National Bank of the Republic of North Macedonia
Financial Stability, Banking Regulations and Resolution Department

REPORT ON RISKS IN THE BANKING SYSTEM OF THE REPUBLIC OF NORTH MACEDONIA IN THE SECOND QUARTER OF 2019

October 2019

Contents

Summary

Several significant changes have marked the second quarter of 2019; primarily the improving solvency ratios, as well as higher growth of the activities, as opposed to the higher degree of credit risk materialization and the substantial reduction of the realized six-month profit of the banks. The banking system maintained its stability, and its resilience to shocks improved. The assets of the banking system increased by 1.8%, which is two times faster compared to the first quarter of 2019 and a highest quarterly growth recorded in the second quarter of the last eight years. The quarterly growth of the sources of funds was mostly due to the sight deposits from non-financial sector, as well as financial institutions deposits. The majority of the newly harvested resources were invested in loans to non-financial sector, while one part was accumulated in terms of further strengthening of the liquid assets of the banking system.

The credit and deposit activity of the banks to non-financial sector increased significantly faster in the second quarter of 2019 compared to the previous quarter, but slower than the growth in the second quarter of 2018. The deposits to non-financial entities increased to solid 2.2%, which is significantly higher realization compared to the stagnation in the previous quarter, and yet, it is slower in terms of the growth in the second quarter of 2018 (when it was 2.5%). Short term denar deposits completely determined the growth of the deposite base, with a contribution by the two non-financial sectors (household deposits had a slightly higher contribution, increasing to 1.6% quarterly). Also, the credit growth which amounts 1.8% quarterly, is twice as high compared to the first quarter of 2019, yet slower than the growth in the same period of 2018 (when it was 2.7%). The quarterly credit growth of the non-financial sector is almost entirely due to the increased household loans (long term denar crediting with or without foreign currency clause) which increased by 3.4%, and is the highest realization in the bank's credit portfolio in the second quarter of the last four years. After the decline in the first quarter of 2019, the corporative loans increased by only 0.5% in the second quarter of the year, which is by far weaker realization compared to the growth of 2.2% in the same period of 2018.

The credit risk materialization accelerated in the second quarter of 2019, when the non-performing loans increased by 8.3%. The largest part of the quarterly growth of non-performing loans goes to their increase with non-financial companies, mostly in "Construction and trade". Yet, the non-performing household loans accelerated their growth reaching a level of 5.9% quarterly, which is mostly due to the growth of both non-performing consumption and non-performing housing loans. Analyzed annually (30 June 2018- 30 June 2019), the growth of non-performing loans is significant (17.7% for total non-performing loans, 20% for non-performing loans of corporations and 10.5% for non-performing household loans). In the second quarter of 2019, the share of non-performing loans in total loans to non-financial entities increased by 0.3 percentage points to a level of 5.5%. This rate worsened in the companies by 0.7 percentage points (up to 8.8%), while in the households it increased minimally (0.1 percentage point) and on 30 June 2019 it was 2.4%. The high coverage of non-performing loans with impairment continued in the second quarter of 2019 (74.6%), which amid satisfactory volume and quality of own funds, limited the adverse effects on the banks' solvency from potential default of these loans.

The liquidity ratios of the banking system remained on the satisfactory level, amid solid quarterly growth of the banks' liquid assets (by 1.8%), in which one third of the new financing sources in the second quarter of 2019 were directed. There were changes in the structure of liquid assets, in order to increase overnight deposits with the National Bank, the bank's funds on the Denar account with the National Bank and the placement of government securities, but decrease of the funds on the corresponding accounts and short-term deposits in foreign banks. The liquid assets still make up roughly one third of the banks' total assets, covering almost 55% of the short-term liabilities and 60% of the total household deposits. At the same time, the ratio between loans and deposits of the banking system is maintained at a level lower than 87%.

The profits of the banking system earned in the first six months of 2019 was smaller by almost 36% than the same period of 2018. Such developments mostly reflect the exhaustion of effects of one-off events that have caused high profit growth in the first half of 2018. However, even without their effect, the profit in the first six months of 2019 is lower (by 12.2%) compared to the same period last year. The challenge that banks face on further profitability maintenance is due to the fact that in the last few years the net interest income has decreased i.e. the revenue from the main/ basic banking activities. Given the declining interest rates, increased competition between banks, as well as the need for maintaining the appropriate level of deposit base, the decrease of the loan interest rates is higher, compared to deposit interest rates, which leads to narrowing the interest rates spread and decline in net interest revenues of banks. On the other hand, the increase of the banks' operating costs lead to lower banking efficiency ratios. As of 30 June 2019, the rates of return of average assets and average equity and reserves of the banking system account for 1.4% and 12.5%, respectively (as opposed to 2.4% and 21.3%, in the first six months of 2018), while the ratio between the operating costs and total regular income is 50.9% (44.6%, for the same period last year).

The solvency of the banking system registers an improvement, due to the reinvestment of profits from 2018 in the equity of banks. The capital adequacy ratio of the banking system equals solid 17.4% as of 30.6.2019 (17% as of 31.3.2019), while the ratio between the most quality layer of the banking system's own funds (common equity Tier 1 capital) and risk weighted assets equals 15.7% (15.4% as of 31.3.2019). Aggregately, the banking system has capital available above the regulatory and supervisory requirement of 12.1% of the total own funds (10.5% as of 31.3.2019) which is available to the banks for covering unexpected risks.

The direct exposures of the banking system to currency risk and interest rate risk are still small and account for 1.8% and 5.5%, respectively, in the total own funds. **But, the monitoring of the indirect exposure from this risks remains,** which arises from the presence of the currency component loans (41.7% on 30 June 2019, as opposed to 76.1% on 31 March 2019) and loans with adjustable and variable interest rates (75.6% on 30 June 2019, as opposed to 76.1% on 31 March 2019).

The National Bank has constantly and carefully monitored the developments and risks present in the banking system and if according to the assessment there is a need for limitation of certain risks, it will undertake appropriate measures.

I. Structure of the banking system

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

On 30 June 2019, fifteen banks operate in the Republic of North Macedonia, which is unchanged in terms of number compared to the previous quarter. Also, the number of banks that are predominantly owned by foreign shareholders (eleven banks), and the number of subsidiaries of foreign banks (six banks) is unchanged.

Table 1

Structure of major balance sheet positions, by banks' majority ownership (as of 30.6.2019)

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	**11**	**43,779**	**72.7%**	**372,899**	**72.1%**	**262,889**	**80.0%**	**267,586**	**70.5%**	**17,888**	**76.8%**	**5,053**	**79.6%**
- subsidiaries of foreign banks	*6*	*37,828*	*62.8%*	*302,278*	*58.5%*	*213,630*	*65.0%*	*220,353*	*58.1%*	*15,091*	*64.8%*	*5,288*	*83.3%*
- Austria	1	2,467	4.1%	22,823	4.4%	15,726	4.8%	13,656	3.6%	970	4.2%	272	4.3%
- Bulgaria	1	1,201	2.0%	9,682	1.9%	6,604	2.0%	6,804	1.8%	376	1.6%	-6	-0.1%
- Greece	1	12,933	21.5%	94,337	18.2%	67,928	20.7%	76,333	20.1%	5,406	23.2%	2,004	31.6%
- Slovenia	1	9,606	16.0%	82,781	16.0%	55,862	17.0%	65,970	17.4%	4,475	19.2%	1,884	29.7%
- Turkey	1	7,330	12.2%	51,298	9.9%	36,839	11.2%	29,791	7.8%	2,138	9.2%	654	10.3%
- France	1	4,291	7.1%	41,356	8.0%	30,670	9.3%	27,799	7.3%	1,727	7.4%	480	7.6%
- other banks in dominant foreign ownership	*5*	*5,951*	*9.9%*	*70,620*	*13.7%*	*49,259*	*15.0%*	*47,234*	*12.4%*	*2,796*	*12.0%*	*-235*	*-3.7%*
- Bulgaria	2	2,591	4.3%	23,592	4.6%	16,515	5.0%	16,513	4.4%	1,113	4.8%	269	4.2%
- Germany	1	2,595	4.3%	28,774	5.6%	21,495	6.5%	16,996	4.5%	899	3.9%	125	2.0%
- Switzerland	2	764	1.3%	18,254	3.5%	11,249	3.4%	13,725	3.6%	784	3.4%	-629	-9.9%
Banks in dominant ownership of domestic shareholders	**4**	**16,421**	**27.3%**	**144,159**	**27.9%**	**65,533**	**20.0%**	**111,993**	**29.5%**	**5,411**	**23.2%**	**1,295**	**20.4%**
- private ownership	*3*	*13,819*	*23.0%*	*134,385*	*26.0%*	*65,509*	*19.9%*	*111,993*	*29.5%*	*5,302*	*22.8%*	*1,260*	*19.8%*
- state ownership	*1*	*2,601*	*4.3%*	*9,773*	*1.9%*	*24*	*0.0%*	*0*	*0.0%*	*110*	*0.5%*	*35*	*0.6%*
Total:	**15**	**60,199**	**100.0%**	**517,057**	**100.0%**	**328,422**	**100.0%**	**379,579**	**100.0%**	**23,299**	**100.0%**	**6,348**	**100.0%**

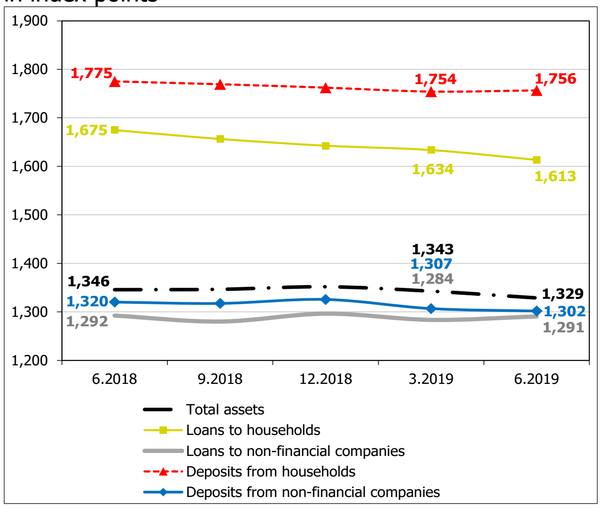
Source: National Bank, based on data submitted by banks.

*Total income and financial result are calculated for the last twelve months (30.6.2018-30.6.2019).

In the first half[1] of 2019, the banks in majority foreign ownership have strengthened their dominant participation in most categories of activities, which is mostly emphasized in non-financial entities (80%), total financial result (79.6%) and in the total revenues (76.8%).

[1] The data on the ownership structure is collected on a semi-annual basis.

Chart 1Herfindahl index
in index points



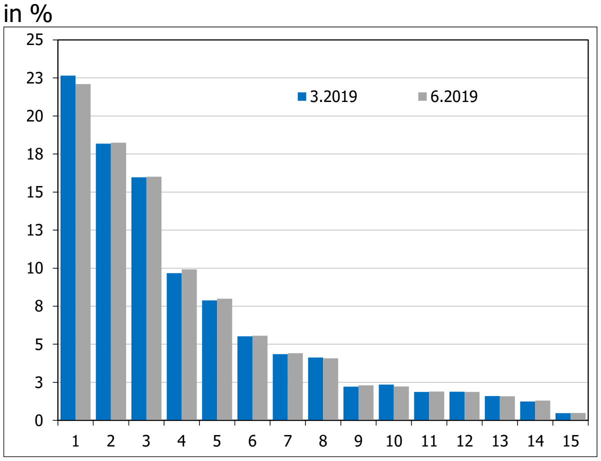
Source: National Bank, based on data submitted by banks.

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

Position	30.06.2019		31.03.2019	
	CR3	**CR5**	**CR3**	**CR5**
Total assets	56.4	74.3	56.8	74.4
Loans to households	59.6	77.5	60.3	77.5
Loans to non-financial companies	48.6	72.7	49.0	72.4
Deposits from households	69.3	79.9	69.3	79.8
Deposits from non-financial companies	49.5	76.1	49.7	75.9
Financial result*	79.2	97.1	75.8	94.0
Total revenues*	61.0	77.6	61.1	77.8

Source: National Bank, based on data submitted by banks.
*Total income and financial result are calculated for the last twelve months (30 6.2018-30.6.2019)

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



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

The downward trend of concentration of the banking system as measured by the Herfindahl index[2], continued in the second quarter of 2019. The Herfindahl index registers a significant decline of more than twenty index points, in household loans. On the other hand, this index increases in household deposits and loans to non-financial companies, but remains within the bounds of acceptable concentration[3].

The reduction in concentration is confirmed through the indicator movements CR3 and CR5. The financial result is an exception, since its indicators increased on quarterly basis by 3.4 that is 3.1 percentage points, respectively.

The difference in the amount of assets between the banks is high, with a slight decline. Namely, in the second quarter of 2019, the spread between the bank with highest (21.1%) and the bank with the lowest (0.5%), participation in the assets of the banking system decreased by 0.6 percentage points. The market shares of individual banks (except two banks) remained almost unchanged compared to the previous quarter. Five of the smallest banks in the system have market share of 7.1% same as in the previous quarter. Ten banks have individual market shares lower than 6% with common market share of 25.7%.

[2] 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.
[3] When the index ranges from 1,000 to 1,800 points, the concentration ratio is considered to be moderate.

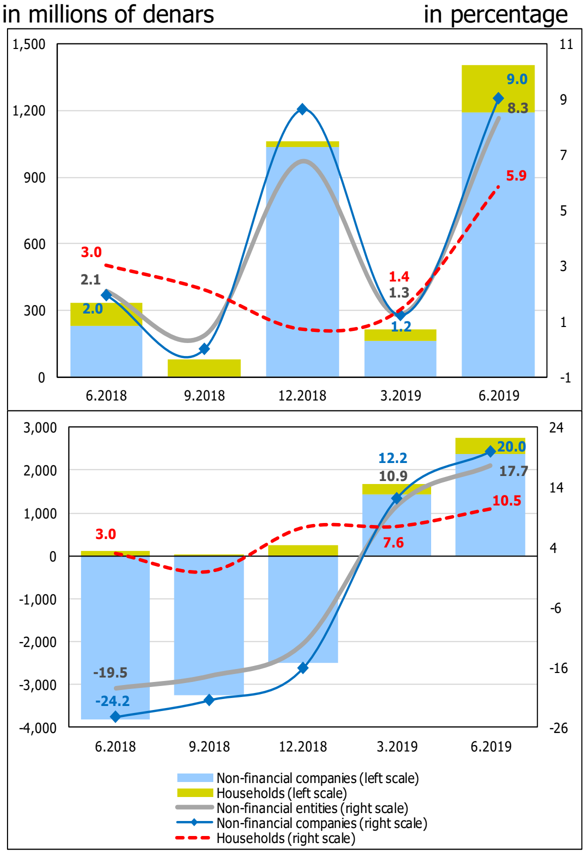
II. Risks in banking operations

1. Credit risk

The realization of credit risk, reflected through the growth of non-performing loans, significantly accelerated in the second quarter of 2019, when these loans grew by 8.3% (1.3% in the first quarter). Thus, the rate of non-performing loans to non-financial sector increased from 5.2% to 5.5%. By sectors, the bulk of quarterly growth of non-performing loans accounts to non-financial corporations, although accelerated growth is present in households. In the credit portfolio of the companies, the non-performing loans registered divergent trends in individual sectors, with significant increase among the construction[4] and trade clients.
The share of non-performing loans in total loans to the non-financial corporations increased by 0.7 percentage points in the second quarter, reaching 8.8% on 3.6.2019. Speaking of households, the increase of non-performing loans is a result of the increase of non-performing consumption and housing loans, which amid solid credit growth causes only a minimal increase in the ratio between non-performing and total loans to households, to a level of 2.4%.

The high coverage of non-performing loans with impairment continued in the second quarter of 2019 (74.6%), which along with the satisfactory volume and quality of own funds, limited the potential adverse effects on the banks' solvency from default of these loans.

Chart 3
Quarterly (up) and annual (down) growth rate of non-performing loans to non-financial entities
in millions of denars in percentage



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

The National Bank is continuously monitoring the developments of loans to non-financial entities, primarily to households and it is ready to undertake appropriate measures to limit the risks of the credit growth if it assesses the need for it.

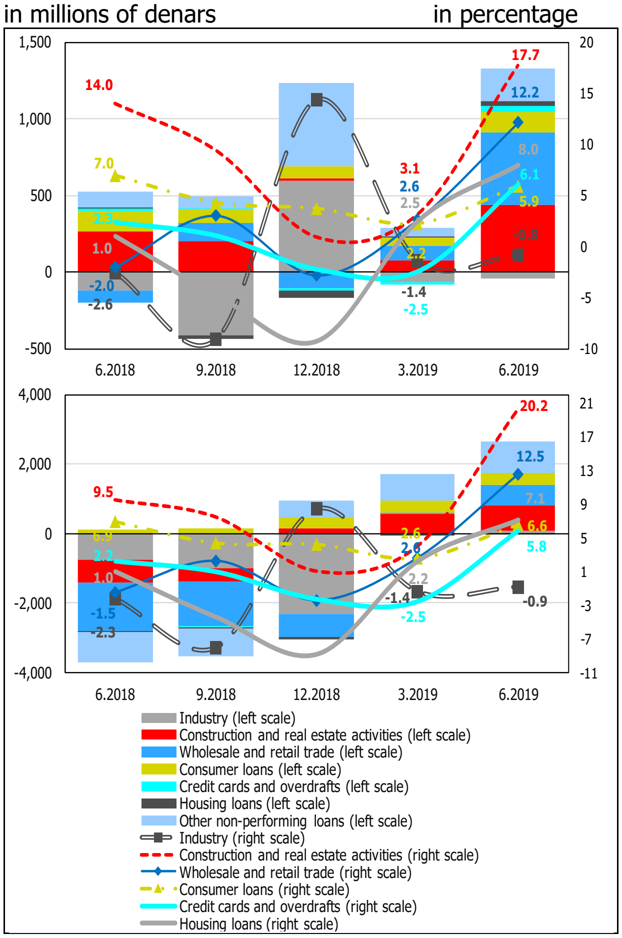
1.1. Materialization of credit risk in banks' balance sheets

In the second quarter of 2019, the total non-performing loans to non-financial sector increased by 8.3% (Denar 1.401 million), which is almost seven times higher compared to the previous quarter (1.3%).

The growth was mainly driven by the growth of non-performing loans of the companies, which significantly accelerated (from 1.2% or Denar 161 million in the first

[4] About 80% of the loans to non-financial companies are placed towards these two activities, including the industry.

Chart 4
Quarterly (up) and annual (down) growth rate of non-performing loans, by activity (non-financial corporations) and by credit product (households)
in millions of denars in percentage



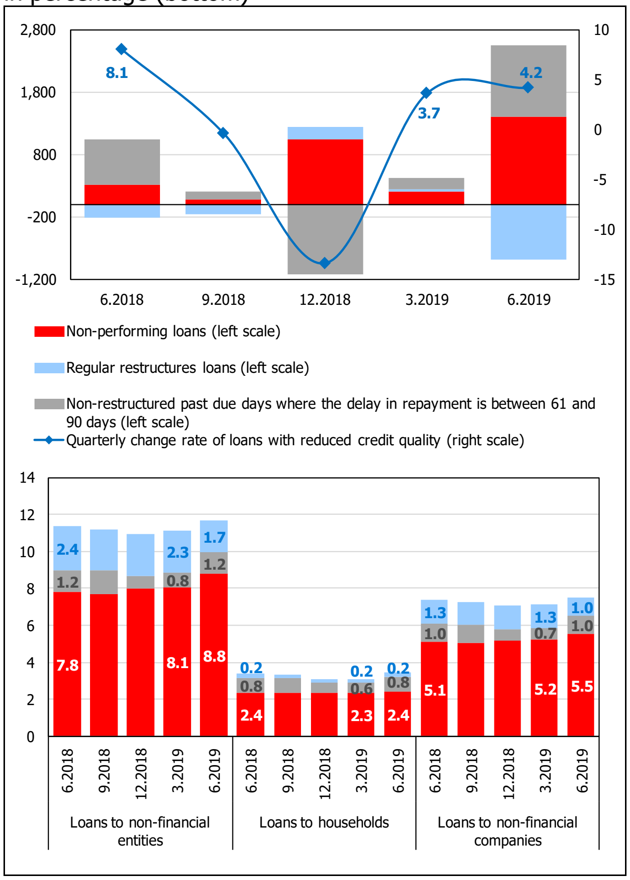
Source: National Bank's Credit Registry, based on data submitted by banks.

quarter of the year, to 9% or Denar 1.190 million in the second quarter of 2019). Analyzed by individual sectors, the highest quarterly growth was recorded in non-performing loans to clients of commercial activities (from Denar 471 million, or 12.2%) and "Construction" (by Denar 441 million, or 17.7%), followed by non-performing loans to clients of agricultural activity (which increased by Denar 164 million, or 29.4%), "Chemical industry" (with an increase of Denar 106 million, or 33.4%) and "Production of metals, machinery, tools and equipment" (with an increase of Denar 59 million i.e. three times higher). In almost all of these activities, the growth of non-performing loans is due to the transition to non-performing status of several major clients in the relevant area[5]. In some of the industrial activities, the non-performing loans have recorded a decline in the second quarter of 2019[6], mostly due to the recovery by taking the deposit, and to a lesser extent by the write-offs implemented by the banks according to their internal rules. Additionally, a larger client in the area of electricity supply, began a cycle of gradual recovery of non-performing receivables.

The non-financial credit portfolio composed of households, increased by 5.9% or by Denar 214 million quarterly, which is four times faster compared to the growth in the previous quarter (1.4% or Denar 52 million). This is the largest quarterly increase in the last ten years. About two thirds of the quarterly increase of non-performing household loans accounts for non-performing consumer loans, which increased by Denar 132 million, or 5.9% (7% in the second quarter of 2018 and 2.2% in the first quarter of 2019). The non-performing housing loans also increased[7] for the second consecutive quarter (8.0% in the second quarter and 2.5% in the first quarter of 2019), after having had a downward quarterly dynamics in the past three years. The increase of the non-performing credit cards and overdrafts on current accounts

[5] The "Chemical industry" is an exception, where the growth of non-performing loans is due to the deteriorating discipline in collecting the matured liabilities of a large number of clients whose loans are relatively small.
[6] The decrease is mostly pronounced in the "Textile industry" (by Denar 155 million, or 29.8%), followed by "the rest of the processing industry" (by Denar 29 million or 2.6%) and the "supply of electricity, gas, steam and air conditioning" (by Denar 20 million, or 1.5%).
[7] Housing loans contribute 17.5% to quarterly rise in non-performing loans to households.

Chart 5
Non-performing loans and regular loans to non-financial entities with reduced credit quality*, quarterly growth (up) and share in total loans to non-financial entities (down)
in millions of denars (top) in percentage
in percentage (bottom)



Source: National Bank's Credit Registry, based on data submitted by banks.
*For the purposes of this analysis, regular loans with reduced credit quality include regular restructured loans and regular non-restructured loans where the delay in collection is between 61 and 90 days.

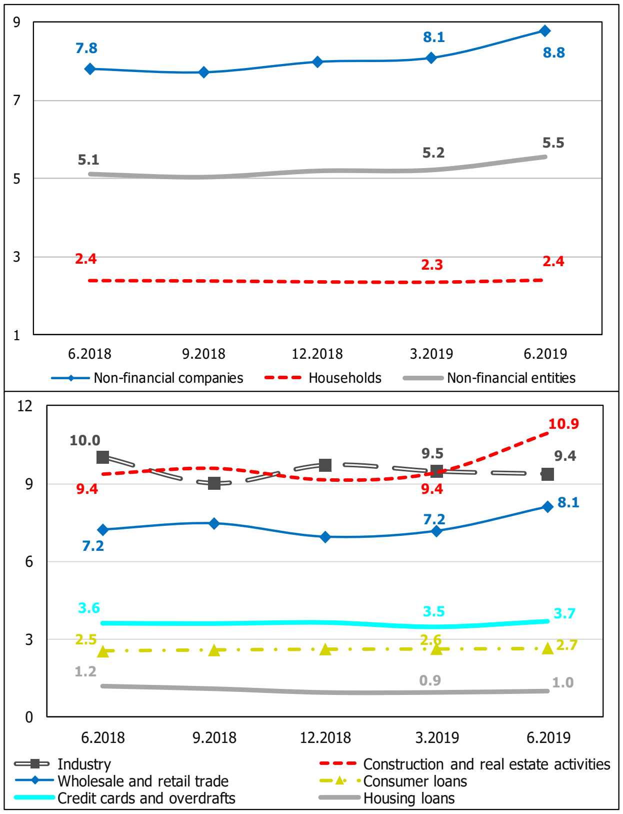
are also noteworthy (by Denar 41 million or 6.1%), after this credit product recorded a mostly downward moderate shift in the past three years, with certain periods of insignificant quarterly growth.

Regular loans with a reduced credit quality[8], i.e. the loans that can be a source of new non-performing loans in the short term, increased rapidly (amounting 4.2%) compared to the first quarter (when they increased by 3.7%). Within this, the regular loans where the delay in repayment ranged from 61 to 90 days increased significantly, by Denar 1.146 million, or by 54.2%[9], while regular restructured loans decreased by Denar 886 million, or by 21.9%. The growth of bank's receivables in which the period of delay in repayment of the principal is between 61 and 90 days is present almost equally in both non-financial companies[10] and households[11]. Current trends in the overdue loans where the repayment delay is between 61 and 90 days indicates possible future increase in non-performing loans.

However, only 0.3%of such loans to non-financial companies[12] received non-performing status in July 2019, while in households, this percentage is even lower and amounts to 0.2%. The reduction of restructured regular loans is fully concentrated in non-financial companies and is a result of several events of a different nature (crossing to non-performing status of several larger clients[13], collection by taking over the pledge, as well as regular collection of restructured receivables).

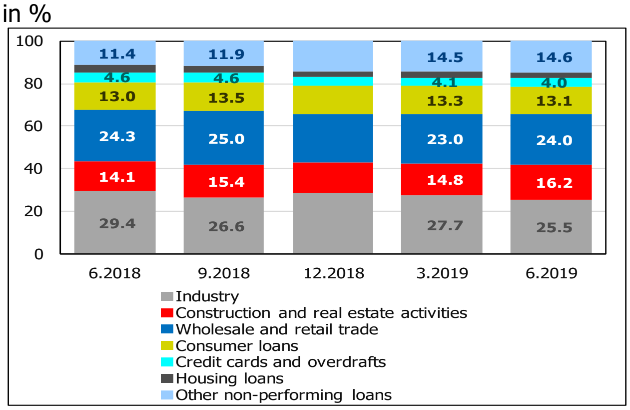
[8] For the purposes of this analysis, regular loans with reduced credit quality include regular restructured loans and past due regular non-restructured loans where the delay of repayment is between 61 and 90 days (any further delay in the repayment of these regular loans for another 1-30 days would make them non-performing). Regular restructured loans are likely to become non-performing if banks do not change the terms of clients facing financial difficulties.
[9] This is an extremely high growth, but it should be taken into consideration that it is present only in several banks, and the share of these loans is very small and amounts to only 1% of total loans.
[10] In corporate credit portfolio, the upward movement is mainly a result of commercial activity, "manufacturing industry", "Transport and storage" and "Construction".
[11] In households, the increase in loans with such interval of delay is equally due to consumer and housing loans (with a contribution of 36%) and credit cards and overdrafts on current accounts (22.6%).
[12] Transition to non-performing loans where the delay in repayment ranges from 61 to 90 days is low in terms of individual sectors and credit products, with a higher transition of 0.7% only in "Manufacturing industry.
[13] The transition of restructured regular loans to non-performing status is concentrated in commercial activities, agriculture and construction.

Chart 6
Share of non-performing in total loans to non-financial sector, by individual sectors (up) and by individual activities and credit products (down)
in %



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

Chart 7
Structure of non-performing loans to the banking system, by individual activities (non-financial companies) and credit products (households)
in %



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

The quality of the banks' credit portfolio, measured by the share of non-performing loans in the total non-financial sector, deteriorated by 0.3 percentage points in the second quarter of 2019 and reached a level of 5.5%. Significant quarterly deterioration of the ratio between non-performing and toal loans, by 0.7 percentage points was present in the portfolio of non-financial companies, where on 30 June 2019, 8.8% of total loans are non-performing. Amid upward movement of "bad" loans, the increase in the rate of non-performing loans to non-financial corporations is due to the generally weaker credit support to this sector[14]. Analyzed by individual sectors, the ratio between non-performing and total loans increased in these activities where non-performing loans feature quarterly increase.

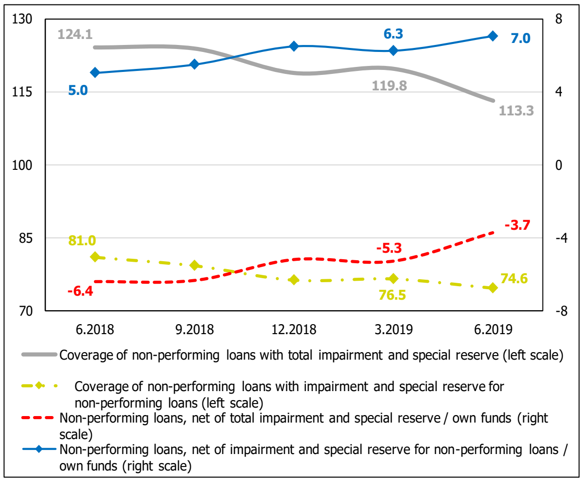
The share of non-performing to total loans in the household credit portfolio is increased by 0.1 percentage point, to the level of 2.4%, which is the very same level as of 30 June 2018. Amid increasing growth of non-performing loans, the slightly upward movement in this indicator is due to the solid credit support by this sector , which recorded twice as faster growth (3.4%) in the second quarter, compared to the previous one (1.8%).

Loans to non-financial corporations accounted the greatest part (78.7%) of banks' non-performing loans portfolio, with an additional increase of their share by 0.5 or 1.5 percentage points compared to the previous quarter and the same quarter of the previous year.

Amongst non-performing loans to the corporate sector, the shares of non-performing loans to non-financial corporations from the industry[15] and wholesale and retail trade are the highest, which account for almost half of the total amount of non-performing loans. From the

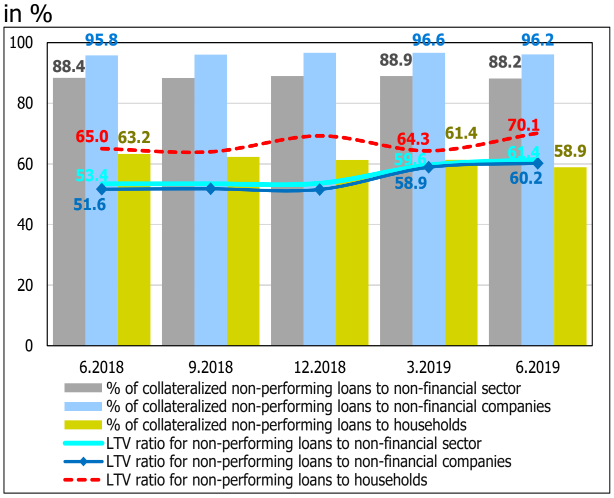
[14] In the second quarter of 2019, the total loans of the non-financial corporations went up by Denar 743 million, or 0.5%.
[15] Industry includes manufacturing industry, quarrying and electricity, gas, steam and air-conditioning.

Chart 8
Coverage of non-performing loans with impairment
in %



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

Chart 9 Non-performing loans for which collateral and LTV ratio have been established, by individual sectors
in %



Source: National Bank's Credit Registry, based on data submitted by banks.
Note: Banks do not report amount of the collateral, in cases when the collateral is in the form of a guarantor and/or bill of exchange or co-borrower, which contributes to the higher value of the LTV ratio for households. This is especially relevant to the credits intended for consumption (including credit cards and overdrafts), where a guarantor and/or bill of exchange is a relatively frequent type of collateral.

households' portfolio, consumer loans have the highest share in the total non-performing loan portfolio of banks (13.1%).

The negative effects of the possible complete default on non-performing loans, i.e. the volume of unexpected losses on this basis, have a limited impact on the solvency position of the banking system. Non-performing loans are significantly covered by the impairment (74.6%). The non-reserved amount of non-performing loans represents 7.0% of total own funds of the banking system, assuming that full non-profitability would not jeopardize the system's solvency. The coverage of non-performing loans with provisions is higher in credit portfolio of non-financial companies (74.8%), and according to certain activities, the coverage is highest in the construction sector (77.4%). In contrast, the non-performing housing loans are traditionally least reserved (56.3%), corresponding to the lower inherent risk of these loans, coupled with established security for them.

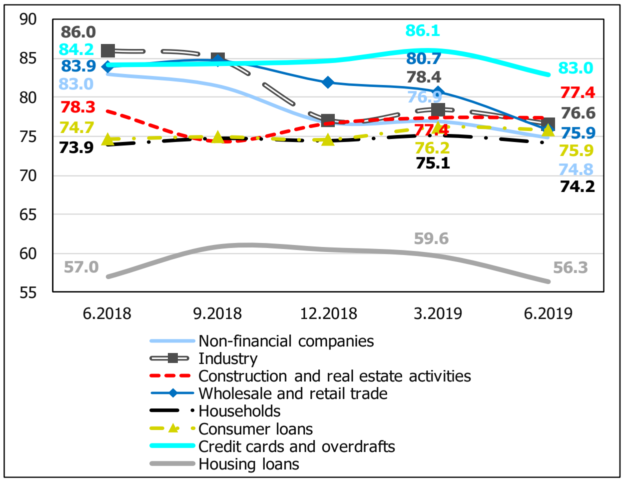
Despite the high coverage of non-performing loans with provisions, the banks maintain a high percentage of collateral of "bad" loans. The percentage of non-performing loans for the companies with established collateral is extremely high (96.2%). This percentage is lower in households (nearly 60 %), mainly due to non-performing consumer loans, credit cards and overdrafts on current accounts, with no collateral established for half of them. However, the banks cover the lower collateral for this loans with their solid provision (the coverage with impairment amounts 83.0% and 75.9% to non-performing loans, credit cards, overdrafts on current account and consumer loans, respectively, which is at higher level compared to the total credit portfolio of households).

Compared to the previous quarter, the annual rate of uncollectability[16] of regular credit exposure to non-financial corporations, records improvement

[16] The annual rate of default is calculated as a percentage of performing credit exposure, which for a period of one year transforms into exposure with non-performing status. The average annual default rates and the standard deviation are calculated from the annual default rates registered from 31.3.2009 to the date of calculating the average i.e. the standard deviation.

Chart 10 Coverage of non-performing loans with impairment by individual activities and credit products

in %

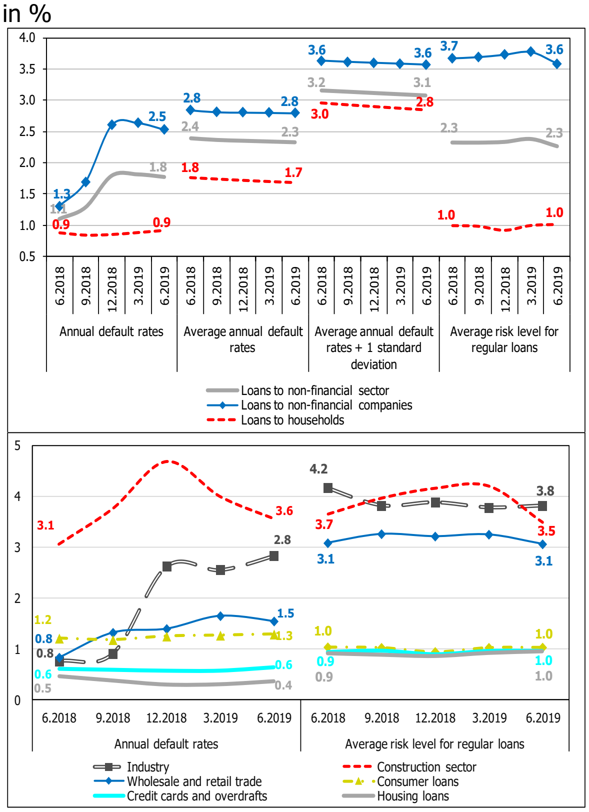


Source: National Bank's Credit Registry, based on data submitted by banks.

Chart 11

Annual rates of default and average risk level of regular loans, by sector (up) and selected activities and credit product (down)

in %



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

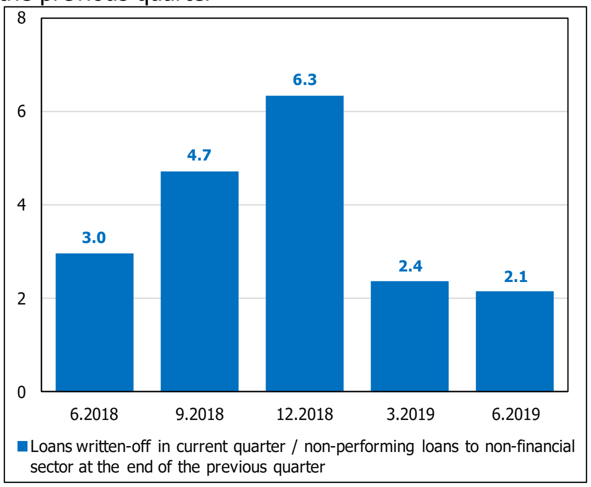
(decrease), while this rate remains unchanged in households. Given the higher inherent credit risk due to the corporate sector, the banks usually allocate significant amount of provisions over the amount suggested by the annual rate of uncollectability. There was a minimal narrowing of the difference to corporate loans in the second quarter, but still remained at a higher level than the achieved annual rates of uncollectability. The average provision of performing loans in households is maintained at around 1%, which is slightly higher than the realized default of this portfolio. This scope of provisions is explained by the lower inherent credit risk in the household's credit portfolio, given its considerable dispersion in individual clients[17].

In the second quarter 2019, banks wrote off Denar 385 million, i.e. 2.1% of total non-performing loans at the end of the first quarter. This is a weaker volume of mandatory and regular write-offs of non-performing loans in this quarter compared to the previous one. The mandatory write-off of non-performing loans is expected to continue in the coming period, given the fact that on 30.06.2019 one third of the non-performing loans are fully covered by impairment in the next year[18] at most, according to the changes in the credit risk management regulation they are expected to be written-off unless they are being collected in the meanwhile. In the second quarter of 2019 there were no sales of non-performing receivables, since these activities are usually irregular. The gross forfeited property based on uncollected receivables recorded a quarterly increase by 13.0%, mostly due to the property forfeit established as a collateral of certain exposures to

[17] According to certain activities and products, fewer provisions are allocated only for loans in Construction and consumer loans (by 0.3 and 0.1 percentage points, respectively) than the realized rate of default in regular loans (but if we take into consideration the reserves of the total loans, regular ones and non-profitable loans, the impairment is significantly above the actual rates of default).

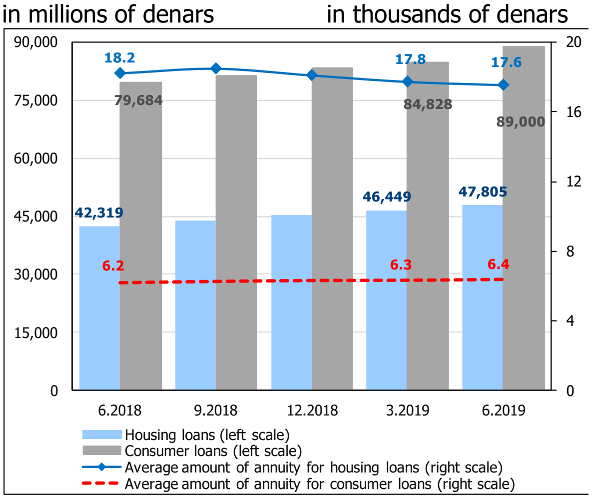
[18] According to the new regulation on credit risk management, as of 1 July 2019, the banks are obliged to perform mandatory off-balance sheet transfer of credit exposures at which twelve months have elapsed from the date when these exposure were fully reserved (instead of two years, according to the current regulations as of 30 June 2019).

Chart 12
Written-off non-performing loans
in percentage of non-performing loans at the end of the previous quarter



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

Chart 13
Consumer and housing loans, amount and average annuity
in millions of denars in thousands of denars



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

clients in the "Industry" sector. However, this type of collectability of non-performing loans has been declining[19], for a longer period, mostly due to the poorer interest in new forfeiting of assets in terms of mandatory impairment of gross forfeited property of 20% per year. However, it should be taken into consideration that the banks also collect receivables with the realization of the established security without forfeiting it.

1.2. Potential sources of future credit risk materialization

The good quality and low realization of the credit risk of bank's exposure to households are analyzed together with certain structural features of this loan portfolio, which can be a potential source of new non-performing loans. Primarily, this refers to the increasing indebtedness of households, in the long run[20], the high (albeit declining) share of loans with currency component[21]of loans with variable and adjustable credit rate[22], as well as weaker collateral of consumer loans.

In 2016 the higher capital requirement for long-term consumer loans (risk ponder of 150%) began its application, in order to cover the unexpected losses from the long term of consumer loans. The housing loans are almost entirely (92.6%) approved with a repayment period equal

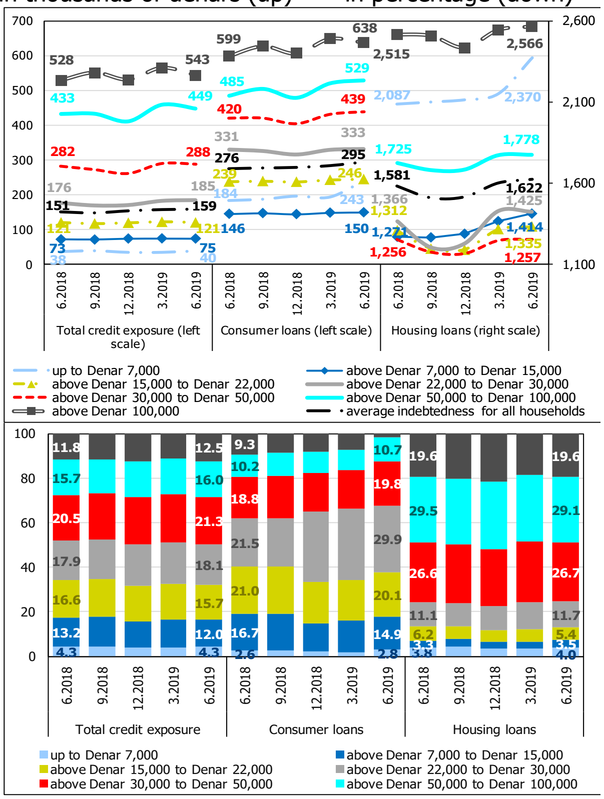
[19] In the last one-year period from 30 June 2018 to 30 June 2019, the forfeited property decreased by 10.8%.

[20] In the second quarter of 2019, long-term loans to households accounted 91.0% of the total loans to households.

[21] On 30 June 2019, the performing loans with currency component granted to households accounted for 45.0% in total performing loans to this sector (44.7% at the end of the first quarter and 45.7% on 30 June 2018). By comparison, this share in performing loans to non-financial companies was lower, at 38.8%.In the past five years, (compared to 30 June 2015) the share of performing loans with currency component in the total performing loans to non-financial companies decreased by 7.4 percentage points, while in regular credit portfolio of households, this share has declined three times less, i.e. by 2.6 percentage points.

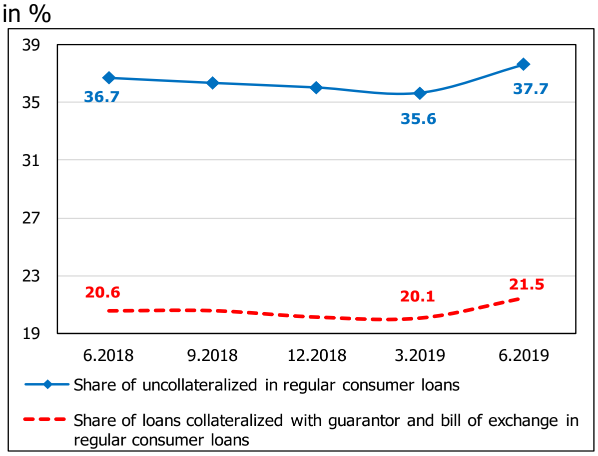
[22] On 30 June 2019, the performing loans with variable and unilaterally adjustable interest rate accounted for 17.5% and 29.4% respectively in the total performing loans to households (17.2% and 32.2% respectively, on 30 June 2018).

Chart 14
Average debt by household (up) and structure of credit exposure (down) to households, consumer and housing loans, by monthly income
in thousands of denars (up) in percentage (down)



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

Chart 15
Uncollateralized consumer loans and collateralized with guantor and bill of exchange
in %



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

to or longer than 10[23] years, but these loans are characterized with extremely good quality and low non-performing loan rate. Despite the growth of the consuming and housing loans, however, the average annuity by borrower suffers minor changes[24], which means no changes in the debt burden of borrowers, i.e. banks regardless of credit growth (to new or existing borrowers), adjusting the maturity of the loans, achieve the usual average amount of annuity.

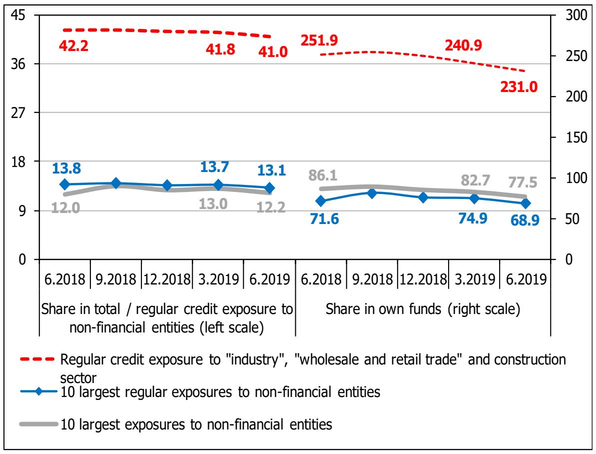
Regarding the structure of the credit exposure to households according to their monthly income, there are no significant changes in the second quarter of 2019. About 40% of the total credit exposure to households is concentrated among households with a net wage equal to or less than the average net salary in the second quarter of 2019. However, according to the volume of the monthly income, this category of borrowers has the lowest average indebtedness per household.

The weaker collateral is a feature of credit cards, overdrafts on current accounts and consumer loans. Namely, almost half and 37.7% of regular credit cards and overdrafts on current accounts and consumer loans respectively, have no collateral, while 38.0% and 21.5% of these loans have adequately collateral by a guarantor and a bill of exchange. However, the experience shows that the guarantor and the bill of exchange are a good source of collection of receivables, and in a large number of credit agreements there is a so called executive clause[25] which allows banks to repay loans relatively quickly.

Concentration is an important feature of loans to non-financial companies that may have impact on the realization of the risks associated with banks' credit portfolio. About 80% of total loans to non-financial

[23] Almost 60% of performing housing loans are granted for a term equal or longer than 20 years.
[24] Only a slight increase in the average annuity for housing, and a decrease in the average annuity for consumer loans at the same time.
[25] Pursuant to the Law on Enforcement and the Law on Notaries, the National Bank does not have any data on the amount of loans with such clause included in the agreements.

Chart 16
Concentration of credit exposure to non-financial corporations
in %



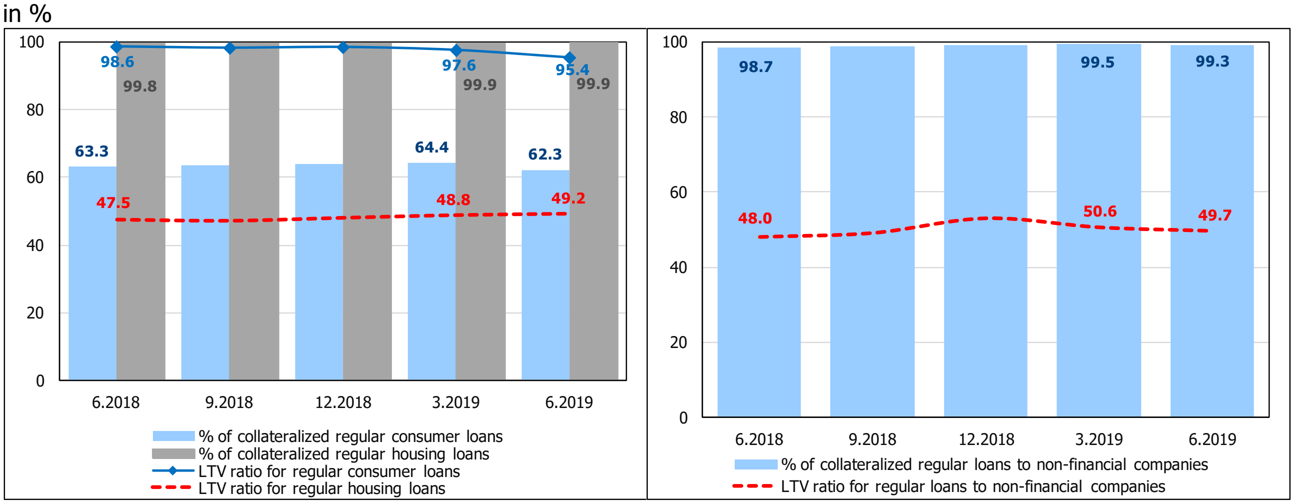
Source: National Bank's Credit Registry, based on data submitted by banks.

companies have been extended to three sectors (industry, wholesale and retail trade, and construction and real estate activities), whose operating performances and business models are particularly important for the quality of the banks' credit portfolio. In fact, the credit portfolio composed of banking clients of these activities[26] owns the highest levels of the non-performing loans rate, but at the same time the banks have set aside the highest amount of impairment, thus enabling the highest coverage with provisions[27].

The concentration of banks' exposure to ten largest exposures to non-financial sector (of each individual bank) is not high (13.1% of the total credit exposure of the banking system) and features a quarterly decrease. These loans account for nearly 80% of own funds of the banking system, with banks' average provision by 9%[28].

The banks usually insure the higher credit risk from corporative sector by establishing certain collateral, where 99.3% of the regular loans to non-financial companies are collateral (mostly in the form of equipment, machinery, factories, warehouses, etc.). The ratio between the provided regular loans of the non-financial companies and the estimated collateral value is at a relatively solid level of 49.7%.[29]

Chart 17
Performing housing and consuming loans (left) and loans to non-financial corporations for which collateral and LTV ratio have been established.*
in %



Source: National Bank's Credit Registry, based on data submitted by banks.
Banks do not enter the amount of the collateral, in cases when the collateral is in the form of guantor or bill of exchange or co-borrower, which contributes to the higher LTV ratio for consumer and housing loans.

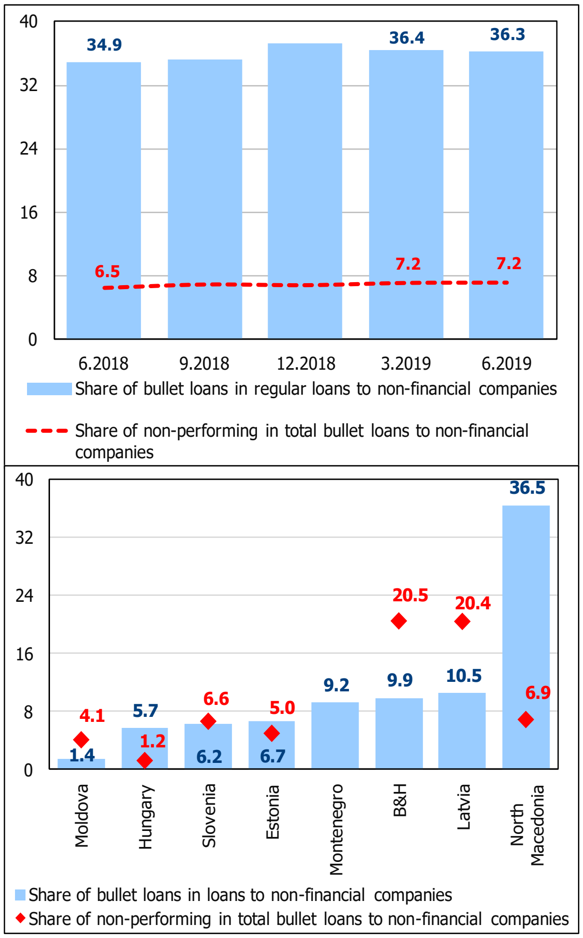
Another feature of non-financial corporate loans that needs to be closely monitored is the share of **bullet loans.** The share of these loans is relatively high and stable (about 36% of the performing loans to non-financial corporations). The level of credit risk[30] materialization of billet loans is lower compared to total loans to non-financial corporations, as well as individual activities. The comparative analysis of banking systems in certain countries in Central and Eastern Europe[31] have shown that most of the countries do not follow the dynamis of bullet loans and for those who regularly do, these types of loans are less prevalent than in our country. Relatively high, although reduced in the second quarter of 2019 (from 11.8% to 11.4%), is the share of loans to non-financial companies with an **approved grace period[32]**, which expires after at least one quarter, in the total performing loans of enterprises. The share of these loans is significantly higher in the construction sector (24.8%). Regarding the manner of structuring the repayments, these structural features of loans to non-financial corporations can be considered justified and acceptable if determined by the business cycle of enterprises and their real needs for funds and investments, in line with expectations for the scope and time intervals of orders and sales, i.e. generating cash flows.

[30] The non-performing loans rate for bullet loans amounts to 7.2% (same as in the first quarter), with a higher share of 8.6% in "Industry" and Construction sector (9.6%).

[31] For the purposes of this analysis, we asked for data on the amounts of bullet loans in the banking systems of 23 member countries of the Banking Supervisors from Central and Eastern Europe-BSCEE. However, most of the countries replied that they do not follow and have no data on this type of loans. The graph shows data on the banking systems from countries that provided data on this type of loans.

[32] These loans are characterized by high quality, i.e. the rate of non-performing loan which accounted 3.9% (4.2% on 31 March 2019).

Chart 19
Non-financial corporate bullet loans (up) and comparative analysis with certain countries from Central and Eastern Europe (down)
in %

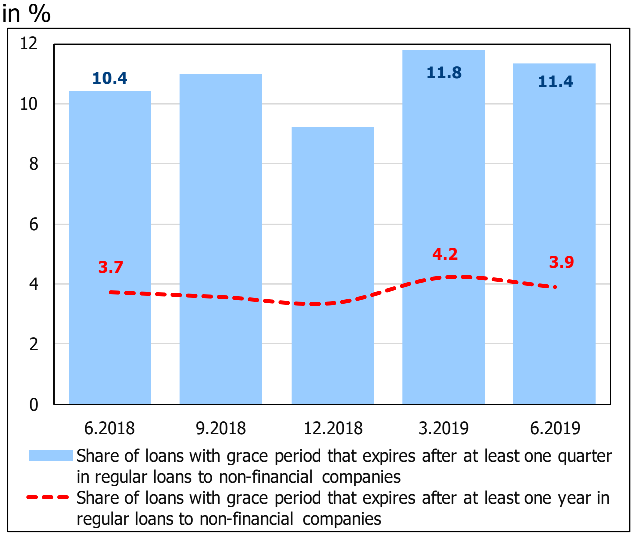


Source: National Bank's Credit Registry, based on data submitted by banks and the Group of Banking Supervisors from Central and Eastern Europe.
* The data on all countries including North Macedonia are as of 31 December 2018.

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

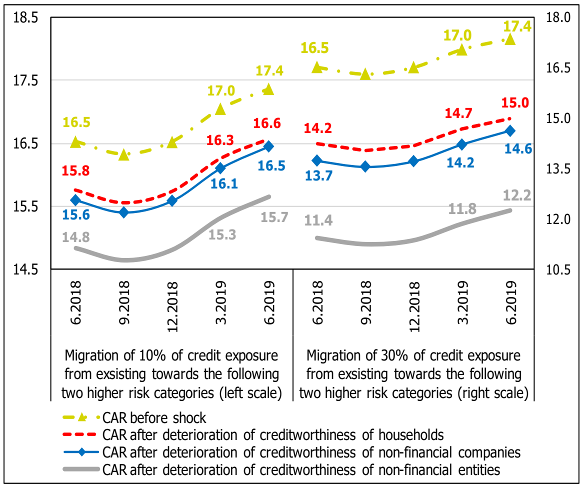
The results of stress testing show that the banking system is more resilient to the simulated shocks compared to the first quarter. The capital adequacy ratio of the banking system does not go below 8% in individual hypothetical shocks. Assuming a migration of 30% of the credit exposure to non-financial corporations, from the existing to the next two higher risk categories, the capital adequacy ratio of the banking system is reduced to 12.2%, which is almost identical reduction (measured in percentage points compared to the initial level of capital adequacy ratio) as the result of the same simulation carried out at the end of the first quarter of 2019. Analyzed by activity, the assumed deterioration of the creditworthiness of the clients dealing with activities with the highest total credit exposure has the largest effect on the capital adequacy ratio. According to certain loan products for households, the exposure based on the consumer loans, as a most common loan

Chart 18
Loans to non-financial entities with grace period that has not expired yet
in %



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

Chart 20
Capital adequacy ratio before and after hypothetical shocks of selected segments of credit exposure
in %

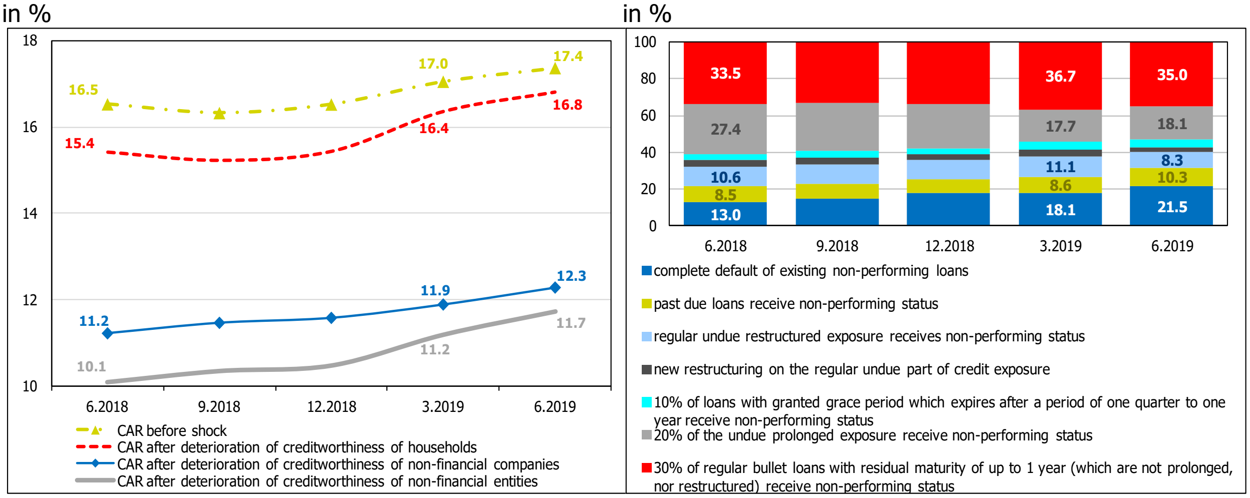


Source: National Bank's Credit Registry, based on data submitted by banks.

product has the greatest effect on the capital adequacy ratio.

The banking system resilience is also examined by extreme simulation based on a combination of seven hypothetical shocks of worsening of the quality of the credit portfolio to the non-financial sector[33]. Even with this extreme simulation, the adequacy of the banking system is not decreased below the minimum. Upon this simulation, the capital adequacy ratio reduces by 5.6 percentage points, to 11.7%, which is a better result compared to the end of the previous quarter (11.2%). The highest negative effect on the capital adequacy ratio is that of the assumed deterioration in the quality of bullet loans to one third of the total reduction of capital adequacy amid combined shock. In addition, the negative effect of the assumed full uncollectability of non-performing loans to the non-financial sector is high (21.5% of the total decline in capital adequacy in combined shock), as well as the hypothetical deterioration of prolonged

Chart 21
Capital adequacy ratio before and after hypothetically combined shocks of various credit exposure segment (left) and contribution of individual shocks to the reduction of the capital adequacy ratio (right)
in % in %



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

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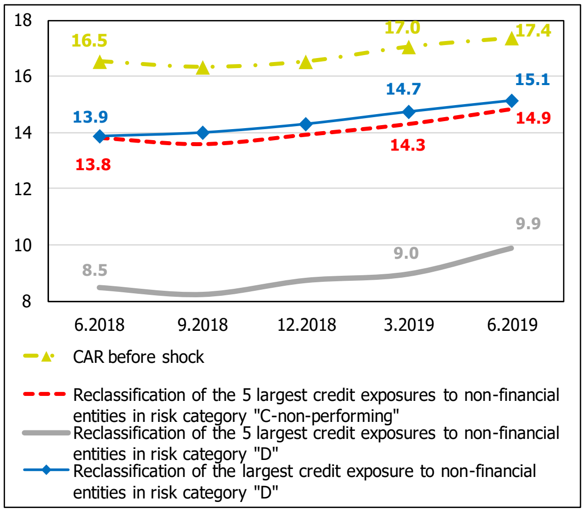
[33] The seven hypothetical shocks are the following: 1. complete default on the existing non-performing loans; 2. the total past due loans receive non-performing status; 3. the total regular undue restructured exposure receives non-performing status; 4. banks carry out new restructuring of the regular undue part of the credit exposure which according to the volume correspond with the amount of restructured exposures which received a non-performing status, from the previous item; 5. 10% of loans with granted grace period which expires after a period of one quarter to one year receive a non-performing status; 6. 20% of the undue prolonged exposure receives a non-performing status; 7. 30% of regular bullet loans with residual maturity up to one year (which are not prolonged, nor restructured) receive a non-performing status.

Chart 22
Effects on the capital adequacy ratio from reclassification of the largest credit exposures to non-financial entities (including the connected entities) in a higher risk category
in %



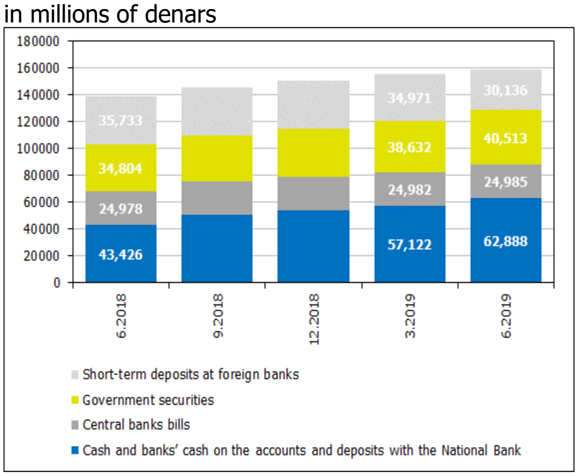
Source: National Bank's Credit Registry, based on data submitted by banks.

loans (which accounts for 18.1% of the total decrease in the capital adequacy ratio of the banking system). The growing contribution of overdue loans that turned into non-performing status (from 10.3% of the total decrease in the capital adequacy ratio, compared to 8.6% and 8.5% on 31 March 2019, respectively) is worth noticing.

2. Liquidity risk

In the second quarter of 2019, the exposure of the banking system to liquidity risk did not change significantly and remained at satisfactory level. Banks continue to manage liquidity risks, maintaining a stable and solid liquidity position that ensures smooth operations. In terms of further growth of the deposit base (mostly of sight deposits), which was higher than the growth of credit activity of banks in the second quarter of 2019, the total liquid assets of banks increased, but slightly slower compared to the previous quarter. In the structure of liquid assets, the greatest increase was noted in the accounts of banks with the National Bank and the banks' placement in overnight deposit available in the National Bank, and a significant contribution also have the increased investments of banks in domestic government securities. These developments have affected most liquidity ratios which have remained at a stable and satisfactory level, but also the scope of assets and liabilities, according to their remaining contract maturity, where there is deepening of gaps in most mature segments. Simulations for combined liquidity shocks confirm that the domestic banks maintain a satisfactory level of liquidity assets which enables proper management with the liquidity risk and satisfactory resilience to the suspected extreme liquidity outflows.

Chart 23
Structure of liquid assets
in millions of denars



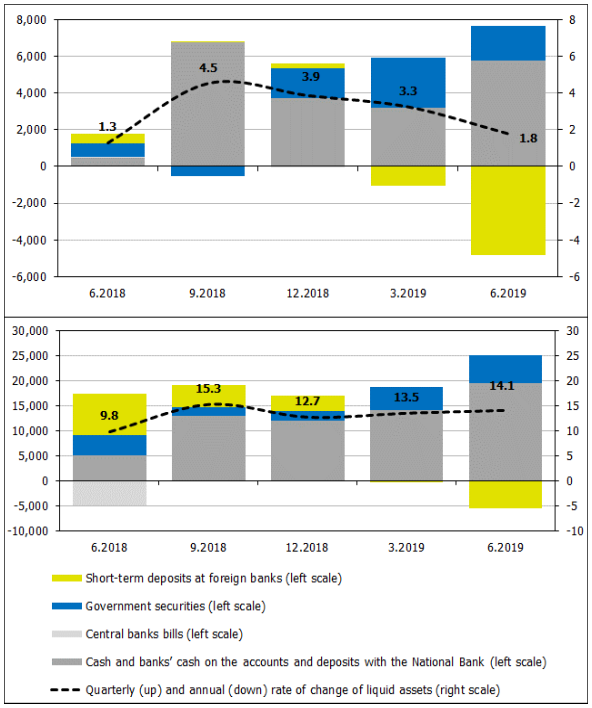
Source: National Bank, based on data submitted by banks.

2.1 Dynamics and composition of liquid assets

At the end of the second quarter of 2019, the liquid assets[34] of the banking system amounted to Denar 158,523 million and registered an increase, slower though, for the seventh consecutive quarter. Compared to the previous quarter, the banks' liquid assets are higher by Denar 2.817 million or by 1.8%, while the growth on an annual basis amounted to Denar 19.583 million or 14.1%. The growth of the liquid assets in this quarter of the year (both on a quarterly and annual basis) is mostly due to growth of cash and bank assets in the National Bank. The increased placements of the banks in domestic long-term securities, primarily the investments in Macedonian Eurobonds issued on foreign market, also had a significant contribution to the growth of liquid assets. The other components of the banks' liquid assets either decreased (short-term foreign

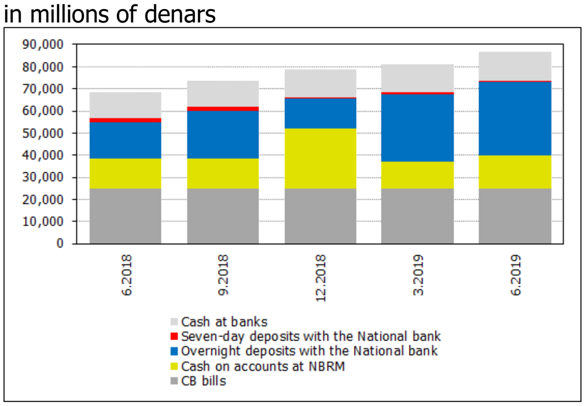
[34] The liquid assets encompass: 1) assets and claims on the National Bank, which include cash, assets on the accounts of banks with the National Bank, deposit facility with the National Bank and CB bills; 2) short-term deposits with foreign banks, including the assets of the banks on their correspondent 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.

Chart 24
Quarterly (top) and annual (bottom) growth rate of liquid assets, by component
in millions of denars and in %



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

Chart 25
Assets and claims of banks from the National Bank, by instrument
in millions of denars



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

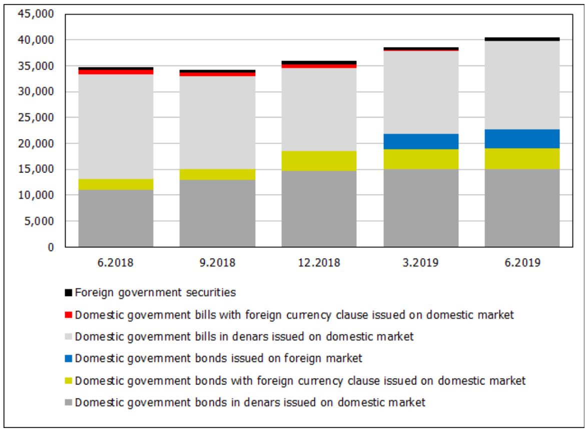
currency assets in foreign banks), or remained unchanged (investments in CB bills).

Cash and bank assets with the National Bank (including CB bills) still dominate the structure of liquid assets, with a share of 55.4% at the end of the second quarter of 2019. The main carrier of the quarterly increase (by Denar 5.770 million, or by 7.1%) was the growth of the funds in the accounts in the National Bank (primarily in denars) as well as placements of banks in overnight deposits[35] available in the National Bank amid minimal reduction of banks' investments in the available seven-day deposits of the National Bank. The CB bills investments have not changed for several consecutive quarters (amid unchanged offer of Denars 25.000 million), and the auctions of CB bills were still conducted through a tender with limited amount and fixed interest rate[36].

[35] According to the Decision on deposit facility (Official Gazette of the Republic of Macedonia No. 49/12, 18/13, 50/13, 166/13 and 35/15), the banks could place deposits with the National Bank every working day with a maturity of one business day (overnight) and once a week with a maturity of seven days. These deposits are placed without the possibility of partial or full early withdrawal. In the second quarter of 2018, the interest rates on these deposits remained unchanged (from the latest change in March 2018) and equaled 0.15% on overnight deposits and 0.30% on seven-day deposits.

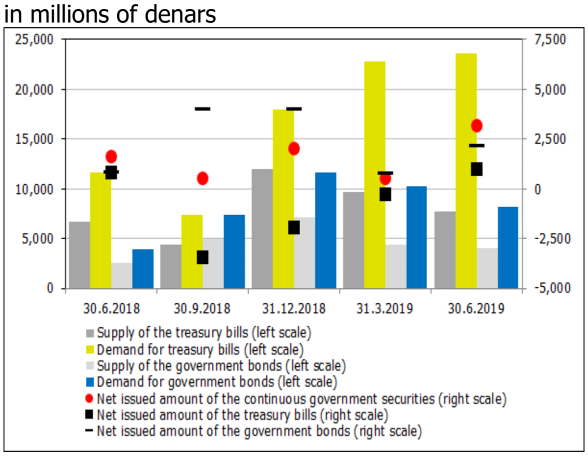
[36] The CB bills interest rate in the second quarter of 2019 remained unchanged (since the last change in March 2019) and amounts 2.25%.

Chart 27
Banks' investments in domestic government securities
in millions of denars



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

Chart 26
Net issued amount and supply and demand of government securities on the domestic market of continuous securities
in millions of denars

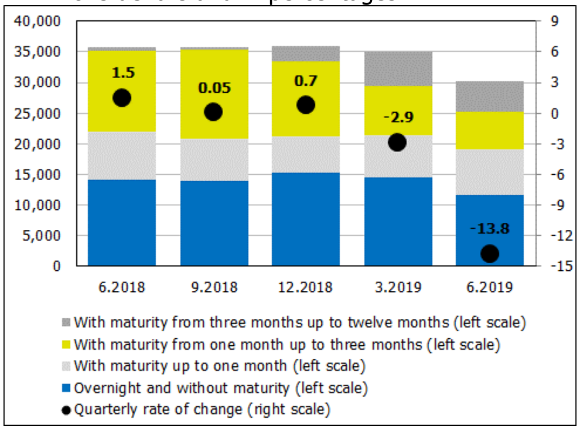


Source: Ministry of Finance and National Bank.

In the second quarter of 2019, although at a slower pace, the banks' investments in government securities continued. The quarterly growth of banks' investments in government securities (by Denar 1.881 million, or by 4.9%) was mostly determined by the increase in banks' placements in treasury bills (by Denar 1.016 million, or by 6.3%), with a significant contribution of banks' investments in Macedonian Eurobonds issued on foreign markets, which increased in the second quarter of 2019[37] by Denar 717.5 million (or by 23.6%). The quarterly increase of investment in government bonds in denars, as well as in government bonds with foreign currency clause (issued on domestic market) was much lower (by 0.8% and 0.4%, respectively), while the foreign government security placements (bonds) remained almost unchanged and have a modest share of only 1.7% of the total portfolio of banks' government securities. In the domestic market of continuous government securities, in the first six months of 2019, the total net issued amount[38] of government securities increased by Denar 3.161 million, and the banks' share in the primary market of government securities remained unchanged (35.6%).

[37] Their share in total placements in government securities amounts 9.3% on 30 June 2019.
[38] Net issued amount of government securities is calculated as the difference between the realized amount at the auctions of government securities for a certain time period and the amount of government securities that falls due in the same time period.

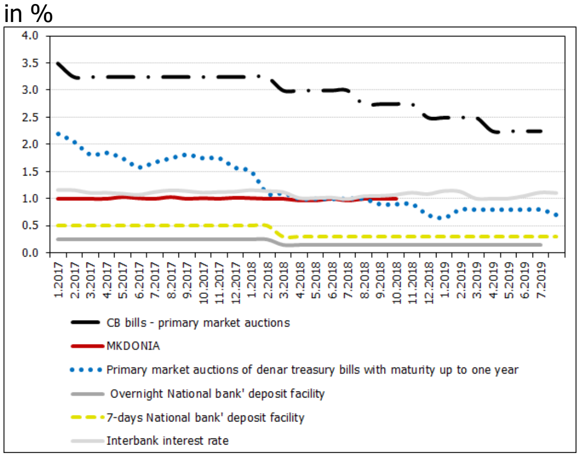
Chart 28
Short term assets in foreign banks, structure and growth
in millions denars and in percentages



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

Short-term assets placed in foreign banks are the most important foreign currency component of banks' liquid assets[39], which continued to decrease in the third quarter of 2019, at a significantly faster pace compared to the previous quarter. The decrease of these funds in the second quarter of 2019 (by Denar 4.834 million, or by 13.8%), is almost entirely due to the reduced funds on accounts and short-term deposits with foreign banks. The share of these assets in the total liquid assets decreased, from 22.5% on 31 March 2019, to 19% on 30 June 2019, which is still solid and enables their use for both operational purposes and needs for liquidity and currency risk management. Most of the short-term foreign banks' assets are placed on the corresponding accounts, and they decreased on quarterly bases.

Chart 29
Movement of domestic interest rates
in %



Source: National Bank.

One of the key motives of the banks to direct their liquid assets to the available financial instruments is the yield offered by individual instruments, which primarily depends on fluctuations of interest rates. In the second quarter of 2019, amid unchanged interest rate of the National Bank, the interbank interest rate on the deposit market remained stable, and there were no changes in the indicative interest rates for interbank deposit trading (SKIBOR[40]). The total transaction interbank interest rate (MBKS[41]) quarterly averaged 1% and remained low and relatively stable compared to the previous quarter.

Monetary policy in most developed countries in the second quarter of 2019 remained unchanged. The interest rates in interbank markets in the euro area remained extremely low, even negative for certain maturities, which corresponds to the unchanged setup of the monetary policy of the ECB (keeping the interest

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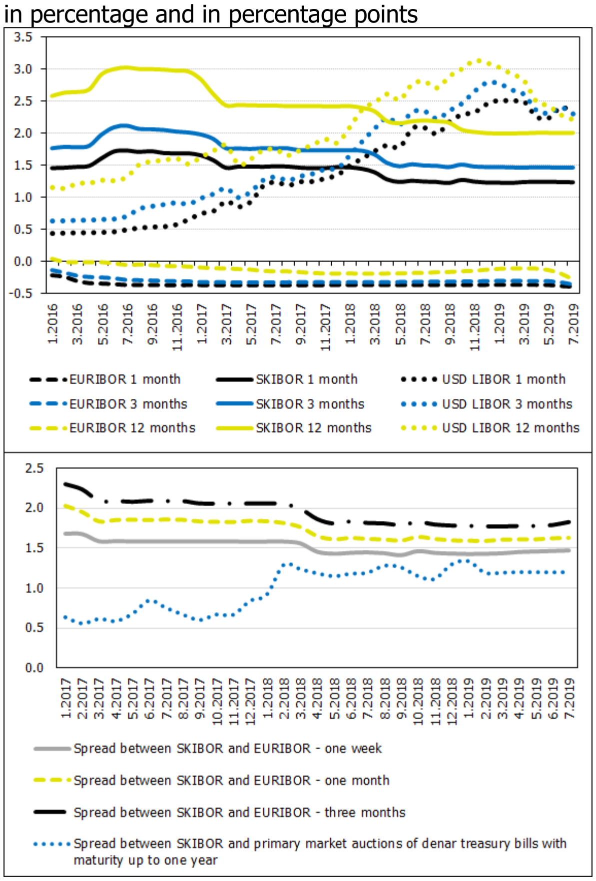
[39] Foreign currency liquid assets comprise short-term deposits with foreign banks, including assets on corresponding accounts, investments in foreign government securities and domestic government Eurobonds issued on foreign markets, foreign currency cash and foreign exchange account with the National Bank and placements of foreign currency deposits with the National Bank.

[40] SKIBOR (Skopje Interbank Offered Rate) is a reference interest rate on the denar money market and is an interbank interest rate at which one reference bank is ready to sell denar liquidity to another reference bank. Pursuant to the new Rules on Selection and Obligations of the Reference Banks Setting the Interest Rates for the Calculation of SKIBOR and the Calculation Process of SKIBOR, adopted on 22 August 2018 by the Macedonian Banking Association and effective from 1 October 2018, reference banks are obliged to quote interest rates for: one week, one month, three months, six months and twelve months.

[41] MBKS is the interbank interest rate for trading on the interbank deposit market.

Chart 30
Movement of SKIBOR, EURIBOR and LIBOR for US-dollar (up) and the spread between SKIBOR and EURIBOR, for selected maturities (down)
in percentage and in percentage points



Source: The National Bank and the website of the European Money Markets Institute for Euribor and the website of the Federal Reserve Bank of St. Louis (so-called FRED) for LIBOR for US dollars.

rate on the main refinancing operations at the level of the last change in March 2016, when it was reduced from 0.05% to 0.00%). Continuing the trend of the Euribor movement in the negative zone mainly reflects expectations that the ECB will keep interest rates at a low/negative level longer than announced[42]. Amid favorable conditions and solid performance on the labor market, as well as moderate economic growth in the second quarter of 2019 the FED kept the interest rate in the current range from 2.25% to 2.50%[43].

2.3.2.2 Liquidity indicators

In the second quarter of 2019, the liquidity[44] indicators of the banking system maintained stable, without major shifts from their usual height. The share of liquidity assets in the total banks' assets remained at a level close to one third, the coverage of short-term liabilities and household deposits with liquid assets is just over one half, while the coverage of liabilities with contractual residual maturity up to 30 days remained at a level close to 70%[45]. The ratio between loans and deposits on a banking system level is constantly below 100% and indicates acceptable limits to liquidity risk and stable liquidity management by banks.

In terms of currency characteristics of liquid assets and liabilities, the liquidity indicators showed divergent movements in the second quarter of 2019. Namely, in case of decline in the foreign currency liquid assets, entirely caused by the reduction of funds in corresponding accounts and the short-term funds in foreign banks, foreign currency liquidity indicators noted a

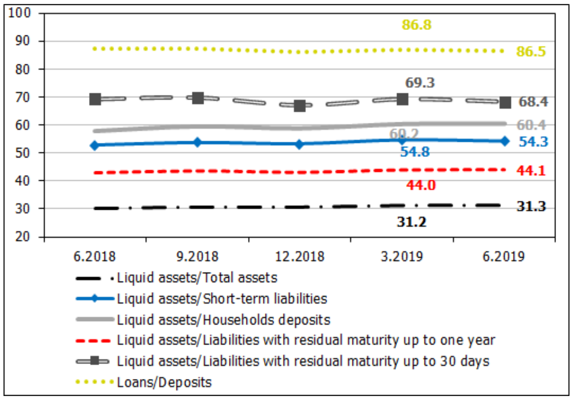
[42] At the meeting in early June 2019, the European Central Bank announced that it would keep the key interest rates at current levels at least until the end of the first half of 2020, compared to previous announcement of their continuity at least until the end of this year. At the meeting in September 2019, the ECB decided to reduce the interest rate on overnight deposits that banks can place in the Euro system, from -0.4% to -0.55. The remaining key interest rates of the ECB (interest rate on key financing operations and overnight loans) remained at the same level (from 0% and 0.25%, respectively).

[43] However, amid reduced inflation pressures in US economy, and adverse impact on global developments at the same time, at a meeting in July 2019, the FED decided to reduce the target range of reference interest rate by 25 basis points, which now stands at 2.00%-2.25%.

[44] The calculation of liquidity ratios of the banking system does not include resident interbank assets and liabilities.

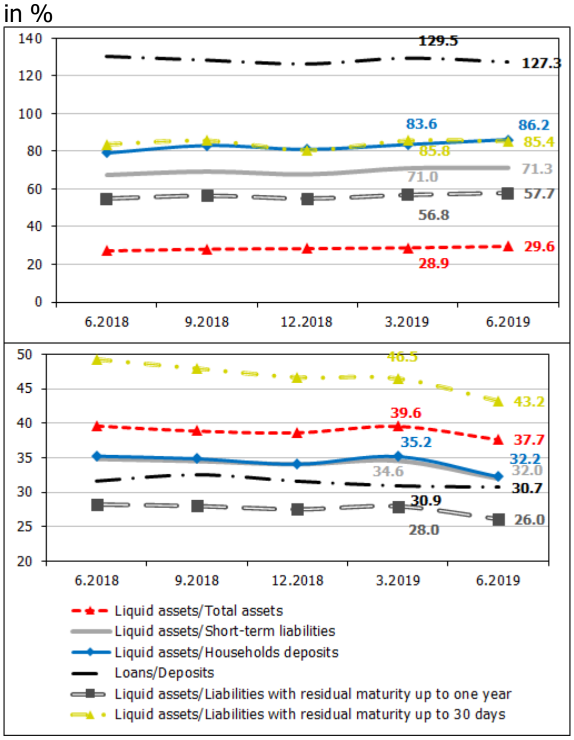
[45] Analyzed by bank, as of 30.6.2019, the share of liquid in total assets ranges between 19.9% and 47.6%, with a median of 28.7% (June 2018: between 18.5% and 47.8%). The coverage of short-term liabilities with liquid assets ranges between 43% and 79.2%, with a median of 53.8% (June 2018: between 35% and 105.2%), the coverage of liabilities with residual contractual maturity up to 30 days between 52.1% and 115.9% with a median of 67.5% (June 2018: between 44.4% and 158.4%). The Development Bank of North Macedonia AD Skopje is excluded from this analysis.

Chart 31
Liquidity indicators of the banking system
in %



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

Chart 32
Banking system liquidity indicators, according to currency structure - Denars (top) and foreign currencies (bottom)
in %



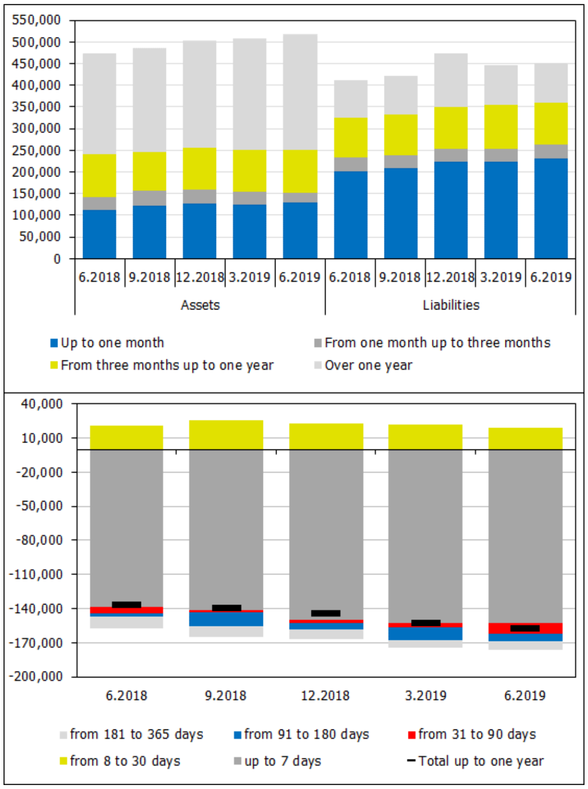
Source: National Bank, based on data submitted by banks.

certain deterioration. Conversely, denar liquidity[46] indicators generally registered a moderate uptrend and remained at a higher level compared to the foreign currency liquidity indicators, given the higher structural share of liquid assets in denars in total liquid assets of banks.

Regulatory liquidity ratios of the banking system, presented as ratios between assets and liabilities that mature in the next 30 days and 180 days, and in the second quarter of 2019, are above the minimum requirement of 1 at the end of 2019, thereby confirming the sufficient amount of liquidity available to the Macedonian banking system, which allows banks to carry out their liabilities.

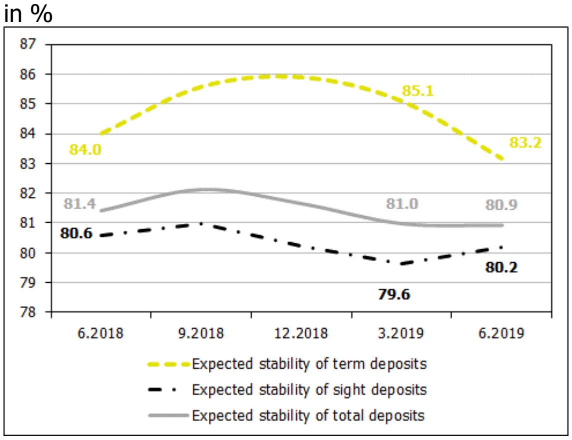
[46] Claims and liabilities with FX clause are considered as denar claims and liabilities, since their cash flow is in denars.

Chart 33
Composition of assets and liabilities of banks according to their contractual residual maturity (up) and the gap between assets and liabilities, with contractual residual maturity of up to one year (down)
in % and in millions of denars



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

Chart 34
Expected stability of deposits with residual maturity up to three months by the banks
in %



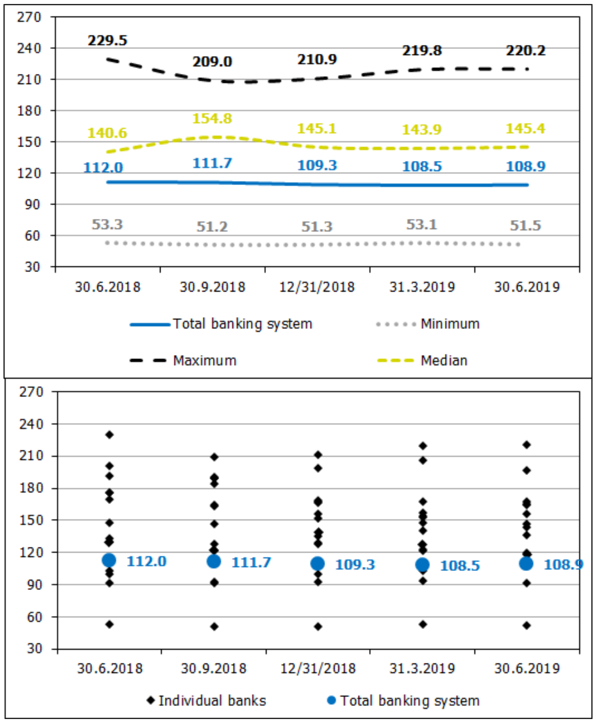
Source: National Bank, based on data submitted by banks.

2.4. Maturity structure of assets and liabilities

The changes in the structure of assets according to their residual maturity in the second quarter of 2019 are modest and refer to an increase in the share of funds in almost all analyzed mature segments. On the other hand in the structure of banks' liabilities, the share of liabilities with higher residual maturity decreased, at the expense of increasing the share of liabilities with shorter contractual maturity, which corresponds to the stronger tendency of depositors to keep deposits shorter (in the second quarter of 2019, the growth of the deposit potential of the banking system is mostly due to the increase of Denar deposits by sight).

Such changes in the maturity structure of banks' assets and liabilities contributed to deepening of the gap according to the contractual residual maturity. However, the largest mismatch between assets and liabilities according to their contractual residual maturity is still registered in the maturity bucket up to seven days, which usually results from the inclusion in this maturity bucket of banks' liabilities on demand and without determined maturity (including transaction accounts). Usually, a positive gap in the residual maturity of assets and liabilities was noticed in the maturity segment from 8 days to one month, mainly due to the fact that banks' investments in CB bills of the National Bank are classified in this maturity segment.

Chart 35
Reduction of liquid assets after the simulation for combined liquidity shocks (after all shocks), total banking system (up) and by bank (down)
in %



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

According to the bank's expectations, the cumulative gap between assets and liabilities in all maturity segments is positive, which leads to the conclusion that banks continue to expect stability maintenance of deposits as the main source of financing their operations (more details in the annexes to this report). Despite the obvious decrease, at the end of the second quarter of 2019 the banks expect high stability of deposits, i.e. 83.2% of termed deposits with the remaining maturity of up to three months (85.1% on 31 March 2019) will remain in banks, while the percentage of expected stability of total deposits and sight deposits is somewhat lower (80.9% and 80.2%, respectively).

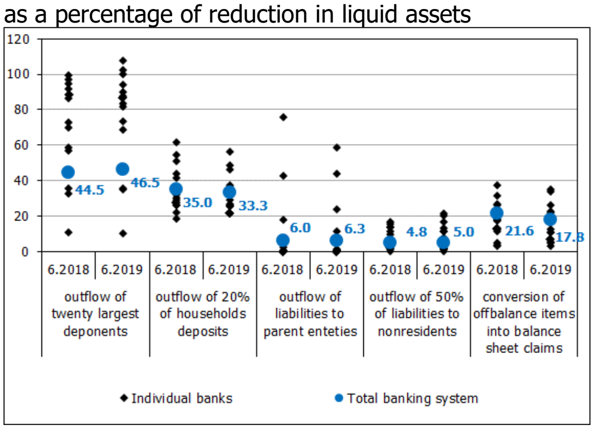
2.5. Stress-simulations for liquidity shocks

Given the satisfactory level of liquid assets available to Macedonian banks, the results of the simulations for liquidity shocks implemented as of June 30 2019, indicate a stable liquidity position of the Macedonian banking system. The resilience of the Macedonian banking system to liquidity shocks is confirmed by the results of all individual simulations of liquidity shocks, and full utilization (or 108.9% on 30 June 2019) of liquid assets would occur only at substantially extreme simulation of liquidity shock which covers combined outflows[47] of funds from banks on several grounds. Considering the extremity of assumption, for the purpose of this simulation, the usual coverage of liquid assets is extended with other financial instruments[48] owned by banks, for which it is estimated that banks will quickly and easily collect or turn into cash. In such case, the banking system would be operating with sufficient

[47] The simulation assumes outflow of: deposits of the twenty 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.

[48] 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 36
Contribution of shocks to the decline in liquid assets in the simulation of a combined liquidity shock, by bank
as a percentage of reduction in liquid assets



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

liquid assets, and a certain amount of it would remain at their disposal.

When applying individual liquidity shock simulations, the high level of liquid assets available to Macedonian banks, enables a coverage of all assumed liquidity outflows. The sharpest decline in liquid assets occurs amid outflow of the deposits of the twenty largest depositors, but 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 significantly greater similarity in the results for individual banks, thereby confirming the importance of deposits to the financing of the banks' activities. Hence, the sustainability of the liquidity position of banks, as well as the potential growth of their activities, are directly dependent on developments and the banks' participation in the deposit market and the maintenance of the confidence of domestic depositors in Macedonian banks.

In the case of assumed conversion of certain off-balance sheet liabilities of the banks into on-balance sheet claims[49], the banks would spend about 20% of their liquid assets, which although less compared to the simulations of outflow of deposits[50], can be considered significant. 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.

[49] 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.

[50] During a simulation of outflow of the deposits of the 20 largest depositors, the liquid assets of the banking system are reduced by 46.5%, while in case of assumed outflow of 20% of the household deposits, liquid assets are reduced by 33.3%.

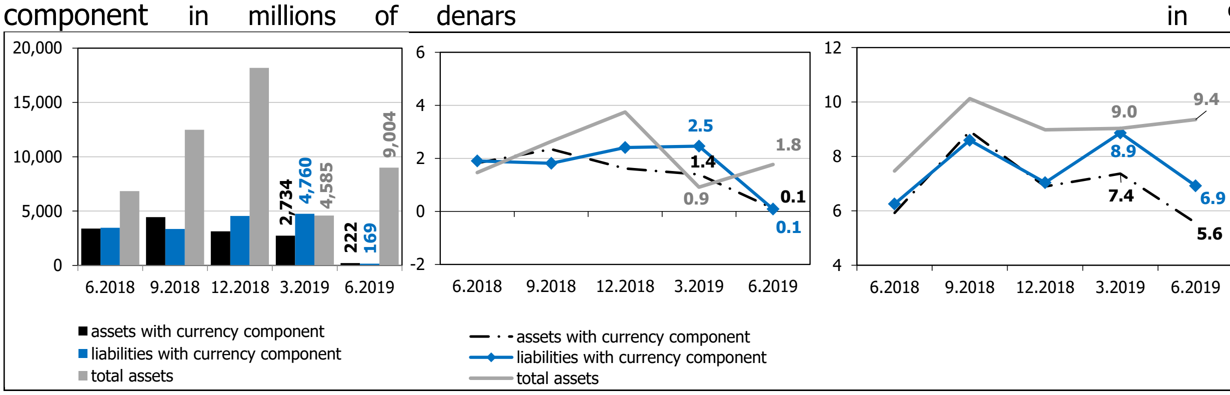
3. Currency risk

The already low direct exposure of the banking system to currency risk, was minimally reduced in the second quarter of 2019. The share of the open currency position in own funds decreased to 1.8%. Analyzed by bank, all banks were in line with the prescribed limit for the aggregate currency position of 30% of own funds. The shares of loans with currency component in total loans to non-financial entities registered a moderate quarterly growth and are still maintained on a relatively high level. Given the dominant share of the euro in the activities of banks with currency component, the probability of achieving direct and indirect exposure of banks to currency risk is minimal, since the implementation of the strategy of maintaining a stable nominal exchange rate of the denar against euro.

The positive gap between assets[51] and liabilities[52] has also increased with the currency component by Denar 53 million (or by 4.1%), which in a situation of a similar quarterly change rate of own funds, conditions its unchanged share in own funds (2.1%).

Chart 37

Quarterly (left and middle) and annual (right) growth of assets and liabilities with currency component in millions of denars in %

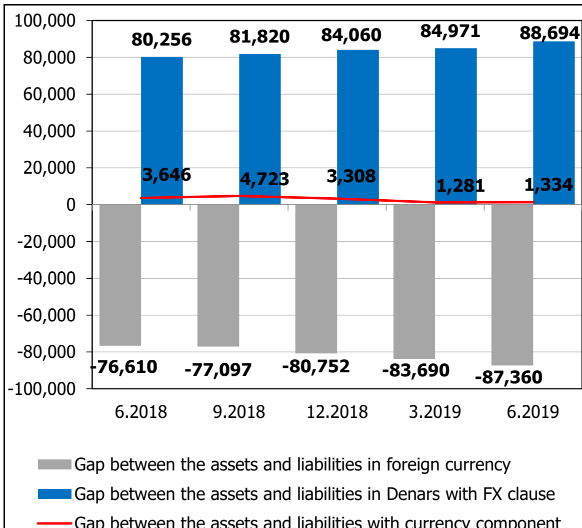


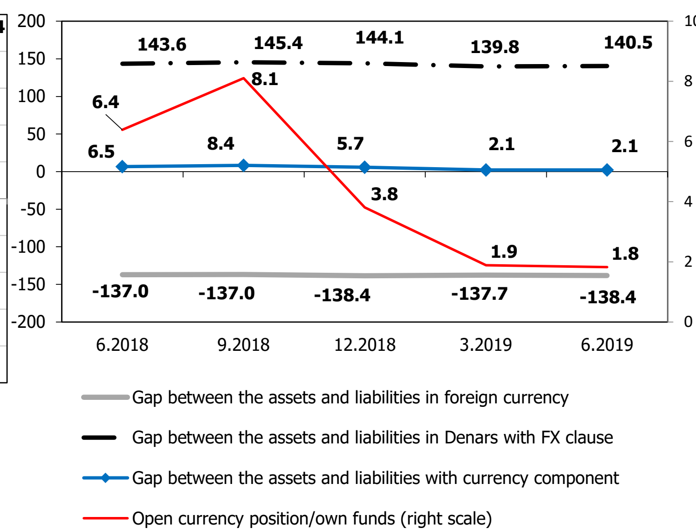
Source: National Bank, based on data submitted by banks.

[51] Most of the quarterly growth of assets with currency component which amounting to Denar 222 million due to the increase of loans in denar with foreign currency clause as well as to moderate growth of debt securities in foreign currency (Macedonian Eurobond).

[52] The quarterly growth of liabilities with currency component of 169 million is mostly due to the increase in deposits in foreign currency by non-residents and companies, as well as the growth of borrowings.

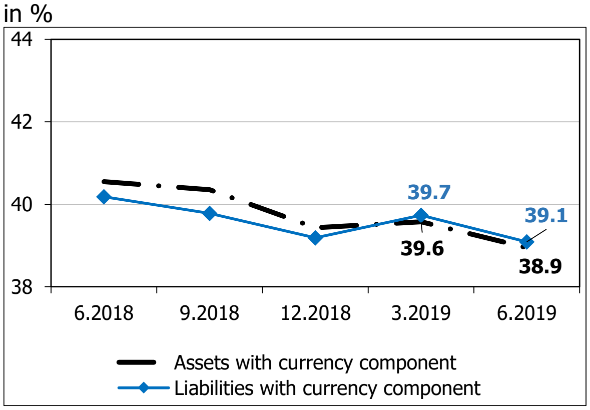
Chart 38
Structure of the gap between assets and liabilities with currency component (left) and share of the assets and liabilities with currency component in own funds (right)
in millions of denars in %





Source: National Bank, based on data submitted by banks.
* DBNM AD Skopje is not included.
Unlike the gap between the assets and liabilities with currency component, according to the regulations, the open foreign exchange position includes the gap between the active and passive off-balance sheet positions with currency component.

Chart 39
Share of the assets and liabilities with currency component* in the total assets of banks
in %



Source: National Bank, based on data submitted by banks.
*Within the assets, loans are on a net basis (i.e. adjusted for the impairment). DBNM AD Skopje is not included.

The lower growth of assets and liabilities with currency component (compared to the total assets and liabilities), conditions a quarterly decrease of their share in total assets, i.e. liabilities by 0.6 percentage points.

Analyzed by currencies, the narrowing of the negative gap between assets and liabilities in US dollars (by Denar 1.025 million) mostly contributed to the quarterly growth of the total gap between assets and liabilities with a currency component. This narrowing arises from the faster decrease in liabilities (Denar 1,172 million)[53] compared to the decrease in assets with US dollar component (Denar 147 million). **At the same time, the positive gap between assets and liabilities in euro decreased significantly (by Denar 579 million),** as a result of faster growth of liabilities (Denar 1.168 million) compared to the

[53] The decrease of liabilities with the US dollar component mostly arises from current account and other short-term liabilities with the dollar component which decreased by Denar 924 million as well as from deposits (by demand and time), which decreased by Denar 307 million.

euro assets (Denar 588 million) [54]. The euro still dominates the currency structure of assets and liabilities with a currency component, accounting for nearly 90%. Hence, in terms of implementing the strategy of maintaining a stable nominal exchange rate against the euro, the probability of achieving the (already low exposure to) currency risk is kept low.

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

Currency	31.3.2019		30.6.2019	
	Assets	**Liabilities**	**Assets**	**Liabilities**
Euro	88.9	87.4	89.1	87.9
US dollar	6.8	8.3	6.7	7.7
Swiss franc	1.9	1.7	1.7	1.6
Australian Dollar	0.8	1.1	0.9	1.1
British pound	0.5	0.6	0.5	0.7
Other	1.0	1.0	1.0	1.0
Total	**100.0**	**100.0**	**100.0**	**100.0**

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

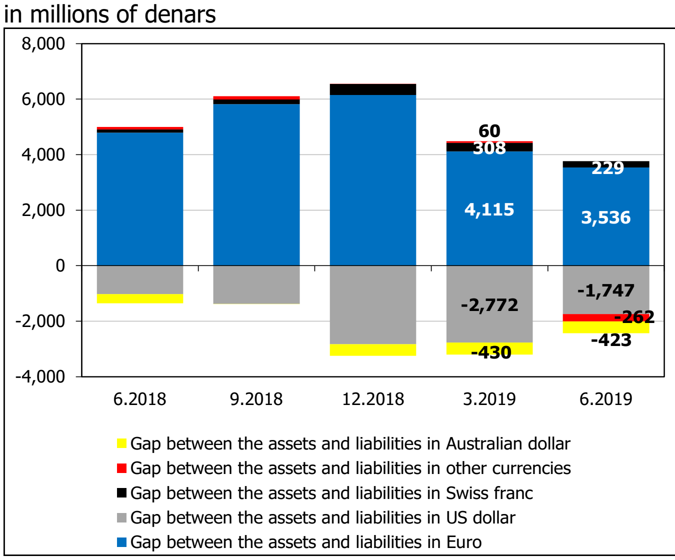
Table 4
Classification of banks according to the share of the open foreign currency position by currency and the aggregate foreign currency position in the own funds

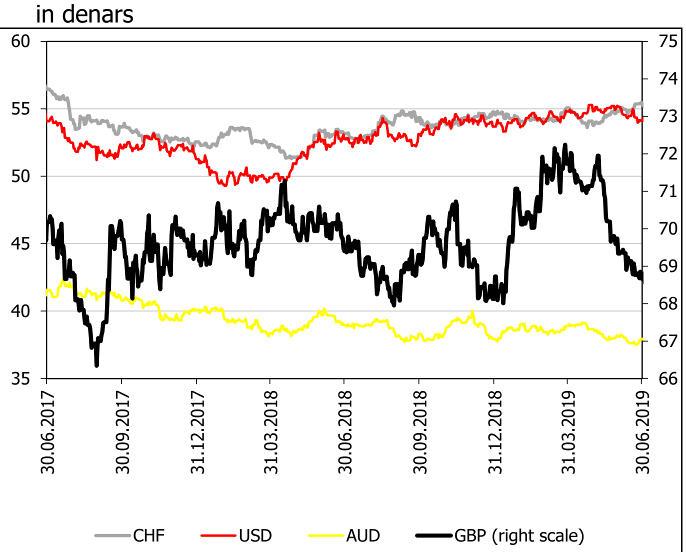
Items	Number of banks										
	Open currency position by currency / own funds										Aggregate currency position / own funds
	Euro		US Dollar		Swiss franc		Australian Dollar		Other		
	Long	Short	Long	Short	Long	Short	Long	Short	Long	Short	
under 5%	4	3	11	3	12	1	9		11	3	5
from 5% to 10%	3							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

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

[54] The largest growth of liabilities in euro was registered in time deposits and demand deposits (Denar 611 million), credit liabilities (Denar 357 million) and current accounts and short-term liabilities (Denar 261 million). On the euro side, most of the growth was in euro denominated loans (Denar 3.455 million) and placements of euro denominated debt securities (Denar 1.359 million), with a simultaneous decrease of time deposits and demand deposits placed in euro (Denar 2.290 million), as well as the item "cash, cash equivalents, gold and precious metals" (Denar 1.929 million).

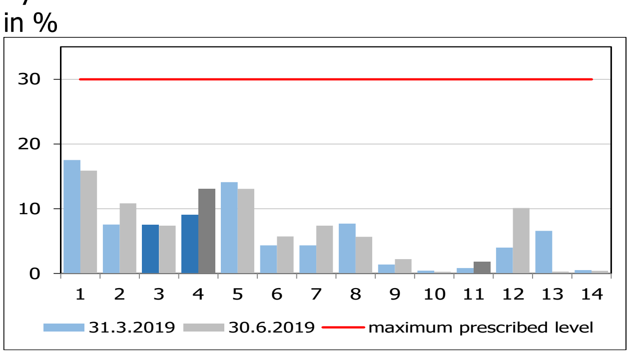
Chart 40
Currency structure of the gap between assets and liabilities with currency component, by currency (left) and development of the exchange rate of the denar against US dollar, Swiss franc, British pound and Australian dollar (right)





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

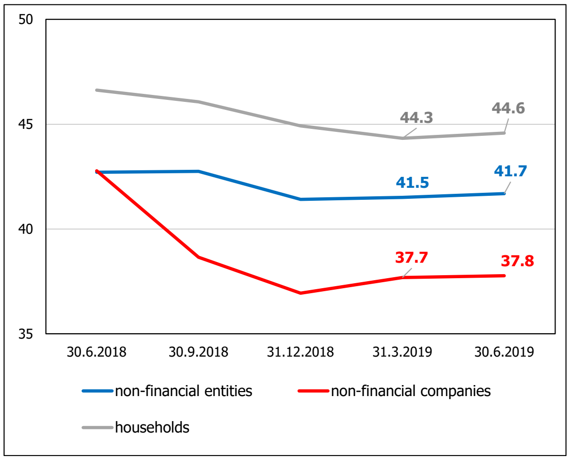
Chart 41
Aggregate currency position to own funds ratio, by bank*



Source: National Bank, based on data submitted by banks.
*The columns with darker shades, refer to the banks that have a short foreign exchange position, but shown in absolute value.

The ratio of the aggregate foreign currency position and own funds per individual bank ranges from 0.3% to 15.9%, so on 30 June 2019 all banks were complying with the prescribed limit of 30% of their own funds. All the banks have a long aggregate foreign currency position, except two.

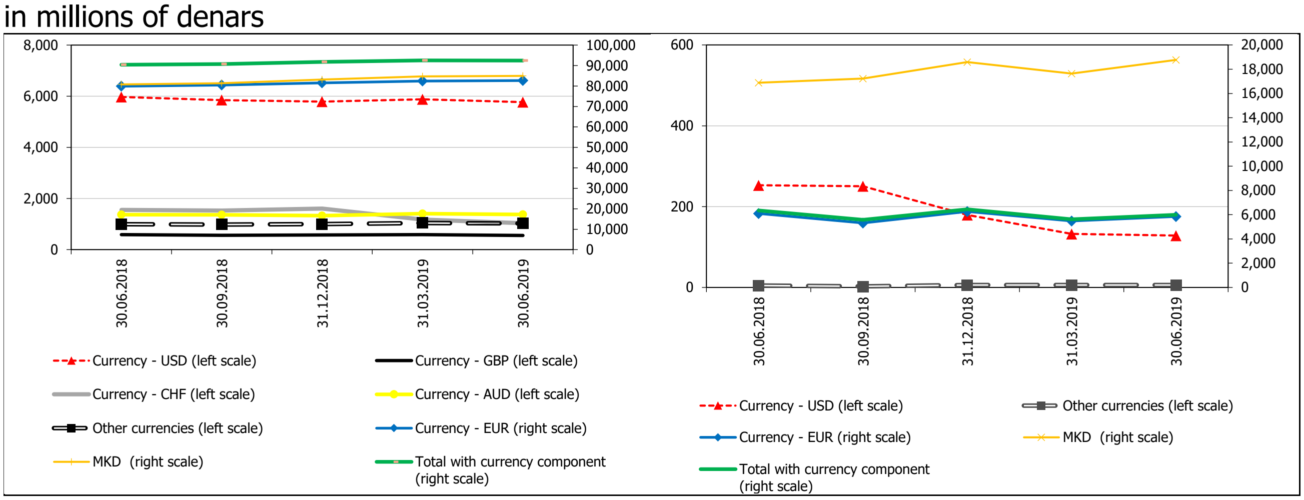
Chart 42
Share of loans with currency component in total loans
in %



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

The indirect exposure to currency risk arises from the presence of currency component loans in the banks' loan portfolios. At the end of second quarter of 2019, the currency component loans minimally increased their share of total loans to non-financial entities, which on 30 June 2019 amounted to 41.7%. The share of the currency component increased in loans to both non-financial corporations and households. Maintaining a stable nominal exchange rate of the Denar against the euro is a key factor in maintaining low probability for realization of the indirect currency risk present in the bank's credit portfolios.

Chart 43
Deposits of natural persons (left) and non-financial corporations (right), by currency
in millions of denars

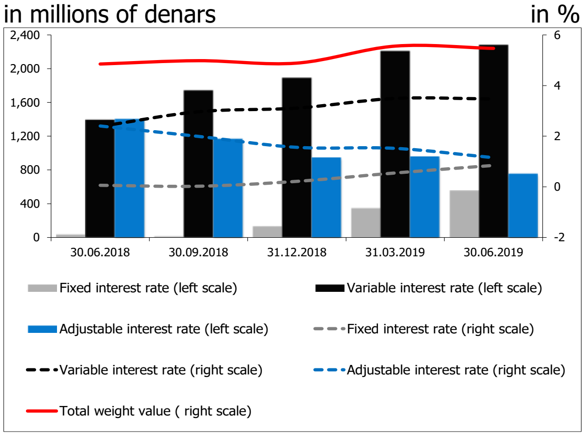


Source: National Bank, based on data submitted by banks.
The deposits do not include transaction accounts of the natural persons and non-financial corporations

4. Interest rate risk in the banking book

The exposure of the banking system to interest rate change risk in the portfolio of banking operations decreased in the second quarter of 2019, which was seen through the reduced share of the weighted value of this portfolio in own funds. The decrease is based on the higher growth of the capital positions of the banking system, amid lower growth of weighted value of the banking portfolio. On the other hand, the total (non-weighted) gap between interest-sensitive assets and liabilities showed slight narrowing which was mostly due to the widening of the negative gap between interest-sensitive assets and liabilities positions with adjustable interest rate (due to larger reduction of loans compared to reduction of termed deposits with adjustable interest rate). At the aggregate level, the banking system is exposed to risk of declining interest rates, given the fact that total gap between interest-sensitive assets and liabilities is positive. However, in terms of historically low interest rates, the banks' exposure to indirect credit risk is significant and growing, given the significant presence of the growth of receivables with variable interest rate.

Chart 44
The total weighted assets of the banking book*, by interest rate type, in absolute amount (left scale) and relative to own funds (right scale)
in millions of denars in %

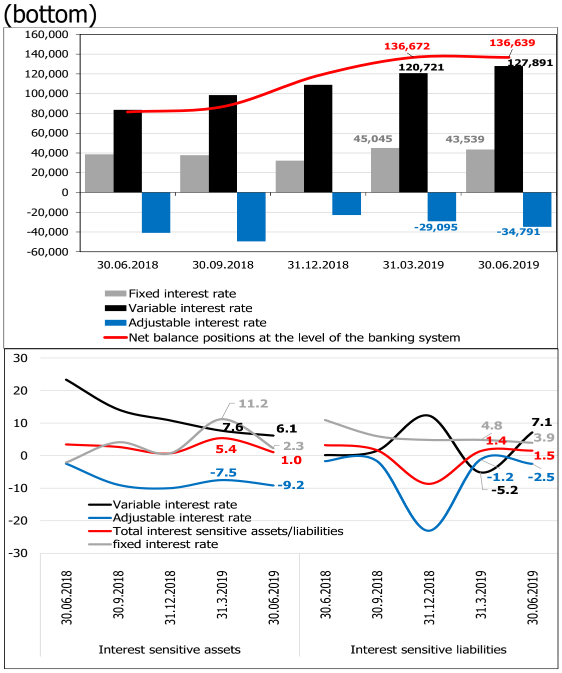


Source: National Bank, based on data submitted by banks.
*The total weighted value of the banking book denotes the potential loss of the economic value of this portfolio, amid assumed unfavorable interest shock of ±2 percentage points.

Total weighted value of banking book was quarterly increased by Denar 76 million or 2.2%. However, the larger quarterly growth of own funds, conditioned a minimal decrease of 0.1 percentage points of the ratio between weighted value of banking book and own funds, to a level of 5.5%, on 30 June 2019. Analyzed by bank, the ratio between the total weighted value of the banking book and own funds ranges from 0.3% to 9.4%, which is still far below the level of 20%.[55] According to the interest rate type, the weighted values of the portfolio with a fixed interest rate recorded a quarterly growth[56] of

[55] 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.
[56] The divergent changes of the weighted (up) and non-weighted (down) value of the portfolio with fixed interest rate is due to the growth of the active positions with a time period until the next reevaluation of over one year, and growth of the liabilities with a time period until the next reevaluation of interest rates of up to one year. In addition, the longer the period, the higher the weights.

Chart 45
Interest-sensitive assets and liabilities by type of interest rate, gap (up) and quarterly growth (down)
In millions of denars (top) and in percentage (bottom)

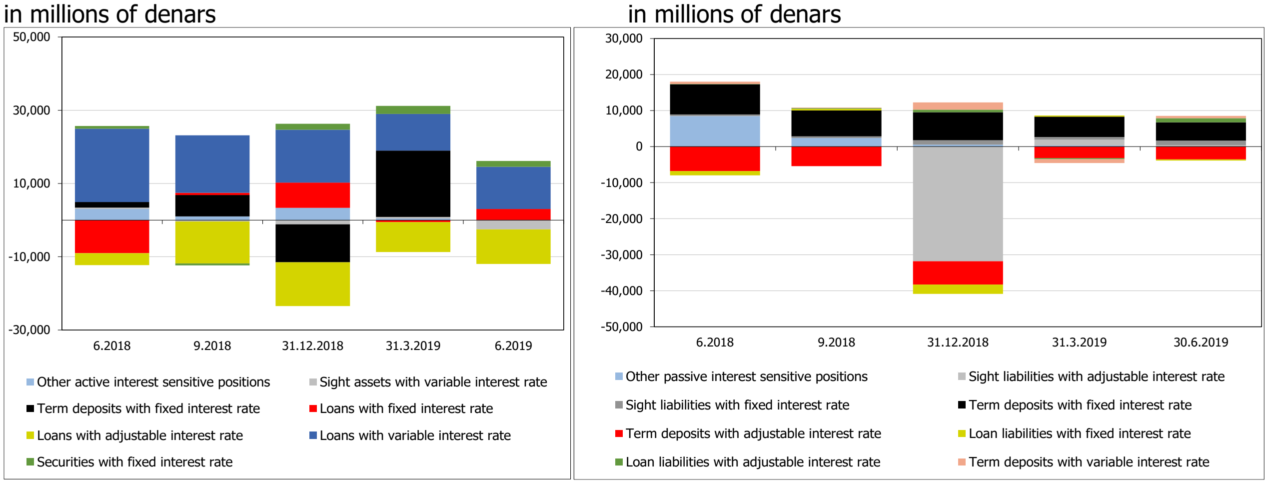


Source: National Bank, based on data submitted by banks.

Denar 208 million or 9.4%, while the weighted values of the portfolio with variable interest rate increased by Denar 72 million or 3.3%. In contrast, the weighted value of the portfolio with adjustable interest rate decreased[57] quarterly by Denar 204 million or 21.3%.

The quarterly growth of the weighted value of the banking book is solely due to the reduction of the gap between active and passive positions in which the period until the next reevaluation of the interest rates is up to one year, at the expense of increasing the gap between the assets and liabilities where the period until the next reevaluation of the interest rates is over one year.

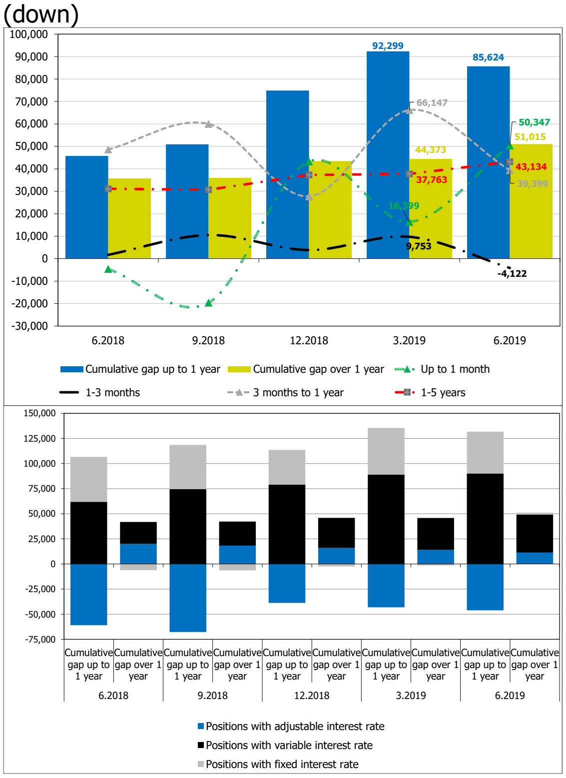
Chart 46 Quarterly changes of the interest sensitive assets (left) and liabilities (right), by type of instrument and type of interest rate
in millions of denars in millions of denars



Source: National Bank. based on data submitted bv banks.

[57] The larger decrease of the assets compared to liabilities influenced the changes of both the weighted and non-weighted gap between interest bearing active and passive positions, but with opposite effects, since the weighted gap is positive, while the non-weighted is negative. Thus, the decrease of assets contributed to expansion of the negative non weighted gap, and reductions of the positive weighted gap.

Chart 47 Asset-liability gap, by period until next interest rate revaluation (up) and gap structure by interest rate type (down)
in millions of denars (up) and in millions of denars (down)



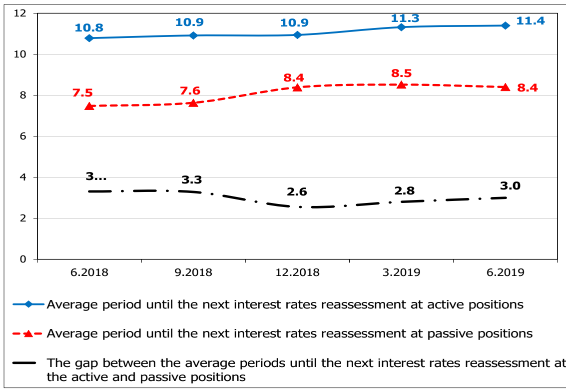
Source: National Bank, based on data submitted by banks.

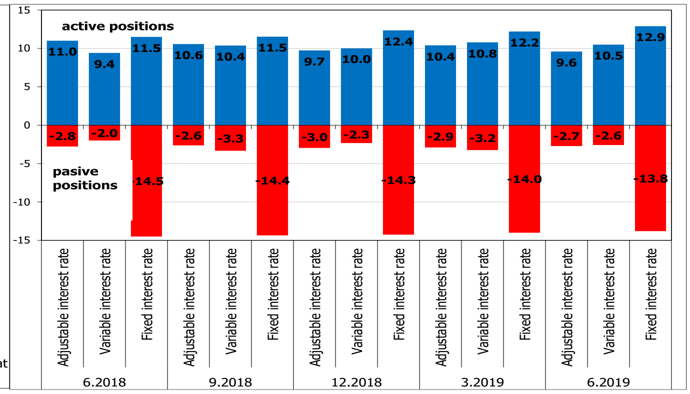
The total gap, i.e. the non-weighted difference between the interest-sensitive assets and liabilities remained almost unchanged (minimal quarterly decrease by Denar 33 million). Analyzed by the type of interest rate, the gap between the positions with adjustable and variable interest rates widened, while the gap between the positions with fixed interest rates registered narrowing. The positive gap between the assets and liabilities with variable interest rate expanded by Denar 7.169 million, mostly under the influence of credit growth with this type of interest rate (Denar 11.534 million)[58], amid lower growth of liabilities by loans (Denar 1.169 million) as well as termed deposits with this type of interest rate (Denar 656 million). On the other hand, in the interest-sensitive assets with adjustable interest rates there are opposite movements, i.e. the loans with adjustable interest rates decreased by Denar 9.436 million. This contributed to the widening of the negative gap between interest-sensitive assets and liabilities with adjustable interest rate by Denar 5.696 million, in terms when the interest-sensitive liabilities with adjustable interest rates decreased by Denar 3.191 million (mostly as a result of the fall in the termed deposits with this type of interest rate by Denar 3.542 million) [59].

The positive gap between assets and liabilities with fixed interest rates decreased by Denar 1.507 million on a quarterly bases, which arises from the bigger growth of interest-sensitive liabilities (Denar 6.014 million) compared to the growth of the interest-sensitive assets (Denar 4.507 million). Thereby, the growth of interest-sensitive liabilities with fixed interest rate is mostly due to the quarterly growth of the termed deposits (Denar 5.034 million) and liabilities by sight (Denar 1.304 million), while the growth of interest-sensitive assets with fixed interest rate is mostly a result of the growth of the loans with this type of interest rate (Denar 2.973 million) as well as placements in the debt (primarily government) securities (Denar 1.589 million).

[58] On the side of interest sensitive assets with a variable interest rate, the assets by sight placed in foreign banks record a quarterly decline of Denar 2.542 million of by 28.9%.
[59] In October 2016, the National Bank in a letter recommended banks to exclude the application of unilaterally adjustable interest rates in new loan and deposit agreements with customers.

Chart 48
Average period until the next interest rates revaluation*, total (left) and by interest rate type (right)
in number of months





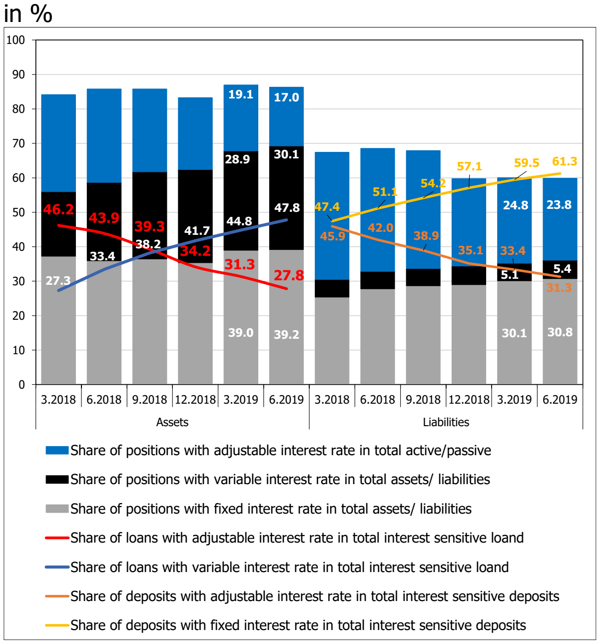
Source: National Bank, based on data submitted by banks.
*the average period till next reevaluation of the interest rates is calculated as share of the amount of the active/passive item in each of the maturity blocks in the total interest-sensitive assets/ liabilities, multiplied by maturity ofeach maturity block, expressed in months. In items with fixed interest rate, the average period till next reevaluation refers to the average remain-ing maturity period.

The decline in the gap between interest-sensitive assets and liabilities where the time period until the next reevaluation of the interest rate is up to one year by Denar 6.675 million is a result of positions (items) with fixed interest rates (Denar 4.778 million) and with adjustable interest rate (Denar 3.006 million). At the same time, the gap between active and passive positions where the time period until the next interest rate reevaluation is over one year increased by Denar 6.642 million, which was present in the positions (items) with variable (Denar 6.061 million) and fixed interest rate (Denar 3.271 million).

The indirect exposure to the risk of rising interest rates, arising from the presence of loans with adjustable and variable interest rates is significant. At the end of second quarter of 2019, the total share of these loans to total loans amounted 75.6% with 47.8% of total loans having variable interest rate, and 27.8% having an adjustable[60] interest rate. The significant representation of variable interest rates (including the adjustable ones), especially in the household credit agreements, emphasizes the importance of banks' indirect credit risk, amid upward shift in interest rates.

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

Chart 49 Assets and liabilities structure, by type of interest rate
in %



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

[60] The downward tendency in the share of positions with adjustable interest rate continued in the second quarter of 2019, both in the interest sensitive assets and liabilities.

5. Insolvency risk

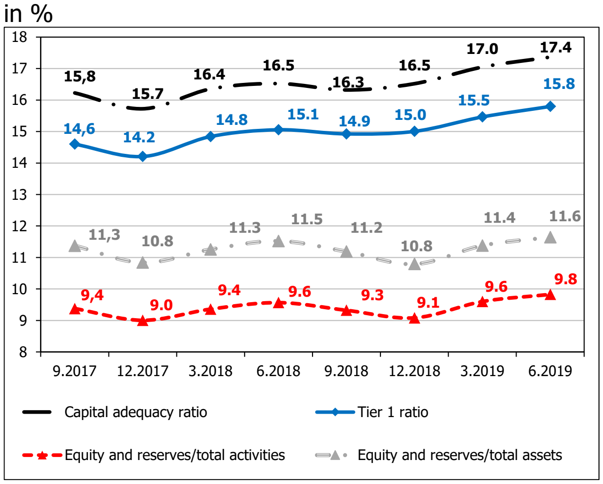
Solvency and capitalization ratios of the banking system improved in the second quarter of 2019 due to the growth of capital positions, mostly reinvestment of income from the previous year. The risk-weighted assets also featured quarterly growth, mainly due to increased lending activity of banks to households, but also to non-financial corporations. Banks use most of the quarterly increase in the own funds to raise the excess capital above the minimum level necessary to cover the risks, whose share in own funds increased to 12.1%. The result of the stress-test simulations as of 30 June 2019 show further strengthening of the banking system resilience compared to the end of the previous quarter.

1.1. Solvency and capitalization ratios of the banking system and risk level of the activities

The solvency and capitalization ratios of the banking system continued to increase gradually in the second quarter of 2019, which on a quarterly basis ranges between 0.2 and 0.3 percentage points. This improvement is due to the continuous quarterly growth rates in capital items[61], compared to the growth of activities[62] of banking system. The banks' activities featured more dynamic quarterly increase compared to the previous quarter due to the increased credit activities of the banks. The capital items also featured accelerated increase in the second quarter of the year, due to the accumulated profit, issuance of shares for profits reinvestment and increase in subordinated loans.

As of 30.6.2019, the capital adequacy ratio of the banking system equaled 17.4%, which is by 0.4 percentage points higher compared to 31.3.2019. Both, the tier 1 and the cet 1 ratio featured similar increase on quarterly basis, which on 30 June 2019 reached a level of 15.8% and 15.7%, respectively. The banks are obliged to calculate the leverage ratio (as a ratio between the core capital and the total on- and off-balance sheet exposure) semi-annually, which for the first half of

Chart 50
Solvency ratios
in %



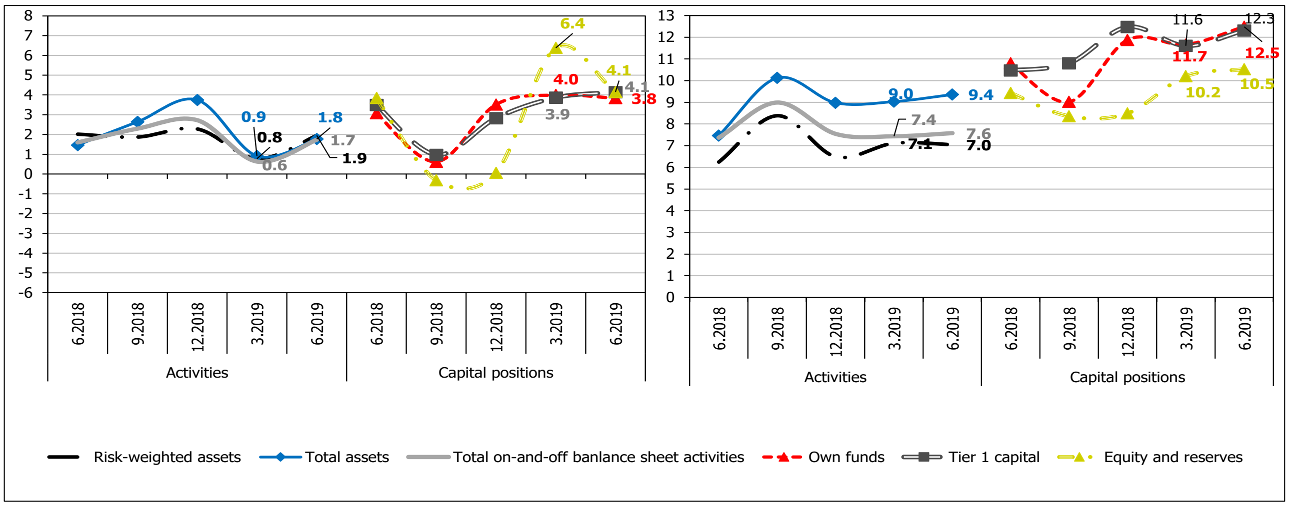
Source: National Bank, based on data submitted by banks.

[61] Capital and reserves, the equity and own funds increased quarterly by 4.2+1% and 3.8a%, respectively.
[62] The assets, total on-balance and off-balance activities and the pondered assets by risk, increased quarterly by 1.8%, 1.7% and 1.9%, respectively. The quarterly growth of assets pondered by risks was mostly due to the growth of assets pondered by credit risk, which increased by 0.9%.

2019 amounted 10.8%[63] (and for the second half of the year 10.5%).

At the same time, the ratios between capital and reserves and the total assets, i.e. the total activities of the banking system increased by 0.3 and 0.2 percentage points, respectively, and on 30 June 2019 they reached 11.6% and 9.8%, respectively.

Chart 51
Growth of components of solvency ratios, quarterly (left) and annually (right)
in % in %



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

In the second quarter of 2019 the ratio between the assets weighted by credit risk and total on-balance sheet and off-balance sheet exposure increased, reaching 54.6% on 30 June 2019. This is mostly due to the increase of items with weight of riskiness of 150% due to growth of small loans portfolio (by Denar 4.138 million or by 1.8%). Also, there was a significant increase of items with weight of riskiness of 100% (receivables from other companies) by Denar 3.613 million (or by 3.2%). The items with lowest credit risk (weight of riskiness of 0%) achieved the biggest growth of Dinar 7.589 million, or by 5.0%, due to the growth of banks' assets placed at the National Bank and the placement of government securities[64].

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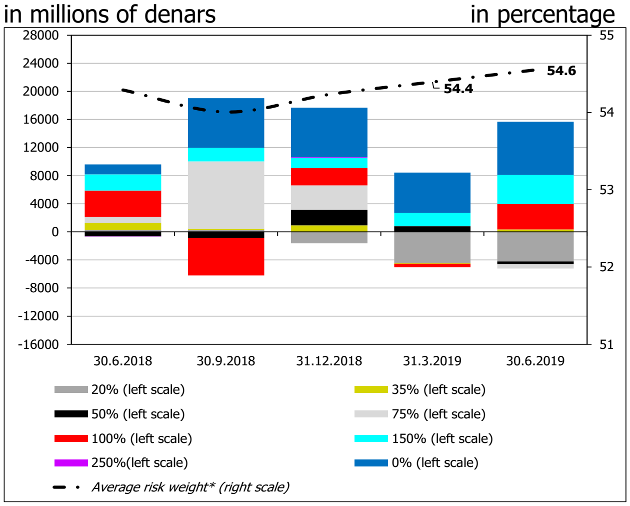
[63] According to the Basel standards for the indebtedness rate, the minimal value of this indicator should not exceed 3%, but in RNM this limit has not been specified yet.
[64] More details in the section on liquidity risk of this report.

Chart 52

Quarterly changes in the total on-balance sheet and off-balance sheet exposure, by risk weights

in millions of denars in percentage

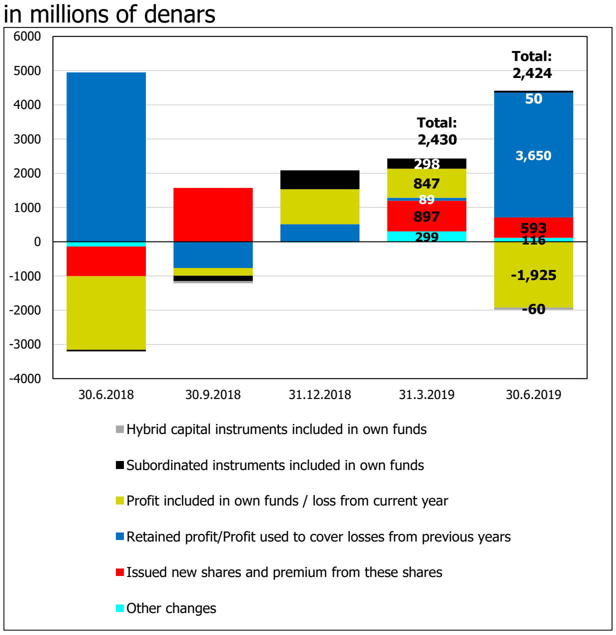


Source: National Bank, based on data submitted by banks.

Chart 53

Structure of the quarterly growth of own funds

in millions of denars



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

1.2. Dynamics and structure of the own funds of the banking system

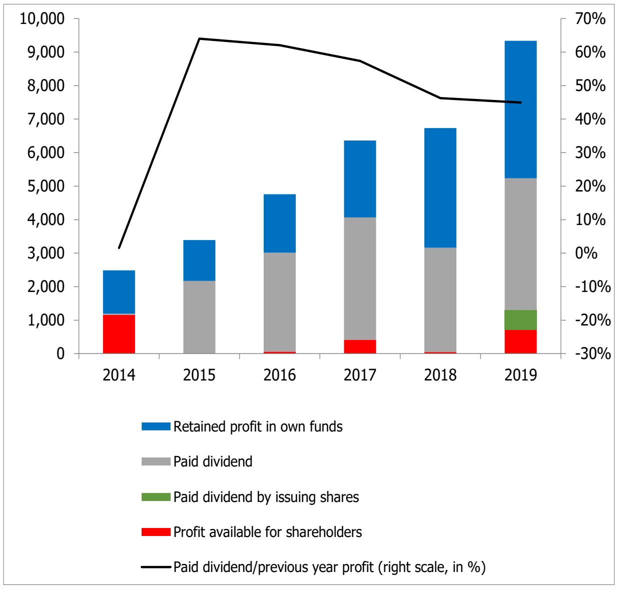
The structure of own funds in the banking system shows that Macedonian banks own a high-quality capital positions (items) which provides significant resilience to potential stress scenarios. In the second quarter of 2019, the own funds of the banking system went up by Denar 2,424 million, or 3.8%. The issuance of ordinary shares by a large bank[65] and retention of (part of) the profits in the banks' own funds mostly contributed to the quarterly increase of core capital of the banking system by Denar 2.434 million or by 4.3%. On 30 June 2019, the core capital of the banking system i.e. the most quality layer of the banking system's own funds participates with 90.5% in the total own assets (90.1% on 31March 2019). The additional capital of the banking system has also increased by Denar 50 million or by 0.8% as a result of used subordinated loan by a medium bank from its dominant shareholder.

Single events in 2018 which contributed to increase of the banking system's profit, enabled the amount of the dividend (paid off and forfeited obligation for its payment) from the profits in 2018 to be higher by Denar 1.406 million or by 45.1% compared to the previous year[66]. However, a significant number of banks (eight of the fourteen banks which operated with the profit in 2018), fully retained the profit in capital items (same as last year), while five banks decided to pay off part of the profit as a dividend (whereby two banks recorded a decreased amount of dividend compared to 2017), while one bank paid

[65] It is about reinvestment of profits by issuing ordinary shares.

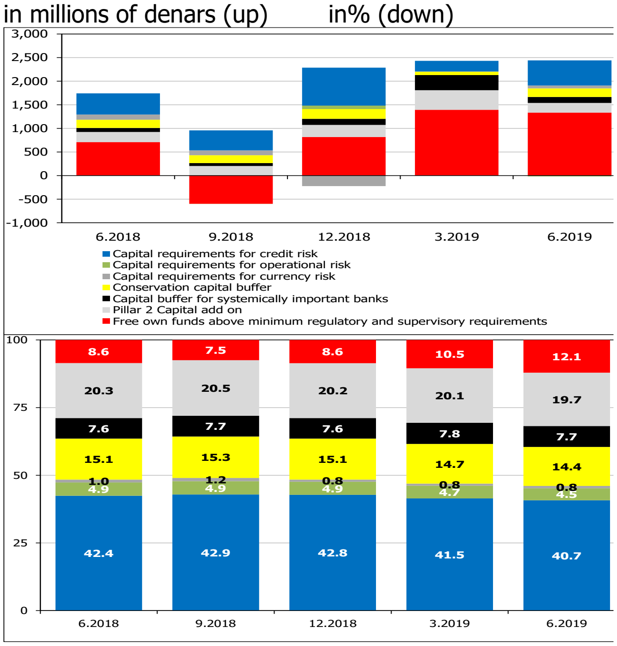
[66] The decision on methodology for determining the maximum amount of profit distribution, sets forth the method of determining the maximum amount that a bank which doesn't meet the total amount of capital buffers can distribute. Pursuant to the amendments of the Banking Law from October 2016, in addition to the capital adequacy requirements, determined with the National Bank Regulation or with the corrective measures undertaken by the National Bank, banks are also required to maintain an appropriate amount of capital to cover the so-called capital buffers. The prescribed capital buffers can only be met with positions of the Common Equity tier 1 capital (CET1) which are not used for covering capital adequacy requirements, defined with the National Bank's regulation or with the National Bank's corrective measures. The bank which will not meet the amount of capital buffers with highest quality capital instruments, is limited in the part of the profits it can pay to its shareholders. Of the four capital buffers provided by the Banking Law, all banks have the obligation to comply with the capital buffer to protect the capital, while banks identified as significant for the system are obliged to meet the appropriate capital buffer rate for banks significant for the system.

Chart 54
Distribution of previous year profit
in millions of denars



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

Chart 55
Quarterly growth (up) and structure (down) of own funds, by the requirement for covering risks and for maintaining the required capital buffers
in millions of denars (up) in% (down)



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

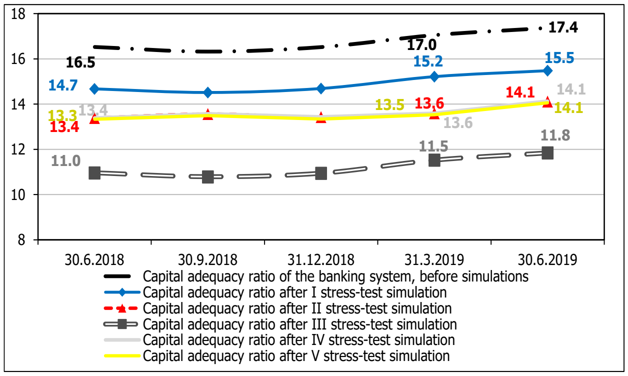
off. Therefore, the profit remains a very significant (if not the most important) source for increase of the banks' capital positions (items). 53.1% of the banks' profits in 2018 are intended for dividend payment. The reinvested profits in banks' own assets (with a limited distribution to shareholders) amounts 46.9% of the profits in 2018 and is higher by Denar 530 million, or 14.8% compared to last year. The part of the profits in 2018 retained by banks in capital items for distribution to shareholders is also higher (by Denar 524 million compared to last year).

The increase of the capital items enabled the "surplus" of the own assets to exceed the required level for covering all requirements by Denar 1.333 million or by 20.2% and on 30 June 2019 participated with 12.1% in total own assets of the banking system. As of 30.6.2019, capital requirement for covering risks increased quarterly by Denar 577 million or 1.9%. Therefore, the capital requirement for covering credit risk increased by Denar 532 million or by 2.0% which relates to increased credit activity of banks to households. The capital allowance determined by the supervisory assessment featured a quarterly increase by Denar 205 million or by 1.6% and minimally reduced the share of total own assets to 19.7%[67]. On the other hand, the capital buffer of banks significant for the system increased by Denar 129 million (or by 2.6%), on a quarterly basis, and on 30 June 2019 participates with 7.7% in own total assets[68].

[67] Pursuant to the Decision on the manner of conducting supervision and inspection (Official Gazette of the Republic of Macedonia No. 58/18), at least annually, no later than 15 December the current year, persons authorized by the National Bank shall evaluate the minimum required levels of capital at banks, referring to the coming year, based on the determined overall risk profile of banks.
[68] Pursuant to the Decision on the methodology for identifying systemically important banks ("Official Gazette of the Republic of Macedonia" no. 26/17), no later than 30 April of each year, the National Bank identifies the systemically important banks and determines the capital buffer rates that are to be maintained by these banks. Systemically important banks are required to comply with the prescribed capital buffer rates for systemically important banks by 31 March next year.

Chart 56 Stress-test simulation results

in %



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

*Stress testing includes the following simulations:

I simulation: Increasing the non-performing credit exposure to nonfinancial entities by 50%;

II simulation: Increasing the non-performing credit exposure to nonfinancial entities by 80%;

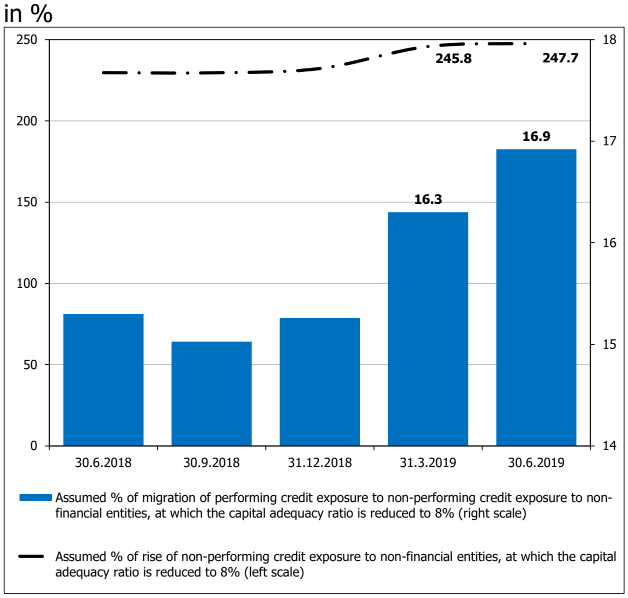
III simulation: Migration of 10% of the regular to a non-performing credit exposure to non-financial entities;

IV simulation: Increasing the non-performing credit exposure to nonfinancial entities by 80% and increase in interest rates from 1 to 5 pp.;

V simulation: Increasing the non-performing credit exposure to non-financial entities by 80%, depreciation of the Denar exchange rate by 30%, and increase in interest rates from 1 to 5 pp.

Chart 57 Necessary deterioration of the quality of credit exposure for the capital adequacy of the banking system to drop to 8%

in %



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

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.

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

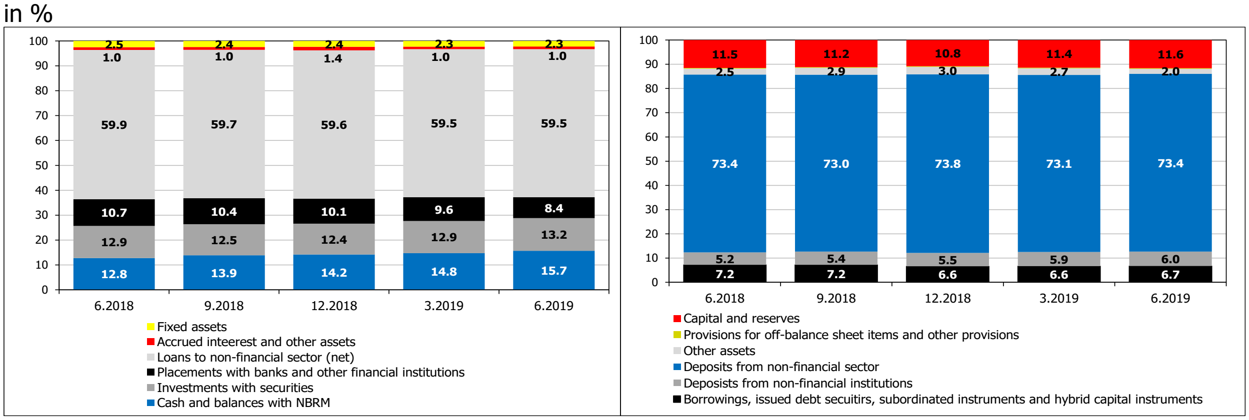
Conducted testing of the resilience of the banking system and of individual banks to simulated shocks indicates better results compared to the first quarter of 2019. The capital adequacy of the banking system does not go below 8%, in none of the simulations. This is a result of the higher capital adequacy of the banking system prior the simulations, but also of the less pronounced sensitivity of some banks to the assumed shocks. Hypothetical shocks on the part of the credit risk had the greatest impact on the stability of the banking system. Reversed stress testing shows that the capital adequacy of the banking system would drop below 8% only if the non-performing credit exposure to non-financial entities rises by 247.7%, i.e. in case of migration of 16.9% from regular to non-performing credit exposure. Also, amid assumed growth of non-performing credit exposure to non-financial corporations rises by 297.0%, i.e. in case of migration of 19.6% from regular to non-performing credit exposure, the capital adequacy ratio of the banking system would drop to 4.5%.

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

1. Bank activities

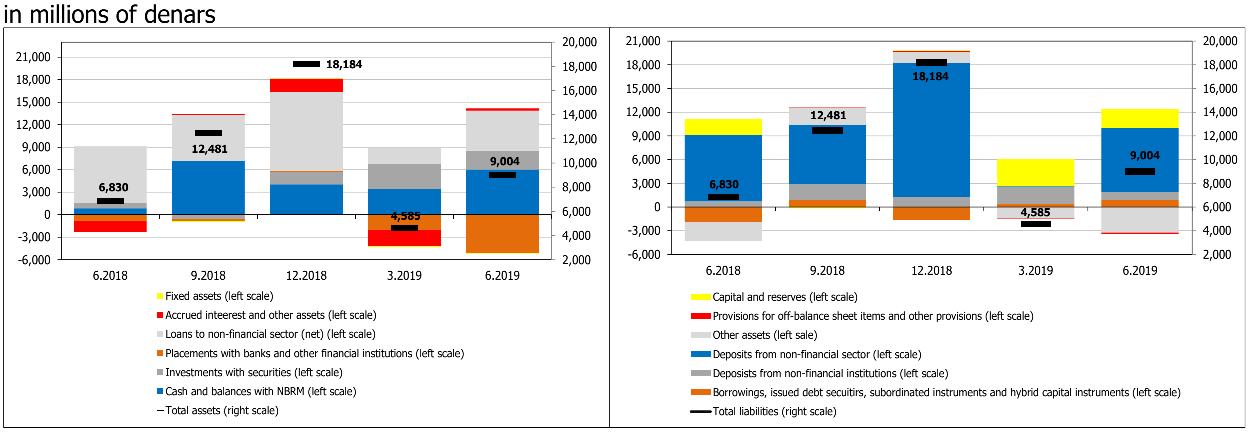
During the second quarter the total activities of the banking system continued to increase at an accelerated pace compared to the previous quarter. The growth of banks' assets stems mostly from the accelerated deposit growth which was used to enhance lending and increase liquid assets. The increased credit activity is still due to the higher level of loans to households, which in the second quarter explain 92% of the growth in total loans to non-financial entities. There was also an increase in the corporate sector loans, after the mild decrease in the previous quarter, but this growth lags behind the usual quarterly dynamics for this part of the year. The structure of financing sources shows further strengthening of the trend of "denarization" of deposits, whose growth in the second quarter was entirely led by the growth of denar deposits, amid mild decrease of foreign currency deposits. The capital position of banks continued to strengthen during the second quarter, also recording a growth in deposits and loans in financial institutions.

Chart 58 Structure of the assets (left) and liabilities (right) of the banking system
in %



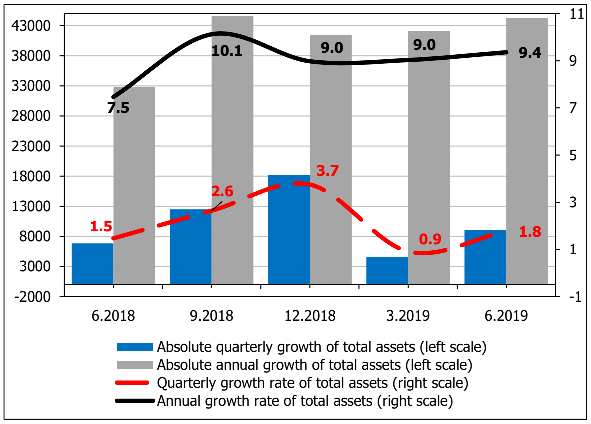
Source: National Bank, based on data submitted by banks.

Chart 59 Quarterly growth of components of assets (left) and liabilities (right) of the banking system
in millions of denars



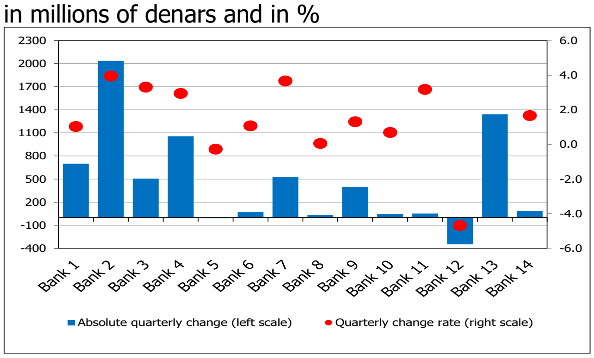
Source: National Bank, based on data submitted by banks.
Note: The loans are presented on a net basis, reduced by impairment.

Chart 60
Assets of the banking system
in millions of denars and in %



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

Chart 61
Quarterly growth of the total lending to non-financial entities, by bank
in millions of denars and in %



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

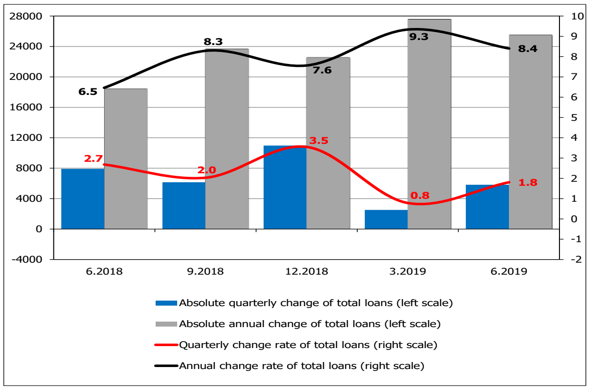
As of 30.6.2019, total assets of the banking system was Denar 517,057 million, which is an quarterly increase of Denar 9,004 million, or 1.8%. The quarterly growth of the assets is higher compared to the growth in the previous quarter (0.9%) also compared to the same period last year (1.5%). Within the assets, the placements of liquid financial instruments on domestic market increased mostly (primarily, the overnight deposits available in the National Bank) and investments in government long-term securities (primarily in treasury bills and Macedonian Eurobonds issued on foreign markets) partly due to redirecting part of the assets from foreign banks in these profitable liquid instruments. The credit activity of banks to non-financial entities increased at an accelerated pace compared to the performances in the previous quarter, which led to increase of the loan contribution to growth of the assets in the banking system.

Speaking of liabilities, the largest growth was registered among deposit activities of banks to non-financial entities, after a minimal growth in the first quarter of the year mainly due to the season factors. The capital position of the banking sector continued to strengthen during the second quarter, which along with the increase of deposits and loans to financial institutions, provided additional contribution to growth of the funding sources of domestic banks. Thereby, the quarterly decrease of other funding sources is a result of the decision by several banks to pay off part of the profits as a dividend, while one bank reinvested the profits by issuing ordinary shares.

2.1. Loans to non-financial corporations

Chart 62 Growth of loans to non-financial entities

in millions of denars and in %



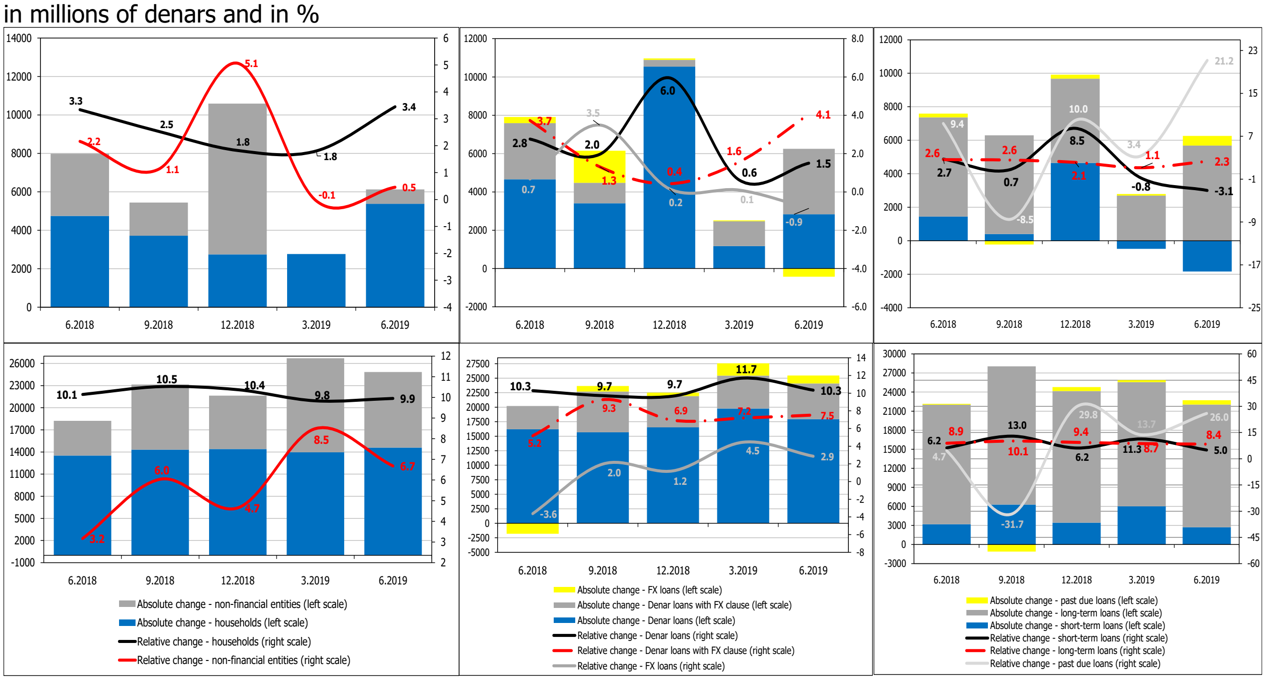
Source: National Bank, based on data submitted by banks.

In the second quarter of 2019, loans to non-financial corporations recorded a faster growth and on 30.6.2019 reached Denar 328,422 million. Loans to non-financial corporations[69] increased by Denar 5,824 million, or by 1.8% (compared to the growth 0.8% in the first quarter of 2019). Analyzed by bank, three banks from the group of large banks contributed almost 65% to the total quarterly growth of loans to non-financial corporations. On an annual basis, the increase of crediting has slowed down amounting Denar 25.457 million, or 8.4% compared to 9.3% on 31 March 2019.

Chart 63

Quarterly (up) and annual (down) growth of loans, by sector, currency and maturity

in millions of denars and in %

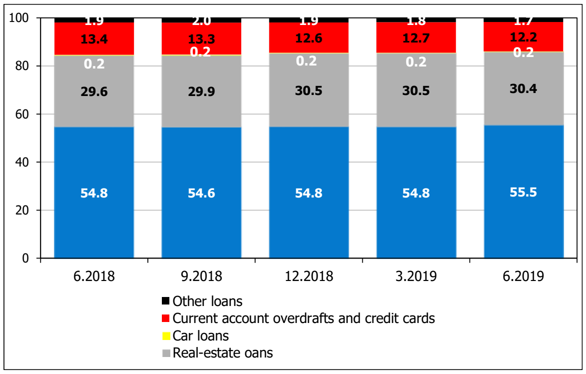


Source: National Bank, based on data submitted by banks.

The quarterly growth of credit activity was largely due to the increased credit

[69] Loans to non-financial entities include loans to resident and non-resident non-financial entities, including loans to private and public non-financial companies, central government, local government, non-profit institutions serving households (loans to other clients), sole proprietors and natural persons (loans to households).

Chart 64
Structure of loans to natural persons, by product
in %

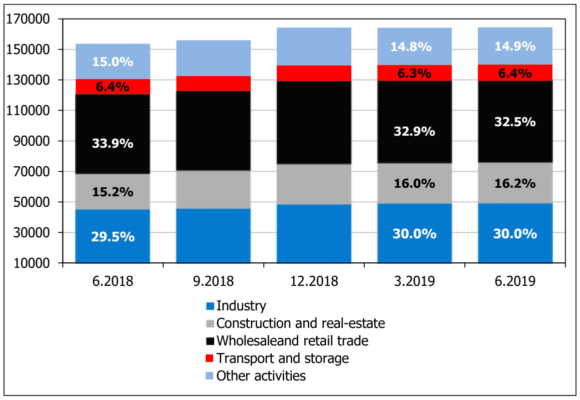


Source: National Bank, based on data submitted by banks.

support to households, while crediting to corporate clients increased moderately. The loans to households in the second quarter of 2019 increased by Denar 5.379 million or 3.4%, which is almost double the growth in the first quarter of the year (1.8%). This contributed to minimal acceleration of the annual growth of loans to households up to 9.9% in the second quarter (9.8%, as of 31 March 2019). In fact, for a longer period the credit growth has been a reflection of crediting to households, whose growth averages about 10% annually (for the period 31 December 2013 -30 June 2019). This is mainly explained by the stronger supply of loans to this sector given the lower inherent credit risk of the "household" sector, and consequently with net facilitating of total credit conditions (which continued in the second quarter of 2019 with more pronounced pace compared to the previous quarter, especially in terms of housing loans). Competition of other banks remains a factor which mostly facilitates the approval conditions of both consumer and housing loans, with a positive contribution from expectations on overall economic activity. In the second quarter of 2019, the demand for household loans increased, which is mostly pronounced in consumer loans. The most contributing factor that influences the demand for consumer loans and contributes to its increase is the factor "consumer confidence". In the area of housing loans, the increase of demand is primarily due to the improved assessments on "housing market prospects" and "consumer confidence" and a continuous positive contribution from the factor "population savings"[70].

[70] Source: Bank Lending Survey, second quarter 2019.

Chart 65
Structure of loans to non-financial corporations, by activity
In amounts and in % as shown in the data labels



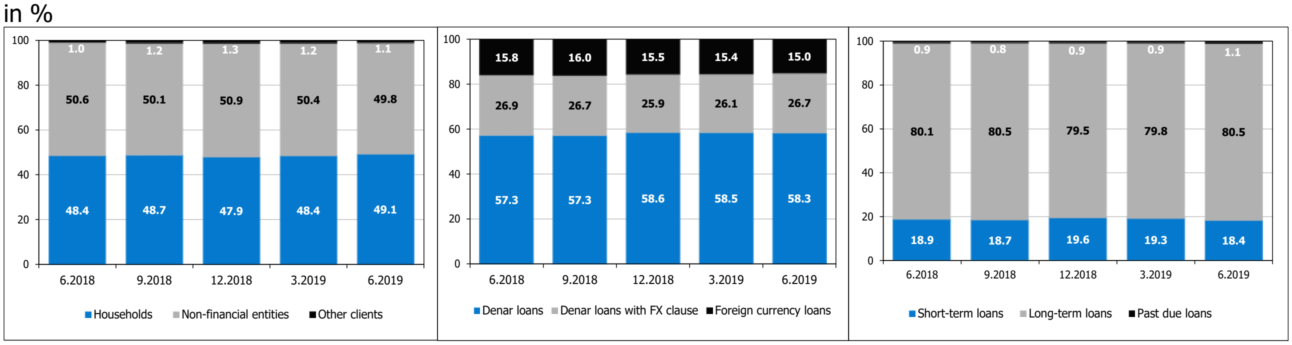
Source: National Bank's Credit Registry, based on data submitted by banks.

The quarterly growth rates of housing and consumer loans amounted 2.9% and 4.9%, respectively, which is an acceleration of growth compared to the first quarter of 2019.

The credit support to non-financial corporations is less stable and legs behind the regular growth of loans to corporations for the second quarter. Corporate loans registered quarterly growth of 0.55 (Denar 743 million), while they were higher by 6.7% on an annual basis, which is a slowdown compared to 31 March 2019 (8.5%). Thereby, most of the quarterly increase of corporate loans is due to growth of long-term denar loans with foreign currency clause to number of clients by one large bank.

The greater propensity to households crediting reflects in the sector structure of loans, where the shares of household and corporate loans are almost equal (49.1% and 49.8%, respectively).

Chart 66
Structure of total loans, by sector (left) and currency (middle), and structure of regular loans, by maturity (right)
in %



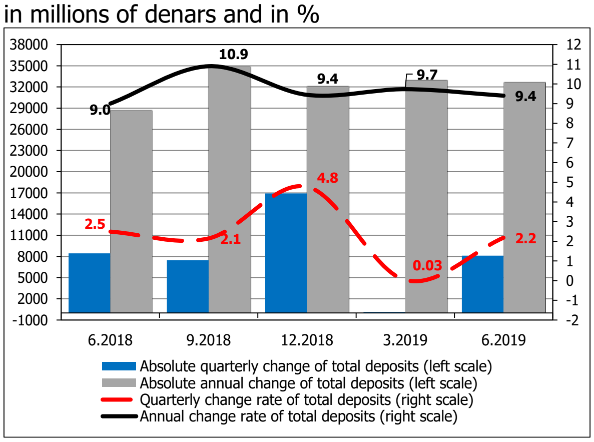
Source: National Bank, based on data submitted by banks.
*Note: In the structure of the total loans by maturity, non-performing loans are not included.

The greater propensity for household crediting is reflected towards sector structure of loans, in which the shares of household and corporate loans are almost equal (49.1% and 49.8%, respectively). In seven of the fourteen[71] banks, the share of household loans in the banks' loan portfolio is higher than the share of corporate loans. Thereby, three of the group of large banks account for almost 60% of total loans to households on a banking system. By credit product, 78% of the loans to natural persons are intended for financing the non-identified consumption by natural persons (consumer loans, overdrafts and credit cards).

Analyzed by currency, crediting in denars with foreign currency clause[72] increased significantly compared to the increase of the denar crediting[73], while the loans in foreign currency[74] registered slight quarterly decrease. The currency structure of total loans is almost unchanged compared to the previous quarter with a leading share of denar loans of 58.3%.

In terms of maturity, the main driver of credit activity growth in the second quarter of 2019 is the long-term lending, [75] whose share in the structure of total regular[76] loans reached 80.5%. Almost 90% of the growth of the long-term loans are due to the household denar loans[77]. Conversely, the decrease in short-term loans was entirely due to denar loans to non-financial corporations[78]).

Chart 67
Growth of deposits of non-financial entities
in millions of denars and in %



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

2.2. Deposits of non-financial entities

After the minimal increase in the first quarter of 2019, in the second quarter of the year, the deposits to non-financial entities featured significant increase, in which the households and corporate sector had similar contribution. At the end of June 2019, the total deposits to non-financial entities reached Denar 379.579 million.

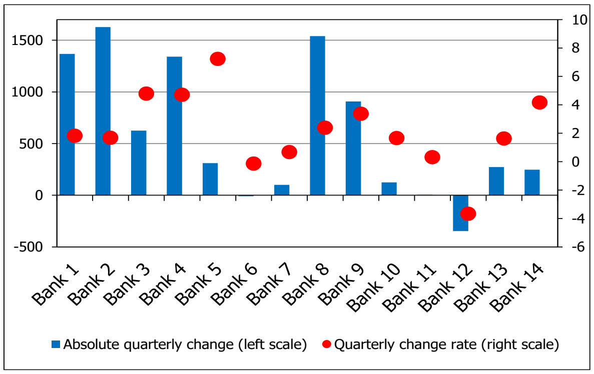
Their quarterly growth was Denar 8,116 million or 2.2% (as opposed to the stagnation in the first quarter of 2019), while the annual growth slowed moderately to Denar 32,626 million, or 9.4% (9.7% as of 31.3.2019). Analyzed by individual banks, 72.4% of the increase of deposit base is due to the increase of deposits at four

[71] The Development Bank of North Macedonia AD Skopje is excluded from this analysis.
[72] Denar loans with foreign currency clause increase by Denar 3.418 million or by 4.1%, within which the long-term loans to households increased by Denar 2.692 million (or by 4.6%).
[73] Denar loans increased quarterly by Denar 2.833 million, or 1.5%. The increase of denar loans is mostly due to the long-term loans to households (increase of Denar 2.328 million, or 3.2%).
[74] The quarterly decrease of foreign exchange loans amounted to Denar 427 million, or 0.9%.
[75] The long-term lending increased quarterly by Denar 5.682 million (2.3%).
[76] Analyzes by maturity does not include non-performing loans.
[77] Long-term loans to households registered a quarterly increase of Denar 5,086 million, which mostly resulted from the growth of denar loans to households (about Denar 2,328 million) and from the growth of denar loans with FX clause to households (Denar 2,692 million).
[78] The quarterly decrease of short-term loans amounted to Denar 1,839 million, or 3.1%. Within this, the short-term denar loans to non-financial corporations decreased quarterly by denar 1.212 million (or by 3.1%), which is mostly due to collecting receivables.

banks. Thereby, only at two of total fourteen[79] banks had a decrease of the total deposits compared to the previous quarter.

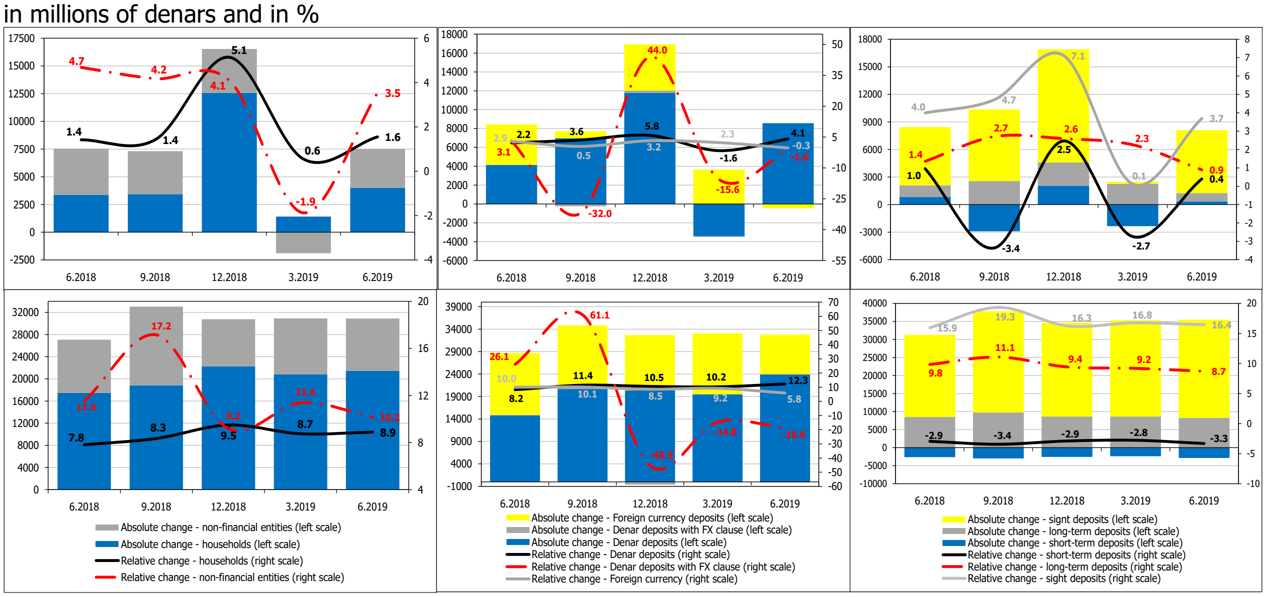
Households, as traditionally the most important depositor in the Macedonian banking system, increased their assets in banks by Denar 4,013 million, or 1.6%, in the second quarter of 2019. **Corporate deposits** increased by Denar 3,503 million or 3.5%. The annual rate (June 2019-June 2018) of corporate deposit growth (amounting 10.2% or Denar 9.461 million) is higher than the annual growth rate of household deposits (8.9% or in absolute terms Denar 21.429 million).

Chart 68
Quarterly growth of total deposits of non-financial entities, by bank
in millions of denars and in %



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

Chart 69 Quarterly (up) and annual (down) deposit growth by sector, currency and maturity
in millions of denars and in %

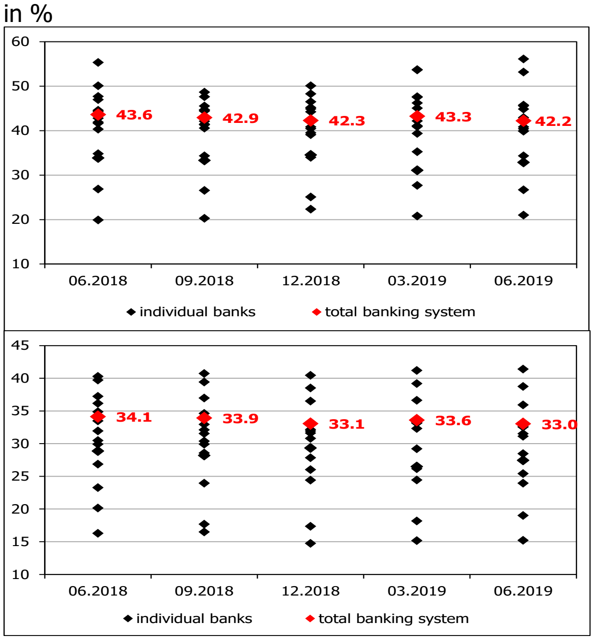


Source: National Bank, based on data submitted by banks.

The deposit denarization continued in the second quarter of 2019 as well Denar deposits entirely determined the quarterly growth of total deposits, increasing by Denar 8,562 million (or 4.1%). Deposits of non-financial corporations contributed significantly (53.8%) to the growth of denar deposits compared to the contribution of household deposits (39.8%). In both sectors the increase of denar deposits is due

[79] The Development Bank of North Macedonia AD Skopje is excluded from this analysis.

Chart 70
Share of total foreign currency deposits (up) and foreign currency household deposits (down) in total deposits of the banks/banking system
in %

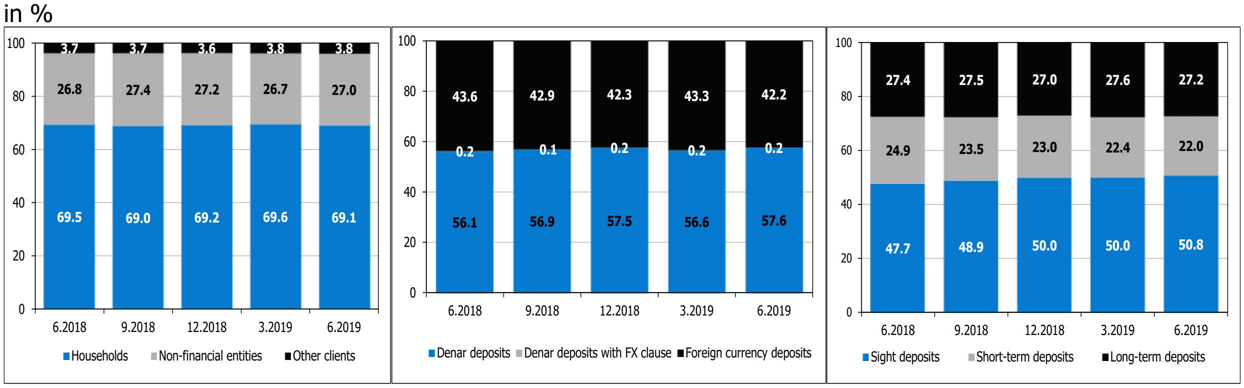


Source: National Bank, based on data submitted by banks.

to deposits by sight[80]. In contrast, the foreign currency deposits decreased (by Denar 436 million, or 0.3%), which was entirely due to deposits by sight to non-financial corporations[81]. Such developments have contributed to increase **of share of denar deposits in total deposits to non-financial entities, which at the end of the second quarter of 2019 amounted 57.6%.**

In terms of maturity, just over half of deposit base is composed of deposits of very short terms. Additionally, in the second quarter of 2019, the deposits by sight[82] mostly contributed (84.6%) to the growth of total deposit base. The termed deposits, both in long[83], term, and in short[84] term increased minimally by 0.9% and 0.4%, respectively.

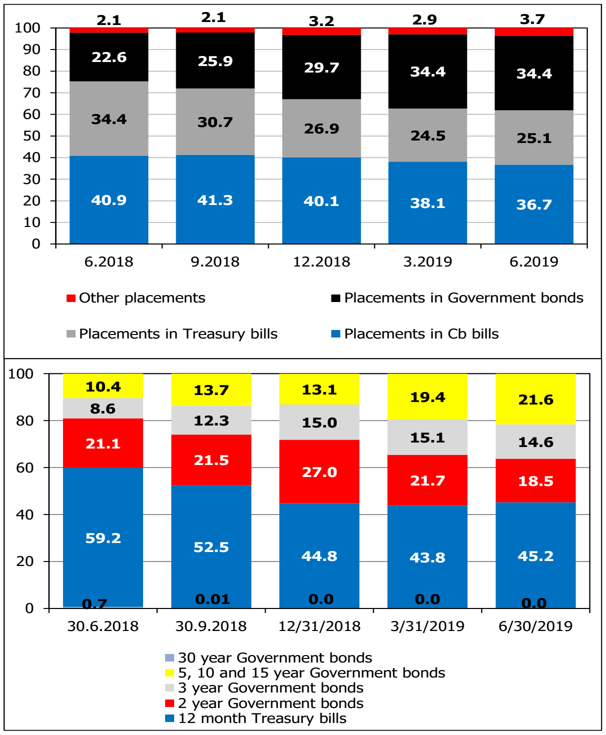
Chart 71 Structure of total deposits, by sector (left), currency (middle) and maturity (right)
in %



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

[80] The quarterly increase of denar deposits by sight to non-financial corporations and households amounted Denar 3.429 million or 6.6% and Denar 3.298 million or 6%, respectively.
[81] The quarterly decrease of foreign deposits by sight to non-financial corporations amounted Denar 1.487 million, or 6.2%.
[82] The quarterly increase of deposits by sight amounted Denar 6.869 million (or 3.7%), where the participation of denar deposits to non-financial corporations is 49.9%, while the participation of denar household deposits is 48%.
[83] The quarterly increase of long-term deposits (Denar 914 million) is a result of the increase of denar deposits to non-financial corporations (by Denar 731 million) and denar household deposits (by Denar 272 million).
[84] Short-term corporate deposits in denars increased by Denar 446 million or 5%, amid decrease in short-term denar household deposits of Denar 165 million, or 0.6%.

Chart 72
Structure of securities portfolio (up) and maturity structure of banks' investment in continuous government securities issued on the domestic market (down)
in %



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

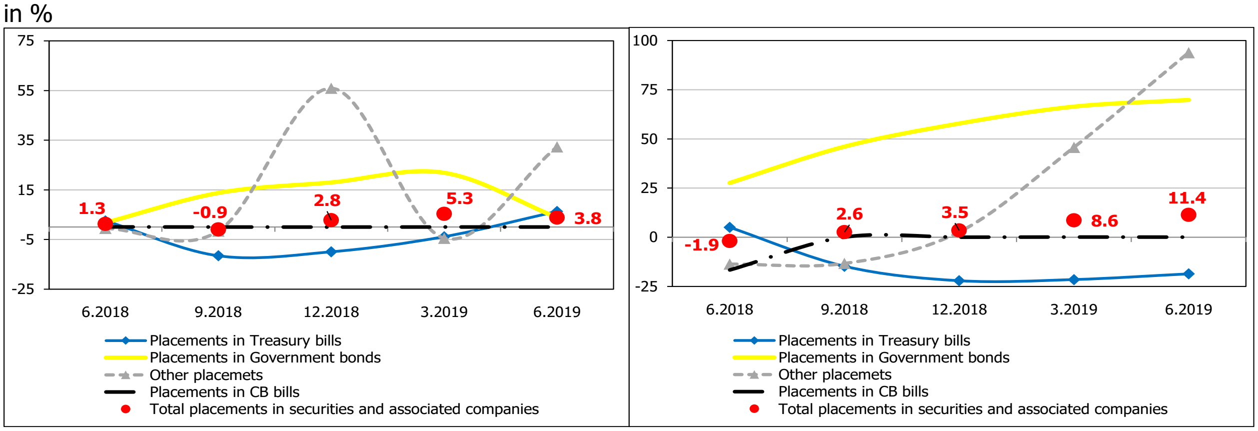
2.3. Other activities

In the second quarter of 2019, the investments of the banks in securities[85] (according to the carrying amount), increased by Denar 2.503 million (or 3.8%), which contributed to increase of their share in the total assets of banks up to 13.2% on 30 June 2019. Such developments are mostly conditioned by the growth of banks' investments in treasury bills (Denar 1.016 million, or 6.3%) and in a smaller portion by the growth of bank's placements in domestic Eurobonds issued on foreign markets (Denar 717 million, or 23.6%), in which the banks primarily invested in the first quarter of 2019[86]. The investments in CB bills remained unchanged compared to the previous quarter amid unchanged key interest rate of the National Bank (2.25%) and unchanged offer of CB bills (Denar 25.000 million). Such developments caused a quarterly increase of the investments in government securities in total portfolio of securities with banks from 24.5% on 31 March to 25.1% on 30 June 2019, while the participation of the placements in CB bills decreased (from 31.8% on 31 March 2019 to 36.7% on 30 June 2019). In the second quarter, there is a redirection of part of the assets on accounts in foreign banks into foreign corporate bonds (issued by banks), as more profitable financial instruments, which is first investment of this kind by domestic banks which contributed to the growth of rest of the investments in the portfolio of securities.

[85] Including investment in associated companies.
[86] The transition to the second stage of association between republic of Macedonia and European Community since the beginning of 2019, ceased the validity of the bylaw which disabled the domestic banks to invest in government Eurobonds.

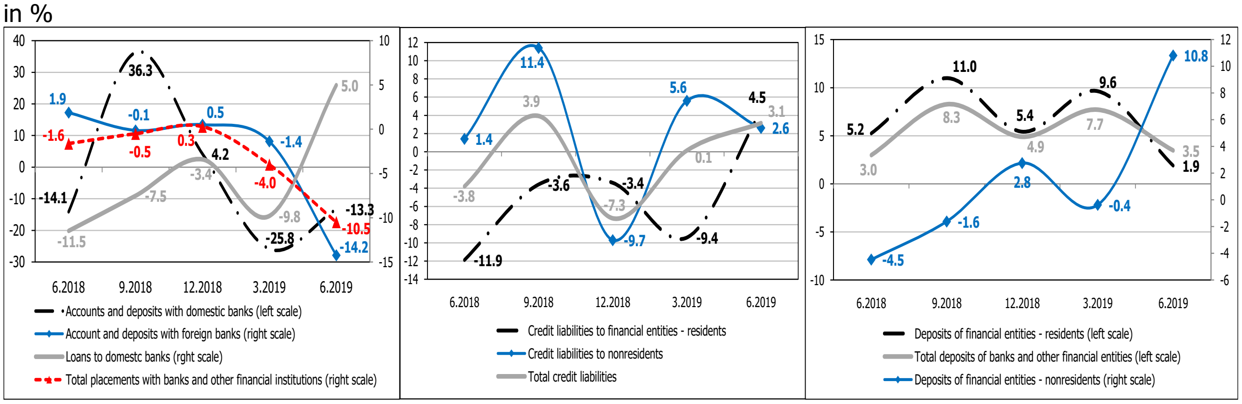
Placements with banks and other financial institutions in the second quarter of 2019 featured significant decrease (by Denar 5.103 million, or by 10.5%), which almost completely resulted from the reduced assets on current accounts[87] and short-term termed deposits in foreign banks. There was also a decrease in the short-term deposits with domestic banks in foreign currency (by Denar 215 million, or by 13.3%). In contrast, the long-term loans to domestic banks in foreign currency (placed through "RBSM" AD Skopje) increased quarterly by Denar 286 million, or by 3.5%. This adequately reflected the liabilities through the increase of liabilities in relation to long-term loans from domestic banks[88]. Thereby, the total **loan-based**

Chart 74
Quarterly (left) and annual (right) growth rate of securities portfolio
in %



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

Chart 73 Quarterly growth rate of placements with financial institutions (left), loan liabilities (middle) and deposits of financial companies (right)
in %



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

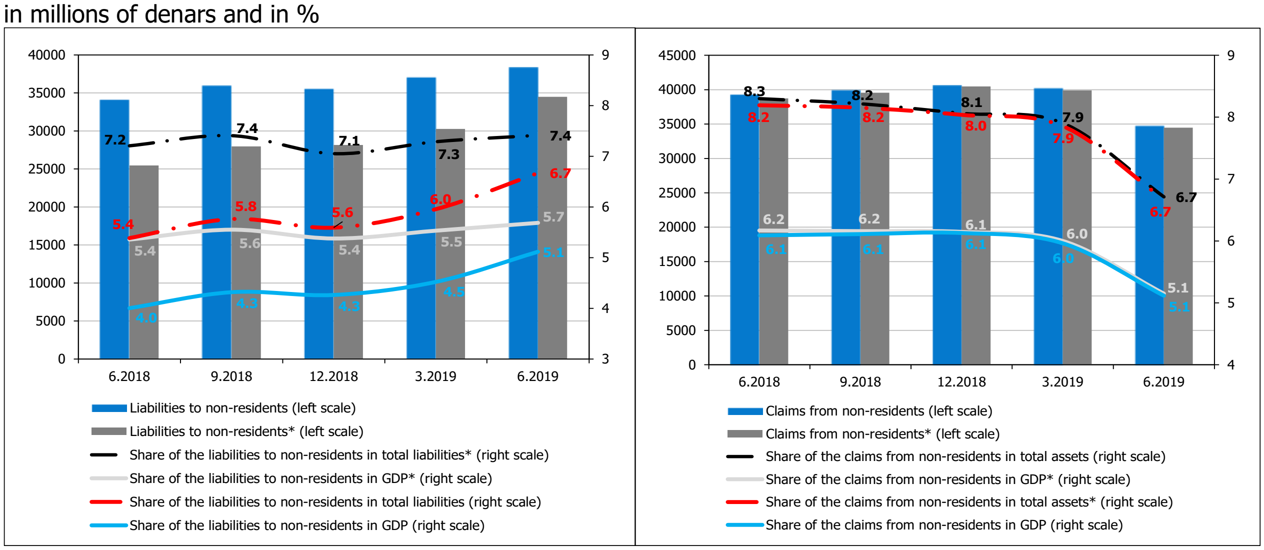
liabilities increased on quarterly basis by Denar 872 million, or by 3.1% with a contribution of the growth of liabilities related to financial corporate loans[89] (by Denar 401 million) and liabilities

[87] Assets in foreign currency on current accounts in foreign banks in the second quarter of 2019 decreased by Denar 3.306 million (or by 23.7%), which is mostly due to three large banks. The decrease of short-term termed deposits abroad in foreign currency is Denar 2.467 million (or by 18.2%).
[88] The long-term loans liabilities in foreign currency to domestic banks increased by Denar 269 million.
[89] The quarterly growth of liabilities by loans to financial corporations is due to the growth of long-term loans in foreign currency (by Denar 269 million) with one large and one medium sized bank and growth of long-term loans in denars with banks (by denar 219 million), which is entirely due to a medium sized bank.

based on loans to non-residents[90] (Denar 478 million). **The deposits form banks and other financial institutions** continue to be a very small source of funding the banks, with a participation in the total assets by 6% in the second quarter of 2019. The growth of these deposits (by Denar 1.036 million, or 3.5%) is due to the balance of current accounts in foreign currency and short-term denar deposits and the growth of short-term deposits to non-residents in foreign currency.

The banking system continues to have more liabilities than claims on non-residents[91]. However, the volume of domestic banks' activities with non-residents is still relatively insignificant. In the second quarter of 2019, the liabilities of domestic banks to non-residents featured growth of Denar 1.307 million (or 3.5%), and their share in the total liability of the banking system reached 7.4%[92]. Such increase is due to the above mentioned growth of short-term deposits to financial corporations-non-residents in foreign currency and the growth of liabilities to long-term loans in foreign currency. At the contrary, the claims of banks from non-residents significantly decreased by denar 5.452 million (or 13.6%), almost completely due to the decrease of balance on current accounts and short-term deposits in foreign banks. The share of claims on non-residents in total liabilities decreased and equaled 6.7%[93].

Chart 75
Liabilities to (left) and claims on (right) non-residents
in millions of denars and in %

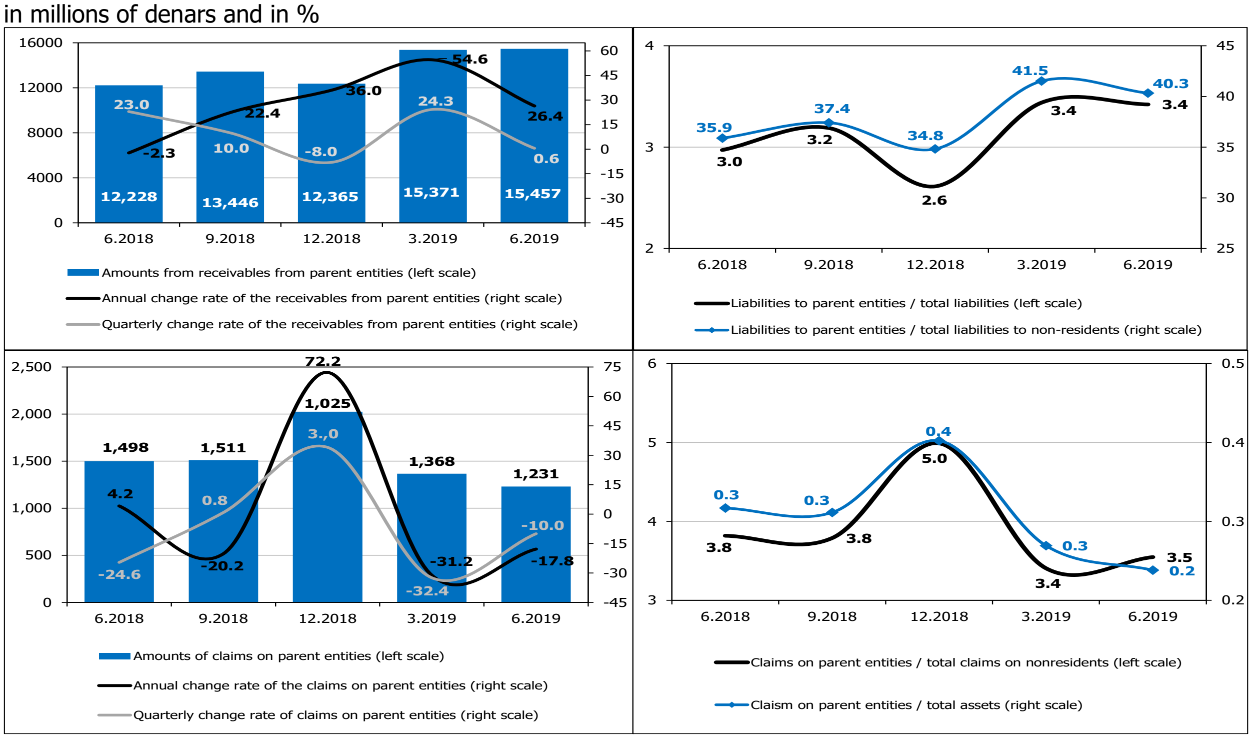


Source: National Bank, based on data submitted by banks.
* Amounts of liabilities and claims to/from non-residents do not include "RBSM" AD Skopje.

[90] The quarterly growth of liabilities based on loans to non-residents is due to the growth of long-term loans in foreign currency (by Denar 1.032 million), mostly in a large bank and in a less amount at "RBSM" AD Skopje. At the same time, there was a decrease of liabilities based on short-term loans (up to one month) in foreign currency by Denar 554 million.
[91] On 30 June 2019, nine out of total fifteen banks have a bigger loan than claims by non-residents.
[92] If we exclude "RBSM" AD Skopje from the analysis, the share of liabilities to non-residents in total liabilities amounts 6.7%. Analyzed by bank, this share ranges from 0.1% to 20.2%.
[93] Analyzed by bank, this share ranges from 1.2% to 13%

The activities of the domestic banking system do not depend on the sources of funding that originate from banks' parent[94] entities, with differences in individual banks, though. The liabilities of banks to their parent entities in the second quarter of 2019 featured a minor change, i.e. increased by Denar 85 million (or 0.6%), which is mostly due to the increase of short-term deposits by financial entities and liabilities based on subordinate instruments. Thereby, the share of banks' liabilities towards the parent entities (including the subordinated liabilities and hybrid capital instruments) in total liabilities of domestic banking system remained unchanged (3.4%)[95] compared to the previous quarter, while their share in liabilities towards the non-residents decreased and is 40.3%. The claims from the banks' parent entities are insignificant and account for only 0.2% of the total assets of the banking system, while their share in total claims from non-residents accounts 3.5%. Compared to the first quarter of 2019, the liabilities from parent entities decreased by Denar 137 million.

Chart 76
Liabilities to (up) and claims on banks' parent entities (down)
in millions of denars and in %



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

[94] The sources of banks' financing from parent entities predominantly include short-term deposits, long-term loan liabilities and liabilities based on subordinated and hybrid capital instruments.
[95] Analyzing by bank, the share of banks' liabilities to parent entities in total liabilities ranged from 0.3% to 17%.

2. Profitability[96]

In the first half of 2019, banks achieved a positive financial result from their operations which is lower compared to the same period in the previous year. The reduced financial result mainly reflects the exhaustion of effects by one-off factors[97] which caused high profit growth in the first half of 2018. Consequently, the profitability and efficiency indicators on monitoring the banking sector decreased, but still maintain at an appropriate level. Net interest income as the driving component of total banks' income, which, in the first six months of 2019, continued to decrease moderately, given the low interest rates, and higher deposit growth compared to banks' lending activity. Thus, the challenge remains for banks to generate positive growth rates of net interest income or expand their sources of income through diversification of banking activities, but also to reduce operating costs in order to ensure sustainable profitability of the banking sector in the medium and long term.

1.1. Profitability and efficiency indicators of the banking system

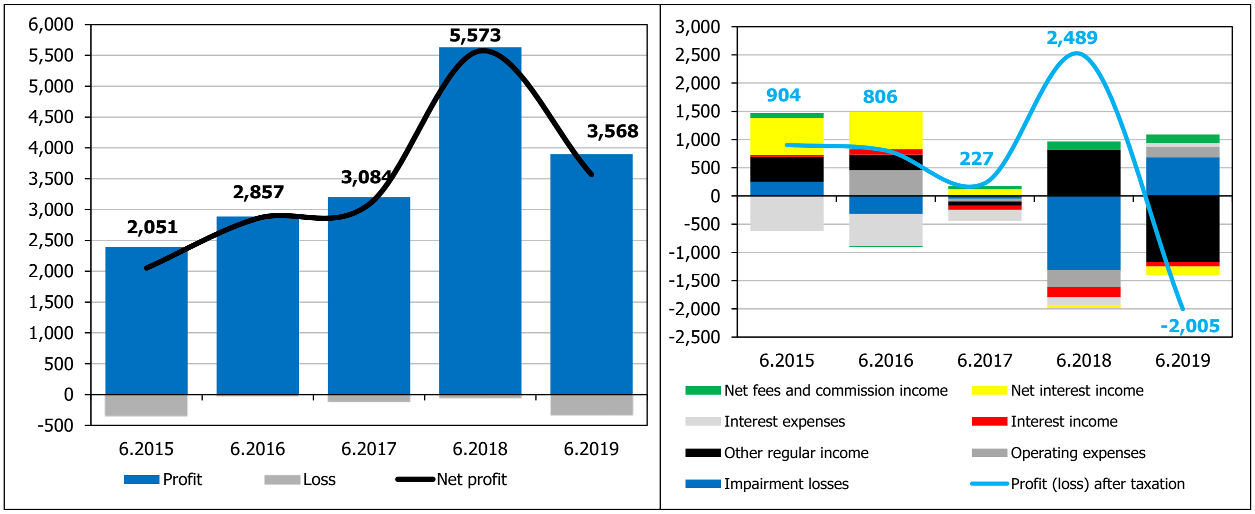
The trend of achieving positive financial results by the banks, continued in the first half of 2019, when the profit reached Denar 3.6 billion. Compared to the same period last year the profit is lower by 36%, which mainly reflects the exhaustion of effects of one-off events within the first three months of 2018, which caused high growth of profits in this period by increased collection of non-functional receivables and sale of equity stake by one bank. The impact of one-off factors towards profitability in 2018 was achieved by reducing the costs for impairment and increasing other regular operating revenue. These two categories had opposite movements, after exhaustion of effects in the first half of 2019, i.e. contributed to decrease of the profit. **If we exclude the effects of these factors the decline in the financial result would be significantly lower amounting 12.4%.** The lower level of other regular income (after excluding one-off effects) also contributed to profit decline, primarily due to the higher comparative basis from the previous year[98], continuing with the reduction of the net interest revenue that banks generate from traditional financial mediation with the households and corporate sector. The net commissions revenue continued to grow, at a similar rates as in the first half of the previous year and completely covered the impact of the lower net interest revenue. Analyzed by groups of banks, all of them realized a positive financial result from their operations, but unlike the small banks which significantly improved their profitability, with the large banks profitability declined mainly as an effect of the exhaustion of one-off factors. The profitability decrease was also observed among medium-sized banks.

[96] All data in this section of the Report, derived from the banks' income statement (income, expenses, profit, loss, etc.) relate to the first six months of 2019, and their value is compared with the same period last year or another year. Data derived from the balance sheet (assets, loans, deposits, capital, etc.) or those related to the lending and deposit interest rates in this section are presented as an average for the first six months of 2019 and such calculated average is compared with the average calculated for the first six months of 2018 or any other year. If data are presented on a different basis, other than the above-mentioned, it will be specified in the text.

[97] In the first quarter of 2018, a number of non-performing claims on a large corporation was collected by several banks and capital gains were generated from the sale of equity stake. Occasional events.

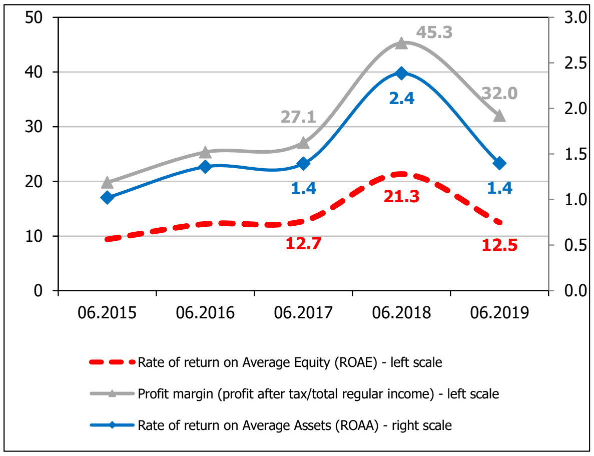
[98] In the first half of 2018, despite the realized capital gains from the capital investment sales, the sales of forfeited property also contributed to the growth of other regular income.

Chart 78
Net profit after taxation (left) and annual change in the main income and expenses (right)
in millions of denars



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

Chart 77
Rates of return on average assets and on average equity and reserves and profit margin
in %

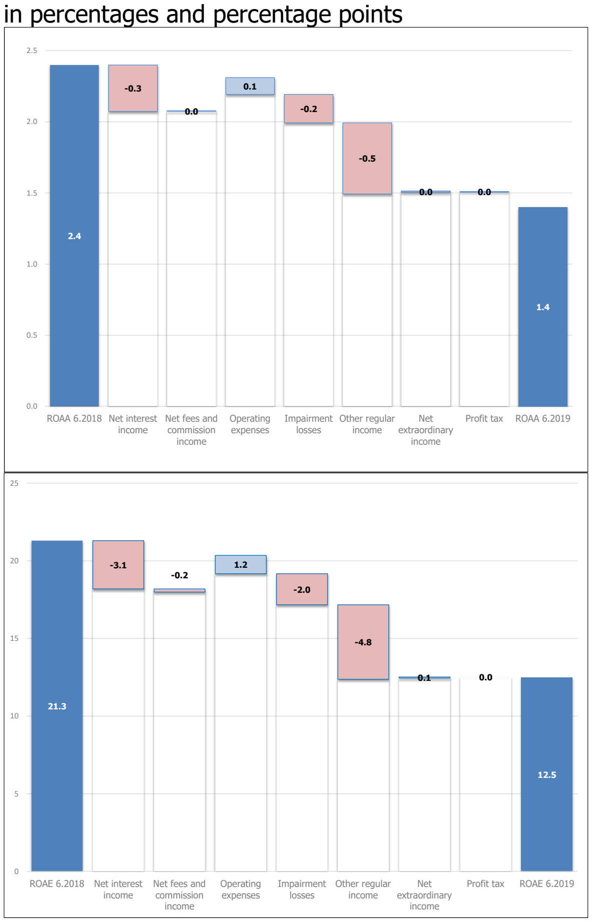


Source: National Bank, based on data submitted by banks.

The decline in profit, compared to the last year, contributed to a decrease of basic profitability indicators. The return rates on average assets (ROAA) and average equity and reserves (ROAE)[99], as well as the profit margin of the banking system decreased significantly compared to the same period last year. If the effect of the one-off events in the first quarter of 2018 is isolated, the profitability indicators would decrease again, but with a more moderate[100] decline. Profitability and efficiency indicators of the banking system and individual bank groups are presented in Annexes to this Report.

[99]Average assets and average equity and reserves are calculated as averages of the balance of assets i.e. equity and reserves as of the analyzed date and as of 31 December of the previous year.
[100] If we isolate the effect of one-off factors in the first quarter of 2018, the rate of return of average assets as of 30 June 2018 would be 1.7%(1.4% on 30 June 2019), the rate of return of average equity and reserves from the same date would be 15.6% (12.5 on 30 June 2019), while the profit margin would be 34.1% (32% on 30 June 2019).)

Chart 79
Decomposition of the return rates on average assets and average equity and reserves
in percentages and percentage points

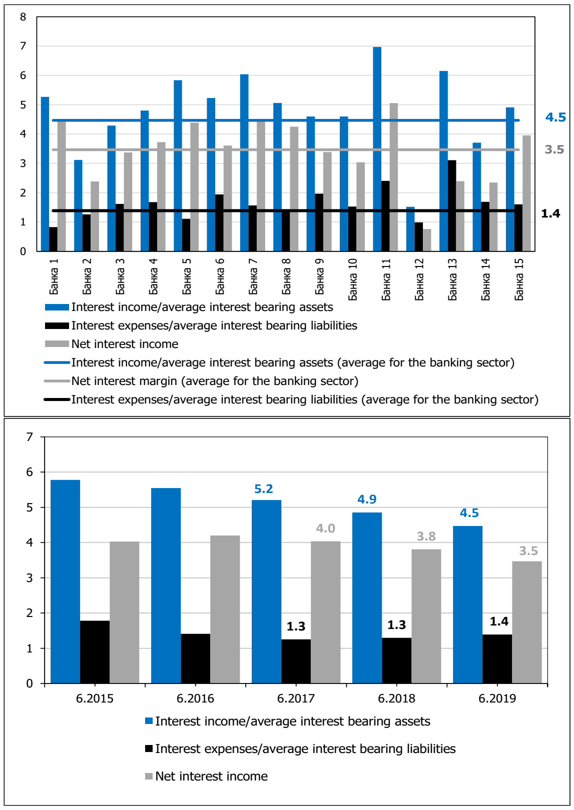


Source: National Bank, based on data submitted by banks.
Note: The chart shows the changes in individual components of profitability expressed as a share in average assets i.e. average equity and reserves. The light blue and red bars indicate a positive and negative contribution to the growth of ROAA/ROAE, respectively, in percentage points. ROAA and ROAE are expressed in percentages.

Amid historically lowest interest rates, a downward correction of the net interest margin is expected, realized by the banks from interest bearing activities. However, besides the continuous narrowing tendency, still, the net interest margin maintains at a solid level of 3.5%, emphasizing the capacity of the domestic banks to generate income from financial intermediation. The analysis of the movement of net interest margin, shows its decrease by 0.3 percentage points compared to the rate in the first half of the previous 2018. The decrease of the interest margin is a reflection of the reduced net interest revenues (by 1.9% or by Denar 148 million), amid simultaneous increase of the average level of the interest bearing assets (by 7.7% or by Denar 30.879 million[101]). The decline of the net interest revenues is due to the further decrease of interest revenues (by Denar 84 million, or by 0.9%[102]), amid simultaneous increase of interest expenditures (by Denar 64 million or by 3.0%[103]) compared to the first half of 2018. As usual, the credit and deposit activity with households [104] had the largest contribution in creating the net interest margin, where only this sector, besides the non-residents[105], realized a positive contribution in generating the net interest margin. On the other hand, the revenues from financial corporations decreased continuously during the first half of 2019 (by Denar 118 million or by 19.5%) which is mainly due to lower interest revenues from the central bank, in conditions when in March 2019, the National Bank cut its key interest rate by 0.25 percentage points to a level of 2.25%. The decline in interest revenues from credit activities with non-financial corporations continued (by Denar 80 million or by 2.3% on annual basis), yet it is

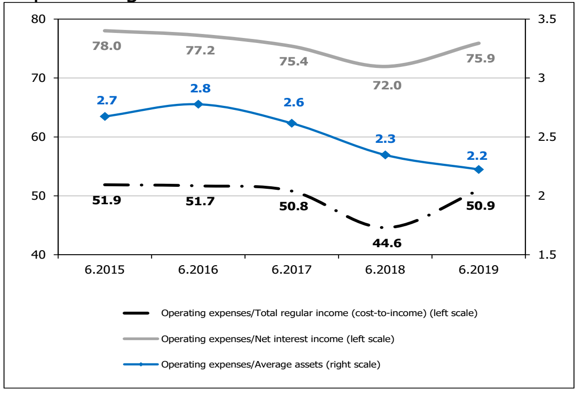
[101] In comparison, as of 30 June 2018, the average interest rate assets increased by Denar 19.820 million or by 5.2%.
[102] In comparison, as of 30 June 2018, the interest revenues decreased by Denar 183 million or by 1.9%.
[103] In comparison, as of 30 June 2018, the interest expenses decreased by denar 133 million or by 6%.
[104] The net interest revenue from households in the first half of 2019, increased by denar 190 million or by 5.2%, due to the increase of interest revenues (denar 170 million or by 3.6%) and decrease of interest expenses (Denar 19 million or by 1.8%).
[105]The interest revenues from non-residents in the first half of 2019 increased by 63% or by Denar 67 million, opposite the insignificant growth of interest expenses by 1.9% or by denar 6.6 million, which led to narrowing the negative gap between interest revenues and expenses by non-residents and positively contributed to increase of net interest margin. However, the activities with non-residents are a very small part of the total activities of the banking system.

Chart 80
Net interest margin per specific bank, as on 30.6.2019 (above)* and net interest margin on the level of the banking system (below)
in %



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

Chart 81
Operational efficiency indicators
In percentages



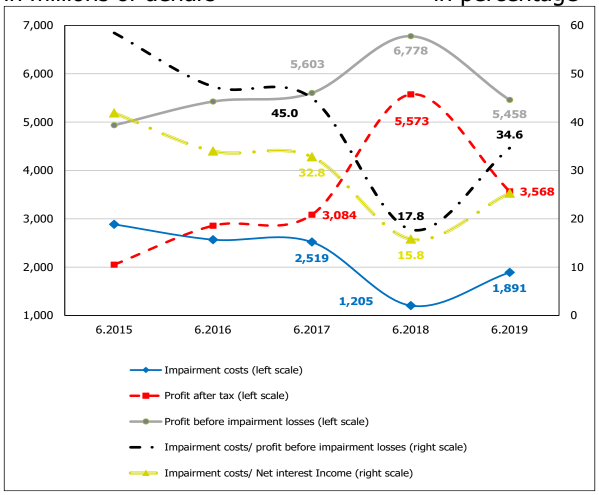
Source: National Bank, using data provided by the banks.

moderate compared to the same period last year[106]in conditions when the credit activity of the banks to non-financial corporations strengthened compared to the first half of 2018[107].Such movements highlight the importance of banks' credit activity for maintaining stable net interest income. On the expenditure side, the banks achieved higher interest expenditures in almost all sectors[108], except "households". The interest expenditures on household continue to decline, but at a significantly slower pace[109], amid slower decline of the deposit interests recently.

The increase in operating costs by denar 188.7 million or by 3.4% amid a decrease of interest revenues and other regular revenues leads to a **deterioration of the operational efficiency of the banking system** as reflected by the amount of the relevant indicators. The only indicator showing improvement is the indicator of operating costs coverage to total average assets (asset) [110], which is due to the rapid growth of the average assets (9.2%), compared to the growth of operating costs (3.4%) in the analyzed period. The increase in operating costs is mainly due to the growth of costs for employees (by Denar 127.5 million, or by 5.2%) and general administrative

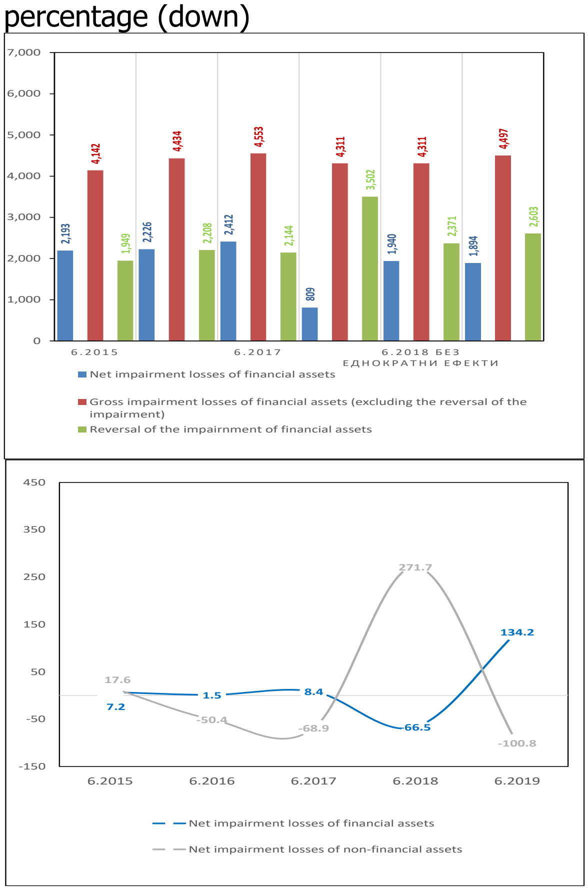
[106]In the first half of 2018, interest income from non-financial corporations was lower by Denar 268 million, or 7%, on an annual basis.
[107]In the first half of 2019, banks' total loans to non-financial corporations grew at an annual average rate of 7.4% (or average absolute change of Denar 11.126 million), compared to the same period last year when the average growth rate was halved and equaled 3.1% (or average growth of Denar 4.486 million).
[108] The largest absolute increase was by the interest expenses to financial corporations (by 14.1% or by Denar 55 million), followed by expenses on interest towards the state (by denar 12.5 million) and expenses towards non-financial corporations (by denar 7.6 million or by 3.1%).
[109] In the first half of 2019, the interest expenses from households on annual basis decreased by denar 19 million, or by 1.85, compared to the same period from the previous year when the annual decrease amounted denar 81.7 million or 7%.
[110] The average assets is calculated as average from the assets amount on 30 June the current year and 31 December the previous year.

Chart 82
Impairment costs to gain and to net interest income ratio
in millions of denars in percentage



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

Chart 83
Amount of impairment costs of financial and non-financial assets in millions of denars (up) and annual growth rates of impairment costs of financial and non-financial assets in percentage (down)



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

costs (by Denar 113.3 million or by 6.1%), while rest of the operating costs declined.

The total revenues from regular operations[111] of banks feature downward correction by Denar 1.160 million or by 9.4%, mostly as a result of the decline of other regular revenues, reflecting the high comparative basis from the first half of 2018[112].

The trend of impairment of financial assets in the first half of 2019 was affected by the one-off events from the first quarter of 2018, when due to a recovery of a high amount of non-performing receivables by several banks a high amount of the impairment was released. The exhaustion of the effects by these factors contributed to increase of net impairment of financial assets in the first six months of 2019 by Denar 1.085 million or by 134.2%, compared to the same period last year. By excluding the one-off effects, the net impairment of financial assets is lower by Denar 46 million or by 2.4%.

On the other hand, net expenditure for impairment of non-financial assets in the first half of 2019 decreased by significant Denar 399 million or by 100.8%, which is mainly due to the higher amount of impairment release of these assets due to a sales of a forfeited property[113]. At the same time, the lower new impairment of non-financial assets contributed to the reduction of these expenditures.

Cumulatively, the total impairment expenditures (financial and non-financial assets) increased by Denar 685 million or by 56.9%. If we isolate the effect of the one-off events from the first quarter of 2018, the total impairment expenditure would decrease by 19.1% or by Denar 446 million.

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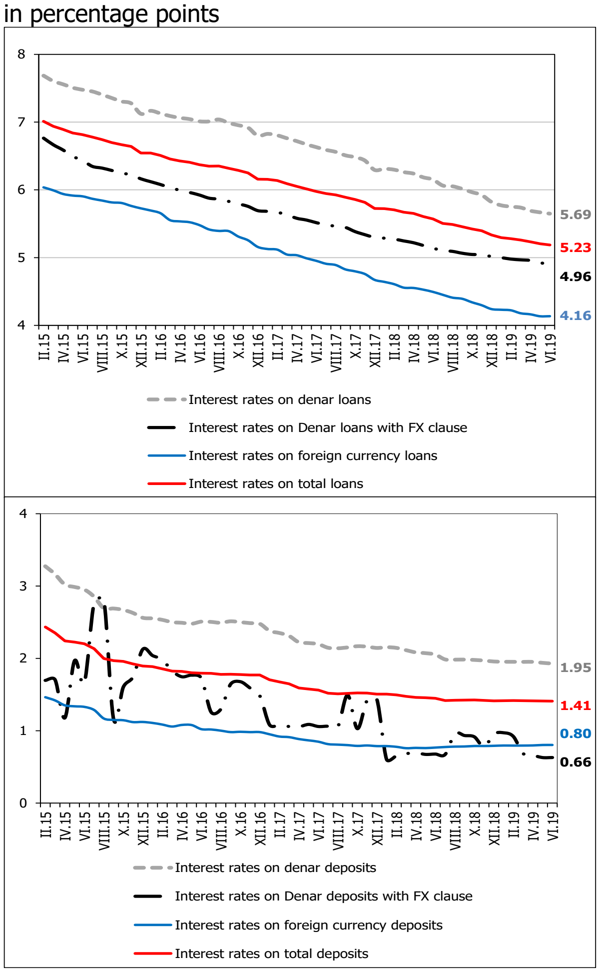
[111] Total income from regular operations include net interest income, net income from commissions and other regular income.
[112] In the first half of 2018 there was a capital gain from the sales of capital investment and sales of foreclosed property by a bank which contributed to the growth of other regular revenues.
[113] In the first half of 2019, the average foreclosed property was decreased by 24.0% or by Denar 1.210 million compared to the same period the previous year.

Chart 84 Active (above) and passive interest rates (below)
in percentage points



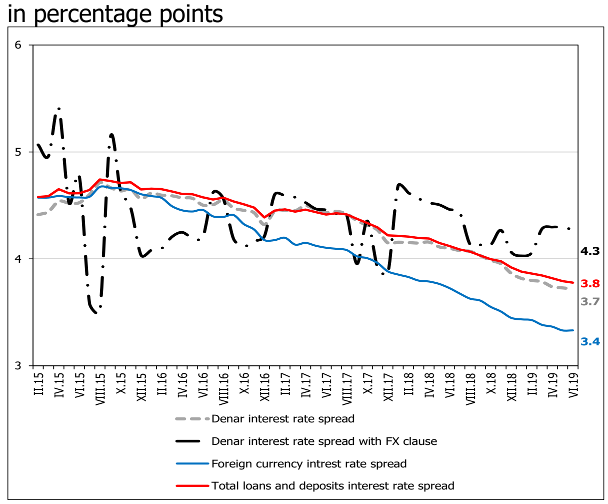
Source: National Bank, based on data submitted by banks.

3.1 Movements in interest rates and interest rate spread

The downward trend in banks' interest rates continues in the first half of 2019, which is more pronounced in the interest rates of loans[114]. Thus, at the end of June 2019, the total active interest rate of banks (denar and foreign currency loans) decreased by 0.4 percentage points compared to June 2018 and amounted 5.2%. The total passive interest rate (denar and foreign deposits) remained almost unchanged (decrease by 0.04 percentage points) and amounted 1.4%.[115]

Amid further more intensive decrease of active versus to passive interest rates, **at the end of June 2019 the spread between active and passive interest rates was 3.8% percentage points and decreased by 0.3 percentage points compared to the end of the second quarter of the previous year.**

Chart 85 Interest rate spreads
in percentage points



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

[114] The analysis refers to the weighted interest rates of the banks according to the National Banks' interest rate Statistics. Weighted interest rate is the ratio between the sum of the products between ACR and individual amounts of each loan/deposit agreement, and the sum of the individual amounts of each loan/deposit agreement (Interest rate statistics, Methodological explanations, July 2018; for more details visit https://www.nbrm.mk/content/statistika/Monetarna%20statistika/metodologija/Metodologija_MIR_07_2018_mak.pdf).

[115] The interest rate analysis shows that the average weighted active and passive interest rates of banks in the first half of 2019 decreased on average by 0.4 and 0.1 percentage points, respectively, compared to the same period in 2018. The average weighted active interest rate in the period January-June 2019 averages 5.2% (5.7% for the first six months of 2018) while the average weighted passive interest rate is 1.4% (1.5 for the first six months of 2018). The average spread between active and passive interest rates for the period January-June 2019 is 3.8 percentage points and is decreased by 0.4 percentage points compared to same period last year amid more intensive decrease of active versus passive interest rates.

ANNEXES