it was kept at 6.3%, appropriate to the conditions in the economy. Also, there were no changes neither in other monetary instruments, which is based on the expectations that the current level of interest rates, together with the changes in reserve requirement and macro prudential measures taken, are still expected to further slow down the inflation and maintain the exchange rate stability, as well as the resilience of the banking system. The balance sheet of the banking system increased in the second quarter of the year (1.7%) as opposed to the decrease in the preceding quarter, while its annual growth, although decelerated, remained solid (7.5%). The risk exposure indicators of the banking sector were stable, while the stress tests indicate a solid capacity to deal with assumed shocks. However, the environment remains vague, with the risks to the world and domestic economy still persisting. Hence, there is a need for further cautious risk monitoring and prudent policy conduct in order to preserve the banking sector stability in the following period.

The growth of the bank deposits was more moderate, but remained solid and enabled credit growth maintenance, which slightly accelerated in the second quarter of the year. After the usual seasonal decrease in the first quarter of the year, deposits from non-financial entities increased by 1.9% in the second quarter of 2024. However, their growth was moderated and analyzed on an annual basis, it recorded a slowdown to the level of 6.8% (in contrast, 9.1% as of 31.3.2024). Favorable movements continue in terms of maturity and currency structure of savings (growth in denar and long-term deposits), reflecting the effects of the measures taken by the National Bank and stabilized expectations of economic agents, as well as higher interest rates. The quarterly growth of loans to non-financial entities is accelerating, reaching the level of 3%, with the annual growth rate, which reached 6.5% (6.2% as of 31.3.2024), also recording a slight acceleration. The credit growth accelerated in both sectors (corporate and households), which corresponds to the results of the Lending Survey in the second quarter of 2024, when banks reported a net easing of lending standards and a net increase in demand for loans in both sectors.

The solvency of the banking system continues to improve. The capital adequacy ratio reached 19.0%, which is the highest level since 2006. The maintenance of the earnings realized in the preceding year contributed towards strengthening of the banks' capital positions. Thus, their increase not only underpinned the accelerated credit growth and widened open currency position of the banking system in the second quarter of 2024, but enabled also further increase in the "free" capital over the required minimum. Thus, 37% of the banking system's own funds account for the capital buffers, or are "free" over the required minimum and are important for covering possible future unexpected losses of the banks. The higher solvency ratios mainly result from the higher regulatory and supervisory requirements for maintenance of higher capital by the banks, which is primarily associated with capital buffers (countercyclical and capital buffer for systemically important banks) and capital supplement determined by the supervisory assessment. Given that the National Bank on several occasions announced an increase in the

countercyclical capital buffer, the implementation of which will start in the next period, the solvency of the banking system is expected to improve further. The conducted stress testing shows that the banking system is resilient to the simulated shocks.

The liquidity of the banking system remains satisfactory. After the decrease in the preceding quarter, liquid assets increased slightly by 0.5% in the second quarter of 2024, which given higher growth in the total assets and certain categories of liabilities caused small decrease in the liquidity indicators of the banking system. Thus the share of the liquid in the total assets went down by 0.4 percentage points to the level of 30.5%, while the coverage of the short-term household liabilities and deposits with liquid assets is lower by 0.4 and 1.3 percentage points, respectively and as of 30 June 2024, it equals 52.1% and 60.5%, respectively. The liquidity coverage ratio of the banking system also reduced by 2.7 percentage points to the level of 276.4%, which is almost three times higher than the regulatory minimum (100%), thus confirming the satisfactory volume of liquidity available to the Macedonian banking system. The liquidity-related stress test results indicate satisfactory resilience of the banking system to the assumed extreme, individual and combined liquidity outflows.

The banks' loan portfolio retained its quality. After the initial significant increase in the non-performing loans in the first quarter, influenced by the regulatory changes in determining the non-performing status, in the second quarter of 2024, the increase in the non-performing loans to non-financial sector decelerated substantially. The increase in non-performing loans almost entirely stems from the households portfolio, with the corporate segment also having a minor contribution to that. The share of non-performing in the total loans to non-financial entities remained unchanged. Analyzed by individual sectors, this share decreased again to the level of the historical minimum in the portfolio composed of enterprises (3.7%), while increased by 0.2 percentage points (to the level of 2.5%) with households.

The exposure of the banking system to currency risk is kept below the regulatory limit. The growth of foreign currency funds, at simultaneous reduction in the liabilities based on loans with a currency component, widened the open currency position of the banking system, as a measure of exposure to currency risk. However, even with this widening, it takes only 7% of its own funds, which is far below the regulatory limit of 30%. On the other hand, the presence of the currency component (foreign currency and FX clause) in banks' balance sheets further decreased and reduced to 40.6% in assets and 40.0% in liabilities. Such a positive trend has been stirred also by the changes in the reserve requirement instrument, which were aimed at increasing the denarization.

Banks' exposure to interest rate risk reduced and remained within the prescribed regulatory minimum. Thus, the weighted value of the banking book, as a measure of the exposure of the banking system to the interest rate risk, recorded a decrease in the second quarter of 2024, and as a result, its share in own funds dropped to a single-digit level of 9.8%, thus remaining below the regulatory limit of 20%. Such movements mostly stem from the usual change in the majority of loans with variable interest rates, where the residual period until the next reassessment of the interest rate levels has decreased over several months. Exposure to indirect interest risk, measured by the share of loans with adjustable or variable interest rates in total loans, recorded a slight decrease, but it is still substantial (68.8%), and it is one of the factors for the level of indirect credit risk depending on interest rate trends.

In the first half 2024, the profitability of the banking system improved compared to the same period last year. The profit of the banking system increased by 28.6%, which is certain deceleration compared to the same period last year (35.3%). Net interest income had the biggest contribution to the profit growth, which increased by 20.3%, due to the increase in interest rates and interest-bearing assets. The increase in the profit was also contributed by the net income from commissions and realized capital gains from the sale of assets(due to single event, in only one bank), but their contribution is far less compared to that of net interest income The rates of return on average assets and average equity and reserves reached 2.5% and 19.8%, respectively, which is a better performance compared to the same period last year, when these rates equaled 2.1% and 17.1%, respectively. The impairment costs increased by 12.1%, with the two-digit growth of 11.5% being registered by operating costs, mostly as a result of the increased employees and administrative expenses. However, in conditions of stronger growth in total income, the operating costs to income ratio decreased to 40.9% (as opposed to 43.7% in the first six months of 2023).

Generally, in the second quarter of 2024, as well, the banking sector retained its stability, with improved solvency, good liquidity and maintained credit portfolio quality. However, the environment remains vague, with the risks to the world and domestic economy in the short and medium run still persisting. Hence, there is a need for further vigilance in the risk management and in the policy conduct, and the National Bank is ready to use all the necessary instruments and to take appropriate measures that will contribute to preserve the stability of the exchange rate, the price levels and the banking sector.

II. Structure of the banking system

1. Number of banks and ownership structure of the banking system

In the second quarter of 2024, the number of banks in the Republic of North Macedonia remained the same and equaled thirteen banks. Nine of them are banks in predominant foreign ownership, five of which are subsidiaries of foreign banks.

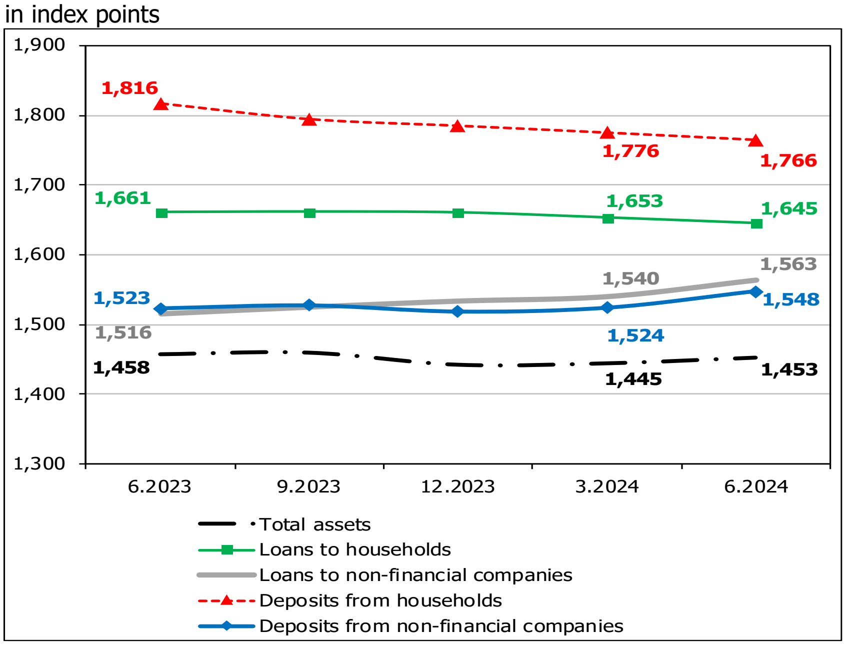
Table 1
Structure of major balance sheet positions by banks' majority ownership (as of 30.6.2024)
in millions of denars and in %

Type of ownership	Number of banks	Capital and reserves		Assets		Loans to non-financial sector		Deposits from non-financial sector		Total revenues*		Financial result*	
		Amount	In %	Amount	In %	Amount	In %	Amount	In %	Amount	In %	Amount	In %
Banks in dominant ownership of foreign shareholders	**9**	**77,130**	**77.4%**	**544,460**	**72.5%**	**377,148**	**82.3%**	**384,991**	**70.7%**	**29,083**	**75.0%**	**11,866**	**72.3%**
- subsidiaries of foreign banks	*5*	*67,280*	*67.6%*	*456,692*	*60.8%*	*319,550*	*69.7%*	*325,667*	*59.8%*	*24,704*	*63.7%*	*10,535*	*64.2%*
- Austria	1	12,350	12.4%	96,979	12.9%	68,951	15.0%	58,732	10.8%	3,867	10.0%	1,651	10.1%
- Bulgaria	1	1,362	1.4%	12,447	1.7%	7,572	1.7%	9,655	1.8%	470	1.2%	52	0.3%
- Greece	1	22,236	22.3%	134,300	17.9%	94,662	20.7%	100,188	18.4%	8,428	21.7%	3,785	23.1%
- Slovenia	1	14,540	14.6%	115,570	15.4%	79,795	17.4%	90,949	16.7%	6,512	16.8%	3,428	20.9%
- Turkey	1	16,792	16.9%	97,396	13.0%	68,571	15.0%	66,143	12.1%	5,428	14.0%	1,619	9.9%
- other banks in dominant foreign ownership	*4*	*9,849*	*9.9%*	*87,768*	*11.7%*	*57,598*	*12.6%*	*59,324*	*10.9%*	*4,380*	*11.3%*	*1,331*	*8.1%*
- Bulgaria	2	3,887	3.9%	29,544	3.9%	18,965	4.1%	20,636	3.8%	1,811	4.7%	405	2.5%
- Germany	1	5,010	5.0%	48,409	6.4%	33,077	7.2%	31,778	5.8%	2,039	5.3%	718	4.4%
- Switzerland	1	952	1.0%	9,815	1.3%	5,556	1.2%	6,911	1.3%	530	1.4%	207	1.3%
Banks in dominant ownership of domestic shareholders	**4**	**22,467**	**22.6%**	**206,784**	**27.5%**	**81,058**	**17.7%**	**159,441**	**29.3%**	**9,697**	**25.0%**	**4,549**	**27.7%**
- private ownership	*3*	*18,835*	*18.9%*	*188,635*	*25.1%*	*80,844*	*17.6%*	*159,441*	*29.3%*	*9,459*	*24.4%*	*4,436*	*27.0%*
- state ownership	*1*	*3,632*	*3.6%*	*18,149*	*2.4%*	*214*	*0.0%*	*0*	*0.0%*	*238*	*0.6%*	*113*	*0.7%*
Total:	**13**	**99,596**	**100.0%**	**751,244**	**100.0%**	**458,207**	**100.0%**	**544,432**	**100.0%**	**38,780**	**100.0%**	**16,415**	**100.0%**

Source: National Bank, based on the data submitted by banks.
*Total revenues and financial result are calculated for the last twelve months (30.6.2023-30.6.2024).

The general picture for the ownership structure is unchanged in the second quarter of 2024, so that banks with predominantly foreign ownership continue to dominate the structure of important positions on the banking system's balance sheet. Similar to the previous quarter, the change in the bank shares in foreign ownership by position was mainly downward. The decrease is most noticeable in the total financial result (down by 3 percentage points), which is followed by a decrease in the share of 1 and 0.5 percentage points of total income and loans to the non-financial sector. In contrast, the share of foreign banks in the total capital and reserves increased by 0.2 percentage points, with minimal increase of 0.1 percentage point being registered in the share of total assets, as well. These banks still have the highest share in total loans to non-financial sector (82.3%).

Chart 1
Herfindahl index



Source: National Bank, based on the data submitted by banks.

The value of the Herfindahl index[1] **recorded slight changes in the second quarter of 2024.** The Herfindahl index for loans and deposits to non-financial corporations and total assets registered a quarterly growth, amid slight decline in this indicator calculated for household loans and deposits, where its values are the highest. In all categories of activities, the index is **within the acceptable values**[2].

Table 2
Indicators of concentration of major balance sheet positions in the three and the five banks with the largest share in these positions
in %

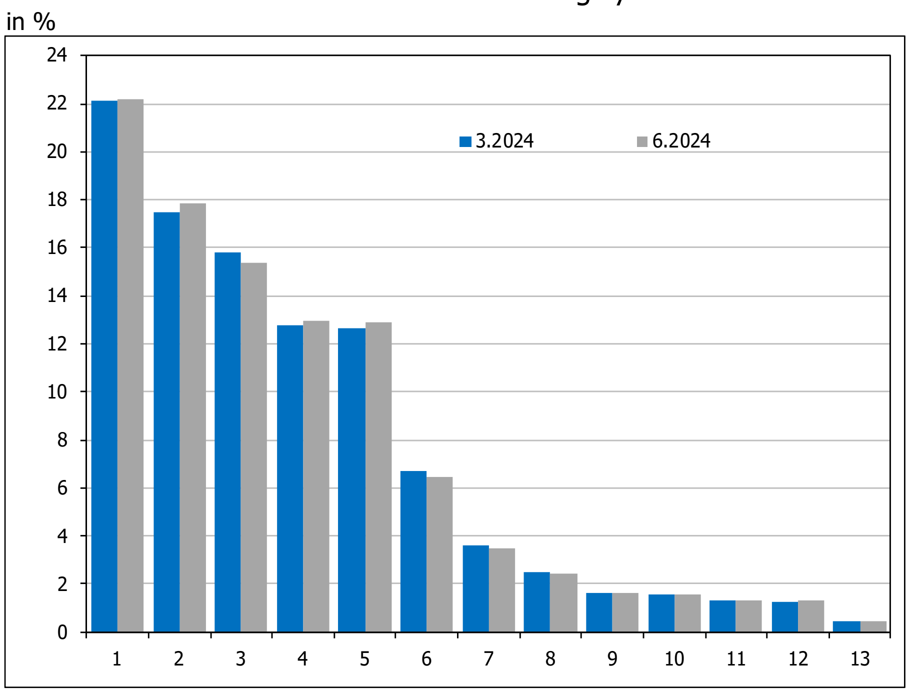
Position	30.06.2024		31.03.2024	
	CR3	**CR5**	**CR3**	**CR5**
Total assets	55.5	81.3	55.5	80.9
Loans to households	61.4	84.2	61.8	84.2
Loans to non-financial companies	54.7	83.2	53.0	82.3
Deposits from households	67.4	85.5	67.7	85.6
Deposits from non-financial companies	56.3	82.1	55.7	81.1
Financial result*	70.9	90.8	70.3	91.6
Total revenues*	59.9	83.8	59.3	83.5

Source: National Bank, based on the data submitted by banks.
*Total revenues and financial result are calculated for the last twelve months (30.6.2023-30.6.2024).

[1] The Herfindahl index is calculated according to the formula $HI = \sum_{j=1}^{n} (S_j)^2$, where S is the share of each bank in the total amount of the analyzed category (e.g. total assets, total deposits, etc.), where n denotes the total number of banks in the system.
[2] The level of concentration is considered acceptable when the index ranges from 1,000 to 1,800 points.

The indicators of the three and five banks with largest share in individual banks' balance sheet positions registered slight changes on a quarterly basis as well. A more pronounced change was registered in the bank concentration in the loans of non-financial corporations, where there is an increase in the share of the three banks with the largest share of 1.7 percentage points, as well as increased share of the five banks with the largest share of 0.9 percentage points. On the other hand, there is also substantial decrease in the share of the five banks with the largest share in financial result of 0.8 percentage points.

Chart 2
Share of individual banks in the total assets of the banking system



Source: National Bank, based on the data submitted by banks.

Regarding the difference in the bank size according to the amount of their assets, there are no significant changes, with the spread between the bank with the highest market share (22.2%) and the bank with the lowest market share (0.4%) being widened by 0.1 percentage point, compared to the previous quarter. The five largest banks remain the only ones with a double-digit market share, which cumulatively equals 81.3% with a increase of 0.4 percentage points, while the five smallest banks have the single market share below 2%, while their cumulative share equals 6.3%.

III. Bank risks

1. Credit risk

In the second quarter of 2024, the non-performing loans to non-financial entities increased (4.2%), but far slower than in the previous quarter (11.5%)[3]. They increased more with households (growth of 10.7%), given minimal quarterly growth (of 0.2%) of non-performing loans to enterprises. In the "household" sector, consumer loans were once again the main growth generator of the non-performing loans, which, however, grew slowly. The rate of non-performing loans, after the increase in the previous quarter (due to regulatory changes), once again reduced to the historical minimum in the corporate portfolio (3.7%), while increased by 0.2 percentage points (to 2.5%) with households. For the total non-financial sector, the rate of non-performing loans remained the same this quarter (3.1%). The risks of default of the entire amount of the identified non-performing loans are limited, due to their high coverage with impairment for expected credit losses, while the share of the non-provisioned part of the non-performing loans remains stable at the level of 5% of own funds. The coverage of regular loans with impairment for expected credit losses remains at the same level as of 31 March 2024 (2.2%).

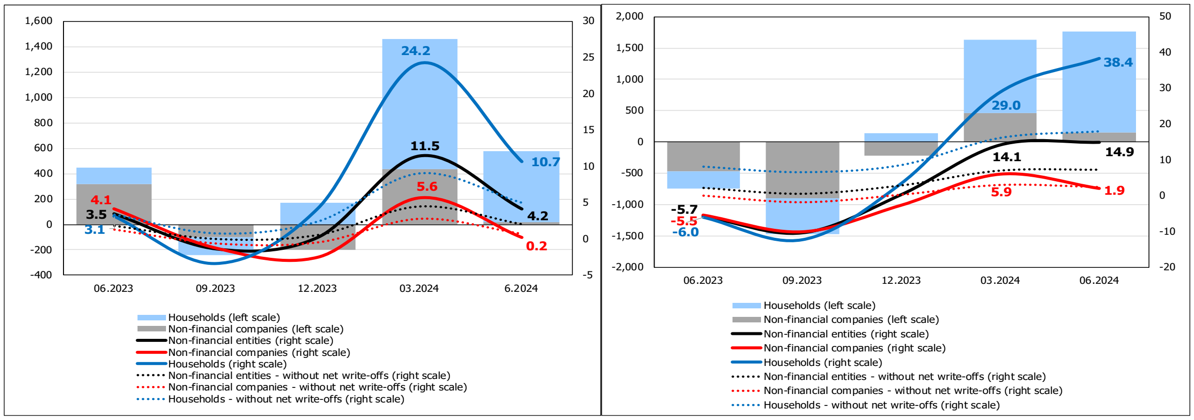
Prolonged and restructured loans decreased in the second quarter of 2024 and have small shares in total loans (3.7% and 1.6%, respectively), so they still do not represent a source of risk for a significant future deterioration in credit portfolio quality. Moreover, the results of the credit risk stress-test simulations, confirm the banking sector resilience to relatively extreme deteriorations of the credit portfolio risk. However, the uncertainties arising from the unstable environment, together with the tightening of monetary policy, point to the need for further increased caution on the part of banks in managing credit risk, as well as of the National Bank, which will take all the necessary measures if necessary to preserve financial stability.

1.1 Materialization of credit risk in banks' balance sheets

Following the initial effect of the regulatory changes and the significant growth of non-performing loans in the first quarter of 2024 (of 11.5% or Denar 1,403 million), in the second quarter of the year, the growth of total non-performing loans in the non-financial sector decelerated and equaled 4.2% (or Denar 568 million). The increase in the non-performing loans almost entirely stems from the households portfolio, with a minor contribution of corporate segment, as well.

[3] On 1 January 2024, the new Decision on the methodology for credit risk management became effective, which introduces methodological changes that will affect the amount of non-performing loans and on part of the indicators for exposure to credit risk, compared to the previous situation. The Decision is available at the following link: https://www.nbrm.mk/content/Regulativa/Odluka_metodologija_%20za_krediten_rizik_nova.pdf

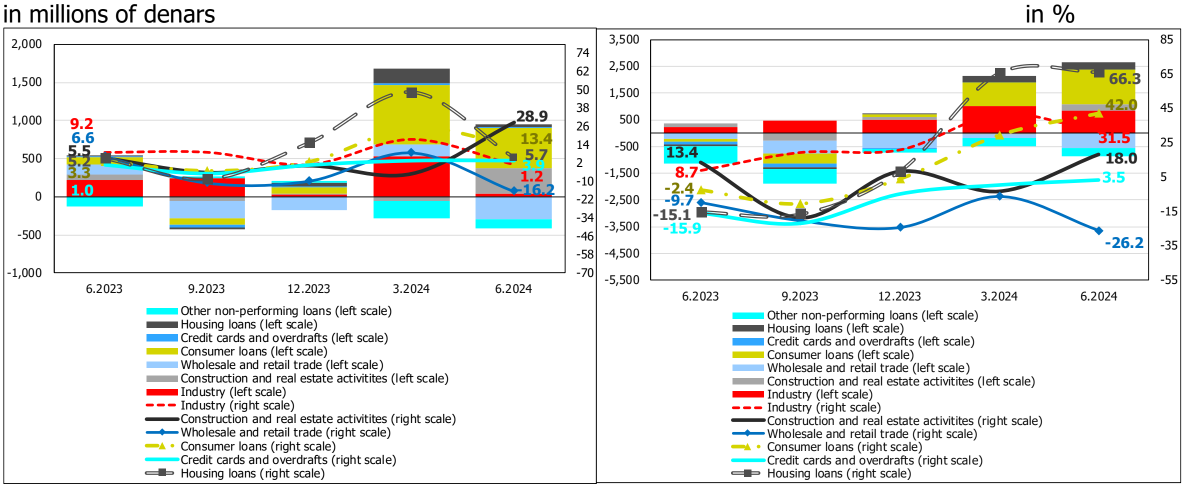
Chart 3
Quarterly (left) and annual (right) growth of non-performing loans by sector
in millions of denars in %



Source: National Bank, based on the data submitted by banks.
Note: Dashed lines present the increase in the non-performing loans by excluding the effect of all mandatory write-offs.

Non-performing corporate loan portfolio[4] increased slightly by Denar 18 million, or 0.2%. In conditions of a solid amount of mandatory net write-offs of the non-performing loans of this sector (Denar 188 million)[5], in most of the individual economic activities, the non-performing loans recorded moderate quarterly changes. In the second quarter of the year, "construction and real estate activities" registered a significant increase in non-performing loans (Denar 341 million, or 28.9%), where the largest contribution was made by the increase in the non-performing loans in "immovable property activities" (Denar 326 million), mostly from one company.

Chart 4
Quarterly (left) and annual (right) growth rate of non-performing loans, by activity (non-financial companies) and by credit product (households)
in millions of denars in %

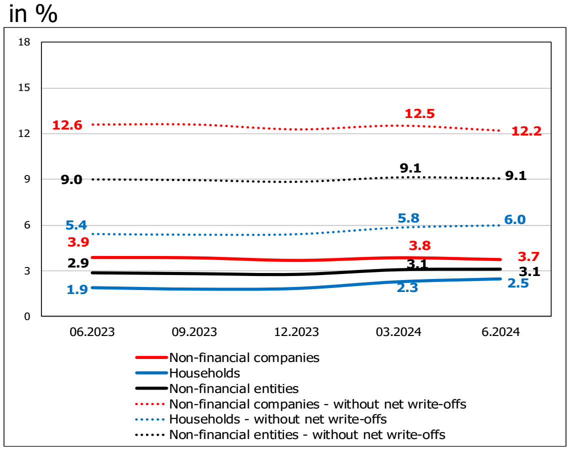


Source: Credit Registry of the National Bank.

[4] The share of non-performing corporate loans in the total non-performing portfolio kept decreasing by 2.3 percentage points to the level of 57.9% at the end of the second quarter of 2024.
[5] By excluding the effect of mandatory writte-offs the increase in the non-performing corporate loans is minimally higher and equals 0.7%.

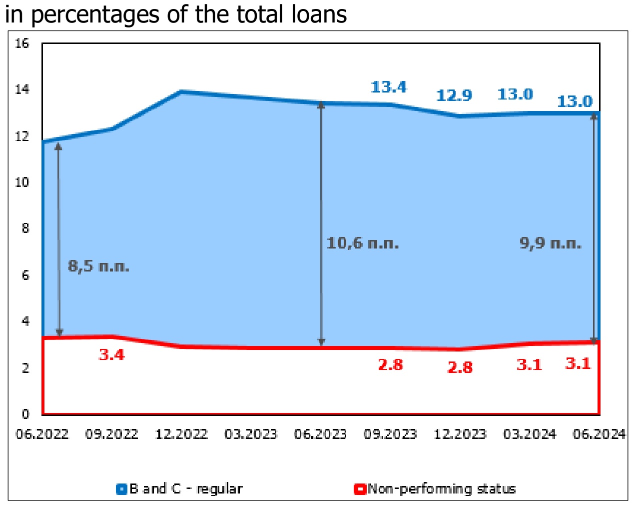
Non-performing household loans increased in the second quarter of 2024 (10.7%[6] or Denar 559 million), but more slowly than in the previous quarter (when they increased by 24.2% or Denar 1,022 million). According to the purpose of loans, 93% of the quarterly growth of the non-performing loans to households account for consumer loans, which, although their slow growth, still recorded a double-digit rise of 13.4%, or of Denar 520 million (in the previous quarter, these non-performing loans increased by 25.3%, or by Denar 784 million). A growth slowdown is also registered in non-performing housing loans, which increased by Denar 34 million denars, or by 5.7% during this quarter, while the quarterly growth in non-performing loans in terms of allowed overdrafts on payment accounts and loans based on credit cards remained at the same level (3.9%). With such changes in non-performing loans, at the rapid growth of credit activity at banks on a quarterly basis (from 1% to 3%), the total rate of non-performing loans remains at the level of 3.1%[7].

Chart 5
Rate of non-performing loans of non-financial corporations, by sector
in %



Source: National Bank, based on the data submitted by banks.

Chart 6
Gap between regular loans in B and C ri categories" and non-performing loans*, by th share in total loans
in percentages of the total loans



Source: Credit Registry of the National Bank.
*Regular loans classified in B and C risk categories and no performing loans, are approximation of the so-called grou and 3 loans according to IFRS 9, respectively.

In the corporate loan portfolio, the rate of non-performing loans minimally decreased by 0.1 percentage point, back to the historical bottom of 3.7%[8]. This rate improved in several non-financial corporations' prevailing activities of higher importance, except "real estate", which increased up to the level of 2.9% (0.3% in the previous quarter) and "transport and storage" activity, which increased by 1.1 percentage points (up to 4.6%) and "textile industry", which registered a growth of 0.8 percentage points (up to 9.1%).

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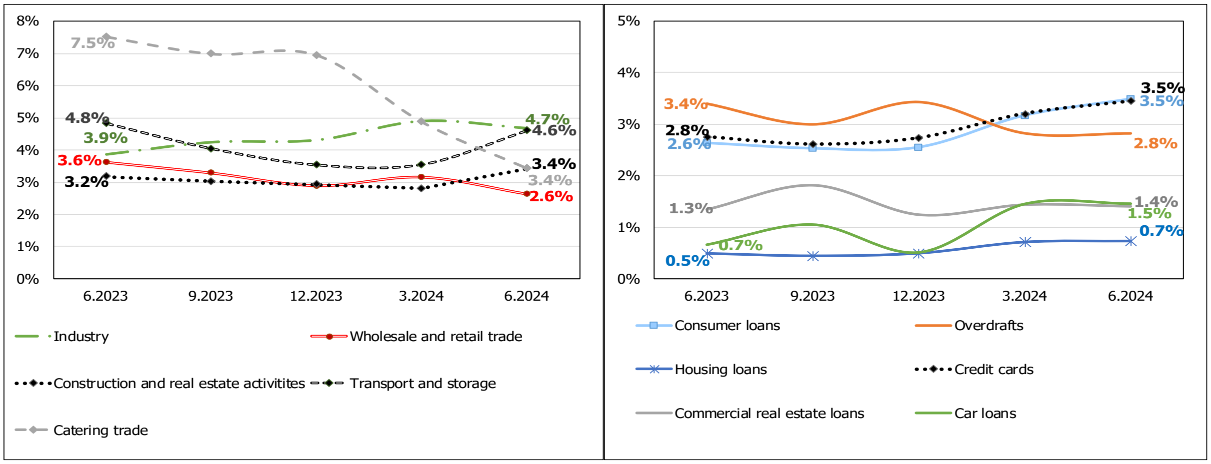
[6]The amount of mandatory write-offs in the second quarter equaled Denar 132 million. If we exclude the effect of these net write-offs, the non-performing household loans increase by 5%.
[7]Without the effect of the mandatory net write-offs, the share of non-performing to total loans equals 9.1%, which is the same level as that as of 31.3.2024. The ten-year average of this share equals 10.5%.
[8]If we exclude the effect of the mandatory net write-offs, the share of non-performing in total loans decreased to 12.2%, which is at the level of the ten-year minimum of this indicator.

Chart 7
Rate of non-performing loans, by activity and credit product
in %



Source: Credit Registry of the National Bank.

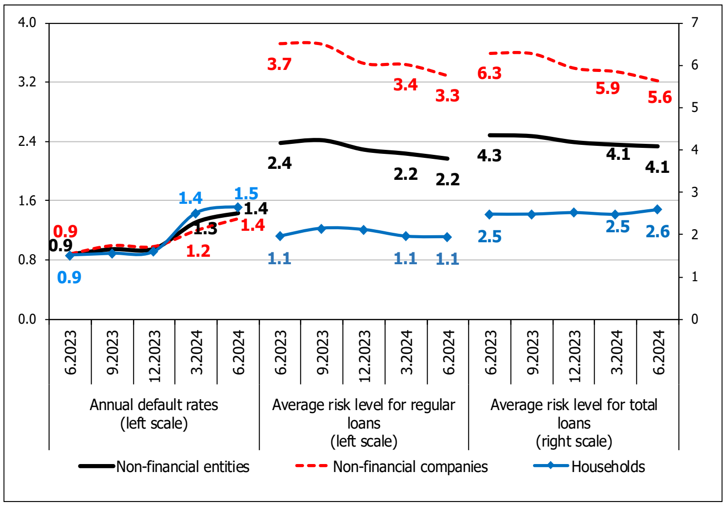
The rate of households' non-performing loans increased by 0.2 percentage points up to the level of 2.5%[9]. Analyzed by credit product, this rate increased by 0.3 percentage points for consumer loans and equals 3.5%. Similar changes have been registered in credit cards, while there were no changes in the overdrafts during this quarter. The non-performing loans rate remains the lowest in housing loans (0.7%).

The annual transition rates from regular to non-performing credit exposure increased in the second quarter of 2024. However, the coverage of loans with impairment for expected credit losses remains at similar level as previously. At companies, the banks continuously allocate higher amount of impairment relative to the realized transition rates, which is an indicator of their perceptions of higher risks of the corporate loans than to households. Namely, at the end of the second quarter of 2024, the expected loan losses for regular loans to non-financial corporations equaled 3.3%, which is by three times higher compared to households (1.1%), although the annual migration rates in both sectors are similar, and even minimally higher in household sector (1.4% in the corporate sector, while 1.5% in households[10]).

[9]Without the effect of mandatory net write-offs, the rate of non-performing loans to households increased minimally compared to the previous quarter and equals 6%, which is moderately above the level of its 10-year moving average (5.3%).
[10]The migration rates from performing to non-performing loans are low in both sectors, but more pronounced in households. The difference that occurs at the beginning of 2024 i.e. higher migration rate in households, is due to the changes in the regulations of the rules for acquiring non-performing status, which mostly affected the household portfolio.

Chart 8
Annual migration rates of regular to non-performing credit exposure and average risk level of regular and total loans, by sector

in %

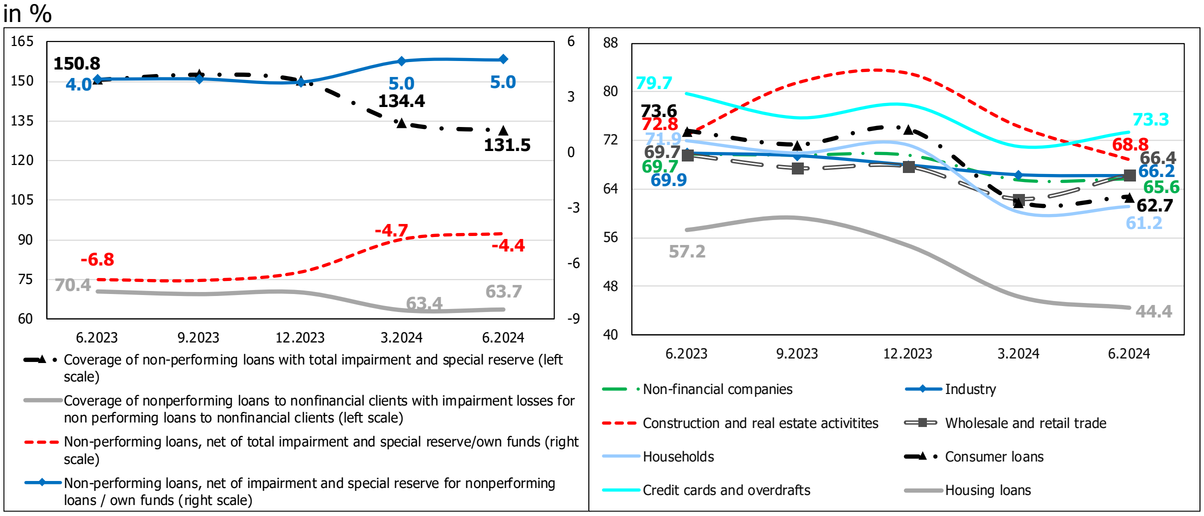


Source: Credit Registry of the National Bank.

Th high coverage of the non-performing loans with impairment reduces the negative effects on the bank solvency at assumed full default of these loans, i.e. it restricts the scope of unexpected credit losses on this basis. Coverage of the non-performing loans with allocated impairment for these loans (63.7%), which is an increase of 0.3 percentage points compared to the first quarter of 2024. The non-provisioned amount of non-performing loans remains low and stable at the level of 5% of banking system’s own funds. Thus, even in case of extreme assumption of complete default of non-performing loans, the banking system solvency would not be jeopardized.

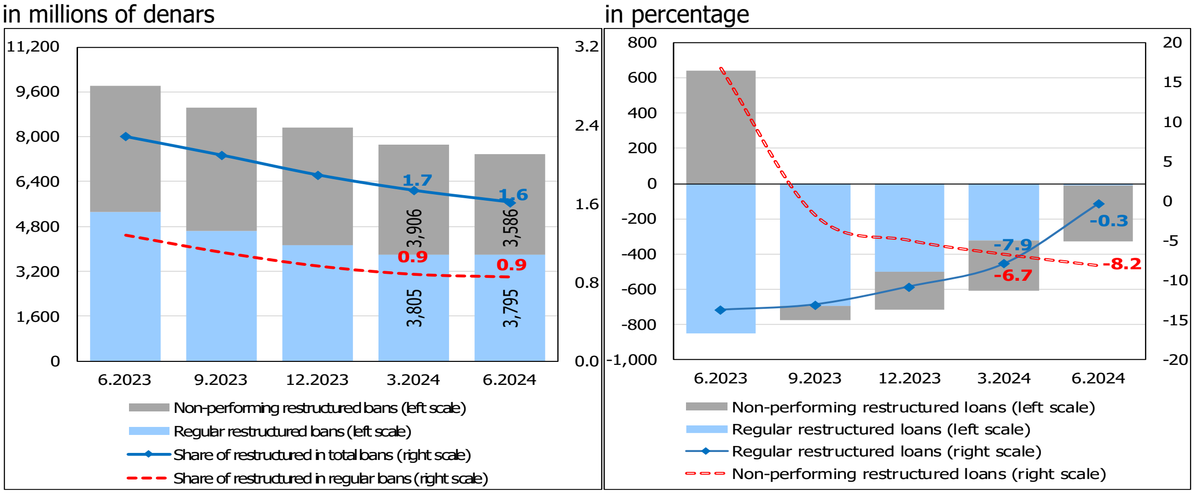
Chart 9
Coverage of non-performing loans with impairment (left) and by activity and credit product (right)

in %



Source: Credit Registry of the National Bank.

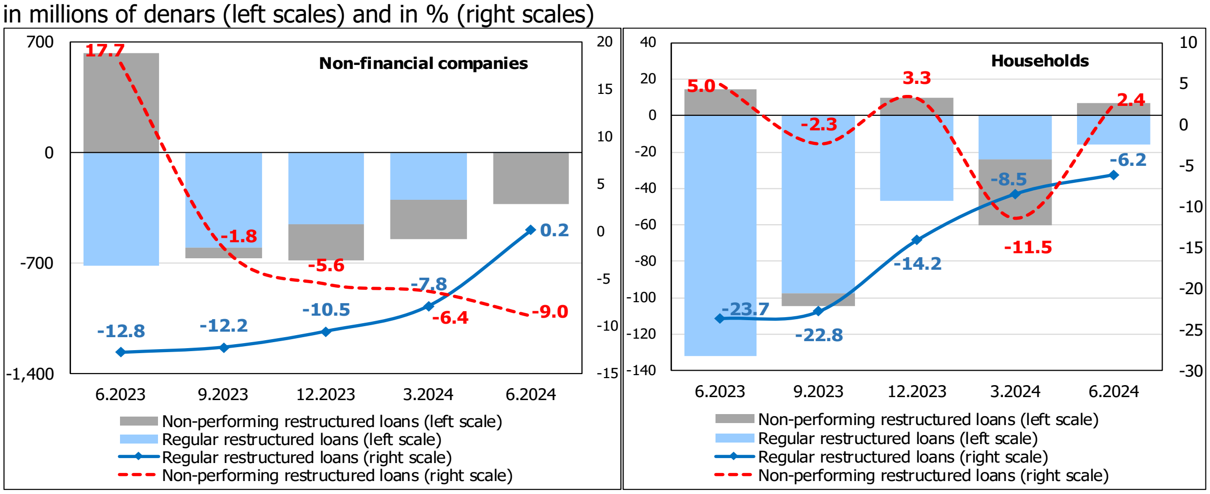
Chart 10
Restructured loans of non-financial entities (left) and their quarterly growth (right)



Source: Credit Registry of the National Bank.

Restructured loans are a possible growth driver of non-performing loans if the restructuring does not achieve the expected goals of adjusting the debtor's credit burden, which requires their cautious monitoring. In the Macedonian banking system, in the second quarter of 2024 there was a further downward trend in restructured loans from almost three years ago, so that the share of these loans in total loans further decreased to 1.6%, while the share in regular loans remained at 0.9%. Banks find performing restructured loans at higher risk, thus allocate higher expected credit loses for these loans. Thus, their coverage with impairment as of 30.6.2024 amounted to 20.2% (minor quarterly drop of 0.7 percentage points) and was significantly higher compared to the coverage with impairment of total regular loans of 2.2%, which is unchanged compared to the preceding quarter. On the other hand, the coverage of non-performing restructured loans with allocated provisions (of 63.6%) is almost identical to the coverage of total non-performing loans (of 63.7%).

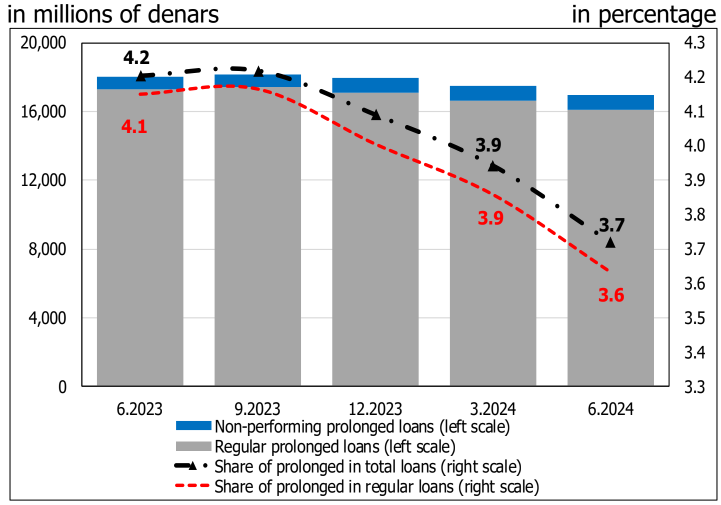
Chart 11
Annual change of restructured loans, by individual sectors



Source: Credit Registry of the National Bank.

Analyzed by sector, during this quarter there was a change in the trend with the restructured corporate loans, i.e. growth instead of the decline registered in the last two years[11] (growth of 0.2%, or Denar 6 million), while the household sector registered a slower decline (of 6.2%, or Denar 16 million). The largest share in the structure of the restructured credit portfolio of 92.9% accounts for the non-financial corporations[12].

Chart 12
Prolonged loans to non-financial entities by status



Source: Credit Registry of the National Bank.

In the second quarter of 2024, extended loans continued to decline (a decrease of 2.9%, or Denar 514 million, compared to the decrease of 2.5% and Denar 451 million in the previous quarter). Their structure is unchanged, i.e. regular prolonged loans still prevail (share of 94.6%), which entirely determined the quarterly decline in total prolonged loans, while by sector, the most common loans that are prolonged are those extended to non-financial corporations (share of 90.4%).[13] The share of prolonged loans in the banks' total credit portfolio is low (3.7% at the end of the second quarter of 2024) and is higher in the portfolio to non-financial corporations, where the prolonged loans account for 7%[14], compared to the household sector where the share of these loans is low (0.7%)[15].

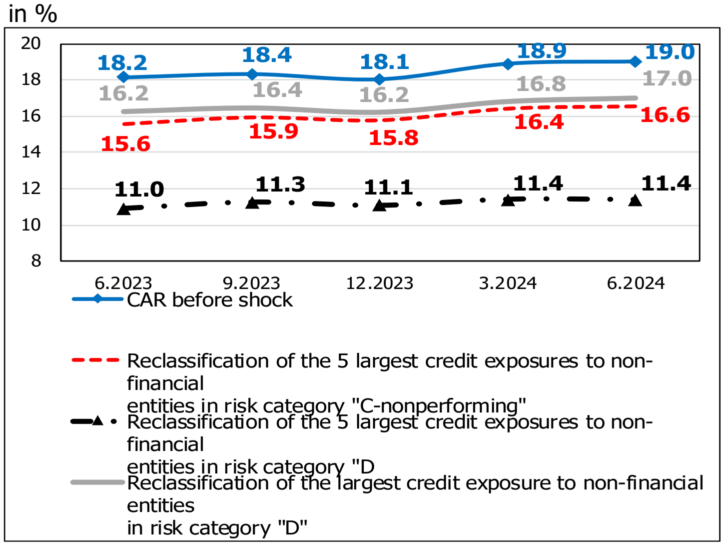
Banks remain cautious in applying measures for the creditworthiness of borrowers. The DSTI and LTV indicators on newly granted/ increased credit exposures to natural persons, during the second quarter of 2024, remained at a relatively prudent level, of 35.6% and 63.1% on average, respectively, which is below the regulatory prescribed levels of 55% and 50% for the DSTI indicator, i.e. 85% for the LTV indicator.

[11] The increase in regular restructured loans to enterprises is entirely due to the doubled credit exposure to the food industry, the increase in the activity "transport and storage" and in "real estate activities", while all other activities recorded a decrease.
[12] As of 30.6.2024, the share of restructured loans in credit portfolios of non-financial legal entities and households was 3.1% and 0.2%, respectively.
[13] The prolonged maturity is usually registered in industry, wholesale and retail trade, usually with framework renewable loans.
[14] In non-financial corporations, the average risk of prolonged loans kept increasing on a quarterly basis and amounted to 7.8% (7.4% at the end of 31.3.2024, amid slight increase in the rate of non-performing loans to 5.8% (5.6% in the previous quarter).
[15] In households, the average risk of prolonged loans amounted to 1.3% (1.2% at the end of 31.3.2024), while the rate of non-performing loans increased to 1.4% (1.1% in the previous quarter).

1.2 Stress-testing of the resilience of the banking system to increased credit risk

The results of the assessments of the banking system resilience amid simulation of increased credit risk confirm the resilience of the domestic banking system. The capital adequacy ratio of the banking system does not go below 8% in individual hypothetical simulations. in case of more extreme simulation for a migration of 30% of the credit exposure to non-financial corporations, from the existing to the next two higher risk categories, the capital adequacy ratio of the banking system is reduced by 5.1 percentage points compared to the initial level, i.e. from 19.0% to 13.9%, which is a similar result to the previous quarter.

Chart 13
Effects on the capital adequacy ratio from reclassification of the largest credit exposures to non-financial entities (including the connected parties) in a higher risk category



Source: Central Registry of the Republic of North Macedonia and National Bank calculations

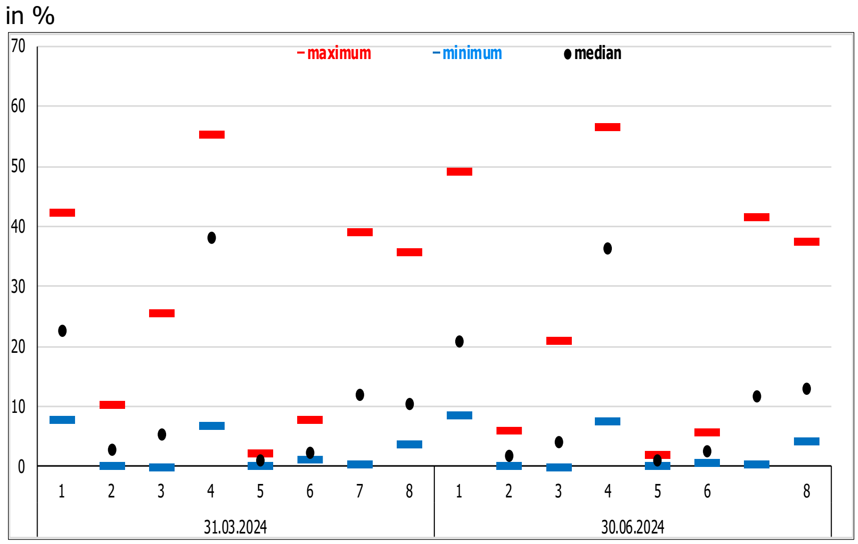
Simulated materialization of concentration risk in the credit portfolio, amid assumed migration of the five largest clients from non-financial sector of each bank, from the risk category (mostly A), to risk category B- non-functional, reduces the capital adequacy ratio of the banking system from the initial 19.0% to 16.6%. This is a slightly better result compared to the previous quarter, when, in the same simulation, the capital adequacy dropped by 2.5 percentage points. As of 30.6.2023, the reduced capital adequacy ratio amid such scenario would range from 1.1 percentage points to 4.3 percentage points, whereby it would not drop below 8% in any of the banks.

The banking system resilience is also assessed by **extreme simulation based on a combination of eight[16] hypothetical simulations of worsening of the quality of the**

[16]The eight hypothetical shocks of risk exposure to non-financial entities for each bank are as follows: 1.Complete default of the current non-performing credit exposure; 2 part of the regular loans with a delay that exceeds 31 days receive non-performing status. The part that receives non-performing status is determined in the amount of the ten-year average of the exposure transition rate from risk category B and C regular to risk category B non-performing, D and E with each bank; 3. total regular restructured exposure without current delay in the repayment of liabilities receives a non-performing status; 4. new restructuring of regular credit exposure without a current delay in repayment of liabilities, reduced credit exposure with residual maturity which is due in the next year. The scope of new restructuring shall be based on 2* the ten-year average of the exposure migration rate from A risk category to B and C

credit portfolio to the non-financial sector. Even in case of this extreme simulation, the capital adequacy of the banking system does not come below the prescribed minimum. Upon this simulation, the capital adequacy ratio registered almost minimal changes compared to the preceding quarter, i.e. it reduces by 5.2 percentage points, to 13.7%[17](5.1 percentage points and 13.7%, respectively at the end of 31.3.2023). The shocks would absorb 27.5% of the initial capital adequacy ratio, which is slightly above the level of the previous quarter (27%). The greatest effect on the capital adequacy ratio is that of the assumed new restructuring of the credit risk exposure that the banks would carry out on the regular exposure without a current delay in repayment of liabilities (contribution of 37.5% in the decrease of capital adequacy), followed by complete default in current non-performing exposure (contribution of 19.1%) and worsened quality of the credit exposure with an agreed bullet payment falling due next year (contribution of 17.1%)[18].

Chart 14
Distribution of the new expected credit losses, by shock



Source: the NBRM calculations, based on data submitted by banks

regular, with individually; 5 Part of the loans with granted grace period which expires after a period of one quarter to one year after the reporting date receive a non-performing status. The part that receives a non-performing status is determined in the amount of 2* the ten-year average of the exposure transition rate from A, B and C risk categories regular, to C risk category non-performing, D and E risk categories; 6 Part of the prolonged exposure without a current delay in the repayment of liabilities receives a non-performing status which is determined in the amount of the ten-year average of the exposure transition rate from the risk category A, B and C regular to risk categories C non-performing, D and E; 7. Part of the regular, non-restructured and non-prolonged credit exposure without a delay in the repayment of liabilities and with a residual maturity, which is due in the next year, receives a non-performing status. The part that receives non-performing status is determined in the amount of the sum of the 2*ten-year average of the amount exposure transition from risk category A into risk categories B non-performing, C and D and the 2*ten-year average of the amount exposure transition from risk category A into risk categories B and C regular; and 8. Part of the regular loans with a delay in the repayment of liabilities up to 31 days increase the period of delay longer than 31 days. The part that increases the delay period is determined in the amount of the ten-year average of the transition rate of the exposure from risk category A to B and C regular. The coverage with impairment with each of the eight shocks is the same as before the shock.

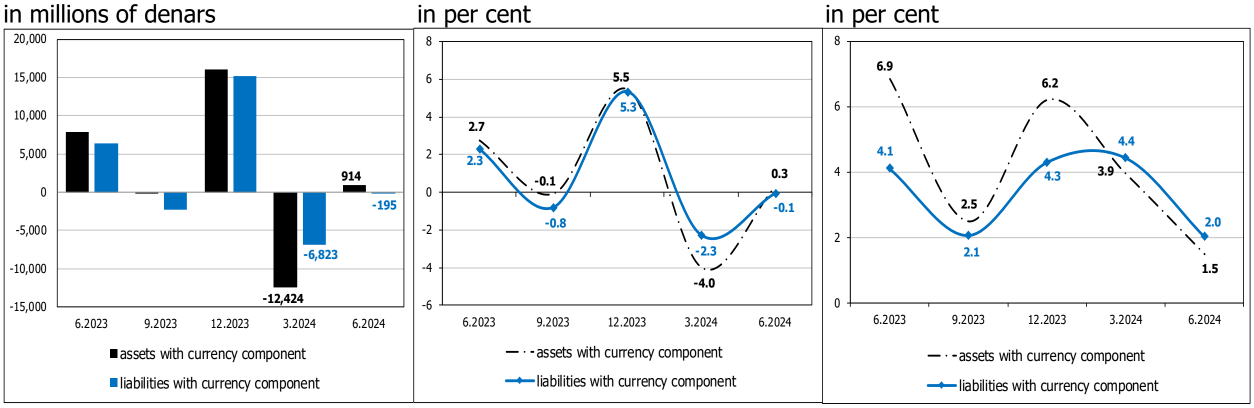
[17]The initial capital adequacy ratio of the banking system is without DBNM AD Skopje, which is excluded from this simulation.

[18]The quality of the new restructuring of the regular credit exposure with no current delay in repayment of liabilities, the reduced credit exposure with an agreed bullet payment which is due in the next year and the quality of the credit exposure with an agreed bullet payment which is due in the next year, slightly improved, while the complete default of the current non-performing exposure registered certain improvement, thus their contribution in the decrease of the capital adequacy ratio compared to the end of 2023 decreased by 0.4 percentage points, 0.9 percentage point and by 0.2 percentage points, respectively.

2. Currency risk

In the second quarter of 2024, the banking system's direct exposure to currency risk remained moderate, despite the widening of the gap between assets and liabilities with currency component and the open currency position. The ratio between the open currency position and own funds equals 7.0%, which is significantly below the prescribed regulatory limit of 30%. The direct exposure of the banking system to currency risk in the second quarter of 2024 remained declining, but it is still high. However, the euro loans prevail within the loans with currency component, so the risk of indirect currency risk materialization is mitigated due to the implementation of the exchange rate targeting strategy.

Chart 15
Quarterly (left and middle) and annual (right) growth of assets and liabilities with currency component*



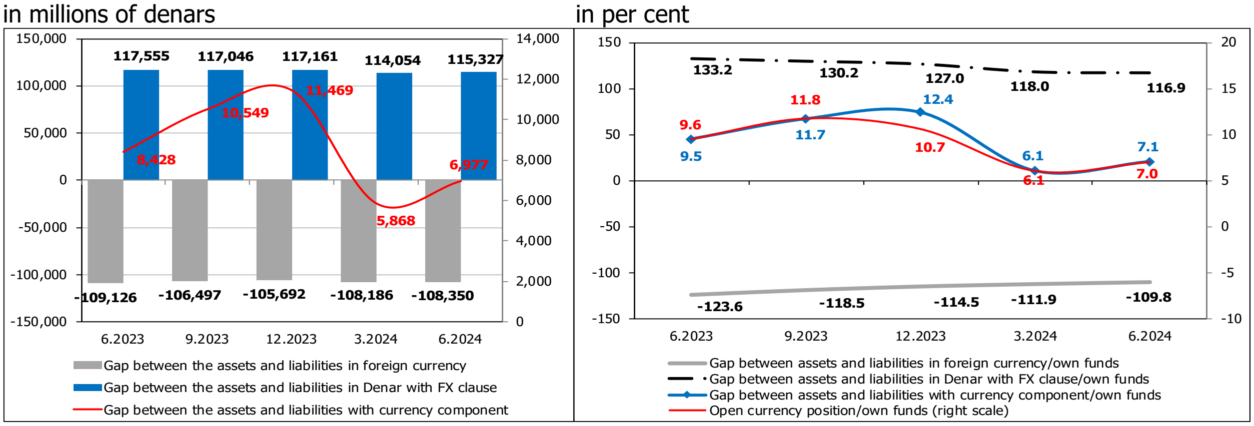
Source: National Bank, i.e. the report on open currency position based on data submitted by banks.
* The assets are on a net basis, reduced by the impairment of claims that are classified in risk categories "C", "D" and "E", in accordance with the regulations on currency risk management. DBNM is not included in the analysis, because pursuant to the legislation, the regulations for the open foreign exchange position do not apply to the DBNM.

The positive gap between assets and liabilities with a currency component in the second quarter of 2024 amounted to Denar 6,977 million, which is an increase of 18.9% compared to the preceding quarter. The widening results from the increase in assets (by Denar 914 million or by 0.3%)[19] and to the decline in liabilities (by Denar 195 million or by 0.1%)[20]. Analyzing the gap structure, the widening was registered in both, the positive gap between assets and liabilities in denars with FX clause and the negative gap between assets and liabilities in foreign currency. The share of the gap in own funds equaled 7.1%, which is an increase of 1.0 percentage points compared to the previous quarter and is by 2.4 percentage points lower than the same quarter in the previous year. The share of open currency position[21] in own funds is 7.0%, which is lower than the ten-year average and is significantly below the regulatory limit of 30%.

Chart 16

Structure of the gap between assets and liabilities with currency component (left) and share of the assets and liabilities with currency component in own funds (right)

in millions of denars / in per cent



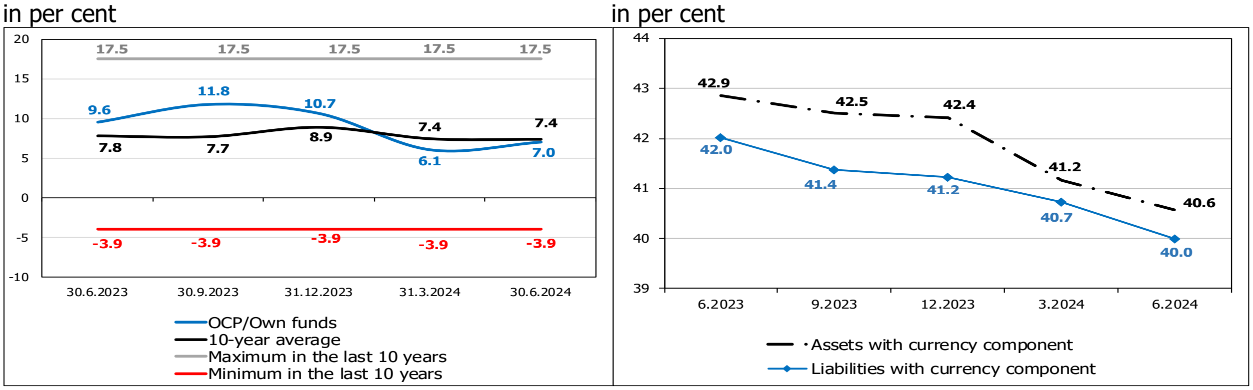
Source: National Bank, based on the data submitted by banks.

The minor changes in assets and liabilities with currency component in conditions of growth in total assets contribute to a further decrease in the banks' balance sheets euroization. In the second quarter of 2024, the share of assets with currency component in total assets decreased by 0.6 percentage points on a quarterly basis, and the share of liabilities with a currency component in total liabilities decreased by 0.7 percentage points.

Chart 17

OCP/own funds ratio (left) and share of the assets and liabilities with currency component* in the total banks' assets (right)

in per cent / in per cent



Source: National Bank, based on the data submitted by banks.

* Within the assets, claims are shown on a net basis, i.e. adjusted for the impairment. The analysis does not include DBNM.

[19] The growth of assets with currency component is mainly due to the increased foreign assets by Denar 2,345 million (of which the funds in foreign currency account in MIPS increased by Denar 1,766 million), as well as to loans in denars with a foreign currency clause by Denar 1,302 million. The growth is partially mitigated by the reduced placements in foreign currency deposits by Denar 1,459 million and lower loans in foreign currency by Denar 1,370 million.

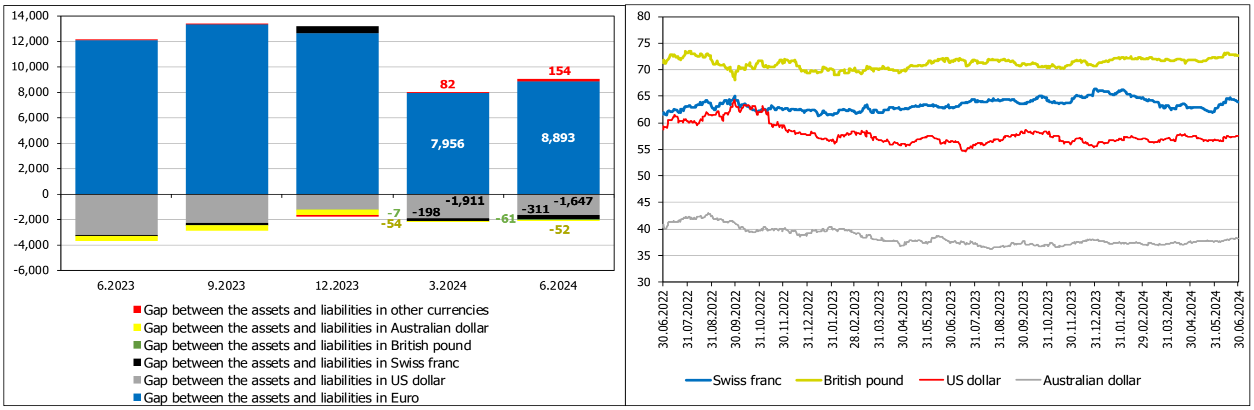
[20] The decline in liabilities with currency component results from the significant decrease in foreign currency assets on payment accounts and other short-term liabilities by Denar 2,496 million, as well as in liabilities based on loans with currency component by Denar 1,008 million, and the decline is mitigated by the increase in liabilities based on foreign currency deposits by Denar 2,494 million.

[21] The calculation of the open currency position, in addition to the gap between the on-balance sheet assets and liabilities with currency component, also includes the gap between the off-balance sheet assets and liabilities with currency component.

Chart 18

Structure of the gap between assets and liabilities with currency component, by currency (left) and movement of the denar against the US dollar, Swiss franc, British pound and Australian dollar (right)

in millions of denars | in denars



Source: National Bank, based on the data submitted by banks.

By currency, the expansion of the long position as of 30 June 2024 is a result of the increased positive gap in assets and liabilities in euros (including with a foreign exchange clause), as well as the reduced negative gap in the US dollar. The positive gap between assets and liabilities in euros and denars with euro clause increased by Denar 937 million or by 11.8% due to the higher growth in assets than liabilities in this currency[22]. The negative gap between assets and liabilities with US dollar component narrowed compared to the previous quarter (by Denar 264 million or by 13.8%), which is due to the larger drop of liabilities than the assets in this currency[23]. With regard to other currencies, the aggregate currency position of the banks remained short[24], but its contribution to the total gap was very small due to the low share of these currencies in the currency structure of assets and liabilities.

The indirect exposure of the banking system to currency risk reduced in the second quarter of 2024, which can be perceived through the lower share of the loans with currency component to non-financial entities. As of 30.6.2024, loans with currency component accounted for 40.4% of total loans to the non-financial sector, which is a decrease by 1.3 percentage points compared to the end of the previous quarter. The decrease mainly stems from the reduced share of corporate loans and, to a lesser extent, the decreased share of household loans. However, given that 99.8% of the loans with currency component are actually

[22] Assets with euro component increased by Denar 2,035 million or by 0.8%, and the increase results from the higher cash in euros by Denar 1,619 million, loans in denars with euro clause by Denar 1,300 million and placements in euro deposits by Denar 1,099 million, while a decrease was recorded in euro loans by Denar 1,494 million and financial assets held to maturity by Denar 1,158 million. Liabilities with euro component increased by Denar 1,098 million or by 0.4%, and this was mainly due to the increased euro deposits by Denar 3,600 million, while a decrease was recorded in euro assets on payment accounts and other short-term liabilities by Denar 2,242 million and liabilities based on loans by Denar 1,003 million.

[23] Assets with dollar component decreased by Denar 1,452 million or by 6.9%, with the decrease mainly being due to the decline in placements in dollar deposits by Denar 2,117 million, while the financial assets held to maturity registered an increase by Denar 533 million. The liabilities with dollar component declined by Denar 1,716 million or by 7.4%, as a result of the lower dollar deposits by Denar 1,144 million as well as dollar assets on payment accounts and other short-term liabilities by Denar 609 million.

[24] The negative gap with the Swiss franc has widened and amounts to Denar 311 million, regarding the British pound it has significantly widened (by Denar 54 million) and amounted to Denar 61 million, while with the Australian dollar it has minimally narrowed and amounted to Denar 52 million. The cumulative gap in other unspecified currencies is positive and amounts to Denar 154 million, which points out to widening compared to the previous quarter.

loans in euros or in denars with euro clause, the implementation of the fixed exchange rate policy mitigates the effect of the possible realization of indirect currency risk.

Table 3
Currency structure of assets and liabilities with currency component
in per cent

Currency	31.3.2024		30.6.2024	
	Assets	Liabilities	Assets	Liabilities
Euro	90.0	89.0	90.4	89.5
US dollar	7.1	7.9	6.6	7.3
Swiss franc	1.3	1.4	1.3	1.4
Australian dollar	0.5	0.6	0.5	0.6
British pound	0.5	0.5	0.5	0.5
Other	0.7	0.7	0.8	0.7
Total	**100.0**	**100.0**	**100.0**	**100.0**

Source: National Bank, based on the data submitted by banks.

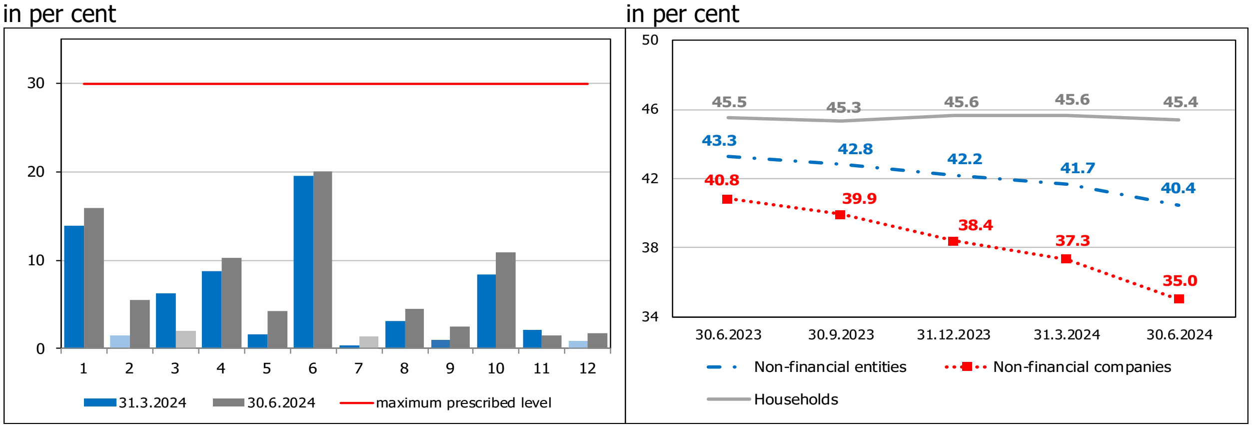
Table 4
Distribution of banks by share of open currency position, by currency and the aggregate currency position in own funds

Items	Number of banks												
	Open currency position by currency/own funds												Aggregate currency position/own funds
	Euro		US dollar		Swiss franc		British pound		Australian dollar		Other		
	Long	Short	Long	Short	Long	Short	Long	Short	Long	Short	Long	Short	
under 5%	6	2	11	1	7	4	9	2	6	2	12		7
from 5% to 10%	1												1
from 10% to 20%	3												3
from 20% to 30%													1
over 30%													

Source: National Bank, based on the data submitted by banks.

The aggregate currency position relative to own funds on 30.6.2024 is long in ten banks and is below the regulatory limit of 30%. The interval of the ratios by bank ranges from 1.5% to 20.0%, which is a slight narrowing compared to the previous quarter.

Chart 19
Aggregate currency position to own funds ratio, by bank* (left) and loans with currency component to total loans ratio (right)
in per cent
in per cent



Source: National Bank, based on the data submitted by banks.
* Columns with lighter shades refer to the banks that have a short foreign currency position, but are shown in absolute value. The analysis does not include DBNM.

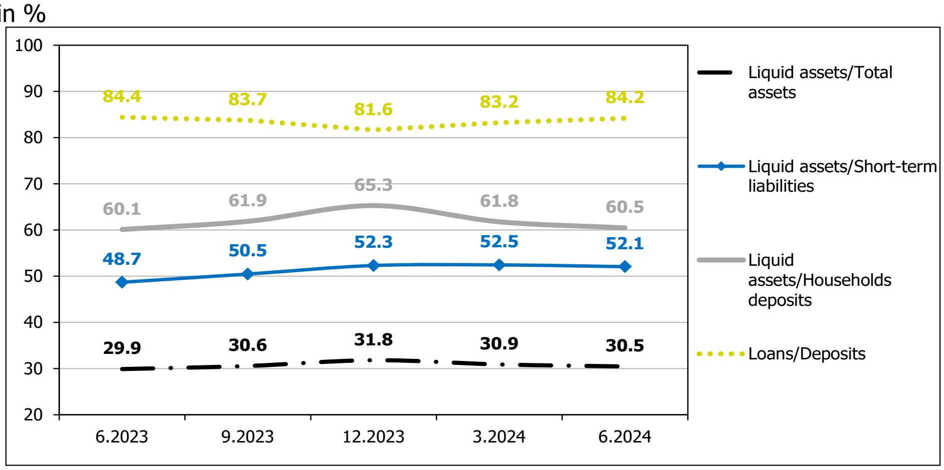
3. Liquidity risk

In the second quarter of 2024, the liquidity position of the banking system remained stable, ensuring satisfactory capacity of banks to timely and regularly service liabilities. In the second quarter of 2024, amid growth in deposits, liquid assets registered moderate growth, and in their structure, the largest growth was recorded by cash and bank investments in domestic government securities. The indicators through which the liquidity of the banking system is monitored and assessed deteriorated moderately, but remained at their usual, satisfactory levels. The Liquidity Coverage Ratio of the banking system is significantly higher than the regulatory minimum, which confirms the sufficient amount of liquid assets available to banks. The gap between the agreed cash inflows and outflows of up to one year are negative, however banks expect a relatively high level of deposit stability, as the main source of their finance. The stress test results indicate satisfactory resilience of the banking system to the assumed extreme, individual and combined liquidity outflows.

3.1. Liquidity indicators

In the second quarter of 2024, in conditions of moderate decrease in liquid assets of the Macedonian banking system, the liquidity indicators registered slight worsening, without significant deviations from the usual satisfactory level. Therefore, liquid assets make up 30.5% of total bank's assets, providing solid coverage of short-term liabilities and household deposits with liquid assets (of 52.1% and 60.5%, respectively[25]).

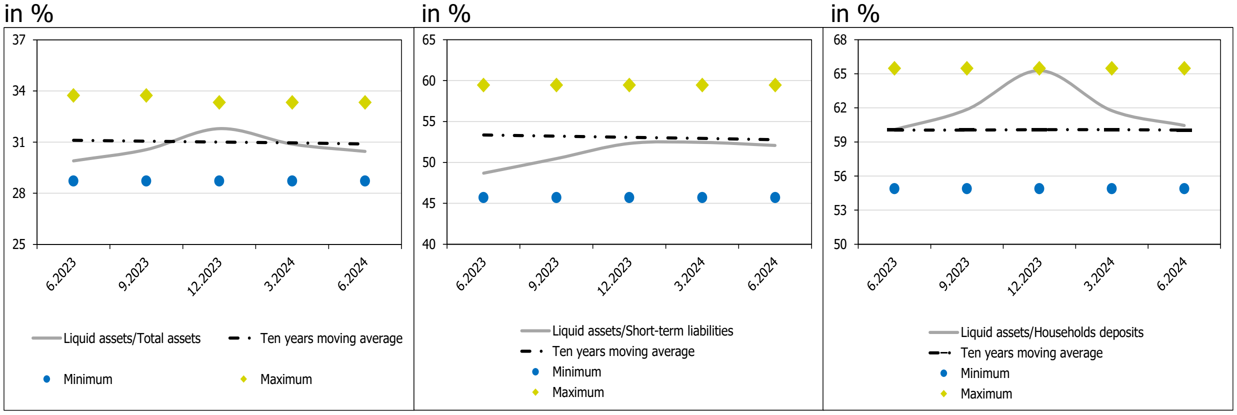
Chart 20
Banking System Liquidity indicators,
in %



Source: National Bank, based on the data submitted by banks.
Note: The calculation of liquidity ratios of the banking system does not include resident interbank assets and liabilities.

[25] Analyzed by bank, as of 30.6 2024, the share of liquid in total assets ranges between 21.4% and 48.8%, with a median of 27.9% (June 2023: between 20.5% and 49.1%). The coverage of short-term liabilities with liquid assets ranges between 37.2% and 88.6%, with a median of 51% (June 2023 between 34.5% and 79.9%), while the coverage of household deposits with liquid assets between 40.4% and 98.6%, with a median of 70% (June 2023 between 30.5% and 112.5%). The Development Bank of North Macedonia AD Skopje is excluded from this analysis.

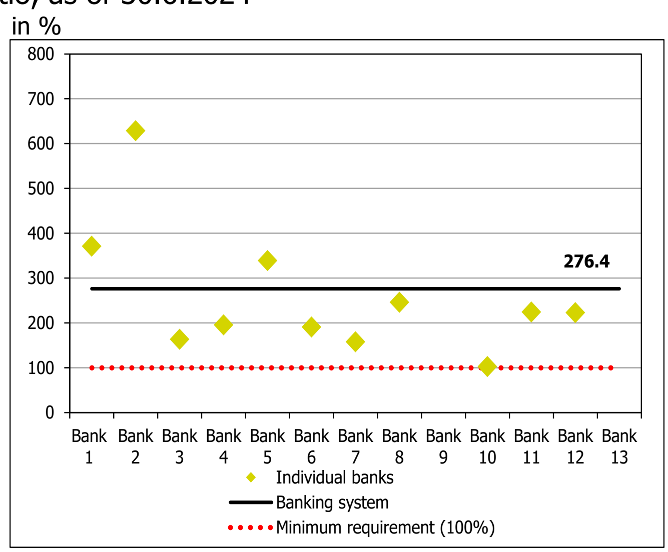
Chart 21
Liquid assets / total assets (left), liquid assets / current liabilities (middle) and liquid assets / household deposits (right)



Source: National Bank, based on the data submitted by banks.

The Liquidity Coverage Ratio of the banking system equals 276.4%, which is significantly higher than the regulatory minimum (100%[26]), thus confirming that there is sufficient liquidity available to the Macedonian banking system. Bank-by-bank analysis shows that the liquidity coverage ratios range from 103.1% to 1077.4% (with a median of 224.4%), which also indicates acceptable liquidity risk frames to which banks are exposed and their stable liquidity management.

Chart 22
Liquidity coverage ratio, as of 30.6.2024

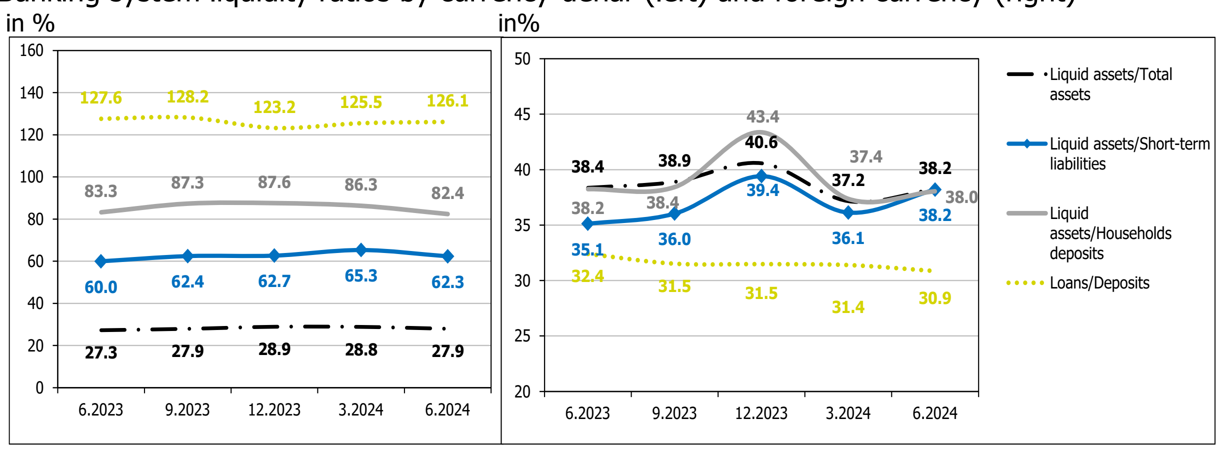


Source: National Bank, based on the data submitted by banks.

[26] In addition to cumulative basis, banks are required to determine and monitor a liquidity coverage ratio for each currency that is significant to the bank (each currency whose share of the bank's total balance sheet liabilities is at least 5%). Thus, the minimum level of liquidity coverage ratios by currency is not prescribed. As of 30 June 2024, the liquidity coverage ratios for the two significant currencies, euros and denars, were 100.3% and 314.1%, respectively.

According to the currency features of liquid assets and liabilities, in the second quarter of 2024, the foreign currency liquidity indicators improved, as opposed to the denar liquidity indicators,[27] which registered a decrease. Such movements in liquidity indicators correspond to the more significant quarterly increase in foreign currency (by 3.2%), as opposed to the minimal decline in denar liquid assets (by -0.7%). However, indicators for denar liquidity continue to be on a high level compared to the indicators for foreign currency liquidity, which is due to the higher structural share of liquid assets in denars in the total liquid assets of the banks. The lower foreign currency liquidity indicator, compared to denar liquidity, emphasizes the adequate volume of the foreign reserves and the presence of the National Bank in the foreign exchange market (in order to maintain a stable exchange rate) for covering the demand for foreign currency cash[28].

Chart 23
Banking system liquidity ratios by currency-denar (left) and foreign currency (right)



Source: National Bank, based on the data submitted by banks.

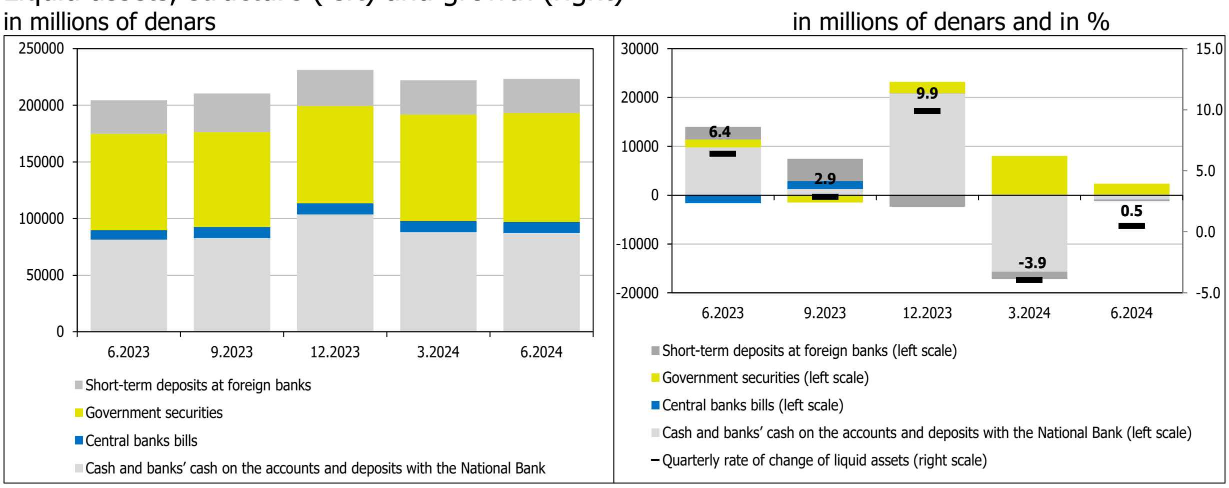
3.2. Dynamics and composition of liquid assets

At the end of the second quarter of 2024, the liquid assets[29] of the banking system amounted to Denar 223,213 million. Amid quarterly growth of deposit base (by 1.9%, after the seasonal decrease in the first quarter), the liquid assets of the banking system increased by 0.5%, i.e. Denar 1,097 million. Analyzed by individual financial instruments that make up liquid assets, the increase was most pronounced in assets (cash and assets on the

[27] Claims and liabilities with FX clause are considered as denar claims and liabilities, since their cash flow is in denars.
[28] The European Central Bank (ECB) granted the National Bank access to foreign currency liquidity in euros, with appropriate collateral. This access has been granted in the form of repo line, since August 2020, totaling Denar 400 million, and the deadline for application of the repo line was extended several times (the latest, as of 31 January 2025). The repo line assets were not used in the past period, despite several subsequent crisis. For more details please visit: https://www.ecb.europa.eu/mopo/implement/liquidity_lines/html/index.en.html.
[29] The liquid assets encompass: 1) assets and claims on the National Bank, which include cash, assets on the accounts of banks with the National Bank, deposit facility with the National Bank and CB bills; 2) short-term deposits with foreign banks, including the assets of the banks on their correspondent accounts abroad and 3) the carrying amount of the investments in securities issued by central governments, i.e. government securities issued by the Republic of North Macedonia and issued by foreign countries. For the purposes of analyzing the liquidity, assets and liabilities in denars with foreign exchange clause are considered denar assets and liabilities.

accounts with the National Bank), which increased by Denar 6,654 million, or by 21.6%)[30]. They are followed by bank placements in government securities, namely government bonds by Denar 2,489 million, or 3.8% and treasury bills placemenets by Denar 608 million, or 2.7%. In contrast, the placements in foreign government securities decreased by Denar 746 million or by 13.0%. The bank placements in overnight deposit facilities with the National Bank decreased by Denar 7,720 million, or 47.1% (as opposed to the increase in bank placements in deposit facilities up to seven days with the National Bank by Denar 150 million, or 0.4%)[31]. Decrease was also registered in bank assets on the correspondent accounts and short-term deposits placed in foreign banks (of Denar 331 million or 1.1%)[32], as well as in bank assets on corresponding and short-term deposits placed in foreign banks (of Denar 8 million or 0.1%)[33].

Chart 24
Liquid assets, structure (left) and growth (right)



Source: National Bank, based on the data submitted by banks.

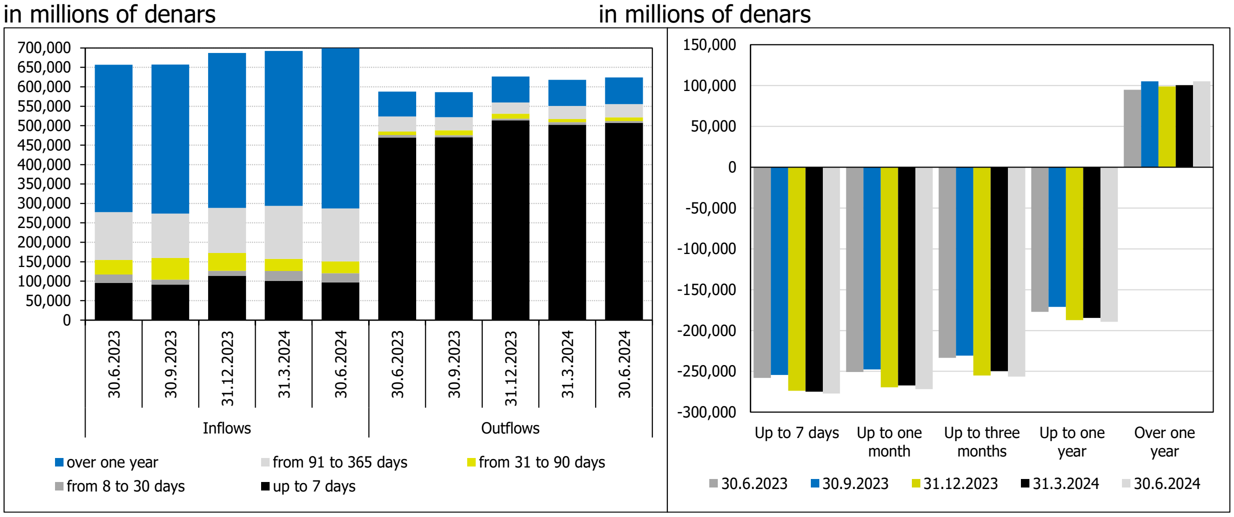
3.3. Maturity structure of the contracted inflows and outflows of bank's assets and liabilities

As of 30.6.2024, the agreed inflows of banks distributed in the period over one year and the agreed outflows of banks distributed in the period up to seven days prevail in the maturity structure of banks' inflows and outflows. The largest difference (gap) between the banks' inflows and outflows is registered in the time periods up to seven days

[30] Denar cash increased by Denar 4,311 million (mostly funds on the denar account with the National Bank, by Denar 3,428 million), while foreign currency cash recorded an increase of Denar 2,343 million (mostly funds on foreign currency account in MIPS, by Denar 1,766 million).
[31] In the second quarter of 2024, the National Bank estimated that the current monetary policy setup is appropriate to the economic conditions and made no changes to its setup. Interest rates on overnight and seven-day deposit facilities remained unchanged, i.e stood at 4.20% and 4.25%, respectively.
[32] Increase in banks' assets on accounts with foreign banks of Denar 662 million or 9.5%, amid decline of short-term time deposits placed in foreign banks by Denar 993 million, or 4.2%.
[33] During the second quarter of 2024, the National Bank made no changes in the policy rate, which was kept at 6.3%, appropriate to the conditions in the economy. The offered amount of CB bills remained at Denar 10,000 million. The current level of interest together with the changes in reserve requirement and macro prudential measures taken, is expected to contribute towards further inflation slowdown and exchange rate stability maintenance. Also, the latest changes in reserve requirement which apply from June 2024, will contribute to further support to the current monetary policy setup.

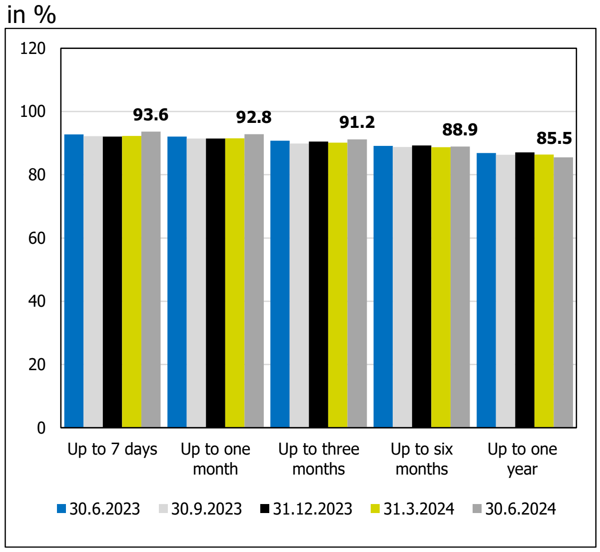
(negative gap) and over one year (positive gap), which results from the inclusion of liabilities on demand and without a maturity in the maturity segment up to seven days, and due to claims based on loans and advances included in maturity segments over one year (long-term loans at the level of the banking system cover more than 80% of total loans to non-financial entities). In terms of the banking system assets, the cumulative gap up to seven days and the cumulative gap up to one year amounted to 36.9% and 25.2%, respectively).

Chart 25
Maturity structure of inflows and outflows of balance sheets assets and liabilities (left) and cumulative gap between agreed inflows and outflows, including the cumulative amount of unencumbered assets (right)



Source: National Bank, based on the data submitted by banks.

Chart 26
Expected deposit stability to the remaining period to maturity,



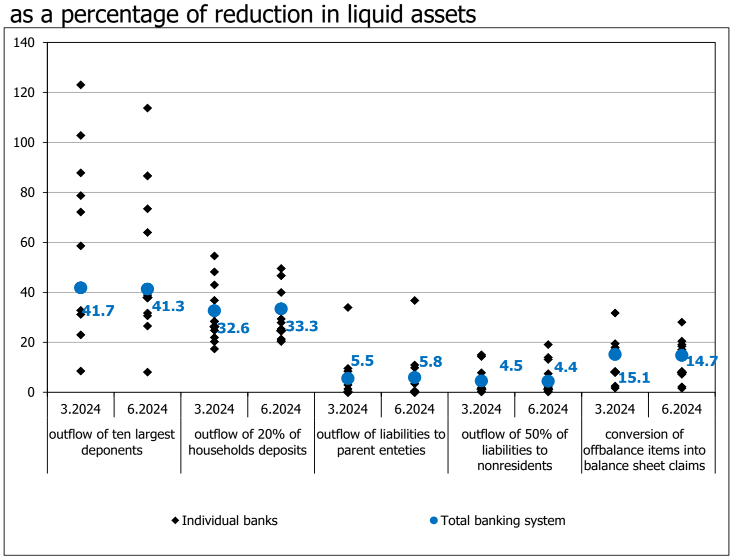
Source: National Bank, based on the data submitted by banks.

The banks expect maintenance of the deposit stability as the main source of funding for their activities. In accordance with the depositors' behavior, banks assessed that the largest part of the agreed cash inflows and outflows (or 85.5%) based on deposits will not be realized by depositors in the next twelve months.

3.4. Stress-simulations for liquidity shocks

As of 30.6.2024, the results of the conducted stress simulations for liquidity shocks show solid capacity of the banking system, with sufficient liquid assets to respond appropriately to the simulated cash outflows. The resilience of the Macedonian banking system to liquidity shocks is confirmed by the results of all individual simulations of liquidity shocks, with the liquid assets being almost fully used (or 99.5% on 30.6.2024) only in case of significantly extreme simulation of liquidity shock, which covers combined outflows[34] of funds from banks on several bases. Having in mind that the assumption is extreme, for the purposes of this simulation,

Chart 27
Contribution of individual combined shocks to the decline in the liquid assets in the simulation of a combined liquidity shock
as a percentage of reduction in liquid assets



Source: National Bank, based on the data submitted by banks.

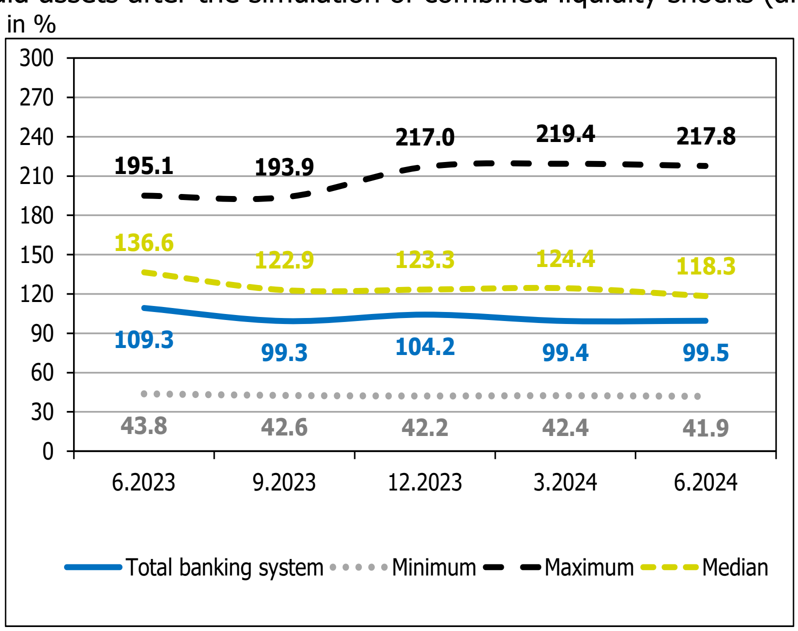
The usual coverage of liquid assets is extended with other financial instruments[35] owned by banks, for which it is estimated that banks will quickly and easily collect or turn into cash amid lack of liquid assets.

[34] The simulation assumes outflow of: deposits of the ten largest depositors, 20% of household deposits, liabilities to parent entities (liabilities on subordinated instruments and hybrid capital instruments are excluded from the simulation as, according to the regulations for calculating capital adequacy, their repayment is regulated), 50% of the liabilities to non-residents (excluding liabilities to non-resident parent entities of banks which are already covered by one of the previous simulations) and conversion of certain off-balance sheet liabilities of the banks (uncovered letters of credit, irrevocable credit lines and unused limits based on credit cards and approved overdrafts on transaction accounts) into balance sheet claims. The simulations of liquidity shocks exclude the Development Bank of North Macedonia AD Skopje.

[35] Financial instruments that comprise liquid assets, also include the following financial instruments: assets in the guarantee fund in KIBS, long-term deposits in foreign banks, money market instruments issued by foreign non-government issuers, loans with

At individual simulations of liquidity shocks, the high level of liquidity which Macedonian banks have at their disposal provides settlement also of all assumed, individual, extreme liquidity outflows. The sharpest decline in liquid assets occurs amid outflow simulation of deposits of the ten largest depositors, and the importance of this simulation to individual banks is different, given the differences in the degree of concentration of deposits. On the contrary, simulated materialization of reputation risk and loss of confidence of the population in the banks represented by an outflow of 20% of household deposits shows a greater similarity in the results for individual banks, thereby confirming the importance of public confidence in the banking system. Amid assumed migration of certain off-balance sheet liabilities of banks into on-balance sheet liabilities[36], the banks would spend around 15% of their liquid assets. The small share of liabilities to non-residents, as well as to parent entities in the structure of the total sources of funding for banks, causes moderate impact of the shocks associated with them on the overall result of this simulation.

Chart 28
Reduction in liquid assets after the simulation of combined liquidity shocks (after all shocks)



Source: National Bank, based on the data submitted by banks.

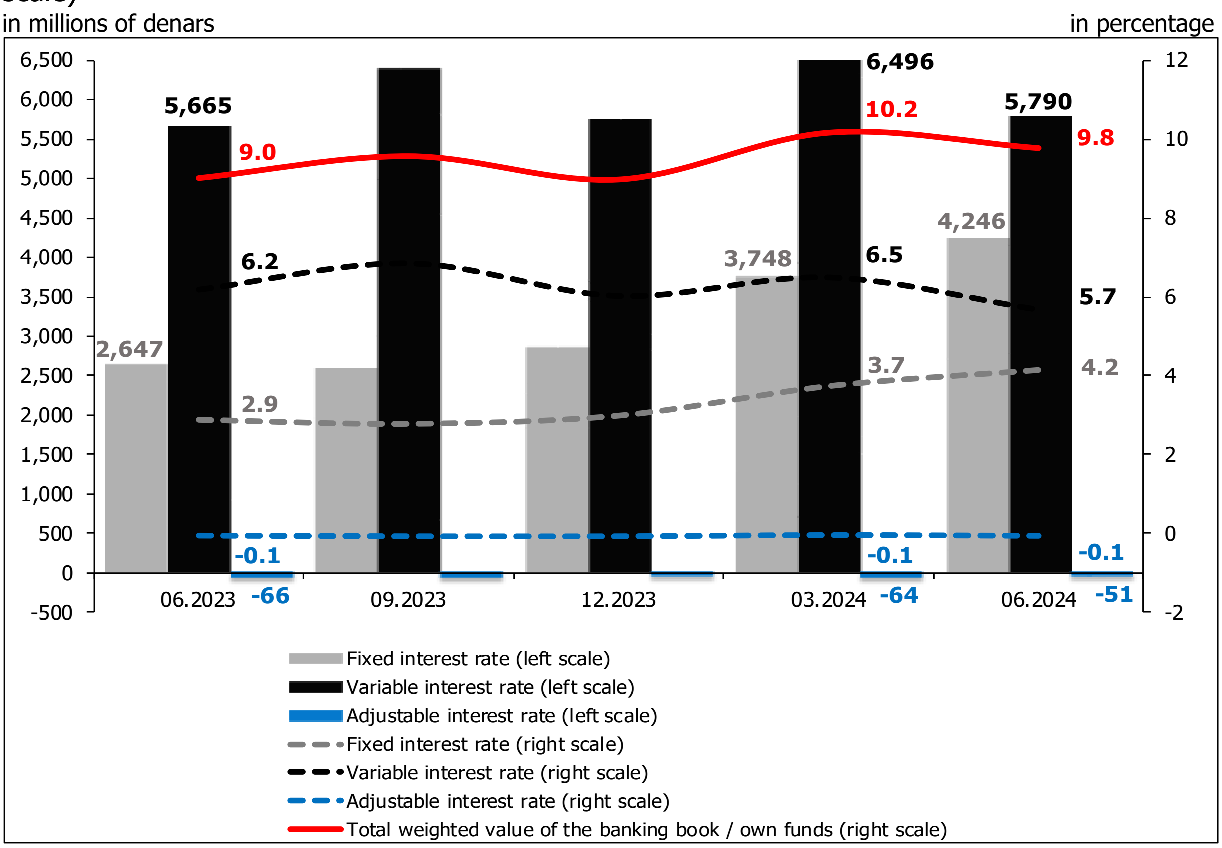
contractual residual maturity of up to 30 days and the effect of reducing the reserve requirement for foreign currency liabilities of banks, which is allocated in foreign currency due to the simulated outflow of households' foreign currency deposits.

[36] Outflow is assumed as a result of the migration of some off-balance sheet liabilities of the banks (uncovered letters of credit, irrevocable credit lines and unused limits based on credit cards and approved overdrafts on transaction accounts) into on-balance sheet claims.

4. Interest rate risk

In the second quarter of 2024 the exposure of the banking system to the interest rate risk[37] reduced, which is evident through the reduced weighted value of the interest rate risk in the banking book[38]. The exposure to indirect interest risk, measured by the share of loans with adjustable or variable interest rate in total loans remains high, although it declined slightly.

Chart 29
Total weighted value of the banking book*, amount (left scale) and to own funds (right scale)

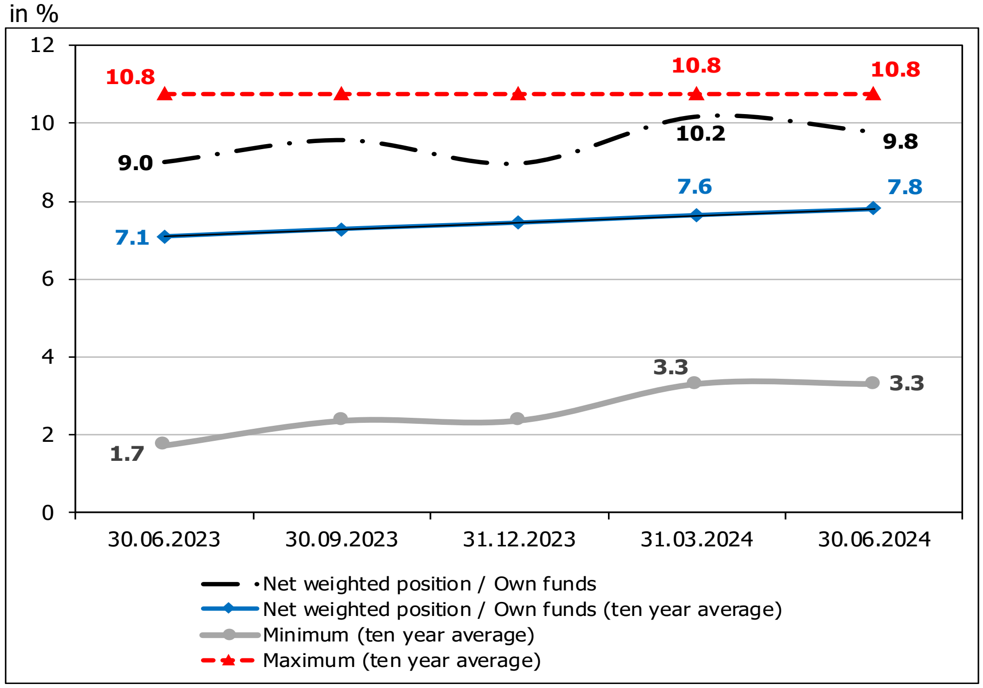


Source: National Bank, based on the data submitted by banks.
*The total weighted value of the banking book denotes the potential loss of the economic value of this portfolio, amid assumed unfavorable interest shock of ±2 percentage points.

[37] In accordance with the regulation, the banks' exposures to interest rate risk which arises from the banking activities, is monitored through the net amount of the interest sensitive assets and liabilities (mainly loans and deposits), to which unfavorable interest shock for growth of interest rates by 2 percentage points is being used, distributed in time zones according to the period in which the interest rate change will occur. At the same time, assets and liabilities with fixed interest rates are distributed according to the maturity period, with variable interest rates according to the interest rate reassessment period and with adjustable interest rates according to the probability and frequency of the interest rate change. Loans with annuity payment which are with combined interest rates (fixed interest rate for a certain period, followed by variable interest rate), are distributed in time zones according to the actual maturity of annuities in the period of the fixed interest rate (for the amount which is actually due in that period), while the rest of the amount to which the variable interest rate will be applied, is presented in the appropriate future time zones according to the period of the variable interest rate reassessment. This net amount of the interest sensitive assets and liabilities is called weighted value of the banking book.
[38] This decrease mostly stems from the shift of a significant part of loans with variable interest rate from time zone with longer to time zone with shorter period until the next interest rate reassessment.

The total weighted value of the banking book[39] **registered a quarterly decrease of Denar 195 million or 1.9%, which amid increase of own funds (by 2.1%) conditioned moderate decrease in the regulatory measure for direct interest rate risk exposure of the basic banking activities (net weighted value of the banking book to own funds ratio) by 0.4 percentage points, to 9.8%.** Analyzing by bank, the ratio ranges from 1.6% to 14%, and is below the level of the prescribed threshold of 20%[40].

Chart 30
Indicator of the interest rate risk exposure of the banking activities (net weighted position / own funds)

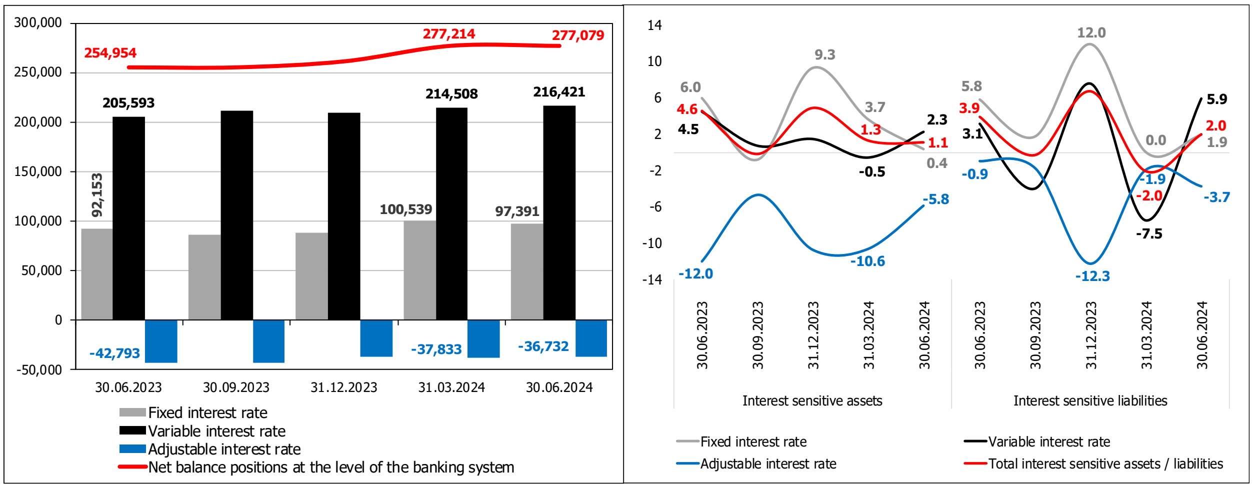


Source: National Bank, based on the data submitted by banks.

Analyzed by the interest rate type, the quarterly decrease in the weighted value (net) of the banking book arize fully from the banking activities with variable interest rate. Thus, the weighted value of the portfolio with variable interest rate decreased by Denar 706 million or 10.9%, mainly due to the shift of most of the placements in loans with variable interest rates (in the amount of Denar 152,028 million) from the maturity until the next interest rate reassessment up to three to six months to maturity up to one month. In contrast, the weighted value of the fixed interest rate portfolio increased by Denar 498 million, or 13.3%, mostly due to the increase in the positive assets and liabilities gap with this type of interest rate with three-to-four year maturity, where investments in securities increased, while the non-deposit liabilities (based on subordinated, hybrid capital instruments and loans) decreased. A slight widening (of Denar 13 million) was registered also in the weighted value of the portfolio with adjustable interest rate.

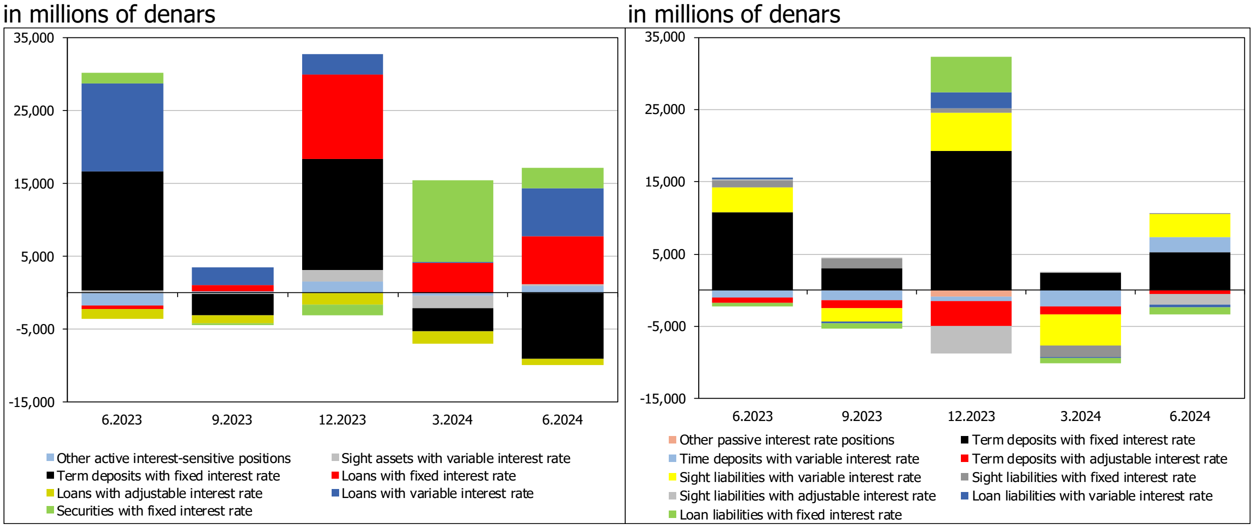
[39]For the explanation of the term weighted value of banking book, see the firs footnote in this part of the Report
[40] According to the regulation, when total weighted value of the banking book to own funds ratio exceeds 20%, the bank is required to propose measures to reduce this ratio, and the National Bank may also require allocation of appropriate amount of capital for covering the interest rate risk in the banking book.

Chart 31
Interest-sensitive assets and liabilities by type of interest rate, gap (left) and quarterly growth (right)
in millions of denars in %



Source: National Bank, based on the data submitted by banks.

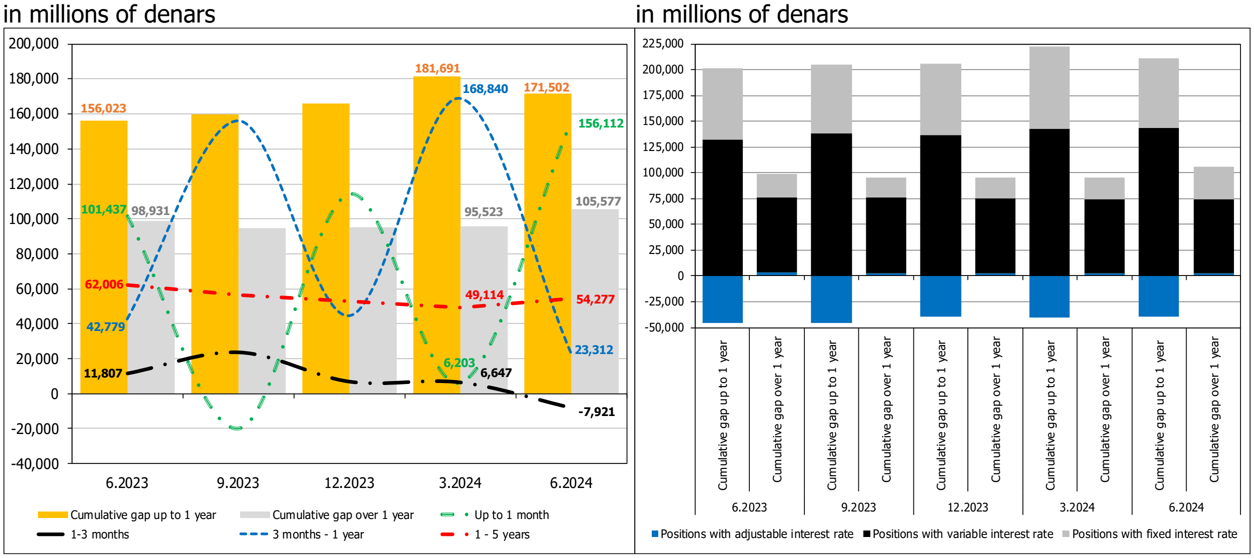
Chart 32
Quarterly changes of the interest sensitive assets (left) and liabilities (right), by type of instrument and type of interest rate
in millions of denars in millions of denars



Source: National Bank, based on the data submitted by banks.

The unweighted gap between interest sensitive assets and liabilities (**i.e. net amount of interest sensitive assets and liabilities not implementing the prescribed interest rate shock of 2 percentage points) registered a minor quarterly decline of 0.05%, or Denar 134 million.** At the same time, the positive gap between fixed interest rate positions narrowed by 3.1% or Denar 3,148 million (mostly due to the decrease in placements in deposits with the National Bank, with a simultaneous increase in liabilities based on time deposits with this type of interest rates), and the positive gap between variable interest rate positions widened by Denar 1,913 million or 0.9% (mostly due to the stronger growth in placements in loans with variable interest rates compared to the increase in liabilities based on deposits with this type of interest rates). The negative gap between assets and liabilities with adjustable interest rate narrowed by Denar 1,100 million or by 2.9%, resulting from the stronger decrease in liabilities based on deposits with adjustable interest rates compared to the further decrease in loans with this type of interest rates. Analyzed by the period until the next reassessment of the level of interest rates, in addition to the aforementioned migration of the majority of loans with a variable interest rate with maturity of three-to six month maturity to the maturity of up to one month, which caused corresponding changes in these maturities. A more significant narrowing of the gap is also observed in the maturity between one and three months (by Denar 14,569 million), which also stems from the movements in loans with a variable interest rate.

Chart 33
Asset-liability gap, by period until next interest rate revaluation (left) and gap structure by interest rate type (right)
in millions of denars | in millions of denars

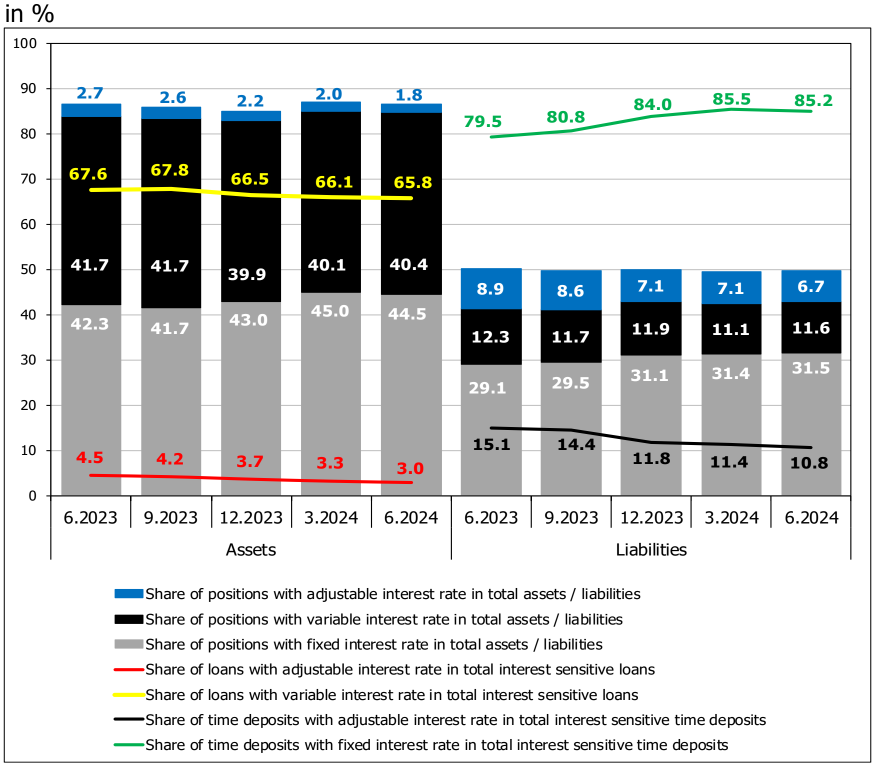


Source: National Bank, based on the data submitted by banks.

The indirect exposure to interest rate risk, which arises from the presence of loans with adjustable and variable interest rates, remains significant. As of 30.6.2024, the cumulative share of these loans in total loans equaled 68.8%, which is a decline of 0.6 percentage points compared to 31.3.2024. Thus, 65.8% of total loans are with variable interest rate, while 3% with adjustable interest rate. It should be borne in mind that in accordance with regulations, in the interest rate risk reports, the amount of all positions (including loans) that are envisaged to be regulated by a different type of interest rate in different time periods to maturity, is distributed depending on the type of interest rate that will apply in the corresponding time period. Thus, as of 30.6.2024, around 17.5% of total loans, for the purposes of these reports, are shown as loans with variable interest rate, in the respective future time bucket, which is envisaged to be regulated by variable interest rate, although they are currently regulated by fixed interest rate[41].

[41] In other words, as of 30.6.2024, about 48.3% of the loans, are with changeable (variable and adjustable) interest rate, while the remaining 17.5% (up to the presented 65.8% as of 30.6.2024), are currently with fixed interest rate, which during the life expectancy of the loans (usually after several years) will be replaced by a variable or adjustable interest rate.

Chart 34
Structure of assets and liabilities, by type of interest rate



Source: National Bank, based on the data submitted by banks.

For more details about the structure of interest-sensitive items of the banks see Annexes to this Report.

5. Insolvency risk

The solvency and capitalization ratios of the banking system remained at a high and stable level in the second quarter of 2024. The capital adequacy ratio increased by 0.1 percentage point, to a level of 19%, which is the maximum value registered in the last seventeen years. This growth reflects the more pronounced quarterly growth of own funds compared to the risk weighted assets growth. The growth of own finds in the second quarter is mostly due to profit distribution of banks from the previous year, while the increase in risk weighted assets results from the increased credit risk weighted assets. Analyzed by purpose, in the second quarter of 2024, most of the growth in own funds remained free, while a portion was used to meet certain capital requirements, mostly to cover credit risk and the capital allowance determined by the supervisory assessment. Thus, as of 30.6.2024, around 11.4% of total own funds remained free and together with the capital buffers account for 37% of total own funds of the banking system and may be used for dealing with challenges of different nature and intensity. The results of the conducted stress testing of the banking system resilience to the simulated shock with extreme assumptions are similar, showing increased resilience of the banking system compared to the previous

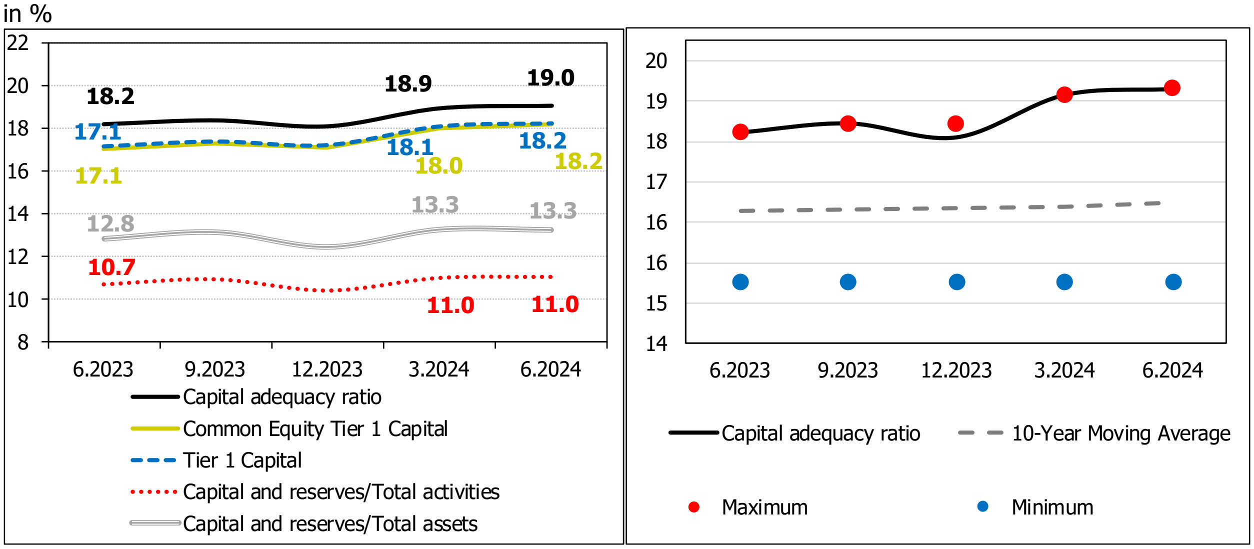
quarter. This is particularly important given the environment which still remains uncertain. In such circumstances, the solvency of the banking system, which is at a satisfactory level, significantly mitigates the negative effects of any potential risk materialization.

The increasing capitalization is also supported by the macroprudential measures of the National Bank, which contribute to strengthening the resilience of the banking system, as one of the indirect objectives of macroprudential policy. By building capital buffers and strengthening the solvency of the banking system, banks' readiness to deal with risks and absorb possible losses is improved, without jeopardizing their stability and ability to lend to the private sector. Macroprudential measures aimed at individual bank borrowers also contribute to the resilience of banking service users, by maintaining a prudent level of their indebtedness and adequate capacity to repay liabilities, which also contributes to achieving the goal of a macroprudential policy for a resilient banking system. The intermediate objectives of this policy enable the attainments of its primary objective - financial stability maintenance.

5.1 Solvency and capitalization ratios of the banking system

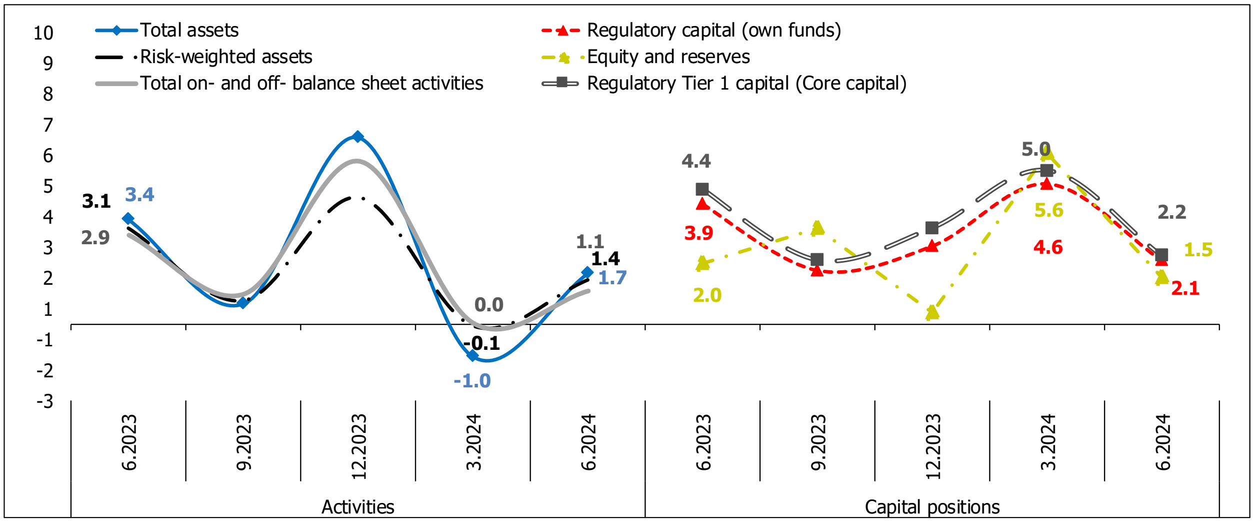
The solvency and capitalization ratios of the banking system remained at a high and stable level in the second quarter of 2024. Quarterly, the capital adequacy ratio increased by 0.1 percentage point, to 19%, which is the maximum value registered in the past seventeen years.

Chart 35
Indicators of solvency and capitalization (left) and capital adequacy ratio movement (right)
in %



Source: National Bank, based on the data submitted by banks.

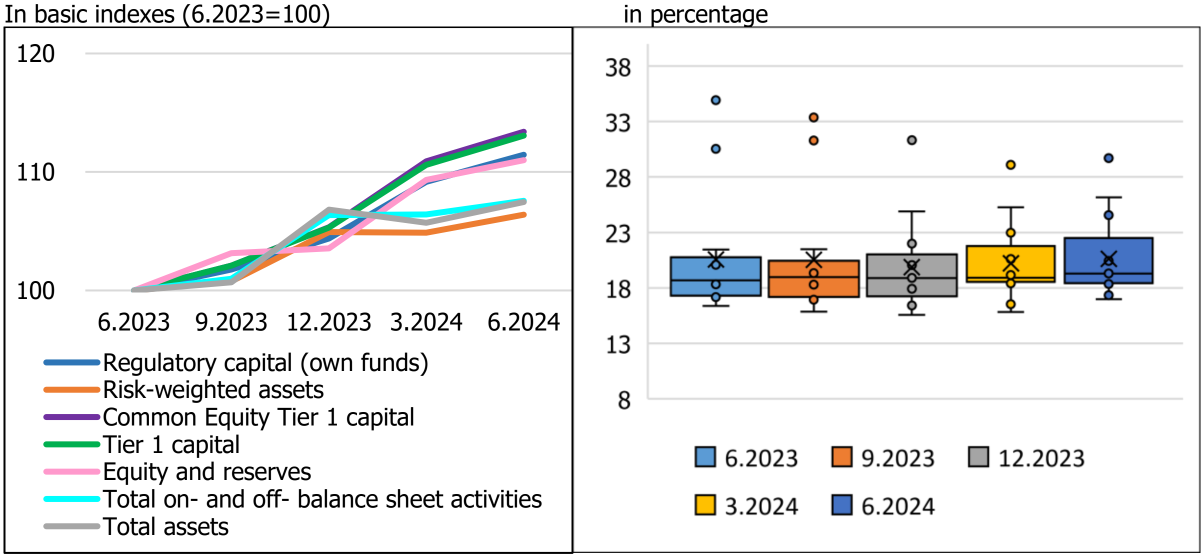
Chart 36
Quarterly rate of change of solvency ratio components
in %



Source: National Bank, based on the data submitted by banks.

The rates of Common Equity Tier 1 capital and Tier 1 Capital equalised at the level of 18.2%. The shares of capital and reserves in total assets and in total on-balance sheet and off-balance sheet activities of banks remained at the same level as in the previous quarter. The capital positions of banks registered mainly higher growth rates compared to the growth rates of their activities.

Chart 37
Trends in nominator and denominator of solvency ratios (left) and dispersion measures of the banking system adequacy ratio (right)
In basic indexes (6.2023=100) in percentage



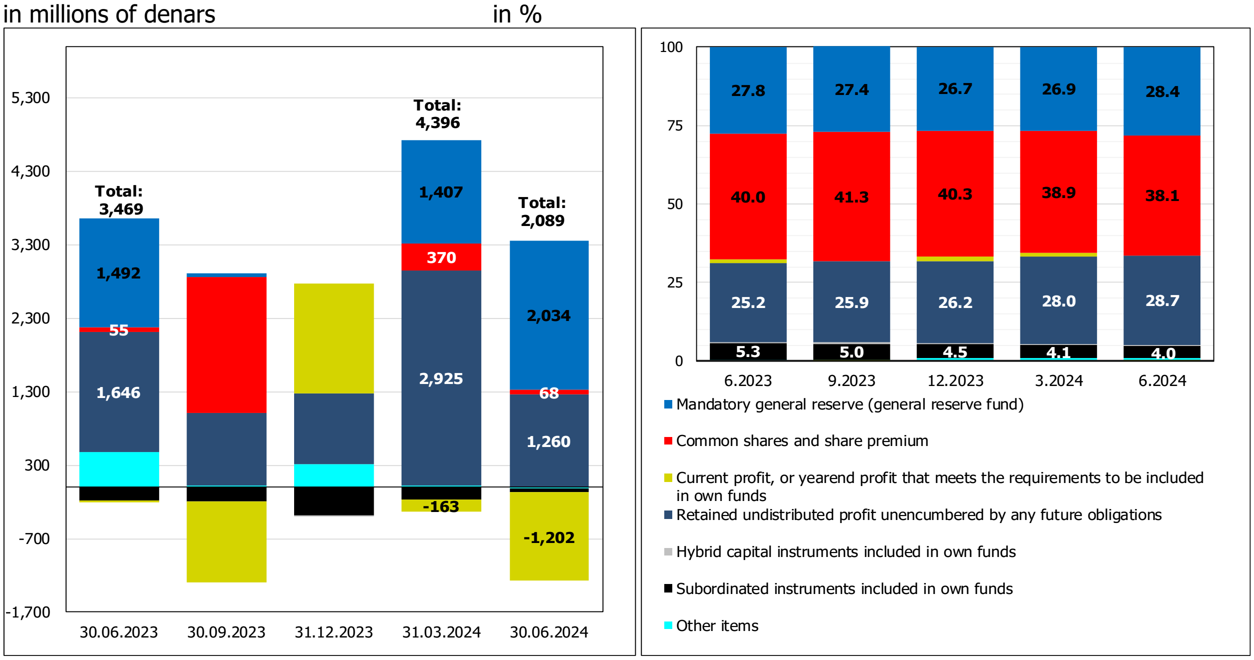
Source: National Bank, based on the data submitted by banks.
Note on the right chart: The average value is marked with X, while the median value is marked with the middle horizontal line within the column. The column explains the interquartile difference, i.e. indicates the capital adequacy ratios in half of the banks in the system. The dots show capital adequacy ratios by bank.

The breakdown of the banking system solvency ratios points to the conclusion that the upward movement of solvency indicators mainly stems from the pronounced growth of the best layer of own funds, the Common Equity Tier 1 capital. The last two quarters registered more pronounced upward trend in capital positions especially in the Common Equity Tier 1 capital, the growth of which almost entirely levels up with the growth of the Tier 1 capital. On the other hand, the growth trend of assets, total on-balance and off-balance sheet activities as well as risk-weighted assets is milder, which contributes to strengthening of the banking system solvency. **The dispersion of adequacy ratio in the banking system indicates an upward trend.** The average and median values of the adequacy ratio are higher compared to the previous quarter. The capital adequacy ratio as of 30.6.2023, is higher than 17% for all banks, which is the highest level in the last five quarters.

5.2 Quality of own funds of the banking system

The banking system has high-quality capital positions, which enable satisfactory resilience to possible stress situations. At the end of the second quarter of 2024, the most quality layer of banking system's own funds (Common Equity Tier 1 capital) dominated the total own funds with a share of 95.5% (95.3% as of 31.3.2024), while the Additional Tier 1 capital and Tier 2 capital account for 0.2% and 4.3% of the banking system's own funds (0.2% and 4.5% as of 30.6.2023, respectively).

Chart 38
Structure of the quarterly changes (left) and the Structure of the own funds (right)
in millions of denars in %

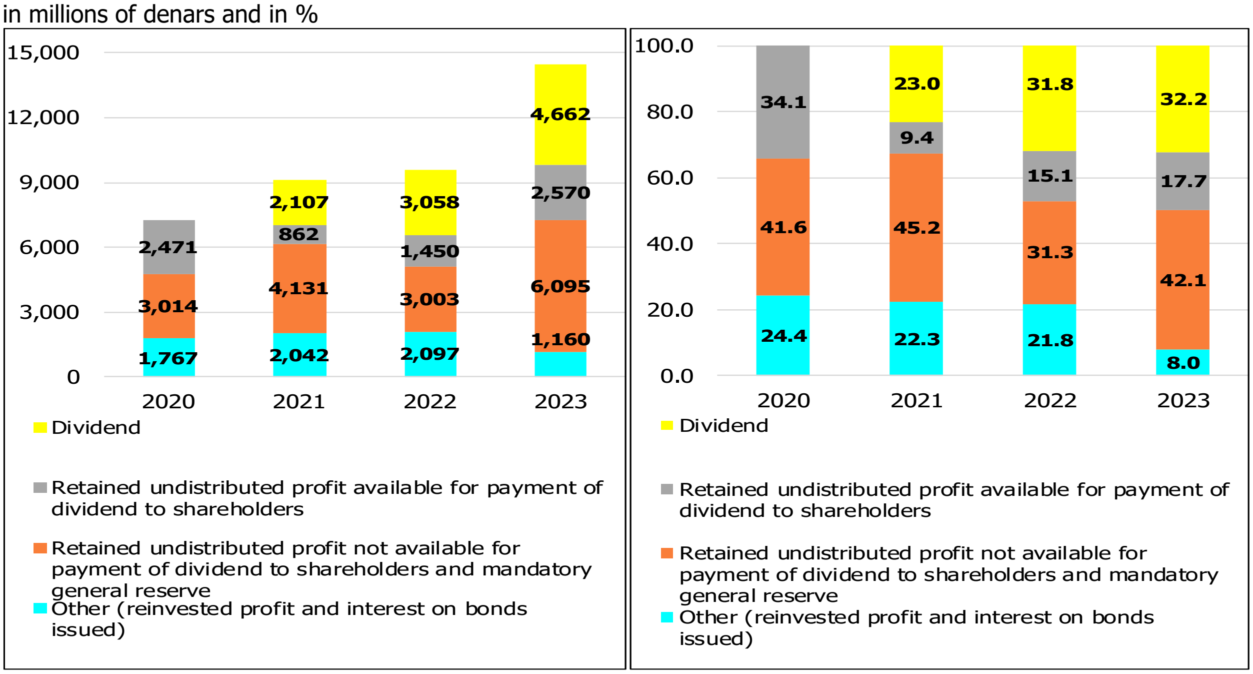


Source: National Bank, based on the data submitted by banks.

In the second quarter of 2024, own funds of the banking system registered a growth of Denar 2,089 million or 2.1%, which is primarily due to the profit distribution last year. The growth is almost entirely due to the allocation of part of the profit (realized in 2023) to increase the general reserve requirement (Denar 2,034 million). A certain growth was also recorded in the retained undistributed profit, which arises from the transfer of the profit from the current (2023) year at a large bank. A slight positive contribution was also made by the payment of a dividend through the issue of common shares (Denar 68 million) by a small bank.[42] For more details about the level of own funds by group of banks see annexes to this report.

Twelve out of thirteen banks in the system ended 2023 with profit, whereby only five banks paid dividend (two large, one medium-sized and two small bank). Around 32.2% of the profit in 2023 was intended for dividend payment in 2024 (an amount higher by 50.2%, or Denar 1,536 million[43] compared to the last year). However, the amount that banks have allocated to capital positions exceeds the amount of dividends paid and amounts to Denar 6,095 million, which is twice as much as last year. This is a confirmation that the high profitability of the banks has been largely used to strengthen their capital strength and at the same time their resilience.

Chart 39
Distribution of banks' profits from 2023 denominated in amounts (left) and in percentage shares (right)
in millions of denars and in %



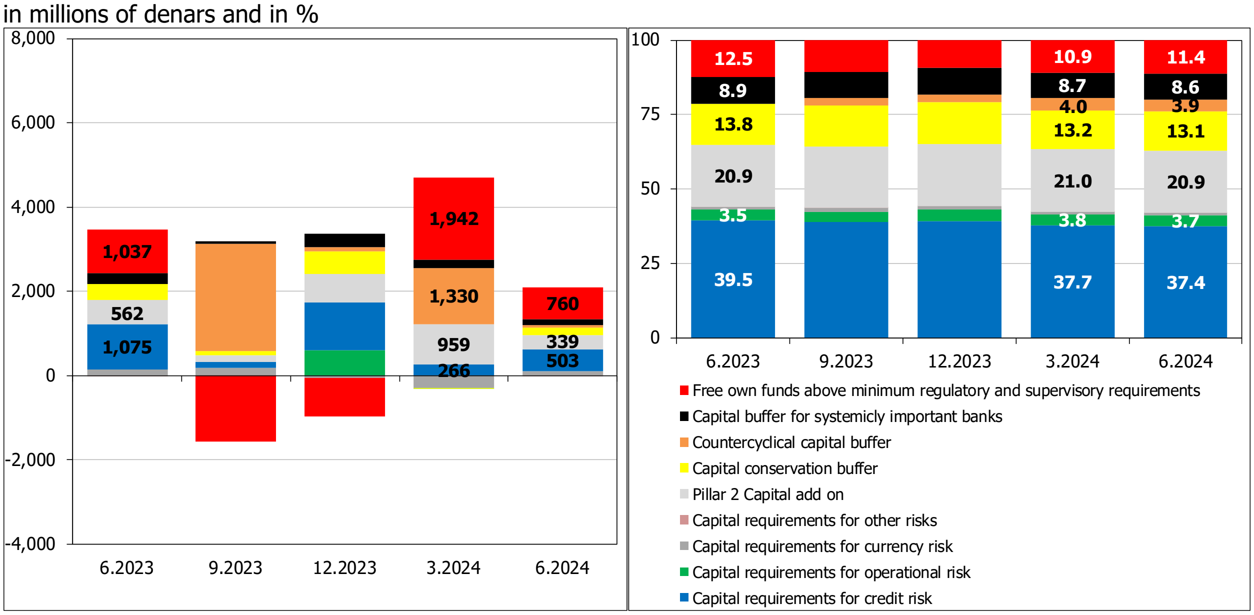
Source: National Bank, based on the data submitted by banks.

Analyzed by purpose of the own funds, in the second quarter of 2024, most of the growth in own funds remained free, while a portion was used to cover certain capital requirements, mostly to cover credit risk and the capital allowance determined by the supervisory assessment. Capital requirements for credit risk coverage increased by Denar 503 million (or 1.3%), which mostly stems from the increase in the small loans portfolio and claims collateralized by commercial properties, i.e. bank activities included with risk weight

[42] For more details, please see page 8 on the following link.
[43] This amount excludes the dividend paid in shares by one small bank.

of 75% and 100%, respectively. There was an increase of Denar 110 million or 14.5%, in capital requirements for covering currency risk, due to the increased open currency position[44], while capital requirements for operational risk and other risks are almost unchanged. The amount of the capital supplement determined by the supervisory assessment registered a quarterly increase of Denar 339 million or 1.6%. The total amount of capital buffers[45] increased by Denar 381 million or 1.5%, on a quarterly level. The higher level of the capital buffers to great extent (Denar 191 million), resulted from the capital buffer for capital preservation. Most of the increase in own funds remained free above the minimum regulatory and supervisory requirements, namely available own funds increased by Denar 760 million or 7%, increasing their share in total own funds of the level of 11.4% (10.9% as of 31.03.2024).

Chart 40
Structure of quarterly change (left) and balance (right) of own funds, by the requirement for covering risks and for maintaining the required capital buffers
in millions of denars and in %

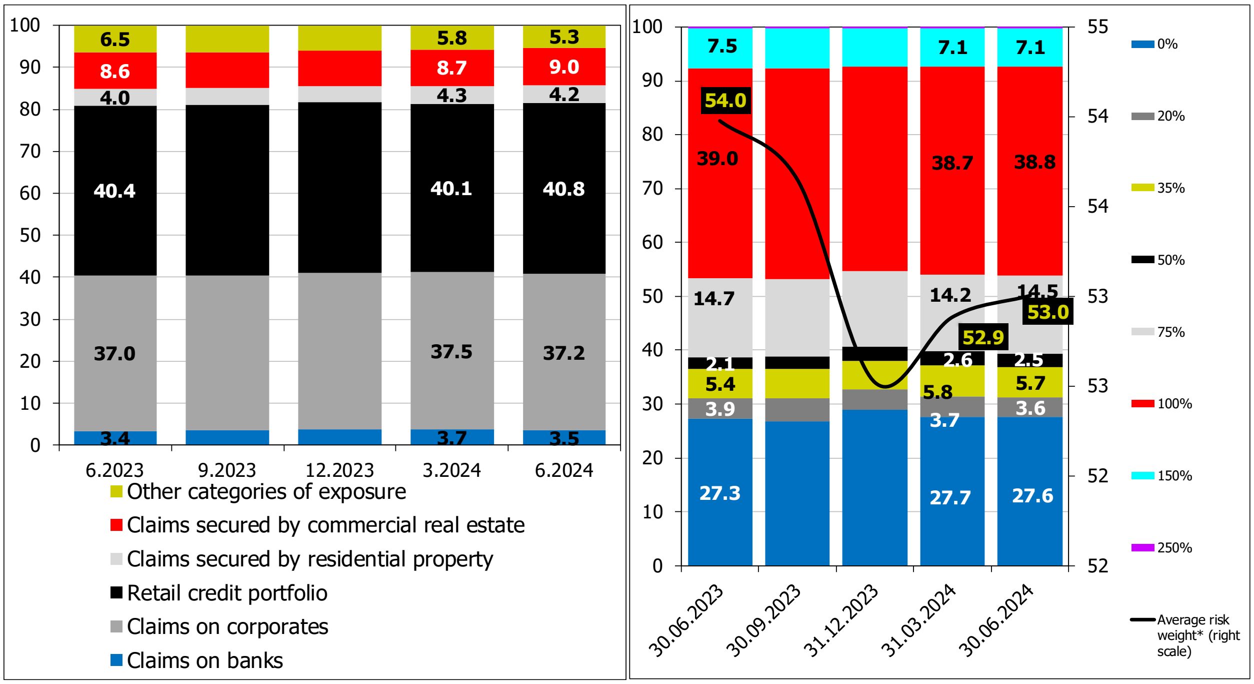


Source: National Bank, based on the data submitted by banks.

[44] More details in Currency risk section.

[45]From the four capital buffers specified by the Banking Law, in the second quarter of 2024, all banks were required to meet the capital conservation buffer and countercyclical capital buffer, while seven systemically important banks the capital buffer for systemically important banks (for more information visit the following link). In July 2024, a decision on the amount of the countercyclical capital buffer rate for exposures in the Republic of North Macedonia and for exposures to other countries in the third quarter of 2025 was adopted. A rate of 1.5% was determined, which will apply from 1 to 31 July 2025, and a rate of 1.75%, applicable from 1 August to 30 September 2025. For more details on the countercyclical capital buffer decisions visit the following link.

Chart 41
Structure of capital requirements for covering credit risk, by category of exposure (left) and total on-balance and off-balance exposure, by risk weights (right).
in %



Source: National Bank, based on the data submitted by banks.
Note: The average risk weight is calculated as a ratio between risk weighted assets and total banking system balance and off-balance sheet exposure.

The average risk weight of the banking system activities registered minor increase. Thus, the higher quarterly growth of risk-weighted assets by 1.3% (Denar 6,289 million) compared to the increase of 1.1% of the total on-balance sheet and off-balance sheet exposure of the banking system resulted in a minor growth (of 0.1 percentage.) of the average risk weight, to the level of 53%. Such movements mostly result from the smaller quarterly growth in bank activities with 0% risk weight (of Denar 1,997 million), compared to increased claims with risk weights of 100% and 75% (of a total of Denar 8,736 million). For more details on the capital requirements for covering risks and on the capital adequacy ratio, by group of banks, see annexes to this Report.

5.3. Stress-testing of the banking system resilience to hypothetical shocks

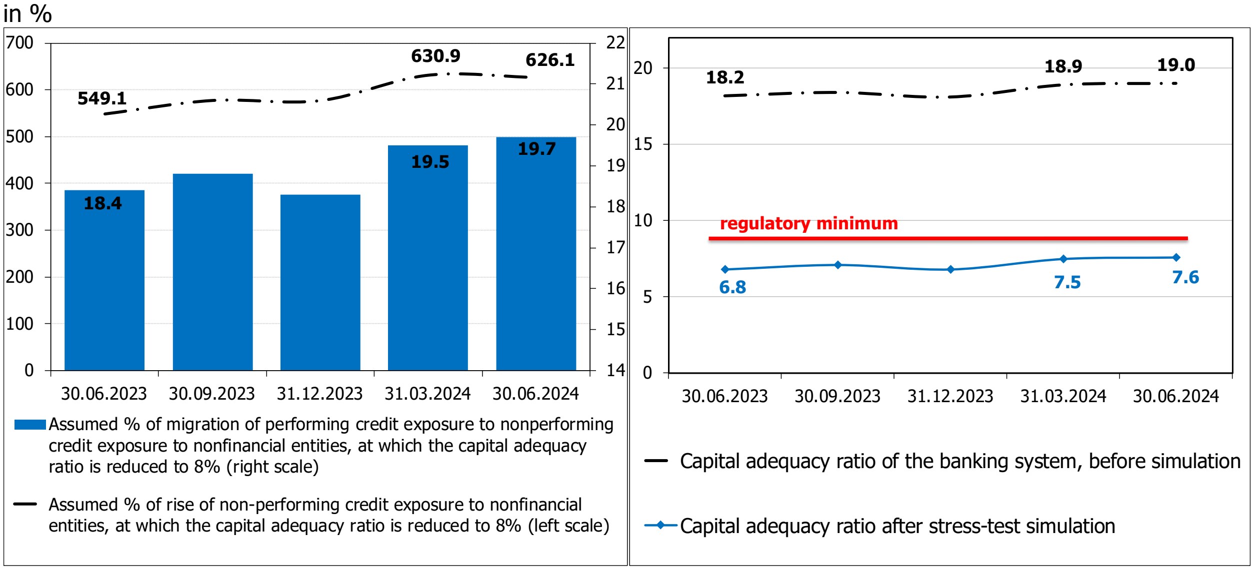
The banking system shows a satisfactory resilience to the conducted regular simulated shocks, which assume extreme materialization of the credit risk (isolated, or in combination with materialization of the currency and/or the interest rate risk in the banking book). The results of the regular stress-testing improved compared to 31.3.2024, mostly due to the higher initial level of capital adequacy ratio. For the purpose of this report we represent the results of **the simulation for simultaneous materialization of credit, currency and interest risk[46]**. After shock, the capital adequacy ratio of the banking system

[46] Stress-testing includes simulation of simultaneous materialization of credit, currency and interest rate shocks, through:

reduces below regulatory minimum, to the level of 7.6%, which is minimally better result compared to the previous quarterly date when the capital adequacy ratio reduced to 7.5%.

Hypothetical shocks on the part of the credit risk had the greatest impact on the solvency of the banking system. The stress test results show that it takes growth of 626.1% of non-performing loan exposure, i.e. migration of 19.7% from performing to non-performing loan exposure for the capital adequacy of the banking system to drop to 8%. These are rather extreme less likely simulations, especially in the short run, given that in the second quarter of 2024, only 0.4% of the regular credit exposure to non-financial sector received a non-performing status, while the non-performing credit exposure incremented by 3.2%. For more details on the capital requirements for covering risks and on the capital adequacy ratio, by group of banks, see annexes to this Report.

Chart 42
Necessary deterioration of the credit exposure quality, for the capital adequacy of the banking system to drop to 8% (left) and results of combined extreme stress-test simulation (right)
in %



Source: National Bank, based on the data submitted by banks.

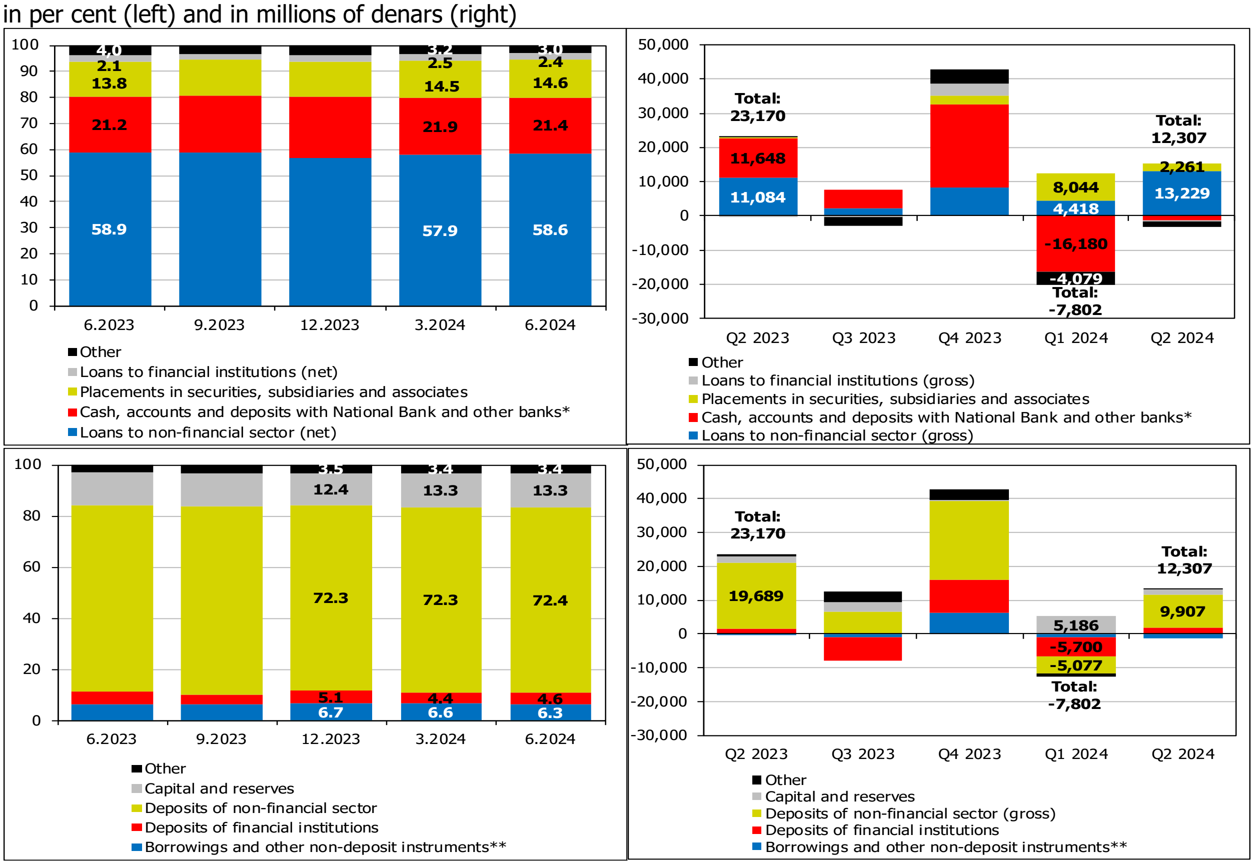
– deterioration of the quality of credit exposure to non-financial entities, assuming a migration of 20%, 25% and 30% of the credit exposure to the non-financial sector, B and C-performing risk categories, respectively, to C-non-performing, D and E, where the migrated exposure is distributed equally (33.3% each) to the weaker risk categories, while maintaining the same percentage of coverage with impairment;
– growth of exposure to financial entities which is non-performing by 100%, at the expense of reducing the exposure in A risk category;
– of the denar against the euro by 30%; and
– of lending and deposit interest rates from 1 to 5 percentage points;

IV. Major balance sheet changes and profitability of the banking system

1. Bank activities

The balance sheet of the banking system recorded growth in the second quarter of 2024, largely due to increased deposits from non-financial entities, as well as to the higher deposits from financial entities. The growth of deposits from non-financial entities mainly stems from the increased household deposits, with the corporate deposits also registering growth. Analyzed by currency structure, the growth is mostly due to the increase in denar deposits, thus contributing to further denarization of deposits. By maturity, demand deposits and long-term deposits recorded an increase as opposed to the short-term deposits that decreased. The assets growth on a quarterly basis is almost entirely due to the increased lending activity of banks to non-financial entities, mostly to enterprises, with the intensified lending to households also contributing. In terms of the currency structure, denar loans recorded an increase, while loans with currency component decreased. As for the maturity structure, short-term and long-term loans recorded an increase, while past due loans decreased.

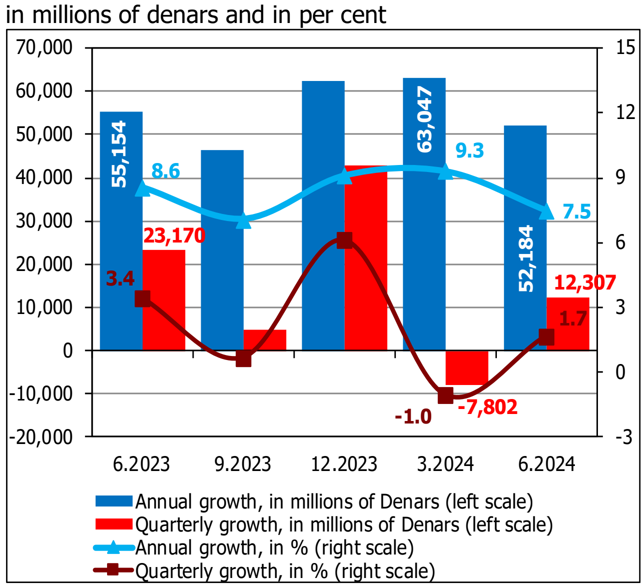
Chart 43
Structure of assets (top left) and liabilities (bottom right) and quarterly changes of the assets (top right) and liabilities (bottom right) of the banking system
in per cent (left) and in millions of denars (right)



Source: National Bank based on data submitted by banks.
Note: * Cash, accounts and deposits with the NBRNM and other banks also include the assets in the guarantee fund of KIBS, as well as the reserve requirement in foreign currency; ** Other issued non-deposit instruments include issued subordinated and hybrid capital instruments.

The balance sheet of the banking system in the second quarter of 2024 increased by Denar 12,307 million or by 1.7% compared to the first quarter of the year. The growth is largely due to the increased deposits from non-financial entities and, to a lesser extent, to the higher deposits from financial institutions as well as to increased capital and reserves due to the retained earnings from the previous year. On the asset side, the increase is mainly a result of the growth of loans to non-financial entities and, to a lesser extent, to increased investments in securities. The assets growth equals 7.5%, annually, in conditions of accelerated lending growth and a slight slowdown in the growth of deposits from non-financial entities.

Chart 44
Assets growth of the banking system



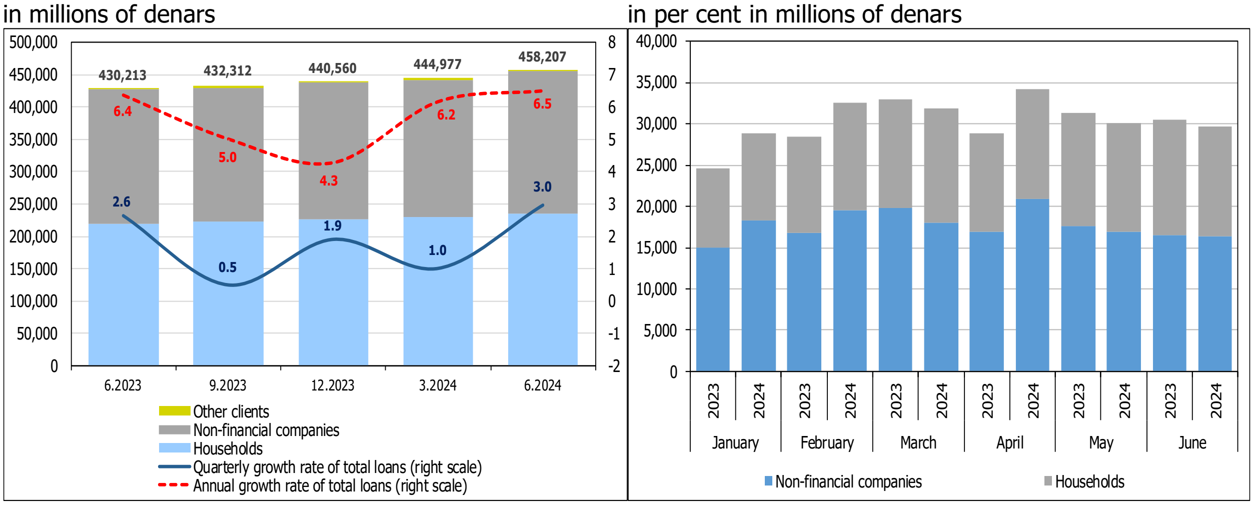
Source: National Bank, based on the data submitted by banks.

1.1. Loans to non-financial entities[47]

In the second quarter of 2024, lending activity registered quarterly growth by Denar 13,229 million or by 3.0%, which is the highest quarterly growth rate after the end of 2021. On annual basis, the loans increased by 6.5%, indicating an acceleration of the growth compared with the previous five quarters. Such movements occur in conditions of net easing of credit standards and net increase in credit demand[48]. Ten out of twelve banks registered credit growth, with the large banks having highest contribution to the growth with 91.0%.

[47] Loans to non-financial entities include loans to resident and non-resident non-financial entities, including loans to private and public non-financial companies, central government, local government, non-profit institutions serving households (loans to other clients), sole proprietors and natural persons (loans to households).
[48] According to the results of the Lending Survey for the second quarter of 2024, a net easing of credit standards was recorded, while there was a net increase in credit demand in both sectors. The National Bank policy rate in the second quarter of 2024 remained at the level of 6.3%.

Chart 45
Stock flow of loans of non-financial entities (left) and newly approved loans, by sector (right)
in millions of denars in per cent in millions of denars



Source: National Bank, based on the data submitted by banks.

In the second quarter of 2024, the newly extended loans to non-financial sector[49] increased by 0.8% compared to the preceding quarter. The growth is solely due to increase in the newly extended household loans (by 6.0%), while the newly extended corporate loans decreased (by 2.7%).

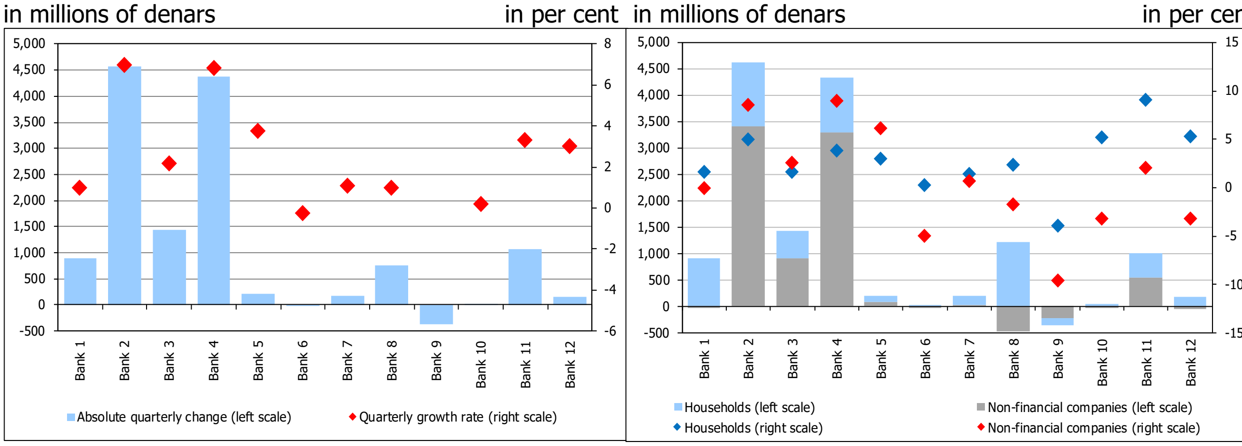
In the second quarter of 2024, the corporate loans increased by Denar 7,440 million or by 3.5%. The increase mainly stems from the growth of loans to customers in the manufacturing industry (by 6.7%), electricity supply (by 5.8%), as well as the construction sector and real estate activities (by 5.6%). The positive developments in the lending to enterprises occur amid a net easing of credit conditions, which represents the first assessment of eased lending to enterprises after the second quarter of 2020 and is due to the easing in terms of interest rates amid a net increase in the credit demand.[50] On annual basis, lending to enterprises grew by 5.8%, which is an accelerated growth compared to the previous three quarters. A slight net easing of corporate credit standards is expected in the third quarter of 2024, while the credit demand is expected to keep increasing.[4]

[49] Non-financial entities include only legal entities and households, while they exclude other clients due to large fluctuations of newly approved loans.
[50] Source: Bank Lending Survey in the second quarter of 2024.

Chart 46

Growth of total loans to non-financial entities (left) and of loans to non-financial corporations and households (right), by bank

in millions of denars in per cent in millions of denars in per cent



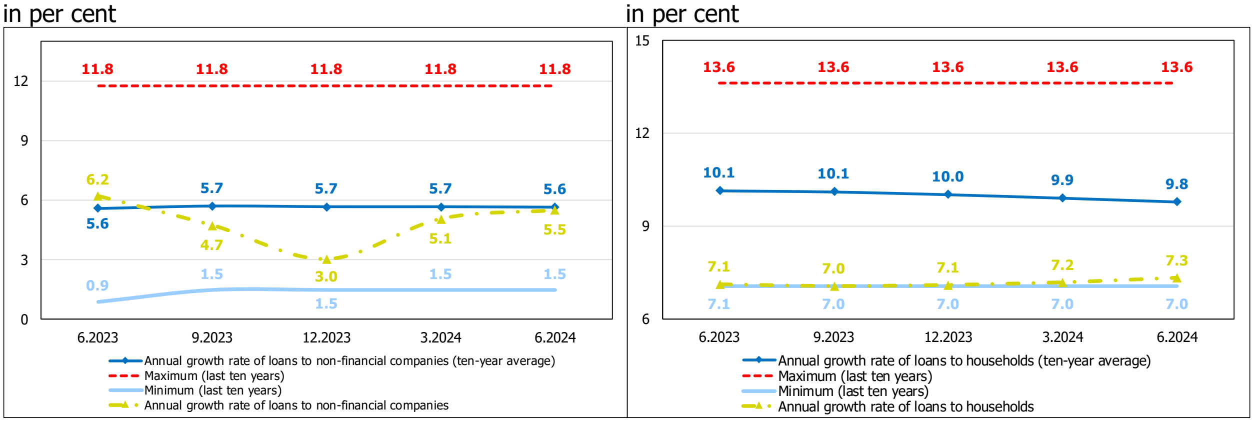
Source: National Bank, based on the data submitted by banks.

Analyzed by the size of non-financial companies[51], the largest share of loans accounts for the large enterprises (36.2%), which is an increase compared to the previous quarter, while the share of loans to micro-enterprises (8.7%) is the lowest, although it recorded an increase. Such shares are partly due to higher amounts of loans to larger enterprises, and partly due to restraint of the banks in terms of lending to smaller enterprises[52]. Analyzed by clients' activity, the largest share accounted for the loans to companies in the industry sector (34.2%) and wholesale and retail trade companies (26.7%), with a significant share of loans in construction (20.0%).

Chart 47

Ten-year moving average of annual growth rates of loans to non-financial corporations (left) and household loans (right)

in per cent in per cent



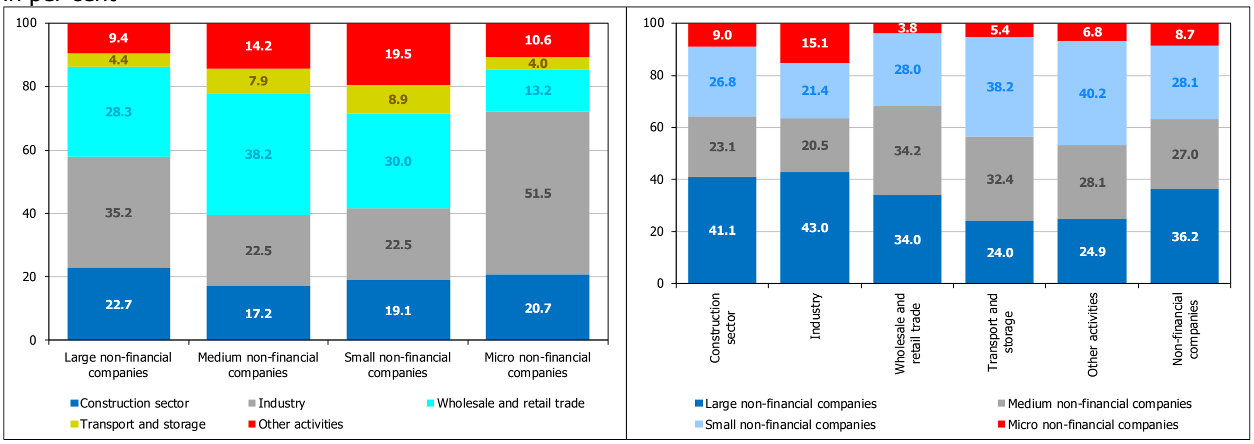
Source: National Bank, based on the data submitted by banks.

* Note: Excluding the effect of all mandatory write-offs made in the period 1.1.2016 - 30.6.2024. Starting from December 2019, the data also contains collected compulsorily written-off loans.

[51] The criteria for Classification of entities by size (into large, medium, small and micro) are defined in Article 470 of the Law on Trade Companies.

[52] Some of the reasons that banks are not prone to financing small and medium-sized enterprises are poor financial literacy, poor corporate reporting and unwillingness of enterprises to disclose and share business information (see p. 5 in Macedonia 2025 (2020). *Barriers for access to finance for MSMEs in North Macedonia: Stock of existing data and knowledge*.)

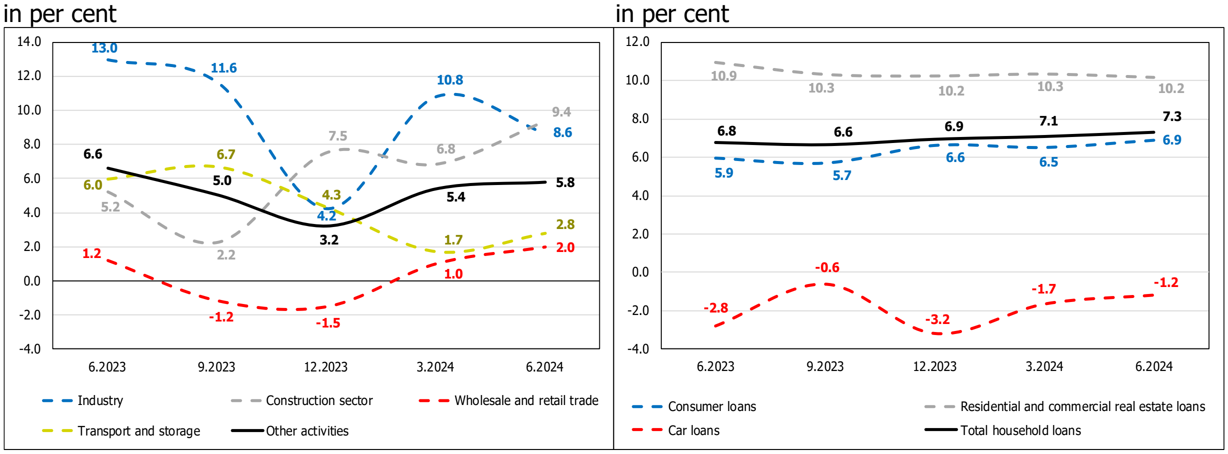
Chart 48
Structure of loans to non-financial companies by individual activities and by size of the company
in per cent



Source: National Bank's Credit Registry based on data submitted by banks.

In the second quarter of 2024, the lending to households increased by Denar 5,758 million or by 2.5% compared to the previous quarter. This growth has been registered in conditions of increased consumer loans (2.9%) as well as higher loans for the purchase of residential and commercial property (2.7%), and the growth rates of both credit products are higher than in the previous quarter. On annual basis, the household loans grew by 7.3%[53]. Positive developments have been registered in conditions of net easing of credit standards, which can be perceived in the net easing of interest rates on housing and consumer loans, with net increase in the demand for loans by households also being registered. The expectations for the third quarter of 2024 are towards further net easing of credit standards amid net increase in the demand for loans.**Error! Bookmark not defined.**

Chart 49
Annual growth rate of corporate loans (left) and household loans (right)
in per cent



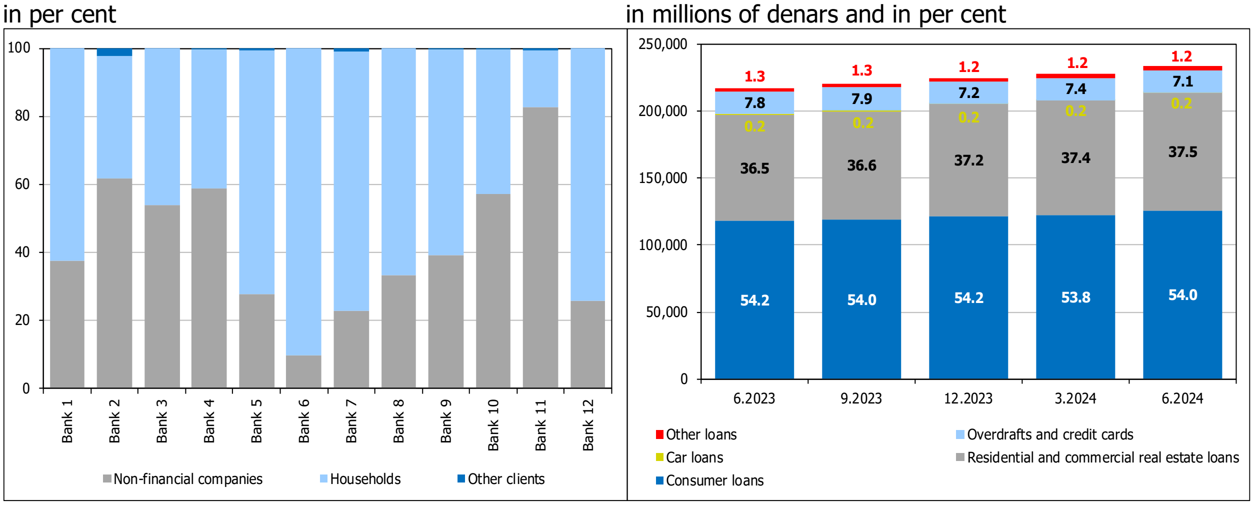
Source: National Bank National Bank's Credit Registry based on data submitted by banks.

[53] Excluding the effect of net write-offs, the annual growth rate equaled 7.3%, which is lower than the ten-year moving average.

Household loans still have a slightly higher share in the total loans structure of 51.2%, which is a decrease by 0.3 percentage points compared to the previous quarter. Within the structure of the loans to natural persons, non-purpose consumption loans dominate with a share of 62.3% (it includes consumer loans with a share of 54.0%), but their share reduced slightly at the expense of the share of loans for purchasing residential and commercial properties, which increased to 37.5%.

Chart 50
Sectoral structure of loans to non-financial entities, by bank (left) and structure of loans to natural entities, by product (right)

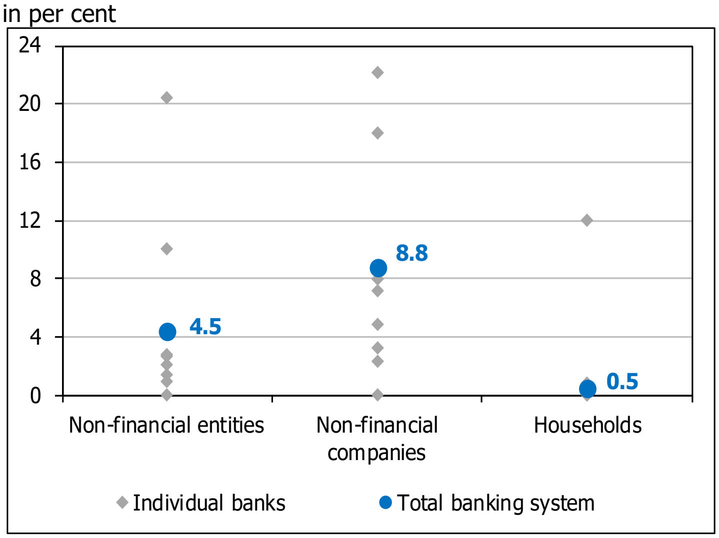
in per cent | in millions of denars and in per cent



Source: National Bank's Credit Registry based on data submitted by banks.

Chart 51
Share of "green" loans in the total loans to non-financial entities and by individual sectors, by individual bank

in per cent

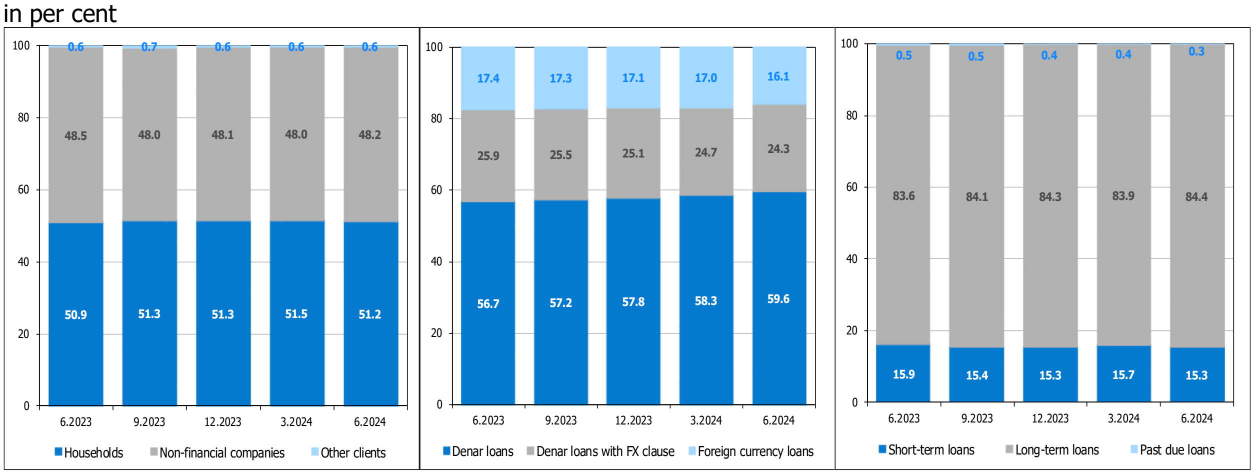


Source: National Bank, based on the data submitted by banks.

The share of green loans[54] in total loans to non-financial entities stood at 4.5%. By bank, the share of these loans is two-digit only in two banks.[55] As of 30.6.2024, the total green loans to non-financial sector increased by Denar 563 million or by 2.8%. The green corporate loans increased by 3.4%, while green household loans decreased by 6.7%.

Analyzed by the currency structure of loans, an increase in the second quarter of 2024 compared to the previous quarter was registered at denar loans, while loans with currency component minimally decreased. Namely, denar loans increased by Denar 13,327 million or by 5.1%[56], while loans with currency component dropped by Denar 97 million or by 0.1%[57]. Therefore, the share of denar loans in the total currency structure increased by 1.3 percentage points compared to the previous quarter and reached 59.6%. Within loans with currency component, the share of denar loans with a currency clause in total loans is higher (24.3%) compared to foreign currency loans (16.1%).

Chart 52
Structure of total loans, by sector (left) and currency (middle), and structure of regular loans, by maturity (right)
in per cent



Source: National Bank, based on the data submitted by banks.

[54] For the purpose of this report, "green" loans denote loans that are intended to improve the energy efficiency of the households and the corporate sector; loans for support of the investments in green technologies, materials and solutions; loans for support of investments in renewable energy sources, control and prevention of pollution, protection of the environment, mitigation of the risks from climate changes, etc.

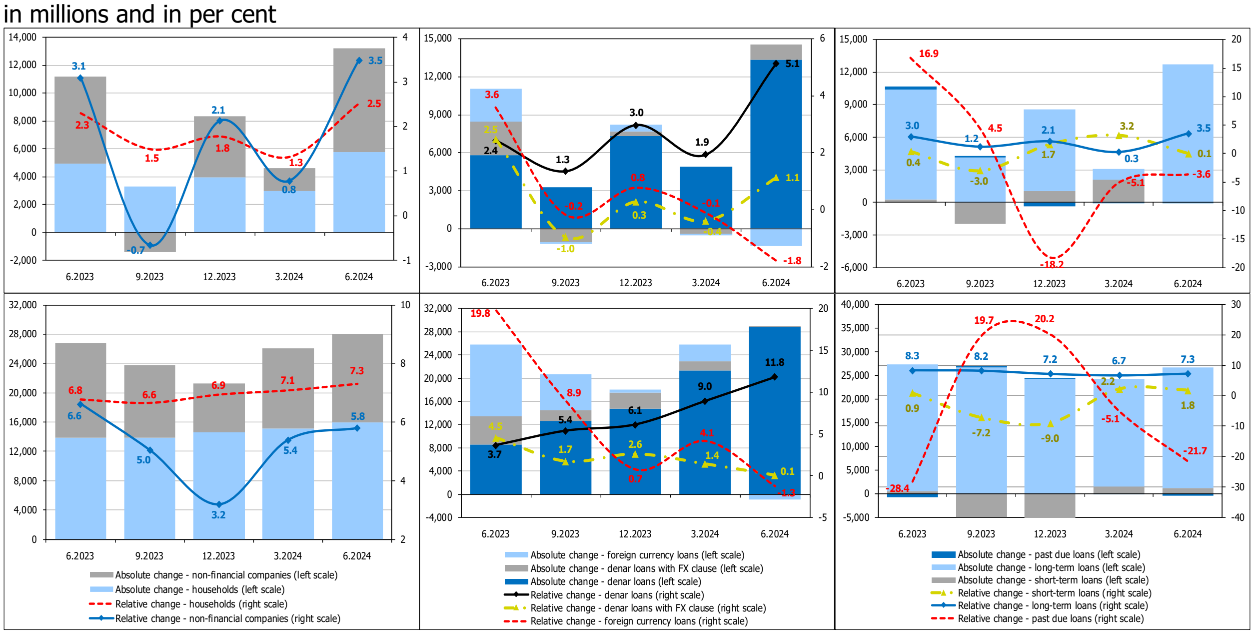
[55] Two out of twelve analyzed banks as of 30.6.2024 have no green loans in their portfolios. In the banks that have approved such loans, the share of green loans in total loans ranges from 0.04% to 20.0%. Analyzed by sector, the share of green loans in total loans by individual banks is between 0.004% and 21.8% in corporate loans, i.e. between 0.0% and 10.9% in household loans.

[56] The quarterly increase in denar loans to non-financial sector is due to the higher corporate loans by Denar 9,751 million or by 7.3% and household loans by Denar 3,606 million or by 2.9%, while loans to other clients decreased by Denar 31 million or by 2.5%.

[57] The decline in loans with currency component to the non-financial sector on a quarterly basis is a result of the decrease in foreign currency loans by Denar 1,344 million or by 1.8%, while denar loans with a currency clause recorded an increase of Denar 1,247 million or by 1.1%. The decrease in foreign currency loans is due to the reduced corporate loans (by Denar 2,139 million or by 3.7%), while increase has been registered in household loans (by Denar 719 million or by 4.3%) and loans to other clients (by Denar 75 million or by 12.1%). The increased denar loans with an FX clause occurred in conditions of growth in household loans (by Denar 1,433 million or by 1.6%), while a decrease was registered in corporate loans (by Denar 172 million or by 0.8%) and loans to other clients (by Denar 14 million or by 2.0%).

Analyzing by the maturity structure of loans[58], both short-term and long-term loans registered an increase in the second quarter of 2024, while past due loans declined. Long-term loans still dominate with a share of 84.4% in total loans, with the share being higher due to the larger growth of long-term than short-term loans.

Chart 53
Quarterly (up) and annual (bottom) loans growth, by sector (left), currency (middle) and maturity (right)
in millions and in per cent



Source: National Bank, based on the data submitted by banks.

1.2. Deposits of non-financial companies

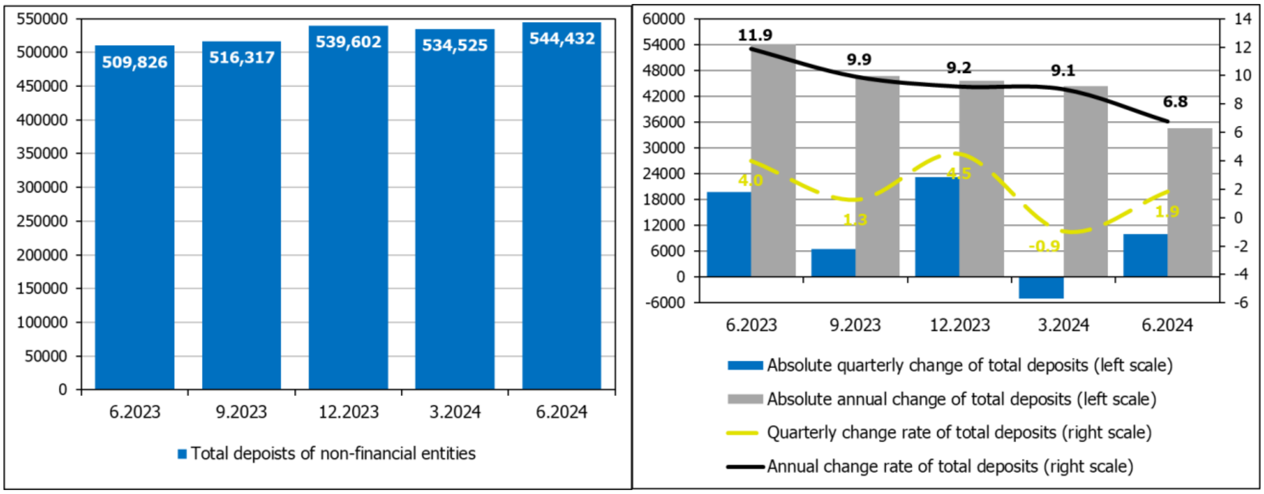
After the usual seasonal decrease in the first quarter of the year, deposits from non-financial entities increased in the second quarter of 2024 by 1.9% (or by 9,907 million denars). However, analyzed on an annual basis, their growth was more moderate and slowed down to the level of 6.8%, or Denar 34,606 million (compared to 9.1% or Denar 44,388 million as of 31.3.2024). Favorable movements continue in terms of maturity and currency structure of deposits (growth in denar and long-term deposits), reflecting the effects of the measures taken by the National Bank and stabilized expectations of economic agents, as well as higher interest rates. Analyzed by bank, most of the banks registered deposit growth on a quarterly basis.

The deposit growth in the second quarter of 2024 mostly results from the growth household deposits, which is traditionally major depositor in the Macedonian banking system (with a share of 67.8% in total deposits at the end of June). The quarterly growth in household deposits amounted to Denar 9,585 million or 2.7%, of which the largest one being in denar demand deposits (of Denar 5,008 million or 4.6%) and denar long-term deposits (of 2,799 million or 5.3%).[59] Annually, household deposits increased by Denar 28,971 million or

[58] The analysis of maturity structure excludes non-performing loans.
[59] The short-term household deposits decreased by Denar 1,466 million or 2.6%.

8.5%, which is a minimal acceleration compared to 31.3.2024, when the annual growth equaled 8.3%.

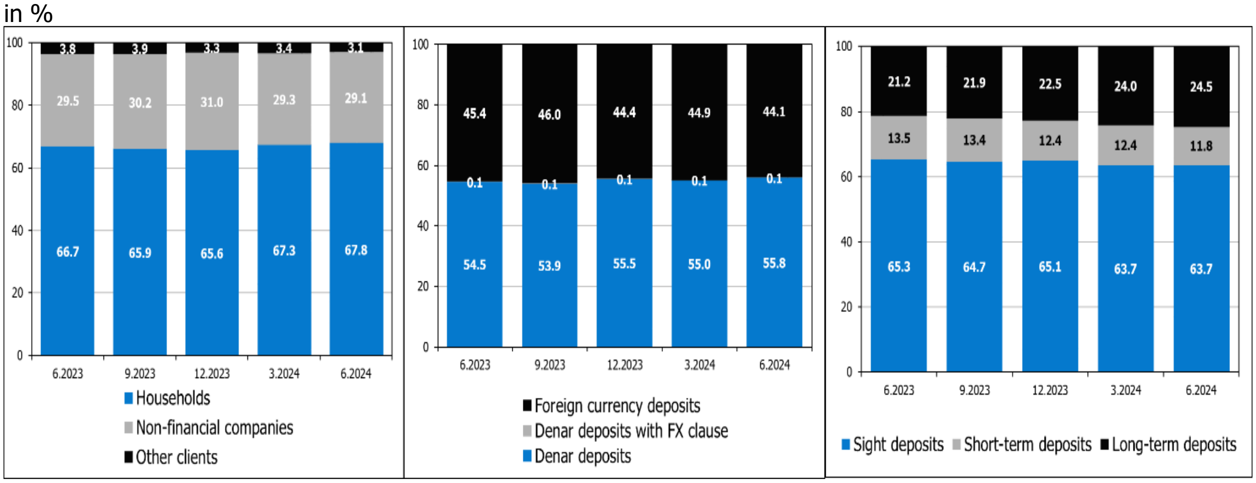
Chart 54
Stock (left) and flow (right) of deposits of non-financial entities



Source: National Bank, based on the data submitted by banks.

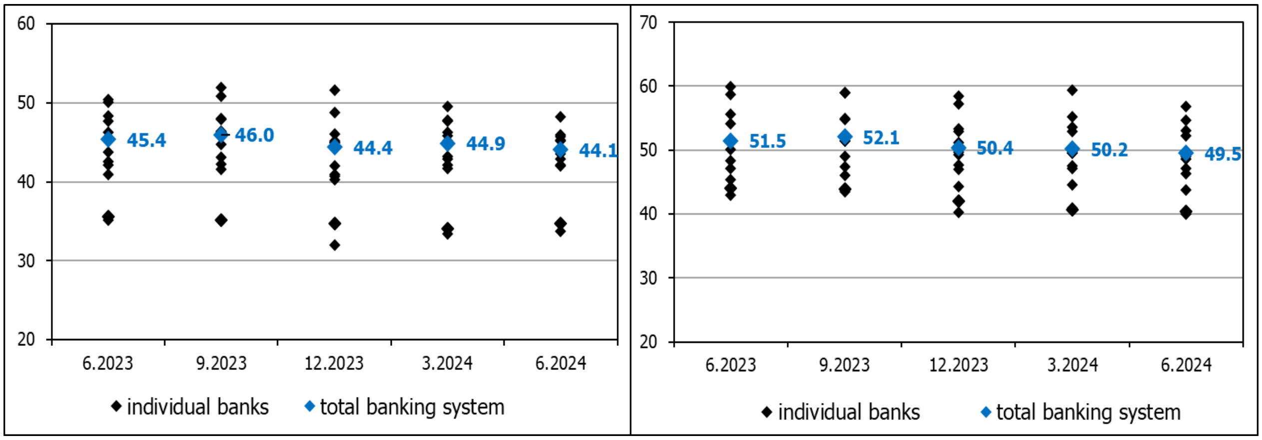
Deposits of non-financial corporations also registered an increase, both quarterly and annually. The quarterly growth of deposits of non-financial corporations amounted to Denar 1,798 million or 1.1% (in the first quarter they recorded a quarterly decrease, mostly due to seasonal factors). The annual growth of these deposits amounted to Denar 8,117 million or 5.4%, and has slowed significantly compared to 31.3.2024, when it amounted to Denar 17,634 million or 12.7%.

Chart 55
Structure of total deposits, by sector (left), currency (middle) and maturity (right)



Source: National Bank, based on the data submitted by banks.

Chart 56
Share of total foreign currency deposits in total deposits of the banking system (left) and of the foreign currency household deposits in total household deposits (right)
in %



Source: National Bank, based on the data submitted by banks.

Observed by currency, the quarterly growth of total deposits was conditioned by the increase in denar deposits by Denar 10,106 million or 3.4%.[60]. In contrast, foreign currency deposits registered a slight quarterly drop of Denar 170 million or 0.1%. Analyzed on an annual basis, the growth of denar deposits (which equaled Denar 26,286 million or 9.5%[61]) significantly exceeds the growth of foreign currency deposits (which increased by Denar 8,429 million or 3.6%[62] (starting from March 2023, the annual growth rates of denar deposits have been consistently higher compared to foreign currency deposits). Such developments contributed to a even larger presence of the domestic currency in the currency structure of the banks' deposit base, which increased by 0.8 percentage points on a quarterly basis, due to the reduced share of foreign currency in total deposits.

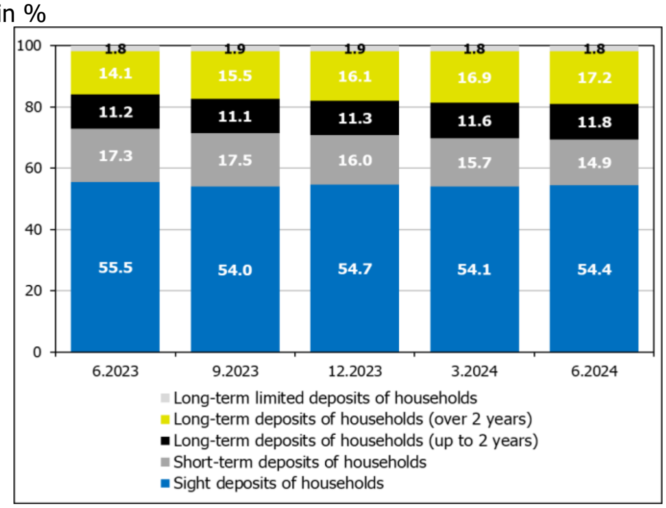
There are still favorable developments in terms of deposit maturity, given an increase in long-term deposits of Denar 5,459 million or 4.3% on a quarterly basis. However, demand deposits made the largest contribution (63.9%) to the quarterly growth of total deposit base, with a quarterly increase of Denar 6,331 million or 1.9%. Short-term deposits kept decreasing (a drop of Denar 1,883 or 2.9%). On an annual basis, the depositors' preference for longer deposit maturities is more pronounced, so the annual growth of long-term deposits, although slowing down, remains high and equals 23.7%, or Denar 25,586 million (as of 31 March 2024, the annual growth of long-term deposits amounted to Denar 28,303 million or 28.3%). On the other hand, the growth of demand deposits continues to slow down, to the level of 4.1% or by Denar 13,610 million.[63]

The growth in long-term deposits stems mostly from deposits in the household sector (which grew by Denar 4,715 million or 4.3%, in this quarter), which enabled a further increase in the structural share of the long-term deposits in total deposits in this sector (from 30.3% on 31.3.2024, to 30.8% on 30.6.2024). For a period of eight quarters, the share of

[60] Such growth was mostly due to the increase in denar household deposits (Denar 7,191 million or 4.0%).
[61] The annual growth of denar deposits amounted to Denar 32,722 million or 12.5% as of 31.3.2024.
[62] The annual growth of foreign currency deposits amounted to Denar 11,677 million or 5.1% as of 31.3.2024.
[63]As of 30.6.2023, this growth equaled Denar 34,000 million or 11.4%.

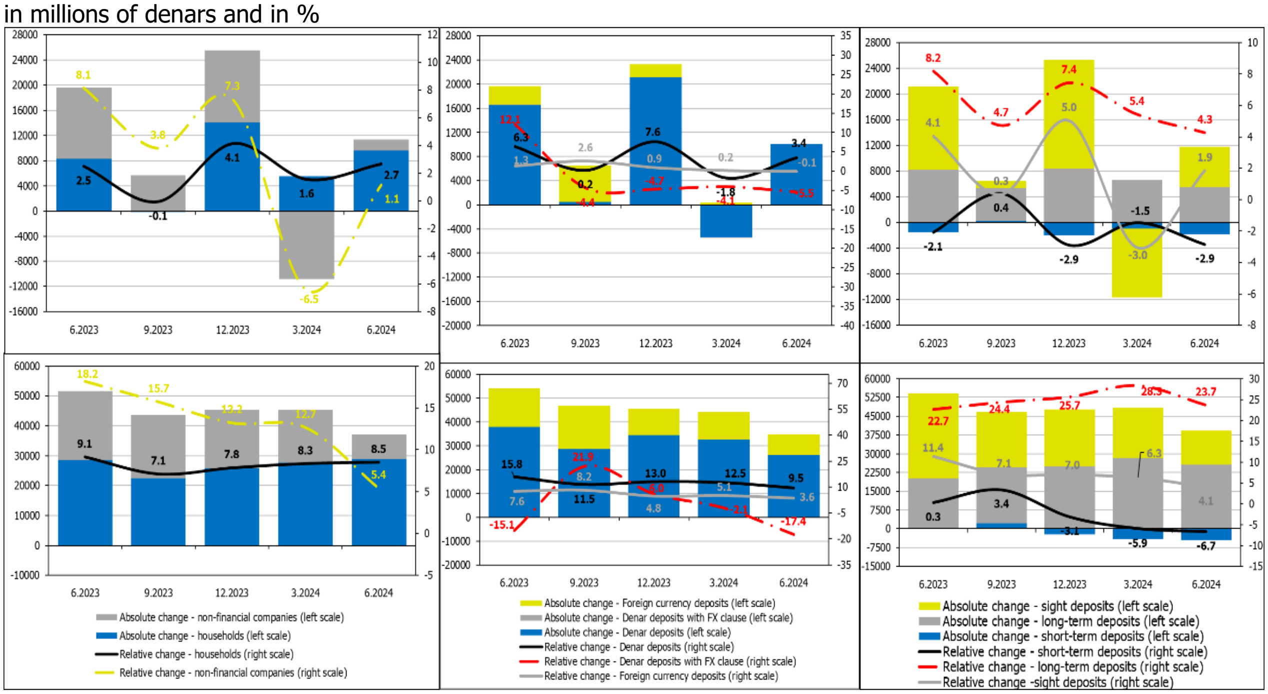
long-term deposits increased by 6 percentage points. However, demand deposits continued to dominate the maturity structure of deposits (with a share of 54.1%).

Chart 57
Maturity structure of household deposits



Source: National Bank, based on the data submitted by banks.

Chart 58
Quarterly (up) and annual (bottom) deposit growth by sector (left), currency (middle) and maturity (right)
in millions of denars and in %

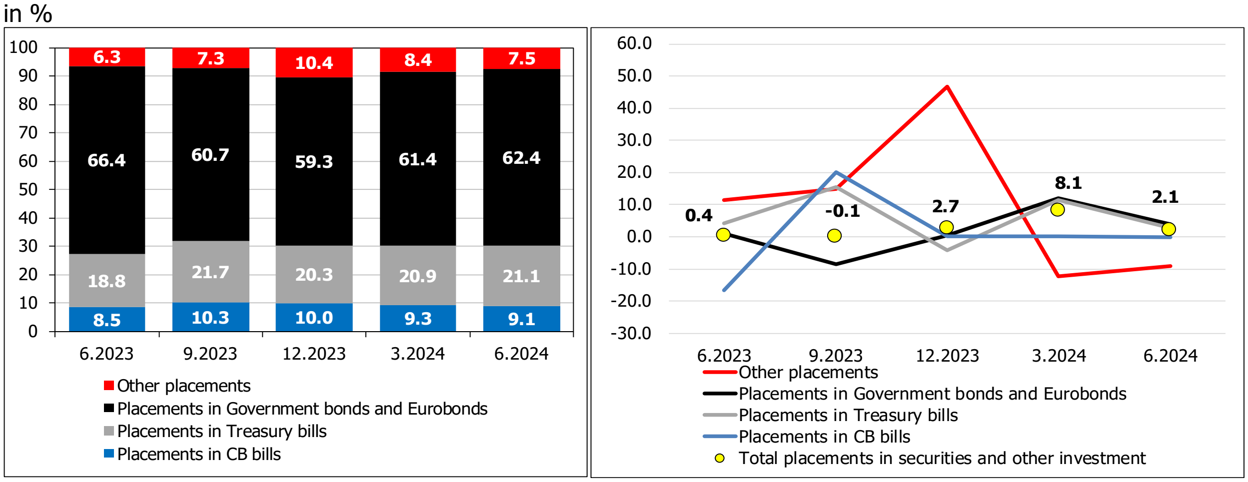


Source: National Bank, based on the data submitted by banks.

1.3. Other activities

The banks' placements in securities, subsidiaries and associates[64] grew in the second quarter of 2024 by Denar 2,261 million (or by 2.1%), with almost unchanged share in the total banks'assets of 14.6% (14.5% at the end of the previous quarter). The largest quarterly growth was registered in banks' placements in government bonds of Denar 2,489 million or 3.8%[65]. A solid rate of a quarterly growth of 2.7% (Denar 608 million) was registered in investments in domestic treasury bills[66]. In contrast, the banks' placements in CB bills remained at a similar level as in the previous quarter, i.e. registered minor quarterly decline of Denar 0.1% or Denar 8 million[67]. Other bank's investments in securities declined by Denar 828 million or 9.2%, as a result of due short-term financial instruments issued by central governments with one large bank. Taking these movements into consideration, the structure of investments in securities registered no significant changes, with an increased and still dominant share of placements in domestic government bonds and euro bonds of 62.4% (61.4% as of 31.3.2024), with a reduced share of other investments in securities to the level of 7.5% (8.4% as of 31.3.2024).

Chart 59
Structure (left) and quarterly rate of change (right) of investments in securities, subsidiaries and associates
in %



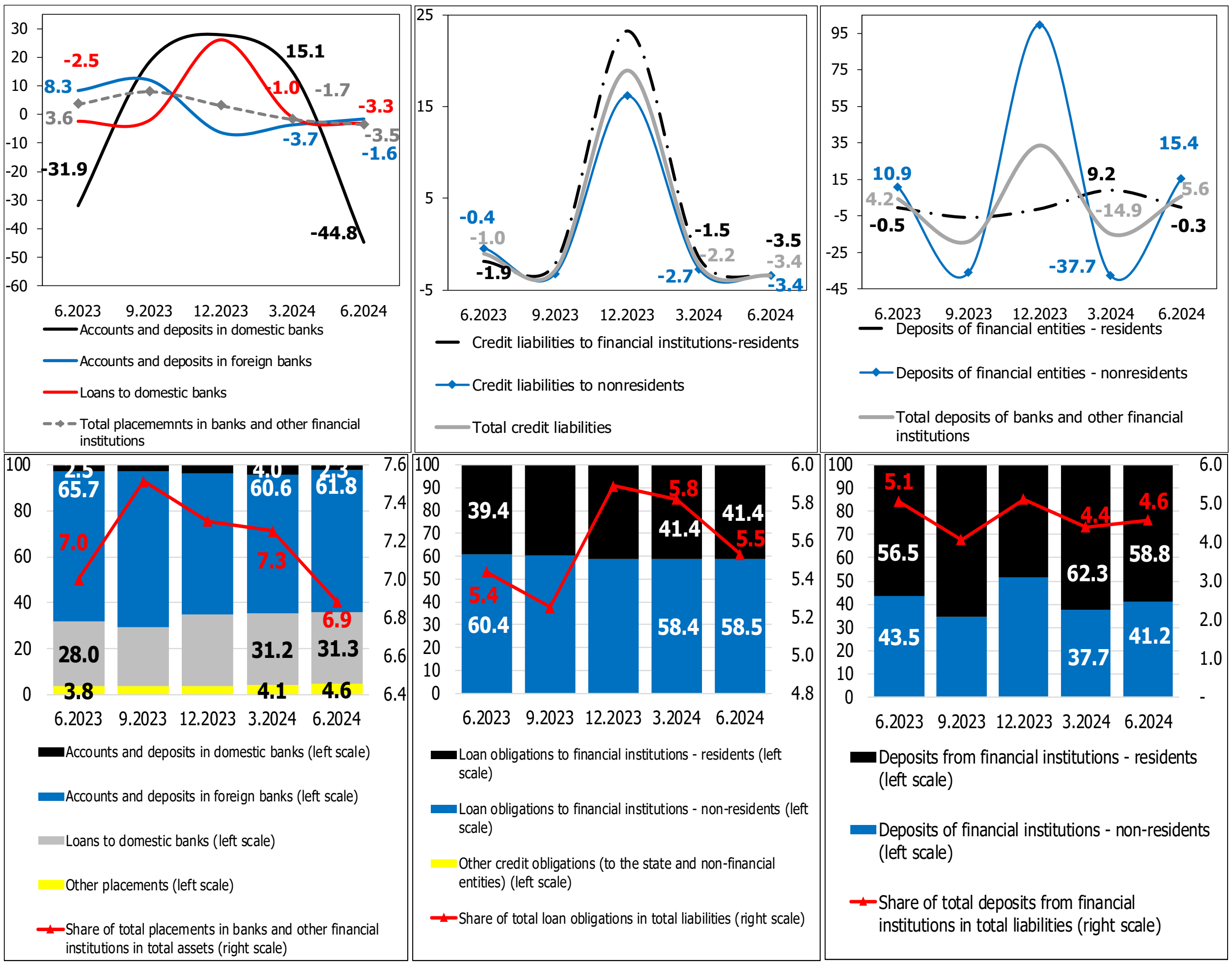
Source: National Bank, based on the data submitted by banks.

On the assets side, the placements with banks and other financial institutions (accounting for 6.9% of the total assets of the banking system) reduced by Denar 1,900 million, or 3.5% in the second quarter of 2024. Such decrease mostly resulted from the reduced assets on accounts and deposits with domestic banks (by Denar 970 million or 44.8%), primarily at one big bank. A less pronounced quarterly decline of 3.3% was recorded in the assets on accounts and deposits with foreign banks (Denar 553 million), due to the decrease

[64] The analyses of these investments are based on their net book value.
[65]In the second quarter of 2024 there were auctions of two-year, five-year and fifteen-year government bonds. The interest rates on 5- and 15-year government bonds was unchanged compared to the last quarter, i.e. equaled 4.2% and 5.6%. There was a decrease in the interest rate compared to the last issue held at the end of 2023 for 2-year government bonds, the rate of which at the last auction in May 2024 was 3.85%..
[66] In the second quarter of 2024, the interest rate on one-year treasury bills remained at the same level of 3.8%.
[67]At the CB bills auctions, held in the second quarter of 2024, the demand was at the level of the offered amount, while the interest rate stood at 6.3%.

in deposits in foreign currency with one large bank. The lowest decline of 1.6% or Denar 529 million was recorded in the loans of domestic banks due to repayment of loans with DBNM. Such developments did not cause significant changes in the structure of total placements with banks and other financial institutions.

Chart 60
Quarterly change (top) and structure (bottom) of the claims on financial institutions (left), loan liabilities (middle) and deposits of financial institutions (right)
in %



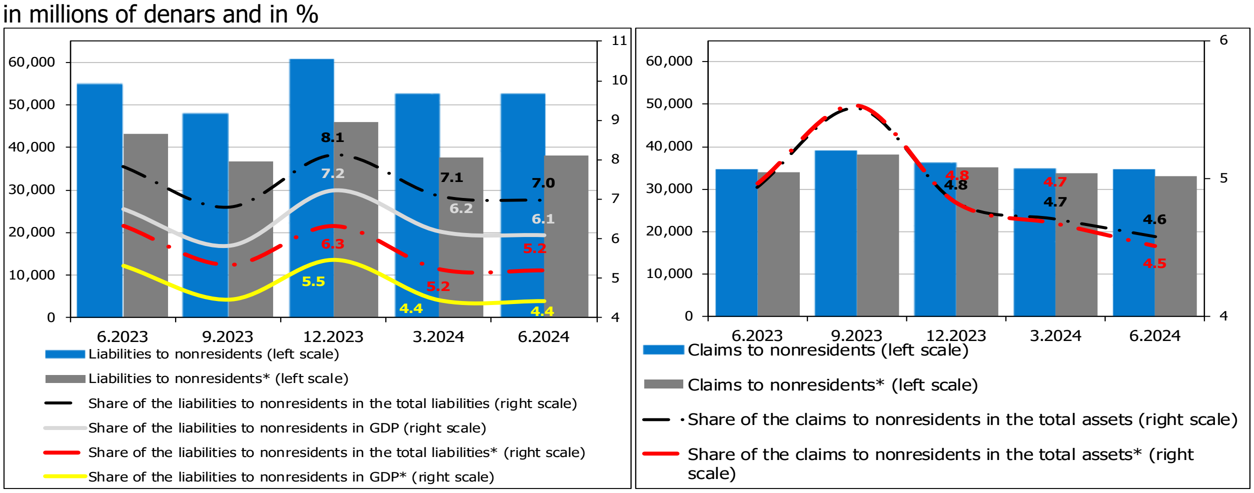
Source: National Bank, based on the data submitted by banks.

The total loan-based liabilities of banks (which account for **5.5% of total liabilities of the banking system)** reduced quarterly by Denar 1,468 million or 3.4%. This decline is due more to the reduced liabilities based on loans to non-resident financial institutions (which registered a quarterly decline of Denar 843 million or 3.4%, as a result mostly of the decrease in liabilities based on long-term loans to non-resident financial institutions at a medium-size development bank). The decline in loan-based liabilities to resident financial institutions is slightly smaller and equals Denar 621 million or 3.5%. Within the banks' total liabilities based on loans, the liabilities based on loans, **the liabilities to non-resident financial institutions still prevail.**

Deposits from banks and other financial institutions increased, although remained a moderate source of banks' financing, **accounting for 4.6% of total liabilities of the banking system.** The quarterly growth in the deposits of banks and other financial institutions of Denar 1,823 million (of 5.6%) results from the increase in the deposits of non-resident financial institutions (of Denar 1,884 million or 15.4%). On the other hand, a quarterly drop of Denar 60 million or 0.3% was registered in deposits of resident financial institutions. Such movements resulted in no changes in the structure of total deposits of banks and other financial institutions. Thus, the largest share of 58.8% still accounts for the deposits of resident financial institutions.

The volume of banking system activities with non-residents remains small. Traditionally, the banking system has more liabilities[68] than claims on non-residents, amid increase in liabilities and decline in claims in the second quarter of 2024. Domestic banks' liabilities to non-residents increased quarterly (by Denar 33 million or 0.1%), mostly due to increased liabilities based on long-term deposits of non-resident financial institutions with one large bank. However, the share of liabilities to non-residents in total banking system liabilities dropped by 0.1 percentage points to 7%[69] as of 30.6.2024. The bank claims on non-residents registered a quarterly decline of Denar 368 million or 1.1%, almost entirely due to reduced time overnight deposits with one large bank.

Chart 61
Liabilities to (left) and claims on (right) non-residents
in millions of denars and in %



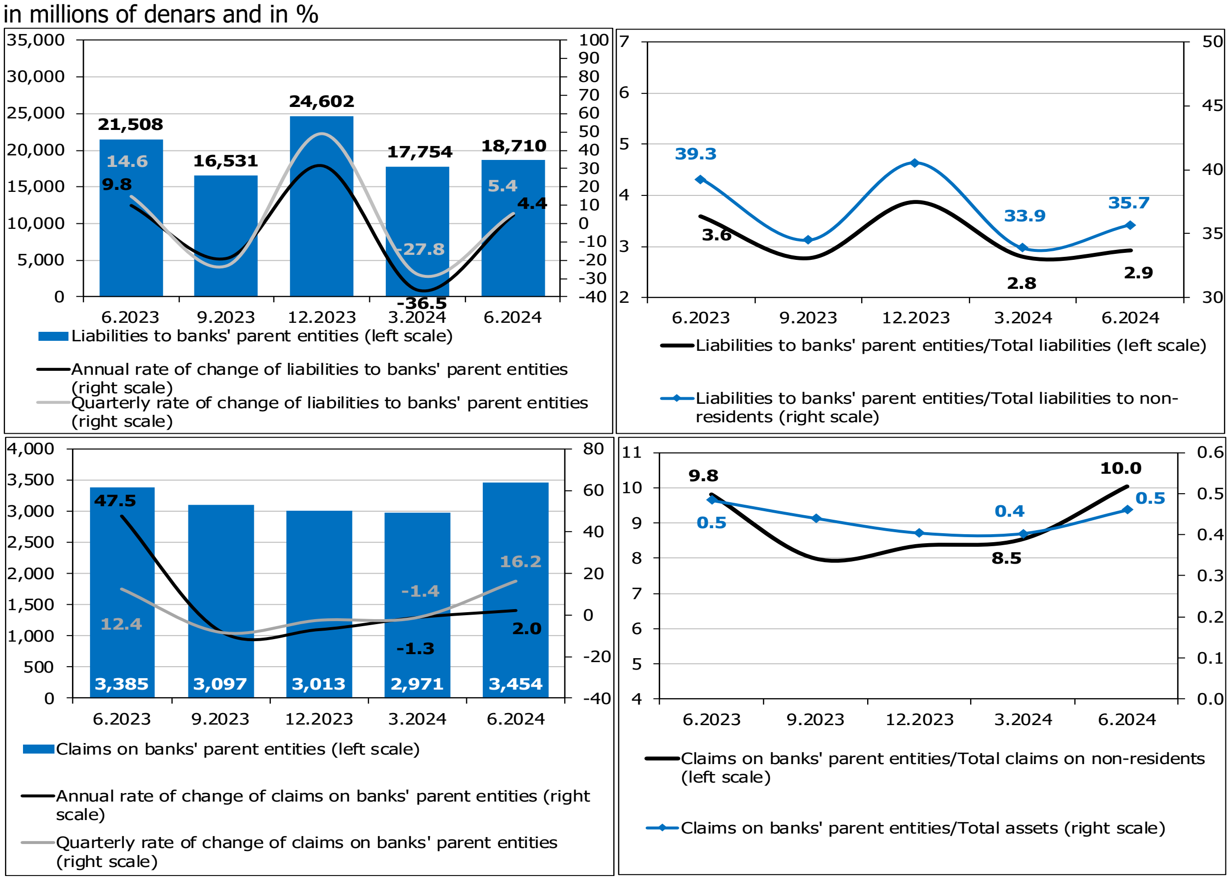
Source: National Bank, based on the data submitted by banks.
*Without DBNM AD Skopje

Liabilities to banks' parent entities registered minor increase, remaining further a moderate source of financing to domestic banks' activities. In the second quarter of 2024, banks' liabilities to their parent entities increased by Denar 956 million (or 5.4%), which was mostly due to the increase in the liabilities based on long-term deposits of parent entities (and their connected persons/entities) with one large bank. Thus, the share of banks' liabilities to parent entities (including subordinated liabilities and hybrid capital instruments) in

[68] As of 30.6.2024, seven of thirteen banks owe more than they claim on non-residents.
[69] If DBNM AD Skopje is excluded from the analysis, the share of liabilities to non-residents in total liabilities would be 5.2%.

total liabilities of the domestic banking system, and in liabilities to non-residents increased to 2.9% and 35.7%[70], respectively. Claims on parent entities registered a quarterly growth of Denar 483 million or 16.2%, although registering low share in total asset to the level of 0.5% (0.4% as of 31.3.2024) and claims on non-residents to the level of 10% (8.5% as of 31.3.2024).

Chart 62
Liabilities to (top) and claims on (bottom) banks' parent entities
in millions of denars and in %



Source: National Bank, based on the data submitted by banks.

2. Profitability

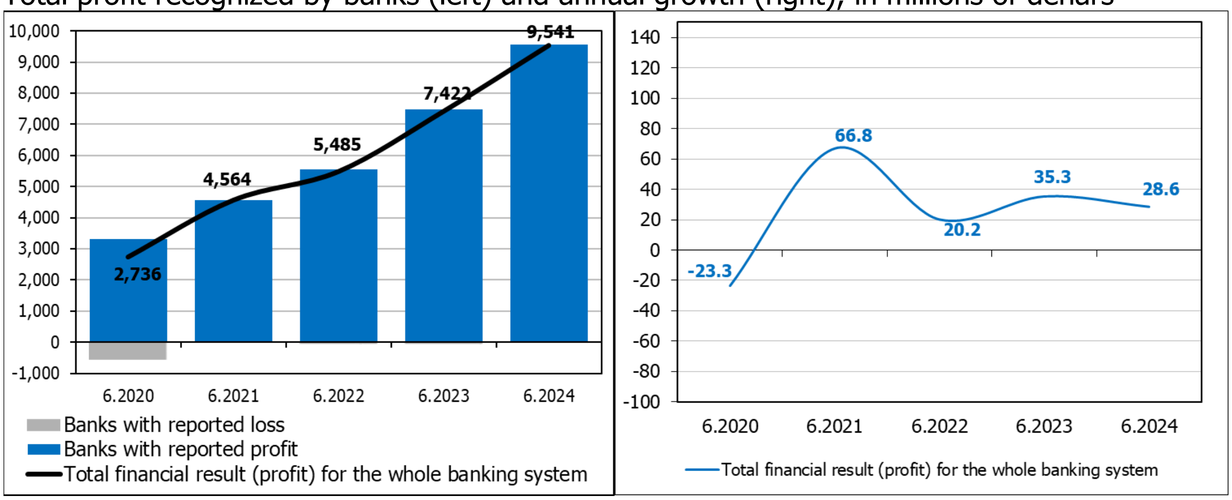
The banking system's profits continued to grow in the first half of 2024, although at a rate that was lower compared to the same period the previous year. Amid growth in interest rates and interest bearing assets, the higher financial result was conditioned by the increased net interest income, the growth of which was supported by the interest income from almost all sectors. Higher capital gains realized from the sale of assets, as well as higher net commission income, also had a small contribution to the increase in profits. The expenditures grew on all grounds. Almost all of the profitability and operational efficiency ratios of the banking system improved. Both lending and deposit interest rates hiked in the first six months of 2024.

[70]As of 31.3.2024, these shares equaled 2.8% and 33.9%, respectively.

2.1 Banking system profitability and efficiency ratios

In the first quarter of 2024, the banking system reported a profit of Denar 9,541 million, which is higher by 2,119 million or 28.6%, compared to the same period last year (Denar 1,937 million or 35.5%). The largest contribution to the profit growth was made by the higher net interest income, although its increase (of Denar 2,376 million or 20.3%) slowed down compared to the same period last year (when it increased by Denar 3,554 million or 43.6%). The higher capital gains realized from the sale of assets (an increase of Denar 548 million), as well as net income from commissions and fees (an increase of Denar 248 million or 7.8%)[71] contributed as well to the earnings growth. On the other hand, operating expenses also increased (by Denar 837 million or 11.5%), as well as the net impairment loss on financial and non-financial assets by Denar 234 million or 12.1%. Analyzed by bank, all banks, except one small-size bank, registered positive financial operating result.

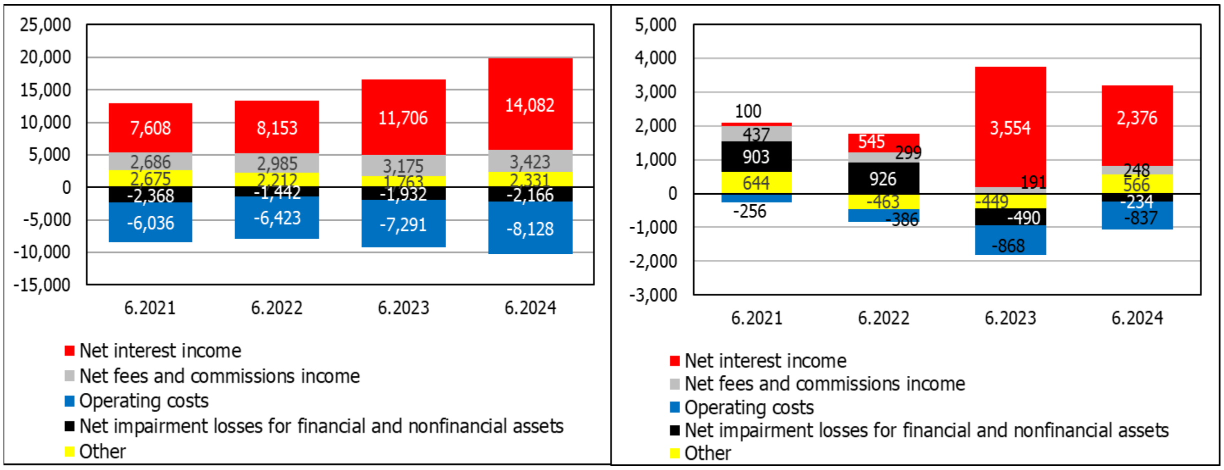
Chart 63
Total profit recognized by banks (left) and annual growth (right), in millions of denars



Source: National Bank, based on the data submitted by banks.

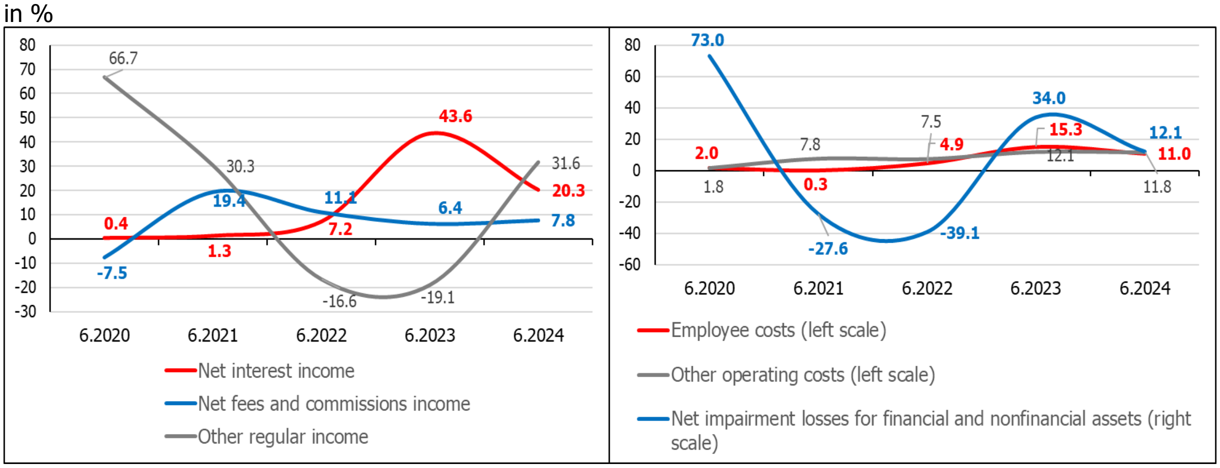
[71] In the first half of 2024, a large bank registered a capital gain from the sale of foreclosed property in the amount of Denar 550 million.

Chart 64
Contribution to the formation of profit (left) and to the profit growth (right) of banks
in millions of denars



Source: National Bank, based on the data submitted by banks.

Chart 65
Annual growth rate of the main income (left) and expenditure items (right) of banks
in %



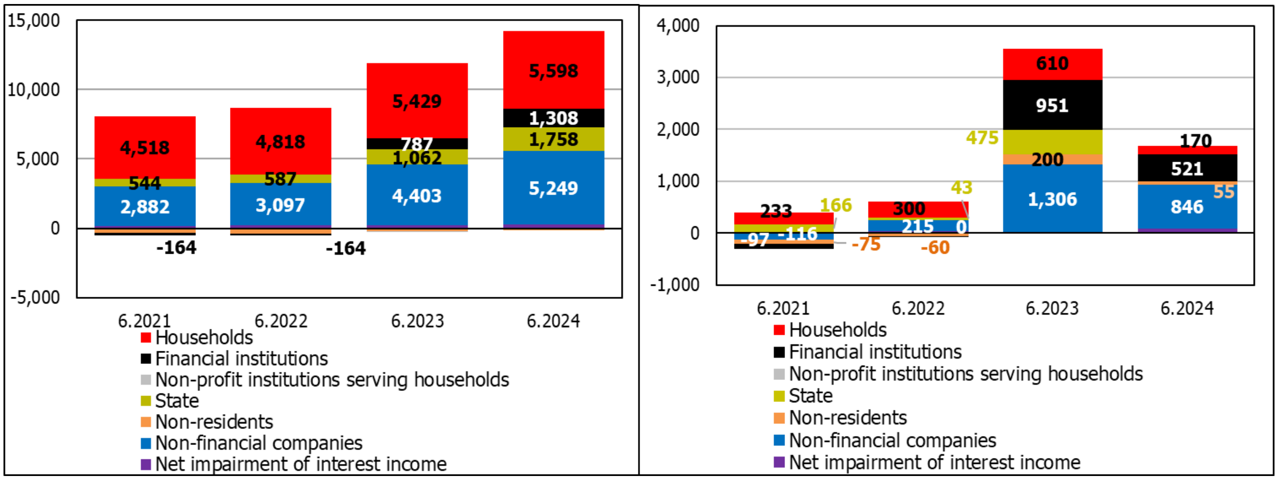
Source: National Bank, based on the data submitted by banks.

Higher net interest income of banks is based on higher absolute interest income (by Denar 3,596 million or 25.8%), compared to the growth of interest expenses (by Denar 1,221 million or 55.0%). Therefore, net interest income recorded growth from almost all sectors, amid higher increase in interest income compared to the increase in interest expenses. The largest contribution to the net interest income (39.8%) was made by the financial intermediation with households while the greatest contribution to the growth of net interest income was made by the net interest income from non-financial corporations (35.6%). Net interest income from non-financial corporations increased annually by Denar 846 million or 19.2%, while the net income from the household sector grew far less, by Denar 170 million or 3.1%. A relatively high absolute net interest income was registered from the activities of banks with the Government (of Denar 695 million or 65.4%) and with financial institutions (of Denar 521 million or 66.2%).

Chart 66

Net interest income of the banking system by sector, structure (left) and contribution to the growth (right)

in millions of denars

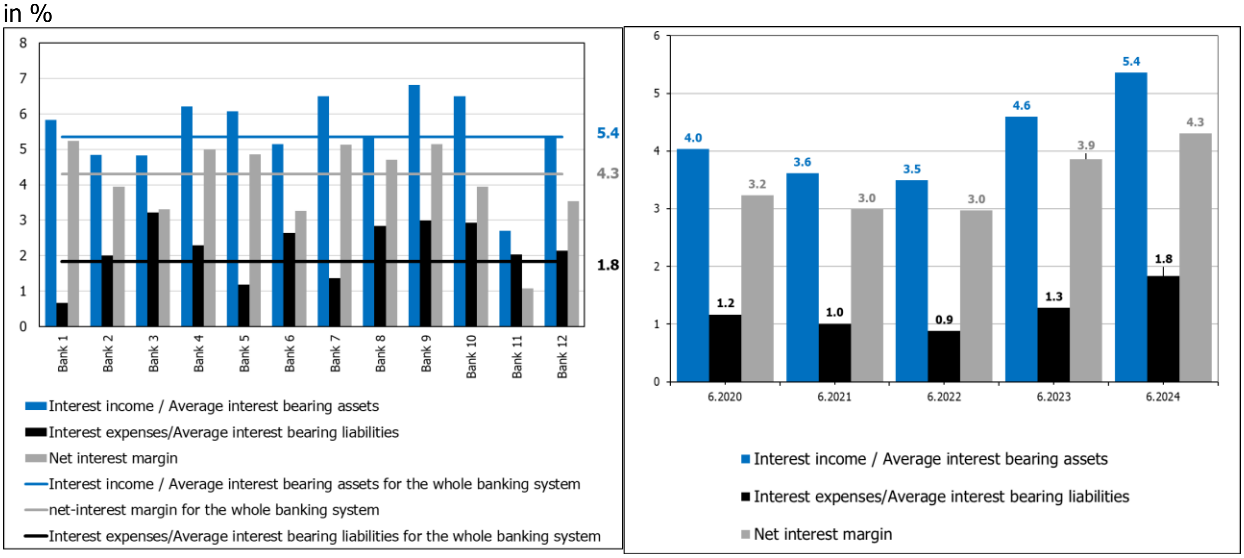


Source: National Bank, based on the data submitted by banks.

Chart 67

Net interest margin as of 31.3.2024, by bank (left)* and of the banking system (right)

in %



Source: National Bank, based on the data submitted by banks.

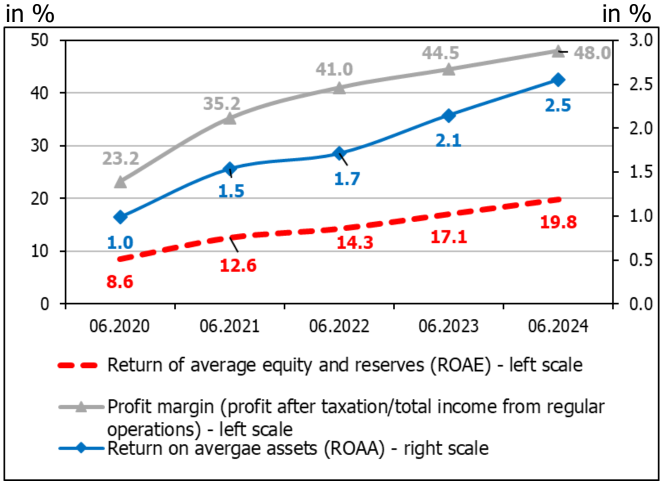
* Indicators of the banking system are shown in lines.

In the first six months of 2024, the net interest margin kept increased further, a trend that started in the same period of the previous year. Thus, the net interest margin increased by 0.4 percentage points, reaching the level of 4.3%, which is the highest rate in the last 10 years. Such growth was due to the more pronounced relative growth of net interest income (20.3%) compared to the growth of the average interest assets (7.9%).

In the first half of the year, the main profitability ratios[72] of the banking system registered improved values. Namely, the return on average capital and reserves, the return on average assets, as well as the profit margin increased by 2.7 percentage points, 0.4 percentage points, and 3.5 percentage points, respectively.

Chart 68

Rates of return on average assets and on average equity and profit margin



Source: National Bank, based on the data submitted by banks.

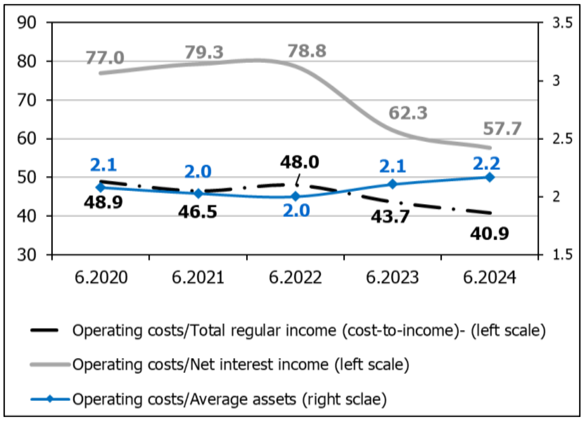
The indicators of the banking system operating efficiency are improving, as well. The operating costs to interest income ratio, as well as operating costs to total regular income ratio improved, by 4.6 and 2.8 percentage points, respectively, due to the faster growth of net interest income (20.3%) and total regular income (19.1%)[73] compared to the increase in operating costs (11.5%)[74]. The operating costs to average assets ratio is almost unchanged (increase of 0.06 perecentage points).

[72] Profitability and efficiency ratios of the banking system and bank groups are presented in the Annexes to this Report.

[73]The increase in regular income was determined by the increase in net interest income (by Denar 2,376 million, or 20.3%) higher capital gains realized from the sale of assets (by Denar 548 million, or more than five times), as well as from the growth in net income based on commissions and fees (by Denar 248 millio, or 7.8%)

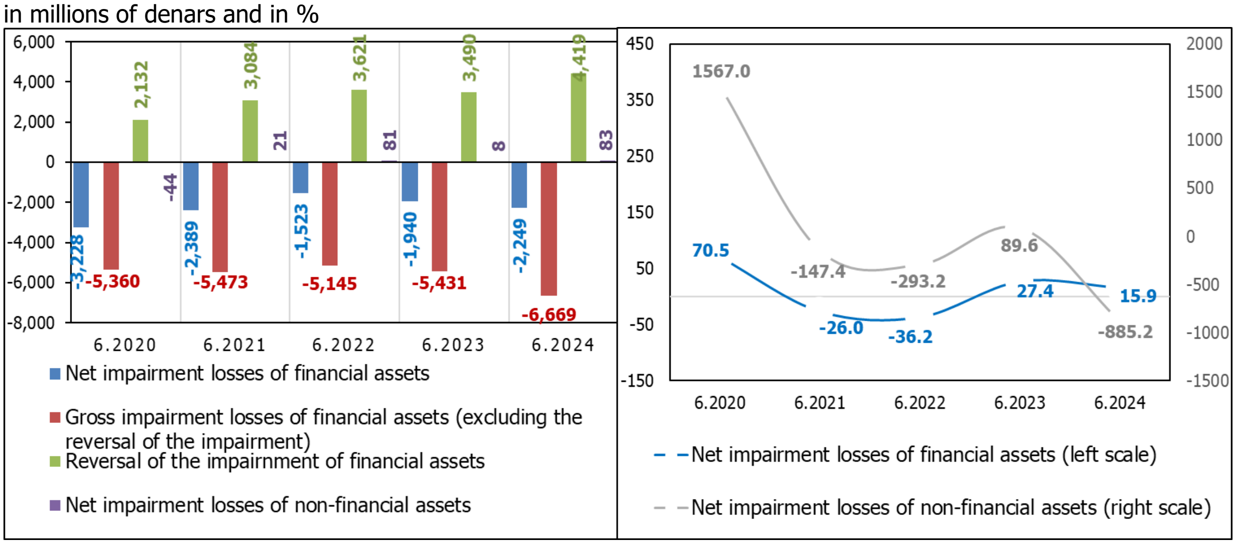
[74] The increase in operating expenses in the first half of 2024 (of Denar 837 million or 11.5%) is mainly due to the increase in employee costs (of Denar 350 million), general and administrative expenses (by Denar 148 million) and other expenses (by Denar 197 million).

Chart 69
Operational efficiency ratios
in %



Source: National Bank, based on the data submitted by banks.

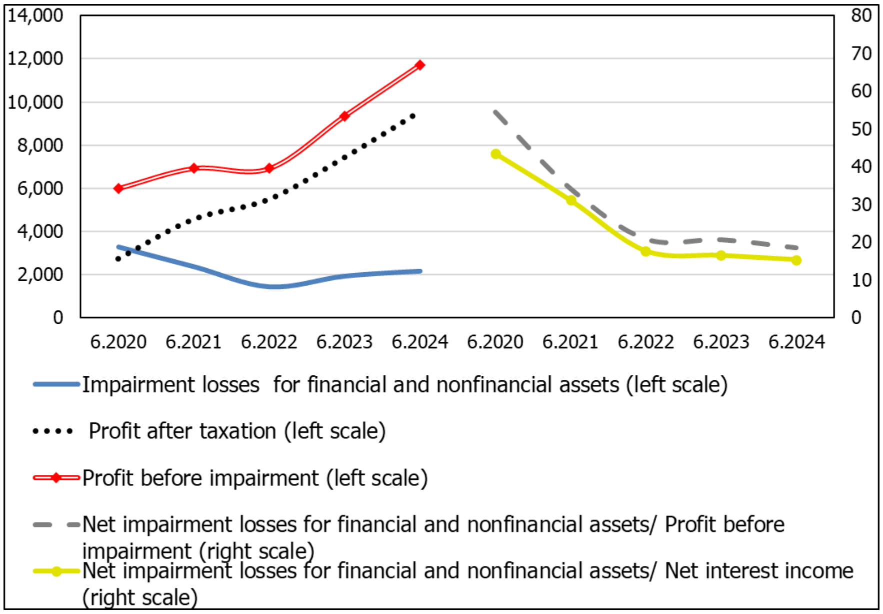
Chart 70
Impairment cost for financial and non-financial assets, stock (left) and annual flow (right)
in millions of denars and in %



Source: National Bank, based on the data submitted by banks.

In the first half of 2024, impairment costs for financial and nonfinancial assets (net) increased by Denar 234 million or 12.1%. The increase in these costs is primarily due to impairment costs of financial assets (which is a net increase of Denar 309 million or 15.9%). This increase was driven by the higher increase in the gross impairment costs of loans and other placements (of Denar 1,079 million or 22.9%), compared to the growth of impairment costs of financial assets (of Denar 574 million or 19.4%). **The net impairment of non-financial assets is minor and positive (it has a treatement as an income item).**

Chart 71
Impairment costs to gain and to net interest income ratios
in millions of denars in %

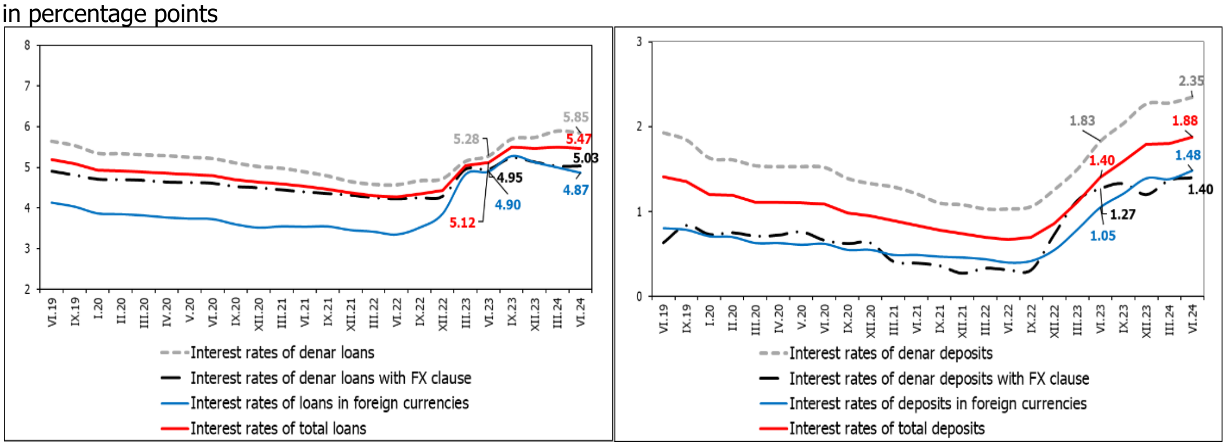


Source: National Bank, based on the data submitted by banks.

2.2. Movements in interest rates and interest rate spread

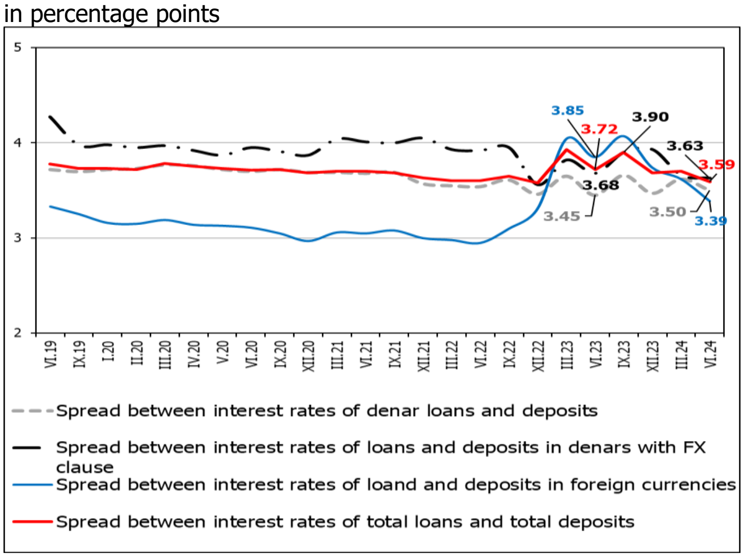
At the end of the first quarter of 2024, the total interest rate on loans and deposits amounted to 5.47% and 1.88% respectively, which is an increase of 0.35 and 0.48 percentage points compared to the end of the first quarter of the previous year when they equaled 5.12% and 1.40%, respectively. The interest rate spread narrowed, due to the faster growth in deposit interest rates, relative to the growth in lending interest rates. The spread between the total interest rate on loans and the total interest rate on deposits in June 2024 equaled 3.59 percentage points, compared to 3.63 percentage points and is smaller compared to the end of the first half of 2023, when it equaled 3.72 percentage points.

Chart 72 Lending (left) and deposit interest rates (right)
in percentage points



Source: National Bank.

Chart 73
Interest spread
in percentage points



Source: National Bank.