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 FIRST QUARTER OF 2024

June 2024

Contents

I. Summary

The environment in which banks operate in the first quarter of 2024 was characterized by favorable movements on the foreign exchange market, moderately faster economic growth and stabilized inflation at the level of the previous quarter, which remained above the historical average. At the same time, the risks arising from the setting and the uncertainty related to their materialization endure and are mainly related to the geopolitical tensions. As required by the economic conditions, the National Bank made no changes in the policy rate, and kept it at 6.3%. Additional changes in the reserve requirement instrument were adopted in this quarter, the application of which, mostly from June 2024, means additional withdrawal of part of the structural excess liquidity from the banking system, which corresponds to prudence, as a monetary policy feature. At the same time, measures further strengthen the denarization process and increase the long-term saving in the banking system. This monetary policy setup, together with the changes in reserve requirement and macro-prudential measures taken are expected to contribute to further slowdown in inflation and maintenance of the exchange rate stability. The banking system activities were affected by the usual seasonal movements in the first quarter of the year, while the annual growth remained solid. 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 remained vague, mainly under the influence of adverse external factors, especially accentuated by geopolitical turmoil. Hence, there is a need for further prudent risk monitoring and policy conduct in order to preserve the banking sector stability in the following period.

The favorable performances of deposits and loans continued in the first quarter of this year. The deposit growth remained solid annually, and almost unchanged compared to the previous quarter, amid accelerated annual growth of loans to non-financial entities. Deposits of non-financial entities registered an annual growth of 9.1% (9.2% as of 31.12.2023), amid accelerated growth of household deposits and slightly slower, yet double-digit annual growth of deposits of non-financial corporations. Analyzing the currency structure, domestic currency still prevails, amid double-digit annual growth of denar deposits, several times higher compared to the growth of foreign currency deposits (12.5% and 5.1%, respectively). The propensity for long-term saving remained as well, thus long-term deposits registered a rapid annual growth and reached 28.3%, amid further decline in short-term deposits and slower annual increase in demand deposits. Bank activities noted an accelerated annual growth of 6.2% (4.3% as of 31.12.2023), despite the tightened credit conditions and reduced credit demand in the first quarter of the year. Most of the categories of activities of the banking system declined or decelerated on a quarterly basis, primarily due to seasonal effects. Thus, deposits to non-financial entities decreased (by 0.9%), with a decelerated growth of loans, which equaled 1% (1.9% in the previous quarter). Such movements are usual for this period of the year and are mostly related to the business operation cycle of corporations.

The solvency of the banking system improved. The capital adequacy ratio reached 18.9%, which is the highest level since 2006. The improved indicator arises from the growth of banks' own funds, mostly due to reinvestment of last year's profits, amid slight decline in risk-weighted assets due to the tightening of the open currency position. The higher solvency ratios mainly result from the higher regulatory and supervisory requirements related to banks' capital, 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, increased the capital requirements in terms of countercyclical capital buffer, which will begin to apply in the following period, the banking system solvency is expected to further improve. Analyzing the use, around 37% of own funds of the banking system accounts for capital buffers or are "free" above the required minimum level, which the banks may use to deal with different challenges in the downward movements during economic cycles and in crisis conditions. The conducted stress testing shows that the banking system is resilient to the simulated shocks.

The liquidity indicators slightly declined, without significant deviations from the usual satisfactory levels. Thus, liquid assets account for 30.9% of total banks' assets (31.8% as of 31.12.2023), while the coverage of short-term liabilities and household deposits with liquid assets account for 52.5% and 61.8%, respectively (as of 31.12.2023, these indicators equaled 52.3% and 65.3%, respectively). The liquidity coverage ratio of the banking system equals 279.1%, which is significantly higher than the regulatory minimum (100%), thus confirming the satisfactory volume of liquidity available to the Macedonian banking system. The stress test results indicate satisfactory resilience of the banking system to the assumed extreme, individual and combined liquidity outflows.

In the first quarter of 2024, part of the credit risk exposure indicators increased, due to methodological changes introduced in the beginning of the year, with the application of the new Decision on the methodology for credit risk management. Thus, the non-performing loans rates increased to 3.1% (non-financial entities), 3.8% (non-financial corporations) and 2.3% (households), due to significant increase in non-performing loans, which is an effect of the different methodological approach in determining the non-performing status (namely, counting the days of delay) and not to the changed creditworthiness of customers. If we exclude this effect in the first month of the application of the new decision, non-performing loans to non-financial entities would drop quarterly (-1.6%) and the rate of non-performing loans would decrease accordingly (to the level of 2.7%).

In the first quarter of 2024 the presence of currency component (foreign currency and FX clause) in banks' balance sheets further decreased and reduced to 41.2% in assets and 40.7% in liabilities. The amendments to the reserve requirement, which were aimed at increasing denarization and registered positive trends, are in context of these changes. The exposure of the banking system to currency risk significantly decreased quarterly, to the level of 6.1% of own funds, which is significantly lower than the regulatory limit of 30%.

The banks' exposure to interest rate risk in the banking book is within the prescribed limit (20%) and as of 31.3.2024 equals 10.1% of own funds, which is a quarterly increase of 1.1 percentage points. The exposure of the banking system to indirect credit risk arising from the share of loans with variable and adjustable interest rate in the credit portfolio is still important, although the share of these loans declined quarterly to 69.4% of total loans (70.2% as of 31.12.2023).

In the first quarter of 2024, most of the profitability and efficiency ratios of the banking system improved compared to the same period last year. The profit of the banking system further grew (14.9%), albeit slower compared to the same period last year (44.3%). In conditions of increased interest rates and interest-bearing assets, the largest contribution to the increase in earnings include the net interest income from almost all sectors, although they grew slower as well. A slight contribution to the profit growth was made by higher net commission income. The rate of return of average assets (which amounted to 2.3% similar to the average for the Western Balkans and the CESEE countries) and the rate of return of the average equity (which equaled 18.2%) improved compared to the same period last year (2.2% and 17.6%, respectively). The main expenditure items of banks increased, especially the impairment cost (57.1%), which is partly due to the above-mentioned amendments to the credit risk management regulations. A solid growth of 10.2% was noted in operating costs as well, but amid faster growth in total income, the operating costs to income ratio decreased to 40.7% (as opposed to the first three months of 2023).

In general, the banking sector preserved its stability and operating security in the first quarter of 2024 as well, registering improved solvency, maintained liquidity and good credit portfolio quality. However, the environment remained vague, given that the risks to the global and domestic economy on short and medium run are still persisting. Hence, further caution is needed, especially in the monitoring and management of credit risk, the importance of which is getting higher in conditions of uncertain environment and tight financial conditions. The National Bank closely monitors all events and is ready to take all necessary measures within its competence, when needed.

II. Structure of the banking system

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

As of 31.3.2024, the number of banks in the Republic of North Macedonia remained unchanged compared to the previous quarter and equaled thirteen banks. Nine banks are in predominant foreign ownership, five of which are subsidiaries of foreign banks.

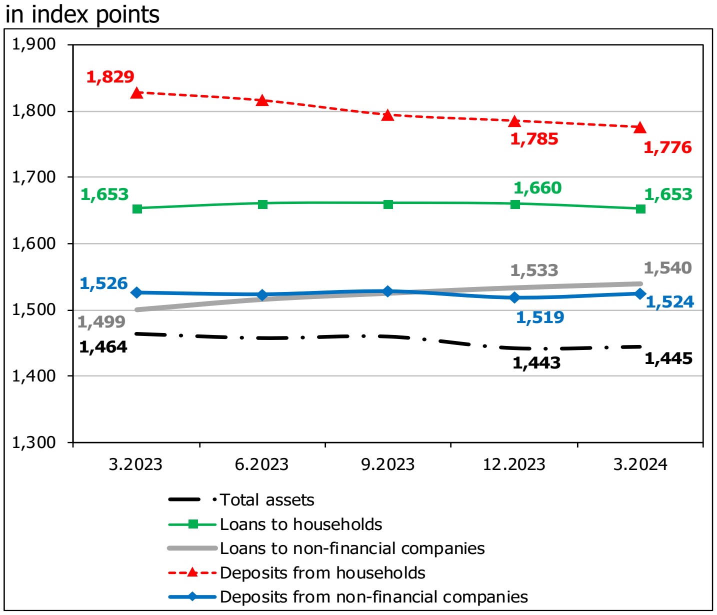
Table 1
Structure of major balance sheet positions by banks' majority ownership (as of 31.3.2024)
in millions of denars and in %

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**	**75,749**	**77.2%**	**535,236**	**72.4%**	**368,272**	**82.8%**	**378,335**	**70.8%**	**28,088**	**76.0%**	**11,182**	**75.2%**
- subsidiaries of foreign banks	*5*	*66,764*	*68.1%*	*446,610*	*60.4%*	*312,117*	*70.1%*	*317,602*	*59.4%*	*23,836*	*64.5%*	*9,947*	*66.9%*
- Austria	1	10,866	11.1%	93,537	12.7%	67,514	15.2%	57,512	10.8%	3,782	10.2%	1,591	10.7%
- Bulgaria	1	1,307	1.3%	12,217	1.7%	7,592	1.7%	9,384	1.8%	462	1.2%	47	0.3%
- Greece	1	22,295	22.7%	129,357	17.5%	93,767	21.1%	96,071	18.0%	8,170	22.1%	3,651	24.6%
- Slovenia	1	16,781	17.1%	116,917	15.8%	79,046	17.8%	90,216	16.9%	6,257	16.9%	3,079	20.7%
- Turkey	1	15,515	15.8%	94,582	12.8%	64,198	14.4%	64,418	12.1%	5,165	14.0%	1,579	10.6%
- other banks in dominant foreign ownership	*4*	*8,985*	*9.2%*	*88,626*	*12.0%*	*56,155*	*12.6%*	*60,733*	*11.4%*	*4,252*	*11.5%*	*1,236*	*8.3%*
- Bulgaria	2	3,635	3.7%	29,896	4.0%	18,783	4.2%	21,157	4.0%	1,808	4.9%	399	2.7%
- Germany	1	4,398	4.5%	49,451	6.7%	32,016	7.2%	32,731	6.1%	1,959	5.3%	678	4.6%
- Switzerland	1	952	1.0%	9,279	1.3%	5,355	1.2%	6,846	1.3%	486	1.3%	159	1.1%
Banks in dominant ownership of domestic shareholders	**4**	**22,347**	**22.8%**	**203,702**	**27.6%**	**76,706**	**17.2%**	**156,191**	**29.2%**	**8,890**	**24.0%**	**3,679**	**24.8%**
- private ownership	*3*	*18,715*	*19.1%*	*185,199*	*25.1%*	*76,500*	*17.2%*	*156,191*	*29.2%*	*8,662*	*23.4%*	*3,624*	*24.4%*
- state ownership	*1*	*3,632*	*3.7%*	*18,503*	*2.5%*	*206*	*0.0%*	*0*	*0.0%*	*228*	*0.6%*	*55*	*0.4%*
Total:	**13**	**98,096**	**100.0%**	**738,938**	**100.0%**	**444,977**	**100.0%**	**534,525**	**100.0%**	**36,978**	**100.0%**	**14,862**	**100.0%**

Source: National Bank, based on the data submitted by banks.
*Total income and financial result are calculated for the last twelve months (31.3.2023-31.3.2024).

Banks with dominant foreign ownership prevail in the structure of the major balance sheet positions of the banking system in the first quarter of 2024. The quarterly change of the shares of the foreign-owned banks by position was mostly downward, albeit minor. The largest decrease in the share of these banks, of 0.4 percentage points, was registered in total equity and reserves, with some decline in their shares in total assets (0.3 percentage points), loans to non-financial sector (0.3 percentage points) and total income (0.2 percentage points). On the other hand, the share of foreign banks in total financial result increased by 0.3 percentage points. These banks still have the highest share in total loans to non-financial sector (82.8%).

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 first quarter of 2024.** The Herfindahl index for loans and deposits to non-financial corporations registered a slight quarterly growth, amid slight decline in this indicator calculated for household loans and deposits. 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 %

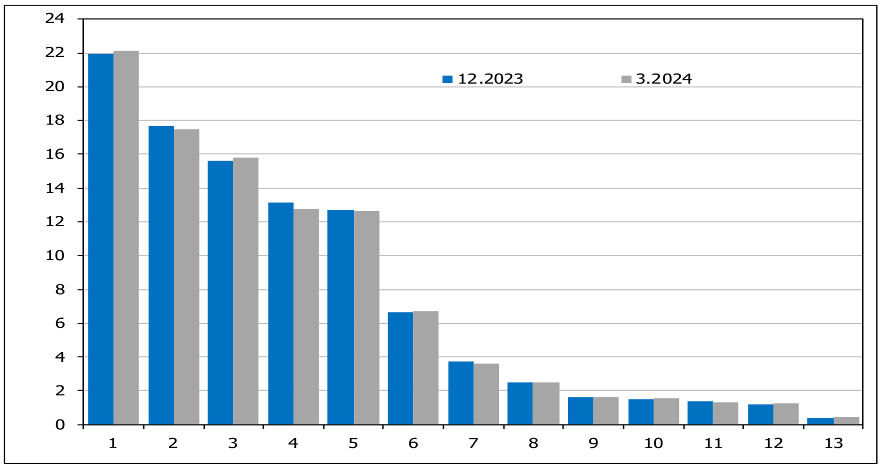
Position	31.03.2024		31.12.2023	
	CR3	CR5	CR3	CR5
Total assets	55.5	80.9	55.2	81.0
Loans to households	61.8	84.2	62.0	84.1
Loans to non-financial companies	53.0	82.3	52.8	82.3
Deposits from households	67.7	85.6	68.0	85.5
Deposits from non-financial companies	55.7	81.1	54.6	81.5
Financial result*	70.3	91.6	71.8	90.8
Total revenues*	59.3	83.5	59.2	83.2

Source: National Bank, based on the data submitted by banks.
*Total income and financial result are calculated for the last twelve months (31.3.2023-31.3.2024).

[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 concentration of banks in the financial result, with a decrease in the share of the three banks with the largest share, of 1.5 percentage points, amid increased share of the five banks with the largest share in the financial result of 0.8 percentage points. There is also an increase in the share of the three banks with the largest share in deposits of non-financial corporations of 1.2 percentage points.

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



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

The difference in the bank size according to the amount of their assets remained high, while the spread between the bank with the highest market share (22.2%) and the bank with the lowest market share (0.4%) widened by 0.2 percentage points, compared to the previous quarter. The five largest banks remain the only ones with a double-digit market share, which cumulatively equals 80.9% with a decrease of 0.1 percentage points, while the five smallest banks have the single market share below 2%, while their cumulative share equals 6.2%.

III. Bank risks

1. Credit risk

In the first quarter of 2024, the rates of non-performing loans increased between 0.1 and 0.4 percentage points, to the levels of 3.1% for non-financial entities, 3.8% for non-financial corporations and 2.3% for households. These performances reflect the methodological changes introduced in the beginning of the year, by applying the new Decision on the methodology for credit risk management[3]. The growth reflects the increased non-performing loans due to the changed methodological approach for determining the non-performing status (namely, counting the days of delay), and not to the changed creditworthiness of customers. This is seen through the simulation in which the exclusion of the initial effect in the first month of the application of this decision, indicates a quarterly decrease in non-performing loans and consequently, lower non-performing loan rates. The growth of non-performing loans in the household sector was focused on consumer loans, while within the corporate loan portfolio, the increase in the non-performing loans rate is most evident in manufacturing industry. The coverage of non-performing loans with impairment for anticipated credit losses moderately decreased, but remains solid, while the non-provisioned part of the non-performing loans accounts for only 5% of banking system's own funds, which limits the potential risks to the banking system solvency amid assumed complete default of non-performing loans. The results of the credit risk stress-test simulations confirm the banking sector resilience to assumed extreme deteriorations of the credit portfolio risk.

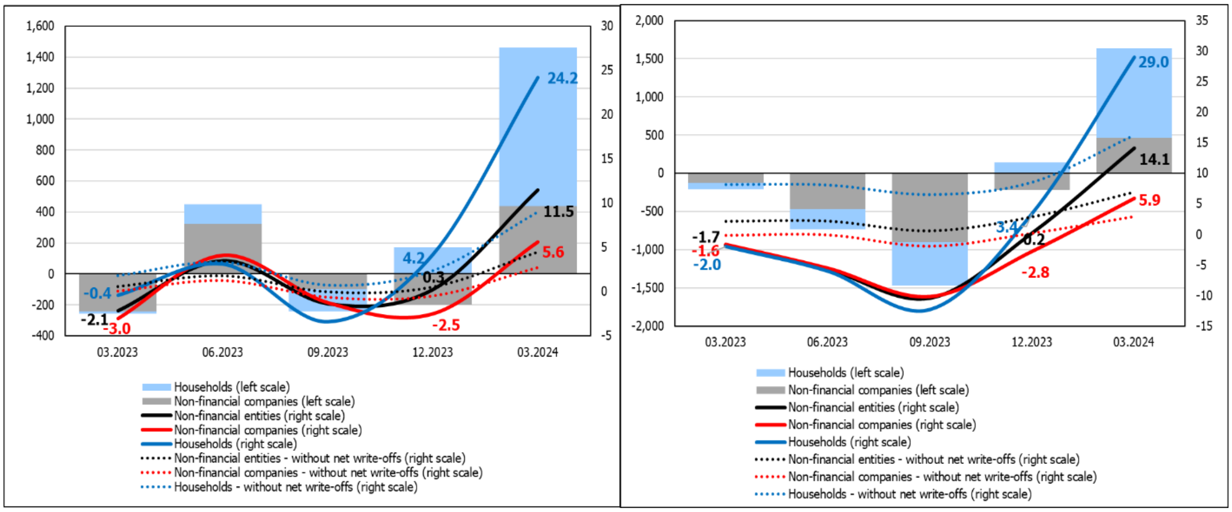
Prolonged and restructured loans, which are mainly part of the corporate credit portfolio, have registered a decrease, and as before, do not represent a source of risk of more pronounced deterioration in the credit portfolio quality of the domestic banking system, due to their relatively low share in total loans (3.9% and 1.7%, respectively as of 31.3.2024). Given the still present risks from the environment, banks need to remain cautious in credit risk management.

In the first quarter of 2024, after the implementation of the new Decision on the methodology for credit risk management, total non-performing loans to non-financial sector increased by Denar 1,403 million (or by 11.5%) which was almost entirely due to regulatory changes in determining the non-performing status[4]. The increase in non-performing loans was more evident in household portfolio, and to a lesser extent in the corporate sector, as expected since the changes in the methodology for counting days mostly affected loans with annuity repayment, mainly in households.

[3]The new Decision introduced the term uncollected credit exposure, which includes fulfillment of one of the following two requirements: 1) credit exposure which has not been collected for longer than 90 consecutive days counted from the day when the due amount exceeded the significance threshold and 2) default has been determined. This means that for the purpose of determining the uncollected credit exposures, the bank does not monitor the days of delay, but the number of consecutive days when the significance threshold has been exceeded (absolute and relative component) l. The Decision is available at the following link: https://www.nbrm.mk/content/Regulativa/Odluka_metodologija_%20za_krediten_rizik_nova.pdf

[4] The first single effect in January 2024 is increase in the non-performing loans by about 12% on both, annual and monthly basis. If we exclude this effect, only in the first month of the application of this decision, non-performing loans would drop quarterly by 1.6%.

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

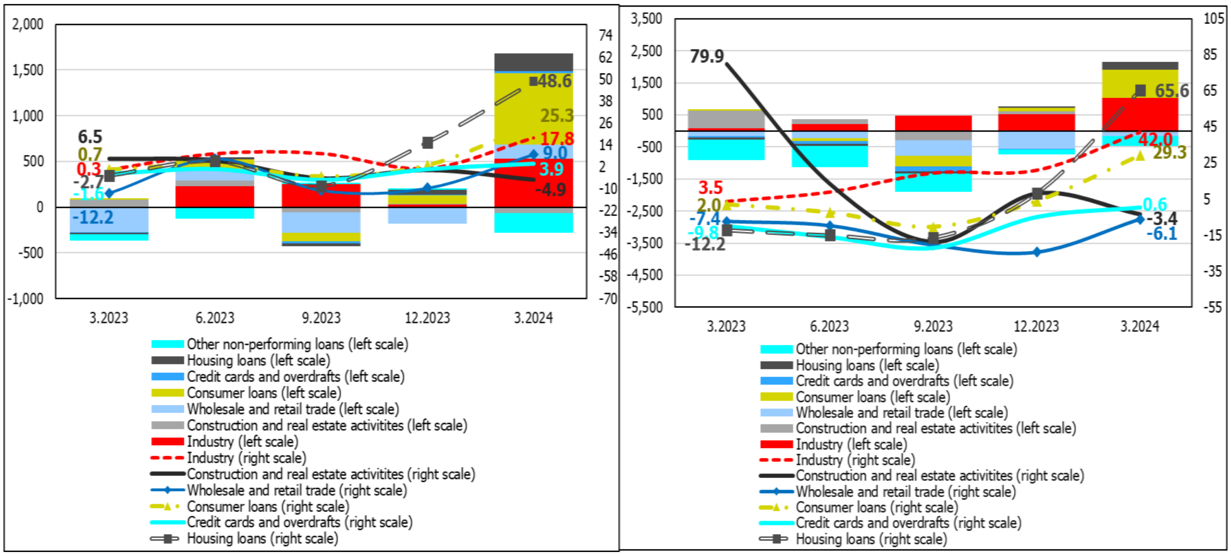


Source: National Bank, based on the data submitted by banks.
Note: The lines with dots show the growth of non-performing loans by excluding the effect of all mandatory write-offs made in the period 1.1.2016 - 31.3.2024. Starting from December 2019, the data also contains the collected compulsorily written-off loans.

Non-performing corporate loan portfolio[5] increased by Denar 438 million, or 5.6%. Such movements[6] are entirely due to the above-mentioned change in regulation, amid solid mandatory net write-offs of non-performing corporate loans (Denar 350 million)[7]. The increase in non-performing loans is mostly evident in activities that account for the largest part of credit exposure, i.e. industry (by Denar 530 million or 17.8%) and wholesale and retail trade (by Denar 153 million or 9%). In contrast, decrease in non-performing loans was registered in construction and real estate services (Denar 60 million or 4.9%), amid significant amount of write-offs in several companies in this field.

[5] Non-performing corporate loans that dominated the total non-performing portfolio, dropped by 3.3 percentage points, i.e. to the level of 60.2% at the end of the first quarter of 2024.
[6] If we exclude the effect of the changed regulation, non-performing corporate loans remain almost unchanged quarterly (slight decline of 0,5%).
[7] By excluding the effect of mandatory net write-offs, the decline of non-performing corporate loans is twice as lower and amounts to 2.8%.

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 %



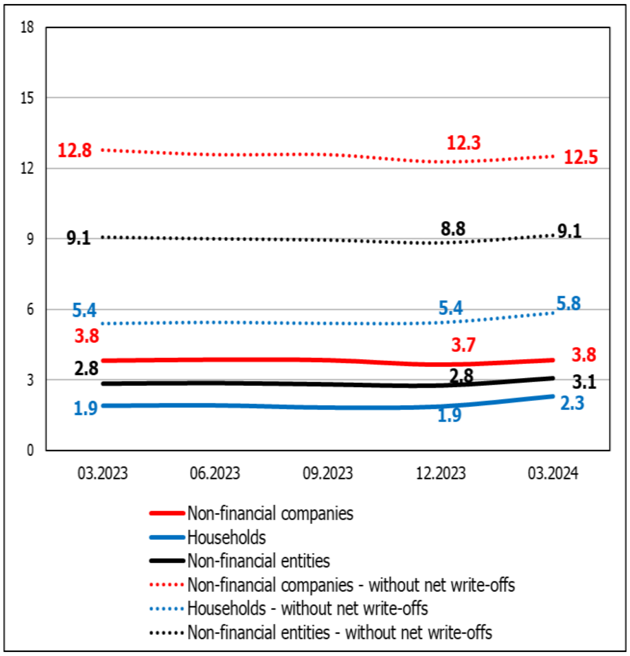
Source: National Bank's Credit Registry based on data submitted by banks.

The largest effect of the changes in the regulation was noted in the household sector, where the quarterly growth of non-performing loans amounted to 24.2% or Denar 1,022 million. If we isolate the initial regulatory effect, only for the first month of the application of the changed regulation, non-performing household loans would decrease by 2.2% quarterly mainly due to the mandatory write-offs[8]. Analyzing by purpose of loans, over three-quarters of the quarterly growth of non-performing household loans account for consumer loans.

Such changes in non-performing loans, amid growth in banks' activities of 1% on a quarterly basis, moderately increased the rate of non-performing loans by 0.3 percentage points to 3.1%[9] in the first quarter of 2024.

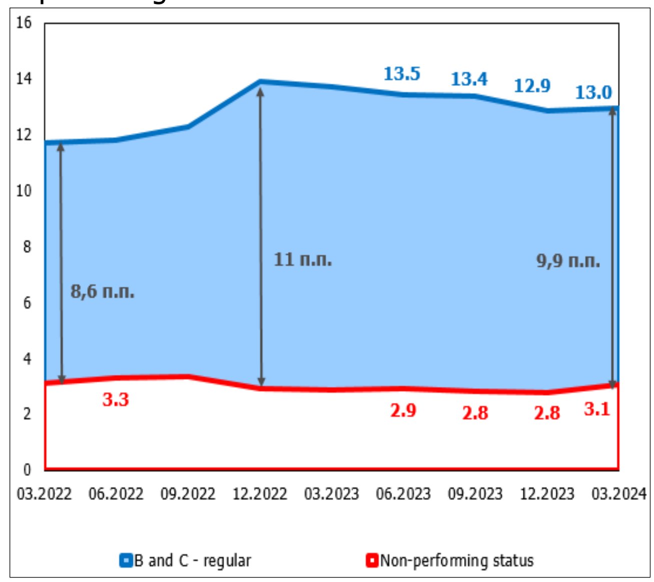
[8]The amount of mandatory write-offs in the first quarter equaled Denar 123 million. If we exclude the effect of these net write-offs, the non-performing household loans increase by 9%.
[9]If we exclude the effect of the mandatory net write-offs, the share of non-performing to total loans is stable at 9.1%, which is still below its ten-year average of 10.6%.

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 risk categories, and non-performing loans*, by their share in total loans
in percentages of the total loans

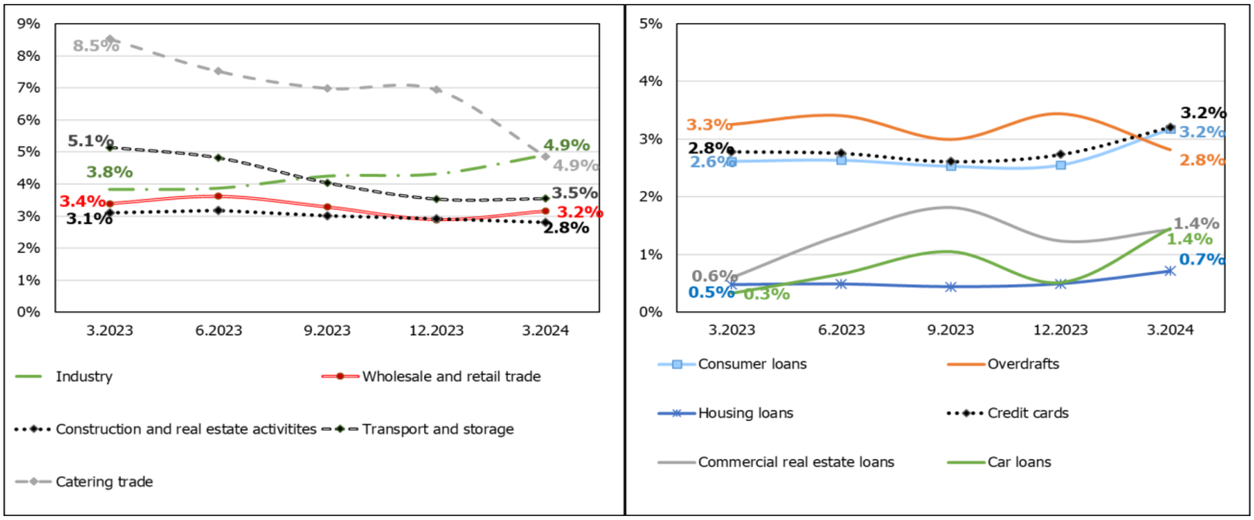


Source: National Bank's Credit Registry based on data submitted by banks.
*Regular loans classified in B and C risk categories and non-performing loans, are approximation of the so called group 2 and 3 loans according to IFRS 9, respectively. The slight differences in the rates of NPL relative to the Chart on the left, are due to the two different data sources.

In the corporate loan portfolio, the rate of non-performing loans increased slightly by 0.1 percentage points, to 3.8%, thus remaining among the historically lowest levels[10]. Observed by economic activity, this rate deteriorated in manufacturing industry to the level of 6.6% (5.7% at the end of 2023), especially in chemical industry and production of building materials (increase of 4.9 percentage points), followed by agriculture, forestry and fishing (increase of 1.5 percentage points). In contrast, the rate of non-performing loans declined in education sector (by 4.5 percentage points), professional, scientific and technical activities (by 3.9 percentage points) and catering, i.e. accommodation facilities and services activities (by 2.1 percentage points).

[10]Without the effect of the mandatory net write-offs, the share of non-performing to total corporate loans remained stable at 12.5%, which is slightly above the levels in the previous quarter and the past decade.

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



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

The changes in regulation mostly affected the non-performing loans rate in household loan portfolio, which increased by 0.4 percentage points to the level of 2.3%[11]. The rates of non-performing loans in the two largest categories of household loans, i.e. consumer and housing loans, grew by 0.6 and 0.2 percentage points during the first quarter and equaled 3.2% and 0.7%, respectively. Thus, housing loans still have the lowest non-performing loans rate.

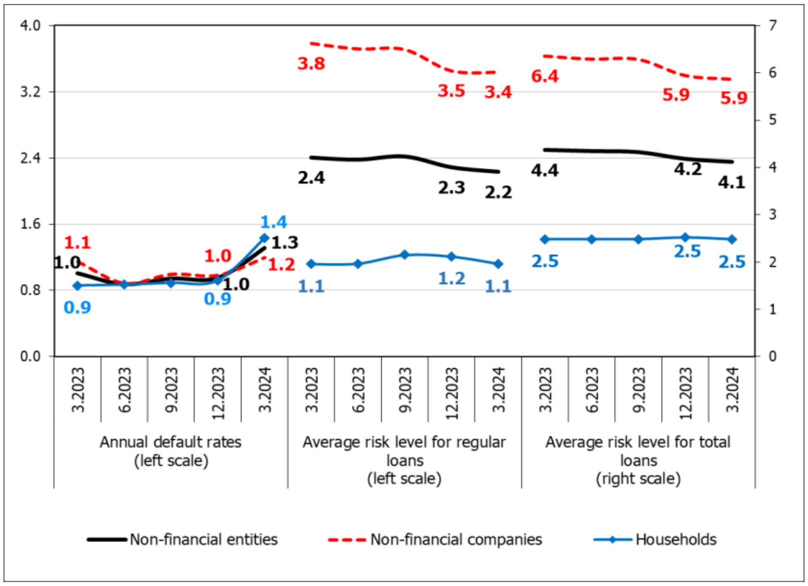
The change in the methodology of determining non-performing loans increased the annual migration rate of the regular credit exposure to non-performing of the overall non-financial sector and individually, of both its segments. Consequently, there is a decrease in the average provisioning of the overall regular loans, and by individual sectors, of 0.1 percentage points. Thus, the transition to non-performing loans is mainly due to the changes in the regulation, and does not indicate increased credit risk. On the other hand, the increased transition from performing to non-performing claims did not increase the average provisioning of the overall credit portfolio, which slightly decreased (by 0.1 percentage point). The average provisioning of loans by sector remained unchanged. As for the companies, banks continuously allocated higher amount of impairment relative to the realized migration rates, which is an indicator of their perceptions of higher risks in the corporate loans than to households, due to both, increased dispersion of household portfolio, and increased exposure of the corporate sector to uncertainties in the surrounding. Thus, at the end of the first quarter of 2024, the expected loan losses for regular loans to non-financial corporations equaled 3.4%, which is significantly higher compared to households (1.1%), although the annual migration rates in both sector are similar (1.2% in the corporate sector, while 1.4% in household[12]). The uncertainty of

[11]If we exclude the effect of the mandatory net write-offs, the rate of non-performing household loans slightly increased compared to the previous quarter at 5.8%, which is slightly above its 10-year moving average.
[12]The migration rates from performing to non-performing loans are usually low in both sectors, more pronounced in households. The difference that occurs at the end of the first quarter 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.

the external environment in which banks operate is still present, thus there is a need for close monitoring of the credit portfolio quality and appropriate and timely allocation of provisions to cover expected credit losses.

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

in %

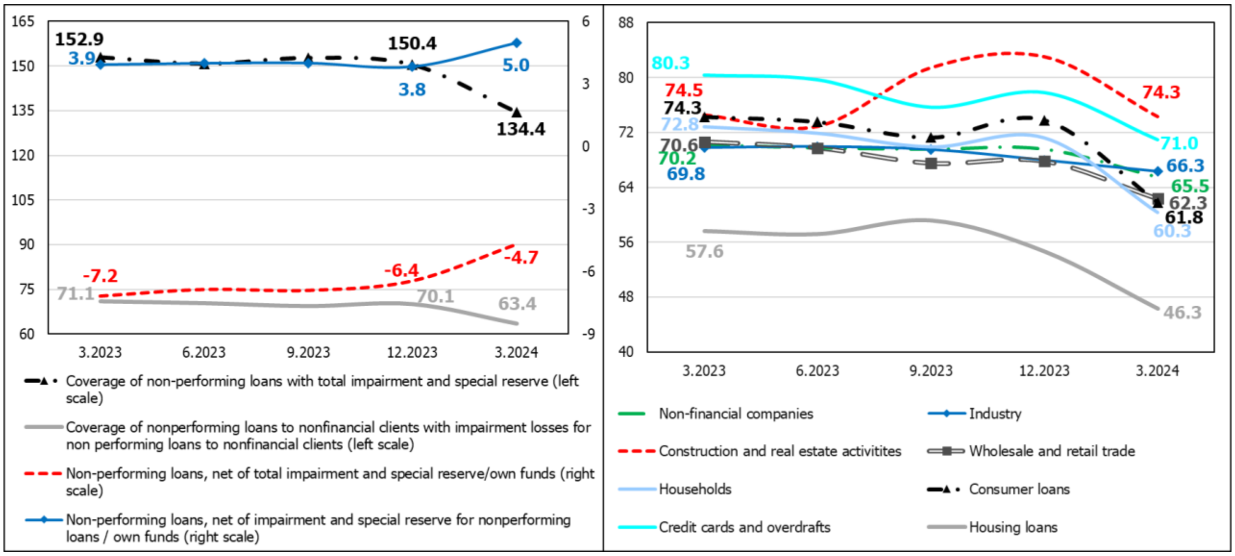


Source: National Bank's Credit Registry based on data submitted by banks.

The negative effects of a possible complete default on non-performing loans, i.e. the volume of unexpected credit losses on this basis have a limited impact on the solvency of the domestic banking system. Solid amount of non-performing loans was covered with impairment for these loans (63.4%), although in the first quarter of 2024 a slight decrease of 6.7 percentage points was evident compared to the previous quarter, primarily due to mandatory write-offs and due to the already mentioned methodological changes and the increased non-performing loans as a consequence of them[13]. Despite the quarterly increase, the non-provisioned amount of non-performing loans remained low and accounted for only 5% of banking system's own funds. Thus, even amid assumption of complete default of non-performing loans, the banking system solvency would not be jeopardized.

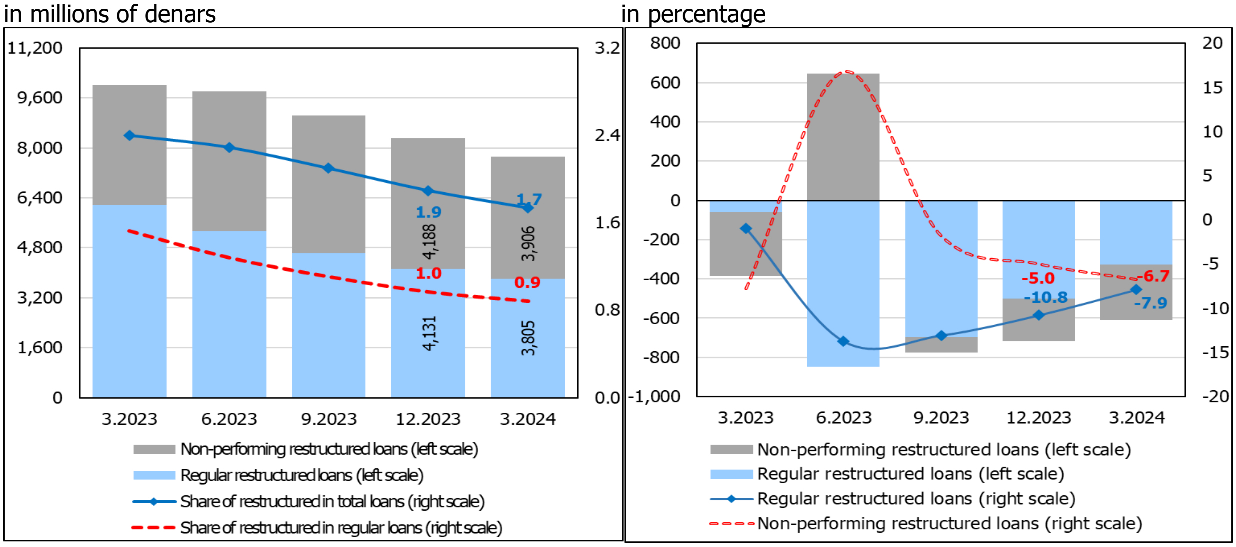
[13]The minimal obligation for provisioning non-performing loans equals 30% (which is probably applied on new non-performing loans, and is twice as lower than the average provisioning of non-performing loans), which decreases the coverage of these loans with impairment, with mandatory write-offs of fully provisioned non-performing loans being a significant factor as well.

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



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

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

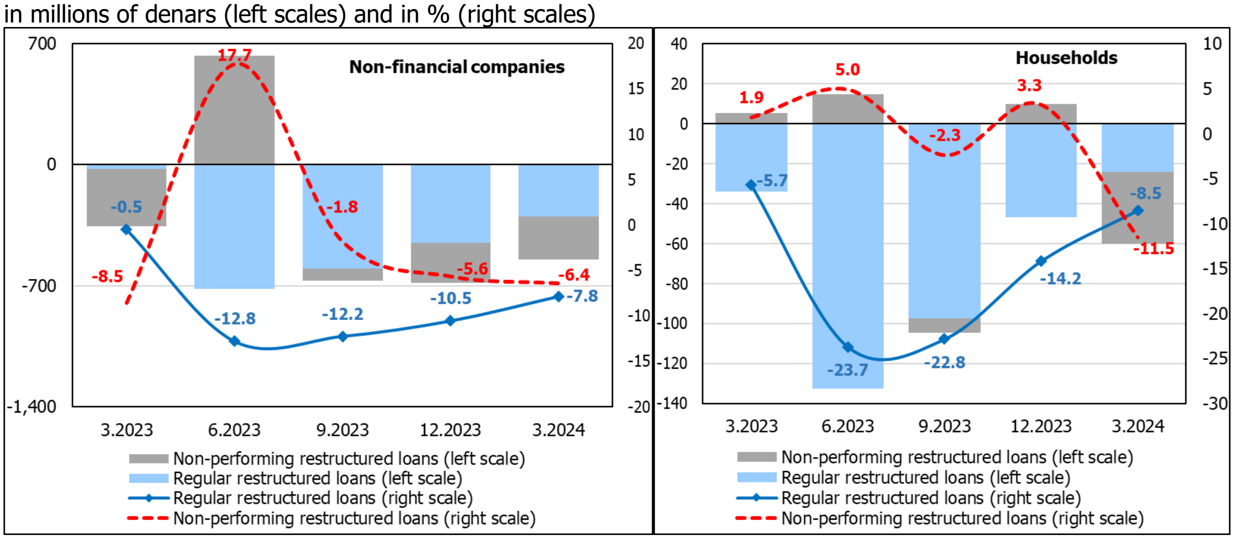


Source: National Bank's Credit Registry based on data submitted by banks.

Restructured loans are a possible growth driver of non-performing loans if the restructuring does not achieve the expected goals of adjusting the credit burden to the financial condition of the client, which requires their cautious monitoring. For two years in a row, the Macedonian banking system registered a decline in restructured loans, which continued in the first quarter of

2024, thus the share of these loans in total and regular loans further decreased to 1.7% and 0.9%, respectively. Banks find performing restructured loans at higher risk, thus allocate higher expected credit loses for these loans. Thus, their coverage with impairment as of 31.3.2024 amounted to 20.8% (minor quarterly decline of 0.8 percentage point) and was significantly higher compared to the coverage with impairment of total regular loans of 2.2% (2.3% as of 31.12.2023). In contrast, the coverage of non-performing restructured loans with separate provisions (of 62.3%) is similar to the coverage of total non-performing loans (of 63.4%).

Chart 11
Quarterly growth of restructured loans, by individual sectors
in millions of denars (left scales) and in % (right scales)

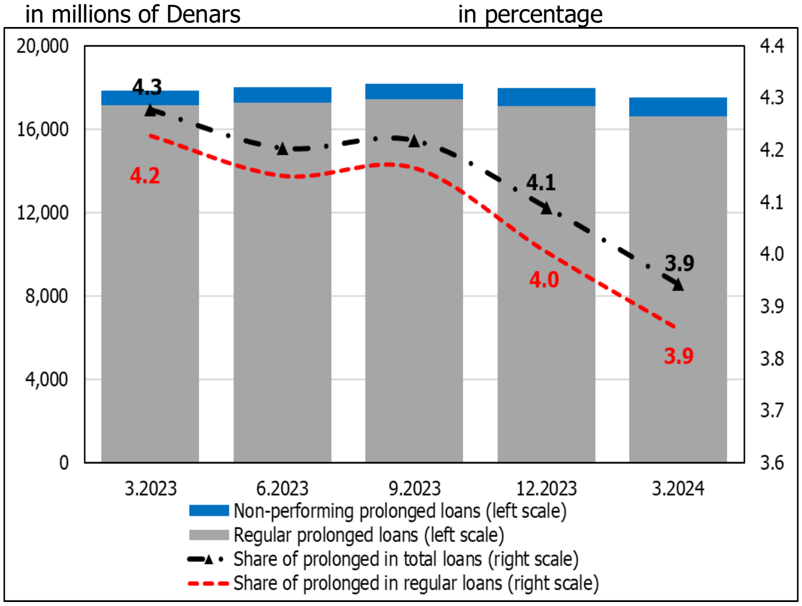


Source: National Bank's Credit Registry based on data submitted by banks.

Analyzing sectors, downward trend was registered in restructured corporate loans[14] **(decrease of 7.8% or Denar 302 million) and household loans (decrease of 8.5% or Denar 24 million).** Thus, as of 31.3.2024, the share of restructured loans in credit portfolios of non-financial legal entities and households is 3.3% and 0.2%, respectively, while the structure of the restructured credit portfolio is dominated by non-financial corporations with 93.2%.

[14] Almost all activities registered a decrease.

Chart 12
Prolonged loans to non-financial entities by status



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

In the first quarter of 2024, prolonged loans (where the prolonged maturity, in accordance with the regulation, is not due to clients' financial difficulties) further decreased by 2.5%, or Denar 451 million quarterly (decline of 1.2% and Denar 212 million in the previous quarter). Their structure is still dominated by regular prolonged loans (share of 94.8%), which entirely conditioned the quarterly decline in total prolonged loans, while by sector, the prolonged maturity dominates the non-financial corporations (unchanged share of 91.1%)[15]. The prolongation may be a possible risk source, especially if it is used as a way to facilitate the financial burden of non-financial corporations. However, the materialization of this risk would have a limited effect, due to the currently low share of prolonged loans in the total credit portfolio of banks (3.9% at the end of the first quarter of 2024). Moreover, this share is higher in the portfolio of loans to non-financial corporations, where the share of prolonged loans is 7.5%[16], compared to the household sector, where the share of these loans is insignificant and stable (0.7%)[17].

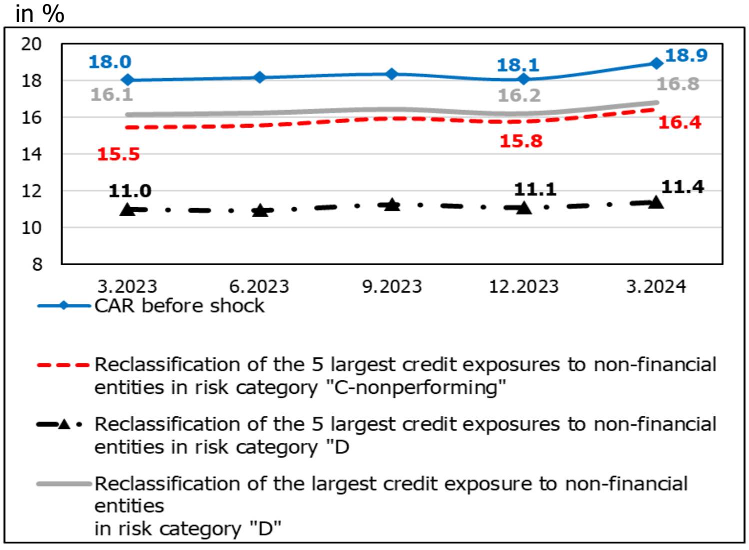
The DSTI and LTV indicators on newly granted/ increased credit exposures to natural persons, during the first quarter of 2024, remained at a relatively prudent level, of 35.5% and 62.1% on average, respectively, which is below the regulatory prescribed levels of 55% and 50% for the DSTI indicator, i.e. 85% for the LTV indicator.

[15]The prolonged maturity is usually noted in industry, wholesale and retail trade, usually with framework renewable loans.
[16]In non-financial corporations, the average risk of prolonged loans increased quarterly and amounted to 7.4% (7.2% at the end of 2023), amid slight increase in the rate of non-performing loans to 5.6% (5.2% in the previous quarter).
[17]In households, the average risk of prolonged loans amounted to 1.2% (1% at the end of 2023), while the rate of non-performing loans increased to 1.1% (0.6% in the previous quarter).

1.1 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 drop below 8% in individual hypothetical simulations. In case of 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 18.9% to 13.8%, which is slight improvement compared 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: National Bank's Credit Registry based on data submitted by banks.

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 current risk category (mostly A), to risk category B- non-performing, reduces the capital adequacy ratio of the banking system from the initial 18.9% to 16.4%, which is a slight deterioration compared to the last quarter (decrease of 2.3 percentage points). As of 31.3.2024, the reduced capital adequacy ratio amid such scenario would range from 0.9 percentage points to 4.1 percentage points, whereby it would not drop below 8% in any of the banks.

The banking system resilience is also examined by extreme simulation based on a combination of eight[18] hypothetical simulations of worsening of the quality of the credit portfolio to the non-financial sector.

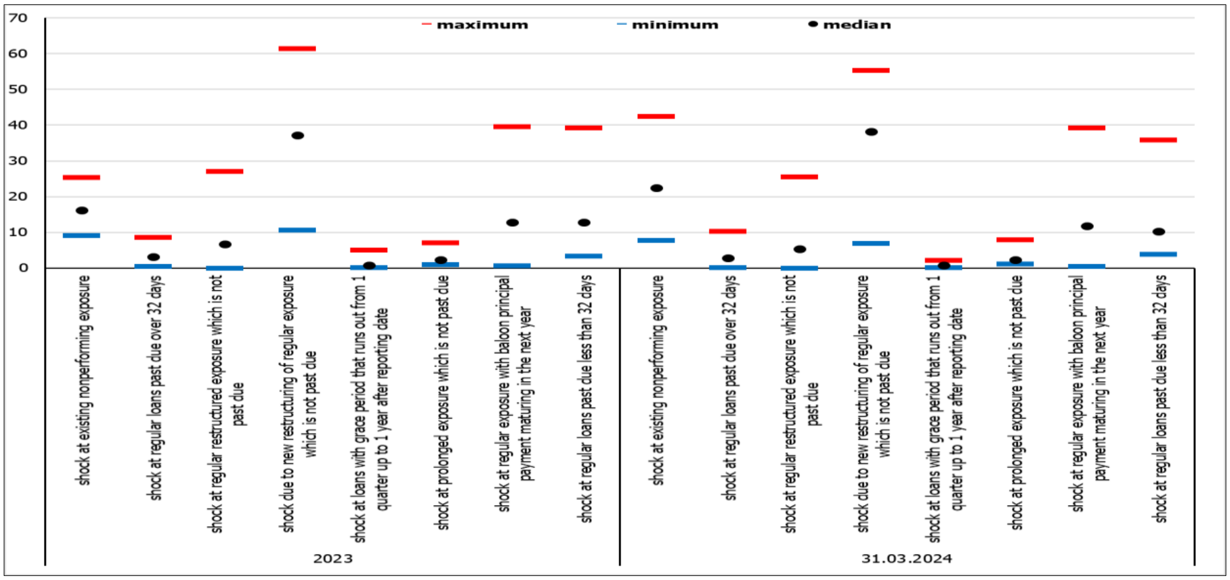
Even amid such extreme simulation, the capital adequacy of the banking system does not come below the prescribed minimum. Upon this simulation, the capital adequacy ratio reduces by 5.1 percentage points, to 13.7%[19] (4.9 percentage points and 13%, respectively at the end of 2023). The shocks would lead to a decrease of 27% of the initial capital adequacy ratio, which is slightly above the level of the previous quarter (27.3% of the initial level of capital adequacy ratio). The greatest impact 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 37.9% in the decrease of capital adequacy), followed by complete default in current non-performing exposure (contribution of 19.3%) and worsened quality of the credit exposure with an agreed bullet payment falling due next year (contribution of 18%)[20].

[18]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 in repayment 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 migration 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 regular, with each bank 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 migration rate from A, B and C risk categories regular, to C risk category non-performing, D and E risk categories with each bank individually; 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 2* the ten-year average of the exposure migration rate from the risk category A, B and C regular to risk categories C non-performing, D and E with each bank individually; 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 migration from risk category A into risk categories B non-performing, C and D in each bank individually and the 2*ten-year average of the amount exposure migration from risk category A into risk categories B and C regular, in each bank individually; 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 migration rate of the exposure from risk category A to B and C regular with each bank.
The coverage with impairment after each of the eight shocks is the same as before the shock.

[19]The initial capital adequacy ratio of the banking system is without

[20]The quality of the new restructuring of the regular credit exposure with no current delay in repayment of liabilities, reduced for the 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 deterioration, thus their contribution in the decrease of the capital adequacy ratio compared to the end of 2023 decreased by 3.6 and 1.2 percentage points, i.e. increased by 4.5 percentage points, respectively.

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



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

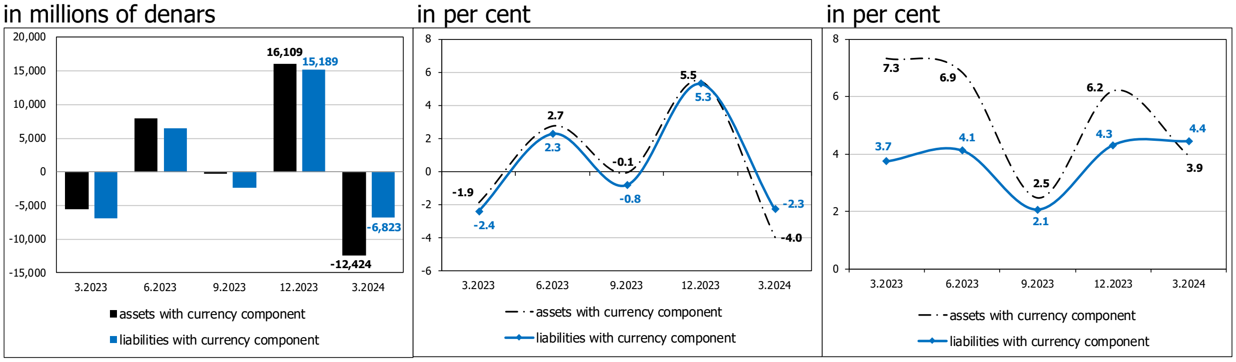
2. Currency risk

The direct exposure of the banking system to currency risk in the first quarter of 2024 registered a decrease in conditions of halved gap between assets and liabilities with currency component and open currency position. The share of the open position relative to own funds decreased significantly to 6.1%, being far below the regulatory limit of 30%.

The decrease in the first quarter of 2024 registered indirect exposure of the banking system to currency risk as well, due to reduced share of loans with currency component in total loans to the non-financial sector, which entirely reflects the lower share of corporate loans with currency component. However, there is still a significant share of loans with currency component, but the risk of indirect currency risk materialization was mitigated due to the implementation of the monetary strategy of targeting the nominal exchange rate.

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

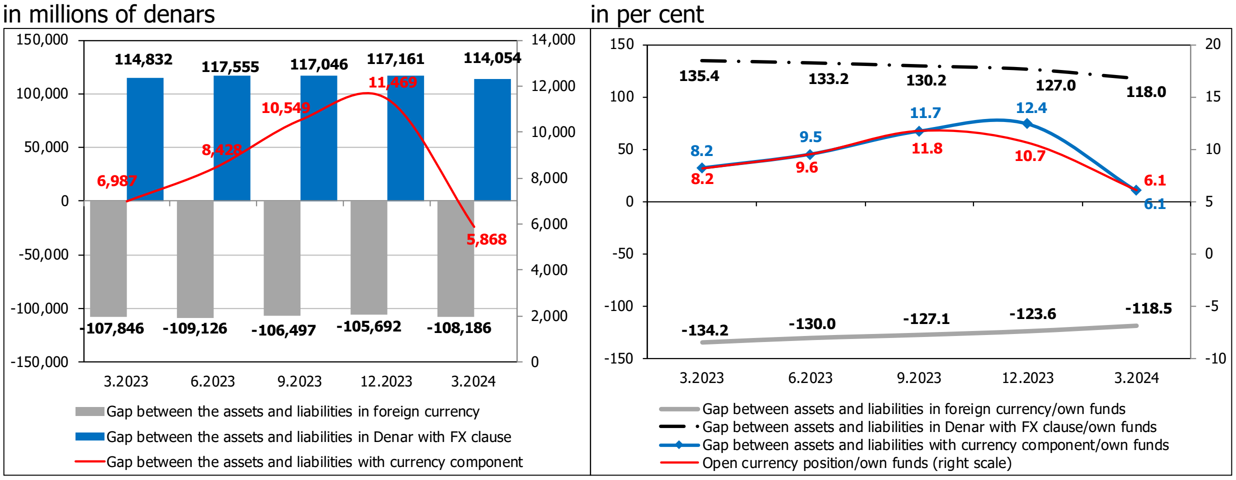
in millions of denars | in per cent | in per cent



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.

As of 31.3.2024, the gap between assets and liabilities with currency component was positive in the amount of Denar 5,868 million and was almost halved compared to the previous quarter, i.e. reduced by 48.8%. The narrowing occurred in conditions of sharp decline in assets (by Denar 12,424 million or by 4.2%)[21] compared to the decline in liabilities (by Denar 6,823 million or by 2.4%)[22]. Observing the structure of the gap, the narrowing was registered in both, the negative gap between assets and liabilities in foreign currency and the positive gap between assets and liabilities in denars with FX clause. The share of the gap in own funds amounted to 6.1%, which is a decrease of 6.3 percentage points compared to the previous quarter and is by 2.1 percentage points lower than the same quarter in the previous year. The share of open currency position[23] in own funds is 6.1% as well, which is below the ten-year average of 7.4% and is far 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)



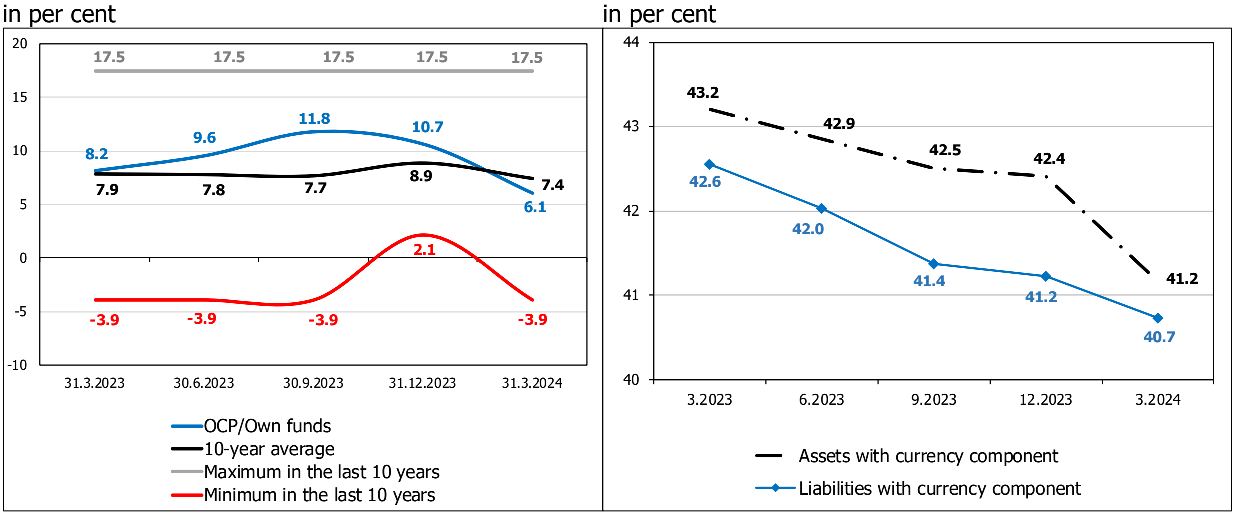
Source: National Bank, based on the data submitted by banks.

Assets and liabilities with currency component grow at a slower pace than total assets (average for the last five quarters), which contributes to decrease in the euroization of the banks' balance sheets. In the first quarter of 2024, the sharper decline in assets with currency component than the decline in total assets lowered its share in total assets by 1.3 percentage points, while the larger decline in liabilities with currency component decreased its share in total liabilities by 0.5 percentage points.

[21] The quarterly decline in the assets with currency component is mainly due to the reduced foreign assets by Denar 7,567 million (of which the foreign assets with the National Bank reduced by Denar 6.363 million, while currency cash by Denar 1,204 million), as well as due to financial assets held to maturity by Denar 3,309 million, which reflects the reduced investments in long-term bonds. On the other hand, the decline is partly mitigated with the growth in foreign currency deposits with other banks in the amount of Denar 1,157 million.
[22] The decline in liabilities with currency component on a quarterly basis is entirely due to the significant decrease in foreign currency deposits of non-residents by Denar 7,925 million, which is due to the decrease in liabilities to parent entities in one commercial bank, with a decrease in liabilities based on loans from other banks by Denar 807 million.
[23] 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 17
Ten year average, minimum and maximum of the OCP/own funds ratio (left) and share of assets and liabilities with currency component* in the total banks' assets (right)

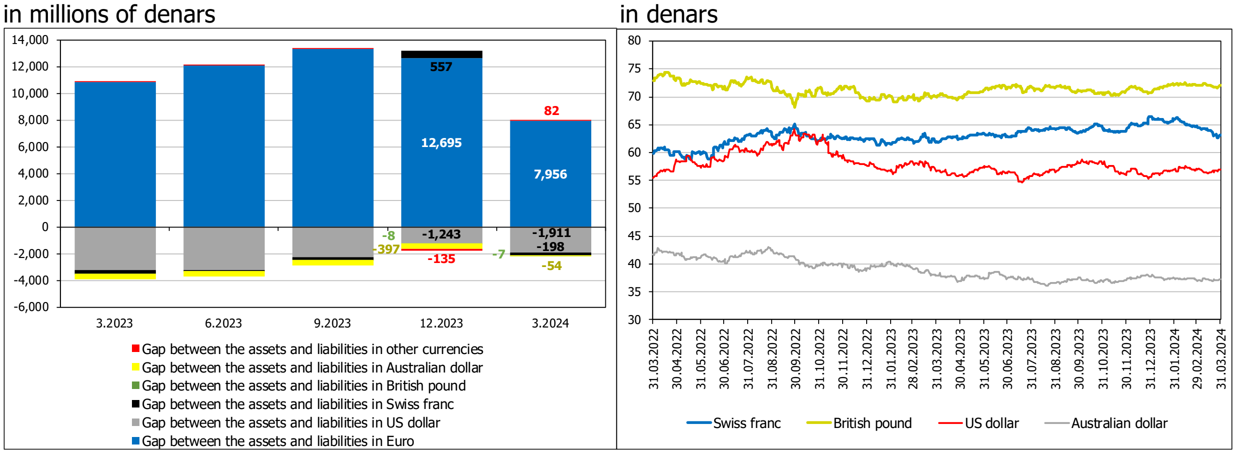
in per cent / in per cent



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".

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.

Analyzing by currency, the tightened long position is due to the reduced positive gap in assets and liabilities with currency component, but the widened negative gap in the US dollar also has a contribution. The positive gap between assets and liabilities in euros and denars with euro clause tightened quarterly by Denar 4,738 million or by 37.3% due to the higher decline in assets than liabilities in this currency[24]. The gap between assets and liabilities with US dollar component remained negative and widened compared to the previous quarter (by Denar 668 million or by 53.7%), which is due to the higher growth of liabilities than the growth of assets in this currency[25]. The significant increase in assets was due to the increased US dollar deposits amid stabilized exchange rate of the US dollar against the euro, and thus against the denar. The currency position of banks with other currencies remained short[26], 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.

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

Currency	31.12.2023		31.3.2024	
	Assets	**Liabilities**	**Assets**	**Liabilities**
Euro	90.5	89.8	90.0	89.0
US dollar	6.5	7.1	7.1	7.9
Swiss franc	1.5	1.4	1.3	1.4
Australian dollar	0.4	0.5	0.5	0.6
British pound	0.5	0.5	0.5	0.5
Other	0.6	0.7	0.7	0.7
Total	**100.0**	**100.0**	**100.0**	**100.0**

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

In the first quarter of 2024, the share of loans with currency component to non-financial entities continued to decrease, which indicates a reduced indirect exposure of the banking system to currency risk. As of 31.3.2024, the share of loans with currency component in total loans to non-financial sector amounted to 41.7%, which is a decline by 0.5 percentage points compared to 31.12.2023. One such movement entirely stems from the reduced share of corporate loans, while the share of household loans remained unchanged quarterly. However, in conditions when euro loans and denar loans with euro clause make up 99.9% in total loans with currency component, the peg policy mitigates the effect of possible indirect currency risk materialization.

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[24]The assets with euro component reduced by Denar 12,945 million, or by 4.6%, while the decline reflects the decrease cash equivalents, gold and precious metals by Denar 8,953 million, as well as financial assets held to maturity by Denar 3,021 million. The liability with euro component reduced by Denar 8,206 million or by 3.0%, which almost fully reflects the reduced euro deposits of non-residents by Denar 7,801 million.

[25] The assets with US dollar component grew by Denar 944 million or by 4.7% due to the increased US dollar deposits with other banks by Denar 641 million, as well as cash, cash equivalents, gold and precious metals by Denar 601 million, mitigated with the decrease in financial assets held to maturity by Denar 288 million. Liabilities with US dollar component grew by Denar 1,612 million or by 7.5%, mainly due to the increased assets on current account and other short-term liabilities by Denar 997 million, as well as increased US dollar deposits by Denar 543 million.

[26] The foreign currency position with the Swiss franc was changed from long to short, while the negative gap amounted to Denar 198 million. The negative gap in the Australian dollar was significantly narrowed and amounted to Denar 54 million, while the British pound registered a slight narrowing and equaled Denar 7 million. The cumulative gap in other unspecified currencies is positive and amounts to Denar 82 million with a slight change in the currency position compared to the previous quarter.

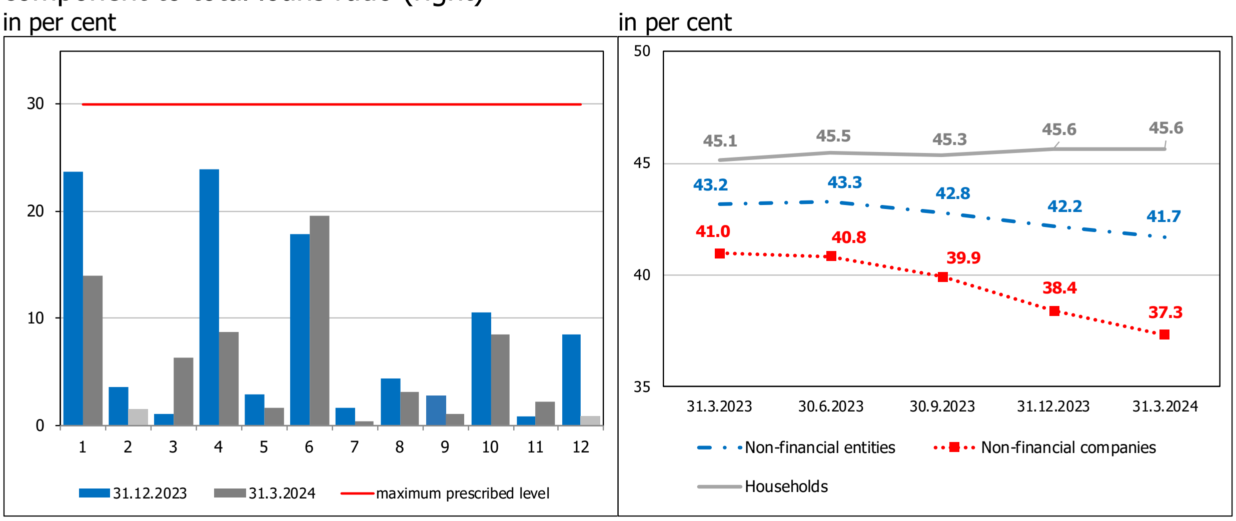
Table 4
Distribution of banks by share of open currency position, by currency and the aggregate currency position in own funds

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	8	4	8	3	10	1	7	1	10	2	7
from 5% to 10%	2												3
from 10% to 20%	2												2
from 20% to 30%													
over 30%													

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

At the end of the first quarter in 2024, the aggregate currency position relative to own funds was long in ten banks and is below the prescribed regulatory limit of 30% in all banks. The ratio by bank ranged from 0.4% to 19.6%, and it narrowed 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)



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".

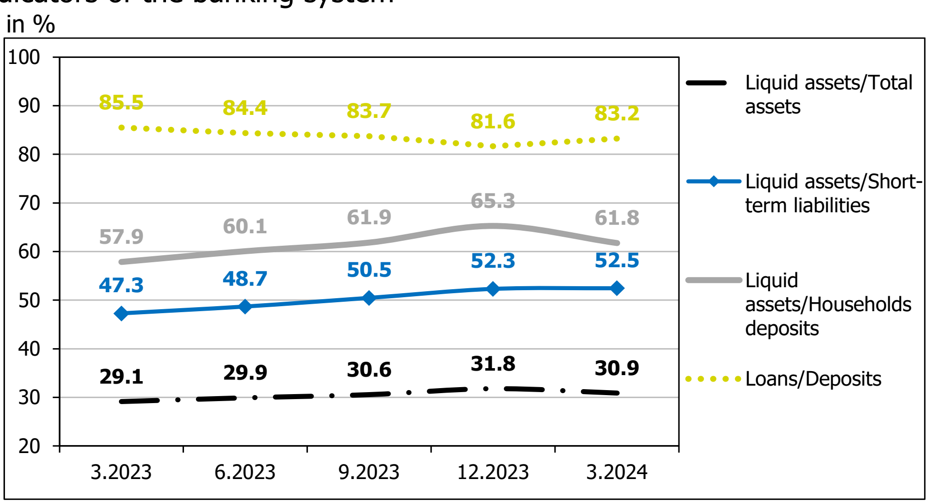
3. Liquidity risk

In the first quarter of 2024, the liquidity indicators of the banking system remained stable. However, amid quarterly decline in deposits of non-financial entities and financial institutions, the banking system liquid assets registered a slight quarterly decrease of 3.9%, which is partly due to the seasonal factors in this period of the year. The quarterly decline of liquid assets had no effect on its annual growth rate, which continued to accelerate, and as of 31.3.2024 reached the level of 15.6%. Thus, the banking system liquidity ratios recorded a minor downward movement, which caused no significant deviations in 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 1 year is negative, but banks expect a relatively high deposit stability, as the main source of financing of their activities. 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 first 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 30.9% of total bank's assets, providing solid coverage of short-term liabilities and household deposits with liquid assets (of 52.5% and 61.8%, respectively[27]).

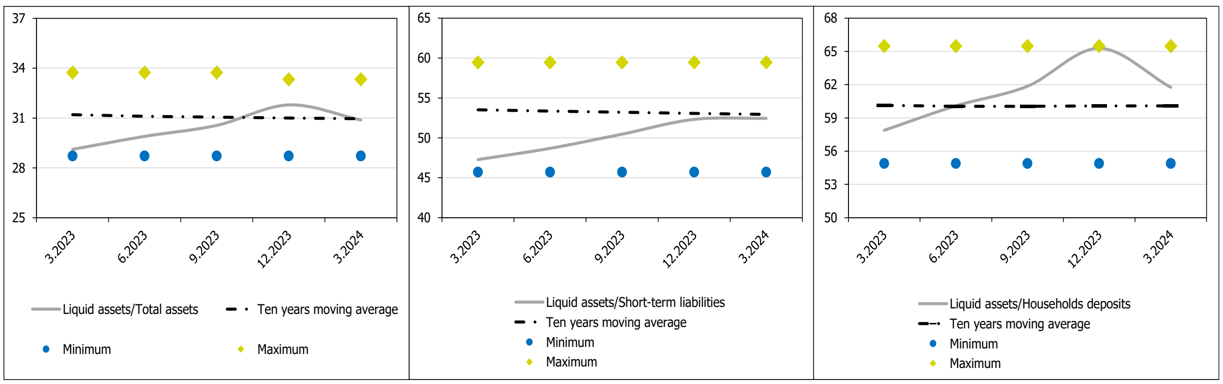
Chart 20
Liquidity indicators of the banking system



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.

[27] Analyzed by bank, as of 31.3.2024, the share of liquid in total assets ranges between 21.5% and 49.8%, with a median of 29.0% (March 2023: between 20.1% and 49.3%). The coverage of short-term liabilities with liquid assets ranges between 37.5% and 82.8%, with a median of 54.3% (March 2023: between 32.3% and 65.3%), and the coverage of household deposits with liquid assets ranges between 36.7% and 115.5%, with a median of 70.6% (March 2023: between 30.4% and 105.2%). The Development Bank of North Macedonia AD Skopje is excluded from this analysis.

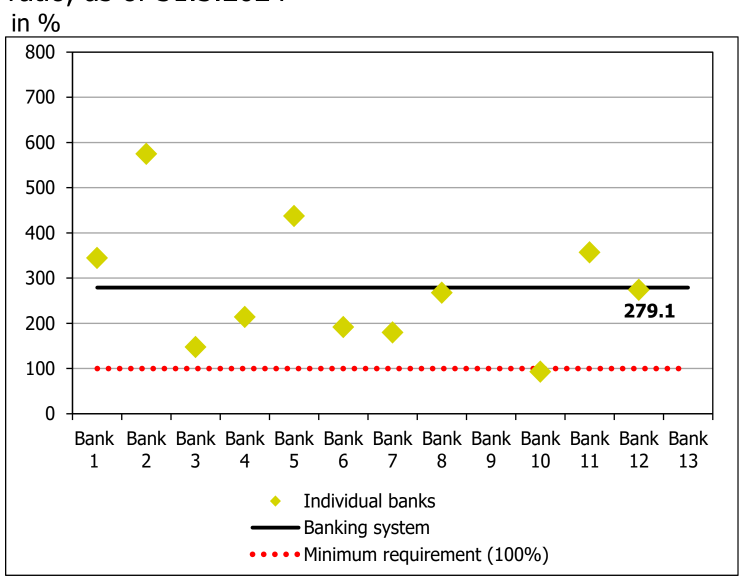
Chart 21
Liquid assets / total assets (top), liquid assets / current liabilities (middle) and liquid assets / household deposits (bottom)
in %



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

The liquidity coverage ratio of the banking system equals 279.1%, and is significantly higher than the regulatory minimum (100%[28]), thus confirming the satisfactory volume of liquidity available to the Macedonian banking system.

Chart 22
Liquidity coverage ratio, as of 31.3.2024

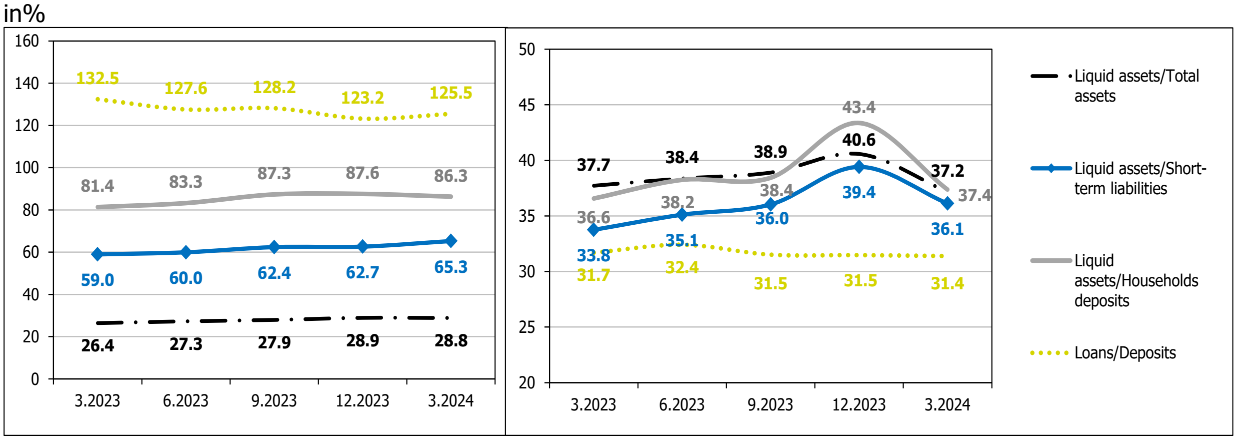


Source: National Bank, based on the data submitted by banks.

[28] 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 31 December 2024, the liquidity coverage ratios for the two significant currencies, euros and denars, were 91.3% and 322.8%, respectively.

According to the currency structure of liquid assets and liabilities, in the first quarter of 2024, liquidity indicators registered a slightly more pronounced decrease compared to denar liquidity indicator[29], given that foreign liquid assets contribute more to the decline in total liquid assets. Also, denar liquidity indicators remain at a higher level compared to the foreign currency liquidity indicators, due to the higher structural share of liquid assets in denars in total liquid assets of 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[30].

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

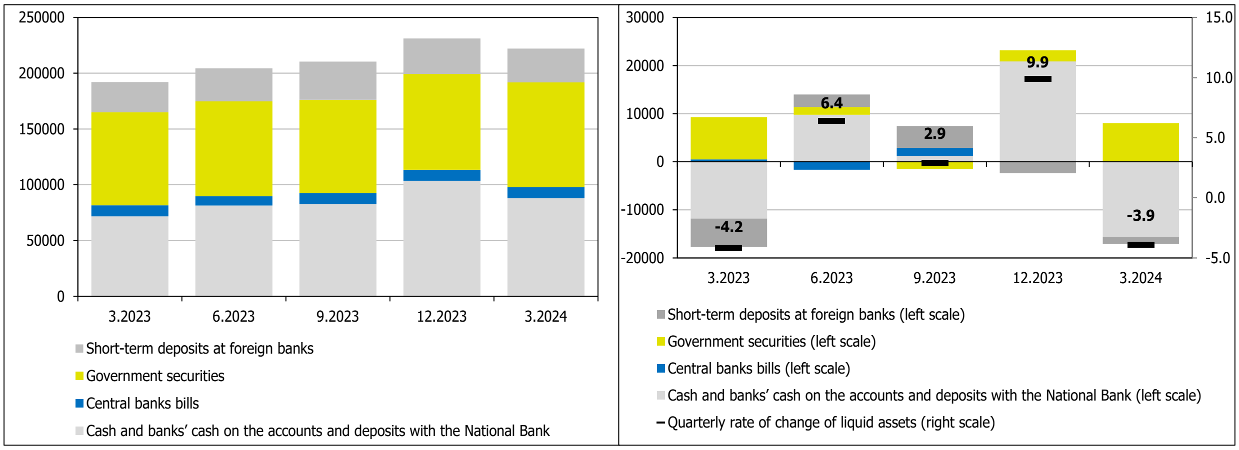


Source: National Bank, based on the data submitted by banks.

[29] Claims and liabilities with FX clause are considered as denar claims and liabilities, since their cash flow is in denars.
[30] 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 Euro 400 million, and the deadline for application of the repo line was extended several times. At the request of the National Bank, the ECB decided to extend the possibility for our central bank to use the repo line until 31 January 2025. If used, the repo line will provide fast access to foreign currency liquidity, as another buffer to guarantee the domestic currency exchange rate. The repo line might meet the possible liquidity needs in times of increased geopolitical insecurities and their potential risks to global economy and financial markets. Otherwise, domestic foreign currency reserves, which are the key instrument for maintaining of the exchange rate stability, are at the record level. 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.

3.2. Dynamics and composition of liquid assets

Chart 24
Liquid assets, structure (top) and growth (bottom)
in millions of denars   in millions of denars and in %



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

At the end of the first quarter of 2024, liquid assets[31] of the banking system amounted to Denar 222,116 million. Amid quarterly decline in deposits of non-financial entities (0.9%) and of financial institutions (14.9%), which is partly due to seasonal effects in this part of the year, **the banking system's liquid assets registered a slight quarterly decline of 3.9%, i.e. Denar 9,082 million.** Analyzing financial instruments which account for liquid assets, the decrease was mostly pronounced in placements of banks in overnight deposit facilities with the National Bank (which reduced by Denar 7,700 million, or 32%), compared to the increase in placements of banks with seven-days deposit facilities with the National Bank (by Denar 3,420 million or 9.2%[32]). A more significant decrease was registered in assets on foreign currency payment account with the National Bank (of Denar 6,363 million or 52.3%), as well as in banks' assets on corresponding accounts and short-term deposits placed in foreign banks (of Denar 1,464 million or 4.6%)[33]. In contrast, banks' placements in government securities increased, namely government bonds by Denar 6,970 million, or 11.9% and treasury bills by Denar 2,306 million, or 11.5%. On the other hand, placements in foreign government securities decreased by Denar 1,272 million or 18.2%. Banks' placements in CB bills slightly grew by Denar

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[31] 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.

[32] In the first 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 4.2% and 4.25%, respectively. Additional changes in the reserve requirement instrument were adopted in this quarter, the application of which, mostly from June 2024, means additional withdrawal of part of the structural excess liquidity from the banking system, which supports the prudence of the monetary policy. At the same time, measures further strengthen the denarization process and increase the long-term saving in the banking system.

[33] Decline in banks' assets on accounts with foreign banks of Denar 2,508 million or 26.4%, amid growth of short-term time deposits placed in foreign banks by Denar 1,044 million, or 4.7%.

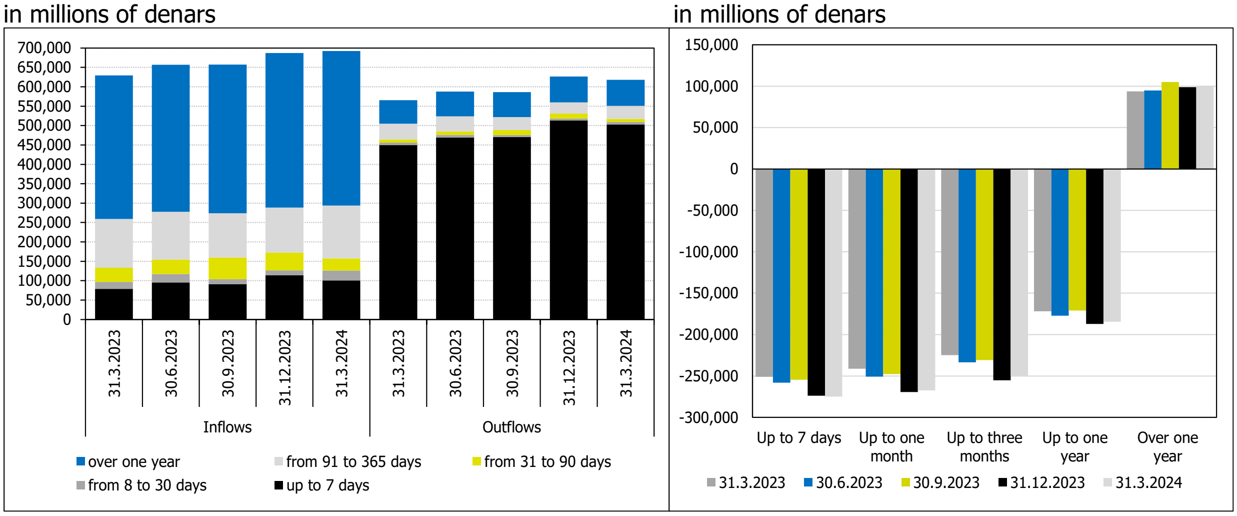
20 million, or 0.2%[34], while assets on denar account with the National Bank grew by Denar 715 million, or 9.9%.

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

As of 31.3.2024, 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 (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 37.2% and 25.0%, 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)

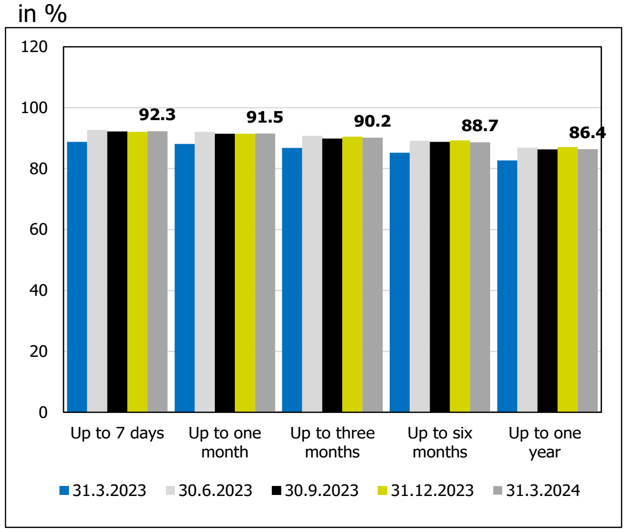
in millions of denars / in millions of denars



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

[34] During the first 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.

Chart 26
Expected deposit stability, according 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. If we take the deponents' behavior into account, banks estimate that in the following twelve months there will be no deposit-based contractual cash outflows (or 86.4%) by depositors.

3.4. Stress-simulations for liquidity shocks

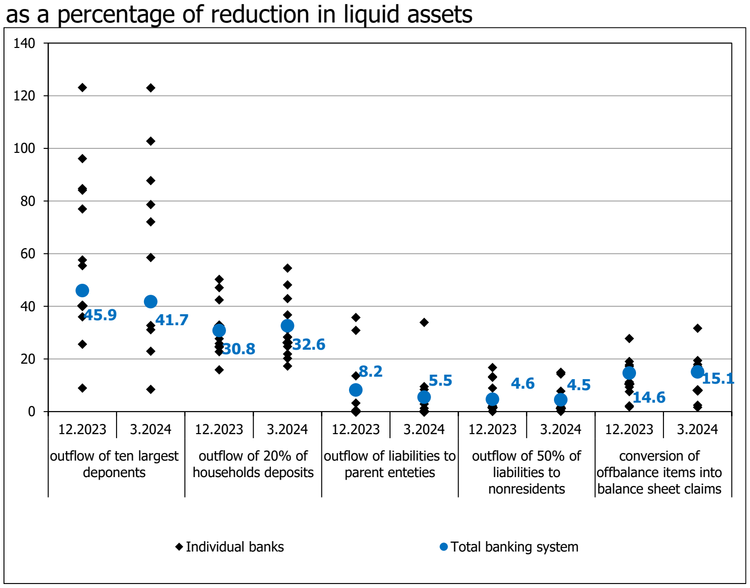
On 31.3.2024, the results of the conducted stress simulations for liquidity shocks show solid capacity of the banking system, with sufficient liquid assets to respond appropriately to the simulated cash outflows. The resilience of the Macedonian banking system to liquidity shocks is confirmed by the results of all individual simulations of liquidity shocks, with the liquid assets being almost fully used (or 99.4% on 31.3.2024) only in case of significantly extreme simulation of liquidity shock, which covers combined outflows[35] of funds from banks on several bases. Considering the extremity of assumption, for the purpose of this simulation, the usual coverage of liquid assets is extended with other financial instruments[36] owned by banks, for which it is estimated that banks will quickly and easily collect or turn into cash amid lack of liquid assets.

[35] 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.

[36] 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 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.

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

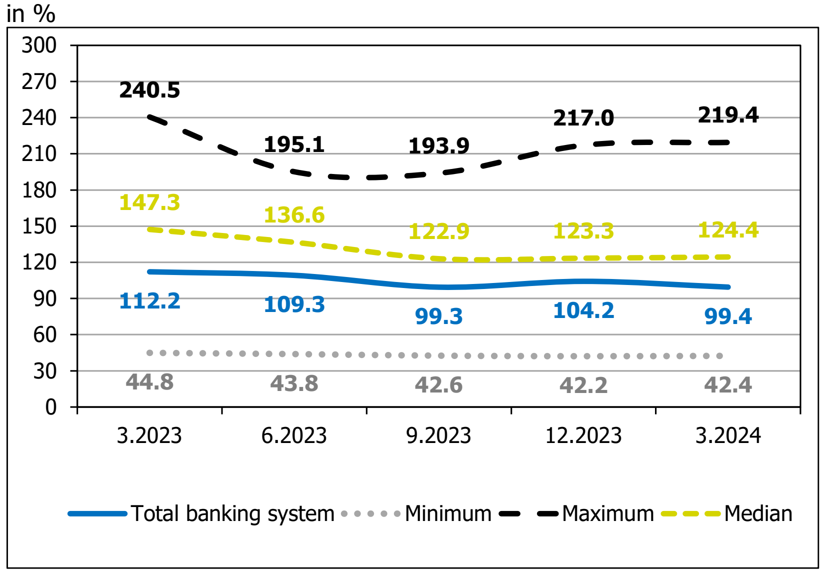


Source: National Bank, based on the data submitted by banks.

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[37], 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.

[37] 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.

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

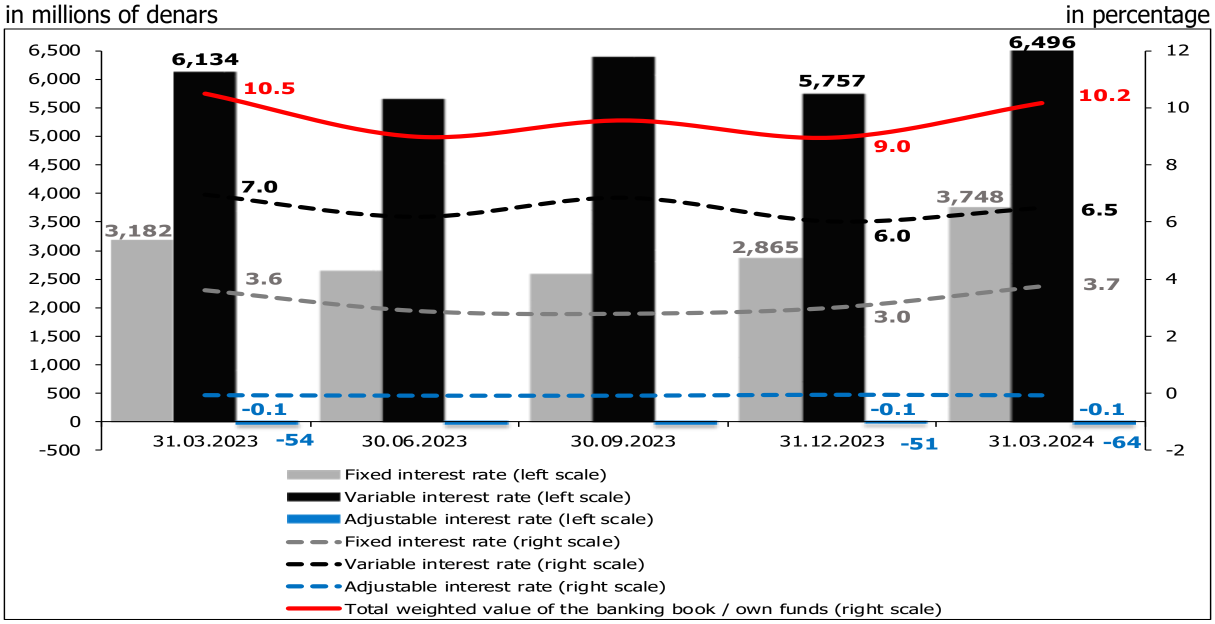


Source: National Bank, based on the data submitted by banks.

4. Interest rate risk

In the first quarter of 2024, banking system's exposure to interest rate risk from performing main banking activities increased, which was seen through the increase in the weighted value of banking book[38]. This is mostly due to the increase in the amount (weighted) of placements in securities with fixed interest rate, as well as to the reduced demand liabilities and time deposits with variable interest rate. The threat of interest rate risk materialization is low, given the activities dominating in the banks' balance sheets (lending and deposit-taking), along with a very short deposit base maturity and solid banks' liquidity. On the other hand, the exposure to indirect interest rate risk is still present and should be carefully monitored, due to the significant share of loans with variable and adjustable interest rates in the banking book. The indirect interest rate risk may lead to credit risk materialization amid possible increase in the interest debt and its effect on the creditworthiness of borrowers.

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

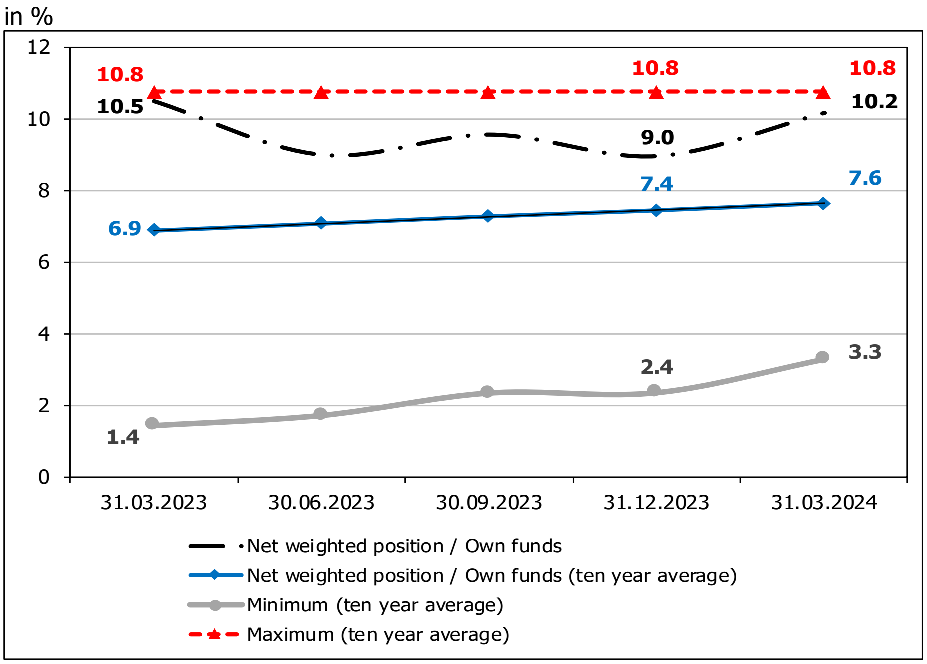


Source: National Bank, based on the data submitted by banks.
*The total weighted value of the banking book denotes the potential loss of the economic value of this portfolio, amid assumed unfavorable interest shock of ±2 percentage points.

[38]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.

The total weighted value of the banking book[39] registered a quarterly increase of Denar 1,608 million, or 18.8%, which amid growth in own funds (of 4.6%), caused a moderate increase in 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 1.2 percentage points, to 10.2%. This ratio is below the maximum realized in the last ten years (10.8%), yet it exceeds the ten-year average which amounts to 7.6%. Analyzing by bank, this ratio ranges from 1.9% to 14.3%, and is below the prescribed threshold of 20%[40].

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



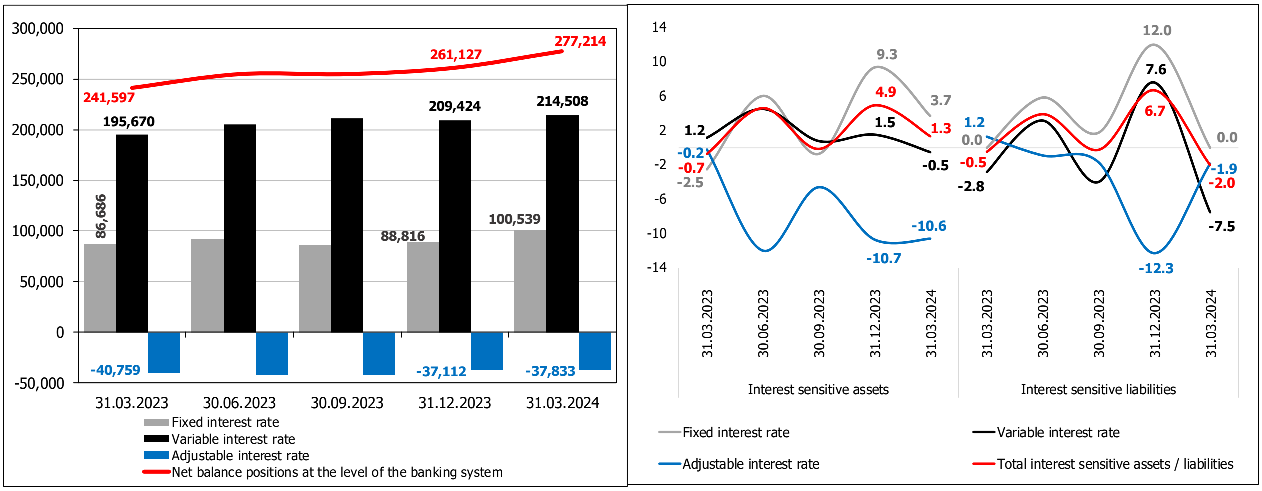
Source: National Bank, based on the data submitted by banks.

Analyzing the type of interest rate, the quarterly growth of weighted value (net) of the banking book mostly results from the increase in the weighted value of the portfolio with fixed (of Denar 883 million, or 30.8%, mainly due to the increased placements in securities[41] and loans with this type of interest rate) and variable interest rate (of Denar 739 million, or 12.8%, mainly due to the decrease in demand liabilities and time deposits with this type of interest rate). A slight negative widening (of Denar 13 million) was registered in the weighted value (net) 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.
[41]Increased placements in government bonds by Denar 6,970 million, or 11.9% and increased placements in treasury bills by Denar 2,306, or 11.5%.

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

in millions of denars | in %

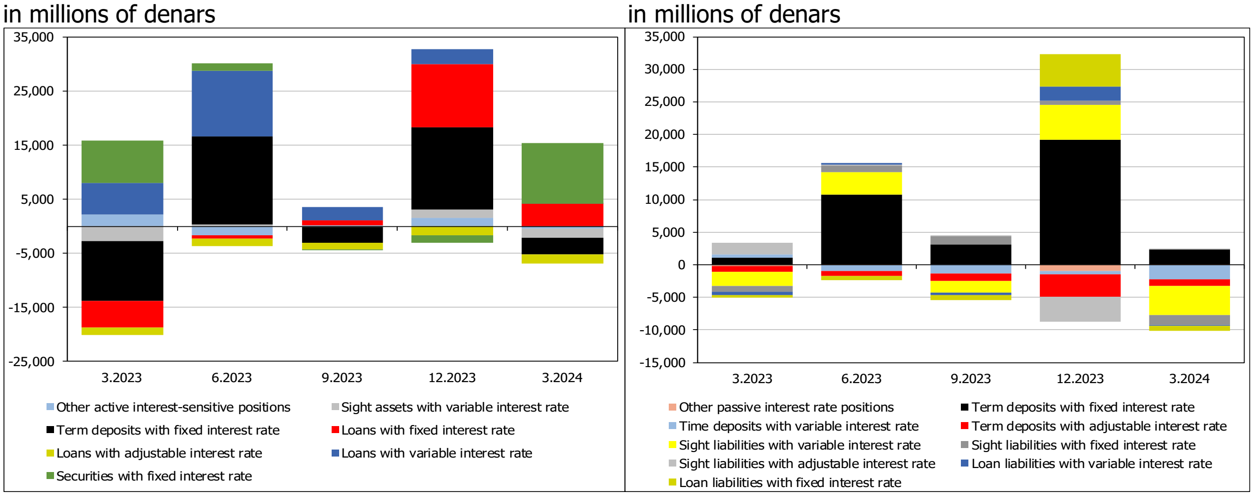


Source: National Bank, based on the data submitted by banks.

These changes of positions with fixed and variable interest rate also affected the amount of the non-weighted gap between the interest sensitive assets and liabilities (the net amount of the interest sensitive assets and liabilities without using the prescribed interest shock of 2 percentage points), which grew quarterly by 6.2% or Denar 16,086 million. Moreover, the positive gap between positions with fixed interest rate grew by 13.2% or 11.723 million, while the positions with variable interest rate by Denar 5,084 million, or 2.4%. The negative gap between assets and liabilities with adjustable interest rate widened by Denar 721 million, or by 1.9%, due to the reduction of the placements in loans, against the decrease in time deposit liabilities with this type of interest rates.

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

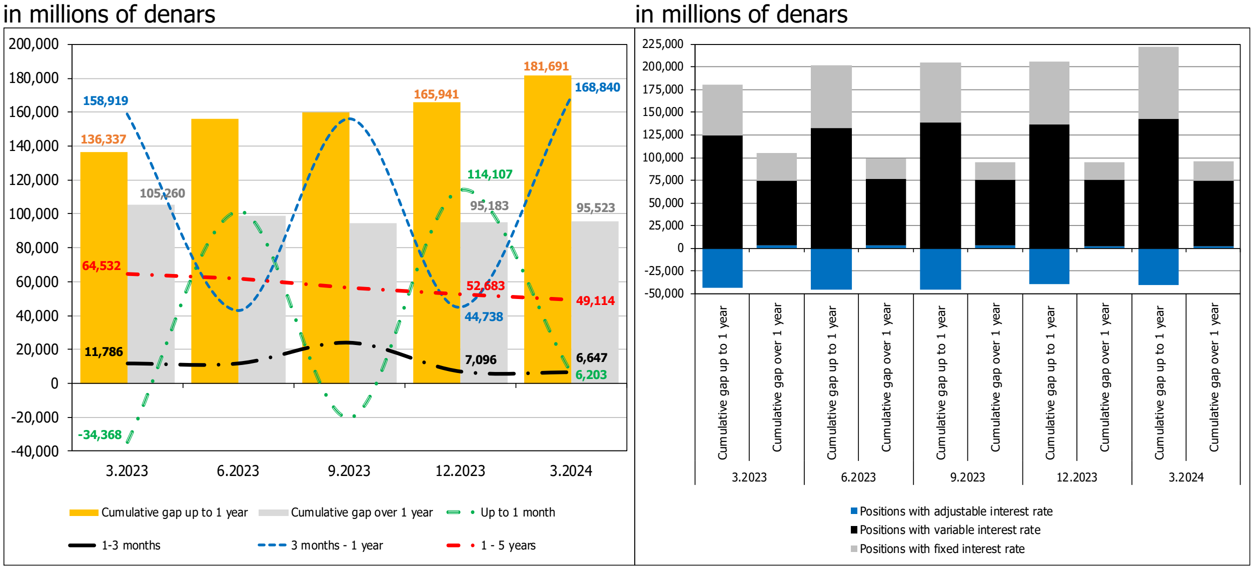
in millions of denars | in millions of denars



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

Analyzing the time period until next interest rate revaluation, the widening of the total gap between the interest-sensitive assets and liabilities was mostly due to the widening of the gap from three months to one year, by Denar 124,102 million. This widening mostly stems from increased placements securities with fixed interest rate. At the same time, the gap up to one month declined (Denar 107,904 million) which on the other hand, is mostly conditioned from the decrease in the placements in loans with 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

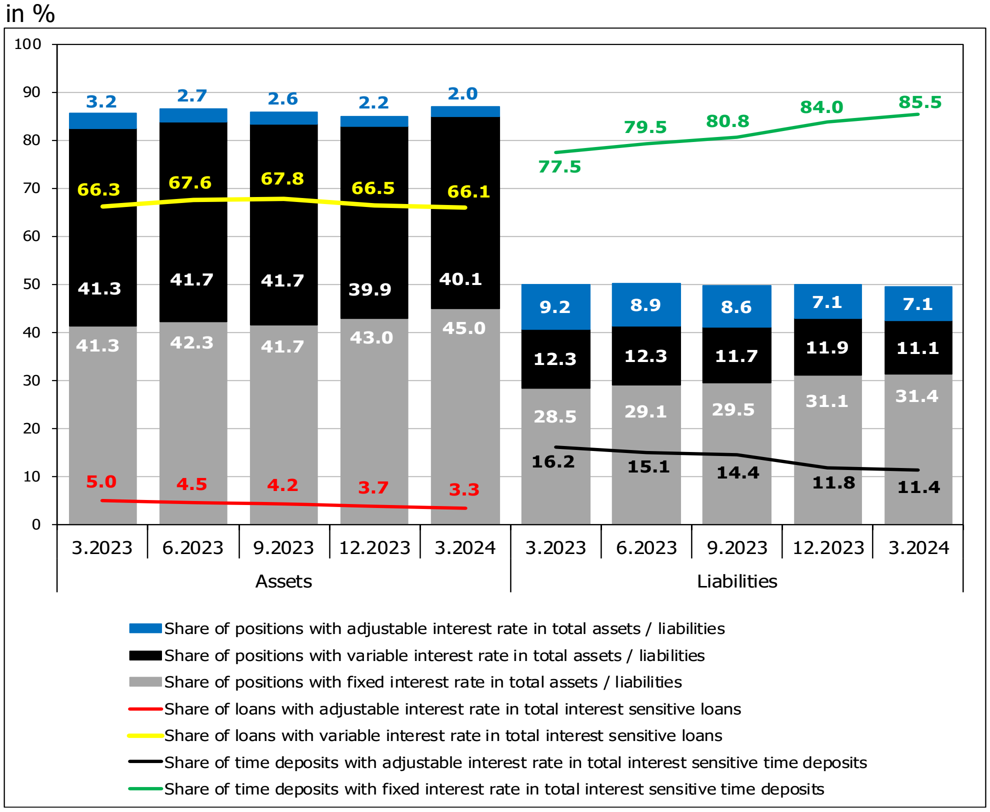


Source: National Bank, based on the data submitted by banks.

The indirect exposure to interest rate risk, which arises from the presence of loans with adjustable and variable interest rates, remains significant. As of 31.3.2024, the cumulative share of these loans in total loans amounted to 69.4%, which is a decline of 0.8 percentage points compared to 31.12.2023. Thus, 66.1% of total loans are with variable interest rate, while 3.3% 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 31.3.2024, around 17% 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[42].

[42] Or in other words, as of 31.3.2024, 49% of the loans, are with changeable (variable and adjustable) interest rate, while the remaining 17.1% (up to the presented 66.1% as of 31.3.2024), 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.

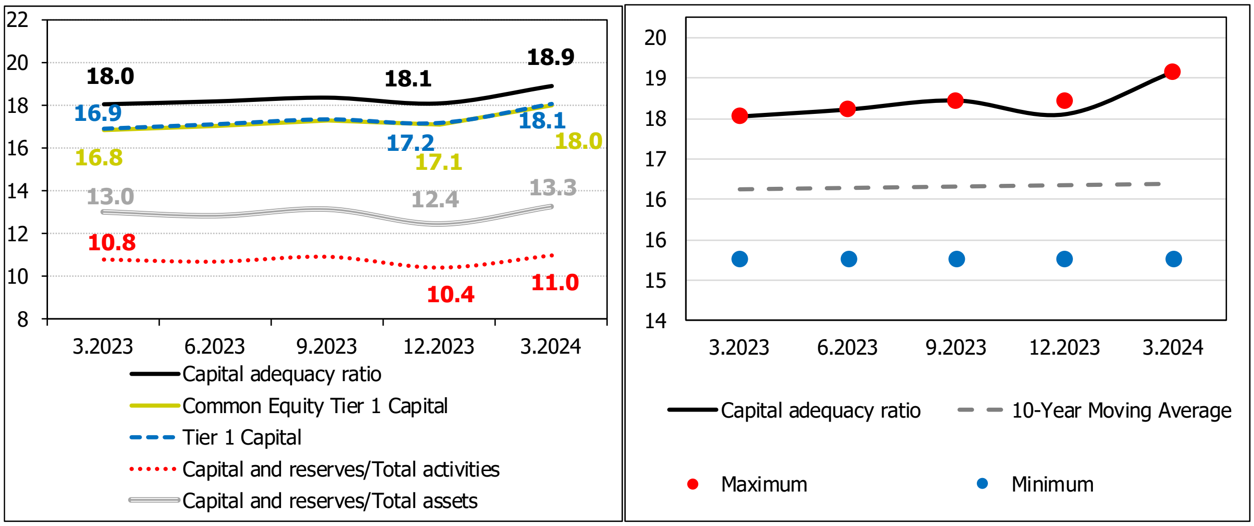
5. Insolvency risk

The solvency and capitalization indicators of the banking system were significantly improved in the first quarter of 2024. The capital adequacy ratio increased by 0.8 percentage points, to a level of 18.9%, which is the maximum value registered in the last seventeen years. This growth reflects the higher quarterly growth of own funds, despite the decline in risk-weighted assets. The growth of own finds in the first quarter is mostly due to retained earnings of banks from the previous year, while the decline in risk weighted assets results from the narrowed open currency position and consequently, the reduced foreign currency risk weighted assets. Analyzing the purpose, in the first quarter of 2024, most of the growth of own funds was used to meet the required capital buffers (primarily the countercyclical capital buffer and the capital buffer of systemically important banks), the capital supplement determined by the supervisory assessment and capital requirements for credit risk. In addition, after meeting all the regulatory and supervisory requirements in terms of the amount of own funds, a large portion of their quarterly increase remained free. Thus, as of 31.3.2024, around 11% 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. This includes the results of the conducted stress testing of the banking system resilience to the simulated shock with extreme assumptions which show increased resilience of the banking system compared with 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.

5.1. Solvency and capitalization ratios of the banking system

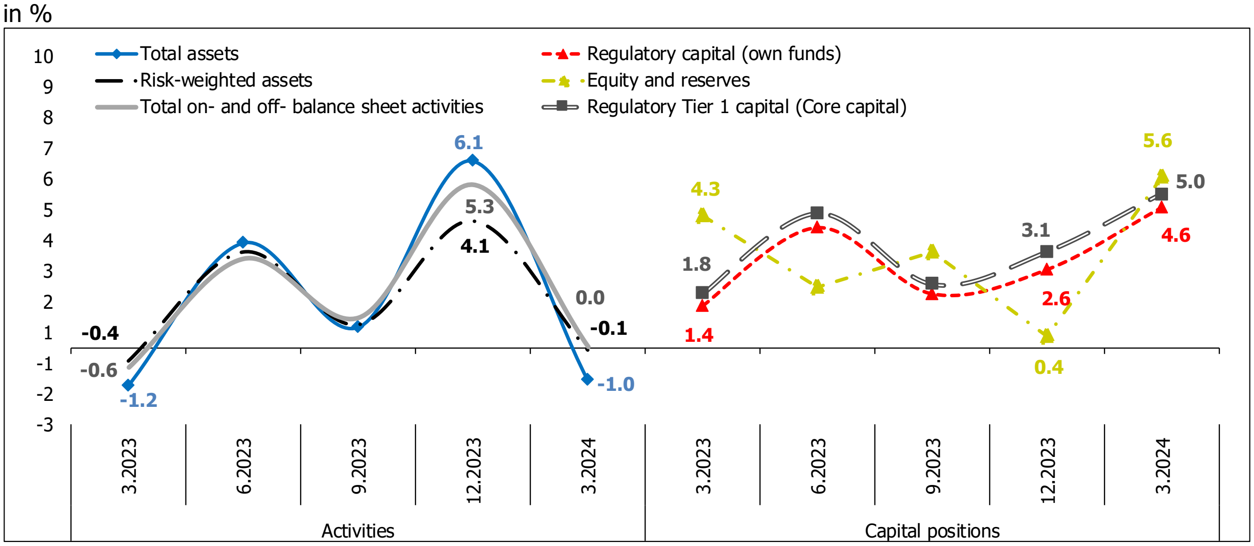
The solvency and capitalization indicators of the banking system accelerated the upward trend in the first quarter of 2024. Quarterly, the capital adequacy ratio increased by 0.8 percentage points, to 18.9%, which is the maximum value registered in the past seventeen years.

Chart 35
Indicators of solvency and capitalization of the Macedonian banking system (left) and capital adequacy ratio (right)
in %



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

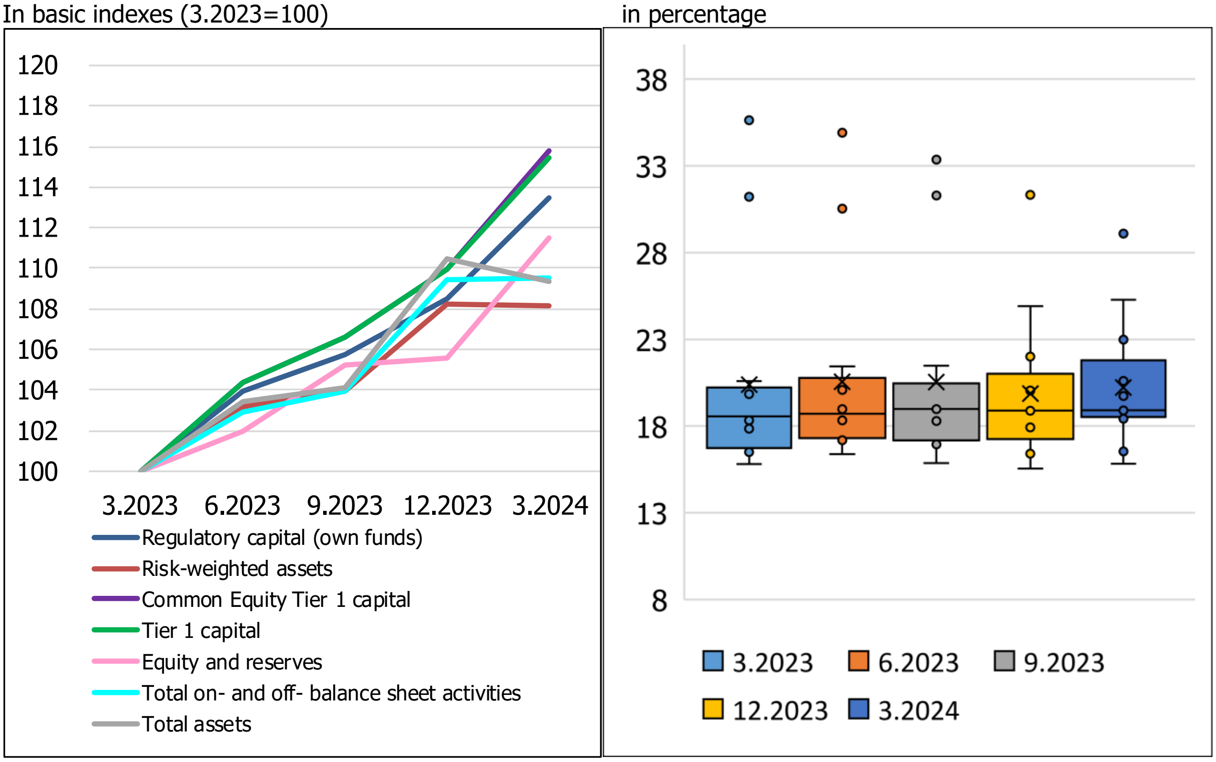
Chart 36
Quarterly rates of change of solvency ratio components
in %



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

The Common Equity Tier 1 capital and Tier 1 capital ratios grew equally by 0.9 percentage points, reaching 18% and 18.1%, respectively. The shares of capital and reserves in total assets and total on-balance and off-balance sheet activities of banks slightly increased from 0.8 and 0.6 percentage points, to 13.3% and 11%, respectively. The quarterly improvement of solvency and capitalization indicators results from the relatively fast increase in banks' capital positions, amid stagnation or decrease in their activities. Thus, capital and reserves grew quarterly by 5.6%, while own funds grew by 4.6%, which mostly results from retained profits of banks from the previous year. On the other hand, total assets and risk-weighted assets declined by 1% and 0.1% respectively, while total on-balance and off-balance sheet activities remained unchanged.

Chart 37
Trends in nominator and denominator of solvency ratios (left) and dispersion measures of the banking system adequacy ratio (right)
In basic indexes (3.2023=100) in percentage



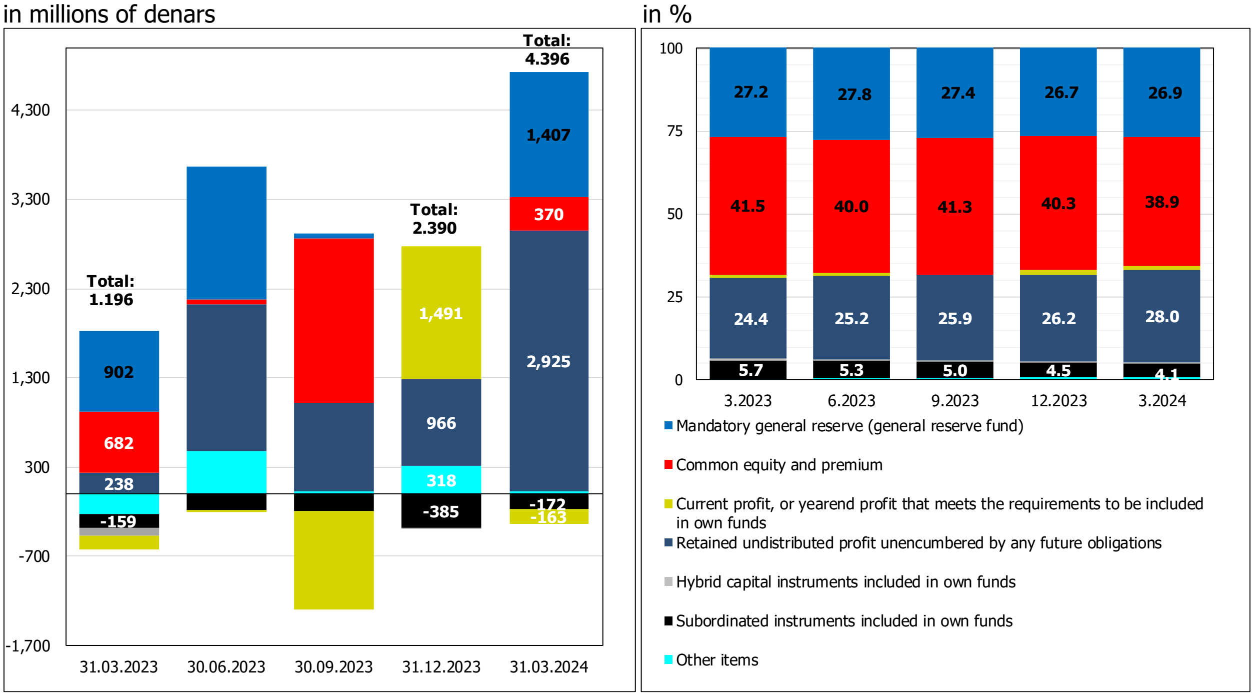
Source: National Bank, based on the data submitted by banks.
Note on the right chart: The average value is marked with X, while the median value is marked with the middle horizontal line within the column. The column explains the interquartile difference, i.e. indicates the capital adequacy ratios in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

The decomposition of the banking system solvency ratios points to the conclusion that the upward movement of solvency indicators mainly results from the pronounced growth of the most quality layer of own funds, the Common Equity Tier 1 capital. The past five 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 balance and off-balance sheet activities as well as risk-weighted assets is milder, especially in the first quarter of this year, which contributes to strengthening of the banking system solvency. **The dispersion of adequacy ratio in the banking system indicates a stable trend.** The average value of the capital adequacy ratio is higher, while the median remains at the same level as in the previous quarter. The capital adequacy ratio as of 31.3.2024, was almost twice the requirement of 8% in all banks.

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 first quarter of 2024, the growth of the highest quality layer of banking system's own funds (Common Equity Tier 1 capital) continued, dominating the total own funds with a share of 95.3% (94.7% as of 31.12.2023), while the Additional Tier 1 capital and Tier 2 capital account for 0.2% and 4.5% of the banking system's own funds (0.5% and 4.8% as of 31.12.2023, respectively).

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



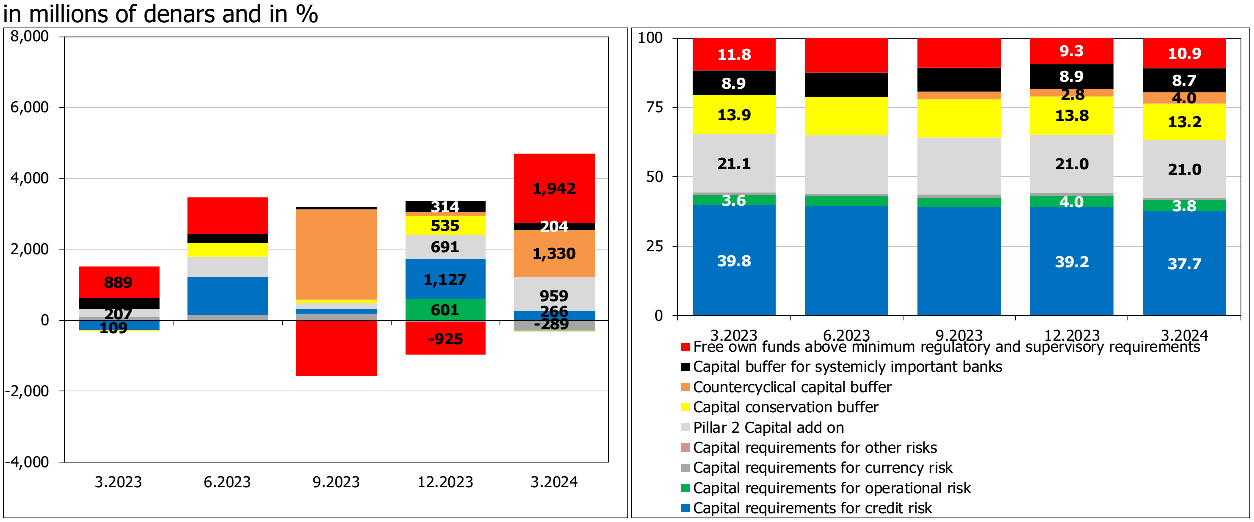
Source: National Bank, based on the data submitted by banks.

In the first quarter of 2024, own funds of the banking system registered a solid growth of Denar 4,396 million, or 4.6%, which is primarily due to the distribution of financial result. Two-thirds of the growth of own funds results from the retained profit from the previous year (Denar 2,925 million), while almost one-third results from the distribution of part of the profit (from 2023) in the increase of the mandatory general reserve (Denar 1,407 million). Modest positive contribution was made by the issue of common shares (Denar 370 million) by one large bank[43]. Insignificant decrease was registered in subordinated instruments (due to reduction of the allowed amount on the bases of which they are included in the calculation of own funds, due to entering the last five years to maturity). For more details about the level of own funds by group of banks see annexes to this report.

[43]For more details, please see page 9 on the following link.

Analyzing the purpose of own funds, the growth of own funds was mostly used for covering the capital buffers, the capital supplement determined by the supervisory assessment and capital requirements for credit risk, with a solid growth in available own funds. Total amount of capital buffers[44] increased by Denar 1,517 million, or by 6.2% on a quarterly basis and at the end of the first quarter of 2024 increased its share to 25.9% in total own funds of the banking system . The sharp growth of capital buffers almost entirely (Denar 1,330 million) results from the increased countercyclical capital buffer rate, the application of which, i.e. fulfillment of obligation started as of 1 January 2024[45]. In conditions of solid profitability, with the increase in the countercyclical capital buffer rate for exposures of the banks in the Republic of North Macedonia of 0.25 percentage points, to the level of 0.75%, we act preventively and enable further strengthening of the domestic banks' capital. The amount of the capital supplement determined by the supervisory assessment registered a quarterly increase of Denar 959 million, or 4.8% and accounted for 21% of the total own funds of the banking system. Capital requirements for credit risk increased by Denar 266 million, (or 0.7%), which mostly stems from the increased claims on other trade companies, claims covered by commercial properties and claims covered by residential buildings. However, total capital requirements for covering risks remained almost unchanged in the first quarter of 2024, due to the reduced capital requirement for currency risk (Denar 289 million), given the significant narrowing of the open currency position. A significant part of the increase in own funds remained free above the minimum regulatory and supervisory requirements, namely available own funds increased by Denar 1,942 million or 21.7%, increasing their share in total own funds to the level of 10.9% (9.3% as of 31.12.2023).

Chart 39 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 data submitted by banks.

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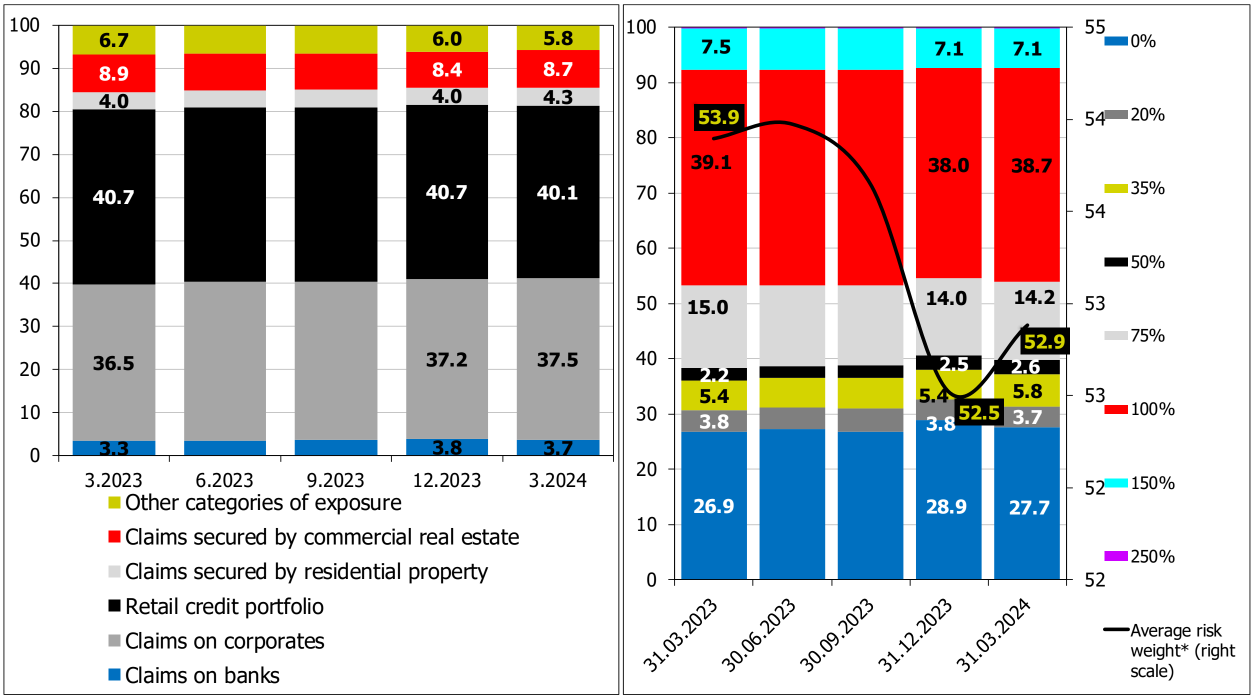
[44]From the four capital buffers specified by the Banking Law, in the first quarter of 2024, all banks were required to meet the capital conservation buffer and countercyclical capital buffer, while the seven systemically important banks, according to data as of 31.12.2022, had a deadline to meet the capital buffer for systemically important banks by the end of March 2024 (for more information visit the followinglink). Moreover, during the first quarter of 2024, in accordance with the data as of 31.12.2023, the list of the systemically important banks and the amount of the adequate capital buffer rates that banks are required to meet by 31 March 2024 were updated(for more information visit the followinglink).

[45]For more details on the countercyclical capital buffer decisions visit the following link.

Chart 40 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 slightly grew. Thus, the higher quarterly growth of risk-weighted assets by 0.7% (Denar 3,330 million) compared to the almost unchanged amount of the total on-balance and off-balance sheet exposure of the banking system resulted in a growth (of 0.4 percentage points) of the average risk weight, to 52.9%. Such movements mostly result from the quarterly decline in banks' activities with 0% risk weight (of denar 10,522 million), amid increased claims with risk weights of 100% and 35% (of a total of Denar 10,179 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.

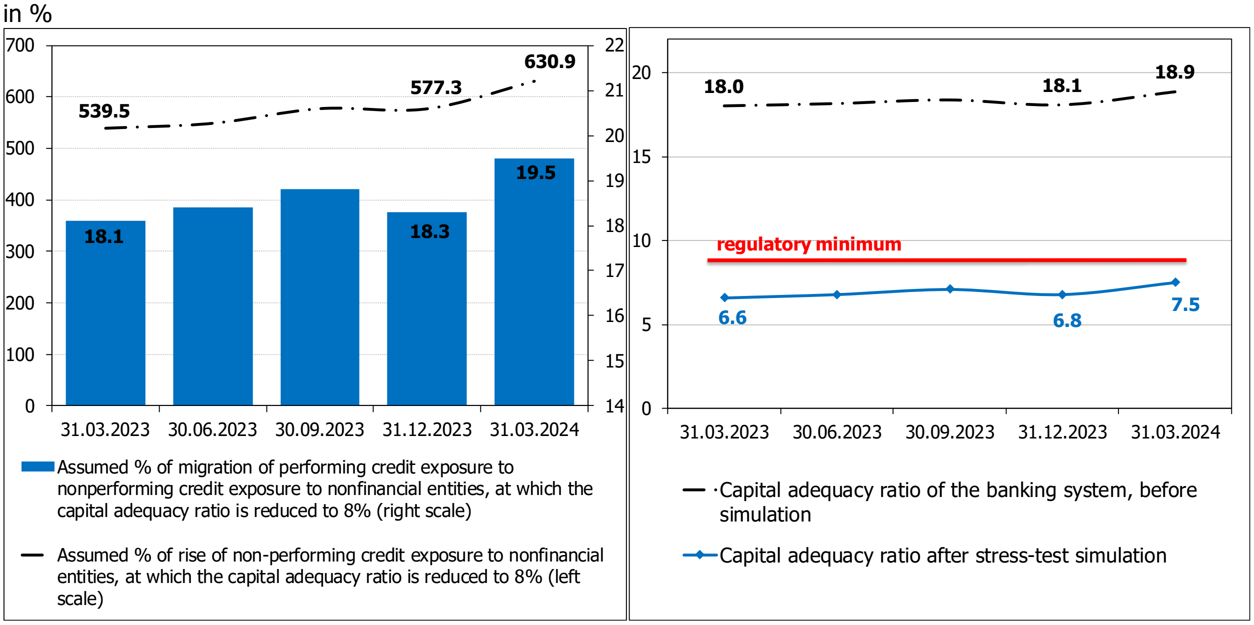
5.3. Stress-testing of the banking system resilience to hypothetical shocks

The banking system shows a satisfactory level of 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 31.12.2023, mostly due to the higher initial level of capital adequacy ratio. The regular stress-testing highlights only the simulations with highly extreme assumptions, the probability for materialization of which is very low, which is in fact the point of the stress-testing process. For the purpose of this report we represent the results of **the simulation for simultaneous**

materialization of credit, currency and interest risk[46]. After such shock, the capital adequacy ratio of the banking system reduced below requirement, to 7.5%, which is better compared to the last quarterly date when the capital adequacy ratio reduced to 6.8%.

Hypothetical shocks on the part of the credit risk had the greatest impact on the solvency of the banking system. The stress testing results show that it takes growth of 630.9% of non-performing loan exposure, i.e. migration of 19.5% from regular to non-performing loan exposure for the capital adequacy of the banking system to drop to 8%. However, these are rather extreme and less likely simulations, especially in the short term, given that in the first quarter of 2024, only 0.6% of the regular credit exposure to non-financial sector received a non-performing status. Moreover, the condition of non-performing credit exposure to non-financial entities registered a quarterly increase of 9.4%[47]. 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 41
Necessary deterioration of the quality of credit exposure for the capital adequacy of the banking system to drop to 8% (left) and results of stress-test simulations(right)
in %



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

[46] Stress-testing includes simulation of simultaneous materialization of credit, currency and interest rate shocks, through:
- 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 of A, 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;
- depreciation of the denar against the euro by 30%; and
- growth of lending and deposit interest rates from 1 to 5 percentage points;

[47]The higher quarterly growth in non-performing credit exposure to non-financial entities compared to the previous quarters is due to the different methodological approach in determining the non-performing status (namely, counting the days of delay) which started to apply with the new Decision on the methodology for credit risk management, as of 1.1.2024, and not because of the changed creditworthiness of clients. For more details see the credit risk section of this Report.

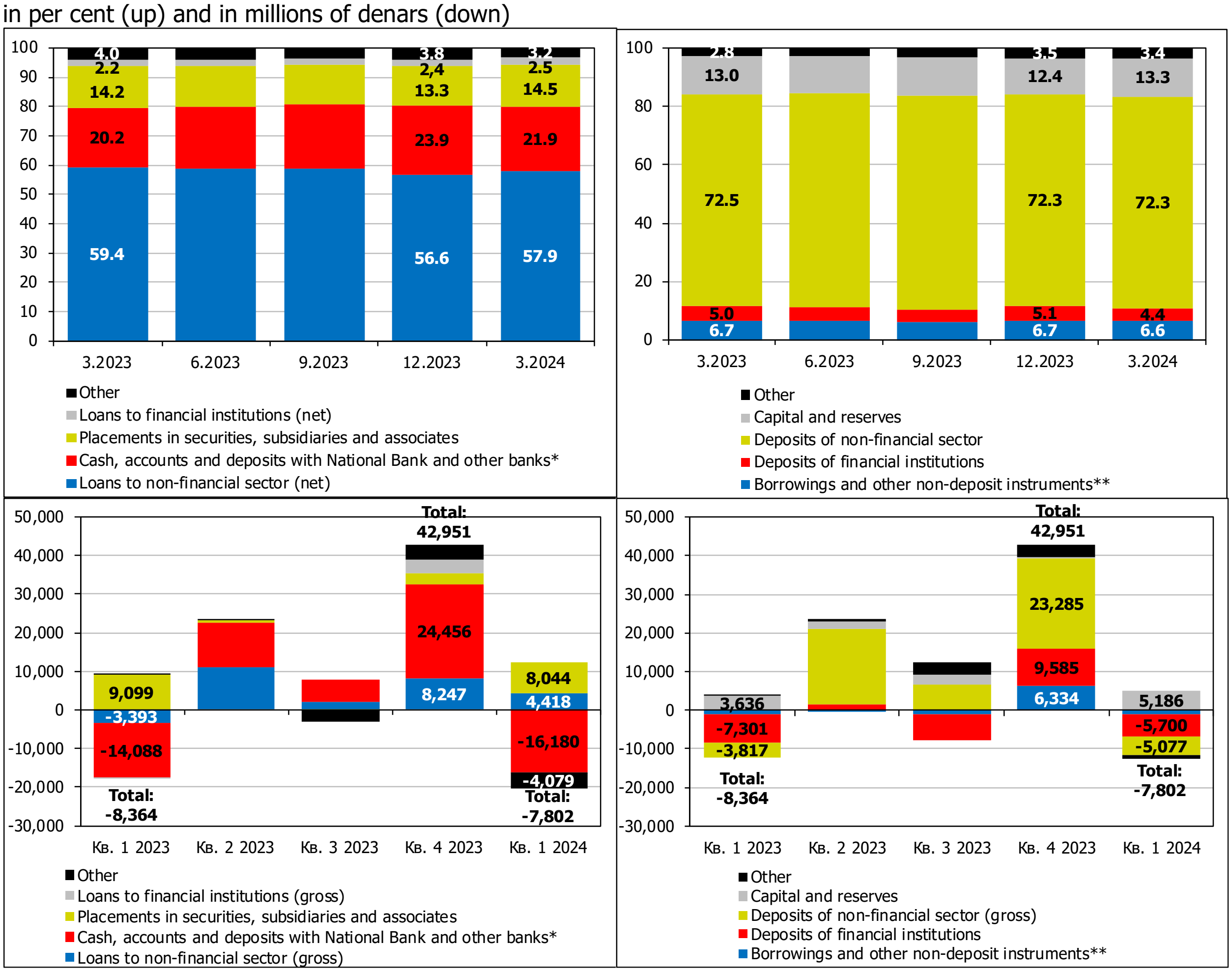
IV. Major balance sheet changes and profitability of the banking system

1. Bank activities

The banking system's balance sheet declined in the first quarter of 2024, which is partly due to common seasonal factors in this part of the year. The largest contribution to the decline in the sources of own funds was made by the deposits of financial institutions and non-financial entities, but the decline was mitigated by the profit in the first three months of the year. The decrease in deposits of non-financial entities is exclusively due to the decline in corporate deposits, which is a common seasonal movement for this period of the year, while household deposits increased at a slower pace. Regarding the currency structure, the decline is mostly due to reduced denar corporate demand deposits. Observing maturity, long-term deposits maintained the growth trend, while short-term deposits and demand deposits decreased.

On the banking system's assets side, liquid assets registered a quarterly decline, with the largest decrease in available deposits with the National Bank, foreign currency assets, corresponding accounts and short-term deposits in foreign banks and placements in foreign government securities. Banks' lending activity continued to grow in the first quarter of the year, albeit slower on a quarterly basis. A slowdown in the quarterly growth was noted in both sectors and was more pronounced in corporate loans, which is also a common seasonal effect in this period of the year. Analyzed annually, loans in both sectors are growing rapidly.

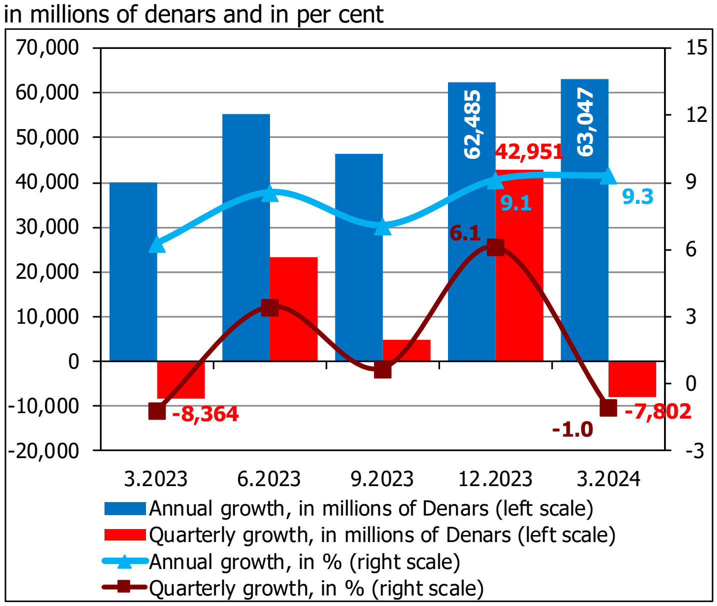
Chart 42
Structure of assets (up left) and liabilities (up right) and structure of the quarterly changes of assets (down left) and liabilities (down right) of the banking system in per cent (up) and in millions of denars (down)
in per cent (up) and in millions of denars (down)



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.

In the first quarter of 2024, the balance sheet of the banking system went down by Denar 7,802 million, or by 1.0% compared to the end of the last quarter of 2023. The decline mainly results from the reduced deposits of non-financial institutions and non-financial entities, while this decline was mitigated by the profit in the first quarter. The quarterly growth of capital and reserves results from the retained profits from the last year and issue of shares with one bank. On the assets side, significant decrease was noted in banks' liquid assets (especially available deposits with the National Bank, foreign currency assets, corresponding accounts and short-term deposits in foreign banks and placements in foreign government securities), while the decline was mitigated by the increase in loans to non-financial entities. The scope of banks' activities are partly affected by the seasonal factors in the first quarter of the year, when most of the categories of activities registered a decline or a decelerated growth. Such movements are usual for this period of the year and are mostly related to the business operation cycle of corporations, whose deposits significantly decreased in the first quarter of the year. Analyzed annually, the growth of assets accelerated to the level of 9.3% amid fast annual growth of the credit activity and minor slowdown in the growth of deposits of non-financial entities.

Chart 43
Assets growth of the banking system



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

1.1. Loans to non-financial entities[48]

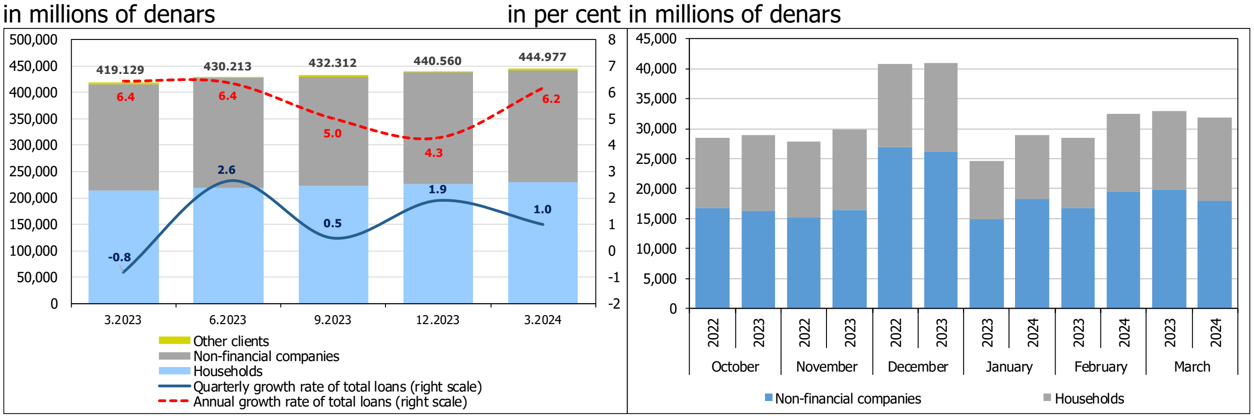
In the first quarter of 2024, banking system's activities grew quarterly by Denar 4,418 million or by 1.0%. On an annual basis, loans grew by 6.2%, which points out to acceleration of the annual growth compared to the previous two quarters. These movements were registered amid net tightening of the credit standards and net reduction of demand for loans, while the monetary policy setup remained unchanged[49]. Most banks registered credit growth, with the largest contribution to the growth by large banks of just over 90%.

[48] Loans to non-financial entities include loans to resident and non-resident non-financial entities, that is, 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).
[49] According to the results of the Lending Survey for the first quarter of 2024, net tightening was registered in both corporate and household lending, while net reduced demand for loans was also noted in both sectors. However, a slight net easing in terms of interest rate was noted among credit standards for corporations. The National Bank policy rate in the first quarter of 2024 remained at the level of 6.30%.

Chart 44

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



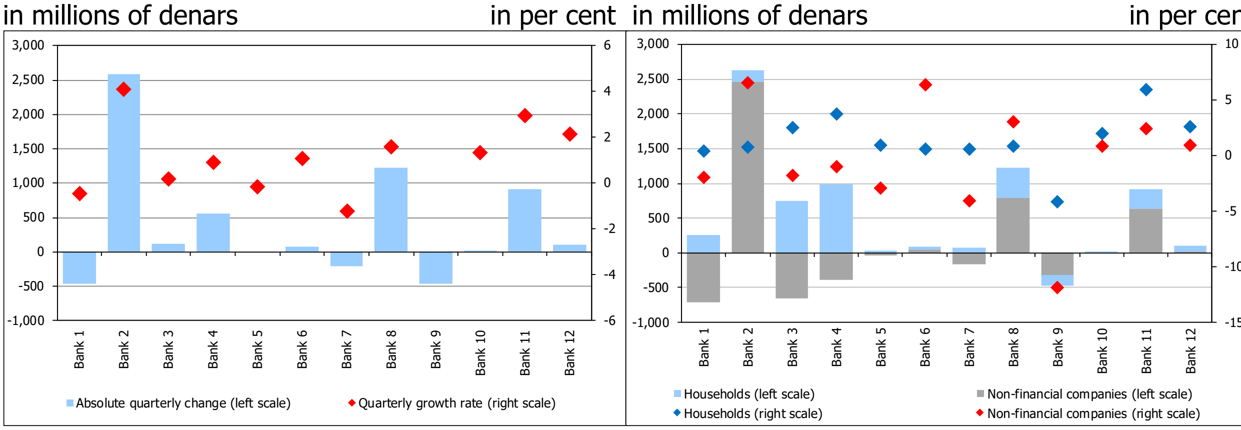
Source: National Bank, based on the data submitted by banks.

In the first quarter of 2024, the newly granted loans to non-financial sector[50] reduced by 6.5% quarterly. The decline results from the reduced newly granted household loans (8.3%) and corporate loans (5.3%), and is partly due to the common seasonal effect in the first quarter of the year and to the significant growth in the previous quarter.

Chart 45

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



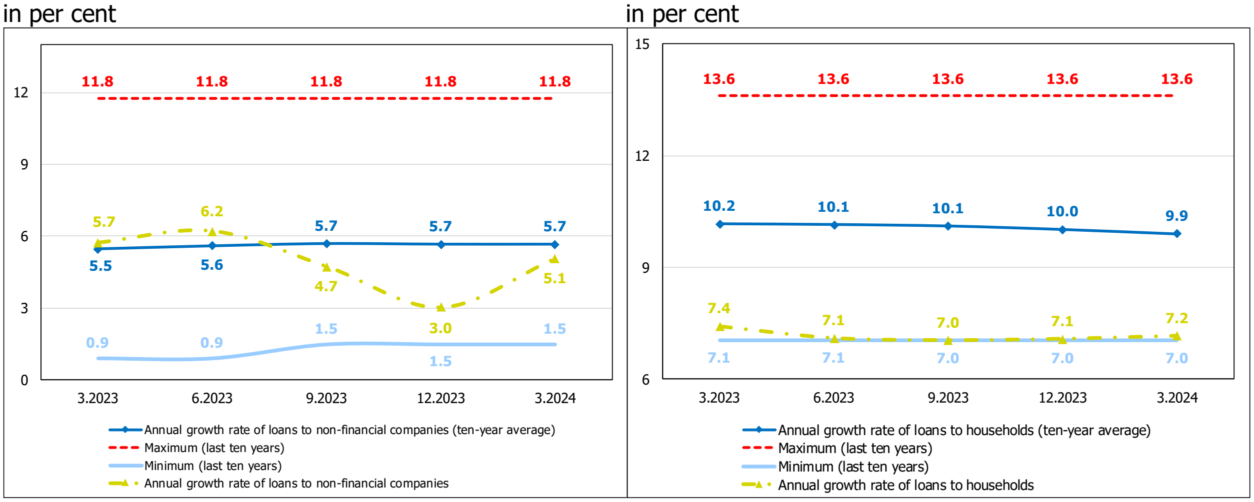
Source: National Bank, based on the data submitted by banks.

Corporate lending in the first quarter of 2024 increased quarterly by Denar 1,652 million or by 0.8%. The growth is due to the increased lending to clients in industry, electricity supply, as well as transport and storage. On the other hand, reduced lending was registered to clients in the construction sector and activities related to real estate, as well as in retail and wholesale trade. The growth in corporate lending occurred amid slight net easing in terms of interest rate, and net tightening regarding the amount of loans and collateral, while the

[50] Non-financial entities include only legal entities and households, while exclude other clients due to large fluctuations of newly approved loans.

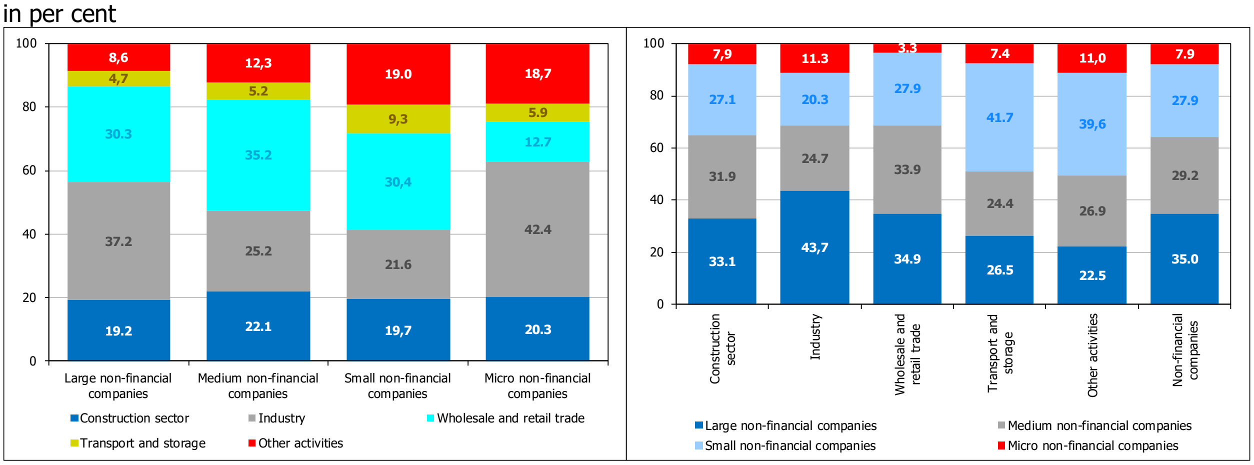
demand for loans still registered a net decrease.[51] Annually, corporate loans increased by 5.4%[52], which is a higher growth rate compared to the previous two quarters. The expectations for the second quarter of 2024 are aimed at slight net tightening of credit standards amid a net increase in demand for loans.

Chart 46
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 - 31.3.2024. Starting from December 2019, the data also contains collected compulsorily written-off loans.

Chart 47
Structure of loans to non-financial companies by individual activities and by size of the company
in per cent



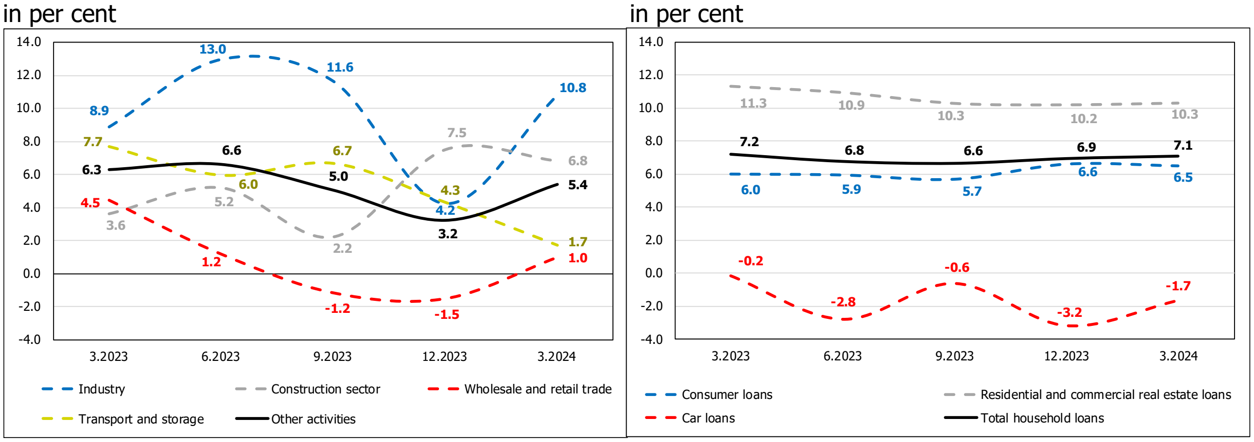
Source: National Bank's Credit Registry based on data submitted by banks.

[51] Source: Bank Lending Survey in the first quarter of 2024.
[52] After excluding the effect of net write-offs, the annual growth rate equaled 5.1%, which is lower than the ten-year moving average.

Analyzed by the size of non-financial companies[53], loans to large enterprises have the largest share (35.0%), which is a decrease compared to the previous quarter, while the share of micro enterprises (7.9%) is the lowest with a slight increase. Such shares are partly due to higher amounts of loans to larger enterprises, and partly due to lower propensity of banks in terms of lending to smaller enterprises[54]. Observing clients' activity, the largest share was registered in loans to companies in wholesale and retail trade (30.8%) and industry (29.8%), with a significant share of loans in construction (20.3%).

In the first quarter of 2024, household loans went up by Denar 2,988 million or by 1.3% on a quarterly basis. The annual growth rate of household loans amounted to 7.1%[55] and is higher compared to the previous three quarters. Observing the type of credit product, quarterly growth was registered in loans for purchasing residential and commercial properties (2.1%) and consumer loans (0.6%), but the growth was slower compared to the previous quarter. Such movements were registered amid more moderate decrease in demand for household loans. The second quarter of 2024 expects net easing of the credit standards amid a net increase of the demand for loans[51].

Chart 48
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.

Household loans still have somewhat higher share in total loans with 51.5%, which is an increase of 0.2 percentage points compared to the previous quarter. Within household loans, non-purpose loans dominated with 62.4% (the share of consumer loans amounted to 53.8%), but their share reduced at the expense of the share of loans for purchasing residential and commercial properties, which equaled 37.4%.

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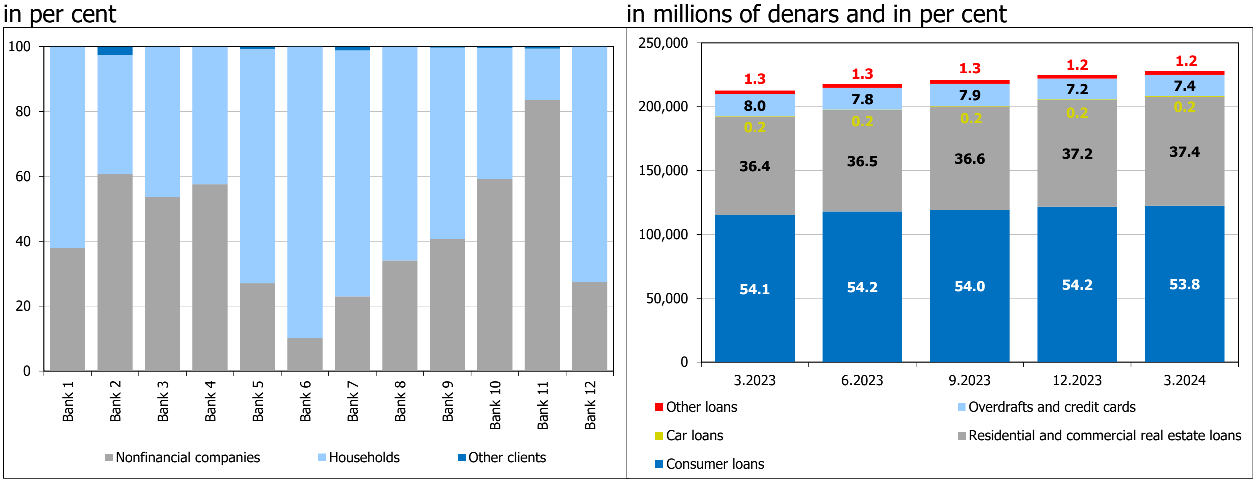
53 The criteria for Classification of entities by size (into large, medium, small and micro) are defined in Article 470 of the Law on Trade Companies.
54 Some of the reasons that banks are not prone to financing small and medium-sized enterprises are poor financial literacy, poor corporate reporting and unwillingness of enterprises to disclose and share business information. (For more information see p. 5 in Macedonia 2025 (2020). *Barriers for access to finance for MSMEs in North Macedonia: Stock of existing data and knowledge*.
55 After excluding the effect of net write-offs, the annual growth rate equaled 7.2%, which is lower than the ten-year moving average.

Chart 49
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

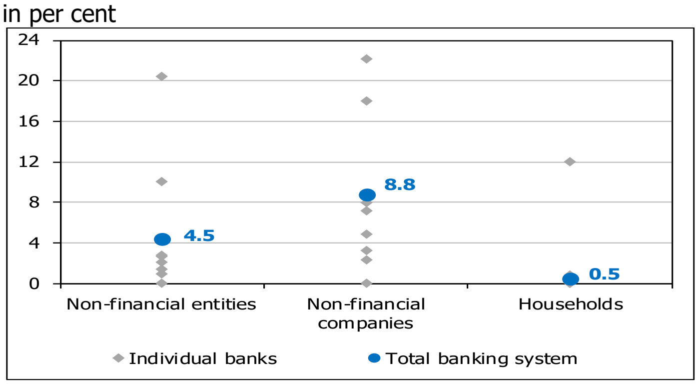


Source: National Bank's Credit Registry based on data submitted by banks.

Green loans remained unchanged[56] compared to the end of 2023, and their share in total loans stood at 4.5%[57]. As of 31.3.2024, total green loans to non-financial sector decreased slightly by Denar 3.3 million, after the continuous increase in the recent quarters. The decrease results from green household loans which reduced by Denar 135 million amid an increase in green corporate loans of 0.7% or Denar 131.7 million. These movements did not change the share of green loans in total loans to individual sectors, i.e. it amounted to 8.8% and 0.5% in the corporate sector and households, respectively.

Chart 50
Share of "green" loans in the total loans to non-financial entities and by individual sectors, by individual bank

in per cent

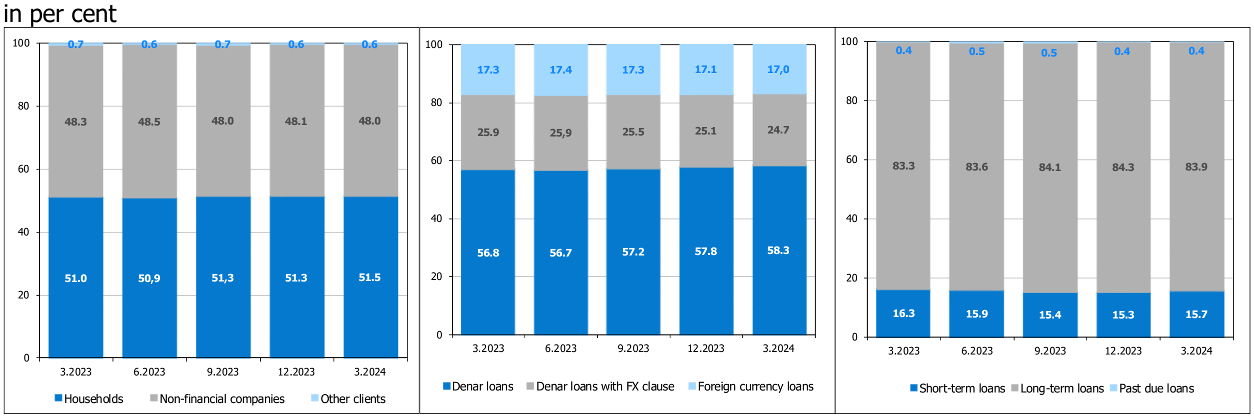


Source: National Bank, based on the data submitted by banks.

[56] For the purposes 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.
[57] Two banks, out of twelve analyzed banks, as of 31.3.2024 have no "green "loans" in the portfolio. In the banks that have approved such loans, the share of "green" loans in total loans ranges from 0.1% to 20.5%. Analyzed by sector, the share of green "loans in total loans by individual banks is between 0.001% and 22.2% in corporate loans, i.e. between 0.0% and 12.0% in household loans.

Analyzing the currency structure of loans, only denar loans registered a quarterly growth in the first quarter of 2024. Compared to the end of 2023, denar loans increased by Denar 4,927 million or by 1.9%[58], while loans with currency component dropped by Denar 509 million or by 0.3%[59]. Therefore, the share of denar loans in total currency structure funds increased by 0.5 percentage points compared to the previous quarter and reached 58.3%. Within loans with currency component, the share of denar loans is higher (24.7%) compared to foreign currency loans (17.0%).

Chart 51
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.

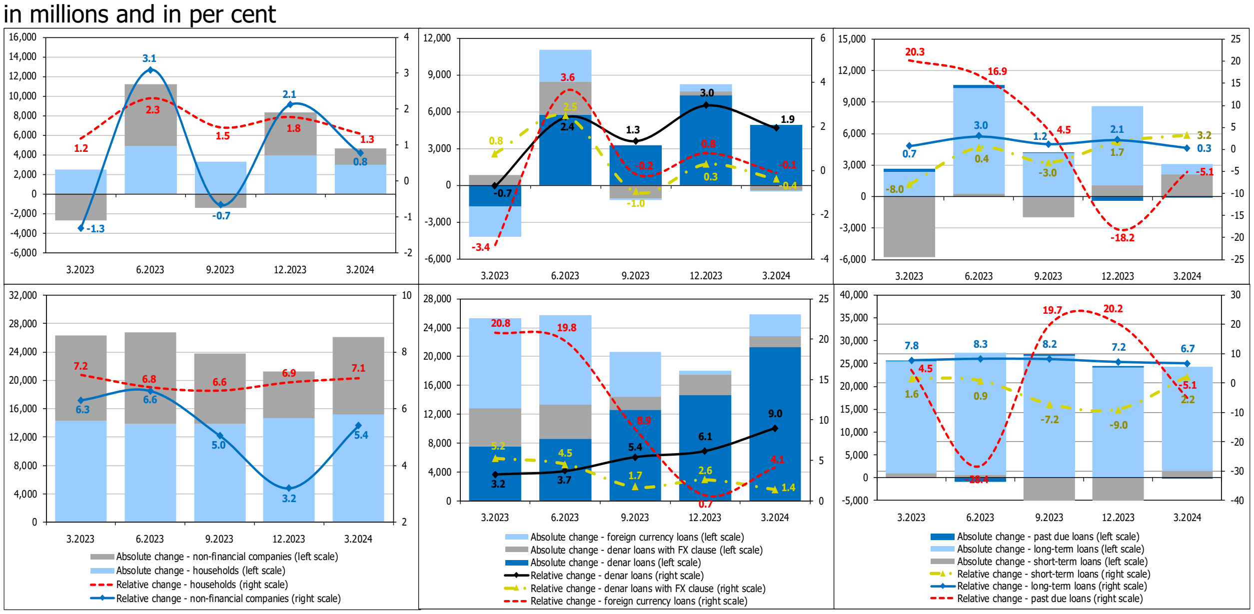
Observing the maturity structure of loans[60], both short-term and long-term loans grew in the first quarter of 2024, while due loans declined. Long-term loans still prevail in total loans with a share of 83.9%.

[58] The quarterly increase in denar loans to non-financial sector is due to higher corporate loans by Denar 3,305 million or by 2.5% and household loans by Denar 1,663 million or by 1.4%, while loans to other clients decreased by Denar 41 million or by 3.2%.
[59] The decline of loans with currency component to non-financial sector on a quarterly basis is due to lower denar loans with FX clause by Denar 427 million or by 0.4% as well as to the decline in foreign currency loans by Denar 82 million or by 0.1%. The decline in denar loans with FX clause is mainly due to reduced corporate loans (by Denar 1,140 million or 5.0%), with a partial contribution of the decline in loans to other clients (by Denar 49 million or 6.9%), while household loans grew (by Denar 763 million or by 0.9%). The reduced foreign currency loans were registered amid a decline in corporate loans (by Denar 512 million or by 0.9%), as well as in loans to other clients (by Denar 132 million or by 17.5%), with a mitigating effect of the increased household loans (by Denar 562 million or by 3.4%).
[60] The analysis of maturity structure excludes non-performing loans.

Chart 52

Quarterly (top) and annual (bottom) growth of loans, by sector, currency and maturity

in millions and in per cent



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

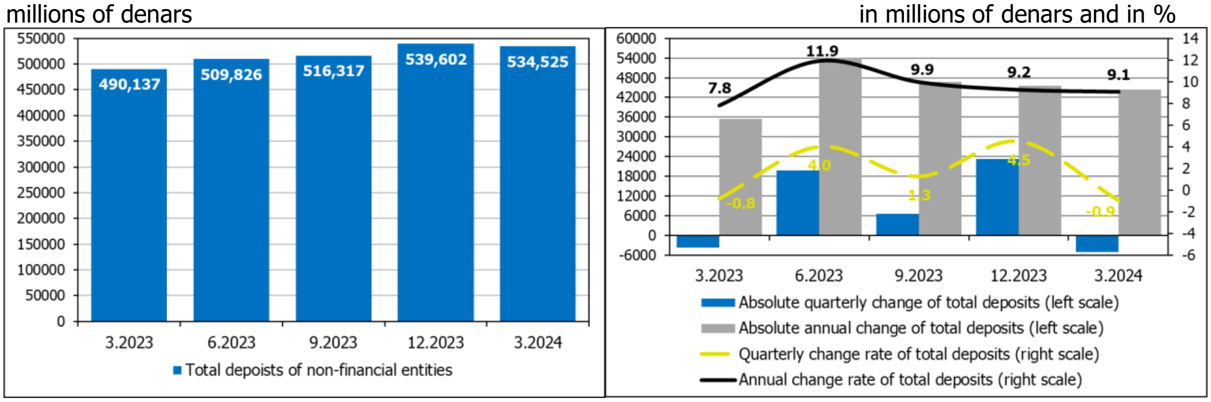
1.2. Deposits of non-financial companies

In the first quarter of 2024, deposits of non-financial entities decreased by Denar 5,077 or 0.9%. The decrease is mostly due to the decline in demand deposits of non-financial companies mostly in denars, which is usual for this period of the year and is mostly associated with the business operation cycle of corporations. On annual basis, total deposit base of banks increased by Denar 44,388 million, or by 9.1%, which is similar to the growth in 2023 (of Denar 45,648 million or 9.2%).

Chart 53

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

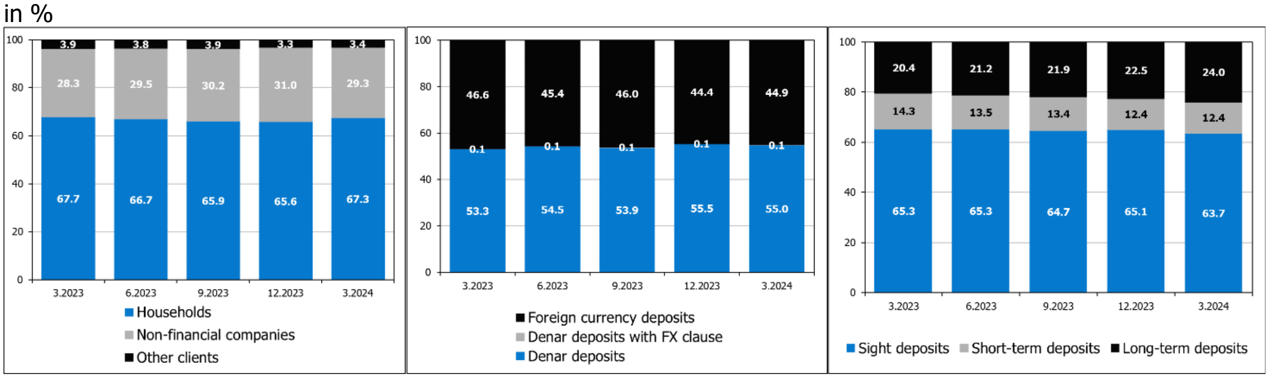
in millions of denars | in millions of denars and in %



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

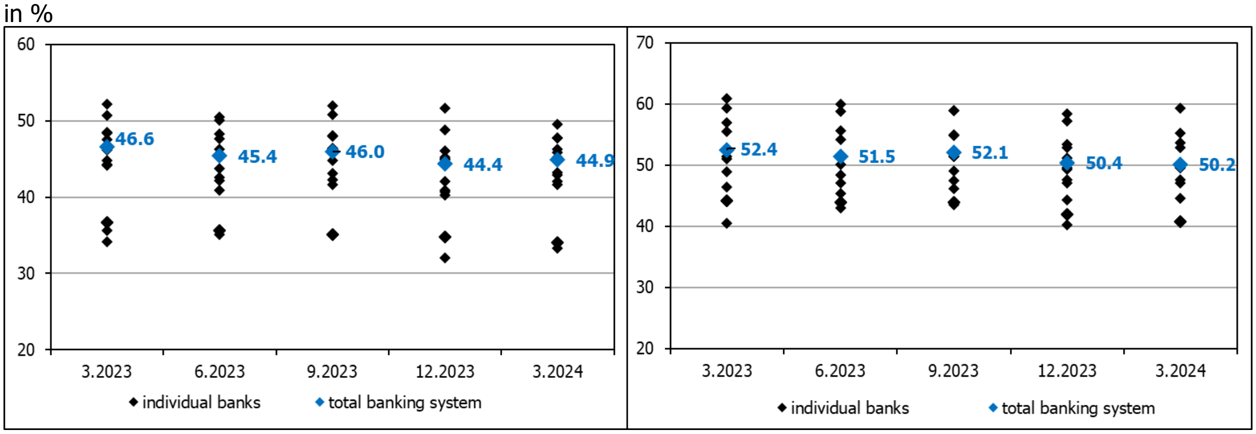
Observed by sector, the quarterly decline of deposits was conditioned by deposits of non-financial corporations, which decreased by Denar 10,817 million or by 6.5%. **Household deposits**, which are traditionally the most significant depositors to the Macedonian banking system (with a share of 67.3% in total deposits), grew (by Denar 5,499 million, or 1.6%), yet at a slower pace compared to the previous quarter (4.1%). Annually, household deposits grew faster (8.3% as of 31.3.2024, against 7.8% as of 31.12.2023), while deposits of non-financial corporations further grew at double-digit rate albeit at a slightly slower pace (12.7% as of 31.3.2024, against 13.2% as of 31.12.2023).

Chart 54
Structure of total deposits, by sector (left), currency (middle) and maturity (right)
in %



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

Chart 55
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 %

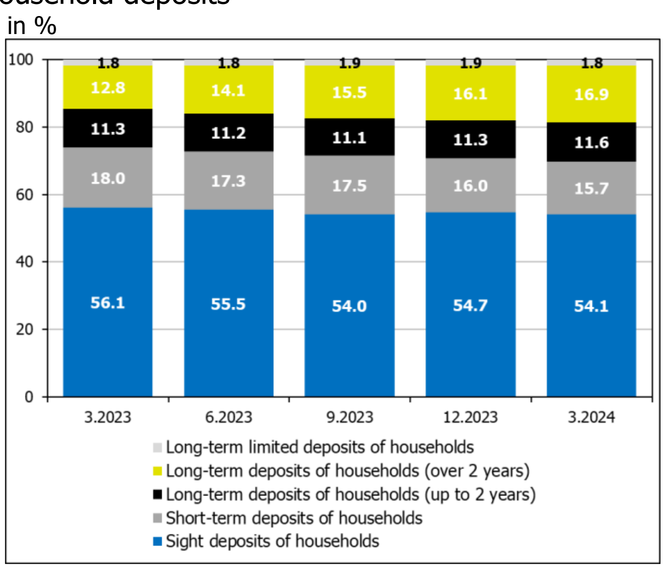


Source: National Bank, based on the data submitted by banks.

Observed by currency, the quarterly reduction of total deposits was mainly conditioned by the decline in denar deposits, which decreased by Denar 5,444 million or 1.8%. Such decline was mostly due to the decrease in denar demand deposits of non-financial corporations (Denar 10,273 million or 10.4%). In contrast, foreign currency deposits noted a slight quarterly growth of Denar 390 million, or 0.2%. Analyzed annually, the growth of denar deposits is double digit (12.5%) and several times higher, compared to the increase in foreign currency deposits (5.1%). Such movements led to certain changes in the currency structure of banks' deposit base, where the share of denar deposits dropped by 0.5 percentage points quarterly, at the expense of the increased share of foreign currency deposits in total deposits.

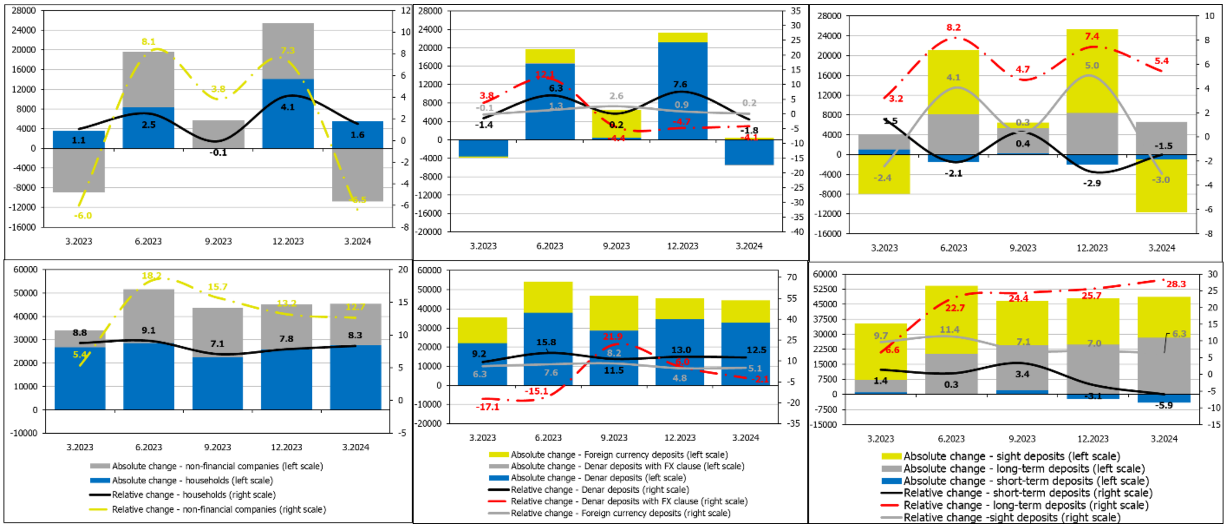
Observing maturity, the preferences for long-term savings remained. Thus, in the first quarter of 2024, only long-term deposits grew by Denar 6,602 million or 5.4%, which is still less compared to the growth in the last quarter of 2023 (Denar 8,427 million or 7.4%). On the other hand, demand deposits registered a quarterly decline (Denar 10,697 million or 3%), with a decrease in short-term deposits as well (Denar 982 million or 1.5%). Annually, long-term deposits accelerated their growth to 28.3%, amid further decline in short-term deposits (-5.9%) and slower growth of demand deposits (6.3% as of 31.3.2024, as opposed to 7% as of 31.12.2023). Such movements in the banks' deposit base increased the share of long-term deposits in total deposits by 1.5 percentage points, at the expense of the reduced share in demand deposits. The maturity structure of household deposits also registered an increase in the share of long-term deposits to the level of 30.2% (from 29.3% as of 31.12.2023), amid reduced share of demand deposits (from 54.7% as of 31.12.2023 to 54.1%) and short-term deposits (from 16% as of 31.12.2023 to 15.7%).

Chart 56
Maturity structure of household deposits



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

Chart 57
Quarterly (up) and annual (down) deposit growth by sector (left), currency (middle) and maturity (right)
in millions of denars and in %



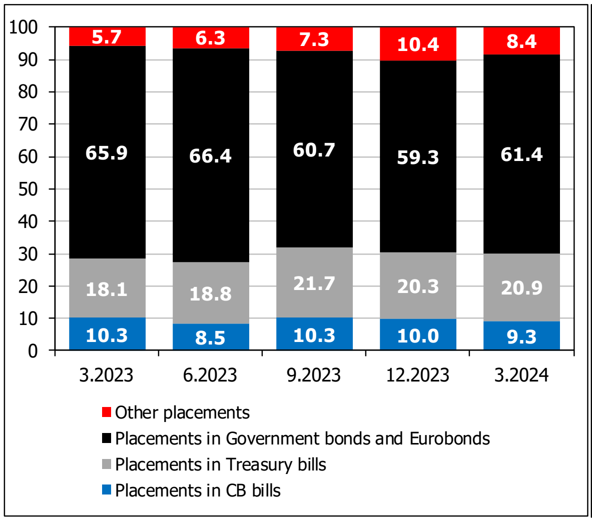
Source: National Bank, based on the data submitted by banks.

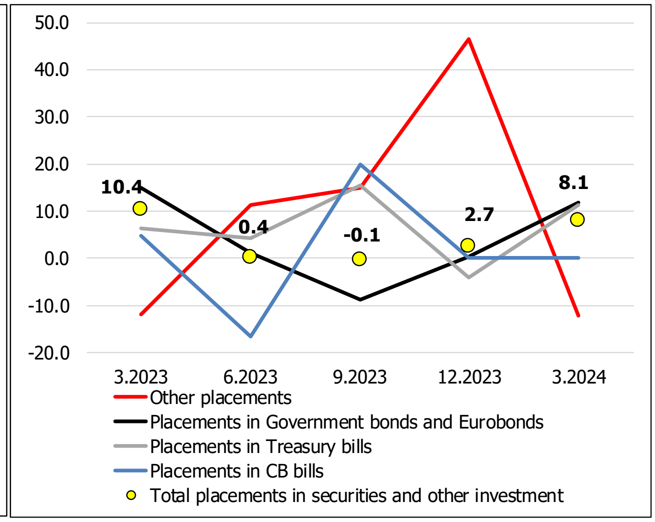
1.3. Other activities

The banks' placements in securities, subsidiaries and associates[61] grew in the first quarter of the 2024 by Denar 8,044 million (or by 8.1%), increasing their share in total banks' assets to 14.5% (13.3% at the end of the previous quarter). The largest quarterly growth was registered in banks' placements in government bonds of Denar 6,970 million or 11.9%[62]. Almost identical quarterly growth rate (11.5% or Denar 2,306 million) was registered in investments in domestic treasury bills[63]. Insignificant quarterly growth of 0.2% or Denar 20 million was noted in banks' placements in CB bills[64]. Other bank's investments in securities declined by Denar 1,253 million, or 12.2%, largely as a result of due debt financial instruments issued by foreign central governments at one large bank. Taking these movements into consideration, the structure of investments in securities was almost unchanged, with an increased and still dominant share of placements in domestic government bonds and euro bonds of 61.4% (59.3 as of 31.12.2023), with a reduced share of other investments in securities to the level of 8.4% (10.4% as of 31.12.2023).

[61] The analyses of these investments are based on their net book value.
[62] In the first quarter of 2024 there were auctions of five-year and fifteen-year government bonds. The trend of slight decrease in interest rates was evident, thus the interest rate on the five-year government bonds amounted to 4.2%, while the interest rate on the fifteen-year government bonds amounted to 5.6%.
[63] In the first quarter of 2024 the interest rate on one-year treasury bills also decreased, from 4.25% at the end of the previous year, to 3.80% at the end of the first quarter of this year.
[64] At the CB bills auctions, held in the first quarter of 2024, the demand was at the level of the offered amount, while the interest rate remained unchanged at 6.3%.

Chart 58
Structure (left) and annual growth rate (right) of investments in securities, subsidiaries and associates
in %

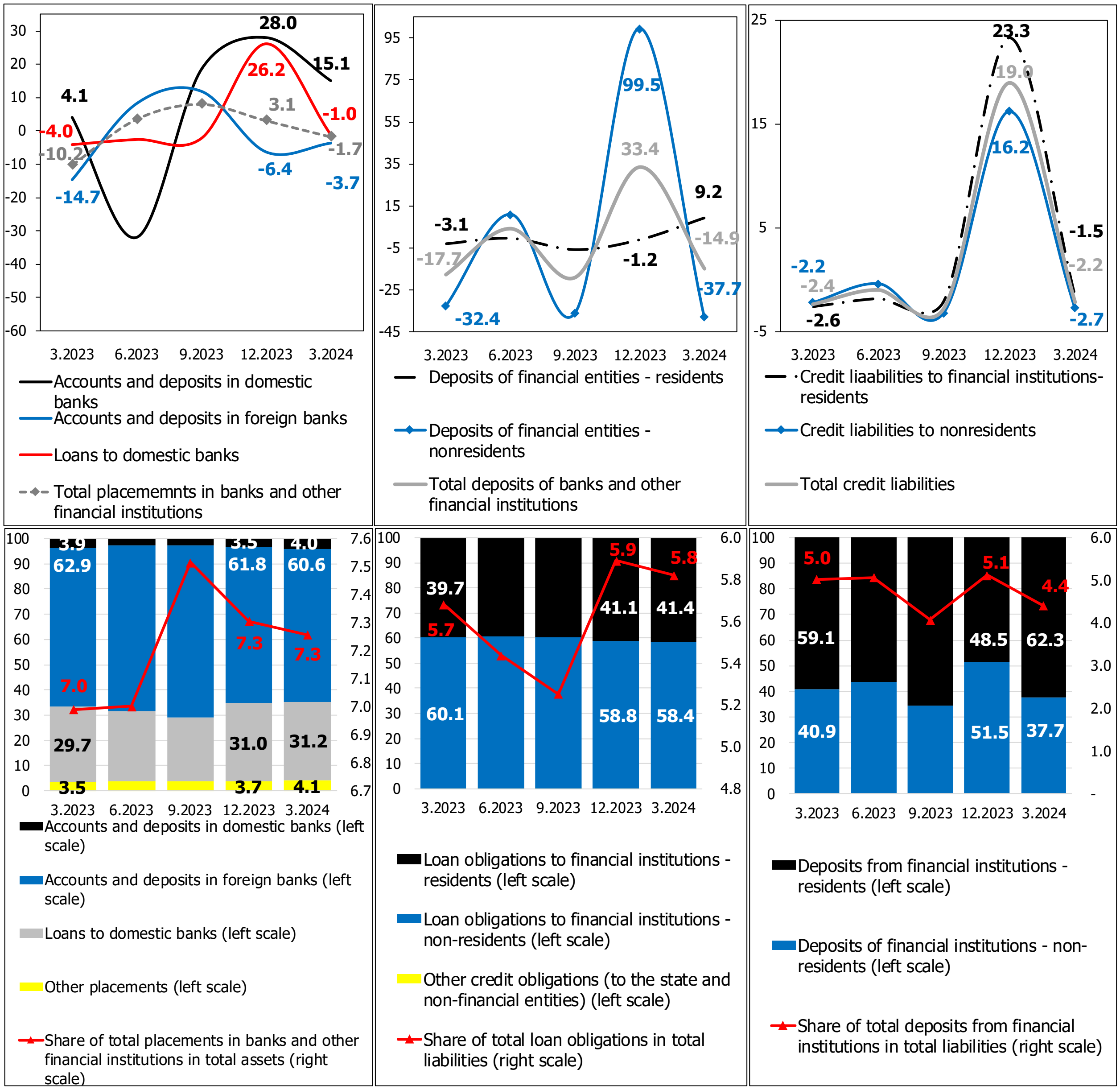




Source: National Bank, based on the data submitted by banks.

On the assets side, the placements with banks and other financial institutions (accounting for 7.3% of the total assets of the banking system) declined by Denar 934 million, or 1.7% in the first quarter of 2024. Such decrease mostly resulted from the reduced assets on accounts and deposits in foreign banks, Denar 1,245 million or 3.7%, primarily due to reduced amounts of assets on corresponding accounts in foreign banks.

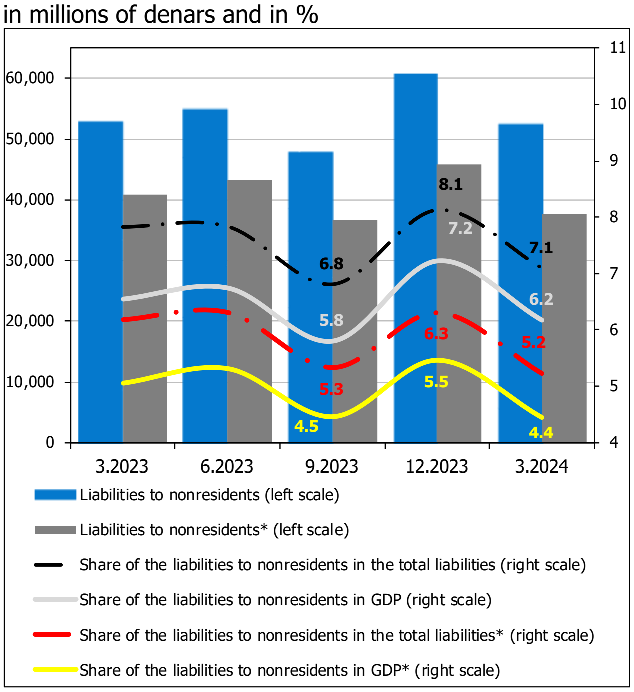
Chart 59 Quarterly change (top) and structure (bottom) of the claims on financial institutions (left), loan liabilities (middle) and deposits of financial institutions (right)
in %

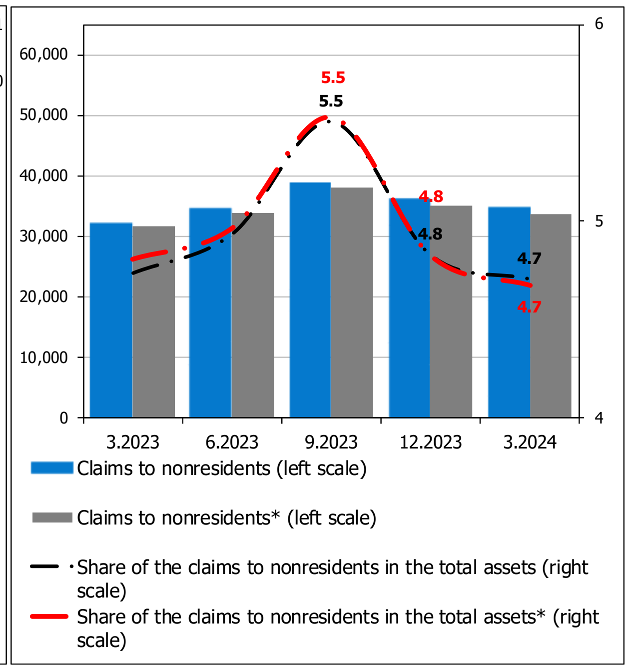


Source: National Bank, based on the data submitted by banks.

On the liabilities side, total loan-based liabilities of banks (which account for 5.8% of total banking system liabilities) declined quarterly by Denar 965 million, or 2.2%. This decline was mostly due to reduced loan-based liabilities to non-resident financial institutions which declined quarterly by Denar 701 million or 2.7%. The decline in loan-based liabilities to resident financial institutions was more moderate and equaled Denar 264 million or 1.5%. Within the structure of the banks' total loan-based liabilities, the loan-based liabilities to non-resident financial institutions still prevail. **Deposits from banks and other financial institutions decreased** and thus remained a moderate source of banks' financing, accounting for 4.4% of total liabilities of the banking system. The quarterly decline in the deposits of banks and other financial institutions of Denar 5,700 million (by 14.9%) mostly results from the decline in the deposits of non-resident financial institutions (of Denar 7,414 million, or 37.7%). On the other hand, a quarterly growth of Denar 1,714 million or 9.2% was registered in deposits of resident financial institutions. Such movements contributed to the largest share of deposits of resident financial institutions, or 62.3%, within total deposits of banks and other financial institutions.

Chart 60
Liabilities to (left) and claims on (right) non-residents
in millions of denars and in %



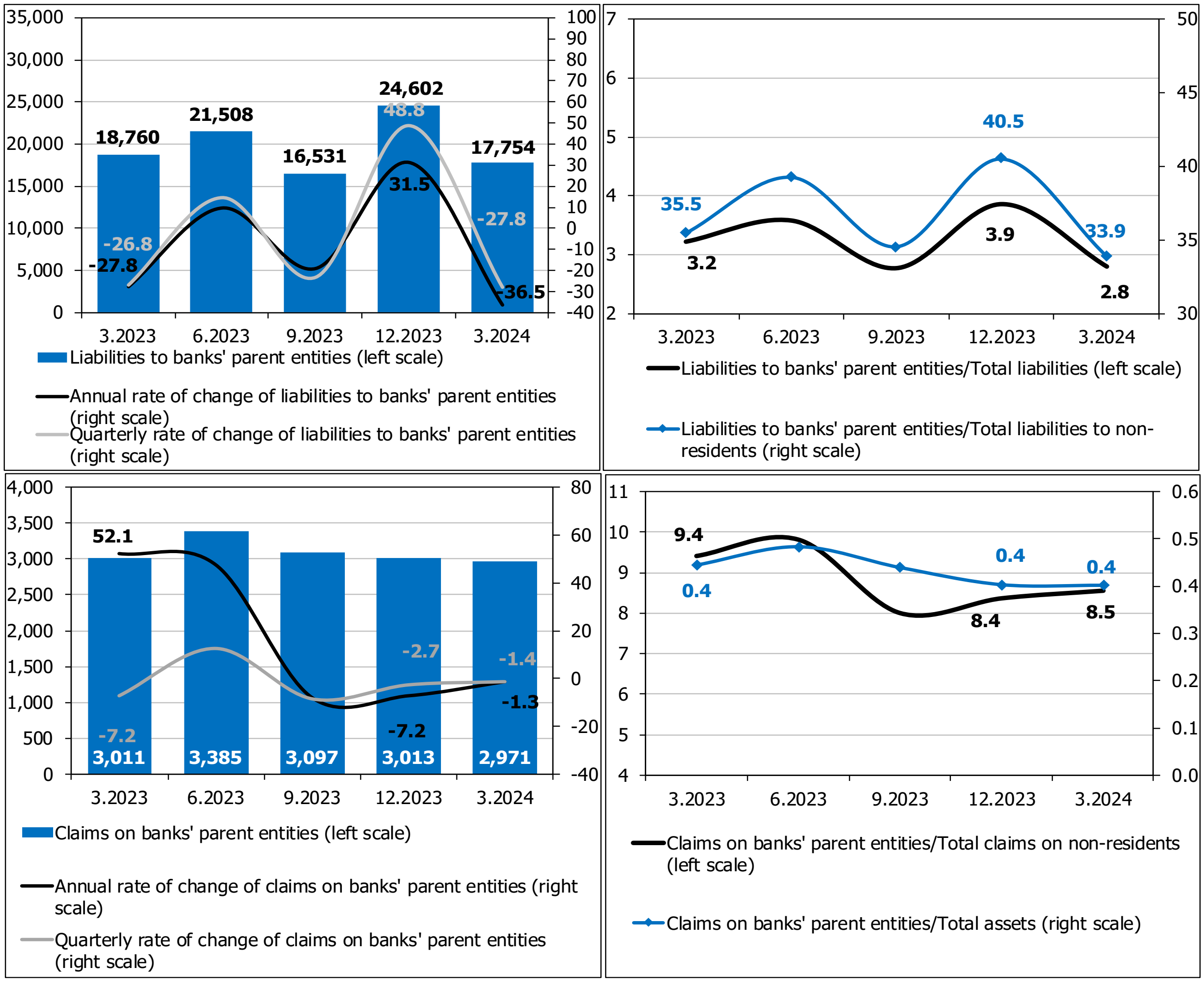


Source: National Bank, based on the data submitted by banks.
*Without DBNM AD Skopje

The scope of banking system activities with non-residents is still very limited. As in the previous quarter, as of 31.3.2024, at the level of the system, the banks owe[65] more than they claim on non-residents, despite the significant decline in liabilities against claims. Domestic banks' liabilities to non-residents registered a significant quarterly decrease (of 8,303 million, or 15.8%), reducing their share in total banking system liabilities to 7.1%[66] as of 31.3.2024. The quarterly decrease mostly results from the decreased liabilities based on short-term foreign currency deposits to non-resident financial institutions. Regarding the bank claims on non-residents, a slightly pronounced quarterly decline of Denar 1,284 million, or 3.7% was registered, almost entirely due to reduced time overnight deposits at one large bank.

[65] As of 31.3.2024, seven of thirteen banks owe more than they claim on non-residents.
[66] If DBNM AD Skopje is excluded from the analysis, the share of liabilities to non-residents in total liabilities would be 5.2%.

Chart 61
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.

Liabilities to banks' parent entities declined, and still do not represent a significant source of financing to domestic banks' activities. In the first quarter of 2024, banks' liabilities to their parent entities decreased by Denar 6,848 million (or 27.8%), which was mostly due to the decrease in the liabilities based on short-term deposits of parent entities (and their connected persons/entities) at one large bank. As a result, the share of banks' liabilities to parent entities (including subordinated liabilities and hybrid capital instruments) in total liabilities of the domestic banking system and in liabilities to non-residents also decreased to 2.8% and 33.9%[67], respectively. Claims on parent entities also registered a minimal quarterly decline of Denar 42 million or 1.4%, which means their share of 0.4% in total assets is still low (0.4% as of 31.12.2023) and the share in claims on non-residents, which equals 8.5% (8.4% as of 31.12.2023).

[67]As of 31.12.2023, these shares equaled 3.9% and 40.5%, respectively.

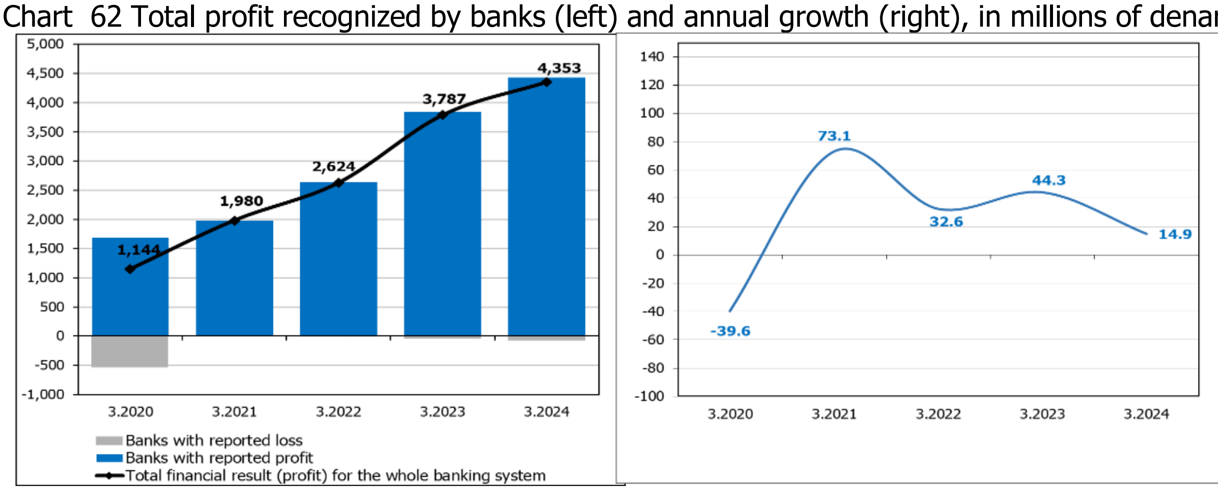
2. Profitability

In the first quarter of 2024, the domestic banking system registered a decelerated profit growth compared to the same period last 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. A slight contribution to the profit growth was made by higher net commission income. The expenditures grew on all grounds. Most of the profitability and operational efficiency ratios of the banking system improved. Interest rates on both loans and deposits increased in the first quarter of 2024.

2.1. Banking system profitability and efficiency ratios

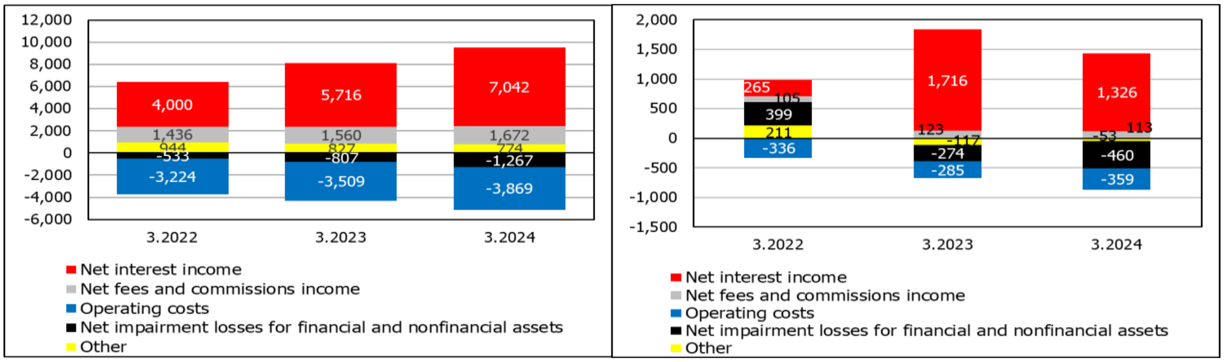
In the first quarter of 2024, the banking system reported a profit of Denar 4,353 million, which is higher by 566 million, or 14.9%, compared to the same period last year (when the growth equaled 44.3%), which is a decelerated profit growth. The largest contribution to the profit growth was made by the higher net interest income, although its increase (of Denar 1,326 million or 23.2%) slowed down compared to the same period last year (when it increased by Denar 1,716 million or 42.9%). The net income from fees (growth of Denar 113 million, or 7.2%) made a slight contribution to the profit growth. On the other hand, net cost of impairment for both financial and non-financial assets increased by Denar 460 million or 57.1%, with a growth in operating costs by Denar 359 million or 10.2%. Analyzed by bank, all banks, except two small-size banks, registered positive financial operating result.

Chart 62 Total profit recognized by banks (left) and annual growth (right), in millions of denars



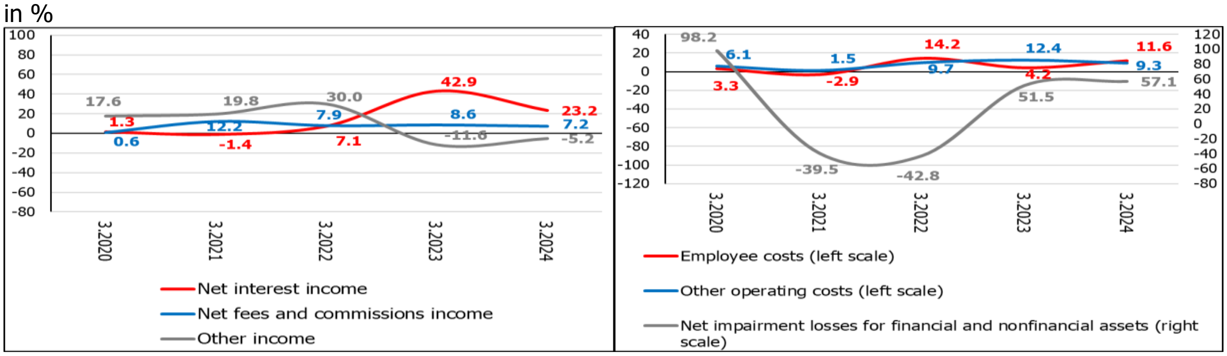
Source: National Bank, based on the data submitted by banks.

Chart 63 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 64 Annual growth rate of the main income (left) and expenditure items (right) of banks
in %

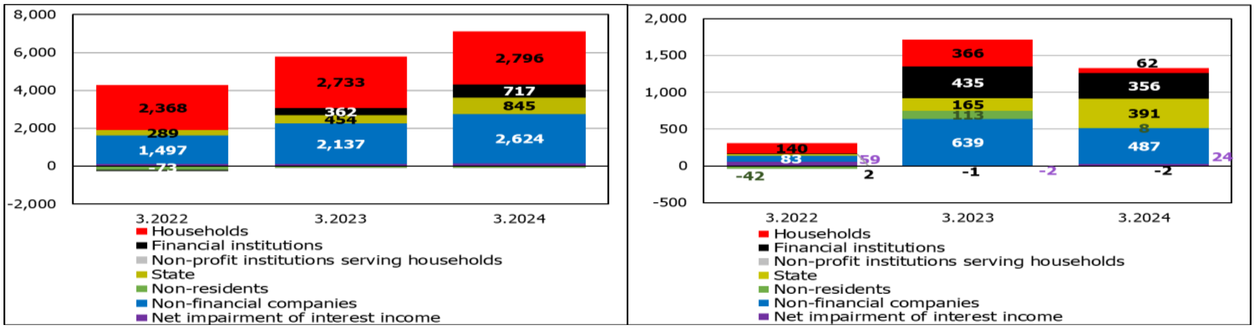


Source: National Bank, based on the data submitted by banks.

Higher net interest income of banks is based on higher absolute interest income (by Denar 2,004 million or 29.7%), compared to the growth of interest expenses (by Denar 678 million or 65.9%). Therefore, net interest income recorded growth from almost all sectors, amid higher increase in interest income compared to the increase in interest expenses. The greatest contribution to the formation of net interest income (39.7%) 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 (36.7%). Net interest income from non-financial corporations increased annually by Denar 487 million or 22.8%, while the net income from the household sector grew far less, by Denar 62 million or 2.3%. A relatively high absolute net interest income was registered from the activities of banks with the Government (of Denar 391 million or 86.0) and with financial institutions (of Denar 356 million or 98.3%)[68]. The slower growth of net interest income in the first quarter of 2024 was primarily due to increased interest income compared to the same period from the previous year[69], amid faster growth in deposit interest rates relative to the growth in lending interest rates. The slower growth of interest income[70] contributed to slow growth in net interest income.

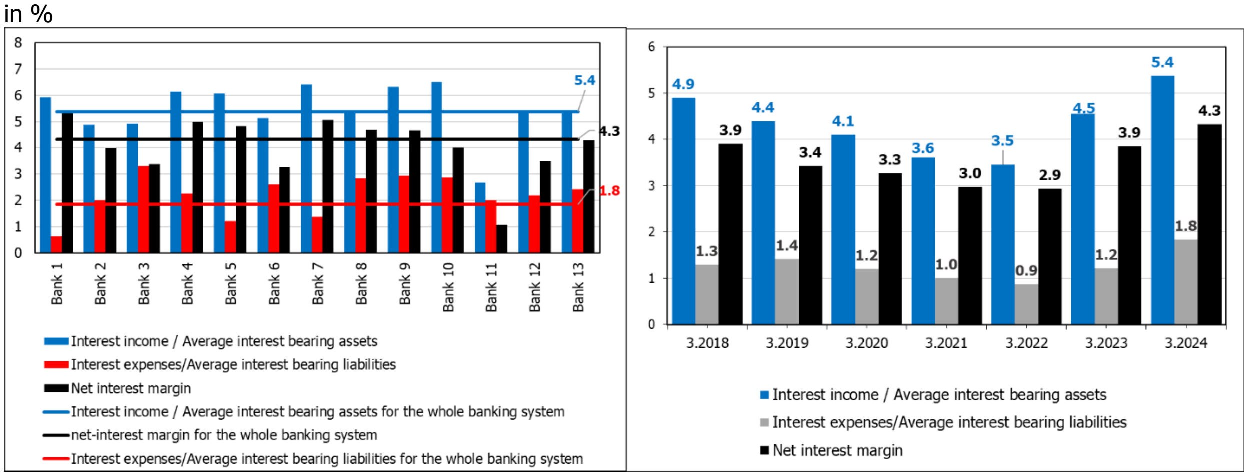
[68] In the first quarter of 2024, the interest income of the central government and the central bank increased by Denar 350 million and Denar 346 million, respectively.
[69] The growth of interest expenses in the first quarter of 2024 amounted to Denar 678 million or 65.9%, while in the same quarter of the previous year the growth equaled Denar 314 million or 43.9%.
[70] The growth of interest income in the first quarter of 2024 amounted to Denar 2,004 million or 29.7%, while in the same quarter of the previous year the growth equaled Denar 2,030 million or 43.1%.

Chart 65
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 66
Net interest margin as of 31.3.2024, by bank (left)* and of the banking system(right)
in %



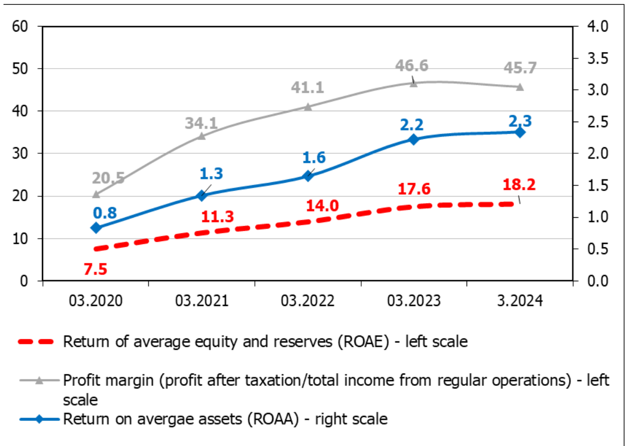
Source: National Bank, based on the data submitted by banks.
* Indicators of the banking system are shown in lines.

In the first three months of 2024, the net interest margin further increased, 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%. Such growth was due to the more pronounced relative growth of net interest income (23.2%) compared to the growth of the average interest-bearing assets (9.7%).

In the first three months of 2024, the indicators[71] of return on average equity and average assets increased by 0.6 and 0.1 percentage points, respectively. In contrast, amid decelerated profit growth, the profit margin decreased by 0.9 percentage points.

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

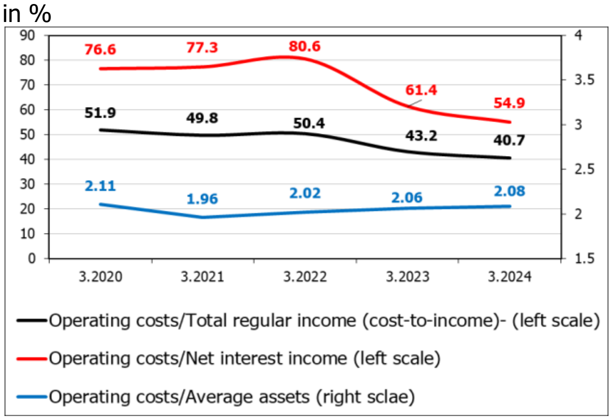
Chart 67
Rates of return on average assets and on average equity and profit margin
in %



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

The indicators of the banking system operating efficiency generally improved. The operating costs to interest income ratio, as well as operating costs to total regular income ratio improved, by 6.5 and 2.6 percentage points, respectively, due to the faster growth of net interest income (23.2%) and total regular income (17.2%)[72] compared to the increase in operating costs (10.2%)[73]. The operating costs to average assets ratio is almost unchanged (increase of 0.02 percentage points).

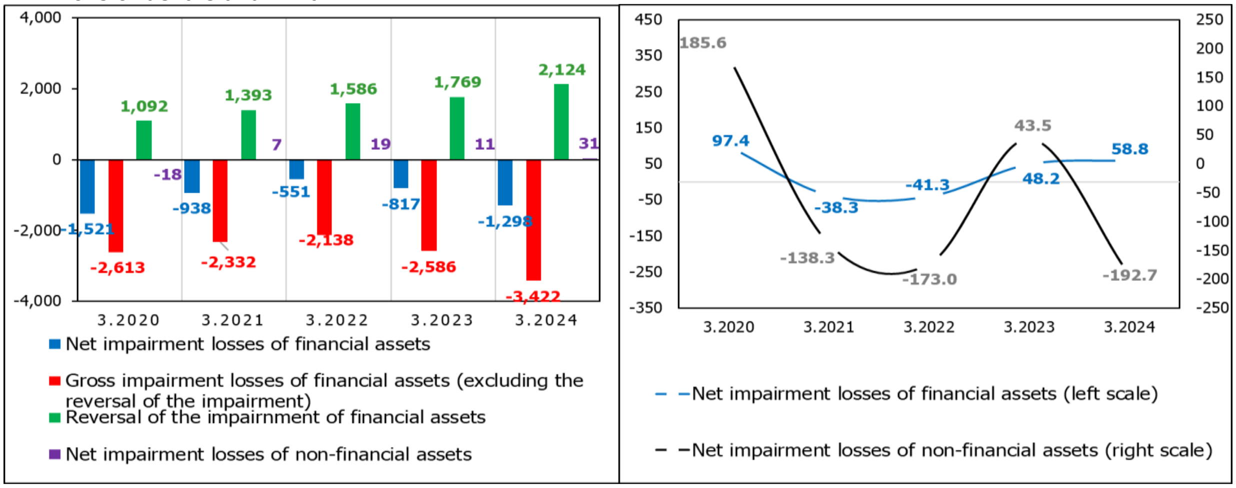
Chart 68
Operational efficiency ratios
in %



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

[72]The increase in regular income was determined by the increase in net interest income (by Denar 1,312 million, or 22.9%) and net fee and commission income (by Denar 113 million, or 7.2%).
[73]In the first quarter of 2024, the operating costs increased by Denar 359 million (or 10.2%), with the largest increase in employment costs (of Denar 170 million), general and administrative expenses (of Denar 63 million), additional provisions for pensions and other employment benefits (of Denar 34 million) and expenses on other grounds (of Denar 43 million).

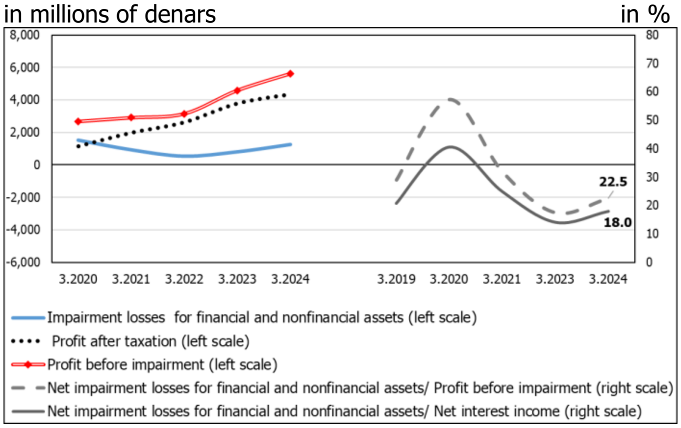
Chart 69
Impairment cost for financial and non-financial assets, stock (left) and annual flow (right)
in millions of denars and in %



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

In the first quarter of 2024, impairment costs for financial and non-financial assets (net) increased by Denar 460 million or 57.1%. The increase in these costs is primarily due to impairment costs of financial assets (which is a net increase of Denar 481 million or 58.8%). This increase was driven by the higher increase in the gross impairment costs of loans and other placements (by Denar 736 million, or 32.9%), compared to the growth of impairment costs of these assets (by Denar 170 million, or 11.6%) and is partly due to regulation changes which refer to the requirements for acquiring non-performing status. The net impairment of non-financial assets is insignificant.

Chart 70
Impairment costs to gain and to net interest income ratios
in millions of denars in %

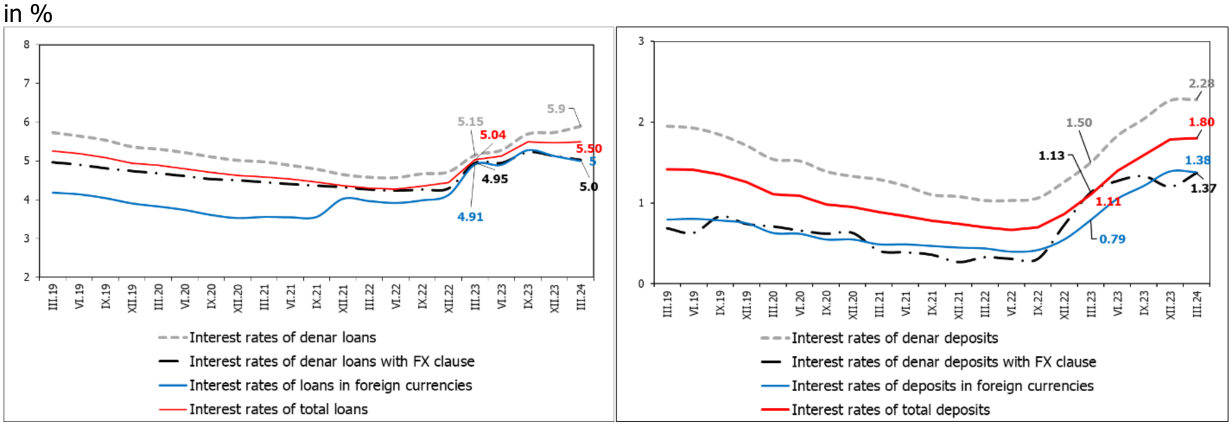


Source: National Bank, based on the data submitted by banks.

2.2. Movements in interest rates and interest rate spread

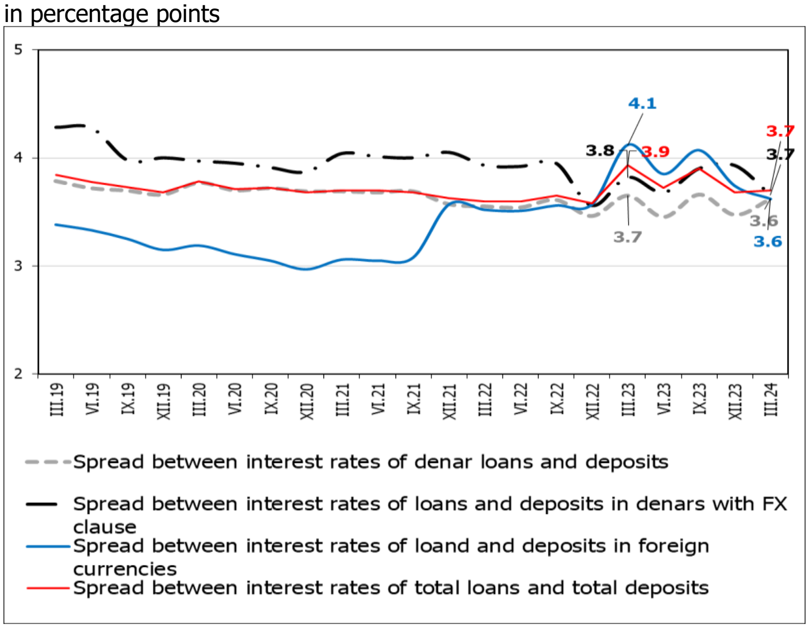
At the end of the first quarter of 2024, the total interest rate on loans and deposits amounted to 5.5% and 1.8% respectively, which is an increase of 0.46 and 0.69 percentage points compared to the end of the first quarter of the previous year, when they equaled 5.04% and 1.11%, respectively. The interest 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 March 2024 equaled 3.70 percentage points, compared to 3.93 percentage points at the end of the first quarter of 2023.

Chart 71 Lending (left) and deposit interest rates (right)
in %



Source: the National Bank

Chart 72 Interest spread
in percentage points



Source: National Bank.