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 MACEDONIA IN THE THIRD QUARTER OF 2020

December 2020

CONTENTS:

Summary

In the third quarter of 2020, the banking system maintained its stability and resilience to shocks, in conditions of prolonged and still unpredictable health crisis. The negative effects of this crisis have no significant impact on the banking system stability, although the economic activity is still in the negative zone (in the third quarter, the annual rate of the economic decline equaled -3.3%). In such crisis conditions, the already built strong capital and liquidity positions of banks are especially important for maintaining the public confidence in the banking system. The National Bank's quick response is also very important, with the measures taken in the first weeks of the crisis outbreak which mitigated the consequences of the unexpected shock. In the third quarter of 2020, a slight decrease in certain segments of the banking activities, primarily corporate lending and household deposits, which probably reflects the higher uncertainty and negative effects of the health and economic crisis. This is also supported by the results of the latest Bank Lending Survey, which indicate certain net tightening of credit standards in the third quarter of 2020, amid net reduction of demand for loans. Hence, the spillover of the negative effects from the health crisis on the economy and consequently on the banking system, can be expected in the following period to a certain extent, with a possible impact on the scope of activities and on total banks' income.

In the third quarter of 2020, the number of banks in the banking system of the Republic of North Macedonia decreased by one. Namely, in August 2020, the National Bank revoked the license of Eurostandard Bank AD Skopje, due to failure to fulfill minimum legal conditions for bank's operations. The bank's market share in certain categories of the banking system's balance sheet range between 1% and 2% and hence, the closure of the bank had no significant transfer effects on other banks in the system.

The banking system solvency indicators remained at a similar level as in the previous quarter. Amid faster quarterly growth of activities, relative to own funds of the banking system, the capital adequacy ratio slightly decreased by 0.1 percentage point, to 16.9%. Over 90% of the own funds account for the Common Equity Tier I capital, which represents the highest-quality segment of the banks' regulatory capital. Analyzing the use, more than half of own funds (52.7%) account for capital supplements determined according to the supervisory assessment, the capital buffers or are "free", above the necessary minimum and altogether can be used for easier coping with negative effects of certain crisis episodes.

Indicators of liquidity of the banking system improved. Thus, the shares of the liquid assets in the total assets, in household deposits and short-term liabilities with liquid assets quarterly increased by 0.4, 1.7 and 0.5 percentage points, respectively and as of 30.9.2020 amounted to solid 29.9%, 58.9% and 50.3%, respectively. The placements in government securities and short-term assets with foreign banks made the greatest contribution to the increase in liquid assets, in conditions of further growth of deposits of non-financial entities and solid quarterly increase in the profits of the banking system. Deposits of non-financial entities increased quarterly, by 0.4%, which was entirely resulted from the growth in deposits of non-financial corporation, amid slight decline in household deposits. To maintain the deposit activity of the banking system at a stable level in times of crisis, in addition to the maintained confidence of the public in the banking system, the economic measures of the government for dealing with the COVID-19 crisis are very important, which cover liquidity support to companies and households,

in order to maintain the liquidity of companies and to support the purchasing power of households.

The measures taken by the National Bank in the first half of the year were aimed at creating liquidity in the banking system, which is used to provide support to the Macedonian economy, mainly through the maintenance of credit flows and the credit cycle by banks. The lending activity of the banking sector registered a slight decline of 0.1% in the third quarter of the year. If data is corrected for the effect of revoking the operating license of this bank, loans to non-financial entities would grow quarterly by 1.6%, which is entirely due to the increased lending to households, amid decline in corporate loans. When analyzing the credit growth, it should be born in mind that around 45% of loans to non-financial sector were under moratorium during the third quarter of 2020. In this period, clients do not pay their loan installments, which certainly affects total loans and their dynamics. On the other hand, banks still invest in government-issued securities, yet at a rather slower pace. Thus, in the third quarter of 2020, placements with the government increased by 7.6% (19.3% in the second quarter of the year), increasing their share in total assets of the banking system to 12.2% (compared to 11.5% as of 30.6.2020).

In the third quarter of 2020, the indicators of credit risk materialization improved, although their further growth is possible given the current crisis. Non-performing loans decreased by 26.9%, reducing their share in total loans by 1.3 percentage points, to a level of 3.4%. The sector-by-sector analysis shows that the decline in non-performing loans was more prevalent in corporate loans (-31.2%), and was also registered in household loans (-14.1%). Consequently, the share of non-performing loans to companies reduced to 5.4%, while the share of non-performing to total household loans decreased to the level of 1.6%. The decrease of non-performing loans is still influenced by the regulatory measure for mandatory write-off of fully provisioned non-performing loans, but in this quarter it largely results from the exit of one bank from the banking system. The dynamics of the non-performing loans was also affected by the National Bank regulatory measures in March and April 2020, which facilitated the banks' credit risk management, in the period when more pronounced effects of the pandemic were expected. Given the time character of these measures, as well as the uncertainty around the duration of the consequences caused by the coronavirus, non-performing loans are expected to grow in the following period. Already in October 2020, banks started to apply the common rules for acquiring non-performing loan status (delay in repayment longer than 90 days or default). The amount of loans where the delay in repayment ranges between 90 and 150 days (which according to the amendments to the regulations were temporarily allowed not to have a non-performing status, if they were regularly paid before the COVID-19 crisis) is relatively small and already in October, most banks decided to give them a status of non-performing credit exposure, instead of using a gradual monthly pace (in the period until 31.12.2020), as prescribed in the amendments to the regulation. Greater credit risk materialization may be expected from loans with approved grace period due to COVID-19, which should be paid regularly after the expiry of the grace period. In part of these loans, the grace period expired at the end of September, so the possible credit risk materialization may be expected by the end of the year. On the other hand, in September 2020, amid prolonged duration of the pandemics, new change in the contractual conditions of loans was made, but only for the clients that are most affected by the crisis. The second change in the contractual conditions, since September 2020, is with a lesser extent and mostly referred to approving additional grace period, in loan repayment (which usually lasts until March 2021), thus the possible credit risk materialization in this part of the loans portfolio may be expected in 2021.

Thus, as of 30 September a second change in the contractual conditions was approved for only 7.8% of total performing loans to non-financial entities.

The banking system's exposure to currency risk and interest rate risk in the banking book remained relatively low and as of 30.9.2020 accounted for 3.4% and 7.5% of own funds, respectively. The open currency position of the banking system declined quarterly due to the higher growth of liabilities with currency component relative to the growth of assets with currency component, mostly as a result of higher liabilities bases on foreign currency loans and increase in currency positions of non-financial entities, primarily households. The weighted value of the banking book, as a measure for interest rate risk exposure, grew quarterly, mostly due to the widening of the total gap with variable interest rate primarily as a result of increased placements in loans with this type of interest rate, which register loan redistribution, from blocks with shorter time period (up to 1 month) to blocks with longer time period until the next interest rate reassessment (from 3 to 6 months).

In the first nine months of 2020, the domestic banking system reported slightly higher operating profit (by 2.1%), compared to the same period last year. Analyzed by structure, the growth in the financial result is mostly due to the increase of the capital gain realized from the sale of takeover assets, as well as due to realized profits from collection of written-off claims. The decrease of operating costs, as well as the growth of net interest income, albeit relatively small, had a certain impact on the profit growth. Moreover, growth of impairment costs of financial and non-financial assets is registered, as well as decrease of income from commission and fees (affected by the health crisis, the banks cut the commissions for part of their services, mostly those related to e-banking). The modest profit growth was not sufficient to improve the rates of return of average assets and average capital and reserves, which are lower compared to the previous year and reduced to the levels of 1.4% and 12.3%, respectively. Possible credit risk materialization in the following period will increase the impairment costs in the banks' balance sheets and will consequently affect their financial result. Also, the prolonged crisis and the consequences it caused, in addition to effect on the health of citizens, it could cause further decrease in the scope of activities and subsequently in the banking system's income.

The COVID-19 pandemic creates numerous challenges for banks, their clients and in general, for all economic entities and institutions in our country. The uncertainty around its intensity and duration hamper the investment and consumer decisions of economic entities and their adjustment to the new situation becomes even harder. In such conditions, so far, the banking system manages to resist the negative effects of the pandemic, but the challenges remain.

I. Structure of the banking system

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

As of 30.9.2020, fourteen banks operate on the financial market in the Republic of North Macedonia, which is by one bank less[1] compared to the previous quarter. Consequently, the number of banks that are predominantly owned by foreign shareholders reduced (amounting to ten banks), while the number of subsidiaries of foreign banks remained unchanged (six banks). This bank's exit from the banking system caused no significant structural changes in the balance sheet of the banking system, except in the financial result, since the bank reported loss.

Table 1
Structure of major balance sheet positions, by banks' majority ownership (as of 30.9.2020)
in millions of denars and in %

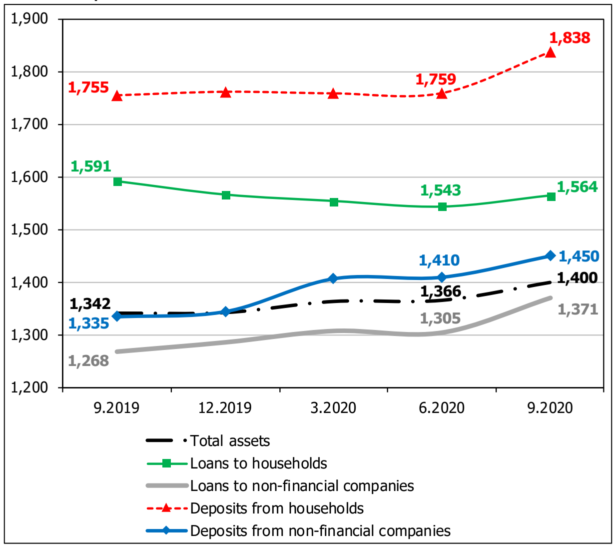
Type of ownership	Number of banks	Capital and reserves		Assets		Loans to non-financial sector		Deposits from non-financial sector		Total revenues*		Financial result*	
		Amount	In %	Amount	In %	Amount	In %	Amount	In %	Amount	In %	Amount	In %
Banks in dominant ownership of foreign shareholders	**10**	**50,736**	**74.9%**	**406,264**	**71.5%**	**280,220**	**80.4%**	**287,316**	**69.4%**	**17,420**	**73.9%**	**5,402**	**72.6%**
- subsidiaries of foreign banks	*6*	*44,691*	*66.0%*	*340,963*	*60.0%*	*231,879*	*66.5%*	*245,442*	*59.3%*	*14,922*	*63.3%*	*4,838*	*65.1%*
- Austria	2	7,921	11.7%	69,573	12.2%	50,096	14.4%	40,372	9.8%	2,611	11.1%	459	6.2%
- Bulgaria	1	1,224	1.8%	10,509	1.8%	7,179	2.1%	7,266	1.8%	379	1.6%	30	0.4%
- Greece	1	15,284	22.6%	103,790	18.3%	72,414	20.8%	83,059	20.1%	5,296	22.5%	2,029	27.3%
- Slovenia	1	11,619	17.1%	93,498	16.5%	60,574	17.4%	75,161	18.2%	4,479	19.0%	1,638	22.0%
- Turkey	1	8,643	12.8%	63,594	11.2%	41,616	11.9%	39,583	9.6%	2,156	9.1%	682	9.2%
- other banks in dominant foreign ownership	*4*	*6,044*	*8.9%*	*65,301*	*11.5%*	*48,340*	*13.9%*	*41,874*	*10.1%*	*2,498*	*10.6%*	*564*	*7.6%*
- Bulgaria	2	2,797	4.1%	26,118	4.6%	18,476	5.3%	18,212	4.4%	1,278	5.4%	379	5.1%
- Germany	1	2,700	4.0%	32,392	5.7%	25,323	7.3%	18,994	4.6%	918	3.9%	144	1.9%
- Switzerland	1	548	0.8%	6,791	1.2%	4,541	1.3%	4,668	1.1%	302	1.3%	41	0.5%
Banks in dominant ownership of domestic shareholders	**4**	**17,027**	**25.1%**	**161,910**	**28.5%**	**68,515**	**19.6%**	**126,489**	**30.6%**	**6,158**	**26.1%**	**2,034**	**27.4%**
- private ownership	*3*	*14,407*	*21.3%*	*149,578*	*26.3%*	*68,441*	*19.6%*	*126,489*	*30.6%*	*6,046*	*25.6%*	*1,998*	*26.9%*
- state ownership	*1*	*2,619*	*3.9%*	*12,332*	*2.2%*	*74*	*0.0%*	*0*	*0.0%*	*112*	*0.5%*	*36*	*0.5%*
Total:	**14**	**67,763**	**100.0%**	**568,174**	**100.0%**	**348,735**	**100.0%**	**413,805**	**100.0%**	**23,577**	**100.0%**	**7,435**	**100.0%**

Source: National Bank, based on the data submitted by banks.
*Total income and financial result are calculated for the last twelve months (30.9.2019-30.9.2020). Total income and the financial result of Eurostandard Banka AD, Skopje are not included in the calculation.

Thus, despite the smaller number of banks with predominant foreign ownership in the third quarter of 2020, these banks maintained their predominant share in the structure of major balance sheet positions of the banking system. Compared to the previous quarter the changes are minor, except in the share of banks with predominant foreign

[1] On 12 August 2020, the Governor of the National Bank adopted a decision on revoking the license for founding and operating of Eurostandard Bank AD Skopje and opening the bankruptcy proceeding. The license revocation is due to the banks' insolvency according to the Banking Law, as a result of the increased credit losses in the previous period, even before the health crisis.

Chart 1
Herfindahl index
in index points



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

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

Position	30.09.2020		30.06.2020	
	CR3	CR5	CR3	CR5
Total assets	57.6	76.5	57.1	75.7
Loans to households	59.1	77.9	58.1	76.8
Loans to non-financial companies	50.2	76.4	49.2	74.2
Deposits from households	70.9	82.3	69.4	80.3
Deposits from non-financial companies	54.7	79.1	54.1	78.4
Financial result*	73.8	87.4	97.3	112.5
Total revenues*	63.2	79.0	62.7	78.3

Source: National Bank, based on the data submitted by banks.
*Total income and financial result are calculated for the last twelve months (30.9.2019-30.09.2020).

ownership in total financial result[2], which increased by 7.9 percentage points (to the level of 72.6%). The share of banks in foreign ownership in the total loans to non-financial sector continues to be the most pronounced (80.4%).

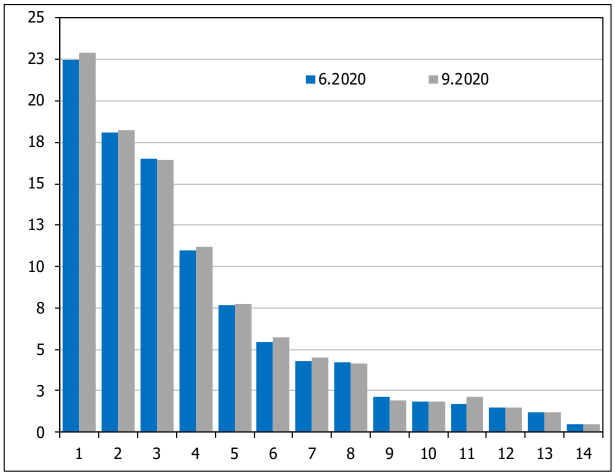
As of 30.9.2020, the concentration of banking activities increased. All values of the Herfindahl index[3] increased compared to the previous quarter. By category of activities, the concentration significantly increased in loans to non-financial corporations by 66 index points and by 79 index points in household deposits. The decrease in the number of banks by one mostly affects the increase in Herfindahl indexes, the values of which are **within the acceptable levels[4]. The exception is the index calculated for household deposits, which shows a moderately high level of concentration.**

On a quarterly basis, the indicators for the share of three and five largest banks in the banking system, registered no significant changes in individual categories of activities. The financial result indicators are an exception, according to which the share of three and five largest banks reduced significantly on a quarterly basis by 23.5 and 25.2 percentage points, respectively. The share of the three and five largest banks in total financial result decreases if we exclude the bankrupt bank from the previous, comparative date (30.6.2020), but in that case the decline in these shares would be more moderate amounting to 5.0 and 3.7 percentage points, respectively.

[2]Total income and financial result are calculated for the last twelve months (for example 30.9.2019-30.9.2020).

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

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



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

The difference in the amount of the assets between banks remains high, whereby the spread between the bank with highest share (22.9%) and the bank with the lowest share (0.5%) in total assets increased on a quarterly basis, by 0.5 percentage points. Nine banks have individual market shares lower than 6% (their joint market share is 23.5%). Six banks registered individual increase in the market share according to total assets, one bank recorded a decrease, while market shares of other banks remained almost the same.

II. Bank risks

1. Credit risk

The credit risk materialization decreased in the third quarter of 2020, which was observed through the lower level of non-performing loans. The decrease in non-performing loans partly results from the mandatory write-offs of fully provisioned non-performing loans. Also, the decrease in non-performing loans in this quarter results from the exit of Eurostandard Bank from the banking system. In addition, the regulatory measures of the National Bank in the area of credit risk management (moving the delay threshold from 90 to 150 days, as well as introducing the possibility of deferring loan repayment due to the COVID-19 crisis), probably contributed to a temporary delay in credit risk materialization. In the third quarter of 2020, non-performing loans decreased by 26.9%, thus reducing the rate of non-performing loans to the non-financial sector to the record low of 3.4%. Observed by sector, the largest part of the decrease in non-performing loans accounts for the corporate sector, which registered a certain credit risk materialization due to non-fulfillment of obligations by individual corporate clients from several different activities. The share of non-performing loans in total loans to non-financial corporations significantly improved by 2.2 percentage points in the third quarter and as of 30.9.2020 reduced to the historically lowest level of 5.4%. Amid enhanced credit support to households, the non-performing-to-total household loan ratio also decreased to the historically lowest level of 1.6%.

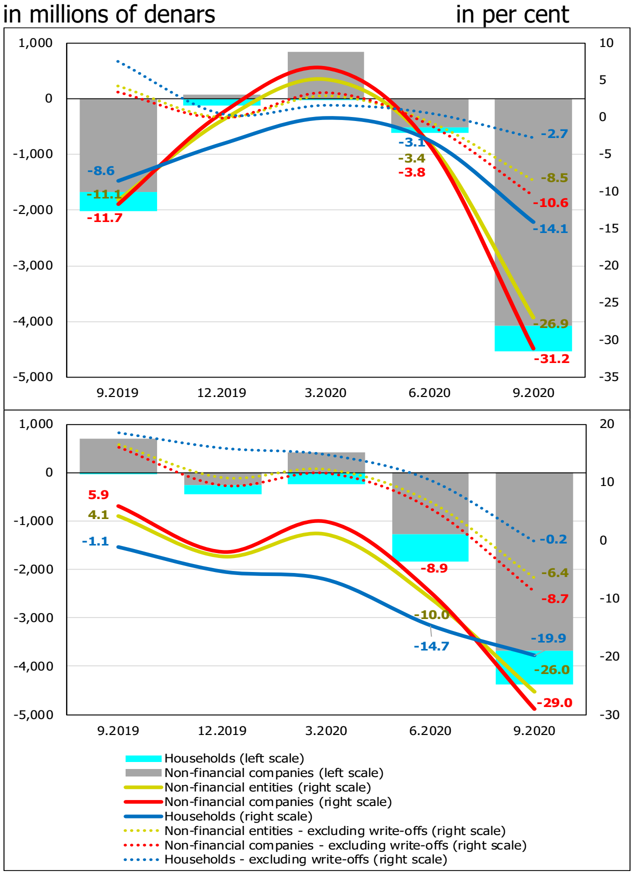
The coverage of non-performing loans with impairment for them is maintained at a relatively high level and increased in the third quarter (to 75.4%), which along with the satisfactory volume and quality of own funds, limits the adverse effects on the banks' solvency of their possible complete default.

The regulatory changes in March 2020 created conditions for banks to ease the lending standards, i.e. the credit burden in the period April-May, mainly by approving grace period usually in duration up to six months, when the most pronounced adverse effects of the COVID-19 crisis on the corporate sector and households were expected. Amid prolonged duration of the pandemics, a new change in the contractual conditions of loans was made in September 2020, but only for the clients that were most affected by the crisis. This time banks also made individual assessment of companies, while making a new offer for natural persons, which refers to those citizens that have lost jobs, have a substantial decrease in their income, have faced increased medical treatment costs etc. Thus, in the following months (until March 2021), the most affected categories of clients were enabled to ease their credit burden and consequently to deal with negative pressures from the health crisis. However, given the mass application as well as the temporary nature of these measures to ease the credit burden, as well as the uncertainty and the unfavorable expectations around the duration of the of consequences of the COVID-19 pandemics, credit risk materialization and growth of non-performing loans with banks may be expected. The borrowers with approved grace period due to COVID-19 (which account for 44% of the total loan portfolio), should start with regular loan repayment after the expiry of the grace period. It is very likely that the negative effects of the pandemics affected the clients' creditworthiness, primarily clients with unstable/uncertain monthly income, as well as those whose income is related to

activities mostly affected by the negative effects from the health crisis. The credit risk materialization of loans with expired grace period as of the end of September may be expected by the end of the year (given the rule for transitioning to non-performing status amid delay of more than 90 days). On the other hand, for clients with second period of deferred payment of loans introduced in September, credit risk materialization may be expected in the second half of 2021.

Effects of the measures for temporary easing of the criteria for acquiring a non-performing status (a threshold of 150 days instead of the regular 90 days of delay in repayment) are minimal. The amount of regular loans, where the repayment delay ranges between 90 and 150 days, is insignificant and already in October most banks decided to give them a non-performing status and to adequately recognize the expected credit losses instead of using the gradual monthly dynamics (in the period until 31.12.2020) as prescribed in the amendments to the regulation. The rate of non-performing loans at the end of October was almost unchanged.

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



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

1.1 Materialization of credit risk in banks' balance sheets

In the third quarter of 2020, total non-performing loans to non-financial sector decreased by 26.9% (or by Denar 4,418 million). This significant decline is mostly due to revoking the license for founding and operation of one bank. Excluding the effects of this bank, non-performing loans of the banking system decreased again. The decrease in non-performing loans partly results from the mandatory write-offs of fully provisioned non-performing loans[5].

The reduced creation of non-performing loans in this quarter are partly due to the approved moratorium by 43.9% of the banks' loan portfolio, which was practically not covered during the third quarter of 2020. The effect of the measure for temporary movement of the threshold for acquiring non-performing status from 90 to 150 days was minor, both on the dynamics of total loans to non-financial sector, and corporate and household loans.

The reduced volume of non-performing loans mainly stems from their decrease in enterprises (by Denar

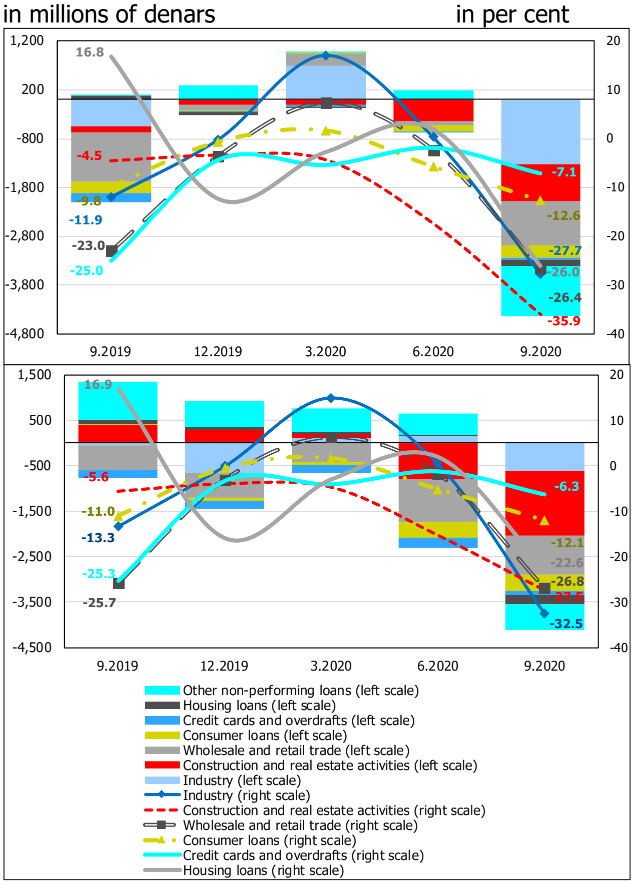
[5] Excluding the effect of the mandatory net write-offs, non-performing loans to the non-financial sector decreased by 8.5% in the third quarter of 2020.

Note: The lines with dots show the growth of non-performing loans by excluding the effect of all mandatory write-offs made in the period 1.1.2016 - 30.6.2022. Starting from December 2019, the data also contains the collected compulsorily written-off loans.

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 per cent



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

4,075 million, or by 31.2%)[6]. Excluding the effect of Eurostandard Bank, non-performing corporate loans decreased, which indicates their downward movement in part of the other banks. A decrease in non-performing loans in this segment of the banks' loan portfolio was registered in all economic activities, with the sharpest decline at clients from industry, trade and construction.

Despite the reduced non-performing loans in the corporate sector, certain activities and clients registered new non-performing loans. Thus, in the industrial sector of manufacture of metals, machinery, tools and equipment; the water supply, waste management and environmental recovery sector and trade, it is mainly due to default of several major clients. However, **there is a lack of larger amounts of new non-performing loans**, mainly due to the approved temporary moratorium on part of the loans (32.9% of total corporate loans as of 30.9.2020).

Non-performing household loans decreased by 14.1%, or by Denar 466 million. Part of this decrease is due to the exit of one bank, thus if we exclude the effect of this bank, the non-performing household loans decreased by 8.6%.

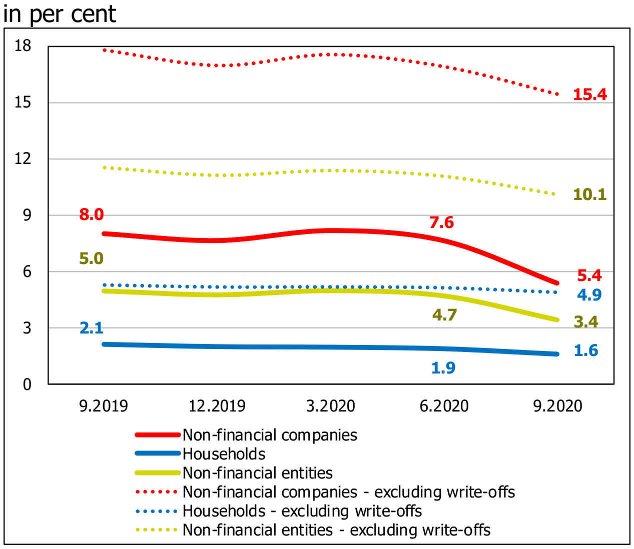
Slightly more than a half of the decrease of non-performing household loans is due to the mandatory write-offs[7]. As for consumer loans, mandatory write-offs are the main drivers of their downward movement (by Denar 257 million, or by 12.6%). A significant decline is registered in non-performing housing loans as well (by Denar 125 million, or by 26.0%). In this segment of the loan portfolio of banks, the creation of new non-performing loans is currently less pronounced, given that 53.9% of the household loans were

[6] Excluding the effect of the easing in terms of the common rules for acquiring non-performing status, non-performing corporate loans would decline by 30%.

[7] Excluding the effect of the mandatory net write-offs, household loans increased by 2.7%, compared with the growth of 0.6% in the previous quarter.

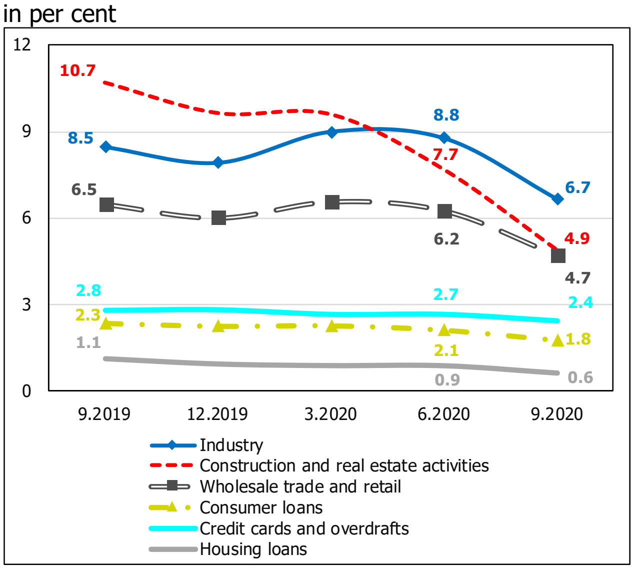
approved with a grace period due to the events related to COVID-19.

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



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

Chart 6
Rate of non-performing loans, by activity and credit product
in per cent



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

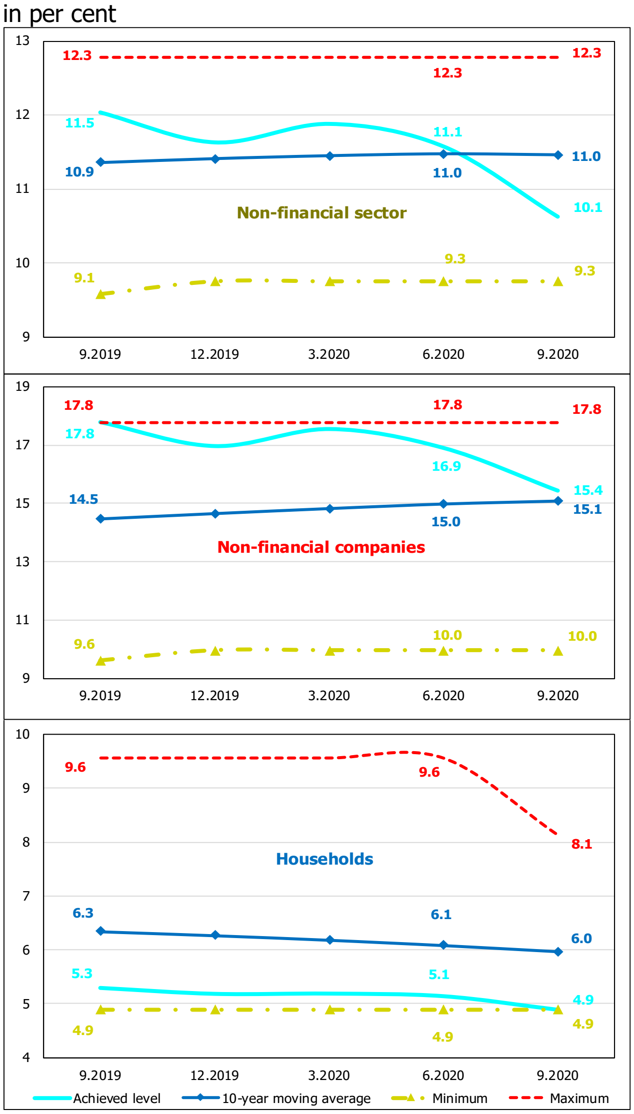
As a result of such developments, the quality of the banks' loan portfolio, measured through the share of non-performing loans in total loans to the non-financial sector, improved by 1.3 percentage points in the third quarter of 2020. As of 30.9.2020, this rate reached the historically lowest level of 3.4%[8].

A slightly more pronounced improvement of the non-performing to total loan ratio was registered in the **portfolio of non-financial corporations,** where, as of 30.9.2020, 5.4% of total loans were non-performing (reduction by 2.2 percentage points compared to the previous quarter). Observed by individual sectors, the decrease of this indicator was mostly pronounced in construction, where the rate of non-performing loans reduced to 4.9% (from 7.7% as of 30.6.2020), while the lowest level of 4.7% was registered in trade (decline of 1.5 percentage points compared to the second quarter). The rate of non-performing corporate loans (without the effect of the mandatory write-offs) equaled 15.4% and approached its 10-year moving average (15.1%), while it additionally diverged from the maximum value of this average (17.8%) with the decline in the third quarter.

In the loan portfolio of households, the share of non-performing loans in total loans decreased by 0.3 percentage points to the new record low of 1.6%. This is due to the accelerated credit support of this sector, as well as to the decrease in bad loans. The rate of non-performing loans to households (excluding the effect of mandatory net write-offs) equaled 4.9%, which is at the minimum value of its 10-year moving average.

[8] Without the effect of the mandatory net write-offs, the share of non-performing to total loans equals 10.1% and is lower by 1 percentage point compared to the previous quarter, and it reduced below the 10-year moving average (11.0%).

Chart 7
Non-performing loans rate, 10-year moving average and maximum and minimum level, by individual sectors
in per cent



Source: National Bank, based on the data submitted by banks.
* Note: Excluding the effect of all mandatory write-offs made in the period 1.1.2016 - 30.9.2020. Starting from December 2019, the data also contains collected

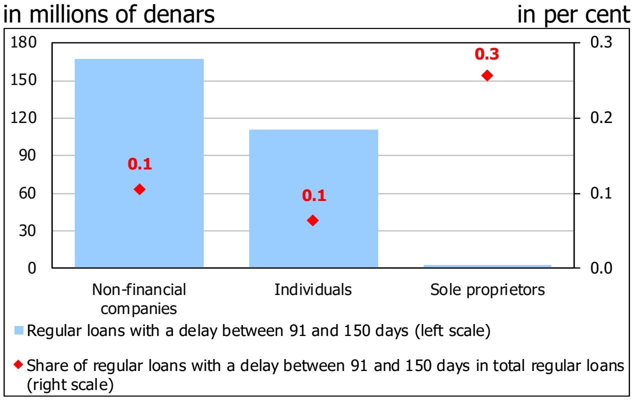
Loans to non-financial corporations accounted for 76.4% of non-performing credit portfolio of banks, which is a lower share compared to the previous quarter. The largest part of non-performing corporate loans falls to "industry", trade and construction. In the non-performing household portfolio, non-performing consumer loans prevail.

From 1 October until the end of 2020, banks are required to apply the common rules for acquiring non-performing status and to recognize losses from credits with a delay of more than 90 days (but not more than 150 days), which according to the easing measures during the pandemics could keep the regular status until the end of September 2020.

Thus, in accordance with the regulation, banks were required to prepare a dynamic plan according to which they will assign non-performing treatment to these loans, not later than 2020. Most banks decided to assign non-performing exposure status to those loans in October and November 2020[9], while a small part of the banks will apply monthly dynamics by the end of the year by recognizing the largest amount as non-performing in October[10]. As it was already pointed out, these loans are small compared to the total amount of non-performing loans, thus, on this basis, the non-performing loan rate to the non-financial sector and, separately, to households and enterprises, will be higher by only 0.1 percentage point.

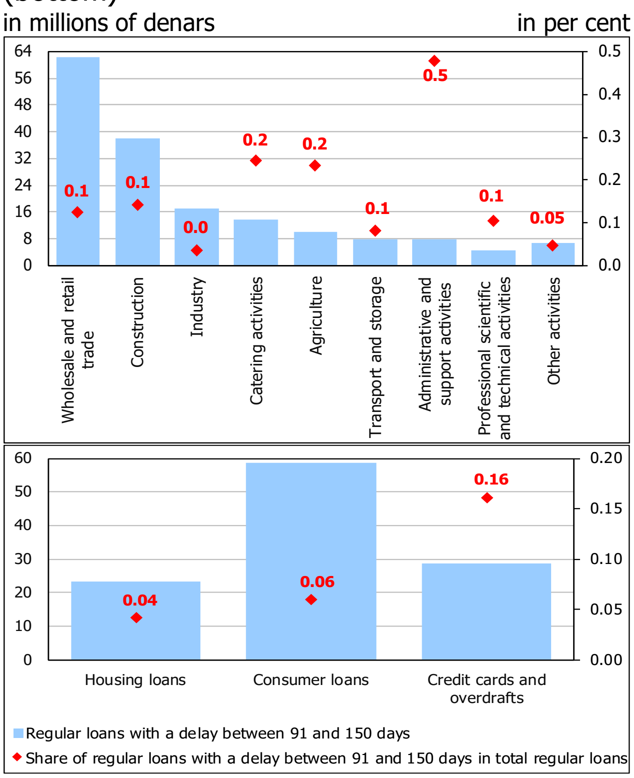
[9] One bank has implemented the regulatory relaxation to move the threshold for acquiring non-performing status from 90 to 150 days (as set in item 58-a of the Decision) as of 31.8.2020 and already as of the end of September assigned a non-performing status to all exposures with a delay in repayment of over 90 days, while another bank did not apply the regulatory easing at all and continued to apply the rule for transferring non-performing credit exposures of claims collected for more than 90 days (in accordance with item 43 of the Decision).
[10] In the banking system, the planned monthly dynamics of migration to non-performing status of loans to non-financial sector with a delay between 91 and 150 days with a regular status as of 30.9.2020 is as follows: 56.2% in October, 39.9% in November and 4% in December 2020. By sector, the dynamics varies, i.e. the migration to non-performing status in households is the greatest in October 2020 (with a share of 83.4%), while in the corporate sector in November 2020 (with a share of 68.4%).

Chart 8
Regular loans with a delay between 91 and 150 days, by sector



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

Chart 9
Regular loans with a delay between 91 and 150 days, by activity (top) and credit product (bottom)



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

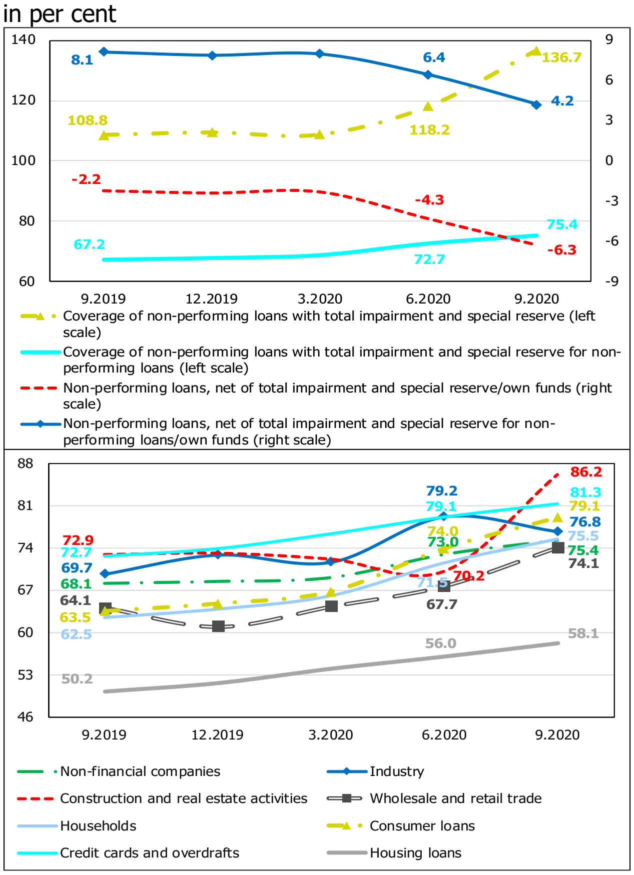
The volume of unexpected losses, i.e. the negative effects of possible complete default of non-performing loans have limited effect on the banking system's solvency. A significant portion of the non-performing loans are substantially covered with impairment (75.4%), which is an increase compared to the previous quarter. Thus, the non-provisioned amount of non-performing loans is only 4.2% of own funds of the banking system and amid assumptions of its complete default, the solvency of the system would not be jeopardized.

Despite the high coverage of non-performing loans with impairment, banks maintain a high percentage of collateral, which is particularly pronounced in enterprises (95.1% of non-performing loans and 98.1% of performing corporate loans have been collateralized[11]). Thus, banks secure higher inherent risk of corporate lending by applying relatively conservative proportion between the amount of the loan and the estimated value of the collateral (which equals 48.8% for performing, i.e. 44.1% for non-performing loans).

As for households, the percentage of collateral is lower (76.0% for performing and 64.8% for non-performing loans), mainly due to credit cards and current account overdrafts, as well as consumer loans. There is no collateral for around 35% of consumer loans. Most of the credit agreements include a so-called executive clause[12], which allows banks fast collection of loans by selling the collateral.

[11] Most often in the form of equipment, machinery, production capacity, business facility and warehouses etc.
[12] According to the Law on Enforcement and the Law on Notarial Practice. The National Bank does not have any data on the amount of loans with such clause included in the agreements.

Chart 10
Coverage of non-performing loans with impairment (up) and by activity and credit product (down)
in per cent



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

The annual rate of default of the regular credit exposure of the overall non-financial sector and the two most significant segments deteriorated in the third quarter. This is mainly due to the approved grace period to about half of the loans to non-financial entities, where the clients practically do not repay the installments based on loans and subsequently cannot acquire non-performing status. In the following period, higher default rates may be expected, since after the expiry of the grace, clients shall be required to regularly repay liabilities to banks.

In the third quarter of 2020, banks wrote off 6.1% of total non-performing loans at the end of the previous quarter. This amount of write-offs is higher compared to the second quarter, but significantly lower compared to the same quarter in 2019[13] where mandatory write-offs dominated. By sectors, around 75% of the written-off claims in the third quarter refer to non-financial companies. Mandatory write-offs of non-performing loans will continue in the next period given the fact that, as of 30.9.2020, 35.6% of non-performing loans are fully covered with impairment and will be written-off the next year at the latest, unless collected meanwhile.

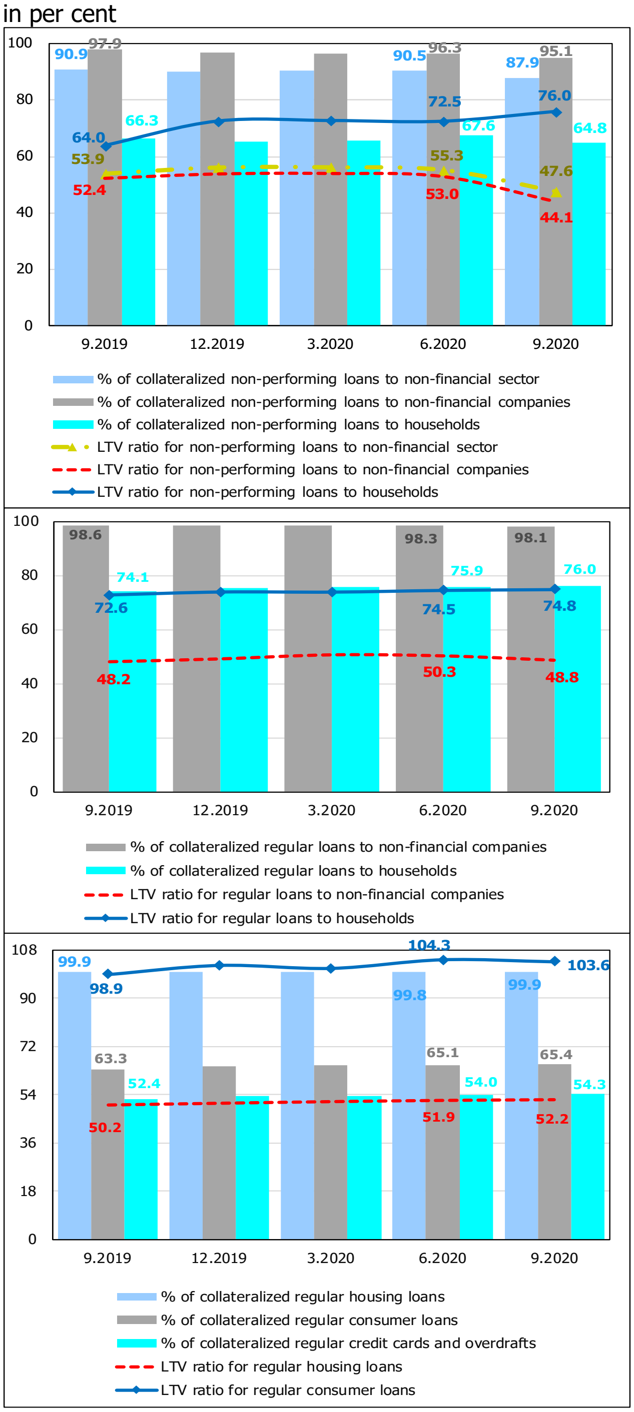
1.2 Potential sources of future credit risk materialization

Performing loans with reduced credit quality[14], which may be source of new non-performing loans in the short run, decreased by 15.1% in the third quarter of 2020. These loans registered a significant decrease (by 35.6%) in the second quarter of 2020. Such decrease of loans with reduced credit quality is mainly due to the

[13] The amount of written-off claims in the same quarter of 2019 was significantly higher due to the application (as of 1.7.2019) of the new provision in terms of mandatory write-offs, which reduced the mandatory write-off period for fully provisioned non-performing exposures from two to one year.
[14] For the purpose 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).

Chart 11 Non-performing loans (up) and performing loans (middle and down) for which collateral and LTV ratio have been established, by sector

in per cent



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

approved grace period to almost half of the loan portfolio. Also, **the share of loans with reduced credit quality in total loan portfolio is negligible** and equals 0.8%. Thus, only 1.0% of loans with a delay from 61 to 90 days received a non-performing status in October 2020[15].

The share of restructured loans in total loans was also small (1.8% in the third quarter) and decreased compared to the previous quarter. Almost the entire restructured credit portfolio (around 95%) includes legal entities, whereby the share of these loans in total corporate loans is low and equals 3.5%.

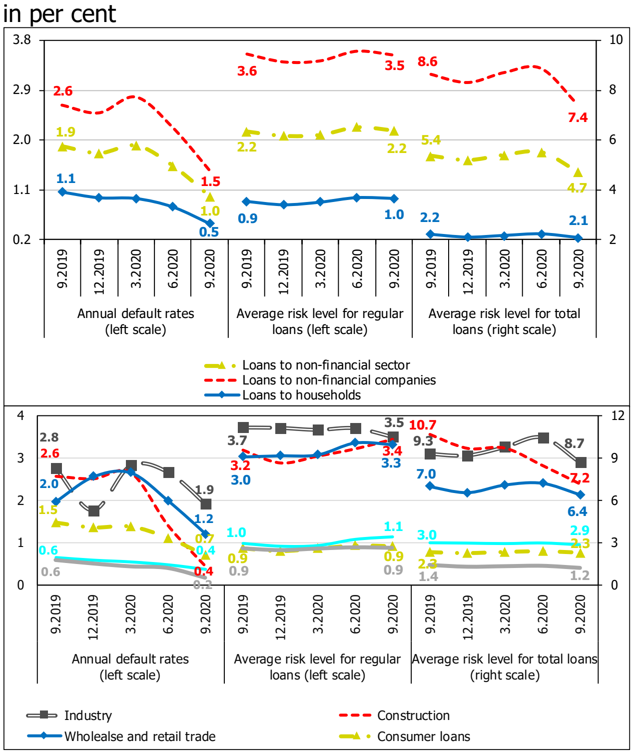
The share of prolonged in total loans is also low and equals 3.4% (3.9% in the second quarter of 2020), although some banks registered a slightly higher share of prolonged loans[16]. **Total prolonged loans decreased** by Denar 1,513 million, or by 11.1%, primarily due to reduced non-performing loans. Legal entities predominate in the loan portfolio of prolonged loans (with a share of around 93%), while the share of these loans in total corporate loans was 6.7%.

In the third quarter of 2020, loans with an approved grace period in accordance with the regulatory changes due to COVID-19 account for 43.9% of total performing loans to non-financial sector (46% as of 30.6.2020). Observing the structure, almost two thirds of these loans account for natural persons, while the rest for the corporate sector. The sector-by-sector analysis shows that in 53.9% of total household loans and in 32.9% of loans to non-financial corporations there is a temporary delay in repayment of loan liabilities. Analyzing household products, the share of loans with an approved grace period due to COVID-19 is the highest in consumer loans (61.6%), followed by housing loans, and credit cards and

[15] As for households, this percentage is higher and amounts to 2.8%, while for the non-financial corporations it amounts to 0.7%.

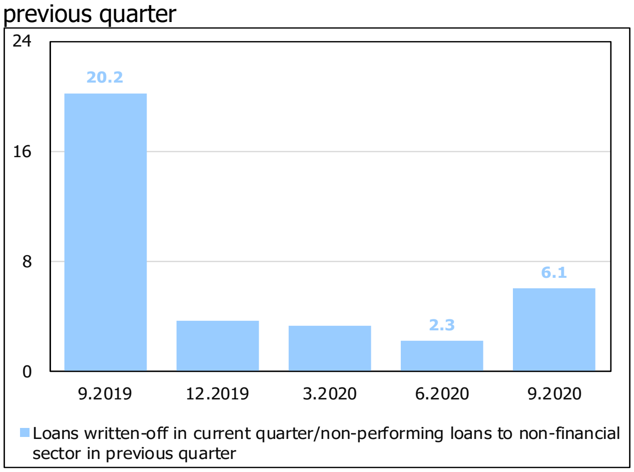
[16] In the bank with the highest share, prolonged loans account for 10.9%.

Chart 12
Annual rates of default and average risk level of regular and total loans, by sector (up) and selected activities and credit product (down)
in per cent



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

Chart 13
Written-off non-performing loans
in per cent of non-performing loans at the end of the previous quarter



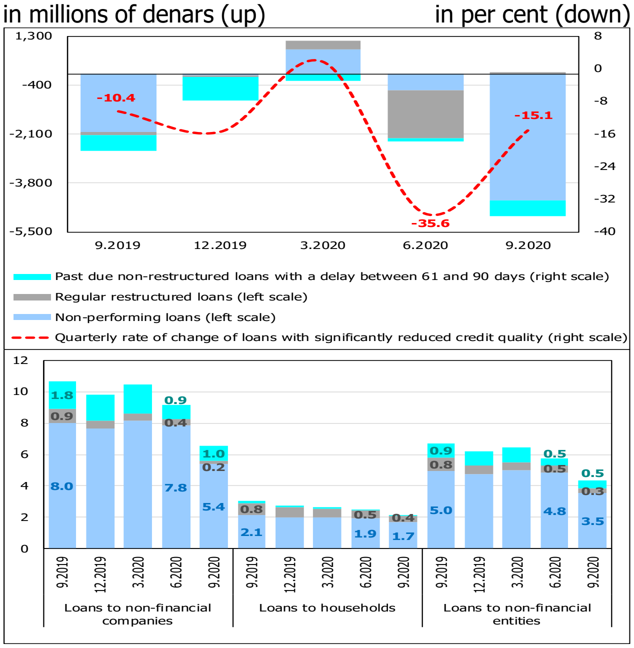
Source: National Bank, based on the data submitted by banks.

overdrafts with shares of 47.0% and 42.2%, respectively. Observing corporate activities, loans with an approved grace period have a significant share in total loans of clients in health and social care activities (76.2%), catering (70.0%) and professional, scientific and technical activities (60.8%). In the traditionally most important economic activities, the share of loans with an approved grace period due to COVID-19 equals around thirty percent on average[17].

According to the regulation, as of 30.9.2020, banks were able to approve a second change in contractual terms to clients. In September, banks started approving a second grace period only to clients most affected by the COVID-19 crisis. These loans account for 17.7% of total loans with an approved grace period due to COVID-19, i.e. 7.8% of total performing loans to non-financial sector. Corporations registered the largest share in loans with a second grace period given that, in corporate loans, the first grace period was mostly approved on shorter terms (usually three months), after which part of the corporate loans were granted a new grace period for the second time (mostly with a duration of three months as well). Thus, in corporations, loans with a second time delay in repayment account for 33.7% and 11.1% in total loans with a grace period due to COVID-19 and total corporate loans, respectively. Also, these loans are half (50.9%) of the loans with approved first easing. In households, loans with a second time delay in repayment are significantly lower with 8.8% and 4.8% in total loans with a grace period due to COVID-19 and in total household loans, respectively, accounting for 0.7% of household loans with a "first" grace period. The decreased presence of loans with an approved second grace period in households can be associated with the fact that natural persons were granted with a first grace period usually approved on six months.

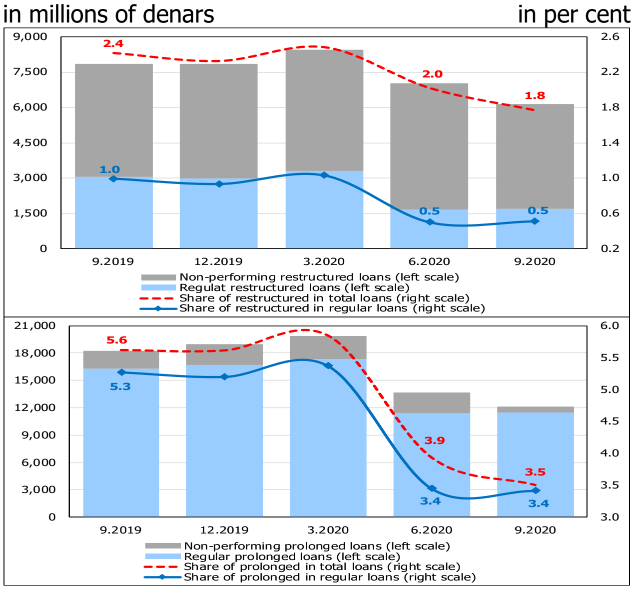
[17] Analyzed by activity, loans with an approved grace period due to COVID-19 account for 37.1%, 27.5% and 25.2% of regular loans in construction, industry and trade, respectively.

Chart 14
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 (up) in per cent (down)



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

Chart 15
Restructured (up) and prolonged loans (down) to non-financial entities by status
in millions of denars in per cent



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

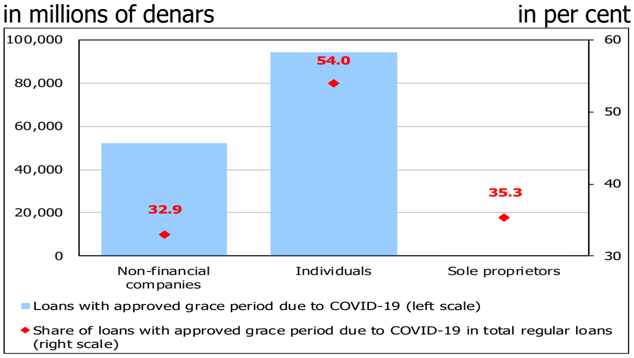
Loans with an approved grace period, especially those with an approved second grace period, are a potential source of new non-performing loans due to the uncertainty whether these clients will be able to repay the loans regularly after the expiry of the grace period. The effect of the possible default is indicatively seen through the loan quality indicators with an approved grace period due to COVID-19, which were only required to have a regular status for the bank to grant them a grace period. The share of loans with an approved grace period in total loans shows the maximum effect of these loans on the quality of credit portfolio, i.e. represents the potential growth of non-performing loans rate. Their share in non-performing loans provides the possible increase in non-performing loans amid possible default of loans with an approved grace period.

Despite the good quality and low credit risk materialization from banks' exposure to households, certain structural features of this credit portfolio may be a potential source of new non-performing loans.

A potential source of deterioration in the quality of households' portfolio is the further growth of indebtedness of current borrowers. In this segment of the credit portfolio, 16.0% of the newly granted loans (16.8% as of 30.6.2020) are granted to new borrowers[18]. The new borrowers are more present in housing loans with 22.4%, while 12% of the newly granted consumer loans in the third quarter are intended for new users. It is worth mentioning that, in conditions of pronounced adverse effects and pressures of the COVID-19 crisis, there is a significant amount of newly granted loans in the third quarter compared to the previous quarter (by 52.0%), but they are in line with the average quarterly amount of newly granted loans in the

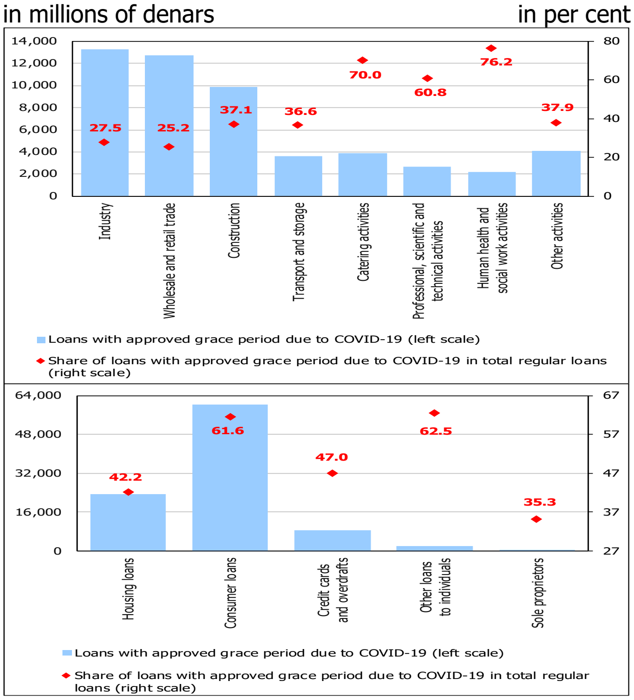
[18] The borrowers in banks at the end of the analyzed period, who were not borrowers at the end of the previous quarter, are considered new, which does not mean they were not borrowers in the previous period.

Chart 16
Loans with approved second grace period due to COVID-19 on 31.3.2021, by sector
in millions of denars in per cent



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

Chart 17
Loans with approved grace period due to COVID-19 by activity (non-financial corporations)and credit products (households)
in millions of denars in per cent



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

past two years. The indebtedness of the entire household sector is a subject of a regular National Bank monitoring and is still low. However, there is still a risk of the negative shock caused by the current health crisis on the financial position of certain segments of households and, consequently, worsening of their creditworthiness. In fact, there is an increased uncertainty for the entire household sector, especially emphasized for the staff in the sectors most affected by the crisis, which will probably significantly disrupt the creditworthiness of these clients.

The maximum clients' debt-to-income ratio is currently set at a prudent level of 50% to 60% in the banks' internal acts, yet the experience shows that the average ratio[19] is at a significantly lower and more favorable level. This reduces the possibility for excessive indebtedness of clients (especially in conditions when new loans are mostly focused on current borrowers) and, at the same time, it reduces the risk of exhaustion of their creditworthiness, i.e. banks avoid taking excessive credit risk. In order to qualify for meeting the criteria for monthly loan repayment in relation to their monthly income, the households, mostly those with "poorer" creditworthiness, borrow on longer terms with the possibility for loan repayment in more monthly installments. This is especially important given that the contractual interest rates which include compensation for the taken credit risk are relatively low[20].

Amid increased average weighted residual maturity of newly granted loans[21], **the monthly loan repayment by borrower registered no significant change.** The average annuity of housing loans registered a

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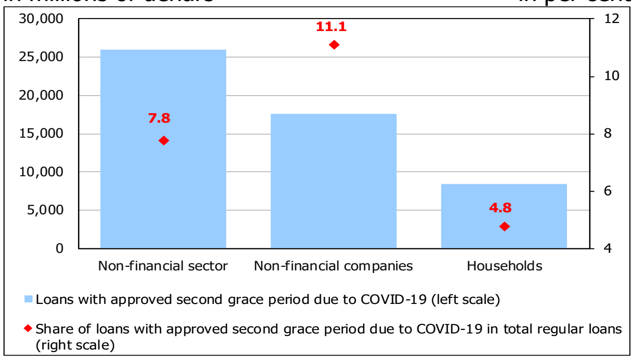
[19] According to the data submitted by banks on the average indicator by credit product and/or currency, and/or maturity etc.

[20] In the third quarter of 2020, the interest rates on newly granted consumer and total household loans reduced to 5.1% and 4.6%, respectively, compared to the higher levels in the same quarter of the previous year (5.7% and 5.3%, respectively). The interest rate on newly granted housing loans remained at 3.3%. Downward movement was also registered in interest rates on total performing loans which equaled 4.1%, 6.2% and 5.8% for housing, consumer and total household loans (compared to the higher levels of 4.2%, 6.5% and 6.1% for the stated credit products, respectively, in the third quarter of 2019). In terms of the previous quarter, interest rates are almost unchanged.

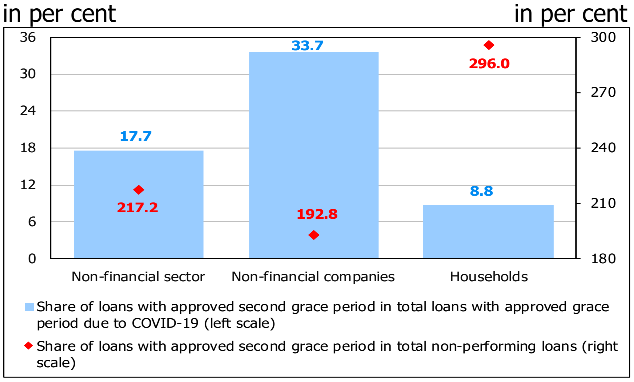
[21] The average maturity of newly granted housing loans equaled 20.6 years (20.1 year for the previous quarter), while the newly granted consumer loans 8.5 years (8.1 year in the previous quarter).

Chart 18
Loans with approved second grace period due to COVID-19 on 31.3.2021, by sector



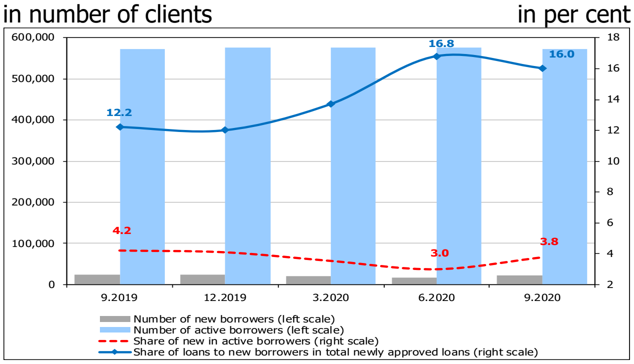
Source: National Bank's Credit Registry based on data submitted by banks.

Chart 19
Loan quality indicators with approved second grace period due to COVID-19, by sector



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

Chart 20
New borrowers of the household sector and share of loans to these clients in total newly approved loans to this sector



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

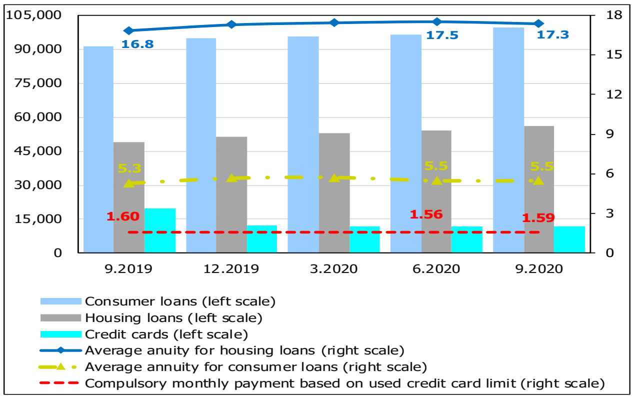
slight decline of 0.9%, or around 200 denars quarterly, while it remained almost unchanged in consumer loans.

In the third quarter of 2020, there are positive movements in terms of the structure of credit exposure to households according to their monthly income. Notably, 39.7% of the total credit exposure of households is focused on households with a net wage equal to or lower than the average net wage for the third quarter of 2020 (42.5% as of 30.6.2020). Corresponding to the monthly income, this category of borrowers has the lowest average debt per person. This indicates that the risks of high indebtedness or the occurrence of over-indebtedness, which are far more pronounced in natural persons with lower monthly income, are currently low. However, a possible shock on the monthly income due to the COVID-19 pandemic, especially with those borrowers that generate income from activities with the longest negative economic consequences of this pandemic, will definitely affect the creditworthiness of part of the households, thus causing increased risk materialization.

The household debt with net wage equal to or lower than the average wage is mainly used for consumer purposes (consumer loans and credit cards and overdrafts), while housing loans are less present. There is a significantly reduced concentration of banks' exposure to persons with a net wage equal to or lower than the average both in total credit exposure and in certain products.

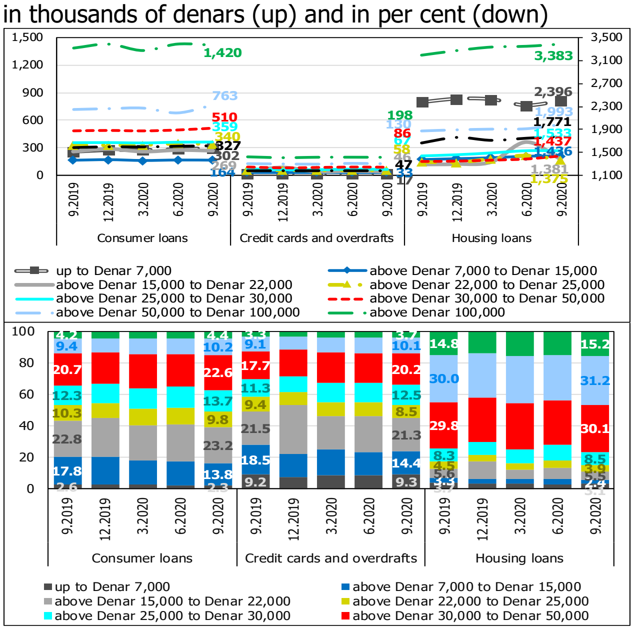
The level of concentration of non-financial companies' credit portfolio is a significant structural feature from various aspects, which can affect the materialization of risks related to this segment of banks' activities. The level of concentration of loans to companies, analyzed by individual activities, mostly correspond to

Chart 21
Consumer, housing loans and credit cards, balance and average annuity
in millions of denars in thousands of denars



Source: National Bank's Credit Registry based on data submitted by banks.
Note: For the needs of this analysis, the mandatory credit card monthly repayment is set on 5%, although certain banks might have different limits.

Chart 22
Average household debt (top) and structure of credit exposure (bottom) based on consumer, housing loans and credit cards and current account overdrafts, by monthly income
in thousands of denars (up) and in per cent (down)



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

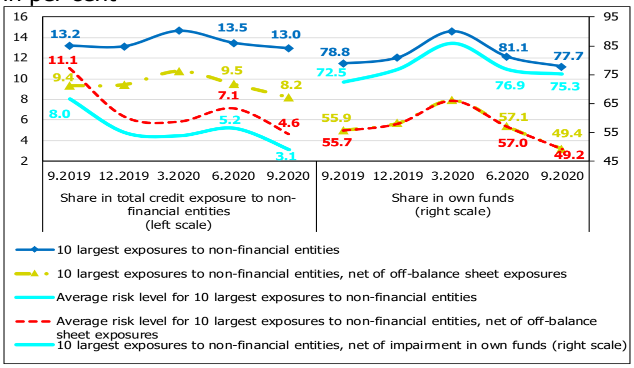
structural features of domestic economy. About 80% of loans to non-financial companies have been extended to three sectors (industry, wholesale and retail trade, and construction and real estate activities), whose business performance are particularly important for the quality of the banks' loan portfolio. In fact, the loan portfolio consisted of banks' clients from these activities has the highest shares of non-performing in total loans, for which the banks have also allocated the highest amount of impairment and thus provided the highest coverage with provisions (more details in the annexes to this report).

The total amount of the ten largest exposures of each bank to clients from the non-financial sector accounts for 13.0% in total credit exposure of the banking system (13.5% as of 30.6.2020). These loans account for 77.7% of banking system's own funds[22] (from 42.6% to 138.4% by bank[23]). On the average, banks have provisioned these exposures with 3.1% (5.2% as of 30.6.2020). If the ten largest exposures reduce the off-balance sheet exposure, then these exposures account for around 50% of own funds, for which banks have provided provision of 4.6% (7.1% as of 30.6.2020).

Another feature of loans to non-financial corporations that should be **carefully monitored is the scope and quality of bullet loans.** The share of these loans in performing loans to non-financial corporations is relatively high (33.5%), but slightly lower compared to 30.6.2020 (when it equaled 34.9%). The level of credit risk materialization of bullet loans improved compared to the previous quarter (the share of non-performing in total loans reduced from 7.5% to 4.5% as of 30.9.2020), which is higher compared to the improvement registered in total corporate loans (by 2.2

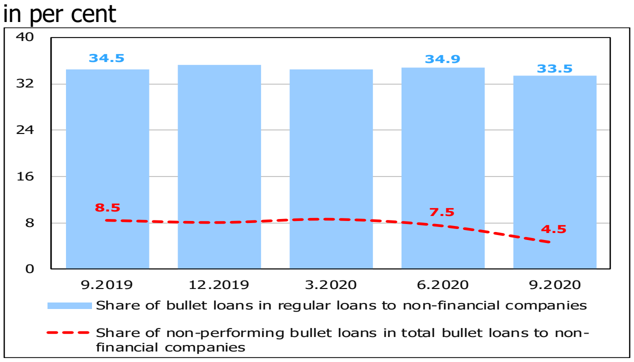
[22] In accordance with the regulation, the total amount of large exposures must not exceed eight times the amount of bank's own funds.
[23] When determining the lowest and the highest share of the ten largest exposures in own funds of certain banks, the Development Bank of North Macedonia AD Skopje is not included due to the low direct credit exposure of this bank to non-financial sector.

Chart 23
Concentration of credit exposure to non-financial corporations
in per cent



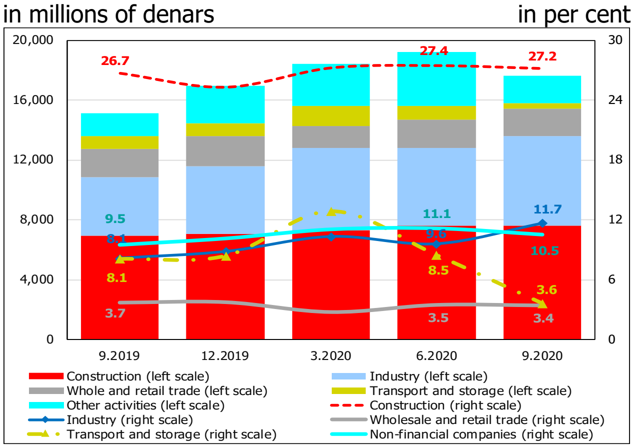
Source: National Bank's Credit Registry based on data submitted by banks.

Chart 24
Bullet loans to non-financial corporations
in per cent



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

Chart 25
Loans to non-financial corporations for project financing and their share in total loans by sector
in millions of denars in per cent



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

percentage points). The rate of non-performing loans in bullet loans declined quarterly due to the more pronounced decrease in non-performing loans (by 79.7% or Denar 2,003 million). The lower credit risk materialization of bullet loans is mostly pronounced in construction sector clients, where the rate of non-performing loans reduced to 2.6% (5.7% as of 30.6.2020) compared to the value of this indicator for total loans in construction sector (4.9%).

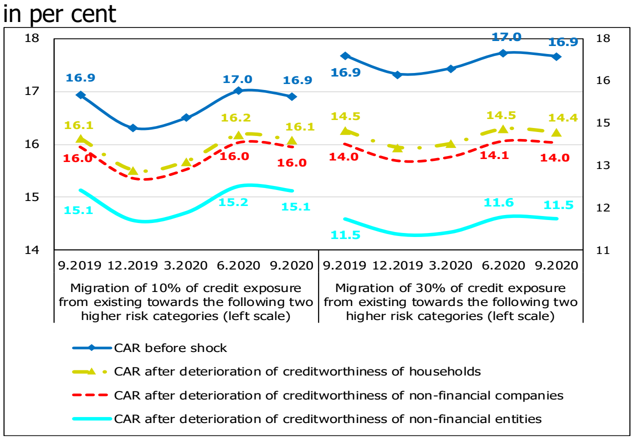
A possible risk to the quality of credit portfolio of non-financial corporations are also the **loans approved for project funding.** The quality of these loans is mostly conditioned by (non)-realization of the projected cash flows from projects which are funded, with the planned volume and/or dynamics. Loans approved for project funding account for 10.5% (11.1% as of 30.6.2020) in total credit portfolio of non-financial corporations, with around one third of these loans approved to clients from the construction sector and industry.

A significant structural feature of the two segments of non-financial sector which can be a potential source of indirect credit risk is the currently high share of loans with a currency component and loans with a variable and adjustable interest rate. The analysis of this aspect is provided in the sections discussing currency risk and interest rate risk in the banking book.

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

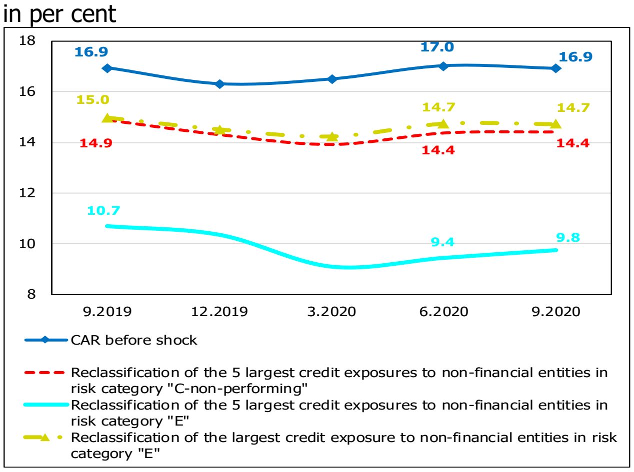
The results of the conducted stress testing confirm the resilience of the banking system to the simulated shocks. The capital adequacy ratio of the banking system does not go below 8% in individual hypothetical simulations. In case of the most

Chart 26
Capital adequacy ratio before and after hypothetical shocks of selected segments of credit exposure
in per cent



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

Chart 27
Effects on the capital adequacy ratio from reclassification of the largest credit exposures to non-financial entities (including the connected parties) in a higher risk category
in per cent



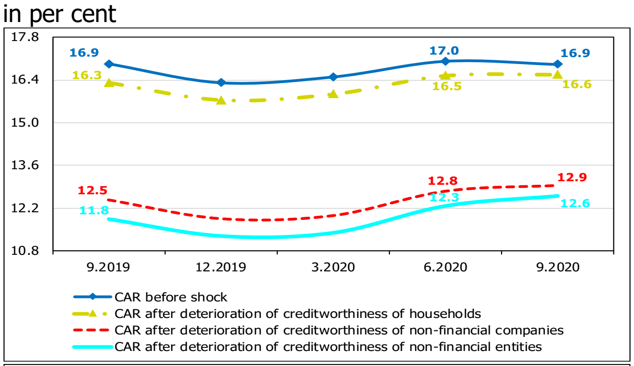
Source: National Bank's Credit Registry based on data submitted by banks.

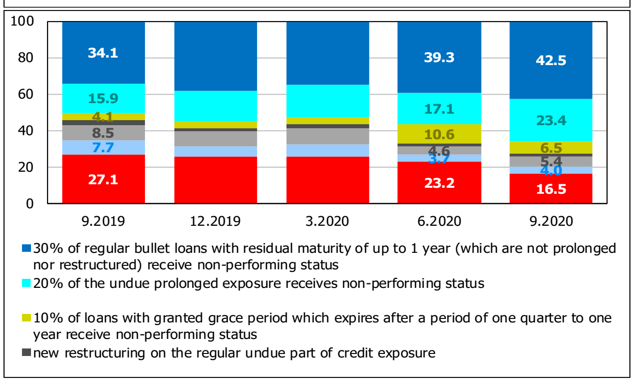
extreme, and the least possible simulation of 11.5% for a migration of 30% of the credit exposure to non-financial corporations, from the existing to the next two higher risk categories, the capital adequacy ratio of the banking system is reduced to 11.5 % (by 5.4 percentage points relative to the initial level of capital adequacy ratio, which is almost an identical result as in the previous quarter). Analyzed by activity, the assumed deterioration of the quality of credit exposure to these activities with the highest total credit exposure has the greatest effect on the capital adequacy ratio. According to individual credit products of households, the greatest negative effect on the capital adequacy ratio has the exposure based on consumer loans as the most common credit product. The results of the stress test simulations for the concentration in the loan portfolio towards the non-financial sector show that the banks are less sensitive to the materialization of concentration risk in this credit portfolio. The improvement of the results reflects the more pronounced decrease in the concentration level of the credit portfolio to the non-financial sector[24] amid almost unchanged capital adequacy before the simulations. The improvement is particularly evident in the simulation of migration of the five largest exposures to non-financial sector in the risk category E.

The banking system resilience is also examined by an extreme simulation based on a combination of seven hypothetical shocks of worsening of the quality of the credit portfolio to the non-financial sector[25]. Even in case of this

[24] On quarterly basis, the five and ten largest exposures to the non-financial sector decreased by 6.4% and 3.3%, respectively, while own funds slightly increased by 0.9%. This contributed to reducing the share of the five and ten largest exposures to the non-financial sector in own funds to 48.2% and 77.7%, respectively, in the third quarter of 2020 (compared to the share of 52.0% and 81.1%, respectively, in the second quarter of 2020).
[25] The seven hypothetical shocks are the following: 1. Full default of the current non-performing loans; 2. Total due loans receive non-performing status; 3. Total regular undue restructured exposure receives non-performing status; 4. Banks are conducting new restructuring of the regular undue part of the credit exposure, which according to the volume corresponds to the amount of restructured exposures that have received a non-performing status from the previous item; 5. 10% of loans with a 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 performing bullet loans with residual maturity up to one year (which are not prolonged, nor restructured) receive a non-performing status.

Chart 28
Capital adequacy ratio before and after hypothetically combined shocks of various credit exposure segment (up) and contribution of individual shocks to the reduction of the capital adequacy ratio (down)
in per cent





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

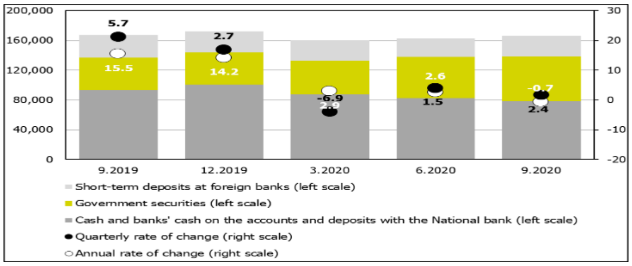
extreme simulation, the adequacy of the banking system does not come below the prescribed minimum. Upon this simulation, the capital adequacy ratio reduces by 4.3 percentage points to 12.6%, which is an improved result compared to the end of the previous quarter (4.7 percentage points and 12.3%, respectively). The highest effect on the adequacy ratio is that of the assumed deterioration in the quality of bullet loans, which contributes to 42.5% of the total reduction of capital adequacy amid combined shock. In addition, the effect of the hypothetical worsening of the quality of prolonged loans (accounting for 23.4% of the total reduction of the capital adequacy ratio of the banking system) is also significant, as well as the assumed complete default on non-performing loans of the non-financial sector (16.5% of the total decline in capital adequacy in the combined shock), which registered an increased contribution compared to the previous quarter.

2. Liquidity risk

In the third quarter of 2020, amid further quarterly growth of non-financial entities' deposits, the liquid assets of the banking system registered an accelerated increase on a quarterly basis. In the structure of liquid assets, the quarterly growth was driven by increased placements in domestic government securities and the increase in short-term foreign currency deposits in foreign banks. Such movements have improved the liquidity indicators, which was slightly more pronounced in foreign currency liquidity indicators of the banking system. The analysis of the composition of assets and liabilities, in terms of their residual contractual maturity, shows deepening of the gaps in all maturity segments, but the quarterly widening of the gap between assets and liabilities with residual contractual maturity of up to 1 year is smaller, compared to the previous quarter. The results of the stress tests indicate satisfactory resilience of the banking system to the individual assumed extreme liquidity outflows with certain improvement compared to the previous quarter.

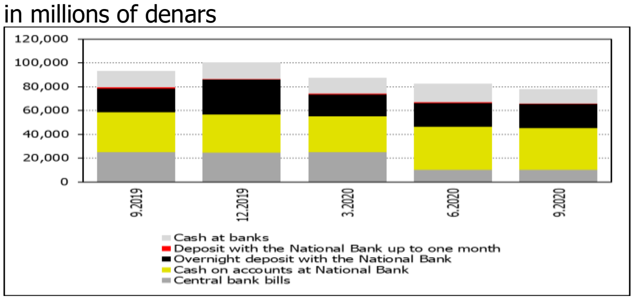
The second wave of coronavirus has emphasized the prolonged uncertainty around the negative effects of the COVID-19 pandemic both on global and domestic economy, creating more uncertain environment for monetary policy conduct. The measures taken by the National Bank in the first half of the year were aimed at creating liquidity in the banking system, which is used to provide support to the Macedonian economy, mainly through the maintenance of credit flows and the credit cycle by banks. In the period ahead, the National Bank will closely monitor the potential risks, as before, due to appropriate reaction, if necessary, thus enabling stable liquidity and equilibrium on the foreign exchange market.

Chart 29
Liquid assets, structure and growth
in millions of denars and in %



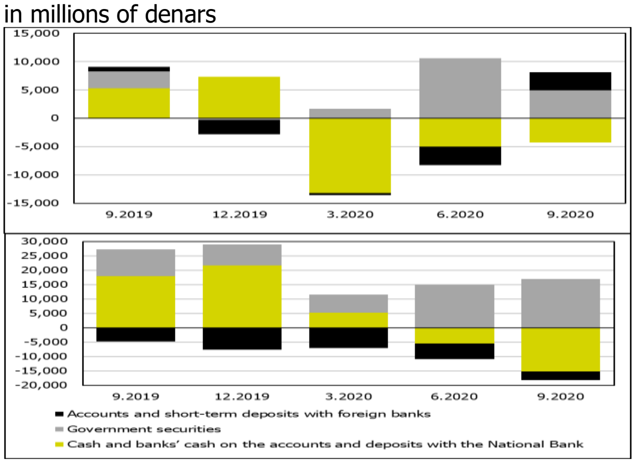
Source: National Bank, based on the data submitted by banks.

Chart 30
Assets and claims of banks from the National Bank, by instrument
in millions of denars



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

Chart 31
Quarterly (top) and annual (bottom) growth rate of liquid assets
in millions of denars



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

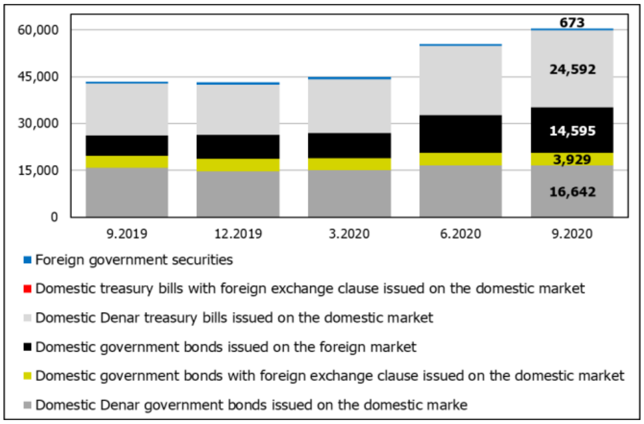
2.1. Dynamics and composition of liquid assets

As of 30.9.2020, the total liquid assets[26] of the banking system amounted to Denar 166,430 million and registered an accelerated quarterly growth of 2.4% (or Denar 3,859 million). On an annual basis, liquid assets slightly decreased by 0.7%. Analyzing the structure of liquid assets, their quarterly growth reflected the increased placements in domestic government securities and the increase in short-term foreign currency deposits in foreign banks. On the other hand, quarterly decline was registered in denar assets on denar account with the National Bank and foreign currency cash, while investments in CB bills are almost unchanged compared to the previous quarter.

At the end of the third quarter of 2020, cash and banks' assets with the National Bank (including CB bills) still have the largest portion (46.9%) in the structure of banks' liquid assets. However, on a quarterly basis, for three quarters in a row, total cash and banks' assets placed with the National Bank decreased (by Denar 4,292 million, or 5.2%, which is almost unchanged dynamics compared to the previous quarter[27]). This decrease is due to the quarterly decline in foreign currency cash (of Denar 3,110 million), with a contribution from reduced balance of denar account with the National Bank (decline of Denar 1,275 million, quarterly). Moreover, there is an evident increase in banks' placements in available overnight deposits with the National

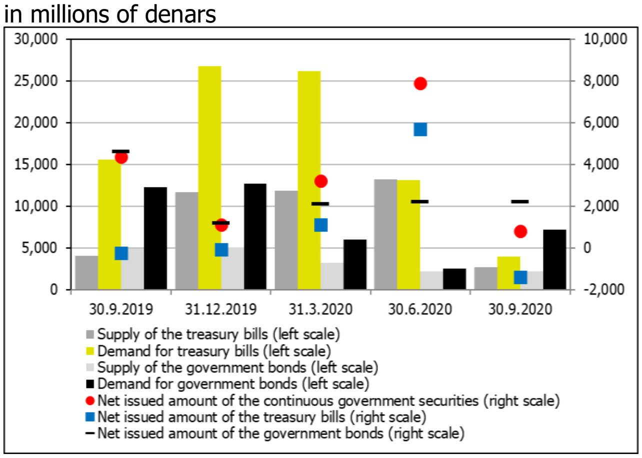
[26] The liquid assets encompass: 1) assets and claims on the National Bank, which include cash, assets on the accounts of banks with the National Bank, deposit facility with the National Bank and CB bills; 2) short-term deposits with foreign banks, including the assets of the banks on their correspondent 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.
[27] In comparison, in the second quarter of 2020, total cash and banks' assets placed with the National Bank dropped by Denar 4,973 million, or 5.7%.

Chart 32
Banks' investments in domestic government securities
in millions of denars



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

Chart 33
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.

Bank[28], amid slight decrease in deposits up to one month.

In the third quarter of 2020, banks investments in government securities continued to grow, starting from the beginning of the year (quarterly growth of Denar 4,970 million, or 9%), with an equal contribution to this growth from banks' increased investments in domestic government bonds (of Denar 2,485, or 7.6%) and treasury bills (of Denar 2,484 million, or 11.2%). The growth of total placements in government bonds is entirely due to banks' investments in Macedonian Eurobonds[29], while investments in denar government bonds and in denar government bonds with FX clause slightly declined (by 0.1%). The structure of government securities owned by banks is still dominated by government bonds (with 58.2%), with the largest share of denar government bonds[30]. Placements in foreign treasury bonds remained almost the same and have a modest share of only 1.1% in the total portfolio of government securities of banks. Observing the ownership structure, at the end of the third quarter, the banks' share in total government securities increased by 1.9 percentage points (from 36.1% in June 2020, to 38% in September 2020), while the total net issued amount[31] of government securities amounted to Denar 797 million (which is ten times lower compared to the previous quarter when it amounted to Denar 7.878 million).

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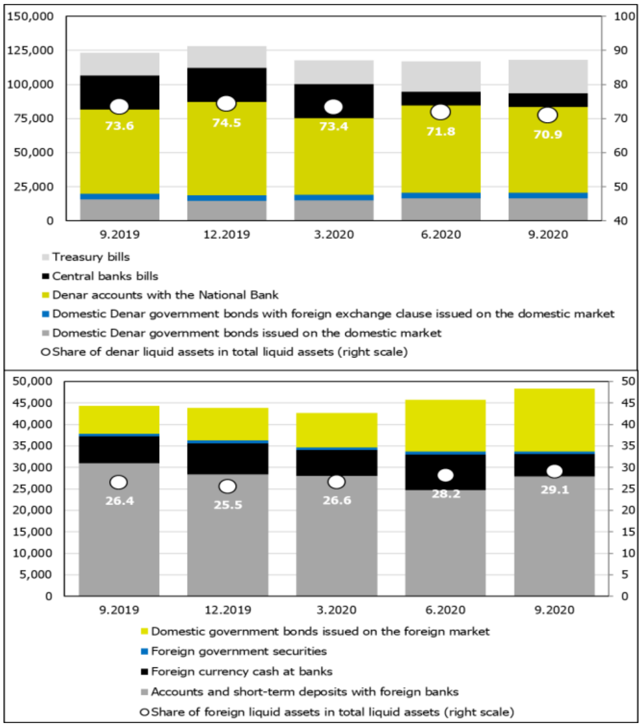
[28] According to the Decision on deposit facility (Official Gazette of the Republic of Macedonia No. 49/12, 18/13, 50/13, 166/13 and 35/15), the banks could place deposits with the National Bank every working day with a maturity of one business day (overnight) and once a week with a maturity of seven days. These deposits are placed without the possibility of partial or full early withdrawal. In 2020, 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.

[29] The Decision on the transition to the second phase of the association between the Republic of Macedonia and the European Community and its member states (Official Gazette of the Republic of Macedonia No. 17/19) of 25.1.2019, allows domestic banks to freely purchase and trade in domestic government Eurobonds.

[30] In May 2020 the scope of securities that the National Bank can accept from domestic banks as instruments for providing denar liquidity expanded. The National Bank will be able to accept domestic government bonds with the longest maturity (15 and 30 years) and Eurobonds issued by the government on international financial markets, owned by domestic commercial banks, when conducting monetary operations for purchasing securities on temporal or outright basis. More specifically, with these changes, the central bank will provide banks with greater access to liquidity, if needed in the following period, which indirectly creates additional space for increased credit support of the economy.

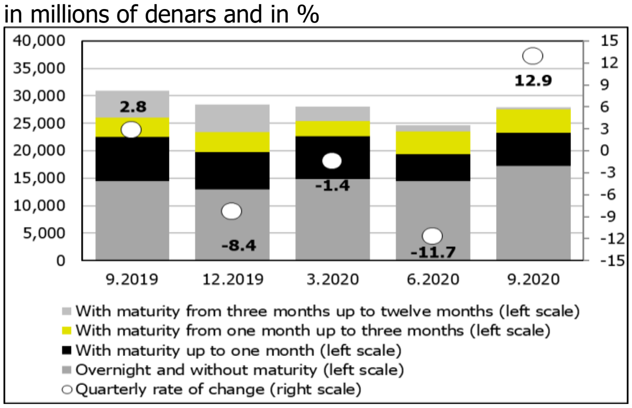
[31] Net issued amount of government securities is calculated as the difference between the issued amount at the auctions of government securities for a certain time period and the amount of government securities that falls due in the same time period.

Chart 34
Structure of denar (top) and foreign currency (bottom) liquid assets
in millions of denars and in %



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

Chart 35
Accounts and short-term deposits with foreign banks, structure and growth
in millions of denars and in %

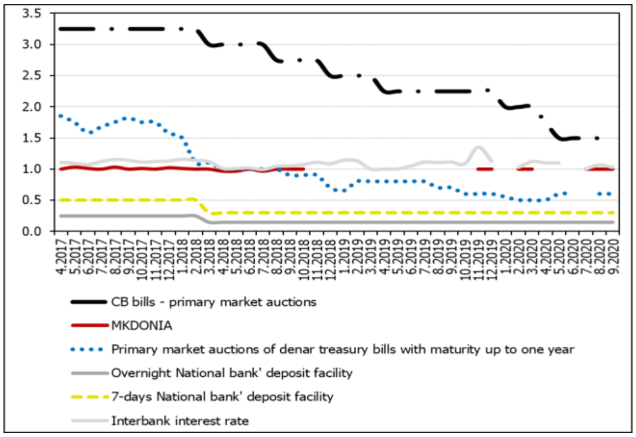


Source: National Bank, based on the data submitted by banks.

In the third quarter of 2020 the downward trend of short-term assets placed with foreign banks halted, so these financial instruments significantly grew, increasing their dominant share in the foreign exchange component of banks' [32]liquid assets(57.3%)[33]. In the third quarter of 2020, short-term assets in foreign banks increased by Denar 3,181 million, or 12.9%, which is very similar to the decline in these assets in the previous quarter[34]. With a share of 16.8% (15.2% as of 30.6.2020), the short-term assets placed in foreign banks remain a significant component in the total liquid assets for the purpose of liquidity and currency risk management, while the largest portion remain assets on corresponding accounts with domestic banks abroad.

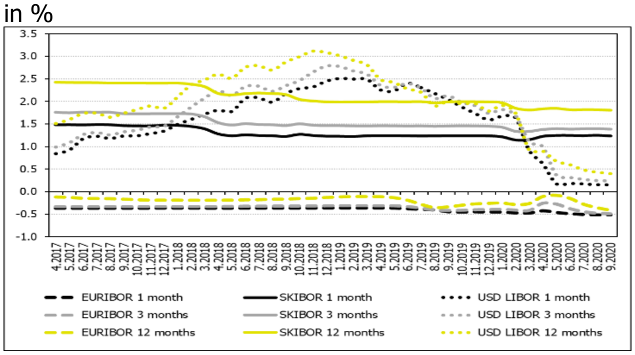
[32]Foreign currency liquid assets comprise short-term deposits with foreign banks, including assets on corresponding accounts, investments in foreign government securities and domestic government Eurobonds issued on foreign markets, foreign currency cash and foreign exchange account with the National Bank and placements of foreign currency deposits with the National Bank.
[33] In comparison, at the end of the second quarter of 2020, the share of these assets in total foreign currency liquid assets amounted to 54%.
[34]To illustrate, in the second quarter of 2020, short-term assets placed in foreign banks decreased quarterly by Denar 3,276 million, or 11.7%.

Chart 36
Domestic interest rates
in %



Source: National Bank.
Note: From the beginning of November 2018 to October 2019, as well as in January 2020 and in the second quarter of 2020, given the smaller number of reference banks that participate in the calculation of SKIBOR and MKDONIA and amid high denar liquidity, there were no transactions carried out on the interbank market for uncollateralized deposits which are used for calculation of MKDONIA.

Chart 37
Movement of the basic interbank interest rates SKIBOR, EURIBOR and LIBOR for the US dollar
in %



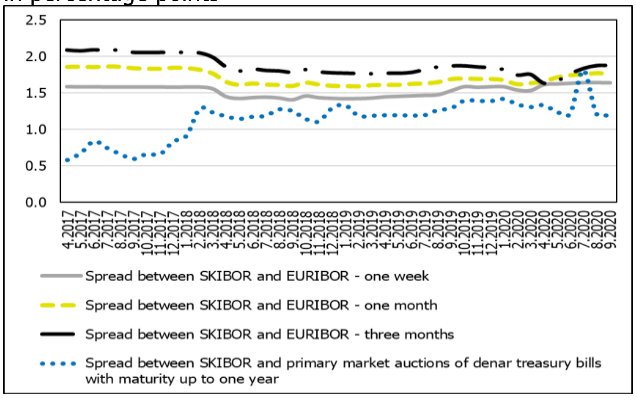
Source: The National Bank and the website of the European Money Markets Institute for EURIBOR and the website of the Federal Reserve Bank of St. Louis (so-called FRED) for LIBOR for US dollars.

The distribution of banks' liquid assets by financial instruments directly stems from the yield they bear, which primarily depends on the interest rates fluctuations. In the third quarter of 2020, amid unchanged policy rate of the National Bank of 1.5%, Skopje Interbank Offered Rate (SKIBOR[35]) remained almost at the same level. The interbank rate of all transactions (MBKS[36]) is lower, and it equaled 1% on average, (1.1% in the previous quarter). Amid prolonged uncertainty around the pandemic and its duration, as well as the spillover effects it has on the macroeconomic aggregate, the National Bank further monitors trends and potential risks of domestic and external environment in order to respond adequately by adjusting the monetary policy setup.

In the third quarter of 2020, the monetary policy setup in the developed countries remained stable, despite the current uncertainty around the US presidential elections and expected adverse effects of the second wave of COVID-19 pandemic. The policy rates during the third quarter remained the same in the US, Euro area, the UK and Japan. In the Euro area[37] the main refinancing operations rate remained the same, at 0%, thus the overnight deposits interest rate is unchanged since the last correction in September 2019 (when it reduced from -0.4% to -0.5%), with an unchanged interest rate of overnight credit (0.25%)[38]. Given such monetary policy setup,

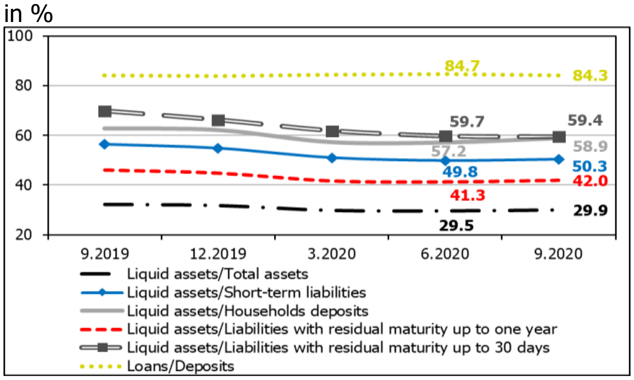
[35] SKIBOR (Skopje Interbank Offered Rate) is a reference interest rate on the denar money market and is an interbank interest rate at which one reference bank is ready to sell denar liquidity to another reference bank. Pursuant to the new Rules on Selection and Obligations of the Reference Banks Setting 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.
[36] MBKS is the interbank interest rate for trading on the interbank deposit market.
[37] At the meeting held in October 2020, the European Central Bank decided to keep the policy rates at the current levels or reduce them, until the prospects for inflation gradually reach the level of 2%.
[38] As of the writing of this report, the only change by the ECB in terms of interest rates refers to reduction of the interest rate in long-term refinancing operations program, in the period June 2020 until June 2021, thus reducing the interest rate by 50 basic points to

Chart 38
Spread of SKIBOR to EURIBOR, for selected maturities
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.

Chart 39 Liquidity indicators
in %



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

together with the ECB announcements to keep or reduce the current interest rates, EURIBOR remains within the negative zone, while the levels of international interbank rates in US dollars (LIBOR for US dollars) from the previous quarter remain almost the same in this quarter as well.

2.2. Liquidity indicators

In the third quarter of 2020, parallel with the increase of liquid assets of the Macedonian banking system, the liquidity indicators[39] remained at a stable level and slightly improved. Although the liquidity indicators are slightly below their ten-year average, they are still above their minimum values[40]. The liquid assets still make up almost 30% of the banks' total assets, and the coverage of short-term liabilities with liquid assets remained stable (slightly above 50%). The coverage of household deposits with liquid assets slightly increased and is slightly below the level of 60%[41]. The loan-to-deposit ratio at the level of the banking system is stable and still below 100%, which additionally points to conclusion that the liquidity risk the banks are exposed to, is within acceptable frames.

Observing the currency features of liquid assets and liabilities, in the third quarter of 2020, both denar[42], and foreign currency liquidity indicators improved. Amid large absolute quarterly growth of foreign

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the level of the reference interest rate on the refinancing operations, i.e. deposit rate, but not higher than -1%. This reduction is included in the set of measures to support the economy and mitigate possible adverse effects of the emergence of the new virus infections (coronavirus), adopted by the ECB at the meetings on 12 March and 30 April 2020.

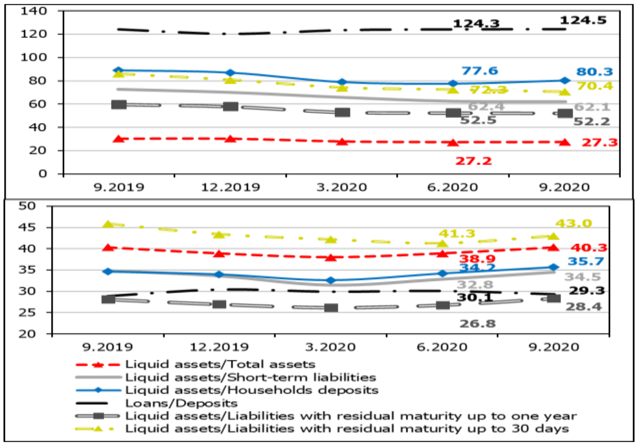
[39] The calculation of liquidity ratios of the banking system does not include resident interbank assets and liabilities.

[40] The decrease of the indicators below their ten-year average is registered in the first quarter of the year, due to the decrease in liquid assets, mainly due to a significant loan approved by six banks, in the total amount of Denar 8 billion. It is a short-term loan for repayment/ refinancing part of the long-term Government loan to an international financial institution.

[41] Analyzed by bank, as of 30.9 2020, the share of liquid in total assets ranges between 17.1% and 46.1%, with a median of 26.8% (September 2019: between 19% and 48.9%). The coverage of short-term liabilities with liquid assets is between 37.1% and 77.4%, with a median of 48.7% (September 2019: between 41.8% and 79.1%), and the coverage of household deposits with liquid assets ranges between 35.4% and 91.5%, with a median of 61.9% (September 2019: between 35.3% and 95.1%). The Development Bank of North Macedonia AD Skopje is excluded from this analysis.

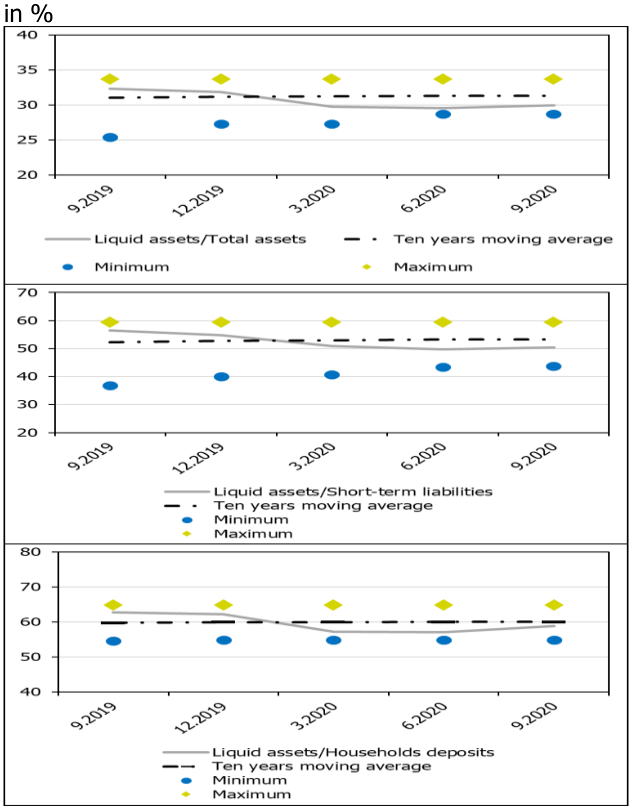
[42] Claims and liabilities with FX clause are considered as denar claims and liabilities, since their cash flow is in denars.

Chart 40
Liquidity ratios by currency– Denars (up) and FX (down)
in %



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

Chart 41
Liquid assets/total assets (top), liquid assets/short-term liabilities (middle) and liquid assets/household deposits (bottom)
in %



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

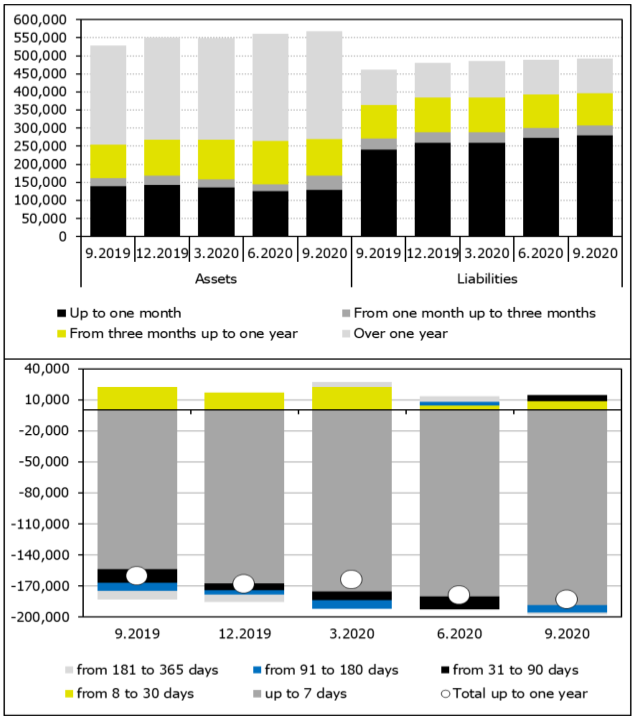
currency liquid assets, there is a slightly more pronounced improvement in foreign currency liquidity indicators. Most of the denar liquidity indicators still remain at a higher level compared to the foreign currency liquidity indicators, which results from the higher structural share of assets in denars in total liquid assets of banks. The lower level of the foreign currency liquidity indicators is offset by the possibility for the National Bank interventions on the foreign exchange market, so banks can provide the required foreign currency liquid assets at any time. In this context it should be born in mind that, in August 2020, amid currently worsened macroeconomic conditions due to COVID-19 pandemic, the ECB accepted the request of the National Bank to use liquid assets in the amount of Euro 400 million, if necessary). The liquidity assistance by the ECB is in a form of a bilateral repo transaction for the period until the middle of the next year, or while necessary. In case of materialization of negative risks related to corona crisis, foreign currency liquidity in euros by the ECB will provide the National Bank more space for a quick and efficient response to mitigate possible effects on the banking system[43].

Regulatory liquidity ratios of the banking system, presented as ratios between assets and liabilities that mature in the next 30 days and 180 days grew, and in the third quarter of 2020 remained above the minimum requirement of 1, thereby confirming the sufficient amount of liquidity available to the Macedonian banking system, which allows banks to carry out their liabilities. At the end of the third quarter of 2020, these rates amounted to 1.8 and 1.4, respectively[44].

2.3. Maturity structure of assets and liabilities

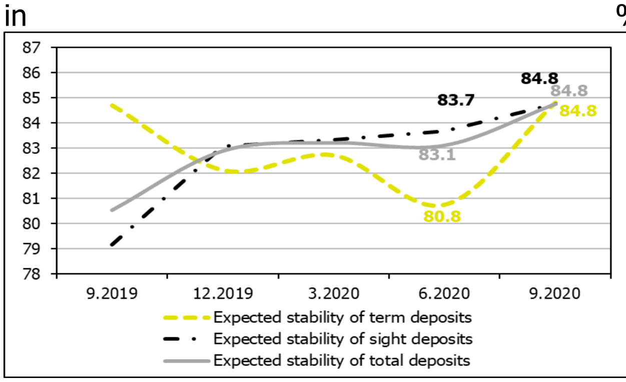
[43]For more details please visit: http://nbrm.mk/ns-newsarticle-soopstenie-18082020.nspx
[44]In comparison, at the end of the second quarter of 2020, these shares amounted to 1.7 and 1.3, respectively.

Chart 42
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 the data submitted by banks.

Chart 43
Expected stability of deposits with residual maturity of up to three months, by banks
in %



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

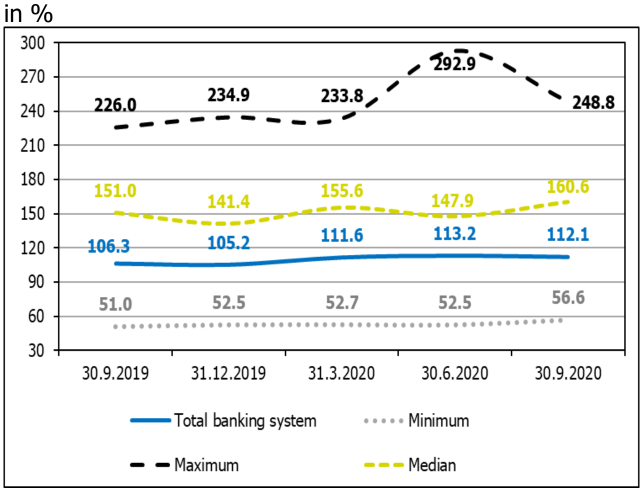
In the third quarter of 2020, with the changes in the structure of assets and liabilities, analyzed by their residual maturity, the gap between assets and liabilities with residual contractual maturity up to one year deepened. However, the quarterly widening of this gap is slightly smaller compared to the previous quarter. The largest contribution to the deepening of the overall gap (up to 1 year) was made by the transition of the gap between assets and liabilities with residual maturity between 3 and 6 months from positive to negative, which in turn is due to reduced placements in debt instruments (treasury bills and bonds) and with loans classified with this maturity segment (probably related to the approved new grace period for part of the loans, in order to easily overcome the consequences of the corona crisis). The total gap up to 1 year was also affected by the gap between assets and liabilities with residual maturity between 6 and 12 months, which in the third quarter of 2020 passed in the negative zone, entirely due to the reduced placements in loans, in this maturity segment. 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 additionally deepened in the third quarter of the year), which usually results from the inclusion of banks' liabilities on demand and without determined maturity in this maturity segment.

According to banks' expectations, the cumulative gap between assets and liabilities in all maturity segments is positive, which suggests that banks expect maintenance of the deposit stability as the main source of financing of their activities (for more details see the Annexes to this Report). Namely, at the end of the third quarter of 2020, banks expect high and great stability of deposits, i.e. that 84.8% of total deposits with residual maturity up to three months (80.8% as of 30.6.2020) will remain in banks, whereby the percentage of the expected stability for time deposits and demand deposits is equal (84.8%). The further retention of the high propensity to save in banks is especially important and largely depends on the expectations for stabilization of the situation in the domestic economy amid second wave of the COVID-19 pandemic.

2.4. Stress-simulations for liquidity shocks

On 30.9.2020, the conducted stress simulations for liquidity shocks show that the banking system is characterized by a satisfactory resilience to assumed shocks, thus holds sufficient liquid assets to respond appropriately to the individual simulated cash outflows. The resilience of the Macedonian banking system to liquidity shocks is confirmed by the results of all individual simulations of liquidity shocks, with the liquid assets being fully used (112.1% on 30.9.2020) only in case of significantly extreme simulation of liquidity shock, which covers combined outflows[45] of funds from banks on several bases. Considering the extremity of assumption, for the purpose of this simulation, the usual coverage of liquid assets is extended with other financial instruments[46] owned by banks, for which it is estimated that banks will quickly and easily collect or turn into cash. In such a case, amid combination of the assumed shocks, the liquid assets of the banking system would be fully used (in particular, to cover the liquidity outflows, it would take 103.1% of the

Chart 44
Reduction in liquid assets after the simulation for combined liquidity shocks (after all shocks), total banking system
in %

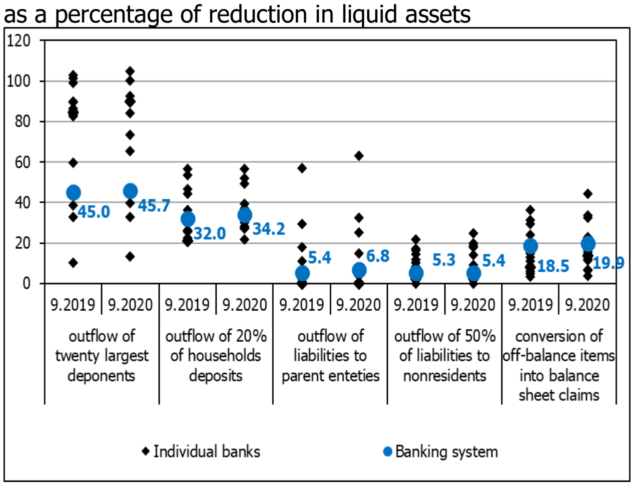


Source: National Bank, based on the data submitted by banks.

[45] 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.

[46] 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 45
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 the data submitted by banks.

available liquid assets, according to the expanded definition).

At individual simulations of liquidity shocks, the high level of liquidity which Macedonian Banking System have at their disposal provides settlement of all assumed, individual, extreme 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[47], the banks would spend about 20% of their liquid assets, which although less compared to the simulations of outflow of deposits[48], yet this assumed reduction in liquid assets 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.

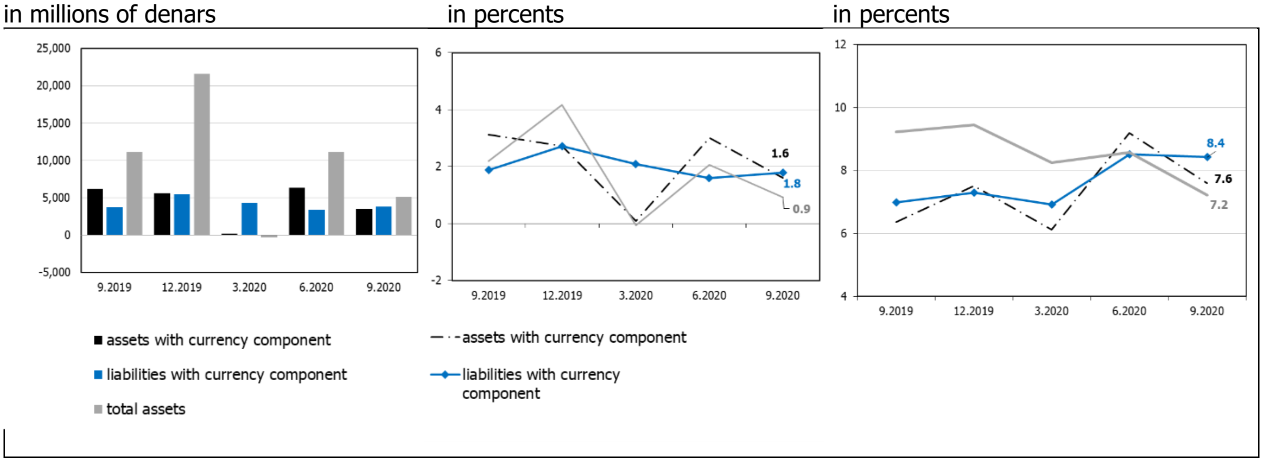
[47] Outflow is assumed as a result of the migration of some off-balance sheet liabilities of the banks (uncovered letters of credit, irrevocable credit lines and unused limits based on credit cards and approved overdrafts on transaction accounts) into on-balance sheet claims.
[48] During a simulation of outflow of the deposits of the 20 largest depositors, the liquid assets of the banking system are reduced by 45.7%, while in case of assumed outflow of 20% of the household deposits, liquid assets are reduced by 34.2%.

3. Currency risk

The banking system in the Republic of North Macedonia maintains a relatively low exposure to currency risk. In the third quarter of 2020, the direct exposure to this risk additionally decreased, which is evident through the reduced open currency position to own funds ratio and the share of the gap between assets and liabilities with currency component in own funds. In contrast, the indirect exposure to currency risk, which arises from the presence of currency component loans in the banks' loan portfolios, is at a relatively high level. However, bearing in mind the largest share of the euro in the banks' activities with currency component, the probability of materialization of direct and indirect exposure of banks to currency risk is minimal, given the implementation of the strategy of maintaining a stable nominal exchange rate of the denar against the euro.

Analyzed by individual bank, as of 30.9.2020, all banks were in line with the prescribed limit of 30% for the aggregate currency position to own funds ratio.

Chart 46
Quarterly (left and middle) and annual (right) growth of total assets and of assets and liabilities with currency component *
in millions of denars in percents in percents



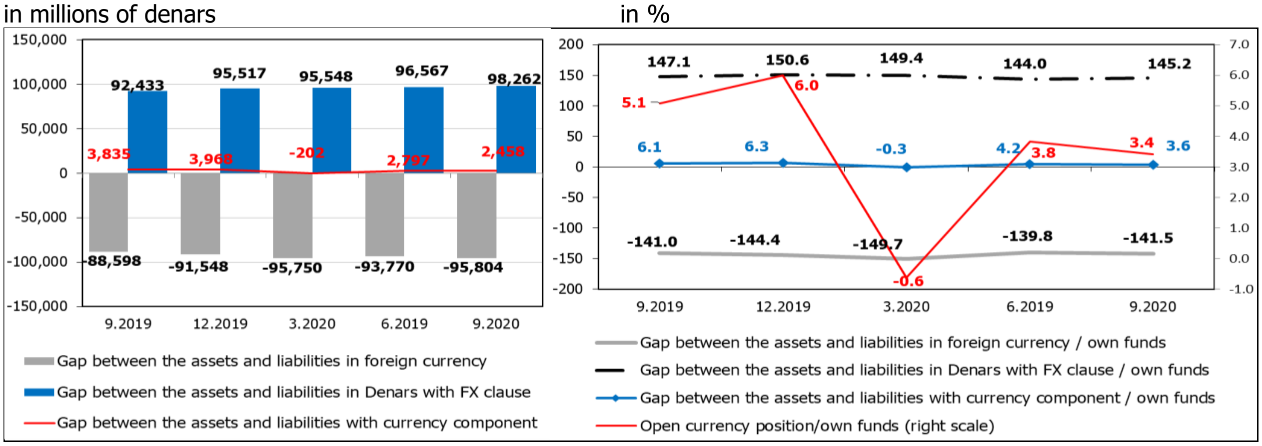
Source: National Bank, i.e. the report on open currency position based on data submitted by banks.
* The assets are on a net basis, reduced by the impairment of claims that are classified in risk categories "C", "D" and "E", in accordance with the regulations on currency risk management. DBNM is not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

As of 30.9.2020, the gap between assets and liabilities with currency component was positive and amounted to Denar 2,458 million, which decreased quarterly by 12.1%, or by Denar 339 million. This reduction results from the slightly higher increase in the liabilities (which increased by 1.8% or by Denar 3,826 million)[49] compared to the

[49]Liabilities with currency component increased due to the growth in foreign currency loan-based liabilities, by Denar 3,766 million and the growth in the position Current accounts and other short-term liabilities by Denar 2,180 million (which includes the growth of current accounts of natural persons, of Denar 2,476 million and transaction accounts in foreign banks by Denar 893 million, against the decrease in current accounts of private non-financial corporations by Denar 614 million). The growth of liabilities with currency component was somewhat influenced by the growth of deposits of non-financial institutions by Denar 671 million. On the other hand, currency deposits of non-residents and natural persons increased by Denar 2,182 million and Denar 877 million, respectively.

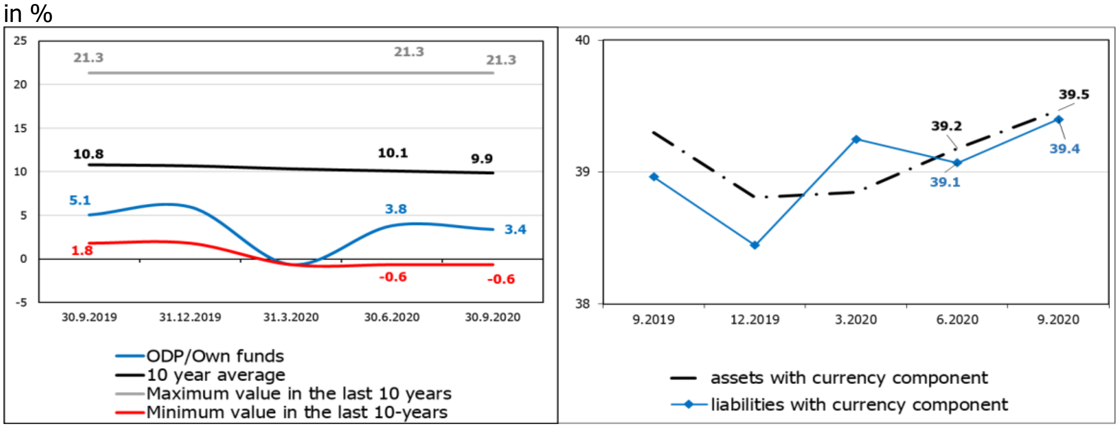
growth of assets with currency component (which increased by 1.6% or by Denar 3,487 million)[50]. The reduced gap between assets and liabilities with currency component, amid growth of banks' own funds, quarterly decreased the ratio of this gap and the own funds. Thus, at the end of the third quarter of 2020, this ratio equaled 3.6%, which is a decrease of 0.6 percentage points, while the open currency position equaled 3.4% of the own funds of the banking system, and is lower by 0.4 percentage points compared to 30.6.2020[51].

Chart 47
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 the data submitted by banks.

Chart 48
Ten year average of the OCP/own funds ratio (left) and share of the assets and liabilities with currency component * in the total banks' assets (right)
in %



Source: National Bank, based on the data submitted by banks.
*Within the assets, claims are shown on a net basis i.e. adjusted for the impairment. The analysis does not include DBNM AD Skopje.

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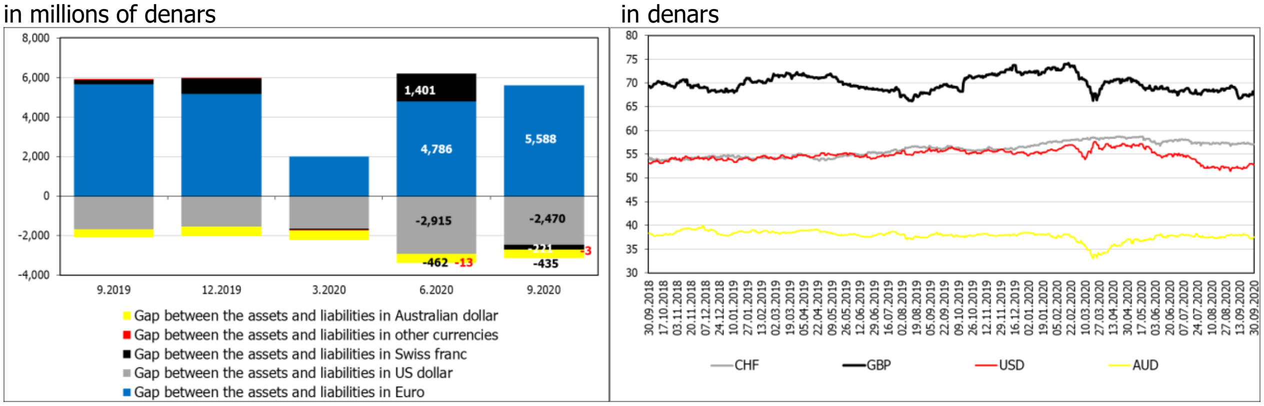
[50]The growth of assets with currency component was mostly conditioned by the increased investments in domestic Eurobonds, by Denar 2,498 million, the growth of current foreign currency accounts in foreign banks by Denar 2,106 million, denar loans with FX clause by Denar 1,170 million and foreign currency deposits by denar 772 million (amid decrease in currency cash, by denar 2,689 million).
[51] The gap between assets and liabilities with currency component represents the difference between the balance sheet assets and liabilities with currency component, while the open currency position, besides the gap between balance sheet assets and liabilities with currency component, includes the gap between off-balance sheet assets and liabilities with currency component.

The quarterly increase of assets and liabilities with currency component was conditioned by the growth of their share in total banks' assets, i.e. liabilities. The total assets also increased (by Denar 5,077 million)[52], yet its relative growth equaled 0.9%, and was lower than the growth of assets (1.6%) and liabilities (1.8%) with currency component.

Chart 49
Dynamics and structure of the gap between assets and liabilities with currency component, by currency (left) and movement of the denar against the US dollar, Swiss franc, British pound and Australian dollar (right)

in millions of denars / in denars



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

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

Currency	30.6.2020		30.9.2020	
	Assets	**Liabilities**	**Assets**	**Liabilities**
Euro	89.5	88.4	90.5	88.9
US dollar	6.1	7.6	6.0	7.2
Swiss franc	2.0	1.4	1.3	1.4
Australian Dollar	0.8	1.0	0.7	0.9
British pound	0.5	0.6	0.6	0.6
Other	1.0	1.0	0.9	0.9
Total	**100.0**	**100.0**	**100.0**	**100.0**

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

Analyzing currencies, the narrowing of the gap between assets and liabilities with currency component is mostly due to the narrowing of the gap between assets and liabilities in Swiss francs (by Denar 1,623 million), which is positive (Denar 1,401 million as of 30.6.2020) shifted to negative (Denar -221 million as of 30.9.2020). Such movements in the gap in Swiss francs stem from the sharp quarterly decline in assets in Swiss francs (by Denar 1,583 million[53]). The euro, although remains the most common currency in the currency structure of assets and liabilities with currency component, had no influence on the decrease in the total gap between assets and liabilities with currency component. In the third quarter of 2020, the gap between assets and

[52] The calculation of the share of assets, i.e. liabilities with currency component in total assets, uses data from the Report on currency exposure by position, which does not include the DBNM AD Skopje.

[53] The decrease in the assets in Swiss francs stems from the quarterly decline in Cash, cash equivalents, gold and precious metals (by Denar 1,115 million), mostly in one large bank. In addition, the decrease in placements in deposits denominated in Swiss francs (by Denar 468 million) also contributed to the decline in total assets in this currency.

liabilities in euro (including the gap in denars with Euroclause), increased by Denar 802 million. This results from the faster growth of assets in euros and in denars with Euroclause (by Denar 5,232 million)[54], relative to the growth of liabilities in euros and in denars with Euroclause (by Denar 4,430 million)[55]. The other analyzed currencies registered narrowing of the gap between assets and liabilities, which is insignificant and has no major impact on the movements of the total gap between assets and liabilities with currency component In the third quarter of 2020, the exchange rate of the British pound and the US dollar continued to decrease, against the euro (consequently the denar), with a sharper decline compared to the previous quarter. Downward trends in the exchange rates were also registered in the Swiss franc, although milder, while the exchange rate of the Australian dollar recorded mild upward and variable movement, mainly remaining at the same level throughout the entire quarter.

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

Items	Number of banks										
	Open currency position by currency / own funds										Aggregate currency position / own funds
	Euro		US Dollar		Swiss franc		Australian Dollar		Other		
	Long	Short	Long	Short	Long	Short	Long	Short	Long	Short	
under 5%	6	1	8	5	8	4	8	1	9	4	6
from 5% to 10%	1										1
from 10% to 20%	2	1									3
from 20% to 30%	2										3
over 30%											

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

Maintaining a stable nominal exchange rate of the denar against the euro is a key factor for maintaining low probability of materialization of the indirect currency risk, having in mind that more than 99% of the loans with currency component are denominated in euros or are in denars with Euroclause. In the third quarter of 2020, the share of loans with currency component in total loans to non-financial entities is almost unchanged (growth of 0.1 percentage point). Moreover, this share in corporations increased by 1.0 percentage points, while in households it decreased by 0.9 percentage points.

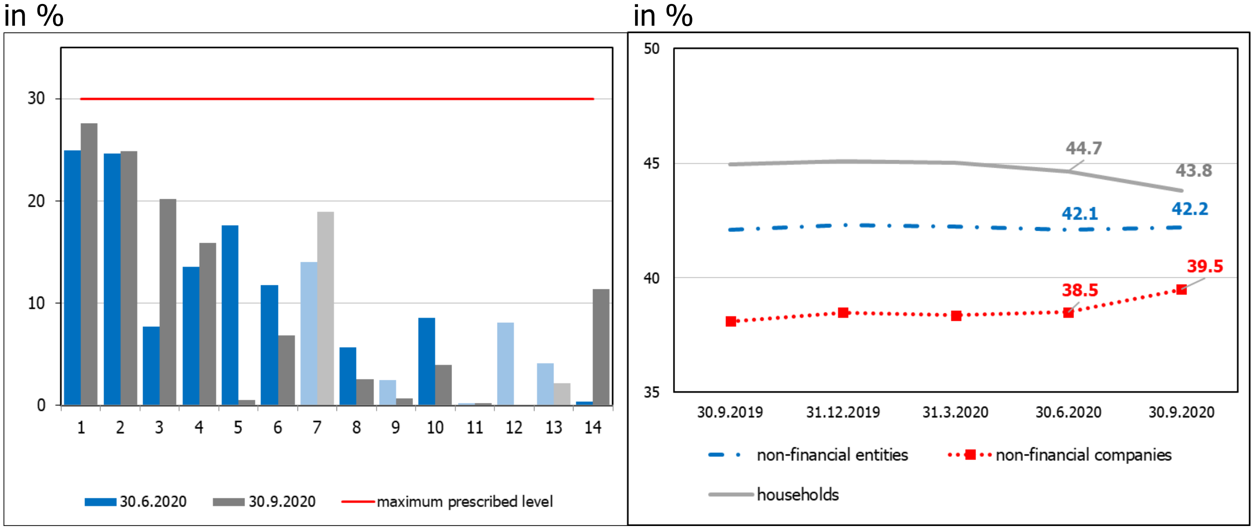
As of 30.9.2020, all banks were in line with the prescribed limit of 30% for the aggregate currency position to own funds ratio. Eleven banks had a long foreign currency position, as opposed to two banks that recorded a short foreign currency position. The highest aggregate foreign currency position was long and amounted to 27.6% in relation to the bank's own funds, while the lowest, which was also long, amounted to 0.2% of the bank's own funds.

[54]The growth in denar and euro assets with Euroclause, is mostly due to the increased investments in domestic Eurobonds, by Denar 2,498 million, the growth in denar loans with by Denar 1,179 million, the growth in Cash, cash equivalents, gold and precious metals (by Denar 696 million), which includes euro current accounts, as well as the growth in euro deposits (by Denar 487 million).

[55]The growth in euro and denar liabilities with Euroclause is mostly due to the increase in loan-based liabilities in euro (by Denar 3,766 million) and the increase in Current accounts and other short-term liabilities (by Denar 2,382 million). Euro deposits (including time and demand deposits) decreased by Denar 1,904 million.

Chart 50

Aggregate currency position to own funds ratio, by bank* (left) and loans with FX component to total loans ratio (right)



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

* Columns with lighter shades, refer to the banks that have a short foreign currency position, but shown in absolute value.

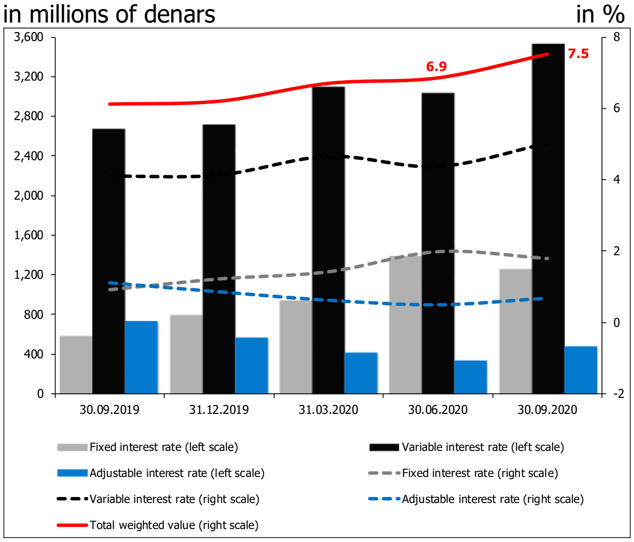
* As of 30.9.2020, 13 banks are presented (one less) given the revocation of the operating license of Eurostandard Banka AD, Skopje in August 2020.

4. Interest rate risk

In the third quarter of 2020, the exposure of the banking system to the interest rate risk in the banking book increased, due to the growth of the weighted value of the banking book, which increased its share in own funds. The increase in the total weighted value of the banking book mostly results from the positions with variable interest rate, where the gap between interest-sensitive assets and liabilities widened primarily due to the growth of the placements in loans with this type of interest rate and their shifting from the blocks with shorter to the blocks with longer period until next interest rate revaluation. Also, the growth in the weighted value of the banking book is due to the widening of the gap between interest-sensitive assets and liabilities with adjustable interest rate, which was mostly conditioned by the growth in liabilities on demand with adjustable interest rate. The total (non-weighted) gap is positive, which on an aggregate basis exposes the banking system to the risk of reducing interest rates. The significant presence of the loans with variable and adjustable interest rates, despite it is decreasing, it further expose the banks to indirect credit risk from the exposure of their clients to the risk of increasing interest rates.

Chart 51 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 the data submitted by banks.

*The total weighted value of the banking book denotes the potential loss of the economic value of this portfolio, amid assumed unfavorable interest shock of ±2 percentage points.

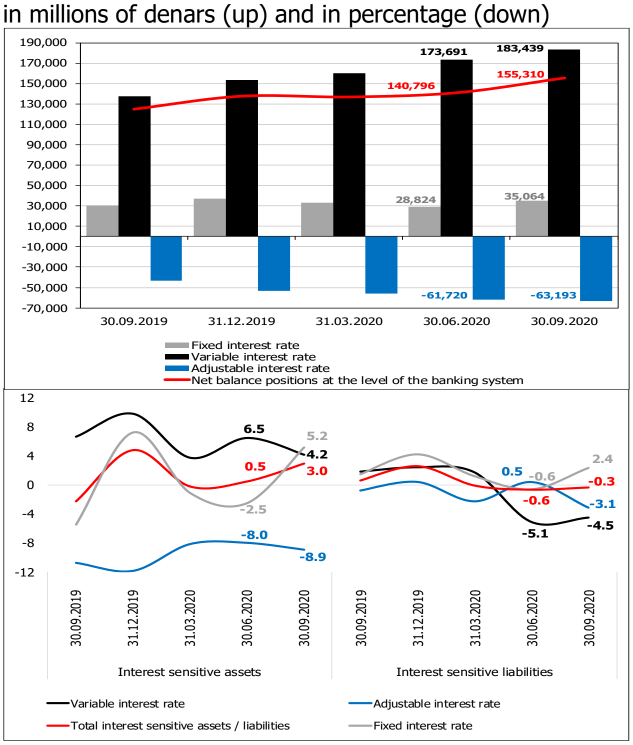
The total weighted assets of the banking book registered a quarterly increase of Denar 503 million or by 10.6%. This, despite the growth of own funds (of 0.9%), increased the ratio between the weighted value of the banking book and the own funds by 0.6 percentage points, to the level of 7.5%. At the same time, the level of this ratio, used to measure the exposure of the banking system to the interest rate risk in the banking book, exceeded even more the level of the average calculated for the last 10 years (4.6%) and slowly approaches the calculated maximum value, for the last 10 years (9.4%). Analyzed by bank, this ratio ranges from 0.1% to 13.6%, and is below the level of the prescribed threshold of 20.0%[56]. Analyzing the type of interest rate, the quarterly growth of the total weighted value of the banking book mostly results from the increase in the weighted value of the portfolio with variable interest rate (Denar 492 million or 16.2%) and partially from the growth of the portfolio with

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

Chart 52

Interest-sensitive assets and liabilities by type of interest rate, gap (up) and quarterly growth (down)

in millions of denars (up) and in percentage (down)

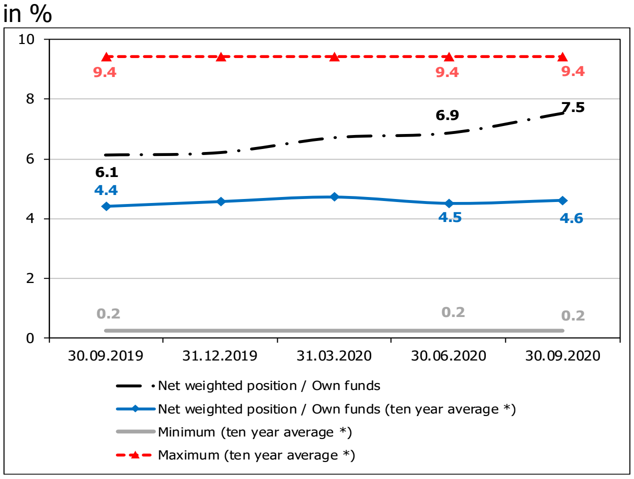


Source: National Bank, based on the data submitted by banks.

Chart 53

Net weighted position / own funds*

in %



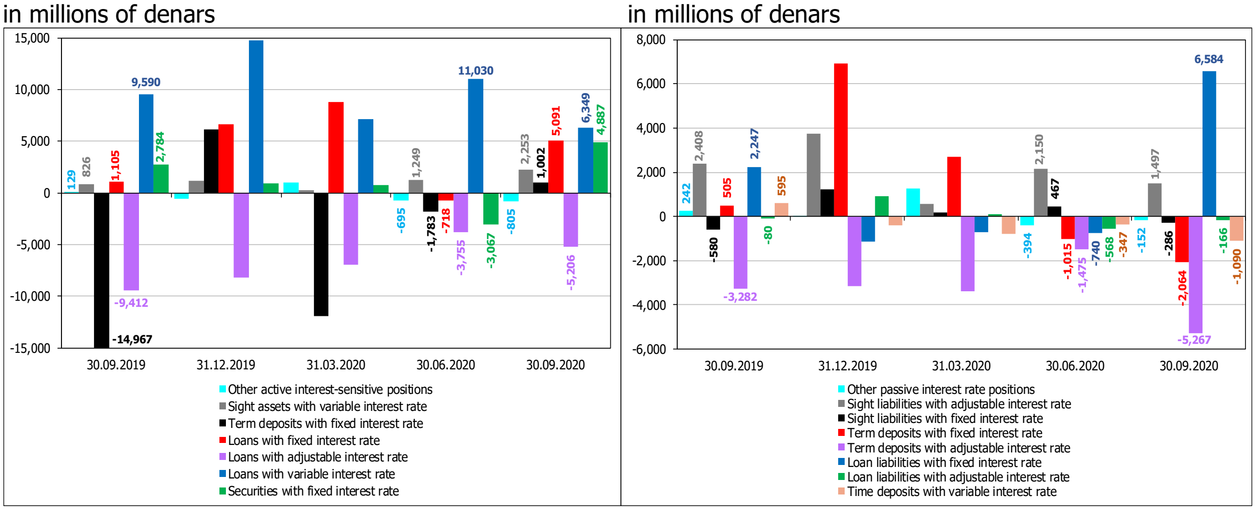
Source: National Bank, based on the data submitted by banks.

*As of 30.6.2020 and 30.9.2020, the data for the average, minimum and maximum are calculated for the last ten years. For the other Dates shown in the chart, the average, minimum and maximum are calculated for the last nine years. Namely, data on the interest rate risk in the banking book are available starting from 2010.

adjustable interest rate (Denar 134 million or by 38.9%). The growth of the weighted value of the portfolio with variable interest rate is due to the increase in the gap between the asset and liabilities items with this type of interest rate amid simultaneously redistribution in the structure of the gap, from the blocks with shorter (up to one month) to the blocks with longer residual maturity (3 - 6 months). Such changes in the gap with variable interest rates mostly result from the changes in the placements in loans with this type of interest rate. The growth of the weighted value of the portfolio with adjustable interest rate is due to the expansion of the (negative) gap with this type of interest rate, which is mostly conditioned by the quarterly increase in demand deposits with adjustable interest rate. In contrast, the weighted value of the portfolio with fixed interest rate decreased (by Denar 123 million, or by 8.9%). The decrease in the weighted value of this portfolio, amid expanded gaps with this type of interest rates, results from the rearranging of the positions (mostly placements in loans and securities), from the blocks with longer to the blocks with shorter residual maturity.

The total gap between the interest-sensitive assets and liabilities increased quarterly by 10.3%, or Denar 14,514 million. This is mostly due to the widening of the **positive gap between the positions with variable interest rate** (which registered a quarterly growth of 5.6%, or by Denar 9,748 million) mostly due to the increased placements in loans with this type of interest rate and partly due to increased assets in banks on demand with variable interest rate. **The positive gap between assets and liabilities with fixed interest rate** also spread (by Denar 6,239 million, or 21.6%), which results from the higher quarterly growth of funds with fixed interest rate (primarily due to increased placements in loans, securities and time deposits with this type of interest rates), compared to liabilities with fixed interest rate, where loans-based liabilities mostly conditioned the growth, amid decline in liabilities based on demand deposits with fixed interest rate. **The negative gap between assets and liabilities with adjustable interest rate** widened by Denar 1,474 million or by 2.4%, which amid similar absolute quarterly decline in placements in loans and liabilities based on time deposits, results from the quarterly increase in liabilities on demand with adjustable interest rate.

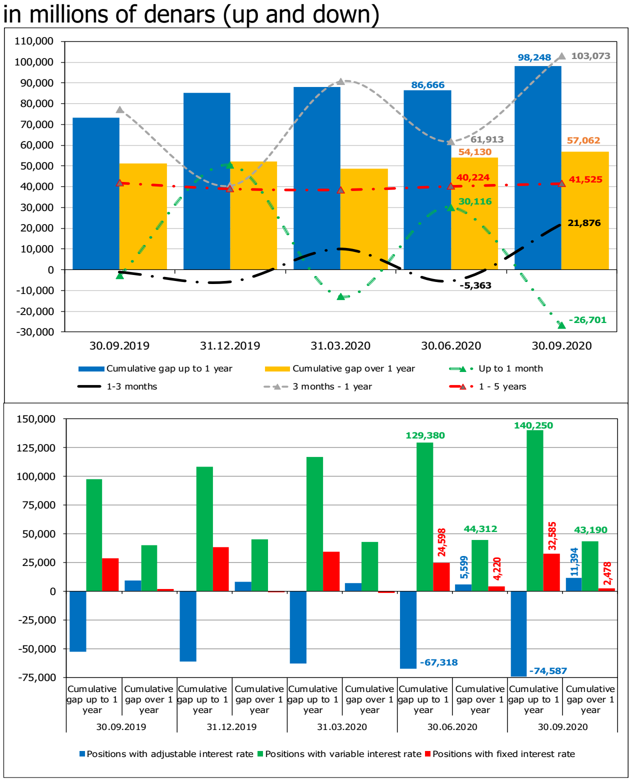
Chart 54
Quarterly changes of the interest sensitive assets (left) and liabilities (right), by type of instrument and type of interest rate
in millions of denars
in millions of denars



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

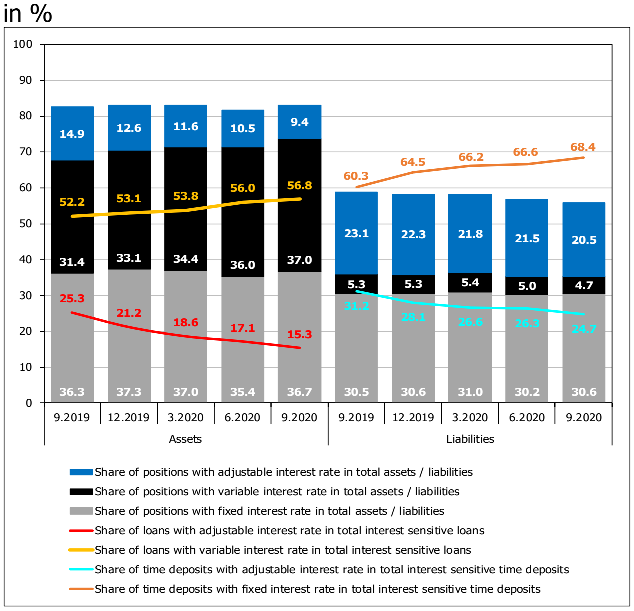
Analyzing the time period until the next reassessment of the level of interest rates, the expansion of the total gap between the interest-sensitive assets and liabilities is entirely due to the expansion of the gap up to 1 year, by Denar 11,583 million, and widening of the gap over 1 year by Denar 2,931 million. The expansion of the gap between the interest-sensitive active and passive positions up to 1 year is mostly concentrated in the blocks from 3 to 6 months (mainly due to the increased placements in loans with variable interest rate) and from 1 to 3 months (mainly due to the increased placements in loans, regardless of the interest rate, as well as placements in securities). At the same time,

Chart 55 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 down)



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

Chart 56 Assets and liabilities structure, by type of interest rate
in %



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

the gap up to 1 month significantly decreased and from positive shifted to negative, mostly due to decreased placements in loans with variable interest rate. The expansion of the gap between the interest-sensitive active and passive positions over 1 year is mostly concentrated in the block from 2 to 3 years, mainly due to the increased placements in securities with fixed interest rate and placements in loans with variable interest rate.

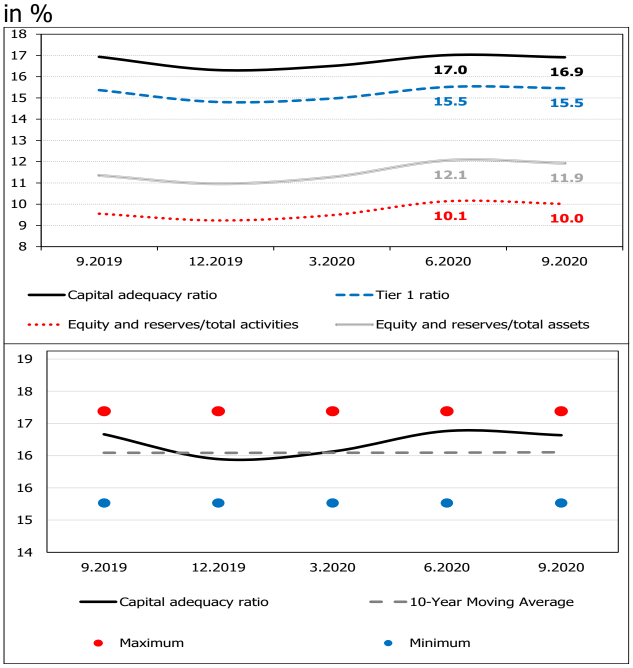
The indirect exposure to interest rate risk, which arises from the presence of loans with adjustable and variable interest rates, remains significant, although slightly decreased. As of 30.9.2020, the share of these loans in the total loans equals 72.1% (which is less by 1.0 percentage points compared to 30.6.2020), whereby 56.8% of the total loans have variable interest rate, while 15.3% are with adjustable interest rate, which exposes banks to indirect credit risk from the exposure of their clients to the risk of increasing interest rates. The trend of reduction of the share of the positions with adjustable interest rate in interest-sensitive the third quarter of 2020, both with interest-sensitive assets and with interest-sensitive liabilities.

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

5. Insolvency risk

In the third quarter of 2020, the banking system maintained its high capitalization and stable solvency position, despite the insignificant decrease in solvency and capitalization indicators. The capital adequacy ratio slightly decreased quarterly by 0.1 percentage points, to the level of 16.9%, which is due to the rapid growth of banks' activities (mainly credit risk-weighted assets) compared to the growth of own funds. The growth of own funds was used to meet the capital requirements and capital buffers (the amount of which grew due to the increased activities), thus using part of the free capital (the capital above the regulatory and supervisory minimum). The share of free capital in own funds reduced from 10.4% in the second quarter of 2020, to 10.1%. However, as much as 42.6% of the own funds of the banking system account for the capital supplements determined according to the supervisory assessment and for the capital buffers, which in turn are especially important in conditions of crisis episodes, when they can be used to deal with challenges of different nature and intensity. The conducted stress testing of the banking system resilience to the simulated shocks shows satisfactory resilience, similar to 30.6.2020.

Chart 57
Solvency indicators (top) and capital adequacy (bottom)
in %



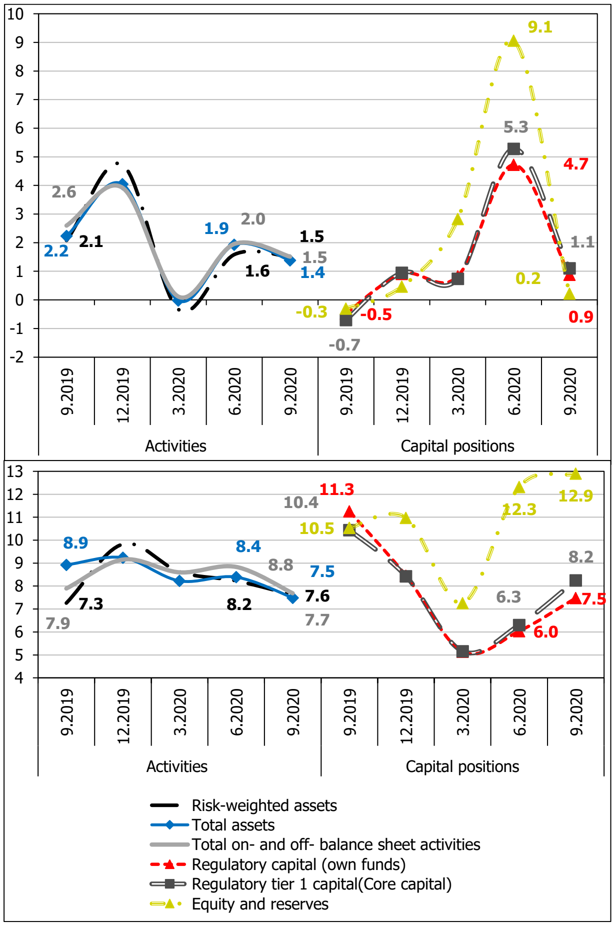
Source: National Bank, based on the data submitted by banks.

5.1. Solvency and capitalization ratios of the banking system

In the third quarter of 2020, the banking system's solvency and capitalization indicators registered a moderate downward shift, due to pronounced increase in activities of the banking system, compared to the increase in capital positions. Thus, the on-balance sheet assets, the risk weighted assets and total (on-balance sheet and off-balance sheet) activities of banks grew quarterly by 1.4%, 1.5% and 1.5%, respectively, while the increase in own funds, the Tier 1 capital and capital and reserves was more moderate and equaled 0.9%, 1.1% and 0.2%, respectively. The quarterly growth of risk-weighted assets results from increase in the credit risk weighted assets (which increased by 1.7%, or Denar 6,165 million), as well as from the increase in currency risk weighted assets (by 7.3%, or by Denar 654 million)[58].

[58] Such movements do not correspond to the quarterly narrowing of the gap between assets and liabilities with currency component of the total banking system, in the currency risk section of this Report. According to the methodology for determining capital adequacy, the bank is required to determine and hold the capital requirement for covering currency risk (and consequently to determine currency risk-weighted assets), if the sum of the net-position of gold and aggregate currency position of the bank do not exceed 2% of the

Chart 58
Growth of components of solvency ratios, quarterly (up) and annual (down)
in %



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

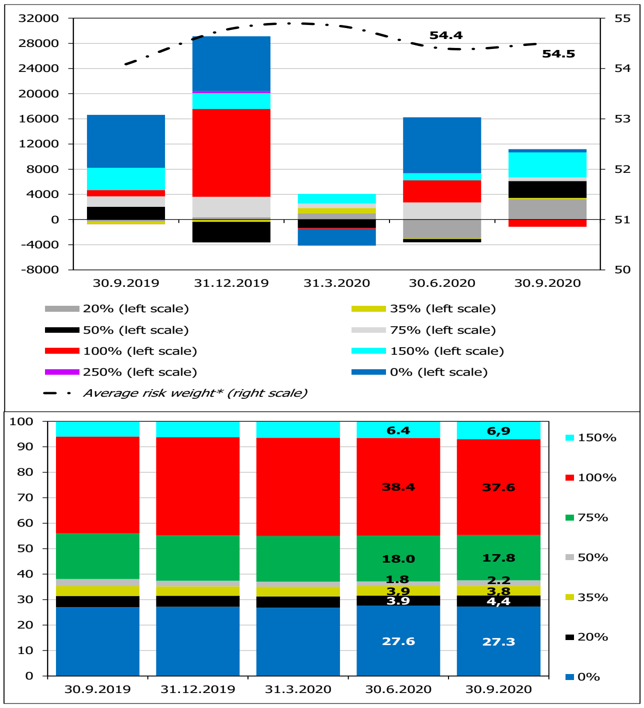
In the third quarter of 2020, the capital adequacy ratio of the banking system equaled 16.9%, which is by only 0.1 percentage points lower compared to the previous quarter. However, it remains high compared to the calculated ten-year average of this item, which equals 16.5%. Analyzed by bank, the capital adequacy ratio as of 30.9.2020 is higher in all banks by 14%. At the same time, the capital and reserves to total assets ratios, i.e. the total activities of the banking system decreased by 0.2 and 0.1 percentage points, respectively and as of 30.9.2020 amounted to 11.9% and 10%, respectively. On the other hand, the capital adequacy ratio and Common Equity Tier 1 capital ratio, in the third quarter of 2020 remained same as in the previous quarter, 15.5% and 15.4%, respectively and are more than two times higher than the prescribed minimum of 6% and 4.5%, respectively (whereby only one bank issued instruments of Additional Tier 1 capital)[59].

In conditions of reduced credit activity, the risk weighted assets registered a slightly decelerated quarterly growth, while the level of riskiness of the bank activities (measured as a ratio between credit risk weighted assets and the total on-balance sheet and off-balance sheet exposure) slightly increased (by 0.1 percentage point) to 54.5%. Such increase in the average risk level of banking activities was mostly due to the significant quarterly growth of risk-weighted positions of 20% and 50% (by a total of Denar 5,959 million), as a result of the increased receivables (growth of short-term assets in foreign banks, as well as increase in claims on

bank's own funds. According to this, as of 30.9.2020, four banks (one large and three medium-sized) do not determine the capital requirement for covering currency risk. These banks registered significant quarterly narrowing of the gap between assets and liabilities with currency component, which contributes to the decrease in total gap in the banking system, as analyzed and determined in the currency risk section.

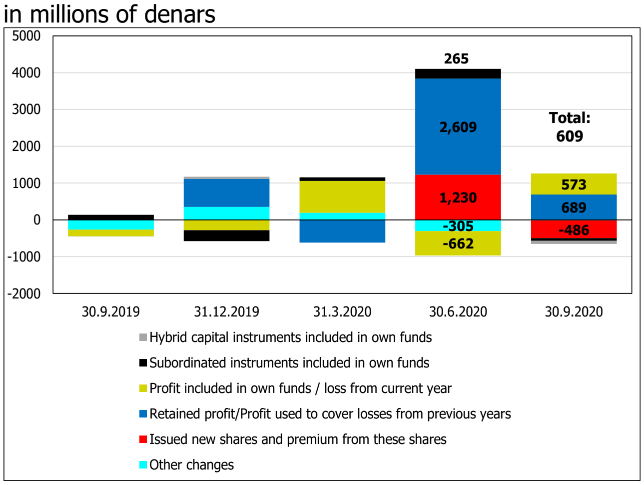
[59] Banks are required to calculate the leverage ratio semi-annually as well (as a ratio between the Tier 1 capital and total on-balance and off-balance sheet exposure), which in the first half of 2020 equaled 10.5% (10.7% for the second half of 2019).

Chart 59
Quarterly changes (up) and structure (down) in the total on-balance sheet and off-balance sheet exposure, by risk weights
in millions of denars   in %



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

Chart 60
Structure of the quarterly growth of own funds
in millions of denars



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

DBNM AD Skopje from domestic banks[60]). Moreover, positions with risk weight of 150% grew quarterly (Denar 3,963 million), due to increased portfolio of small loans (household credit activity), in conditions when around 62% of consumer loans were under moratorium during the third quarter of 2020 and clients did not pay their loan installments.

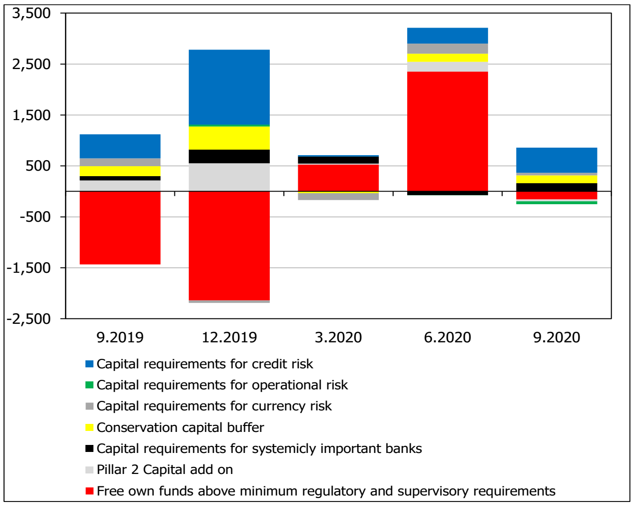
5.2. Quality of own funds of the banking system

The structure of the own funds at a level of the banking system shows that the sector has high-quality capital positions, which provide it with satisfactory resilience to potential stressful scenarios. As of 30.9.2020, the highest-quality buffer of the own funds of the banking system (the Common Equity Tier I capital) accounts for 91% of the total own funds, the Additional Tier I capital accounts for only 0.4% of the own funds of the banking system, while the Tier II capital makes up 8.6%.

In the third quarter of 2020 the banking systems own funds grew at a significantly slower pace than in the previous quarter. The quarterly growth of own funds results from the registration of new common shares and the premium of these shares (by one large bank, in the amount of Denar 615 million). In addition, one medium-size bank issued a new subordinated instrument, in an amount of only Denar 185 million. The reduced number of banks by one, due to the exit of Eurostandard Bank from the banking system, had an overall negative impact on the quarterly change of own funds, which mostly reflected the total amounts of common shares and premium of these shares, as well as the issued subordinated and hybrid capital instruments, which declined. On the other hand, given the high losses of

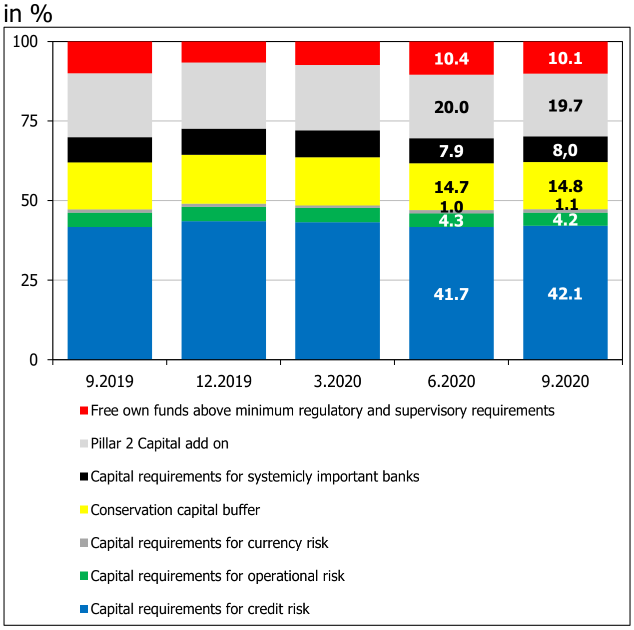
[60]These are rather DBNM AD Skopje loans placed in domestic banks, based on an approved credit line from the EIB, intended for financing domestic non-financial companies.

Chart 61
Quarterly growth of own funds, by the requirement for covering risks and for maintaining the required capital buffers
in millions of denars



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

Chart 62
Structure of own funds, by the requirement for covering risks and for maintaining the required capital buffers
in %



Source: National Bank, based on the data submitted by ba

Eurostandard Banka in the current and past years, the positions that refer to accumulated losses and the loss in the current year of the banking system, declined quarterly, which contributed to increase in own funds of the banking system.

For more details about the level of own funds by group of banks see annexes to this report.

The quarterly increase in own funds was entirely used to meet the capital requirements for credit risk coverage, capital requirements to meet the capital buffer and the capital buffer of systemically important banks[61], the amounts of which increased amid growth in risk-weighted assets. Thus, the own funds above the required level for covering all these requirements registered a slight decrease and as of 30.9.2020 they accounted for 10.1% of the total own funds of the banking system. At the same time, the amount of the capital supplement determined by the supervisory assessment reduced, by Denar 37 million, or 0.3%[62]. The capital buffer for systemically important banks increased

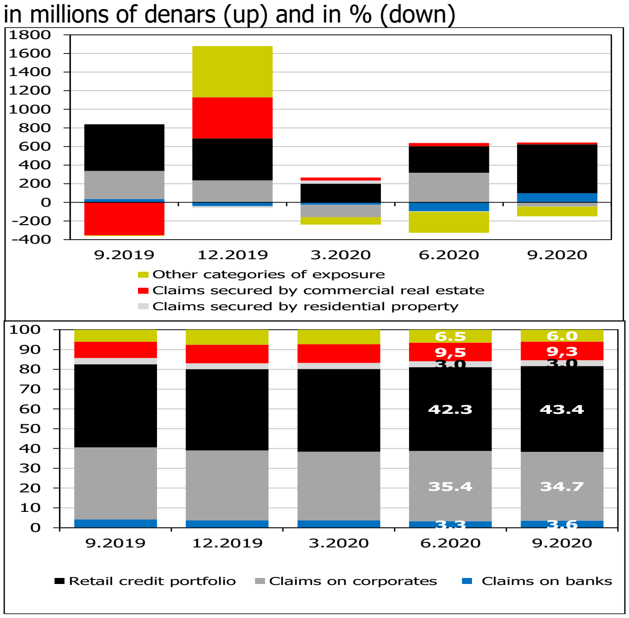
[61] From the four capital buffers specified by the Banking Law, for the time being all banks are required to meet the capital conservation buffer, while the seven banks identified as systemically important banks are also required to meet an appropriate rate of capital buffer for systemically important banks.

[62] The decrease in this capital supplement is mostly due to the closure of Eurostandard Banka AD, Skopje, given the high capital supplement determined by the supervisor, in line with the bank's overall risk assessment.

Chart 63

Quarterly growth rates (up) and structure (down) requirements for credit risk, by exposure category

in millions of denars (up) and in % (down)

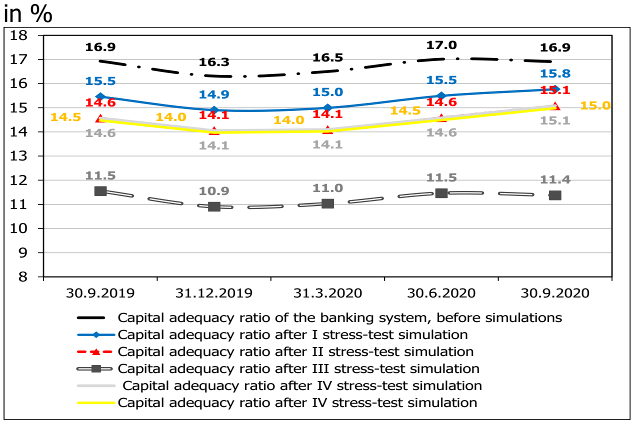


Source: National Bank, based on the data submitted by banks.

Chart 64

Results of stress-test simulations

in %



Source: National Bank, based on data submitted by banks[57].

quarterly by Denar 161 million, or 2.9%[63], while the regulatory capital for covering individual risks (credit, currency and operational risk) registered a quarterly increase of Denar 489 million (or 1.5%), which is entirely due to increased capital requirements for credit risk coverage (mostly due to banks' increased lending to households) and increased capital requirements for currency risk coverage (by Denar 52 million, or 7.3%).

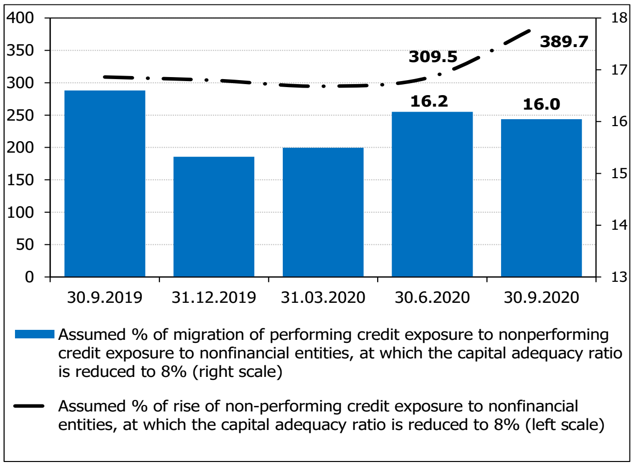
5.3. Stress-testing of the banking system resilience to hypothetical shocks

The banking system shows a satisfactory level of resilience to the conducted regular simulated shocks, which assume extreme materialization of the credit risk, isolated, or in combination with materialization of the currency and/or the interest rate risk). The results of the stress-test simulations, which assume growth of non-performing credit exposure, measured through the level of capital adequacy ratio, are slightly better compared to 30.6.2020, given the significant quarterly decrease in non-performing credit exposure. On the other hand, the results of the stress-test simulations which assume transition of a certain percentage from performing to non-performing credit exposure point to a slightly lower capital adequacy after the shocks, compared to the end of the previous quarter (by 0.1 percentage point),

[57] Stress testing includes the following simulations:
I: Increase in non-performing loan exposure to non-financial entities by 50%;
II: Increase in non-performing loan exposure to non-financial entities by 80%;
III: Migration of 10% of the performing to a non-performing credit exposure to non-financial entities;
IV: Increase in non-performing loan exposure to non-financial entities by 80% and increase in interest rates from 1 to 5 percentage points;
V: Increase in non-performing loan exposure to non-financial entities by 80%, depreciation of the Denar exchange rate by 30% and increase in interest rates from 1 to 5 percentage points;

[63] At the end of April 2020, and based on the latest calculations according to the data as of 31.12.2019, seven banks were identified as systemically important banks (which have to meet the determined capital buffer rate for systemically important banks, by 31.3.2021). For more information visit:

Chart 65
Necessary deterioration of the quality of credit exposure to cause a decline in the capital adequacy of the banking system to 8%
in %



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

similar to the quarterly change in the capital adequacy level before the shocks.

Hypothetical shocks on the part of the credit risk had the greatest impact on the solvency of the banking system. The results of the reverse stress test show that it takes growth of 398.7% of non-performing loan exposure, i.e. migration of 16% from regular to non-performing loan exposure for the capital adequacy of the banking system to drop to 8%. However, these are rather extreme and less likely simulations, especially in the short term, given that in the third quarter of 2020, the non-performing credit exposure to non-financial entities registered a quarterly decrease of 26.9%. On the other hand, in the third quarter of 2020, only 0.2% of the regular credit exposure to the non-financial sector received a non-performing status. However, we should take into account the developments related to COVID-19, which are not only risk to the health and the health systems, but also a potential danger to both domestic and global economy, which may consequently increase risks in banks' operations.

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https://www.nbrm.mk/content/%D0%9B%D0%B8%D1%81%D1%82%D0%B0%20%D1%81%D0%B8%D1%81%D1%82%D0%B5%D0%BC%D1%81%D0%BA%D0%B8%20%D0%B7%D0%BD%D0%B0%D1%87%D0%B0%D1%98%D0%BD%D0%B8%20%D0%B1%D0%B0%D0%BD%D0%BA%D0%B8%2031%2012%202019.pdf

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

1. Bank activities

In the third quarter of 2020, total assets of the banking system further grew, yet at a slower pace. The slower growth of the banking system assets, is mainly due to reduced number of banks by one. With the revocation of the founding and operating license of Eurostandard Banka AD Skopje in August 2020, data on this bank were excluded from the data on the overall banking system, which is a factor of structural nature and affects the changes in this period.

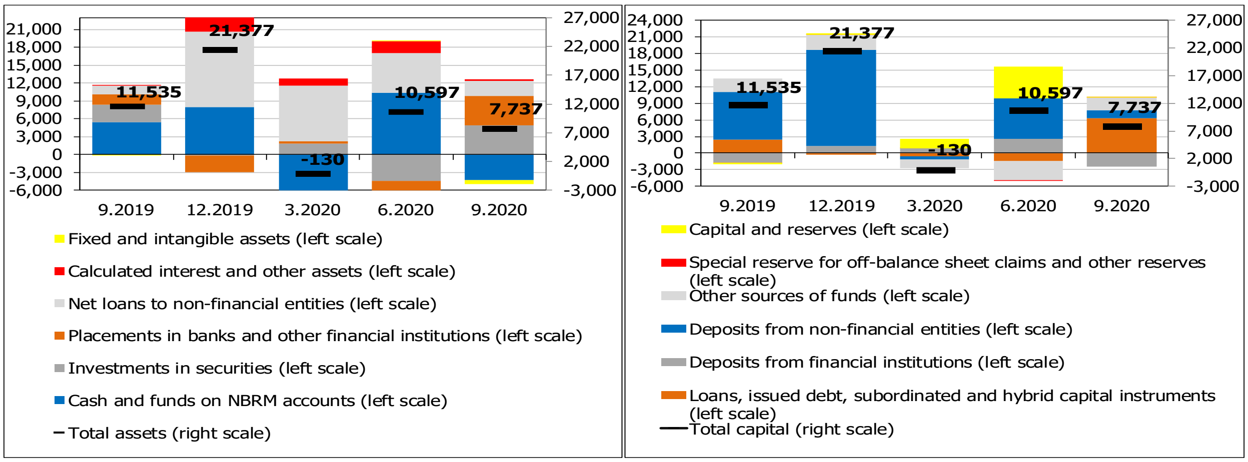
The assets growth in the third quarter reflects the increase in loan liabilities in total liabilities, which significantly grew by almost 23% quarterly. This growth mostly resulted from the loans of DBNM AD Skopje placed in domestic banks, based on an approved credit line from the EIB, with the ultimate goal of financing domestic non-financial companies. The growth of the banks' financial potential was significantly driven by deposits to non-financial entities. Amid deepening of the risks to domestic economy, caused by the current health crisis, they increased quarterly, almost entirely due to the growth of corporate deposits.

Within the assets structure, the quarterly growth in the banking system liquid assets and loans to financial institutions was most pronounced (from DBNM to domestic banks based on the credit line from EIB).

Loans to non-financial entities slightly declined quarterly, due to the decrease in corporate loans, as a result of the bank's exit from the banking system (the credit growth is positive if we exclude the effect of this one-off event).

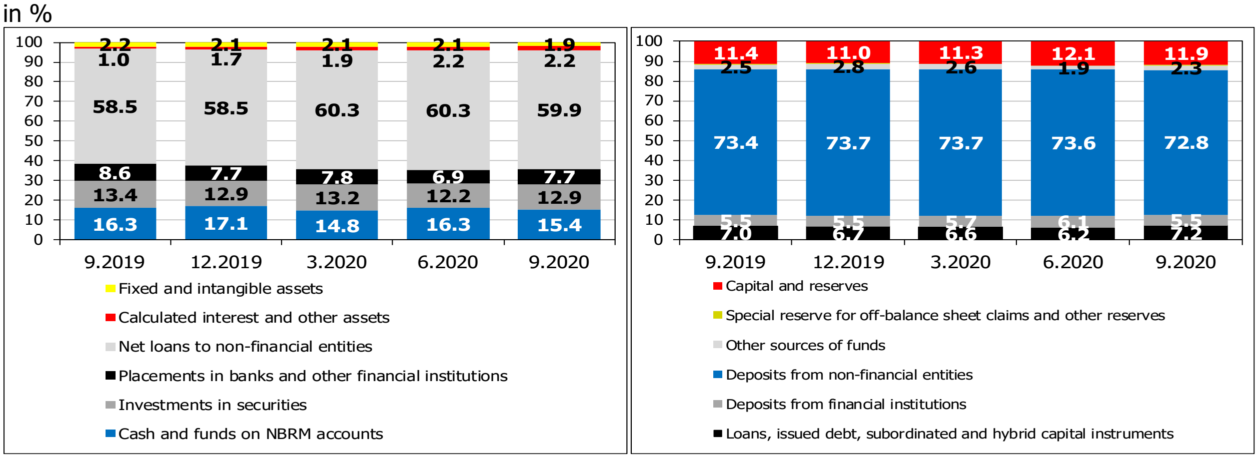
The measures taken by the National Bank in the first half of the year were aimed at creating liquidity in the banking system, which is used to provide support to the Macedonian economy, mainly through the maintenance of credit flows and the credit cycle by banks. In September 2020, given the protracted effects of the corona crisis, banks decided to ease the credit standards, this time for the categories of clients that faced pronounced adverse effects of the health crisis. The easing of credit standards mostly refers to approving grace periods, usually until March 2021. The further continuance of the health crisis can affect the recovery pace of the economic activity in the following period, and thus the operations of financial intermediaries.

Chart 66 Quarterly growth of components of assets (left) and liabilities (right) of the banking system
in millions of denars



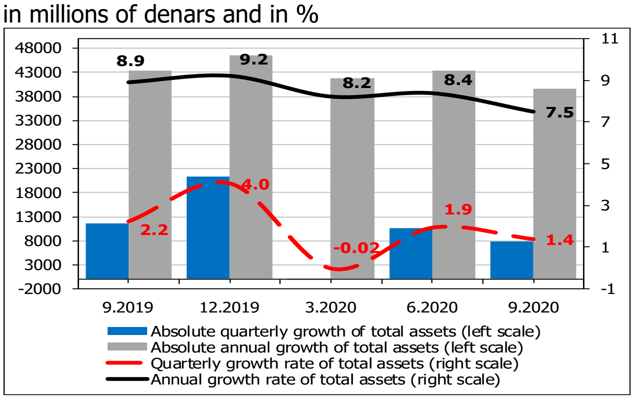
Source: National Bank, based on the data submitted by banks.

Chart 67 Structure of the assets (left) and liabilities (right) of the banking system
in %



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

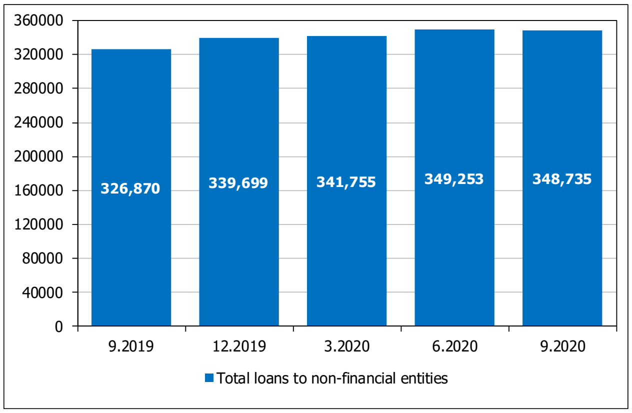
Chart 68
Assets of the banking system
in millions of denars and in %



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

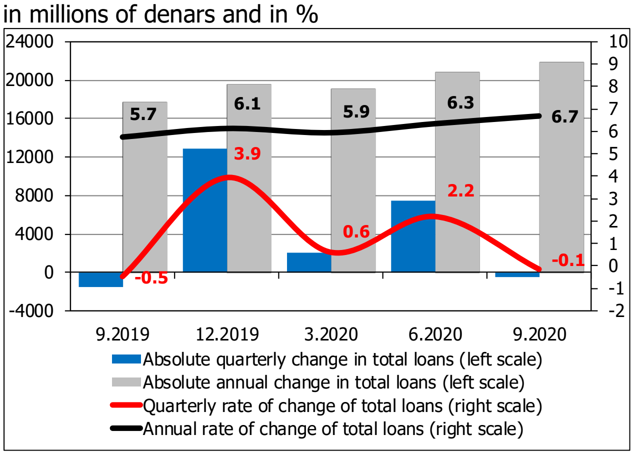
As of 30.9.2020, total assets of the banking system was Denar 568,174 million worth, which is a slower quarterly increase of Denar 7,737 million, or 1.4% (growth of 1.9% in the second quarter of 2020). Analyzed annually, the growth of assets decelerated as well and equaled 7.5% (8.4% as of 30.6.2020, i.e. 8.9% as of 30.9.2019). Moreover, within assets, the most significant increase (of Denar 3,859 million) was registered in liquid assets, primarily due to placements in domestic government securities and short-term foreign assets in foreign banks (amid decrease in assets on denar account with the National Bank and

Chart 69
Amount of loans to non-financial entities
in millions of denars



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

Chart 70 Growth of loans to non-financial entities
in millions of denars and in %



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

foreign currency cash). Quarterly increase (of Denar 2,523 million) was registered in loans to financial institutions (namely domestic banks), which results from loans of DBNM AD Skopje placed in domestic banks, based on an approved credit line from the EIB, intended for financing domestic non-financial companies. **On the liabilities side**, the most pronounced quarterly growth (of Denar 6,440 million) was registered in loan-based liabilities, which is largely due to the aforementioned withdrawal of assets from the EIB credit line, which DBNM AD Skopje placed in domestic banks. Quarterly growth was also registered in deposit activities with non-financial entities (by Denar 1,512 million), while deposits of financial institutions decreased, similar to liabilities to parent entities (explained below).

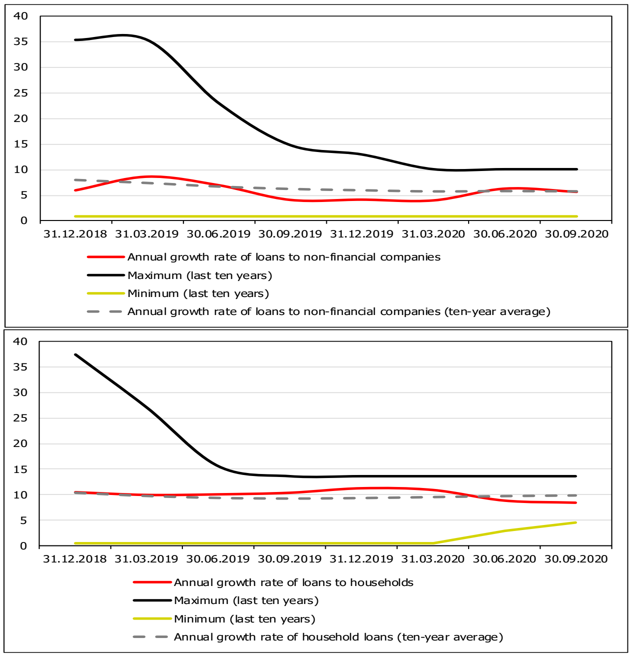
1.1. Loans to non-financial entities[64]

In the third quarter of 2020, the lending to non-financial entities slightly decreased. Loans to non-financial entities[65] decreased by Denar 518 million, or 0.1% mostly due to the reduced number of banks in the system. If we exclude this effect, the credit activity to non-financial entities would grow quarterly by around 1.6%, which is slightly slower compared to the second quarter of 2020 (when it amounted to 2.2%). In contrast, annually, lending registered a faster growth, of Denar 21,864 million, or 6.7% (6.3% as of 30.6.2020, i.e. 5.7% as of 30.9.2019). Given the fact that around 45% of loans to non-financial sector were under moratorium during the third quarter of 2020, when clients do not pay their loan installments, the credit growth rates in this quarter of the year are overrated, compared to the credit growth rates in those periods when clients regularly paid their loan-based

[64] 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).

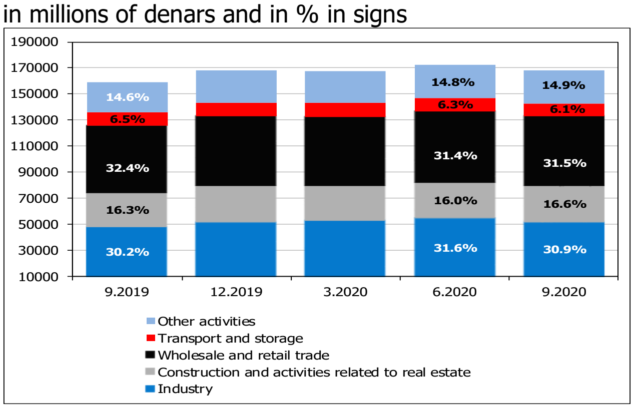
[65] Loans to non-financial entities do not include the government loan granted in January 2020, by six banks, in the total amount of Denar 8,173 million. It is a short-term loan for repayment/ refinancing part of the long-term Government loan to an international financial institution.

Chart 71 Ten-year moving average of annual growth rates of loans to non-financial corporations (up) and household loans (down)
in %



Source: National Bank, based on the data submitted by banks.
* Note: Data for the period from 2016 to 31.12.2019 does not include the effect of the regulatory change to compulsory write-offs.

Chart 72
Structure of loans to non-financial corporations, by activity
in millions of denars and in % in signs



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

liabilities. In September 2020, given the protracted effects of the corona crisis, banks decided to ease the credit standards, this time for the categories of clients that faced pronounced adverse effects of the health crisis.

As of 30.9.2020, twelve out of thirteen banks[66] realized intensified lending activity compared to the previous quarter. Thus, three banks (two large and one medium-size bank) contributed to almost 80% of the total quarterly growth of loans to non-financial entities (excluding the effect on the growth from the exit of Eurostandard Bank).

The quarterly decrease in loans to non-financial entities entirely resulted from corporate loans, while household loans significantly grew.

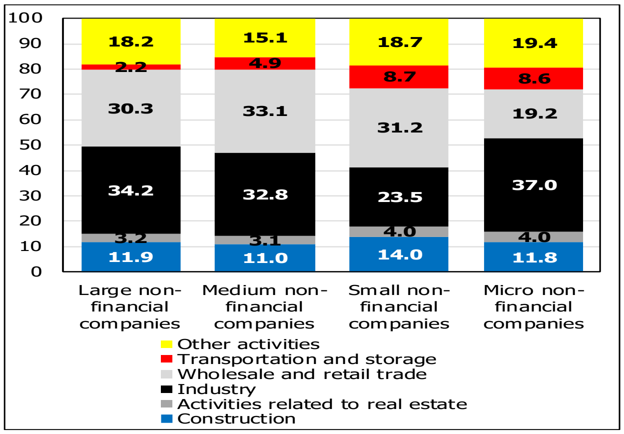
The loans extended to non-financial corporations decreased by Denar 4,637 million, or 2.7% on a quarterly basis. However, such decrease is mostly due to the aforementioned reduction by one bank. If we exclude the effect of such change, loans to non-financial companies decreased again, yet the decline is minor and amounts to 0.2%. However, the annual growth rate of corporate loans accelerated and equaled 5.2% (4.7% as of 30.6.2020), at the level of its ten-year moving average.

In the third quarter of 2020, banks made net tightening of credit standards[67] for corporate loans[68]. At the same time, in this quarter, banks point to further more pronounced net decrease in total demand for corporate loans. For the fourth quarter of 2020, banks expect net easing of the credit conditions for approving corporate loans, followed by a net increase of the credit demand by companies.

[66] DBNM is not taken into account due to its specific activities, which hardly include direct lending to companies.
[67] Analyzing the conditions for corporate lending, banks point to net tightening in non-interest income (unlike the net easing in the previous quarter) and in the collateral requirements. Regarding the other credit conditions (interest rate, size and maturity of loans) banks pointed to net easing in the third quarter.
[68] Source: National Bank Lending Survey in the third quarter of 2020.

Chart 73 Structure of loans to non-financial companies, by size of the company

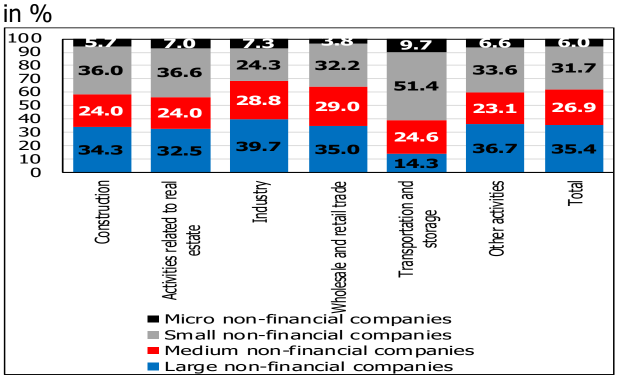
in %



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

Chart 74 Structure of loans to non-financial companies by individual activities and by size of the company

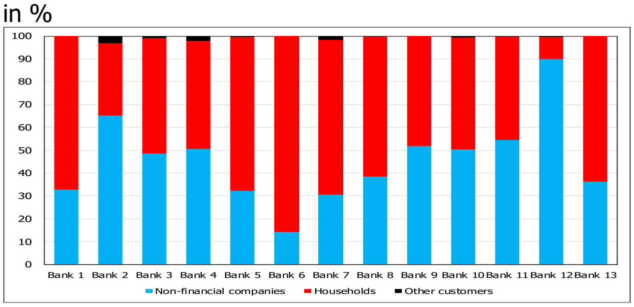
in %



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

Chart 75 Sectoral structure of loans to non-financial entities, by bank

in %



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

The structure of loans to non-financial companies, according to the economic activity of the clients, is predominated by the loans extended to clients from wholesale and retail trade and industry. Analyzing the size of non-financial corporations[69], as of 30.9.2020, approved loans are almost equally distributed among large (35.4%), small (31.7%) and medium-size (26.9%) companies.

As opposed to the reduced lending to enterprises, **the quarterly growth rate of household loans[70] accelerated compared to the second quarter of 2020** and amounted to 2.4%, at growth of these loans by Denar 4,174 million (growth in the second quarter of 2020 was 1.5% or Denar 2,559 million). The annual growth of household loans slightly accelerated as well, but for two consecutive quarters it is below the ten-year average of the annual growth rates of these loans.

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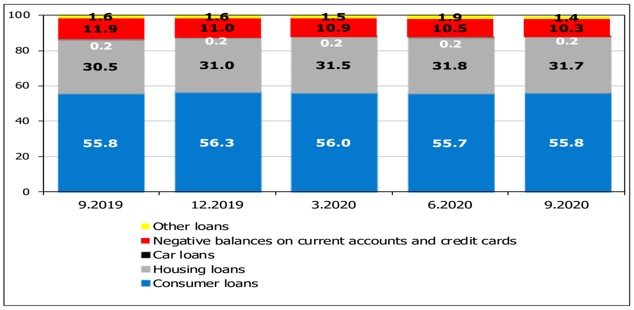
[69] The criteria for classification of entities by size (into large, medium, small and micro) are defined in Article 470 of the Law on Trade Companies.

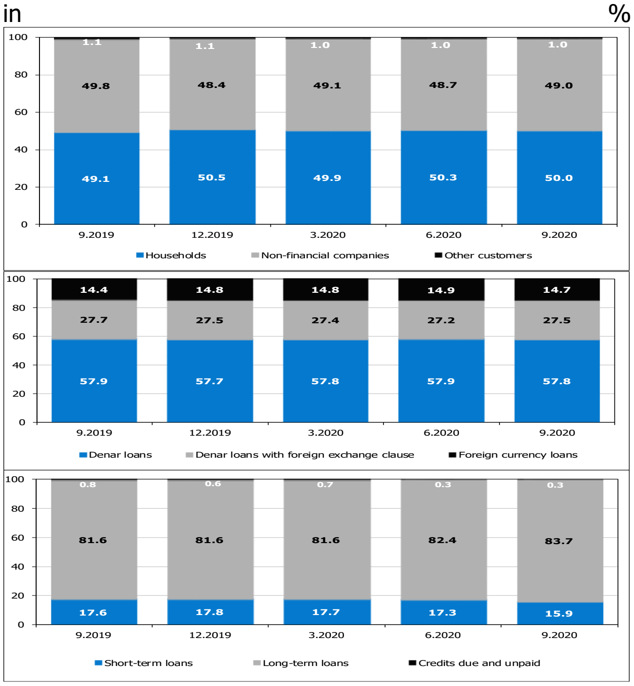
[70] Consumer loans, negative current account balances and credit cards are the most used credit household products.

Chart 76 Structure of loans to natural persons, by product
in %



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

Chart 77 Structure of total loans, by sector (up) and currency (middle), and structure of regular loans, by maturity (down)*
in %



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

In the third quarter of 2020, most of the banks point to unchanged overall credit conditions[71] in household loans[72]. Analyzing types of loans, banks pointed to slight net easing of the credit conditions in housing loans, while consumer and other loans registered small net tightening. On the demand side, banks point to a weaker net decrease in demand for housing loans and other loans, compared to the previous quarter, while consumer's loans registered a slight net increase compared to net decrease in the last survey. In the fourth quarter, banks expected net increase in the demand for household loans.

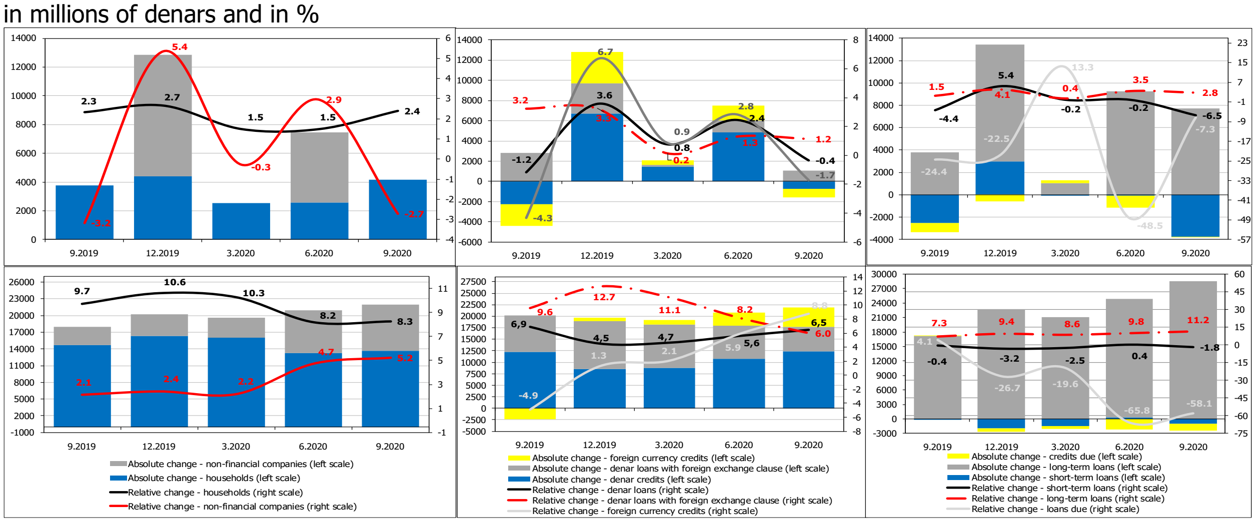
Household loans remained dominant (with a share of 51.3%) in the total loans structure, which additionally increased (by 1.3 percentage points) in the third quarter of the year. In seven of the thirteen analyzed banks, the share of household loans in the banks' loan portfolio is higher than the share of corporate loans. By credit product, 66.5% of the loans to natural persons are intended for financing the non-identified consumption by natural persons (consumer loans, overdrafts and credit cards).

In the third quarter of 2020, the decrease in loans to non-financial entities to a lesser extent resulted from denar loans[73] and largely from foreign currency loans[74], while denar loans with FX clause[75] grew quarterly by 1.2%. The currency structure of total loans registered no significant changes compared to the previous quarter. The largest structural share is still made of denar loans (57.8%).

[71]In terms of individual credit conditions, there is net easing in interest rates on household loans (which is significantly lower compared to the previous survey) and commissions on housing loans. In terms of consumer loans, the other credit conditions (collateral requirements and loan maturity) registered slight net easing.
[72] Source: National Bank's Bank Lending Survey.
[73] Denar loans decreased quarterly by Denar 724 million, or 0.4%, resulting from loans to non-financial corporations (decrease of Denar 4,515 million, or for 4.3%), as opposed to the increase in denar household loans (by Denar 3,806 million, or 3.9%).
[74] Foreign currency loans decreased quarterly by Denar 887 million, or 1.7%, namely, corporate loans decreased by Denar 977 million (or 2.4%), while household loans grew by Denar 54 million (or 0.5%).
[75] Denar loans with foreign exchange clause increased quarterly by Denar 1.093 million (or 1.2%), largely as a result of loans to non-financial corporations (Denar 855 million, or 3.3%), and to a lesser extent of the increase in household loans (Denar 314 million, or 0.5%).

The increase in credit portfolio maturity continued in the third quarter, through further growth of long-term lending (by 2.8%, or by Denar 7.712 million), which as of 30.9.2020, kept its share of 83.7% in the structure of total performing[76] loans. Most (about 71.8%) of the growth of long-term loans is due to denar household loans, and less to loans to non-financial corporations. Short-term loans registered a decrease mostly due to denar and foreign currency loans to non-financial corporations.

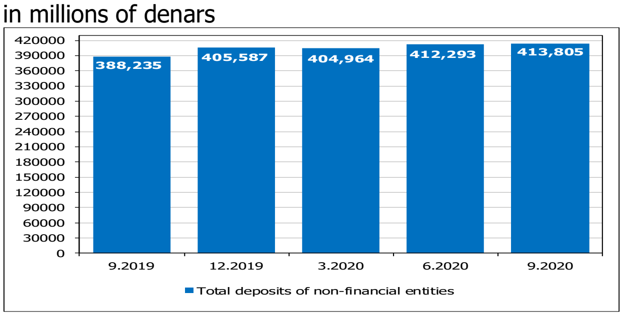
Chart 78
Quarterly (top) and annual (bottom) growth of loans, by sector, currency and maturity
in millions of denars and in %



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

1.2. Deposits of non-financial entities

Chart 79 Stock of deposits of non-financial entities
in millions of denars

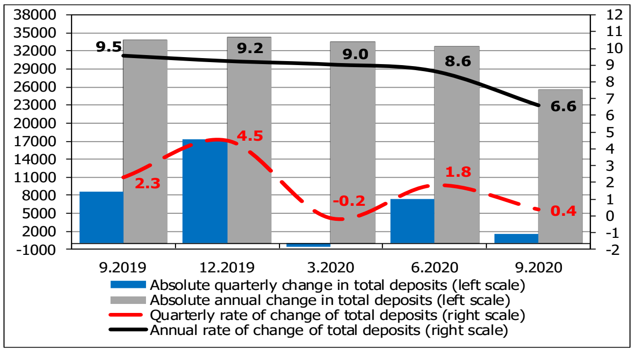


Source: National Bank, based on the data submitted by banks.

Despite the deepening of the risks to domestic economy, caused by current health crisis, as well as the reduced number of banks by one bank, in the third quarter of 2020, deposits to non-financial entities further grew (by Denar 1,512 million, or 0.4%), but slower compared to the second quarter of the year (1.8%). **The growth of deposit base is entirely due to the increase in corporate deposits, while household deposits decreased.** The annual growth of total deposits of banks

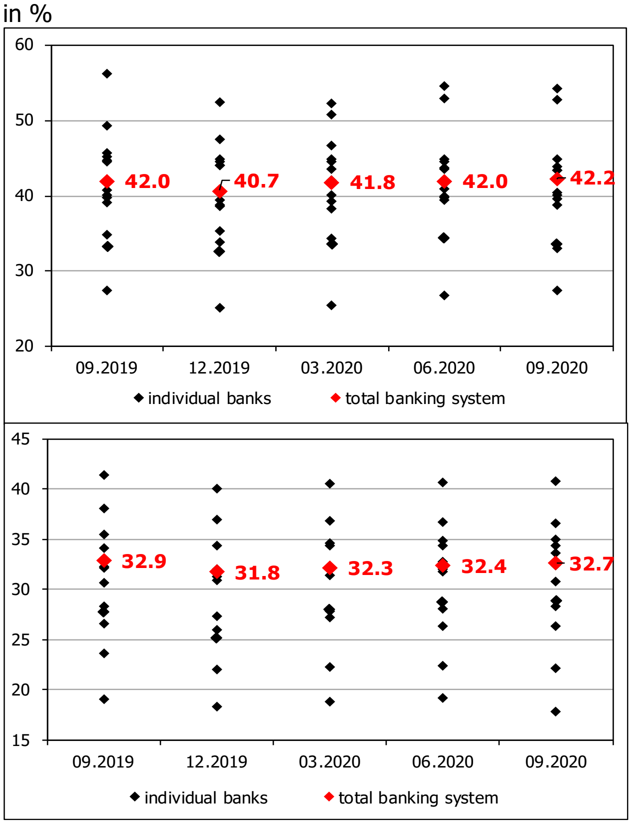
[76] The analysis of maturity structure of loans excludes non-performing loans.

Chart 80
Deposits of non-financial companies, growth
in millions of denars and in %



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

Chart 81
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 the data submitted by banks.

(Denar 25,570 million) decelerated as well and amounted to 6.6% (growth of 8.6% in the second quarter of 2020).

Household deposits, which traditionally have the largest share in total deposits of the Macedonian banking system (with a share of 68.2% in deposits of non-financial entities), in the third quarter of 2020, decreased by Denar 1,818 million, or 0.6% (against the growth of 1.7% in the second quarter of 2020). Such decrease in household deposits, to a certain extent, results from the closure of Eurostandard Bank AD, Skopje, where the payment of natural persons-depositors in this bank, from assets intended for compensation of the Deposit Insurance Fund, is still in progress[77]. The annual growth of household deposits (5.9%) also decelerated compared to 30.6.2020 (when it amounted to 8.3%).

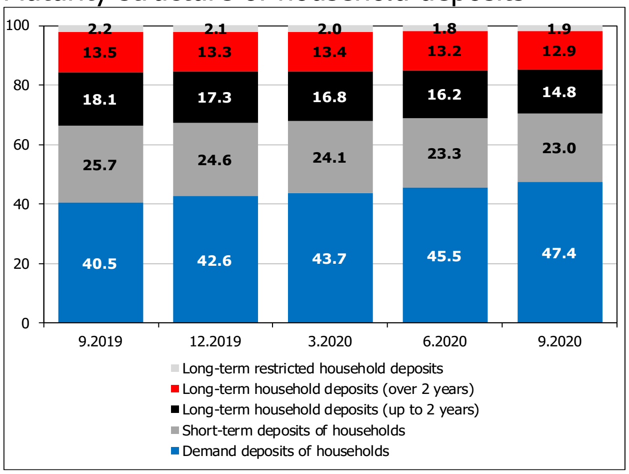
Deposits to non-financial corporations grew quarterly by Denar 2,352 million, or 2.1%, but their annual growth rate (8.7%) slowed down compared to the second quarter of 2020 (when it equaled 10.9%). The annual deposit growth of non-financial corporations amounted to 10.1% as of 30.9.2019.

The change in currency and maturity preference of depositors to hold their deposits in banks (which started in the second quarter of 2020) continued in this quarter as well, due to the prolonged COVID-19. However, euroization level remained stable.

As for the currency, foreign currency deposits entirely conditioned the growth of deposit base. Foreign currency deposits registered a quarterly increase of Denar 1,574 million (or 0.9%),

[77]The assets for compensations of depositors are transferred on 16.9.2020 by the Deposit Insurance Fund on banks accounts for compensation, while natural persons-depositors, subject to compensation, are required to register and collect their claims in the appropriate banks. Moreover, part of the natural persons-depositors (less than 1% of natural persons-depositors in the bank) did not meet the conditions for compensation from the Deposit Insurance Fund and they will collect their claims from the bankruptcy estate pursuant to the provisions of the Bankruptcy Law.

Chart 82
Maturity structure of household deposits

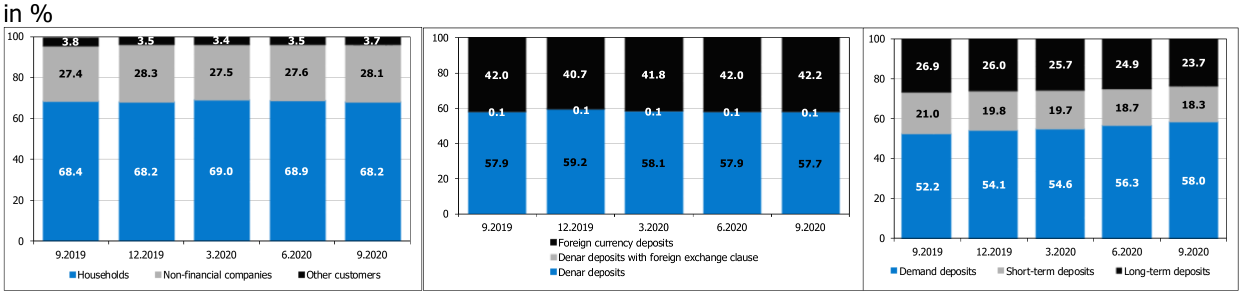


Source: National Bank, based on the data submitted by banks.

which entirely resulted from household deposits, on demand[78]. On the other hand, **denar deposits** slightly decreased, by Denar 47 million, or by 0.02%. **Such movements slightly increased the share of foreign currency deposits in total deposit base,** which in the third quarter of 2020 amounted to 42.2% (42% in the second quarter of 2020).

In terms of maturity, the growth trend of deposits continues on extremely short maturities. Thus, **demand deposits[79] entirely conditioned the growth of total deposit base** with a significant quarterly increase of Denar 7,739 million, or 3.3%, in both sectors. On the other hand, long-term[80] deposits significantly decreased on a quarterly basis by Denar 4,645 million, or 4.5%, while short-term deposits moderately decreased (by Denar 1,581 million, or 2%). There are similar movements in the maturity analysis of household deposits, which increased their structural share of demand deposits in total household deposits on a quarterly basis (from 45.5% as of 30.6.2020, to 47.4% as of 30.9.2020), while the share of long-term deposits decreased, from 31.2% to 29.6%.

Chart 83
Structure of total deposits, by sector (left), currency (middle) and maturity (right)
in %



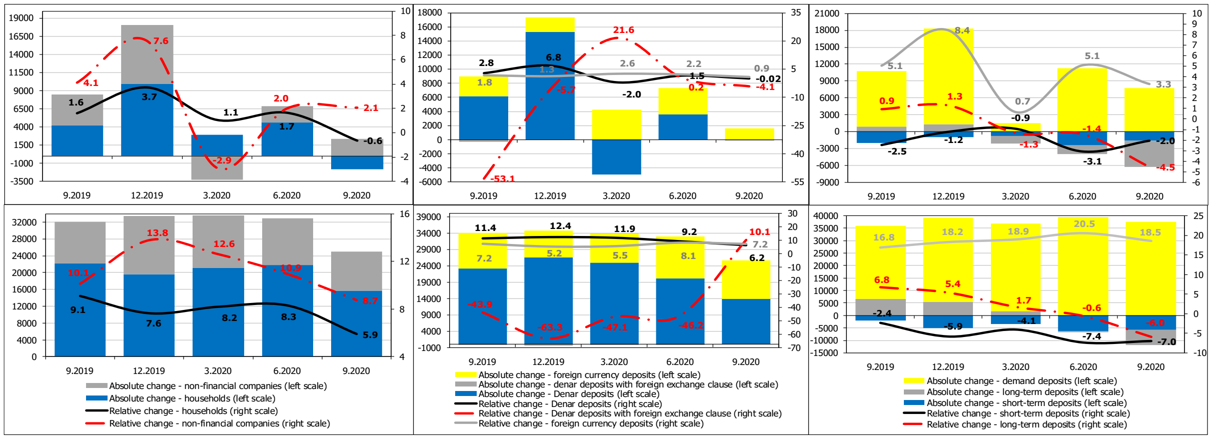
Source: National Bank, based on the data submitted by banks.

78 The quarterly increase of foreign currency household demand deposits amounted 2,931 million, or 5.4%. In contrast, long-term foreign currency household deposits fell by Denar 1,021 million, or 2.7%.

79 The quarterly growth of demand deposits was mostly due to increase in household deposits (Denar 4,601 million, or 3.6%), within which denar deposits accounted for 36.3%, while the share of foreign currency deposits is higher and amounts to 63.7%. The growth of deposits of non-financial corporations on demand equaled Denar 2,137 million (or 2.3%), which is entirely due to denar deposits (which grew by Denar 2,690 million, or 4.1%).

80 The quarterly decrease of long-term deposits is entirely due to the decrease in household deposits by Denar 5,102 million, or 5.8% (with the highest share of denar deposits of 80%, while the rest of the decrease is due to foreign currency deposits). On the other hand, long-term deposits of non-financial corporations grew quarterly by Denar 413 million, or 3.6%, while the largest share (95.4%) results from foreign currency deposits.

Chart 84 Quarterly (up) and annual (down) deposit growth by sector, currency and maturity
in millions of denars and in %

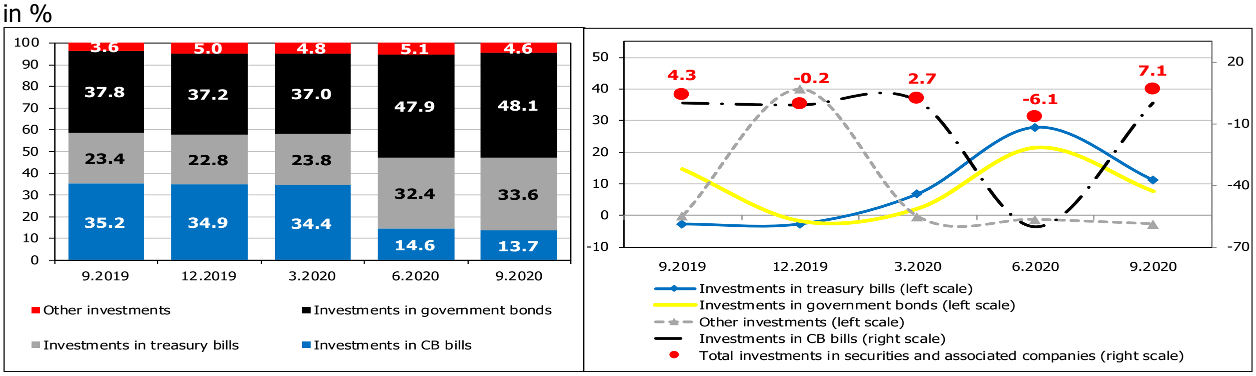


Source: National Bank, based on the data submitted by banks.

1.3. Other activities

In the third quarter of 2020, banks' investments in securities and other investments[81] (net book value) significantly increased by Denar 4,874 million (or 7.1%), which contributed to the growth of their share in total assets of banks up to 12.9% as of 30.9.2020 (12.2% as of 30.6.2020). Moreover, increased banks' placements in treasury bills and government bonds made almost the same contribution to the growth in total securities portfolio. The quarterly growth of banks' investments in government bills amounted to Denar 2,484 million (or 11.2%), while investments in government bonds (primarily domestic government Eurobonds) increased by Denar 2,485 million (or 7.6%). Such developments contributed to the quarterly increase of the share of investments in treasury bills in total securities portfolio with banks from 32.4% as of 30.6.2020 to 33.6% as of 30.9.2020, and increase in the share of placements in government bonds (from 47.9% as of 30.6.2020 to 48.1% as of 30.9.2020). Banks' investments in CB bills remained almost the same compared to the second quarter of 2020.

Chart 85
Structure (left) and quarterly growth (right) of the securities portfolio
in %



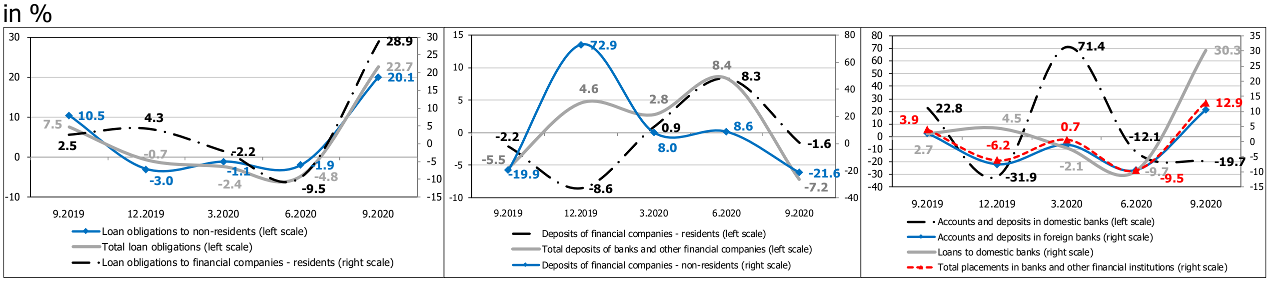
Source: National Bank, based on the data submitted by banks.

[81] Including investment in associated companies.

In the third quarter of 2020, placements in banks and other financial institutions increased by Denar 5,001 million, or 12,9%. Such movement resulted from the growth in assets of two large banks on corresponding accounts in foreign banks and from increased long-term foreign currency loans of domestic banks. The growth of long-term loans of domestic banks stems from the loans of DBNM AD Skopje placed in domestic banks, based on an approved credit line from the EIB, with the ultimate goal of financing domestic non-financial companies.

The withdrawal and placement of assets from the credit line by the EIB mostly (or around 78%) contributed to the growth of **total loan-based liabilities.** These loans significantly increased by Denar 6,440 million, or by 22.7% quarterly, which is due to the growth of loan liabilities to non-residents[82] (by Denar 3,904 million) and to the increased loan liabilities to resident financial corporations[83] (by Denar 2,545 million).

Chart 86 Quarterly growth of claims on financial institutions (left), loan liabilities (middle) and deposits of financial institutions (right)
in %



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

Deposits from banks and other financial institutions are no significant source of banks' financing, accounting for 5.5% of total liabilities in the third quarter of 2020. The quarterly decrease in banks' deposits and other financial institutions (of Denar 2,455 million, or 7.2%) was mostly (84%) due to the decrease in deposits to non-resident financial corporations[84].

The scope of banking system activities with non-residents is constantly small, with bank-to-bank differences. The banking system's liabilities[85] to non-residents exceed their claims. Domestic banks' liabilities to non-residents went up quarterly by Denar 1,720 million, or 4%, and their share in total banking system liabilities increased to 7.8%[86] (7.6% as of 30.6.2020). Such increase is due to the growth of liabilities based on long-term foreign currency loans (DBNM for the EIB loan). Banks' claims on non-residents increased by Denar 2,855 million (or 9.5%) quarterly, almost entirely reflecting the increase in funds on corresponding accounts of two large banks in foreign banks. The share of claims on non-residents in total liabilities decreased compared to the previous quarter and equaled 5.8%[87].

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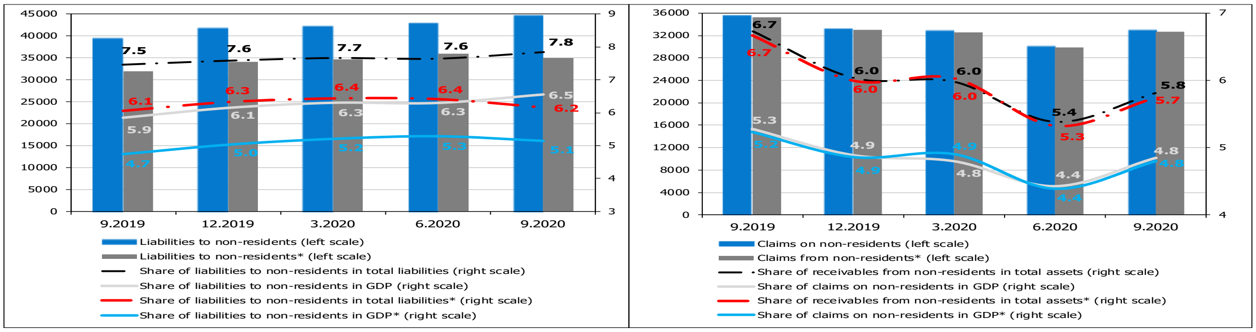
[82] The quarterly increase in loan liabilities to non-residents is due to the increased long-term loan liabilities in foreign currency over five years (by Denar 4,069 million).
[83] The quarterly increase in loan liabilities to resident financial corporations is due to the growth of loan liabilities in foreign currency over five years to domestic banks, i.e. DBNM (by Denar 2,585 million).
[84] It is a matter of deposits of parent entities of several banks, mostly short-term, withdrawn with maturity.
[85] As of 30.9.2020, eight of fourteen banks owe more than they claim on non-residents.
[86] If DBNM AD Skopje is excluded from the analysis, the share of liabilities to non-residents in total liabilities would be 6.2%. Analyzed by bank, this share ranges from 1% to 21%.
[87] If DBNM AD Skopje is excluded from the analysis, the share of claims on non-residents in total assets would be 5.7%. Analyzed by bank, this share ranges from 0.9% to 10.7%.

Chart 87

Liabilities to (left) and claims on (right) non-residents

in millions of denars and in %



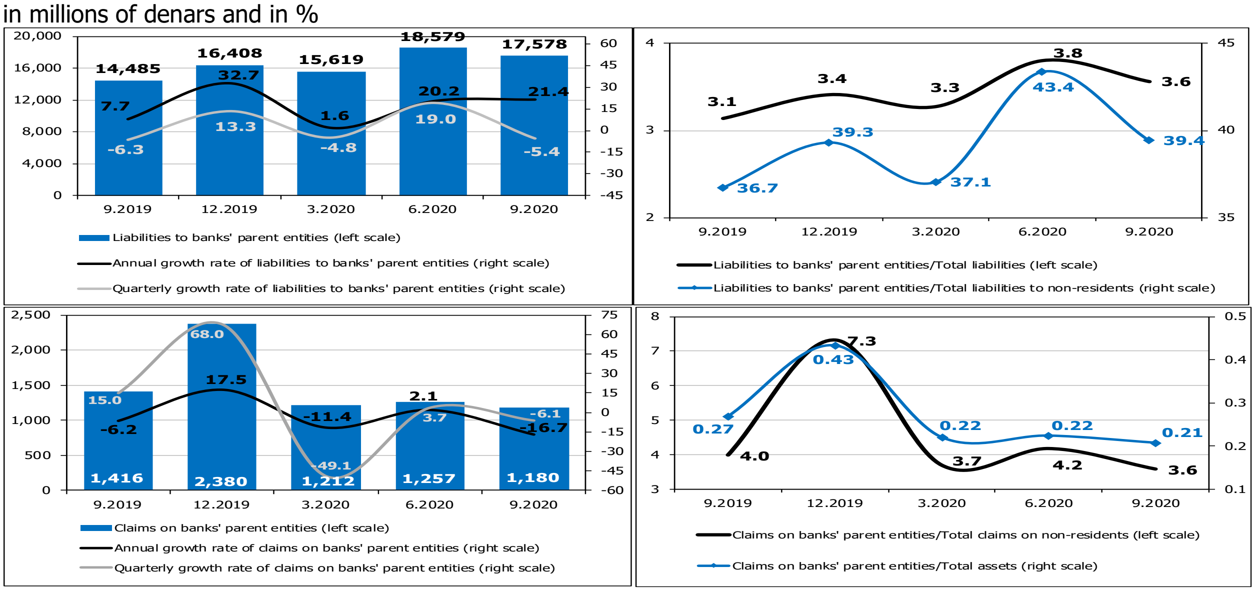
Source: National Bank, based on the data submitted by banks.

Borrowing from parent entities is not a significant source of financing the domestic banks' activities, although bank-to-bank differences can be observed. In the third quarter of 2020, banks' liabilities[88] to their parent entities decreased by Denar 1,001 million (or 5.4%), mostly due to the decrease in long-term deposits of financial entities with one medium-size bank. As a result, the share of banks' liabilities to parent entities (including subordinated liabilities and hybrid capital instruments) in total liabilities of the domestic banking system and in liabilities to non-residents decreased to 3.6% and 39.4%, respectively. Claims on parent entities account for only 0.2% of the total assets of the banking system, while their share in total claims on non-residents is 3.6%. Compared to 30.6.2020, claims on parent entities decreased by Denar 77 million, or 6.1%.

Chart 88

Liabilities to (up) and claims on banks' parent entities (down)

in millions of denars and in %



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

[88] Aalyzing by bank, the share of banks' liabilities to parent entities in total liabilities to non-residents ranged from 20.3% to 76.4%. Analyzing by bank, the share of banks' liabilities to parent entities in total liabilities ranged from 0.2% to 14.9%.

2. Profitability

In the first nine months of 2020, the domestic banking system reported higher operating profit, compared to the same period last year. The growth of the financial result is due to the increase in capital gain from foreclosures, as well as collection of written-off claims, growth of net interest income and decrease in operating expenses. The exit of one bank[89] from the banking system, which operated at a loss, had a certain influence on the increased gain. In contrast, the impairment costs of financial and non-financial assets grew, while in conditions of a health crisis banks abolished fees for some of their services (mostly those related to e-banking), which caused decline in fee and commission income.

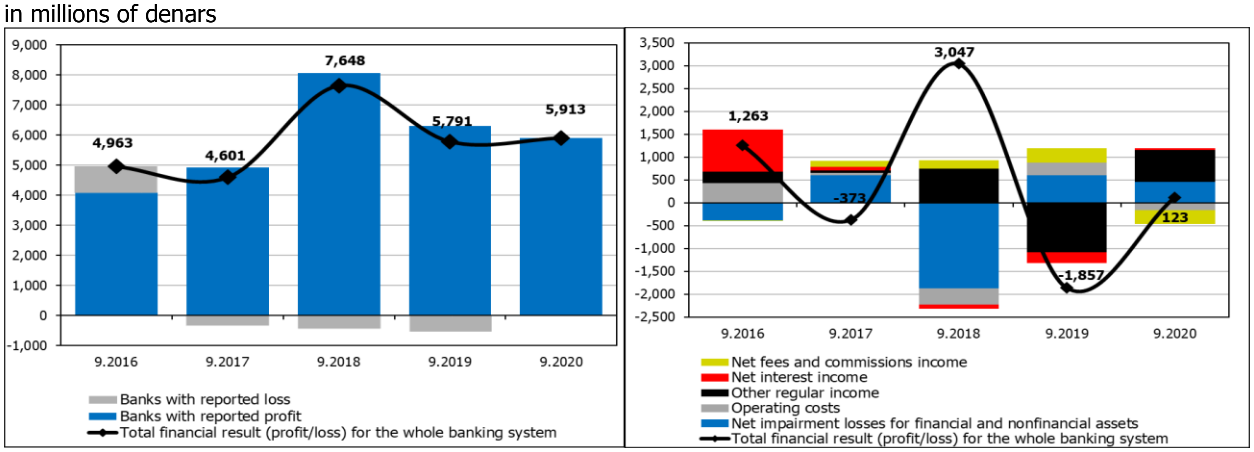
Despite the income growth, the profitability indicators (ROAA and ROAE) decreased, due to higher growth of average assets, average capital and reserves.

The downward trend in banks' lending and deposit interest rates continued in the third quarter of the year. The larger decrease in lending, compared to deposit interest rates, conditioned the narrowing of the interest rate spread between them, in the first nine months of 2020.

2.1. Banking system profitability and efficiency ratios

In the first nine months of 2020[90], the banking system generated operating profit of Denar 5.9 million, which is by 2.1% or Denar 123 million higher compared to the previous year[91]. Analyzed by individual items, the higher profit was conditioned primarily by the growth of capital gain from foreclosures[92], and to a lesser extent by previously written-off claims (which grew by Denar 157 million, or significant 33.1%). There was a certain influence of the decrease of operational costs and the slight growth of net interest income over the growth of profit. On the other hand, the absence of faster profit growth reflects the increase in impairment costs (primarily financial assets, and partly non-financial assets) and the decrease in net fee and commission income[93].

Chart 89 Net profit after taxation (left) and annual change main income and expenses (right)
in millions of denars

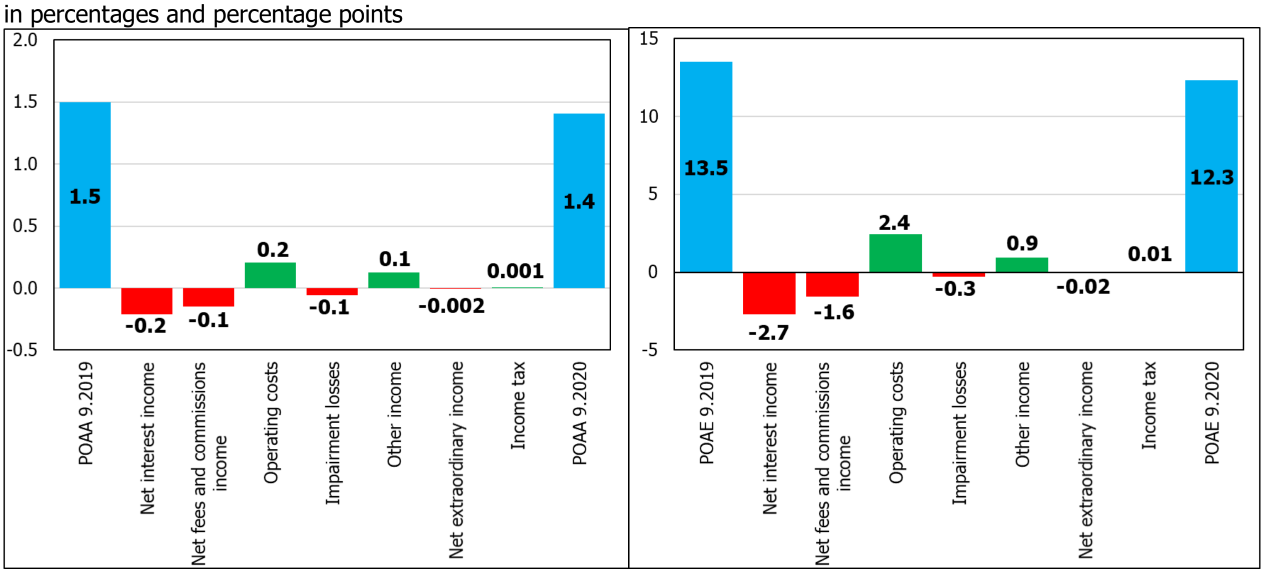


Source: National Bank, based on the data submitted by banks.

All banks reported positive financial operating result. Medium-sized and small banks increased gain, while the profitability in the group of large banks decreased, compared to the same period from the previous year.

Despite the profit growth in the first nine months of 2020, the profitability indicators[94] of the banking system slightly decreased.

Chart 90 Decomposition of rates of return on average assets (left) and average equity (right)
in percentages and percentage points



Source: National Bank, based on the data submitted by banks.
Note: The chart shows changes in individual components of profitability expressed as a share in average assets i.e. average equity and reserves. The green 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. The analyzed contribution by individual category depends not only on the category income or expenditure, but also on the average assets, i.e. average capital and reserves, thus the contributions by component can lead to wrong conclusions.

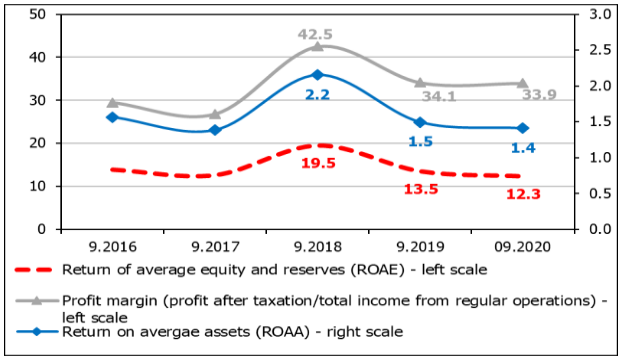
[89] As of 12 August 2020, the National Bank revoked the founding and operating license of Eurostandard Bank AD Skopje.
[90]All data in this section of the Report, derived from the banks' income statement (income, expenses, profit, loss, etc.) relate to the first nine months of 2020, and their value 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 nine months of 2020 and such calculated average is compared with the average calculated for the first nine months of 2019 or any other year. If data are presented on a different basis, other than the above-mentioned, it will be specified in the text.

[92]The capital gain from foreclosures increased by Denar 627 million (or by more than 2.5 times), mostly registered in the first half of 2020.
[93] Denar 302 million.
[94] Profitability and efficiency ratios of the banking system and bank groups are presented in the Annexes to this Report.

Chart 91

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

in %

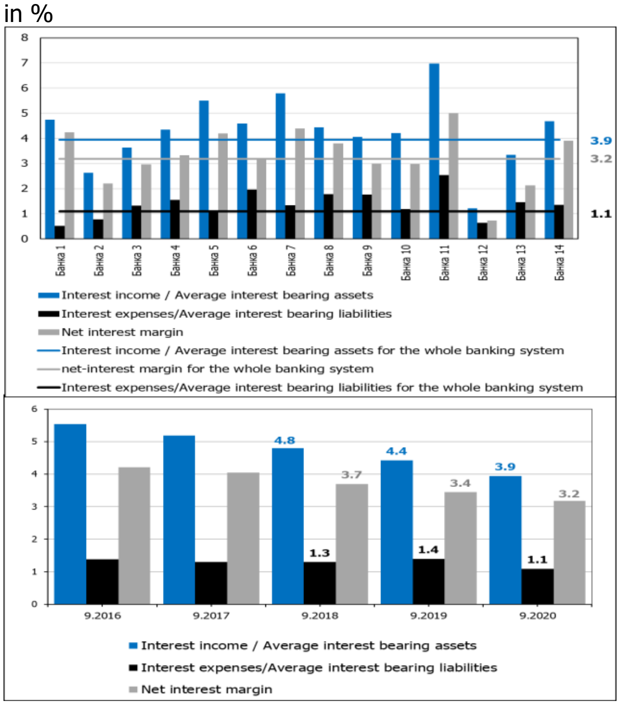


Source: National Bank, based on the data submitted by banks.

Chart 92

Net interest margin by bank, as of 31.3.2020 (top)* and of the banking system (bottom)

in %



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

* Indicators of the banking system are shown in lines.

* As of 30.9.2020, 14 banks are presented (one less) given the revocation of the operating license of Eurostandard Banka AD, Skopje in August 2020

The rates of return of average assets (ROAA) and average capital and reserves (ROAE) decreased compared to the same period of the previous year, due to higher growth of average assets and capital and reserves[95], relative to the profit growth. Thus, the rate of return of average assets and average capital and reserves decreased by 0.1 and 1.2 percentage points, respectively. Despite the growth of total regular income[96], the profit per unit of income registered no increase, which is seen through the decrease in the level of the profit margin. The lower profit margin results from the lower profit growth compared to the growth of total regular income due to increased impairment costs of financial and non-financial assets.

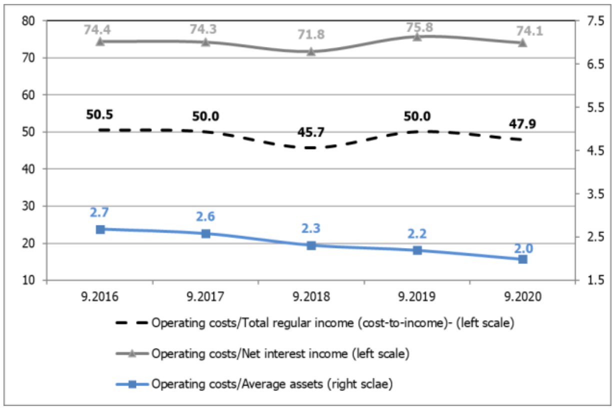
Net interest margin, as an indicator of the banks' success of performing basic banking activities, has a positive value, yet continuously decreased in the last four years. As of 30.9.2020 the net interest margin decreased by 0.2 percentage points, to the level of 3.2%. The decrease in net interest margin is due to the modest increase in net interest income (by Denar 41 million, or 0.4%), amid faster growth of average interest assets (8.6% or Denar 37,286 million). Thereby, the growth of net interest income resulted from the higher annual decline in interest expenditures (of Denar 599 million, or 18.7%), compared to the decrease in interest expenditures (of Denar 558 , million or 3.9%), which amid similar decrease in lending and deposit interest rates, results from the changes in the scope of banking activities.

In the third quarter of 2020, as usual, financial intermediation with households made the largest contribution to the net interest income. Compared to the previous year, net interest income from households increased by Denar 646 million or 11.0%. This

[95]Average assets and average equity and reserves are calculated as the balance of assets i.e. equity and reserves as of the analyzed date and as of 31 December of the previous year. The growth of average assets as of 30.9.2020 equaled 8.3% or Denar 43,041 million, compared to 30.9.2019, while the growth of average capital and reserves amounted to 12.0% or Denar 6,854 million.

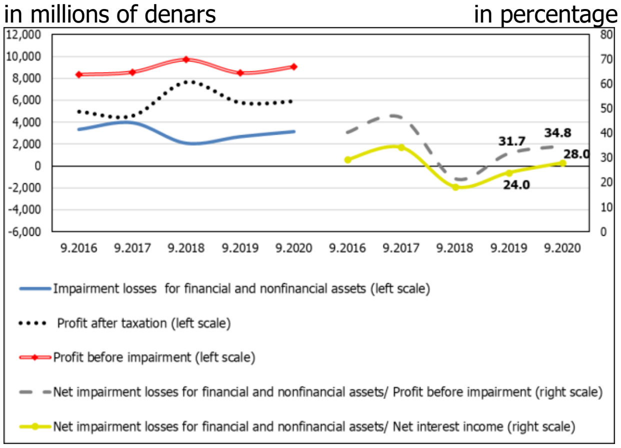
[96]Total regular income increased by 2.6% or Denar 438 million compared to the same period of the previous year.

Chart 93
Operational efficiency ratios
in %



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

Chart 94
Impairment costs to gain and to net interest income ratios
in millions of denars in percentage



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

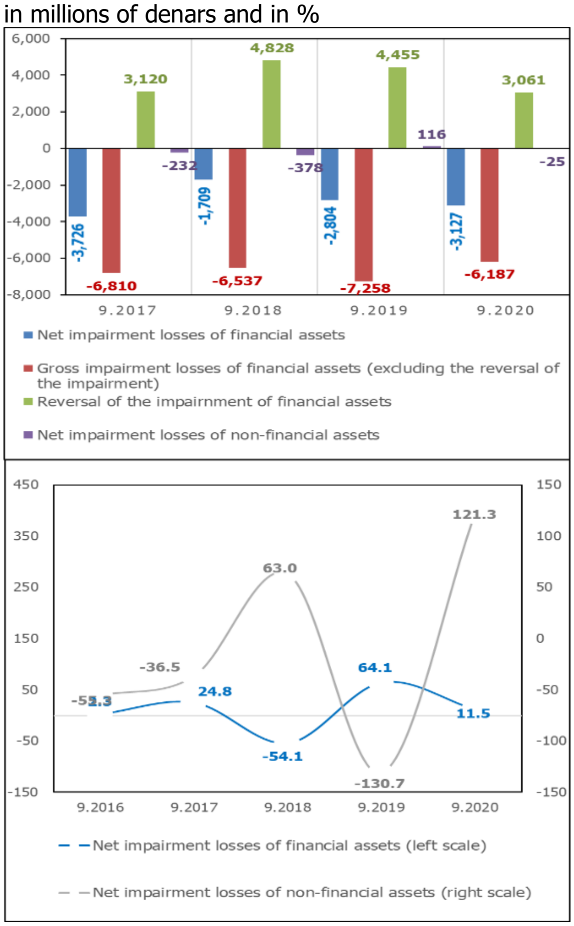
growth was driven not only by household interest income (with their increase of Denar 237 million, or 3.2%), but also by interest expenditures, since they decreased by Denar 410 million, or by significant 25.5% (the sharp decline of interest expenditures, in conditions of corona crisis is mainly due to increased propensity to hold assets in a foreign currency and with short maturity, which usually carry lower income. The net interest income from the government also grew, while net interest income from activities with other sectors (non-financial corporations, financial corporations and non-residents) decreased.

The indicators of the banking system operating efficiency improved, due to reduced operating costs (by Denar 156 million, or 1.8%[97]), coupled with the growth of income and average assets of the banking system. Thus, the share of operating costs in total regular income and in net interest income dropped by 2.2 and 1.7 percentage points, respectively, while the share of operating costs in total average assets decreased by 0.2 percentage points.

In the first nine months of 2020, impairment costs for financial and non-financial assets increased by Denar 464 million, or 17.3%. This growth mostly results from impairment costs of financial assets (which increased by Denar 323 million), and is mostly driven by (over 80%) the special reserve for off-balance sheet exposure (due to lower release of this reserve compared to the same period in the previous year[98]). The impairment costs (net) in the first nine months of 2020 are lower by Denar 70 million, mainly due to the decrease in the number of banks. If we exclude the effect of the exit of this bank, these costs significantly grew, primarily due to the increased vigilance of

[97]Almost half of the decrease in operating costs is due to the lower personnel costs (decline of Denar 77 million), with a significant decrease in services costs (decline of Denar 70 million) and costs of business trips (decline of Denar 24 million).
[98]In the first nine months of 2019 and 2020, the allocated special reserve for off-balance sheet exposure was lower than the release of this reserve. Hence, the special reserve of off-balance exposure, net (allocated reserve reduced for the release of this reserve), was positive and on both dates has a status of income in the banking system's balance sheets. In the first nine months of 2020, the positive amount of the special reserve of off-balance exposure, net, decreased by Denar 262 million.

Chart 95
Amount of impairment costs of financial and non-financial assets (top) and annual growth rates of impairment costs of financial and non-financial assets (bottom)
in millions of denars and in %



Source: National Bank, based on the data submitted by banks.
The high percentage increase of impairment of non-financial assets compared to the same period in 2019 (121.3%) is due to the positive amount of net impairment as of 30 September 2019.

banks and the higher amount of provisions due to corona crisis[99].

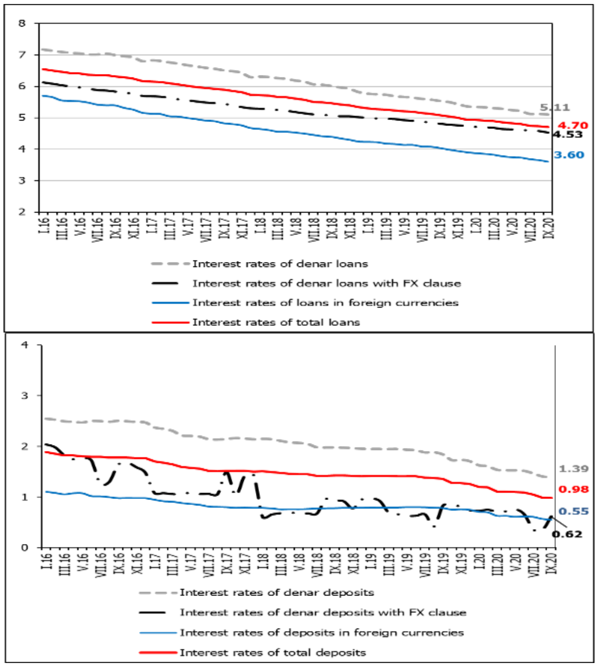
The net cost of impairment of non-financial assets increased by Denar 141 million, compared to the same period in 2019, which results from the Denar 119 million lower release of impairment of assets.

2.2. Movements in interest rates and interest rate spread

After the decrease in CB bill interest rate of the National Bank on three occasions as of May 2020, in the third quarter this rate remained at 1.5%. However, the downward trend in banks' lending and deposit interest rates continued in the third quarter of the year. Thus, the weighted average lending interest rate of banks for the first nine months of the year decreased by 0.4 percentage points, compared to the weighted average lending interest rate of banks for the first nine months of 2019 and equaled 4.8%. The weighted average deposit interest rate decreased as well, by 0.3 percentage points, compared to the

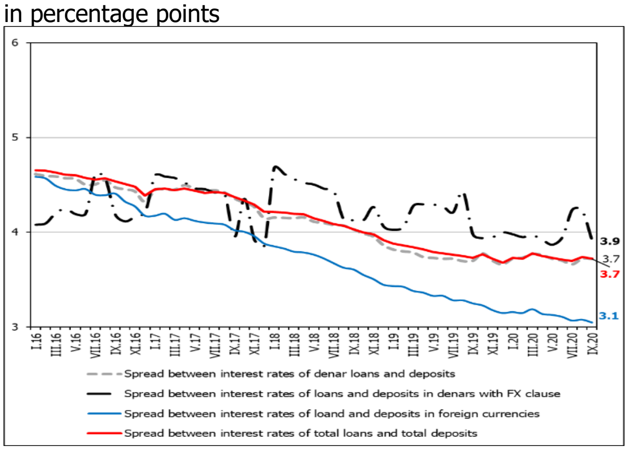
[99] If we exclude the effect of this bank, which for the first nine months of the last 2019 had relatively high impairment costs, the impairment costs of the loans and placements grew by Denar 456 million, mostly due to the increase in these costs in the first half of 2020 (compared to the same period in the previous year).

Chart 96
Lending (up) and deposit (down) interest rates
in %



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

Chart 97
Interest spread
in percentage points



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

same period of the previous year and amounted to 1.1%. Analyzing currencies, the average interest rates on loans registered a stronger decrease compared to the fall in the average interest rates on deposits. Exception to this are the average denar interest rates, which almost identically decreased in both loans and deposits, i.e. by 0.43 percentage points in loans and 0.41 percentage points in deposits.

In line with the larger decrease in lending compared to deposit interest rates, the interest spread narrowed moderately in the first nine months of 2020. The spread between the weighted average interest rates on total loans and deposits in the first nine months of 2020 was 3.7 percentage points which is an annual decrease of 0.1 percentage points.

Annexes