National Bank of the Republic of Macedonia
Supervision, Banking Regulation and Financial Stability Sector
Financial Stability and Banking Regulations Department

REPORT ON THE RISKS IN THE BANKING SYSTEM OF THE REPUBLIC OF MACEDONIA IN THE FIRST QUARTER OF 2017

September 2017

CONTENT

Summary

In the first quarter of 2017, the total activities of the banks in the Republic of Macedonia were reduced by 1.6%, under the influence of the usual seasonal factors, reduced economic activity and mainly due to the (still present) risks caused by domestic political turmoil. The deposit potential of banks was reduced in the first quarter of 2017, mainly because of the reduction in corporate deposits. Household deposits continued to increase in this quarter, but at a slower rate (0.2%), mainly owing to performance in March, in a situation of slightly more emphasized uncertainty related to the domestic political situation. The credit activity of banks in the first quarter of 2017 was reduced, in a situation of decline in credit support for the corporate sector and the increased crediting of households. Furthermore, in a situation of retention of the stability assessments of the bases of the domestic economy, the expectations of economic entities continue to stabilize in a visible and continuous manner, which resulted in continuous normalization of monetary policy in January and February 2017 (which started in December 2016), when the base interest rate was additionally reduced by a total of 0.50 percentage points i.e. was reduced to the level it was before the escalation of the political situation and speculations at the FX and deposits market in the beginning of the second quarter of 2016 (3.25%). The changes in the base interest rate amount were also accompanied by changes in the offered amount of CB bills.

The credit risk ratios continued to improve, albeit with moderate dynamics in comparison with the previous period. Following the significant "cleansing" of the credit portfolios of the banks with regards to the obsolete and entirely reserved non-performing loans during the previous year, the participation of the non-performing loans in the first quarter of 2017, in relation to the total loans, slightly started to go downwards and landed at the level of 6.4% (6.6% as on 31 December 2016). The improvement of the credit risk ratios (indicators) is still under influence (although this influence is in decline) of the changes in the regulations of the National Bank[1]. If we exclude the effects of this measure, the participation of the non-performing loans in the total loans is characterized with certain increase on quarterly basis (from 10.8% as on 31 December 2016, to 11.2% as on 31 March 2017), which is concentrated at the corporate credits – the reduced credit activity of the banks in this segment had a role to play here, in addition to the increase of the non-performing loans to non-financial companies. The participation of the non-performing loans in the total household loans is stable (it is around 2.5% or around 5%, with correction of the effect caused by the compulsory write-off of the entirely reserved non-performing loans). This is mainly due to the solid increase of the credit support for this sector, which neutralizes the effect from the increase of the non-performing loans for the households (excluding here the effects caused by the mandatory write-off) in the last four quarters. The high coverage of the non-performing loans with the own impairment (77.7%), in a situation of satisfactory volume and quality of the own assets of the banks, limits the consequences that the eventual total impossibility to collect these loans could have on the solvency positions of the banks.

In the first three months of 2017, there is moderate reduction in the liquid assets of the banks. One of the reasons for this are the seasonal factors but another reason is the impact the continuous uncertainty on the domestic political stage during this period had on the sources of

[1] According to the changes in the Decision for Credit Risk Management, adopted in December 2015 ("Official Gazette of the Republic of Macedonia" No. 223/15), the banks were obliged, in the period from 1 January 2016 to 30 June 2016 to transfer all receivables which are entirely reserved for more than two years, in off-balance sheet (to write them off).

funding, especially on the deposits of the non-financial entities. If we analyze per specific financial instruments that make up the liquid assets, reduction is the greatest in the short-term FX currency assets in foreign banks, and there is also decline (although to less extent) in the placements of the banks in treasury bills. Regardless of these tendencies, the liquidity ratios remained at stable and satisfactory level. The liquidity assets participate with over 30% in the total assets of the banking system, and in the same time they cover around 53% of the total short-term liabilities as well as around 58% of the total household deposits.

The profitability and efficiency ratios of the banking system, in general, have a trend of continuous improvements, and they are at a solid level. For the first time after a longer time period, the profit in the banking system is having a slow and single-figure increase (9.1%), compared to the same period in 2016, mainly due to the slower decline of the interest expenditures. The increase of the non-interest revenues and the reduced impairment costs has the biggest contribution on the increase of the profit. The banks continue to deliver high rates of return of the average capital and of the average assets (13.8% and 1.5%, respectively), which is especially relevant in the process of internal generation of capital and in a situation of almost total absence of the use of share emissions.

The new changes in the Law on Banks and the changes and amendments in the bylaws (done by the end of 2016) that achieved further harmonization with reforms on the international capital market (so called Basel III), together with the provisions of the European regulations that pertain to bank operations, started with implementation in March 2017. The initial effects from the legislative changes in the area of structure of the own assets provided for increase of the own assets of the banking system. The indicators for solvency and the capitalization of the banking system are having slight increase in the first quarter in 2017, which is mainly due to the reduction of the assets that are weighted according to the risks of the banks (and that is mainly according to the currency risk). This reduction of the activities of the banks resulted in "release" of some of the engaged regulatory capital needed for coverage of the risks and provided for increase of the "free available" capital above the minimum threshold required for covering of the risks, which is almost one half of the total own assets. The results of the stress-test that was carried out on 31 March 2017 are better compared to the results at the end of 2016, and they point out that the banks have satisfactory resilience to the simulated shocks.

In general, the exposure of the banking system to other risks has more limited relevance. The significant presence of the credits that feature a currency component for households and for non-financial companies signifies the currency risk as being relevant for their stability and, consequently, for the stability of the banks. The essential prerequisite for this is the policy of a stable exchange rate of the Macedonian denar in relation to the Euro, because of which the likelihood of currency risk occurring is relatively low. Exposure to the risk of change in the interest rates in the portfolio of banking activities is small, but the intentions of banks to gradually abandon the use of adaptable (adjustable) interest rates will contribute towards a more objective weighing of this risk. Hence, the increased use of interest rates that are determined in advance, or that will be changed depending on market parameters, should be also accompanied by capacity building for banks to manage the risk caused by changes in interest rates.

I. Structure of the banking system

1. Total number of banks and ownership structure of the banking system

As on 31 March 2017, there are fifteen banks in operation in the Republic of Macedonia. This is unchanged number compared to the previous quarter, and the same goes for the number of banks that are predominantly owned by foreign shareholders (eleven), where six of them are subsidiaries of foreign banks.

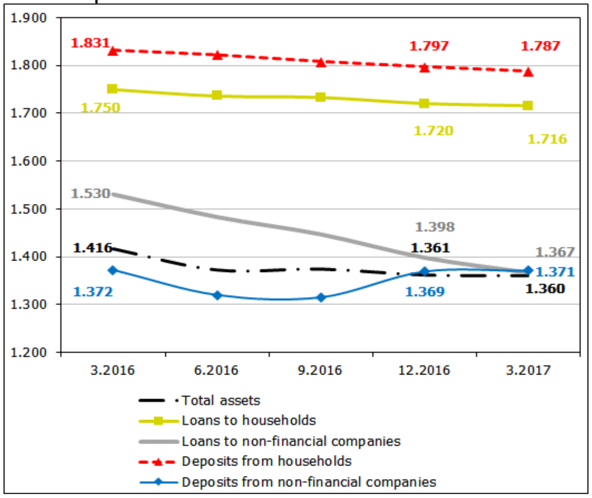
Table 1
Overview of the more relevant items from the Balances, in accordance with the majority ownership of the banks (as on 31 March 2017)
In million denars and in %

Type of ownership	Number of banks	Capital and reserves		Assets		Loans to non-financial sector		Deposits from non-financial sector		Total revenues*		Financial result*	
		Amount	In %	Amount	In %	Amount	In %	Amount	In %	Amount	In %	Amount	In %
Banks in dominant ownership of foreign shareholders	**11**	**34.246**	**70,4%**	**305.122**	**69,8%**	**216.625**	**77,8%**	**220.879**	**69,5%**	**16.974**	**73,8%**	**5.529**	**85,6%**
- subsidiaries of foreign banks	*6*	*29.866*	*61,4%*	*250.349*	*57,2%*	*178.128*	*64,0%*	*183.198*	*57,6%*	*14.146*	*61,5%*	*5.144*	*79,6%*
- Austria	1	2.256	4,6%	16.717	3,8%	11.970	4,3%	10.933	3,4%	1.179	5,1%	204	3,2%
- Bulgaria	1	1.202	2,5%	8.235	1,9%	5.427	1,9%	6.132	1,9%	376	1,6%	17	0,3%
- Greece	1	11.436	23,5%	83.740	19,1%	60.621	21,8%	65.478	20,6%	5.190	22,6%	2.260	35,0%
- Slovenia	1	8.247	16,9%	70.399	16,1%	50.115	18,0%	55.567	17,5%	4.103	17,8%	1.813	28,1%
- Turkey	1	4.140	8,5%	37.826	8,6%	25.086	9,0%	21.997	6,9%	1.669	7,3%	428	6,6%
- France	1	2.585	5,3%	33.432	7,6%	24.908	8,9%	23.091	7,3%	1.630	7,1%	421	6,5%
- other banks in dominant foreign ownership	*5*	*4.381*	*9,0%*	*54.773*	*12,5%*	*38.497*	*13,8%*	*37.681*	*11,9%*	*2.828*	*12,3%*	*385*	*6,0%*
- Bulgaria	2	1.697	3,5%	18.071	4,1%	11.828	4,2%	13.268	4,2%	904	3,9%	125	1,9%
- Germany	1	1.763	3,6%	21.554	4,9%	16.587	6,0%	13.400	4,2%	1.078	4,7%	231	3,6%
- Switzerland	2	921	1,9%	15.148	3,5%	10.082	3,6%	11.013	3,5%	846	3,7%	30	0,5%
Banks in dominant ownership of domestic shareholders	**4**	**14.422**	**29,6%**	**132.279**	**30,2%**	**61.880**	**22,2%**	**96.993**	**30,5%**	**6.037**	**26,2%**	**933**	**14,4%**
- private ownership	*3*	*12.060*	*24,8%*	*117.947*	*27,0%*	*61.856*	*22,2%*	*96.993*	*30,5%*	*5.850*	*25,4%*	*819*	*12,7%*
- state ownership	*1*	*2.362*	*4,9%*	*14.332*	*3,3%*	*24*	*0,0%*	*0*	*0,0%*	*188*	*0,8%*	*114*	*1,8%*
Total:	**15**	**48.668**	**100,0%**	**437.402**	**100,0%**	**278.505**	**100,0%**	**317.873**	**100,0%**	**23.011**	**100,0%**	**6.462**	**100,0%**

Source: NBRM, using data provided by the banks.
*The total revenues and the financial result are calculated for the last twelve months (31.3.2016 - 31 March 2017).

As on 31 March 2017 there are no changes in the ownership structure of the banking system, so there is continuous dominance of the banks that are in majority ownership of foreign shareholders. The equity and the reserves of the banks in foreign ownership participate with 70.4% in the total equity and reserves of the banking system in the Republic of Macedonia. The banks with majority foreign ownership also have dominant role in the more relevant items included in the balance sheets of the banking system. Their dominance is mainly obvious when it comes to credit activity and financial results, which points out to a more aggressive approach that these banks have on the credit market.

Graph 1
Herfindahl index*
in index points



Source: NBRM, using data provided by the banks.
*The Herfindahl index is calculated with the following formula: $HI = \sum_{j=1}^{n} (S_j)^2$, where S is the participation of each bank in the total amount of the category being analyzed (for example: total assets, total deposits, etc.), while *n* is the total number of banks in the system. The concentration level is considered acceptable if this index is somewhere between 1,000 and 1,800.

Table 2
Concentration indicators for the more relevant items in the balances of the three and the five largest banks
in percentages

Position	CR3	CR5	CR3	CR5
Total assets	58,1	74,3	58,2	74,3
Loans to households	62,6	79,2	62,9	79,2
Loans to non-financial companies	54,0	73,6	55,5	74,9
Deposits from households	70,2	79,6	70,5	79,9
Deposits from non-financial companies	52,3	77,9	53,9	76,9
Financial result*	73,1	86,2	72,7	87,0
Total revenues*	61,4	75,7	61,3	75,5

Source: NBRM, using data provided by the banks.
*The total revenues and the financial result are calculated for the last 12 months (1 Aril 2016 - 31 March 2017).

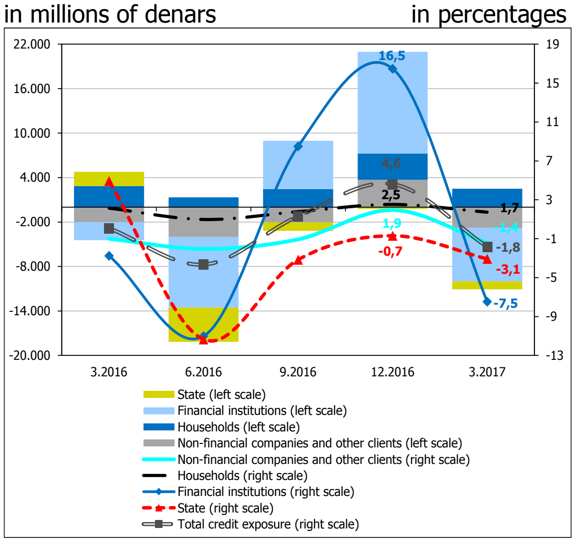
The concentration of the banking system continues to decline, and this decline is the biggest when it comes to loans to non-financial companies. At the end of first quarter of 2017, all the parameters of the Herfindahl index were within its acceptable limits. The decline in the concentration of the banking system is also confirmed with the reduced participation by the three largest banks in all segments of the banking operations. Exceptions are the participations of these banks in the total revenues and in the total financial result – these parameters feature certain increase. There is no change in the participation of the five biggest banks in the total assets system, nor in their participation in the household loans, compared to the previous quarter, but there is some increase in the deposits of the non-financial companies (by 1.1 percentage points) and in the total revenues (0.2 percentage points). If analyzed per individual banks, the four largest banks participate with 66.7% in the assets, which is increase of 0.4 percentage points compared to the previous quarter. On the other hand, nine banks in total participate with 21% in the total assets, which is almost equal to the participation the largest bank has in the total assets. Regardless of the declining trend of the levels of indicators used to measure the concentration, the difference between the bank with the highest and the bank with lowest participation in the assets continues to be high – it is 22.1 percentage points.

II. Bank risks

1. Credit risk

In the first quarter of 2017, the participation of the non-performing loans in the total loans was slightly reduced to 6.4%. On annual basis, the improvement of the credit risk indicators is still influenced by the changes in the regulation of the National Bank[2] for mandatory write-off. If we exclude these write-offs, the participation of the non-performing loans in the total loans is having some quarterly increase, which is concentrated in the corporate loans. The reduced credit activity of the banks in this segment contributed to this situation, as well as the increase of the non-performing loans of the non-financial companies. In the second quarter, the effect from this measure will be exhausted because the largest write-off was done in June 2016. The high coverage of the non-performing loans with the allocated impairment, in a situation of satisfactory volume and quality of own assets of the banks, limits the risks from eventual impossibility to collect these loans, on the solvency of the banks. There are some risk factors in the regular credit portfolio of the banks that could cause credit losses larger than those expected (the allocated reserves) by the banks. These factors are primarily related to the higher concentration in the credit portfolios of some banks, the relatively high costs or the inability to sell the collaterals related to the loans at desired price, or the eventual presence of loans in which it is more difficult to timely identify the financial problems the client has (loans with approved grace period or with one-off payment of the principal[3]). However, the quality of the credit portfolios of the banks is to a large extend conditioned by the relevant assessment of the credit capacity of the clients and the relevant adaptation of the contractual requirements of the already approved loans to the needs and capacities of the clients.

Graph 2
Quarterly increase of the credit exposure according to the sector
in millions of denars in percentages



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

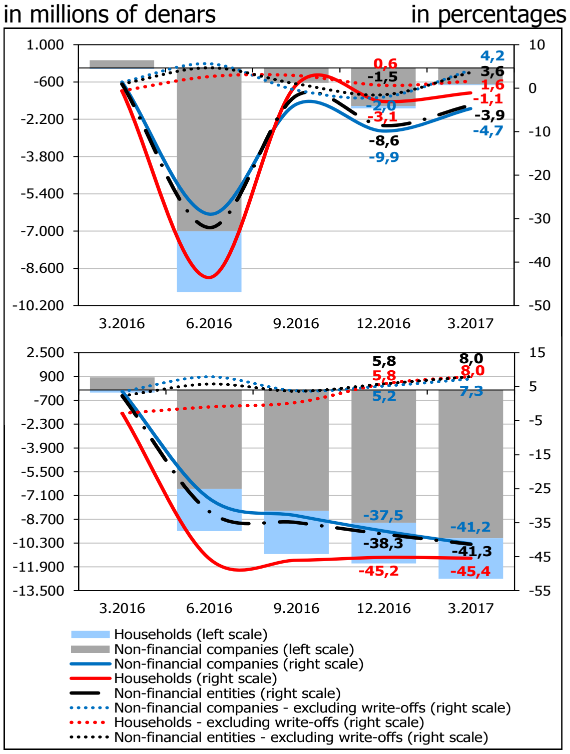
In the first quarter of 2017, **the total credit exposure** of the banking sector declined by 1.8% compared to the previous quarter, and is 461,087 million denars. This reduction is mainly due to the decline in the placements by the financial institutions (by 7,247 million denars i.e. 7.5%) which, in turn, is mainly because of the reduced funds in foreign banks, and partially also due to reduced placements with the NBRM (mainly in a form of denar deposits).

[2] Decision on Changes and Amendments of the Decision for Credit Risk Management ("Official Gazette of the Republic of Macedonia" No. 223/15), according to which the banks were obliged, no later than 30 June 2016, to start the transfer of all receivables which are entirely reserved for more than two years in off-balance sheet (to write them off). Regardless of the write-off, the banks retain the right to collect these receivables.

[3] Due to the small changes in the level and quality of these loans, compared to the previous quarter, they are not subject of analysis in this report.

Graph 3
Quarterly (above) and Annual (below) change in the non-performing loans of the non-financial entities and of specific sector

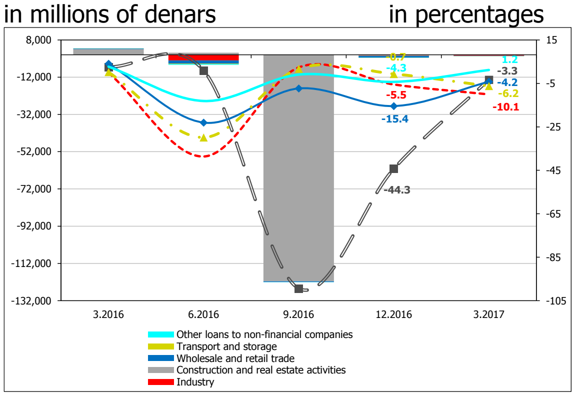
in millions of denars in percentages



Source: NBRM, using data provided by the banks.

Graph 4
Quarterly absolute and relative change of the non-performing loans in specific sectors of the non-financial companies

in millions of denars in percentages



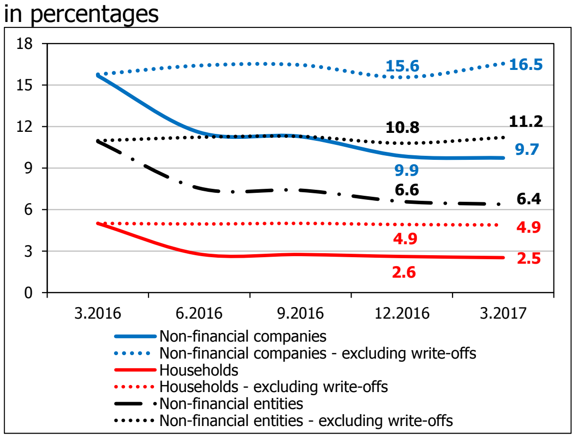
Source: Credit Registry of the National Bank, using data provided by the banks.

1.1 Realization of the credit risk in the balances of the banks

The total non-performing loans of the banking system were reduced by 3.9% during the first quarter of 2017. There is quarterly decline in the non-performing loans both towards the non-financial companies and the households. If we isolate the effect from the regulatory changes, the non-performing loans of the non-financial entities feature quarterly increase of 3.6% vs. the reduction in the previous quarter (-1.5%). Taking only the enterprises, the increase would have been 4.2%, which is essentially a termination of the favorable downwards sliding of the change rate in the non-performing loans towards this sector, present in the previous two quarters (excluding here the effect of the write-offs). If the write-off effect is excluded, the non-performing loans are also increasing among the households by 1.6% on quarterly basis. Although the quarterly percentage increase of non-performing loans among households is low, it is still three times higher compared to the increase in the previous quarter (0.6% if the write-off effect is excluded) and could be a signal for a slight worsening of the household credits quality.

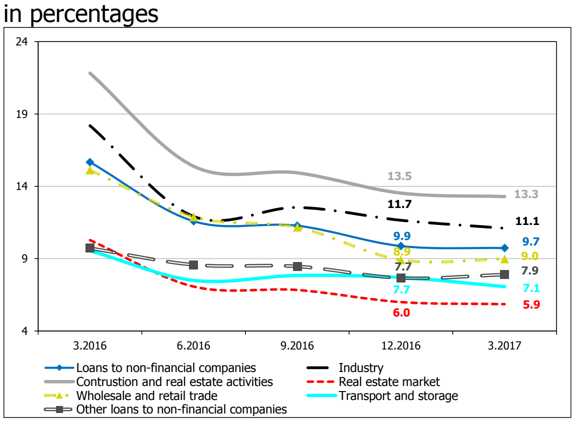
At the end of the first quarter of 2017, the mandatory write-offs done in accordance with the regulatory changes have much greater impact on the annual dynamics of the non-performing loans, having in mind that the largest write-offs were done in June 2016. If analyzed on annual basis, the non-performing loans have high (two-figure) rates of decline. If we exclude the write-off effects, the non-performing loans of the non-financial companies are increasing on annual basis, and this increase is accelerating from 5.8% (as on 31 December 2016) to 8.0% at the end of the first quarter of 2017. Similar is the dynamic of the annual change rates of non-performing loans according to specific sectors.

Graph 5
Share of non-performing loans in the total loans to non-financial entities in specific sectors
in percentages



Source: NBRM, using data provided by the banks.

Graph 6
Share of non-performing loans in the total loans to non-financial entities in specific sectors
in percentages



Source: Credit Registry of the National Bank, using data provided by the banks.
Note: Loans on "real estate market" refers to loans to non-financial companies dealing with construction and activities related to real estate, as well as loans to individuals for purchase and reconstruction of residential and business premises.

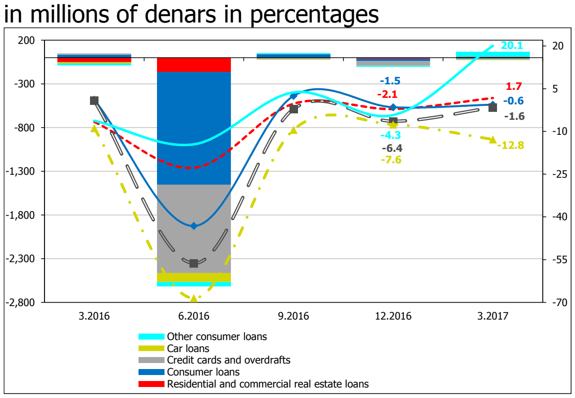
The participation of the non-performing loans in the total loans to non-financial entities was reduced by 0.2 percentage points in the first quarter of 2017 and is at the level of 6.4%. If we exclude the write-off effects, this participation is 11.2%, which is increase of 0.4 percentage points compared to the previous quarter.

With regards to the non-financial companies, non-performing loans rate[4] continued to decline and at the end of the March this rate is 9.7% (this reduction is due to the stronger quarterly decline of the non-performing loans, compared to the decline of the total loans to non-financial companies). If we exclude the write-off effects, this rate is 16.5% which is a quarterly increase of 0.9 percentage points. This increase is mainly caused by the reduced credit activity towards the non-financial companies, but is also caused by the increase in the non-performing loans. If seen per sectors, the non-performing loans rate is the highest among the clients that belong to the following sectors: "Construction and real estate related activities", "Industry" and "Wholesale and retail trade"[5]. However, this rate is featuring a quarterly decline in all these sectors, except in the "Wholesale and retail trade" sector, where it is slightly worsened (because of the faster reduction in the total loans towards the clients in this sector, compared to the quarterly decline of the non-performing loans).

The household non-performing loans rate is 2.5% (4.9% if write-off effects are excluded), hence it remains changed in comparison to the previous quarter. The increase in the household non-performing loans did not have impact on the rate of the non-performing loans solely because of the credit growth in this area. If seen per specific credit products, the biggest decline in the rate of the non-performing loans[6] is evident with

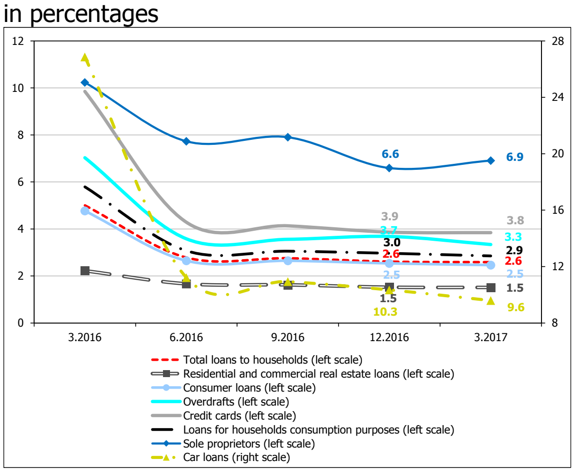
[4] The rate of non-performing loans is the share of the non-performing loans in the total loans.
[5] The credit exposure towards clients belonging to the sector for "Wholesale and retail trade" has the largest participation in the total credit exposure towards the non-financial companies (33.9%). Hence, the non-performing loans towards the clients in this sector also have the largest participation (30.7%) in the total non-performing loans to non-financial companies.
[6] With car loans, this rate was reduced by 0.8 percentage points, but it is the highest compared to other loan products.

Graph 7
Quarterly absolute and relative change of the non-performing loans of specific credit products to households
in millions of denars in percentages



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

Graph 8
Share of non-performing loans in the total loans to households, per specific credit products
in percentages



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

the credit cards and the negative balances on the current accounts which, in a situation of slowed pace of new crediting[7] on this basis after the introduction of the higher capital requirements[8], is probably due to the write-offs carried out on these types of receivables. There is also some decline in the rate of the non-performing consumer credits[9] which, in a situation of slowed pace of consumer crediting, is also related to the regulatory obligation for mandatory write-off[10].

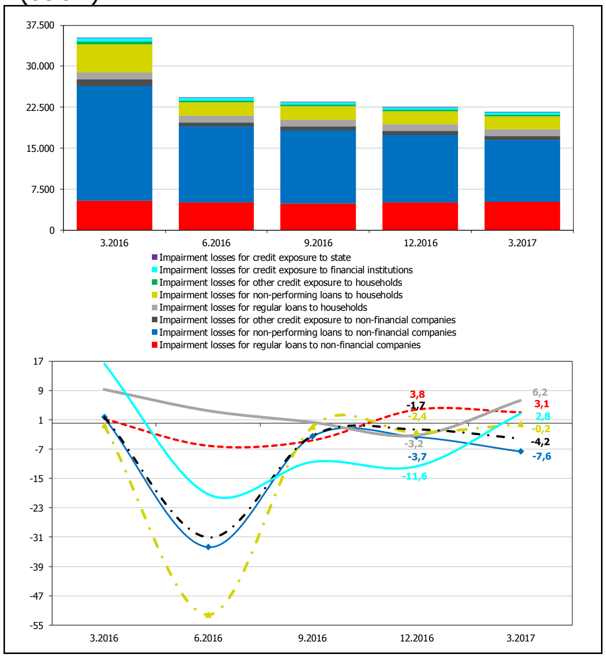
1.2 Capacity of the banks to deal with eventual losses caused by the non-performing loans

In the first quarter of 2017, the allocated impairment for the total credit portfolio of the banks was reduced by 913 million denars i.e. by 4.2%. The reduction of the allocated impairment comes from the above-mentioned mandatory write-off of the entirely reserved non-performing loans. In the first quarter of 2017, non-performing loans were written-off in the total amount of 1,880 million denars, which is 50% more compared to the last quarter of 2016, but is also six times less compared to the second quarter of 2016, when the amount of these write-offs was largest. As of March 2017, the non-performing loans were reduced by half, on the basis of the mandatory write-off.

The high coverage of the non-performing loans with the allocated impairment points out to a satisfactory capacity of the banking system to absorb the expected credit losses. At the end of the first quarter of 2017, the coverage of the non-performing loans with own impairments was

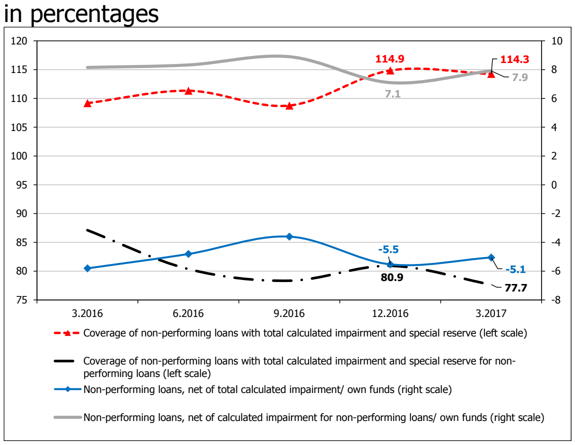
[7] The amount of the newly approved credit cards and negative balances on the current accounts in the first quarter of 2017 is less by 9.0% of the newly approved amount on this basis in the last quarter of 2016.
[8] The changes and amendments of the Methodology for Determination of the Capital Adequacy increased the capital requirements for the newly-approved unsecured consumer loans (approved after 1 January 2016) with maturity longer than, or equal to, eight years (in order to slow down the high growth of this type of loans). In order to prevent the transfer of the indebting towards the overdrafts on the transaction accounts and credit cards, higher capital requirements were introduced for the growth on the basis of these products, realized in relation to 31 December 2015.
[9] The total newly approved consumer loans in the first quarter of 2017 are lower by 5% from the newly approved consumer loans in the last quarter of 2016. The slowed growth of these loans is also due to the said larger capital requirements.
[10] In the first quarter of 2017 the amount of the newly approved consumer loans with maturity longer than, or equal to, eight years, is less by 13.6% compared to the newly approved loans with the identical characteristics in the last quarter of 2016. In the same time, the participation of the newly approved loans in the total consumer loans with original maturity longer than, or equal to, eight years, at the end of the first quarter of 2017, is 5.4% (6.5% at the end of 2016).

Graph 9
Structure (above) and annual change rates (below) of the impairment, according to sectors
in millions of denars (above) in percentages (below)



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

Graph 10
Coverage of the non-performing loans and participation of the net non-performing loans in the own assets of the banks
in percentages



Source: NBRM, using data provided by the banks.

reduced, but it is still high. The reduction of the indicator is due to the mandatory write-offs that have been carried out.

The high coverage of the non-performing loans with own impairment limits the negative effects on the own assets of the banking system, caused by the eventual impossibility to collect these loans. The portion of the non-performing loans which is not reserved absorbs only 7.9% of the own assets of the banking system that would be used to cover the unexpected losses in a hypothetical situation of extreme event – total impossibility to collect these loans. In a case of this extreme assumption, the capital adequacy ratio of the banking system would be reduced by only 1.2 percentage points (almost identical with the previous quarter).

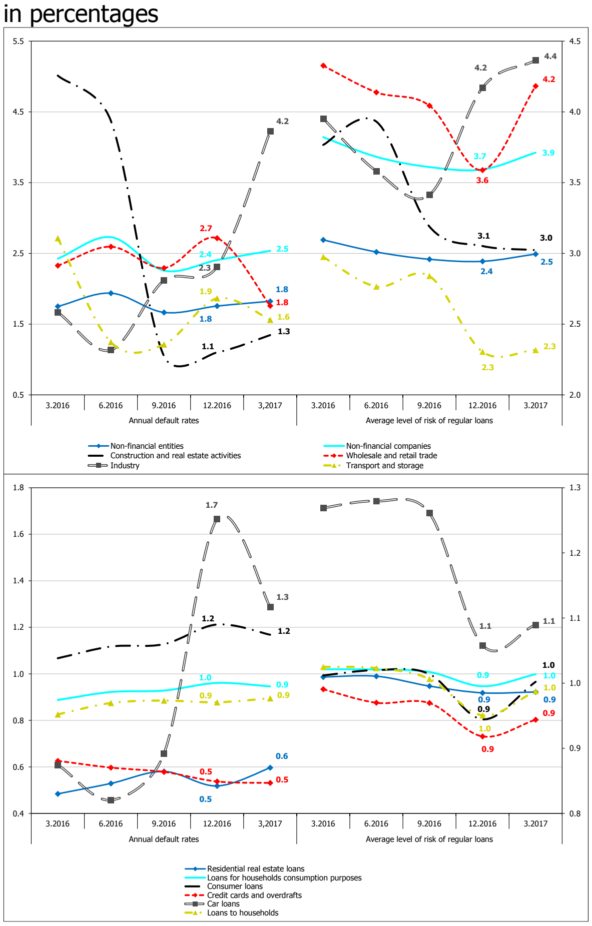
1.3 Other possible sources of credit risk

In the first quarter of 2017, **the annual rate of uncollectability** of the credit exposure with regular status[11] is 1.8% i.e. it is lower in comparison to the average level of riskiness of the regular loans to non-financial entities[12] (2.5%), as established by the banks. This means that the banks are more cautious and they did slightly higher impairment of the regular loans compared to what is suggested by the historical rate of uncollectability of the exposures that have regular status.

If broken down per industry sectors (speaking about non-financial companies) and credit products (for the households), the trend of the annual uncollectability rates, in general, is unchanged, except the improvement in the sector "Wholesale and retail trade" (which is due to the faster annual decline of the loans the status of which has been converted from 'regular loans' to 'non-performing loans', compared to the annual decline of the regular loans in this sector). On the other hand, the worsening of the annual

[11]The annual uncollectability rate of the credit exposure is calculated as a percentage of the credit exposure with regular status which, during a period of one year, migraes into non-performing status exposure.
[12] Calculated as a ratio between the allocated impairment of the regular loans and the gross amount of the regular loans.

Graph 11
Annual uncollectability rates* of the credit exposure with regular status and average level of risk of the regular loans, per specific sectors (above) and credit products (below)
in percentages



Source: Credit Registry of the National Bank, using data provided by the banks.
*Note: The annual uncollectability rate of the credit exposure is calculated as a percentage of the credit exposure with regular status which, during a period of one year, migrates into non-performing status exposure.

uncollectability rate of the exposures in the "industry" sector is caused by the conversion into 'non-performing' status of some larger clients in the food industy.

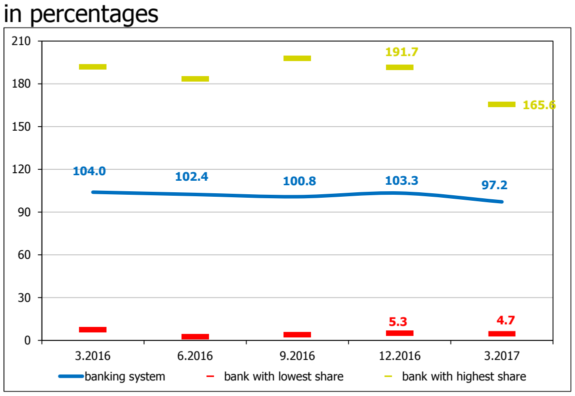
In addition to the appropriate coverage of the regular loans with allocated impairment, **equally high is the volume of the loans for which collateral is provided** (86.0% of the total regular loans to non-financial entities), which is somehow mitigating the level of the credit risk undertaken by the banks, and is also used a secondary collection source.

The relatively high concentration of the credit portfolios of specific banks (per individual clients, per categorization in specific sectors, etc.) could increase the losses because the credit risk could go beyond the expectations of the banks. At the end of the first quarter of 2017, the ten largest exposures of the banks towards the non-financial entities occupy significant portion (97.2%) of own assets of the banks which, per individual banks, varies between 4.7% and 165.6%. However, this participation features downward trend in comparison to the previous quarter and now for the first time in the last four years the ten largest exposures towards the non-financial entities do not fully absorb the own assets of the banks. Although these exposures of the banks have low risk (they mainly belong to risk categories "A" and "B"), still in the largest exposures structure we can also notice exposures with higher risk in some banks.

The prolonged loans[13] participate with 9.6% in the total loans to non-financial entities. This participation level is similar for both segments of the non-financial sector (9.0% at the non-financial companies and 10.6% at the households). There is a prominent increase of the participation of the prolonged household loans in the past one year, but the

[13] According to the regulation, the continuation of the maturity of the loans is not a consequence of the worsened financial situation of the clients.

Graph 12
Participation of the 10 largest exposures to non-financial entities in the own assets of the banks
in percentages



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

quality of these prolonged loans[14] is exceptionally good.

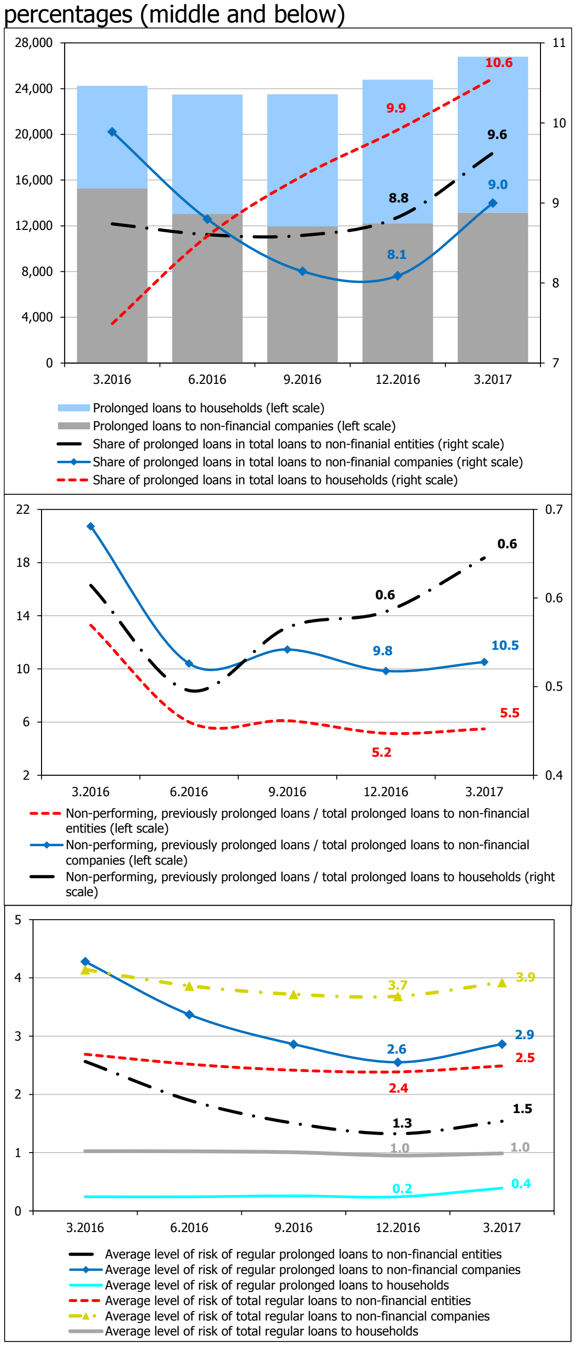
The rate of non-performing loans to non-financial companies that were initially prolonged (10.5%) is on increase (by 0.8 percentage points) vs the total credit portfolio of the non-financial entities, where this rate was reduced. However, the greater increase of the annual level of riskiness of the regular prolonged loans shows that the banks have identified the higher risk from the prolonged regular loans and acted more cautiously by assigning a bit higher impairment, having in mind that it is about clients whose financial standing was not worsened.

Another potential source of credit risk (and the occurrence of non-performing loans which are primarily credits late for repayment over 90 days) is the receivables of the banks that have a **period of late repayment of the principal between 61 and 90 days. The amount of these matured loans was reduced in the first quarter of 2017 by 24.0% i.e. by 690 million denars.** If we assume that the matured debt will not be collected in the following month at none of the loans matured between 61 and 90 days, a total of 0.8% of all regular loans (as on 31 March 2017) would be converted into non-performing, hence the non-performing loans, only on this base, would increase by 2,179 million denars i.e. by 12.3%. However, in the following month (April 2017) the increase (growth) is twice less from this extreme hypothesis - it is 5.7% i.e. 1,022 million denars, and only 3.9% of these exposures were designated with 'non-performing' status, which refers to a solid rate of collection of the matured portion between 61 and 90 days.

In the first quarter of 2017 the regular **restructured loans** were increased by 0.7% (by 32 million denars). As on 31 March 2017, these loans participated with 40% in the total restructured loans and they have an increasing trend (in a situation of almost unchanged level),

[14] Measured through the share of the non-performing loans that were initially prolonged, in the total prolonged household loans (0.6% as on 31 March 2017) and the average level of riskiness of the regular prolonged household loans (0.4% on 31 March 2017).

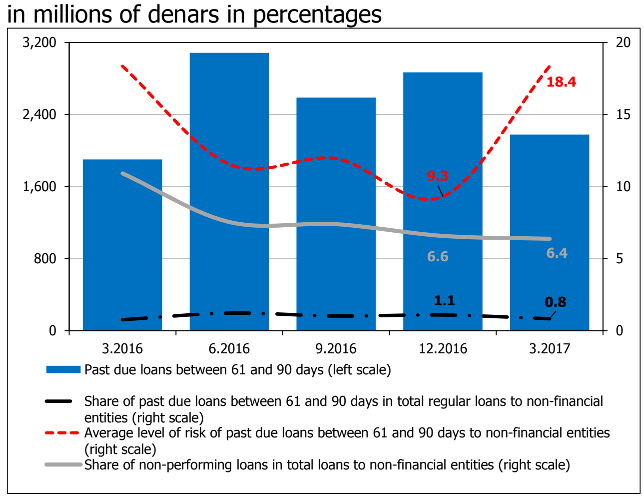
Graph 13
Dynamics of the prolonged loans and structural indicators (above) and indicators of their quality (middle and below)
in millions of denars and in percentages (above), in percentages (middle and below)



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

which is due to the reduction of the non-performing restructured loans, probably as a result of the mandatory write-offs that have been carried out. The non-financial companies dominate the structure of the regular restructured loans. If we assume that the restructuring of the regular loans was unsuccessful and these loans were assigned a 'non-performing loan' status, the non-performing loans rate at the end of the first quarter of 2017 would be higher by 1.8 percentage points. With regards to the non-financial companies, this rate would be higher by 3.2 percentage points.

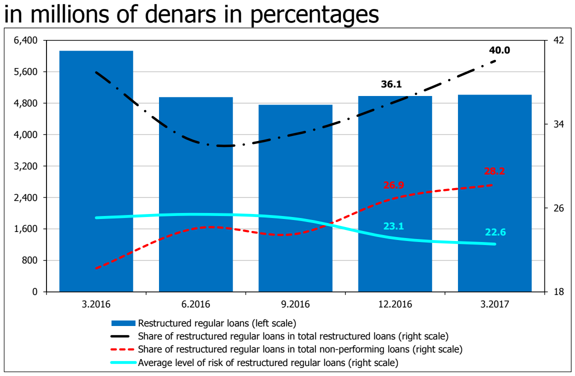
Graph 14
Dynamic and average risk level of the loans with matured part in the repayment of the principle between 61 and 90 days
in millions of denars in percentages



Source: Credit Registry of the National Bank, using data provided by the banks

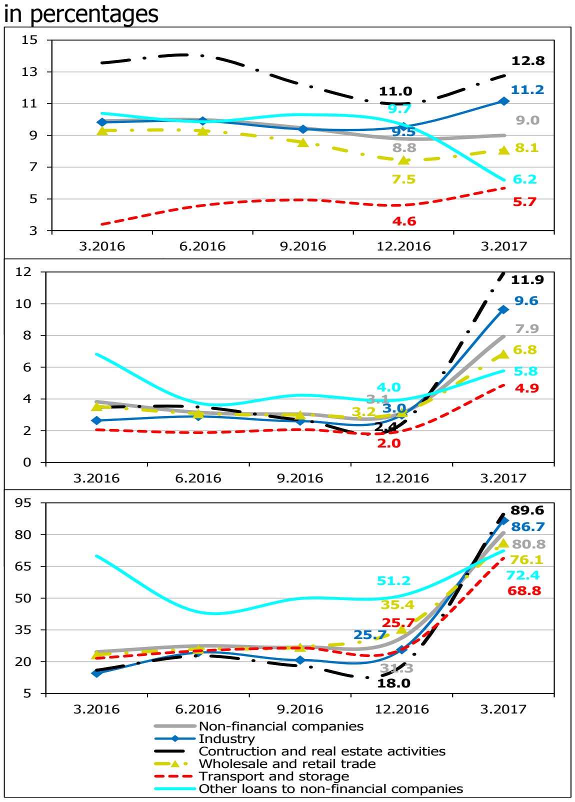
1.4 Stress-test simulation of the banking system's sensitivity to the increase of the credit risk

Graph 15
Dynamics of the restructured regular loans and indicators of their quality
in millions of denars in percentages



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

Graph 16
Participation of the restructured loans in the total loans (above) and of the restructured regular loans in the total restructured loans (middle), and in the total non-performing loans (below), per sectors
in percentages

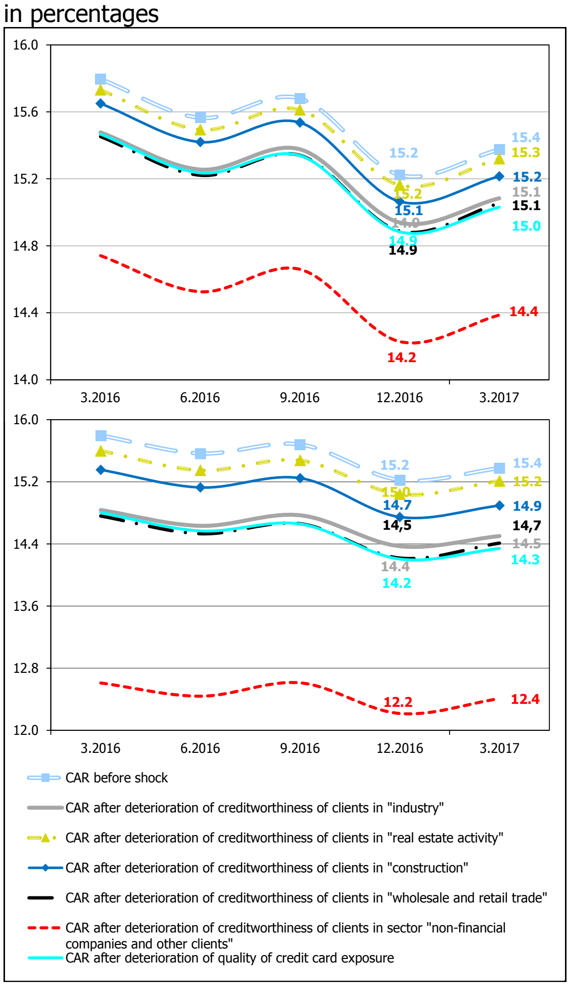


Source: Credit Registry of the National Bank, using data provided by the banks.

In order to examine the sensitivity of the banking system to worsening of the quality of specific segments of the credit portfolio, simulations are carried out for hypothetical migration of 10% (first simulation) and 30% (second simulation) of the credit exposure to non-financial companies (by activity sectors) and households (by credit products), separately, and then to the two sectors jointly – from the existing ones towards the following two higher risk categories. **The results of the simulations confirm the resilience of the banking system to the simulated shocks and they register slight improvement compared to the previous quarter**. This is mainly due to the higher rate of the capital adequacy of the banking system prior to the simulations but also to the less-present sensitivity of some banks to the hypothetical shocks. In this regard, the capital adequacy of the banking system is not reduced below 8% in any of the simulations, although some individual banks show hypothetical need for recapitalization but only in a situation of simulated shocks typical for the second extreme situation (and again it is only about one bank). The largest decrease in the capital adequacy ratio during the implementation of the two simulations was seen in the case of hypothetical deterioration of the creditworthiness of the clients in the "Industry" and "Wholesale and retail trade" sectors, as well as in the exposure in relation to consumer loans. Also important to mention is the significant reduction of the capital adequacy ratio in a case of hypothetical deterioration of the creditworthiness of the clients in the construction sector, which points out to increased sensitivity of the bank capital adequacy in a case of hypothetical deterioration of the quality of exposure towards the clients in this sector. The main reason for this is the high participation of the loans that have regular status, that are assigned as non-performing loans in the simulation.

The sensitivity of the banking system to the eventuality of credit risk is also tested by implementing three additional combined

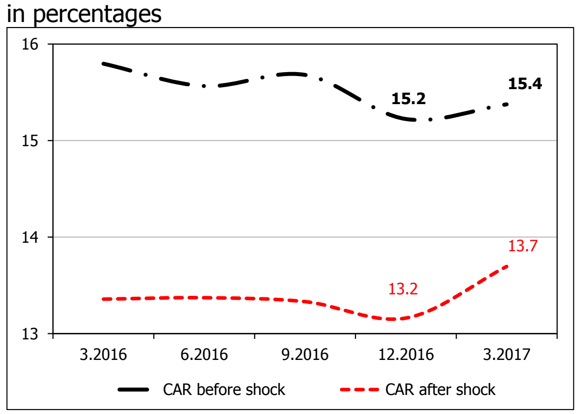
Graph 17
Capital adequacy rate per sectors and credit products, in the first (above) and second (below) simulation for both sectors together
in percentages



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

hypothetical simulations of deterioration of the credit portfolio related to the non-financial entity. More specifically, it is assumed that all non-performing loans of the non-financial entities are completely uncollectable, the overall regular restructured exposure is assigned 'non-performing' status and the banks do new restructurings of the regular portion of the credit portfolio which, according to the volume,

Graph 18
Capital adequacy rate before and after the three combined shock
in percentages



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

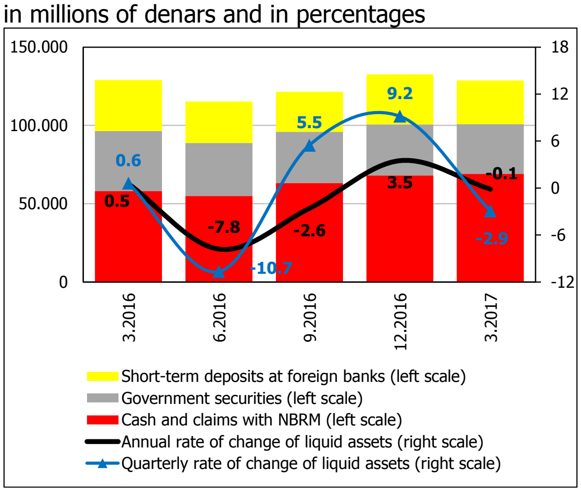
correspond to the amount of the restructured exposures that were flagged with 'non-performing' status[15]. In a case of this combined extreme simulation, the capital adequacy ratio of the banking system is reduced to 13.7% and is only 1.7 percentage points lower from the current level (which is less compared to the previous quarter when it was 2.1 percentage points).

[15] More detailed explanation of the manner in which the three combined hypothetical simulations were carried out is provided in the Report on Risks in the Banking System of the Republic of Macedonia in the third quarter of 2016.

2. Liquidity risk

In the first quarter of 2017, the banks in the Republic of Macedonia were maintaining a satisfactory level of liquidity assets, which enabled them to properly manage the liquidity risk. The participation of the liquid assets in the total assets, as well as the liquidity asset coverage ratios for different categories of risk, remained stable. In the first quarter of 2017 there were no significant changes in the relative relevance of the gap between the assets and the liabilities according their residual maturity. The simulations of combined liquidity shocks confirm that the volume of liquid assets the Macedonian banking system has at disposal provides for appropriate management with the liquidity risk as well as satisfactory resilience to the hypothetical extreme liquidity shocks (outflows).

Graph 19
Liquid assets, structure and growth
in millions of denars and in percentages



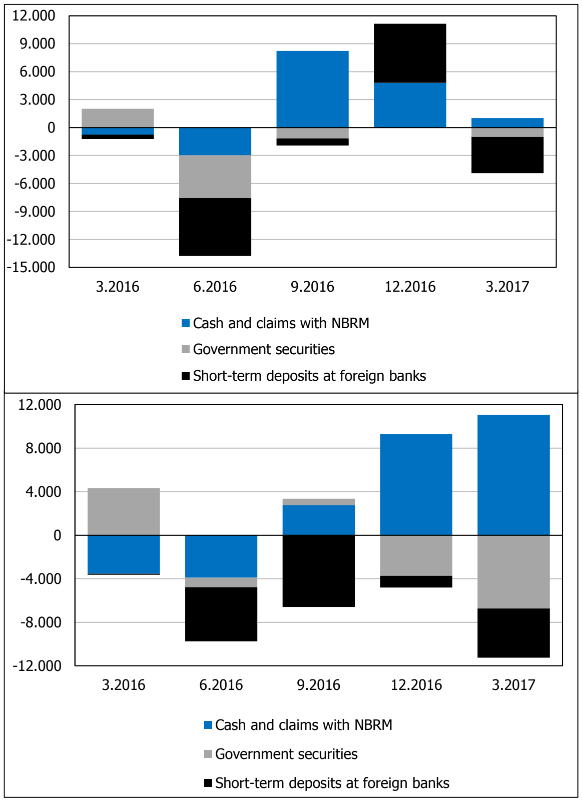
Source: NBRM, using data provided by the banks.

2.1 Dynamics and composition of the liquid assets

At the end of the first quarter of 2017, the liquid assets[16], on a banking system level, are in the total amount of 128,790 million denars which, compared to the end of 2016, is reduction of 2.9% i.e. 3,874 million denars. The quarterly reduction of the liquid assets of the banks was mainly because of seasonal factors[17] but partially also because of the existing uncertainty on the domestic political stage. If broken down per specific financial instruments that make up the liquidity assets, biggest reduction is seen in the short-term FX currency assets in foreign banks and to some less extent in the placements of the banks in treasury bills. Contrary to this, the cash assets and the bank assets placed in the National Bank were increased on quarterly basis. As a result of this, in the structure of the liquidity assets of the banks there was a quarterly reduction of the participation of the corresponding accounts and the short-term deposits in foreign banks (from 24.1% to 21.8%), on the account of increase of the participation of the cash assets and the placements in the instruments of the National

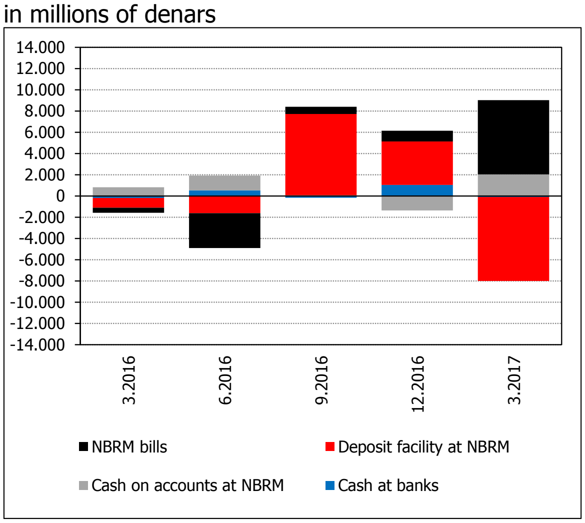
[16] The liquid assets include: 1) assets and claims on the National Bank, which include cash, assets on the accounts of banks with the National Bank, deposit facility with the National Bank and CB bills; 2) short-term deposits with foreign banks, including the assets of the banks on their correspondent accounts abroad and 3) the carrying amount of the investments in securities issued by the Republic of Macedonia and by foreign governments. For the purposes of analyzing the liquidity risk, the assets and the liabilities in denars with foreign exchange clause are considered denar assets and liabilities.
[17] In the first quarter of 2017, the deposits from non-financial entities were reduced by 4.9 billion denars i.e. 1.5%. Most of the deposit decline share is in the non-financial companies, both among denar deposits on sight and on short-term, which realized quite high growth in December 2016. These tendencies are also commonly present in the last and in the first months of the previous years.

Graph 20
Quarterly (above) and annual (below) absolute change of the liquid assets, per components
in millions of denars



Source: NBRM, using data provided by the banks.

Graph 21
Absolute quarterly change of the cash assets and receivables of the banks from the National Bank, per specific instruments
in millions of denars



Source: NBRM, using data provided by the banks.

Bank (from 51.3% to 53.6%). The participation of the placements in state securities remained unchanged (24.6%).

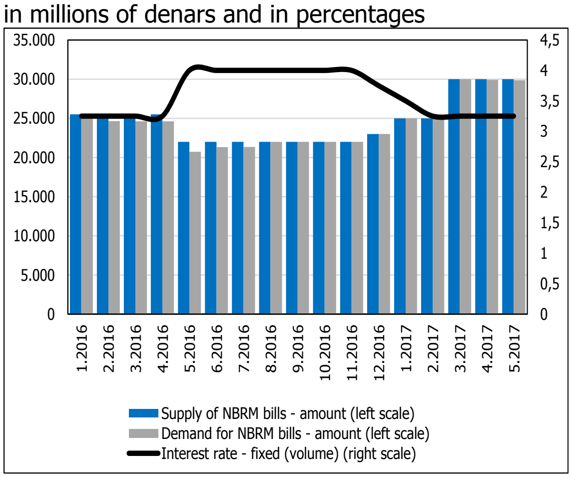
The quarterly increase of the cash assets and receivables of the banks from the National Bank in the first quarter of 2017 (by 1,024 million denars i.e. by 1.5%), is completely due to the increased investments by the banks in CB bills of the National Bank, in a situation of reduced investments by the banks in the available deposits[18] and payment of the matured foreign currency deposits in the National Bank[19]. The assets placed by the banks in CB bills increased by almost one third in the first quarter of 2017, compared to the end of 2016, which is due to the increased offer of CB bills[20].

In the first quarter of 2017, the total nominal amount of the issued continuous[21] government securities featured a modest increase of 3.2% on quarterly basis i.e. 1.3% on annual basis (March 2017 – March 2016). On the other hand, the amount of the net issued[22] government securities was reduced compared to the previous quarter. The placements of the

[18] Pursuant 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 without the possibility of partial or full early withdrawal. In the first quarter of 2017, the interest rates on these deposits remained unchanged – they equaled 0.25% on overnight deposits and 0.5% on seven-day deposits.
[19] Since October 2016, the National Bank stopped organizing auctions for foreign currency deposits, reactivated in May 2016, in the midst of the turbulent events on the FX and deposit market.
[20] Under the influence of the likely stabilizing of the expectations of the economics entities, and due to the significantly higher structural liquidity of the banking sector, in January and February 2017 the National Bank reduced the interest rates by 0.25 percentage points, thus reducing their amount to 3.25%. The changes in the rate of the CB bills interest rate were also accompanied by several changes in the amount of the CB bills offered, as follows: in January 2017 increase from 23,000 million denars to 25,000 million denars and in March 2017 increase to 30,000 million denars i.e. 5,000 million denars more than the level of the matured CB bills (25,000 million denars).
[21] Continuous government securities are the treasury bills and the government bonds issued on the domestic financial market, excluding the structural securities i.e. denationalization bonds.
[22] The net issued amount is obtained as a difference between the realized amount of the government securities auctions for specific time period, and the amount of government securities that matures in the same time period.

banks in domestic government securities also featured quarterly decline of 3.3% (according their nominal value). This decline was totally determined by the reduction of the placements in treasury bills. In other words, according their nominal value, the placements in treasury bills featured decline of 3,813 million denars i.e. by 15.8%, while the investments in domestic government bonds were increased by 2,751 million denars or by 33.8%. With that, the participation of the banks in the issued continuous government securities was reduced in the first quarter of 2017, hence at the end of March it was 37.2%, which is less by 2.5 and 9.0 percentage points on quarterly and annual basis, respectively. The characteristics of these financial instruments[23], from the aspect of their liquidity, but also their yield and the modest offer of other alternatives for placement of the liquidity assets, make them attractive for the domestic banks, so the investments in these financial instruments have important place in the structure of the liquid assets of the banks, with participation of 24.6% at the end of the first quarter of 2017.

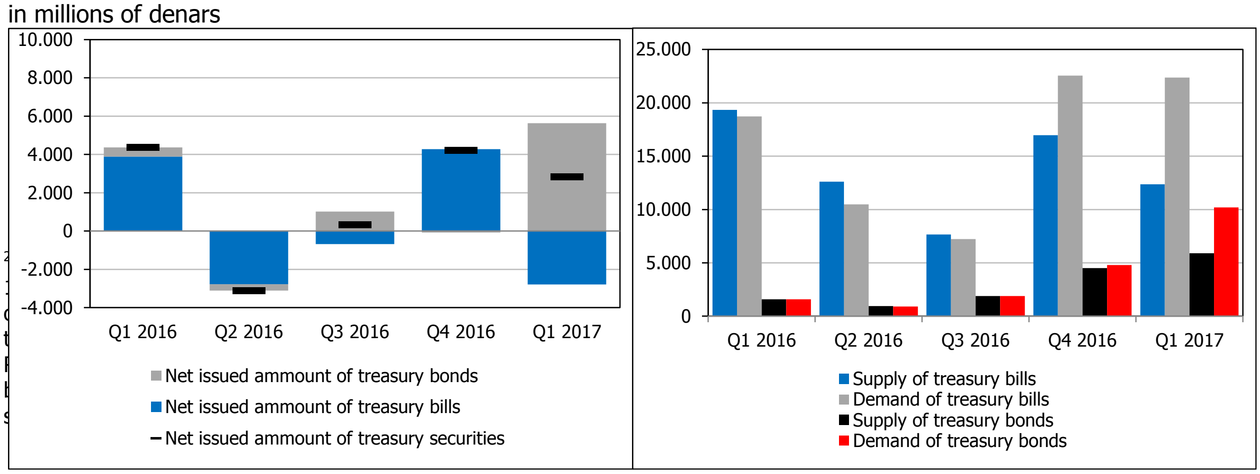
Graph 22
Offer and demand and interest rate of the auctions of CB bills of the National Bank
in millions of denars and in percentages



Source: NBRM

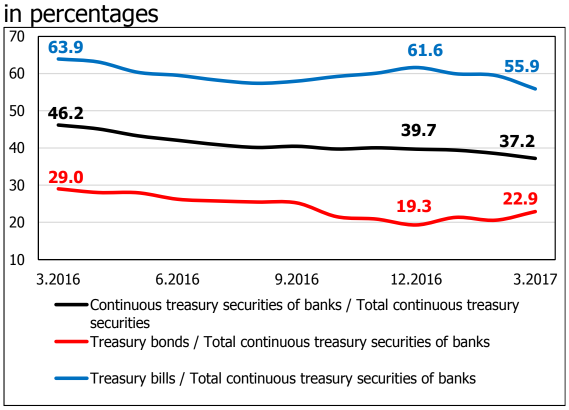
The structure of the government securities owned by the bank continues to be dominated by the participation of treasury bills (they participate with two thirds in the total), compared to government bonds, which is an indicator of the stronger tendency the banks have to invest in government securities with shorter residual maturity, but also of the low liquidity

Graph 23
Net issued amount (left) and offer and demand (right) of the domestic state securities
in millions of denars



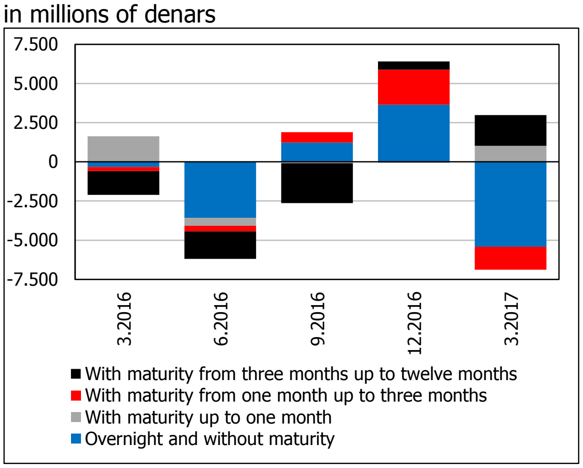
Source: Ministry of Finance and the National Bank.

Graph 24
Relative significance of the banks on the primary market of state securitiesi
in percentages



Source: Ministry of Finance and the National Bank, using data provided by the banks.

Graph 25
Quarterly change in the short-term liabilities in foreign banks
in millions of denars



Source: NBRM, using data provided by the banks.

level of the secondary government securities market. The government bonds owned by the banks are mainly consisted of continuous government bonds issued by the Republic of Macedonia, where half of them are two-year bonds. It was exactly the two-year bonds that almost entirely contributed to the quarterly increase in the total investments by the banks in government bonds. The investments in government bonds issued by other countries have modest participation of around 2% in the total portfolio of the government securities of banks, which is, *inter alia*, due to the negative yields on the international financial markets.

The most important foreign currency clause of the liquid assets of the banks[24] are the assets placed in foreign banks with residual maturity of less than one year. These assets were reduced in the first quarter of 2017 by 3,896 million denars i.e. by 12.2% **compared with the end of 2016, but they still** remained on a specific stable level (with participation of 22% in the total liquid assets), which renders them possible to be used not only for operational purposes but also for managing the liquidity and currency risks. Most of the short-term assets in foreign banks are placed over night i.e. they are placed in correspondent accounts of the domestic banks abroad that provide low, sometimes even negative, yield.

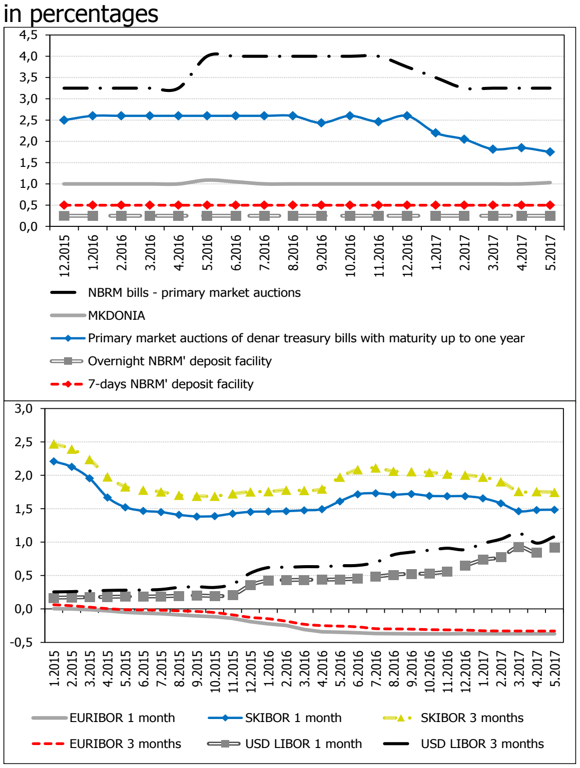
As continuation of the normalization of the monetary policy that started in December 2016, in the first quarter of 2017, as a result of the stabilizing of the foreign currency market and of the deposits in the banking system (two segments that were impacted the most by the political crisis), the National Bank additionally lowered the base interest rate of the CB bills twice (In January from 3.75% to 3.5% and in February from 3.5% to 3.25%). On the other hand, the interest rates of the denar assets available in the National Bank remained unchanged. The interest rate at the local inter-bank market (SKIBOR) was reduced.

[24] The FX liquid assets include the short-term deposits in foreign banks, including funds on the correspondent accounts, investments in foreign government securities, the foreign currency cash and the placements in foreign currency deposits in the National Bank.

Graph 26

Basic domestic interest rates (above) and basic inter-bank interest rates SKIBOR, EURIBOR and LIBOR for US dollar (below)

in percentages

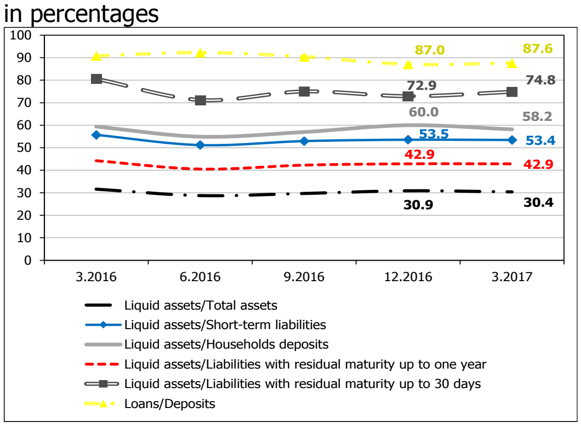


Source: National Bank and website of the European Institute for money market for EURIBOR, and website of the Federal Reserve Bank of Saint Louis (FRED) for LIBOR for the US dollars.

Graph 27

Liquidity ratios of the banking system

in percentages



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

Per individual banks, as on 31 March 2017, the share of the liquid assets in the total assets is between 16.8% and 43.6% (March 2016: 13.8% and 41.3%), with median of 27.2%. The coverage of the short-term liabilities with liquid assets is between 34.6% and 85.5% (March 2016: 28.0% and 98.2%), with median of 52.9%, and the coverage o the liabilities with contractual residual maturity of up to 30 days is between 38.4% and 195.3% (March 2016: between 31.9% and 164.6%), with median of 73.8%.

The interest rates on the inter-bank markets in the Euro zone remained exceptionally low, even negative for some maturities, which corresponds to the unchanged structure of the monetary policy of the ECB in the first quarter of the year. Contrary to that, following the decision by FED to increase the base interest rate in March 2017 (by 25 base points), the inter-bank interest rate LIBOR for US dollar was increased.

2.2 Liquidity ratios

In the first quarter of 2017 most of the liquidity ratios[25] of the banking system were moderately worsened, but they still remained at a satisfactory level. Exception is the coverage of the liabilities that have outstanding maturity of up to 30 days, with liquid assets, which was primarily increased due to the prominent decline in the liabilities with outstanding maturity of up to 30 days. The ratio between the loans and deposits was increased by 0.6 percentage points in comparison to the end of 2016, mainly because of the rapid quarterly reduction of the deposits, and less of the loans. This ratio is still below 100%[26] in most of the banks.

In terms of currency[27], the liquidity ratios have opposite tendencies. The liquidity ratios in denars mainly featured increase, which was due to the higher presence of liquid assets in denars in the total liquid assets of the banks, while the ratios for foreign currency liquidity were worsened due to the decline of the foreign currency clause of the liquid assets of the banks in the first quarter of the year.

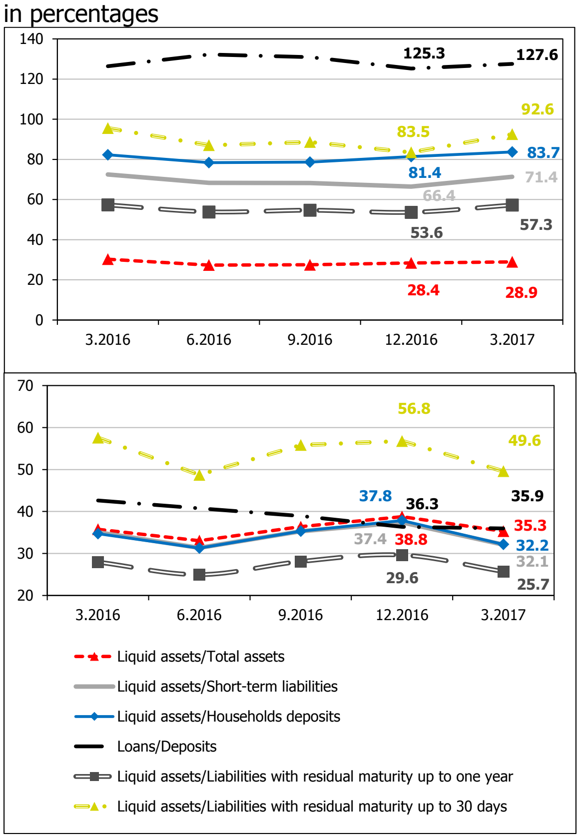
The regulatory rates for liquidity of the banking system, shown as ratio between the

[25] The residential inter-bank assets and liabilities were not taken into account in the calculation of the liquidity ratios on the level of the banking system.

[26] Except for four banks that had a share of 25% in the assets of the banking system as on 31 March 2017. Per individual banks, this ratio/ indicator varies between 60.5% and 123.8% (March 2016: 71.2% and 128.4%), with median of 94.1% (March 2016: 96.3%).

[27] The receivables and liabilities with foreign currency clause are considered to be in denars, because their cash flow is in denars.

Graph 28
Liquidity ratios of the banking system according to the currency, in denars (above) and in foreign currency (below)
in percentages



Source: NBRM, using data provided by the banks.

assets and liabilities maturing in the next 30 days and 180 days, were maintained above the prescribed minimum of 1 (1.4 and 2, respectively).

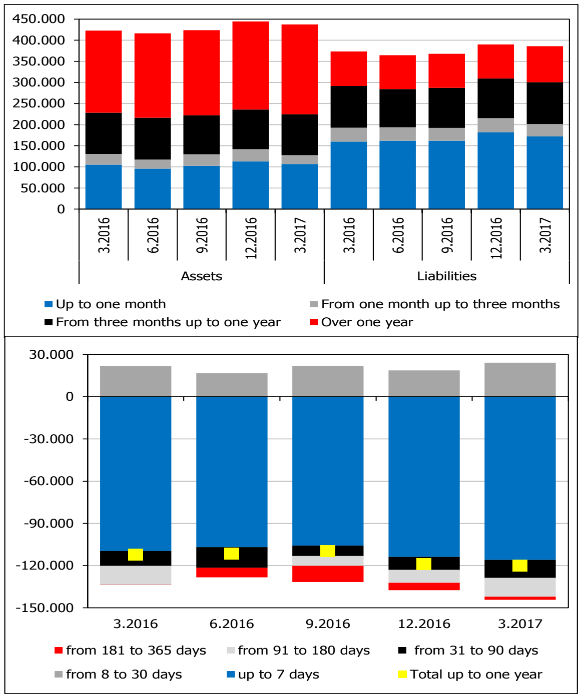
2.3 Maturity structure of the assets and the liabilities

In the first quarter, the share of the assets and liabilities with residual maturity greater than three months was increased, vs reduction of share of assets and liabilities with residual maturity of up to three months. These tendencies are mostly related to the significant decline in the sight assets (sight deposits) and the short-termed deposits, as well as the reduction of the short-term loans, on the side of the assets, in the first quarter of 2017.

The largest discrepancy between the assets and the liabilities, in terms of their residue maturity, continuous to be maturity bucket of up to seven days, **which originates from the sight obligations of the banks** and without determined maturity which are also included in this maturity bucket.

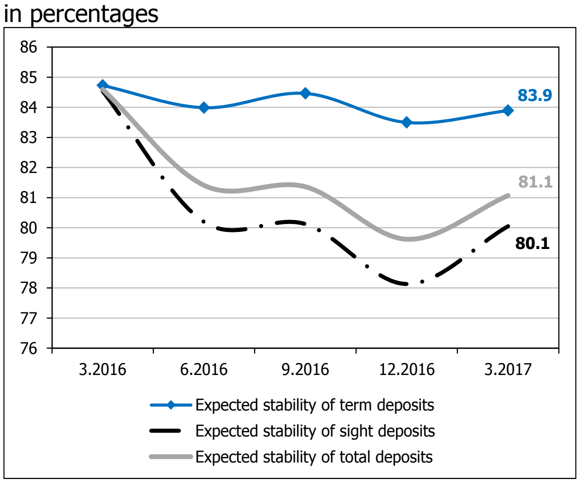
In the first quarter of 2017, **there was improvement in the bank expectations regarding the deposits stability level, as main source of financing, regardless of the actual quarterly reduction of the sight asset and of the short-term deposits by non-financial entities.** At the end of the first quarter of 2017, the banks were expecting that 83.9% of the termed deposits with residue maturity of up to three months (83.5% as on 31 December 2016) to show stability i.e. to remain in the banks. Similar stability is also expected with the sight assets, including the assets on the transaction accounts. The high expected stability of the deposits is the key determinant of having a positive sum difference between the assets and the liabilities in terms of their expected maturity, in all maturity buckets (Annex 33).

Graph 29
Structure of the assets and liabilities of the banks according their contractual residual maturity (above) and structure of the gap between the assets and the liabilities with residual maturity of up to one year (below)
in millions of denars



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

Graph 30
Expected stability of the deposits with residual maturity of up to three months, by the banks
in percentages



Source: NBRM, using data provided by the banks.

2.4 Stress-simulations for liquidity shocks

The liquidity shock simulations carried out as on 31 March 2017 confirm the stable liquidity position of the Macedonian banking system, which is mainly due to the satisfactory level of liquid assets that are available in the system. Only in the simulation of significantly extreme liquidity shock, which includes combined outflows of a number of different sources of funding[28] outside of the banks, the liquidity assets of the banking system are utilized in full (over 100%), and there would a lack only with twelve banks, that jointly participate with 75.5% in the assets of the banking system. Furthermore, for the purpose of this simulation, the usual inclusion of the liquid assets is expanded to also include other financial instruments[29] which are considered to be quickly and easy-to-collect by the banks, or will be converted into cash assets by the banks. In this case, the banking system would have sufficient liquid assets i.e. the decline of the liquid assets on a level of the banking system would be 97.8%, which means that even after such extreme shocks, some amount of liquid assets will remain to be available.

When doing separate application of the particular liquid shock simulations, the

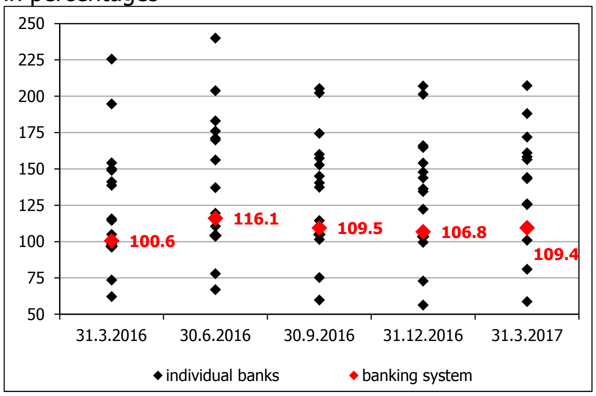
[28] The simulation assumes outflow of deposits of the twenty largest depositors, 20% of household deposits, liabilities to parent entities with the exception of liabilities on subordinated instruments and hybrid capital instruments that are excluded from the simulation as according to the regulations for calculating capital adequacy their early repayment is limited, 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 credits, irrevocable credit lines and unused limits based on credit cards and approved overdrafts on transaction accounts) in balance sheet claims. The simulations of liquidity shocks exclude MBDP AD Skopje.

[29] In addition to the financial instruments that make up the liquid assets, the following financial instruments are also created (if they are present in the assets of the banks): long-term deposits in foreign banks, instruments on the money market issued by foreign non-government issuers, loans with residue maturity of up to 30 days, including the effect from the reduction of the compulsory reserve for the foreign currency liabilities of the banks which is allocated in foreign currency due to the simulated outflow of the foreign currency deposits of the households.

Graph 32

Reduction of the liquidity assets in the simulation of combined liquidity shocks

in percentages

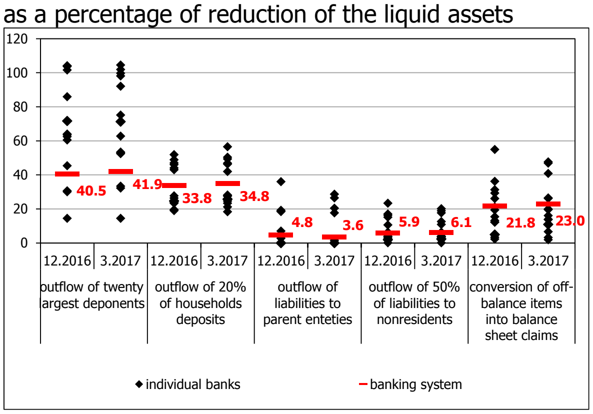


Source: NBRM calculations, using data provided by the banks.

Graph 31

Contribution of the specific combined shocks in the reduction of the liquid assets during the simulation of combined liquidity shock

as a percentage of reduction of the liquid assets



Source: NBRM, using data provided by the banks.

banks have sufficient liquid assets to be able to repay the simulated cash outflows. In this regard, the most relevant are the simulations regarding deposits outflow of the twenty largest depositors, and the simulation for outflow of 20% of the household deposits. The former of these shocks has different relevance for particular banks, mainly because of the differences in the deposits concentration level. The latter simulation (20% outflow of the household deposits) has significantly greater similarity in the results for particular banks. This confirms the relevancy of the deposits for financing of their activity i.e. that the sustainability of the liquid position of the banks, as well as the potential increase of their activities, highly depends on the events on the deposit market and the actions of the banks, as well as of the maintenance of the trust among the domestic depositors. In terms of other shocks, there is some relatively higher relevance when it comes to the simulation of conversion of some banks' off-balance sheet positions to on-balance sheet receivables, and the shocks related to the outflow of the liabilities towards the non-residents, or the outflow of the liabilities towards the parent enterprises without a treatment of capital instruments – have modest influence.

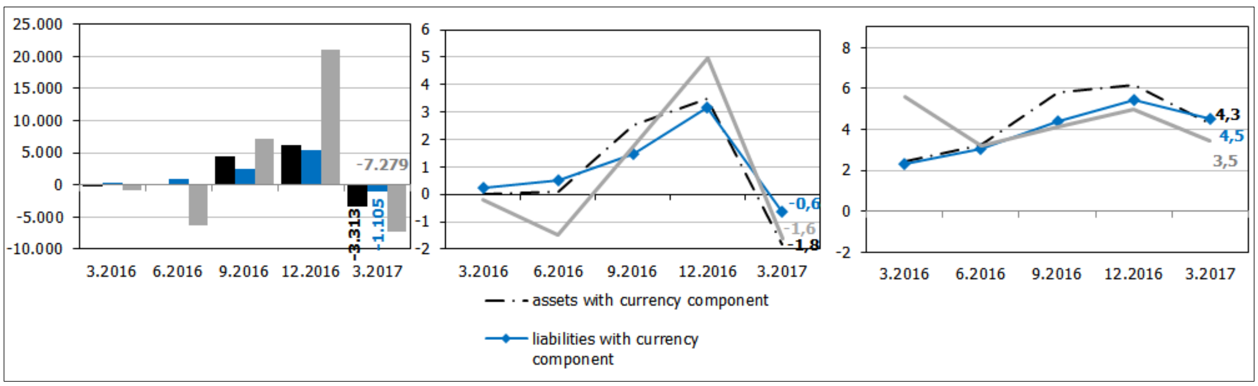
3. Currency risk

In the first quarter of 2017, the exposure of the banking system to currency risk was reduced, measured through the share of the gap between the assets and the liabilities with currency component in banks' own funds, which dropped to 9.6%. At the end of the first quarter of 2017, all banks are compliant to the prescribed limit[30] for aggregate foreign currency position. The most present foreign currency in the balances of the banks is the Euro. In the first quarter of 2017, regardless of the reduction in the receivables and liabilities with currency component, there is some increase in the participation of the liabilities with currency component in the total assets, while the participation of the receivables with currency component has decreased very slightly.

Graph 33

Quarterly (left and middle) and annual (right) change in the assets and liabilities with currency component

In millions of denars In % In %



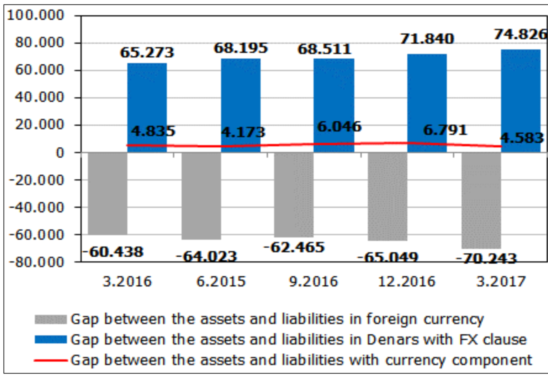
Source: NBRM, using data provided by the banks.

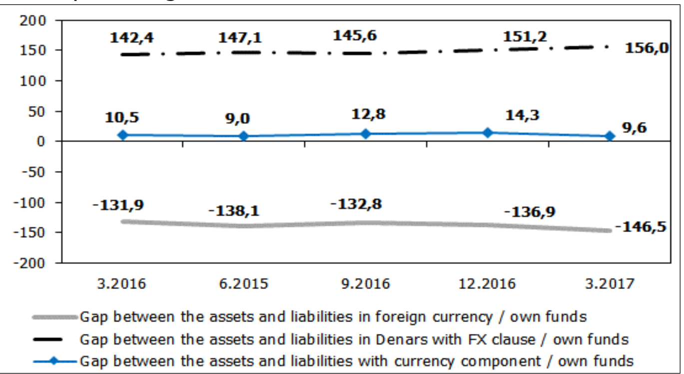
[30] According to the regulation, the aggregate foreign currency position can be maximum 30% of the own assets of the bank.

Graph 34 Gap between the assets and liabilities with currency component, structure (left) and share in the own funds (right)

In millions of denars

In percentages

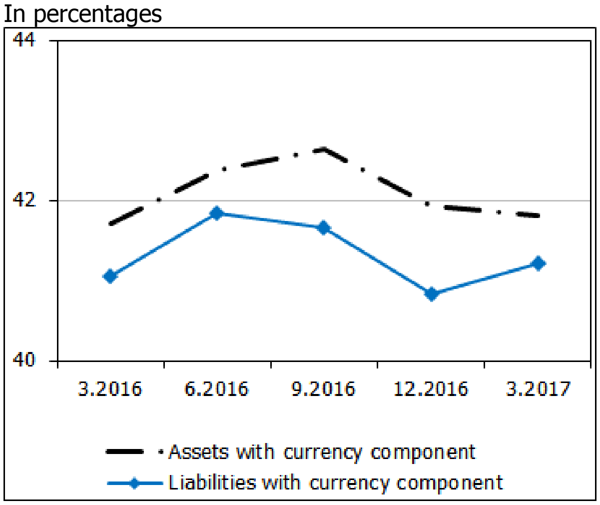




Source: National Bank, using data provided by the banks.

Graph 35
Share of the assets and liabilities with currency component* in the total assets and liabilities of the banks

In percentages



Source: National Bank, using data provided by the banks.
*In the assets, the loans are taken on net basis i.e. they are reduced by the amount of the actual impairment. "MBPR" AD Skopje is excluded.

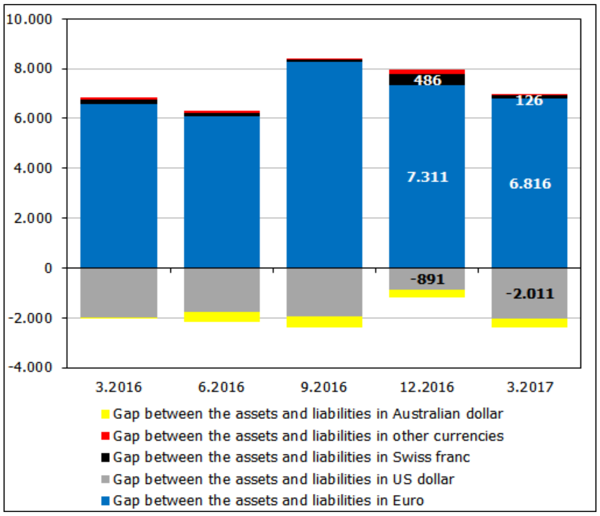
As on 31 March 2017, the gap between the assets and the liabilities with currency component was reduced by 2,208 million denars (-32.5%) in relation to 31 December 2016. This narrowing of the gap is due to the higher quarterly decline[31] in the assets with currency component (by 3,313 million denars, or by 1.8%), in comparison to the decline of the liabilities with currency component (by 1,105 million denars i.e. by 0.6%). This narrowing of the gap also contributed towards reduction in the ratio between the gap and the own funds of the banking system by 4.7 percentage points. The faster decline of the assets with currency component, compared to the decline of the total assets, contributed towards reduction of its participation in the total assets of the banking system by 0.1 percentage point. On the other hand, the slower decline of the liabilities with currency component, in comparison with the total liabilities, contributed towards quarterly increase of the participation of the liabilities with currency component by 0.4 percentage points.

The euro continues to be the dominant currency in the assets and liabilities with currency component of the banking system, therefore, maintenance of

[31] The relatively large decline of the currency component assets is primarily due to the reduction of the cash assets in foreign currency. On the side of the currency component liabilities, the decline of the current accounts, the reduction of the liabilities in relation to loans with currency component and the outflow of deposits in foreign currency from financial institutions and non-financial companies – have the biggest contribution to the quarterly reduction of the liabilities with currency component.

a stable exchange rate of the denar in relation to the euro has exceptional importance for the low probability of exposure of the banks to currency risk. In the first quarter of 2017, the gap between the assets and liabilities in euros was reduced by 496 million denars, which is a result of the greater decline of the assets in euros (by 1,771 million denars[32]), compared to the decline of the liabilities in euros (by 1,275 million denars[33]). However, the biggest contribution towards the quarterly narrowing of the total gap of the assets and the liabilities with currency component was made by the expansion of the negative gap between the assets and the liabilities in US dollars by 1,120 million denars. This tendency was due to the quarterly decline of the assets in US dollars by 970 million denars[34], with simultaneous increase of the liabilities in US dollars by 150 million denars[35].

Graph 36
Currency structure of the gap between assets and liabilities with currency component
In millions of denars



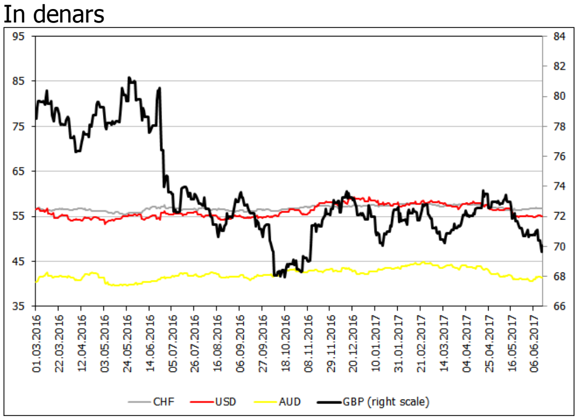
Source: National Bank, using data provided by the banks.

Table 3
Structure of the assets and liabilities with currency component, per currency
In percentages

Currency	31.12.2016		31.03.2017	
	Assets	Liabilities	Assets	Liabilities
Euro	88,4	87,6	89,0	87,4
US dollar	7,1	7,9	6,7	8,0
Swiss franc	2,0	1,8	1,8	1,8
Australian Dollar	1,0	1,2	0,9	1,2
Other	1,6	1,6	1,6	1,6
Total	**100,0**	**100,0**	**100,0**	**100,0**

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

Graph 37
Exchange rate of the denar against the British pound, the US dollar, the Swiss frank and the Australian dollar
In denars



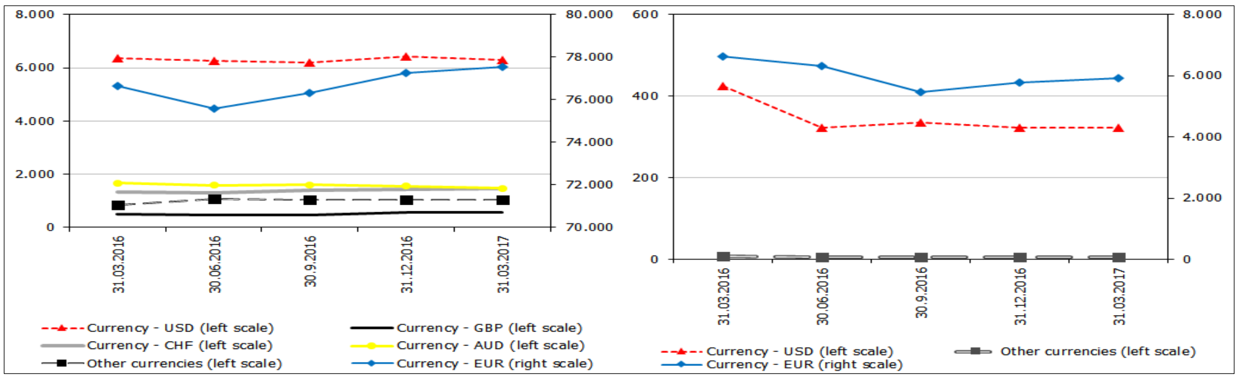
Source: NBRM.

Regardless of the volatility of the value of the British pound, in the light of the negotiations with the EU for exit of United Kingdom from the single market of the European Union, these changes are not direct risk for the domestic banking system, because this currency has minor presence in the

[32] Because of the decline of the cash assets and the placements in deposits and loans in euros.
[33] Because of the decline of the current accounts in euros, the reduction of the liabilities related to loans in euros and the outflow of deposits in euros from the financial institutions and the non-financial companies.
[34] Because of the decline of the cash assets.
[35] The increase of the liabilities with currency component, in the first quarter of 2017, is mainly due to the increase of deposits in US dollars from the financial institutions.

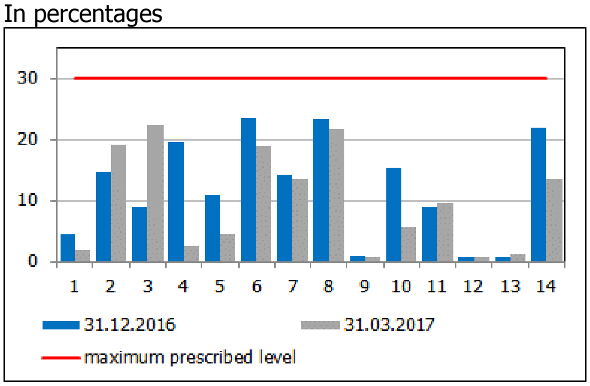
total assets and liabilities with currency component (0.6% and 0.7%, respectively). The banks have approved almost zero loans expressed in British pounds, and on the side of the deposits (in the liabilities side), there are small amounts of this currency on current accounts and deposits.

Graph 38 Deposits in foreign currency* of individuals (left) and of the non-financial companies (right)
In millions of denars



Source: NBRM.
*The deposits do not include the transaction accounts of the individuals and non-financial companies

Graph 39
Aggregate currency position to own funds ratio, by bank
In percentages



Source: NBRM.

In the first quarter of 2017, all banks complied with the prescribed aggregate foreign currency position requirement, which must not go beyond 30% of the own funds. If analyzed per currencies, there is greater number of banks that have long position, that exposes these banks to risks related to drop in the value of the respective currency.

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%	3	4	9	5	7	6	9		10	4	6
from 5% to 10%	1										2
from 10% to 20%	5										4
from 20% to 30%	1										2
over 30%											

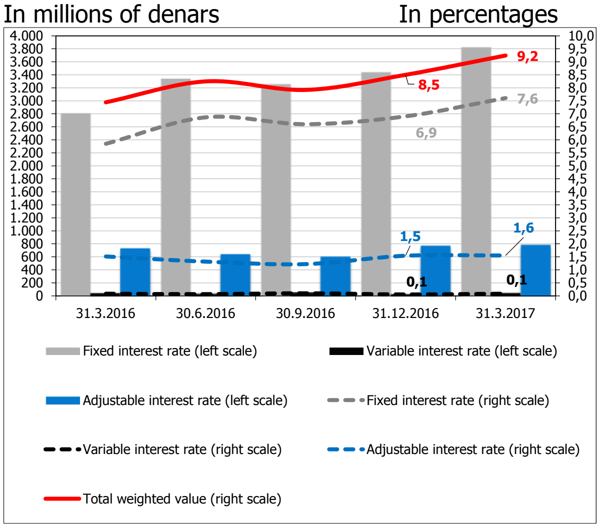
Source: NBRM, using data provided by the banks.

4. Interest rate risk in the banking book

In the first quarter of 2017, the exposure of the banking system to interest rate risk in the banking book was increased, which was due to the increase of the interest-sensitive items with fixed interest rate. According to the items in the banking book, the banking system is exposed to risk of future increase of the interest rates. Having in mind the intentions to abandon the use of adjustable interest rate in the new contracts (that make relative the presence of the interest risk due to the contractual clauses for unilateral adaptability of the interest rates to the loans and deposits), in the future period the banks would have to improve their capacities for risk management related to changes in the interest rates in the banking book.

Graph 40
Total weighted value of the portfolio of banking activities*, per type of interest rate, in absolute amount (left) and in relation to the own assets (right)

In millions of denars In percentages

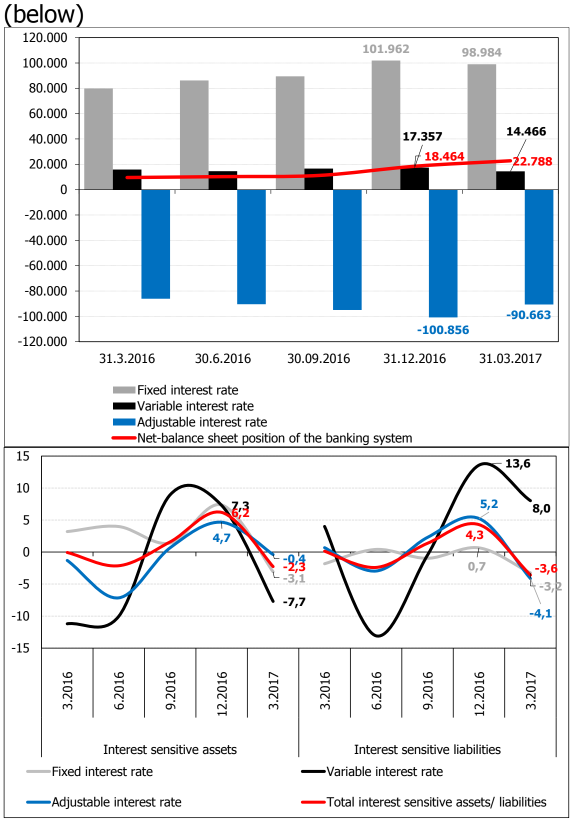


Source: National Bank, using data provided by the banks.
*The total weighted value of the portfolio of banking activities refers to the potential loss of the economic value of this portfolio, in a case of hypothetical unfavorable interest shock of ±2 percentage points.

In the first quarter of 2017, the indicator for exposure of the banking system to interest rate risk in the banking book increased. The potential loss of the banking book's economic value, in a situation of assumed unfavorable interes rate shock of ±2 percentage points, was increased to 9.2% of the own assets of the banking system (quarterly increase of 0.7 percentage points). The interest-sensitive items with fixed interest rate have the largest contribution in the quarterly increase of the total weighted value of the banking book. If analyzed at a level of individual banks, the ratios between the potential losses of the economic value of the banking book items, and own assets of the banks, vary between 0.6% and 16.3%, which is below the level of 20%[36].

[36] According to the Decision on managing interest rate risk in the banking book (Official Gazette of the Republic of Macedonia No. 163/2008 and 144/2009), when total weighted value 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 coverage of the interest rate risk in the banking book.

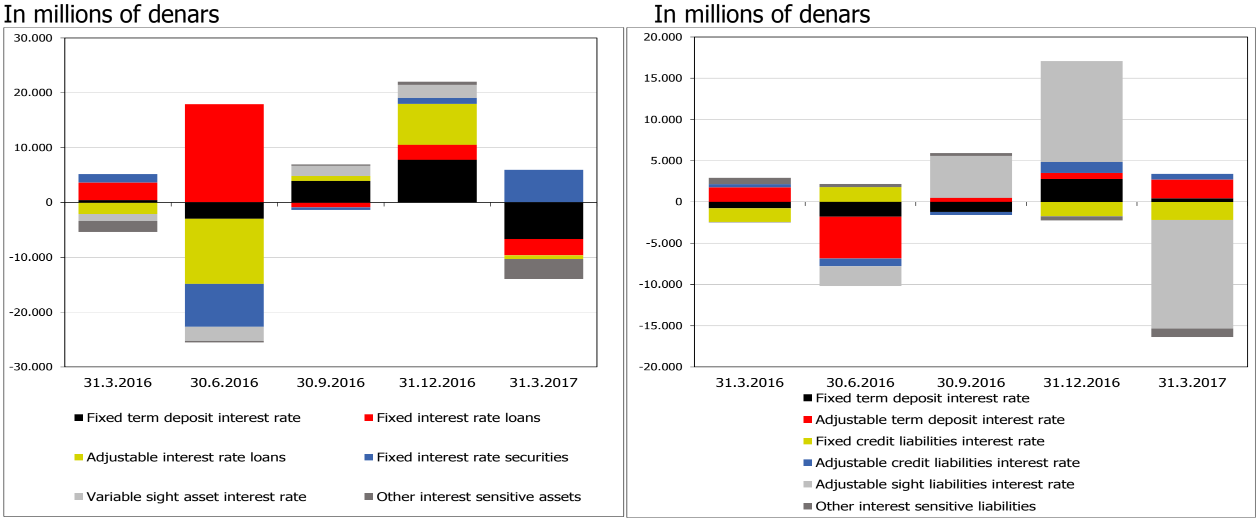
Graph 41
Gap between the interest-sensitive assets and liabilities (above) and quarterly change of the interest-sensitive assets and liabilities (below) according to the type of interest rates
In millions of denars (above) and in percentages (below)



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

In the first quarter of 2017, the gap between the interest-sensitive assets and liabilities increased by 4,324 million denars i.e. by 23.4%, which is due to the smaller negative gap at the positions (items) with variable interest rates (by 10,193 million denars), regardless of the narrowing of the positive gap in the positions (items) with fixed interest rates (by 2,978 million denars) and with variable interest rates (by 2,891 million denars). The reduction in the liabilities on related to transaction accounts (by 13,717 million denars i.e. by 12.4%) was the main reason for narrowing of the negative gap between the positions (items) that have variable interest rates. The narrowing of the positive gap between the positions (items) with variable interest rate is result of the increase of the liabilities related to loans with variable interest rate, regardless of the reduced sight assets with variable interest rate. The narrowing of the positive gap at the positions (items) with fixed interest rates is due to the increased reduction of the placed deposits and the sight assets, compared to the decline in the liabilities (loans and sight assets) that have this type of interest rate.

Graph 42 Structure of the quarterly changes of the interest- sensitive assets (left) and liabilities (right), according to the type of instrument and type of interest rate
In millions of denars
In millions of denars

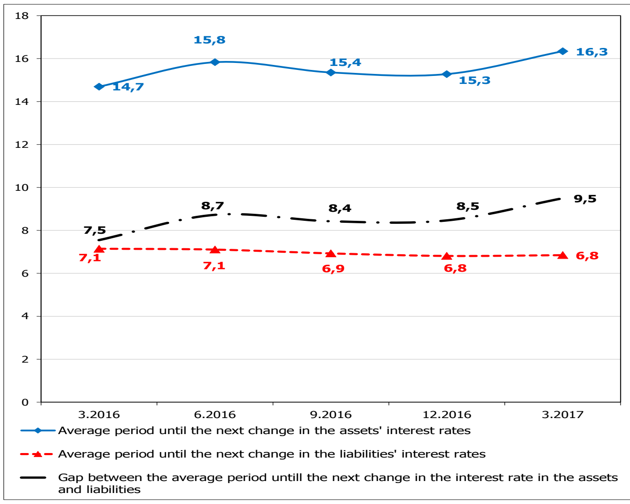


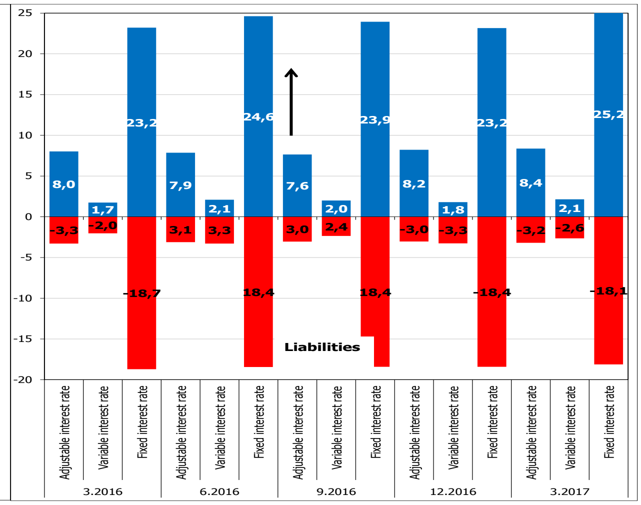
Source: NBRM, using data provided by the banks.

Graph 43

Average period till next reevaluation/ change of the interest rates, total (left) and per type of interest rate (right)

In months





Source: NBRM, using data provided by the banks.

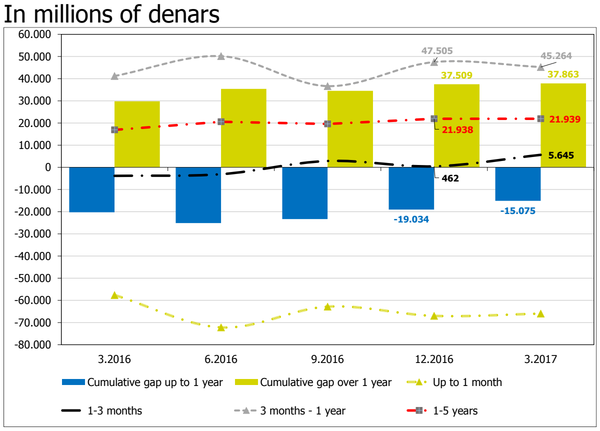
*The average period till next reevaluation of the interest rates (average remaining period of maturity of the items with fixed interest rate) is calculated as participation of the assets from each of the termed blocks in the total assets, multiplied by the maturity of each maturity block, expressed in months.

The gap between the average period, till the next reevaluation of the interest rates among the active and passive positions (items), is positive and is increasing, which exposes the banking system at risk of future increase of the interest rates. In the first quarter of 2017, the banks increased the average time period till next reevaluation of the interest rates for the active positions (items) by one month, while with regards to the passive positions (items), the total average period till next change in the interest rates remained unchanged. If we analyze per type of interest rate, the increase of the average period till next change of the interest rates for the active positions (items) was mainly present with the positions (items) with fixed interest rates, which due to the increase of the average period till maturity, mainly when it comes to placements in loans, and partially also when it comes to investments in termed deposits and in securities.

Graph 44

Gap between the active and passive positions, according to the period till next reevaluation of the interest rates

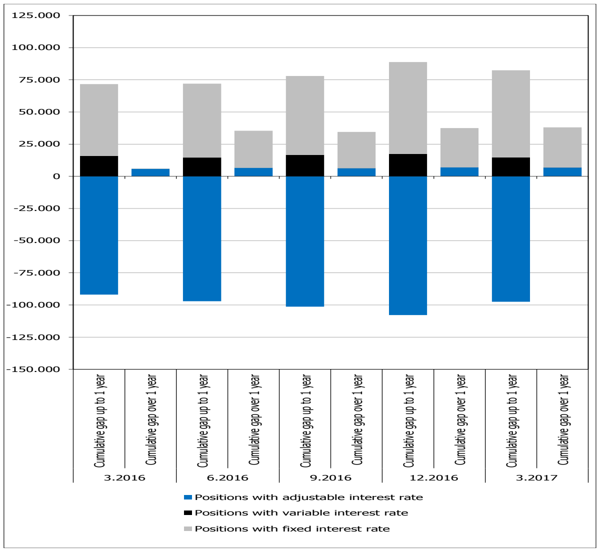
In millions of denars



Source: NBRM, using data provided by the banks.

The positive gap between the total interest-sensitive assets and liabilities originates from the positive gap of the assets and the liabilities with deadline till next reevaluation of the interest rates (that is, with residual maturity deadline for the items with fixed interest rates) longer than one year. This gap additionally widened in the first quarter of 2017, which is again due to the positions (items) with fixed interest rates. On the other hand, the negative gap between the interest-sensitive assets and liabilities with time period till next reevaluation of the interest rates equal to, or less than, one year, features narrowing. With this negative gap, the risk of change in the interest rate and the consequences that could be caused from the

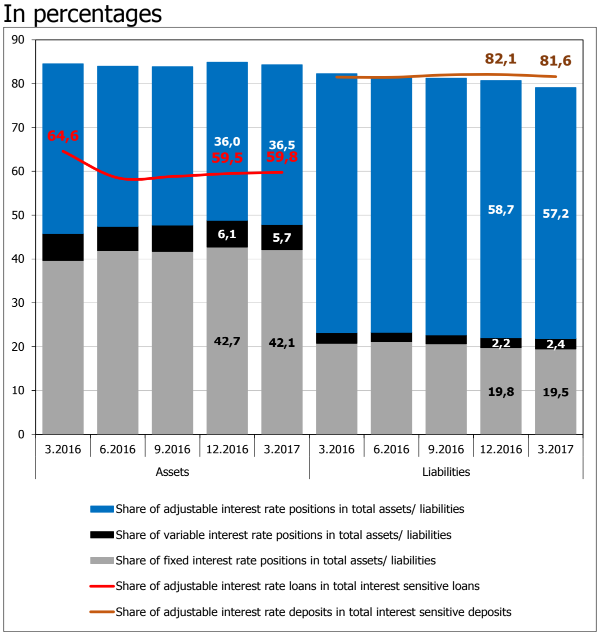
Graph 45
Structure of the gaps between the active and passive items, per type of interest arte
In millions of denars



Source: NBRM, using data provided by the banks.

eventual happening of this risk, is significantly reduced, considering the fact that this is about adjustable interest rates that change depending on a decision made by the relevant bodies of the banks.

Graph 46
Structure of assets and liabilities, per type of interest rate
In percentages



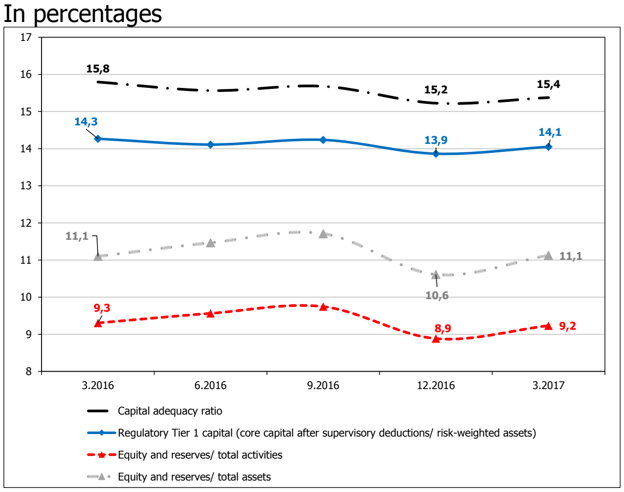
Source: NBRM, using data provided by the banks.

The adjustable interest rates are still significantly present in the operations of the banks, especially on the side of sources of funding. In the first quarter of 2017, the share of the interest-sensitive liabilities and receivables with adjustable interest rates was reduced. The intentions of the banks to gradually abandon the use of the adjustable interest rates will reduce the exposure to indirect credit risk, as well as the exposure to the legal and reputational risks. However, on the other hand, the use of interest rates that are determined in advance, or the change of which will be done on the basis of market parameters, requires strengthening of the capacities of the banks for management of the risk related to change in the interest rates. More details on the structure and the interest-sensitive items of the banks are provided in Annexes 36 and 37.

5. Insolvency risk

The changes in the laws and bylaws made at the end of 2016 with which further harmonization with the international capital standard Basel 3 was achieved, entered into force from March 2017[37]. The capital adequacy ratio slightly increased in the first quarter of 2017 and it is 15.4%, which is mainly due to the reduction in the risk-weighted assets of the banks (and primarily the currency-risk weighted), but also due to the likely increase of the own assets as result of the above-mentioned changes in the regulations, in relation to the structure of the own assets. The reduction in the risk-weighted assets means "relieving" of some of the engaged regulatory capital required for covering of the risks, and provided for increase of the "available" capital above the required level. On the other hand, the riskiness level of the banking activities (measured as a ratio between the credit risk-weighted assets and the total balance and off-balance sheet exposure) was increased, which is mainly due to the increase in the receivables of the banks in relation to small loans portfolio (primarily the activities related to households). The results of the stress-test simulations using the data as on 31 March 2017 were improved in comparison to the previous quarter.

Graph 47
Solvency indicators
In percentages



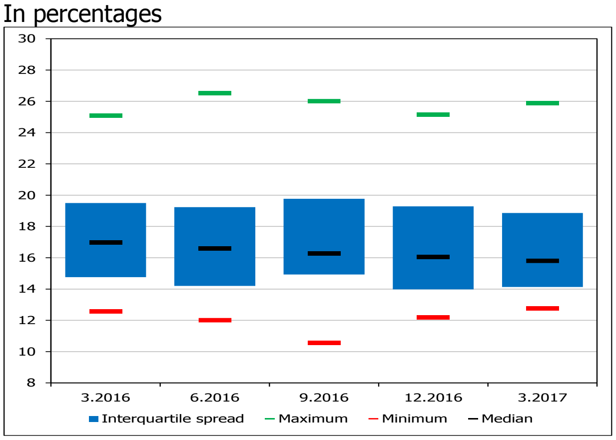
Source: NBRM, using data provided by the banks.
* Starting from March 2017, the banks are required to calculate and maintain: the capital adequacy rate of 8%, the core capital rate of 6% and the regular core capital rate of 4.5%. Currently, the rates of the core capital and of the regular core capital are equal because of the absence of instruments that meet the requirements to be included in the additional core capital.

5.1. Indicators for solvency and capitalization of the banking system, and risk level of the activities

As on 31 March 2017, all solvency indicators of the banking system are improving. In this quarter, the capital positions (items) of the banking systems were increased in an interval between 0,9 and 3.1%[38]. On the other hand, the risk-weighted assets, declined slightly in the quarter -0.1% i.e. decline of 413 million denars (annual growth of 7.5%), primarily due to the quarterly decline of the currency-risk-weighted assets (which reduced by 24.6% i.e. by 2,268 million denars). On the other hand, the capital-risk weighted assets were increased by 0.7% i.e. by 1,855 million denars) mainly because of the solid credit activity of the banks towards the households, in a situation of quarterly decline in the credit support towards the corporate sector.

[37] More details on the regulatory changes in this area can be found in the Report on Risks in the Banking System of the Republic of Macedonia for 2016, in section "Managing the banks regulatory framework".
[38] The equity and the reserves were quarterly increased by 3.1%, the core capital by 1.2% and the own assets by 0.9%.

Graph 48
Measures for distribution of the capital adequacy rate in the banking system
In percentages



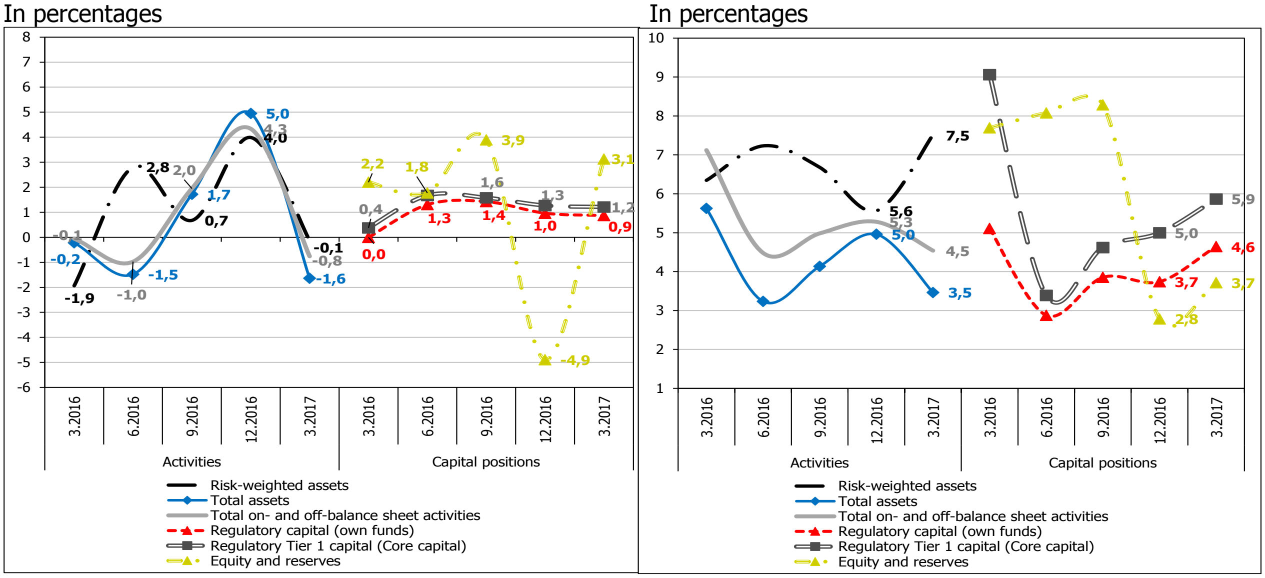
Source: NBRM, using data provided by the banks.

Analyzed on indivual banks level, the capital adequacy ratio as on 31 March 2017 for all banks is higher than 12%[39], and this rate increased for eight banks. This increase is mainly due to the increase of banks' own assets, with simultaneous reduction of the assets weighted according to the risks.

Graph 49
Change rates of the components that make up the solvency ratios, quarterly (left) and annual (right)

In percentages

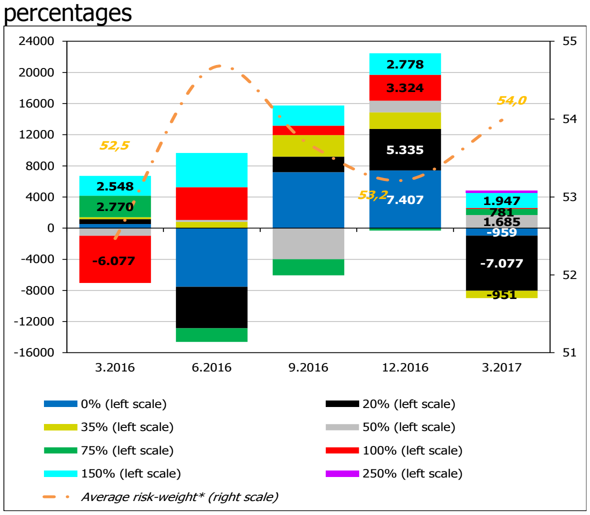
In percentages



Source: NBRM, using data provided by the banks.

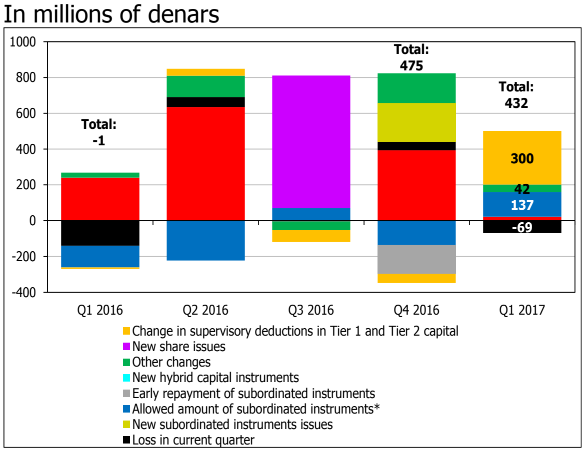
[39] Since 31 March 2017, the banks are required to maintain a capital buffer, for preservation of the capital at 2.5% ratio from the asset weighted according to the risks, which will accordingly increase the capital adequacy rate. Furthermore, seven banks, designated by the National Bank as banks significant for the system, are required to meet half of the capital buffer for banks significant for the system, as on 30 September 2017, for the total capital buffer, no later than 31 March 2018.

Graph 50
Quarterly changes in the total balance and off-balance sheet exposure, according to the weighted risk
In millions of denars ir percentages



Source: NBRM, using data provided by the banks.
Note: *The average weight of risk of the total balance and off-balance sheet exposure is calculated as a ratio between the assets weighted according to the credit risk and the net balance and off-balance sheet exposure of the banks.

Graph 51
Structure of quarterly changes in the own funds
In millions of denars



Source: NBRM, using data provided by the banks.
Note: *This refers to changes in the amount of the already issued subordinated instruments, deriving from the compliance/ non-compliance to the regulatory rules to include these instruments in the calculation of the own funds. Starting from 31 March 2017, the regulations do not include any limits in terms of the allowed summed amount of subordinated instruments and cumulative preference shares that could be part of the additional capital of the banks.

The level of risk of the banking activities (measured as a ratio between the credit risk-weighted assets and the total on-balance sheet and off-balance sheet exposure) increased by 0.8 percentage points and totaled 54% as on 31 March 2017. This increase of the average weight of riskiness is mainly because of the increase in the receivables which are included in the calculation of the credit risk-weighted assets with a risk weight of 75% and 150% (small loans portfolio), in a situation of simultaneous absolutely larger decline in the receivables with risk weight of 20% (receivables from banks) and 0% (receivables from the state and the NBRM)[40].

5.2. Movements (tendencies) and quality of the own funds/assets of the banking system

In the first quarter of 2017, the own assets of the banking system increased by 432 million denars (i.e. by 0.9%). The quarterly increase of the own funds is entirely due to the regulatory changes related to the structure of the own funds. Pursuant to the changes in the regulations, when calculating own funds, the banks do not have the obligation anymore to include as deductible items from the regular core capital the specific significant investments in capital instruments of entities in the financial sector, if the prescribed regulatory limit has been met[41]. On these grounds, the own funds are greater by 300 million denars compared to the end of 2016. Furthermore, in accordance with the changes in the regulations, there are no more limits in relation to the allowed summed amount of cumulative preference shares and subordinated instruments that can be included in the calculation of the own funds[42].

[40] The changes of these investments are shown in Section III.1. Bank activities and in the Section on Liquidity Risk.
[41] However, the banks are required to include these items that are not deductible item in the regular core capital, into the calculation of the assets weighted according to the credit risk, with a risk weight of 250%.
[42] Previously, the summed amount of the cumulative preference shares and subordinated instruments was not allowed to exceed 50% of the core capital amount.

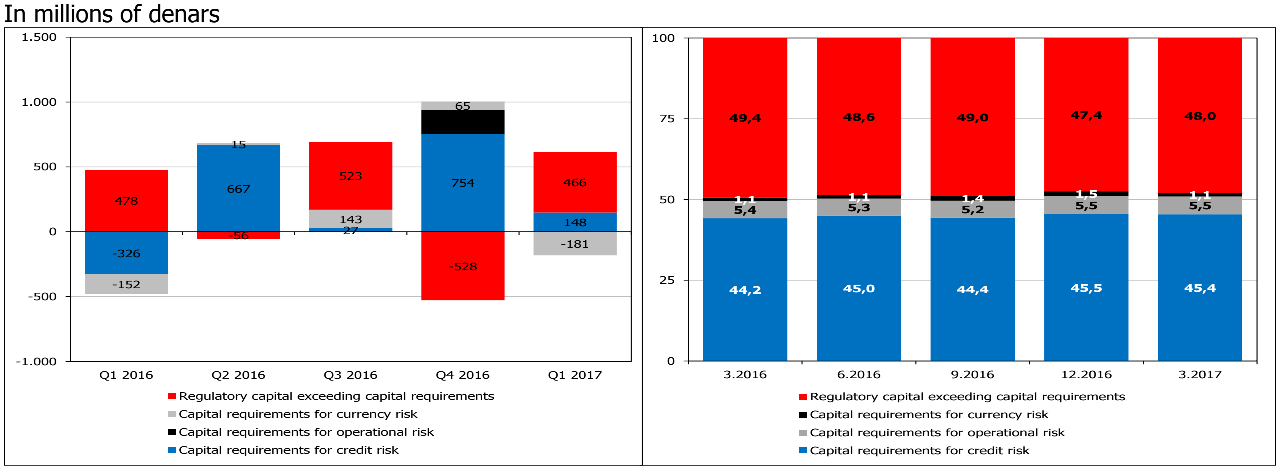
Taking this into account, the own funds increased by additional 137 million denars[43]. The above-mentioned changes in the amount of the own funds were noticed in three banks.

The quality of own funds is at a high level, with participation of the core capital (which is the most quality component of the own funds) in the total own funds/assets of 91.4%. More details about the own funds by groups of banks are included in Annex 38.

5.3. Movements (tendencies) and structure of capital requirements and the available capital

The quarterly reduction of the activities of the banks resulted in "release" of some of the engaged regulatory capital required to cover the risks, and provided for increase of the "available" capital above the minimum level required for covering of the risks (by 466 million denars i.e. by 2%). The capital requirements for covering risks decreased by 33 million denars i.e. by 0.1%, which is due to the decline in the capital required to cover the currency risk (by 181 million denars i.e. by 24.6%).

Graph 52
Structure of the own funds (left) and of the quarterly changes in the own funds (right), according to the use for covering of particular risks
In millions of denars

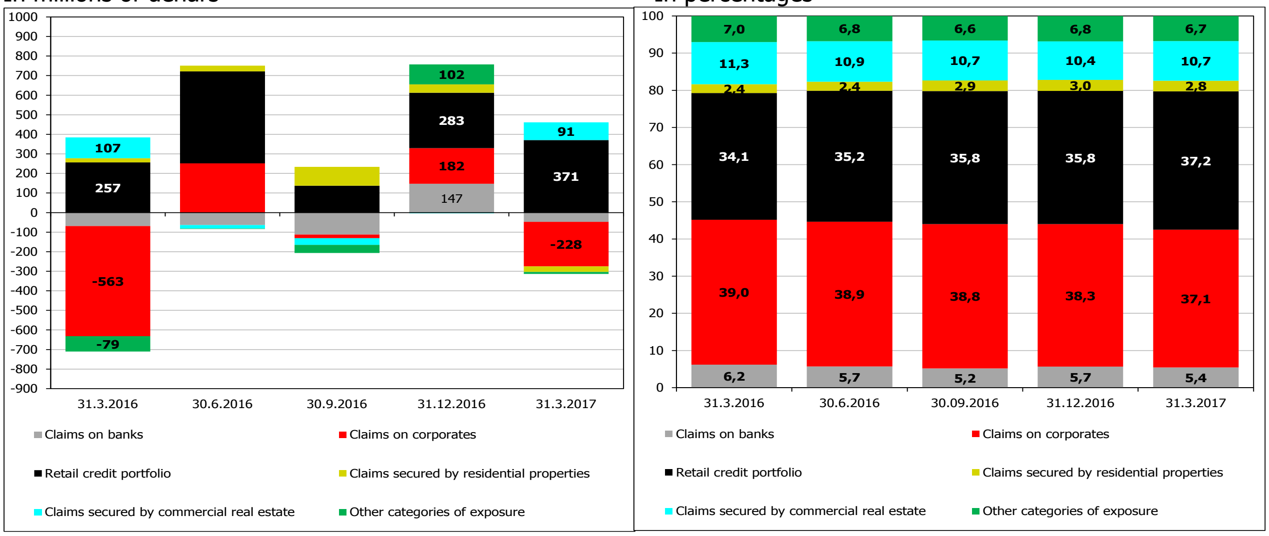


Source: NBRM, using data provided by the banks.

[43] In accordance with the changes in the regulations, the limitations in terms of the allowed amount of additional capital that can be included in the calculation of the own funds are not valid anymore. Previously, the additional capital was not allowed to be greater than the amount of the core capital.

Graph 53
Quarterly changes (left) and structure (right) of the capital requirements for covering of the credit risk, per specific categories of exposure

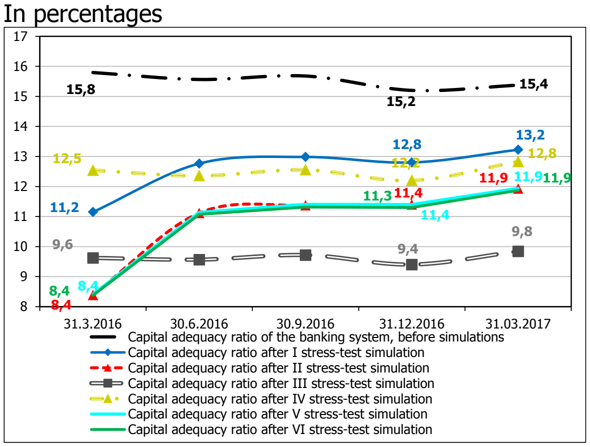
In millions of denars | In percentages



Source: NBRM, using data provided by the banks.

The capital required to cover the credit risk was increased in this quarter by 148 million denars i.e. by 0.7%), which is primarily due to the higher capital requirements for covering of the credit risk originating from the small loans portfolio and from the receivables secured with collateral (business buildings). The own funds above the minimum level required for covering of the risks participate with almost half (48.0%) in the total own funds of the banks. More details on the capital requirements for covering of the risk and the capital adequacy rate, by groups of banks, are included in Annex 39.

Graph 54
Comparison of the credit and combined shock simulation results
In percentages



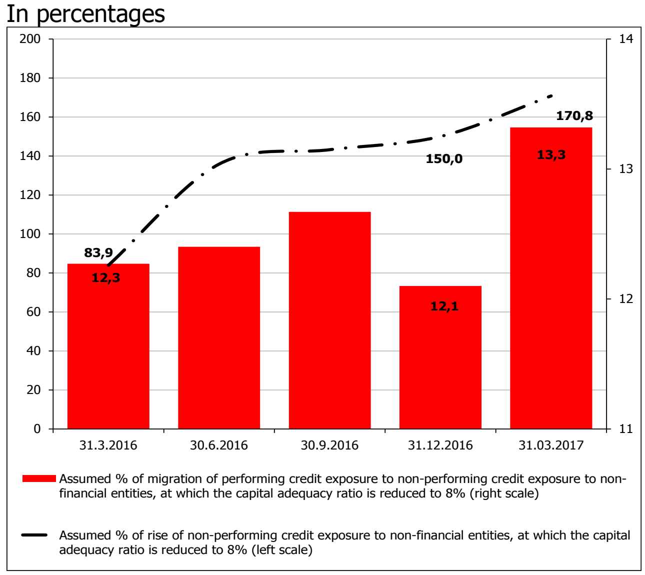
Source: NBRM, using data provided by the banks.
Source: NBRM, based on the data submitted by banks.
*Stress testing includes the following simulations:
I simulation: Increasing the non-performing credit exposure to non-financial entities by 50%;
II simulation: Increasing the non-performing credit exposure to non-financial entities by 80%;
III simulation: Migration of 10% of the regular to a nonperforming credit exposure to non-financial entities;
IV simulation: Reclassification in risk category "C - nonperforming" of the five largest credit exposures to nonfinancial entities (including related entities);
V simulation: Increasing the non-performing credit exposure to non-financial entities by 80% and increase in interest rates from 1 to 5 pp.;
VI simulation: Increasing the non-performing credit exposure to non-financial entities by 80%, depreciation of the Denar exchange rate by 30%, and increase in interest rates from 1 to 5 pp.;
*Note: Credit exposure to non-financial entities includes the total credit exposure decreased by the exposure of banks to financial institutions and the government, i.e. to customers from the "financial activities and insurance activities" and "public administration and defense and compulsory social security"
.

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

The stress testing of the resilience of the banking system and individual banks in the Republic of Macedonia to simulated shocks indicates improved results compared to 31 December 2016. The capital adequacy of the banking system does not fall below 8% in any of the simulations. This is due to the higher adequacy of the capital of the banking system before doing the simulations, but also due to the less expressed sensitivity of some banks to the simulated shocks.

The hypothetical shocks on the part of the credit risk have the greatest impact on the stability of the banking system. The simulations show that it is necessary to have growth of the non-performing credit exposure to non-financial entities of 170.8%, i.e. migration of 13.3% from regular to non-performing credit exposure, in order for the capital adequacy of the banking system to drop to the legally required minimum level of 8%. These simulations would result in almost tripling of the share of non-performing exposure in the total credit exposure to non-financial entities. As a comparison, in the first quarter of 2017 only 0.6% of the regular credit exposure was assigned 'non-performing' status.

Graph 55
Required worsening of the credit exposure quality, in order for the capital adequacy of the banking system to drop to 8%
In percentages



Source: NBRM, using data provided by the banks.

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

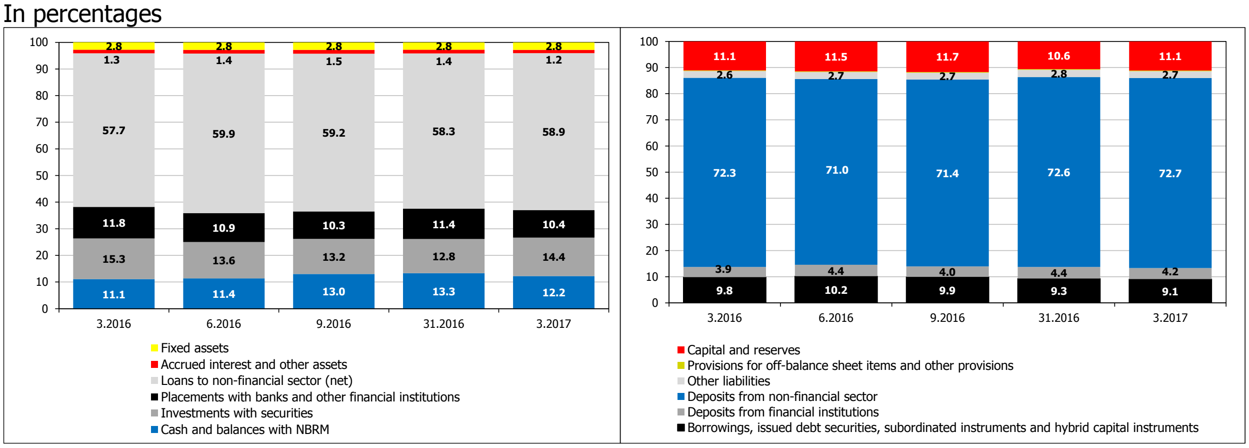
1. Activities of the banks

The usual seasonal decline in the activities of the banks in the first quarter of the year, accompanied by the still-present risk related to the domestic political events, altogether contributed towards quarterly reduction of the total activities in the Macedonian banking system and slowing down of the annual growth rate.The reduction of the corporate deposits determined the the downward movement of the total deposit base, while the deposits in the "households" sector continued to increase, albeit with slower pace. The increase of the foreign currency potential continued on annual level.

The banks continue to be focused on the crediting of the households, mainly because of the perceptions for smaller risks due to the greater diversification, compared to the corporate crediting. Hence, the credit activity also features downward quarterly tendency as a result of the reduced credit support for the corporate sector, in a situation of further increase in the household loans.

In the first quarter of 2017, the National Bank implemented measures to normalize the monetary policy and revert the CB bills interest rate to the pre-crisis level (3.25%). The amount of CB bills offered was also increased.

Graph 56
Structure of assets (left) and liabilities (right) of the banking system
In percentages

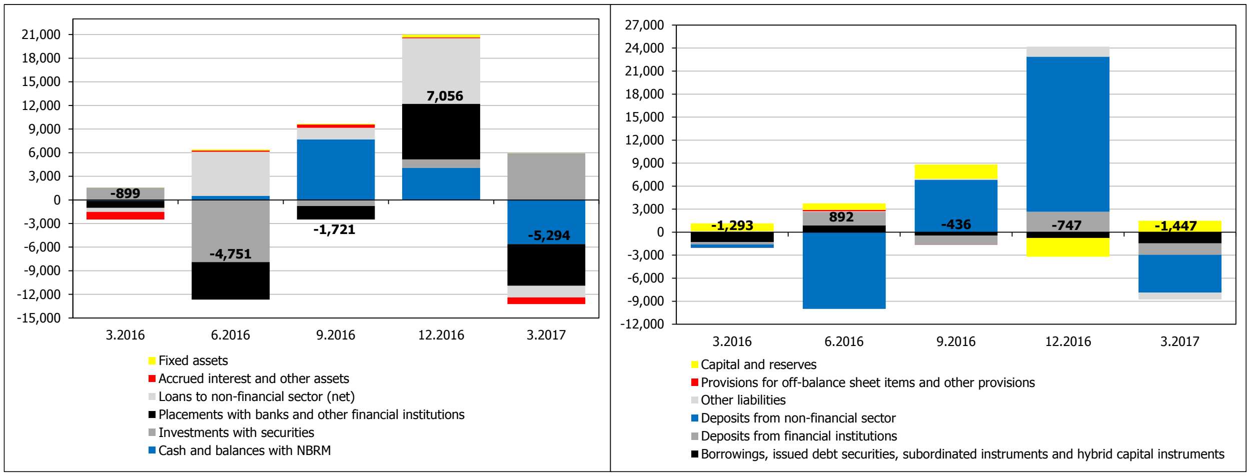


Source: NBRM, using data provided by the banks.

Graph 57

Absolute quarterly change of the components of the assets (left) and liabilities (right) of the banking system

In millions of denars



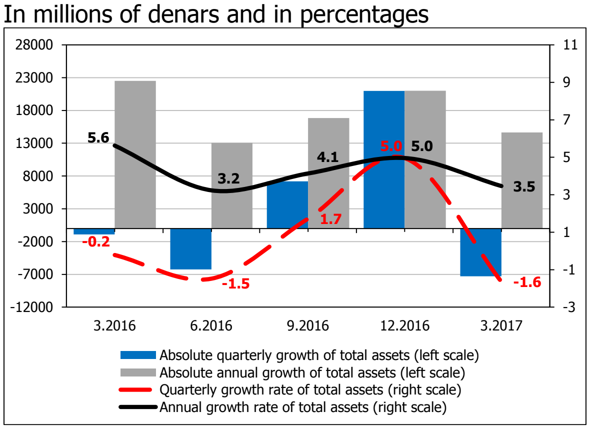
Source: NBRM, using data provided by the banks.

Note: The left graph shows the loans on net basis, reduced by the impairment.

Graph 58

Increase of the banking system assets

In millions of denars and in percentages



Source: NBRM, using data provided by the banks.

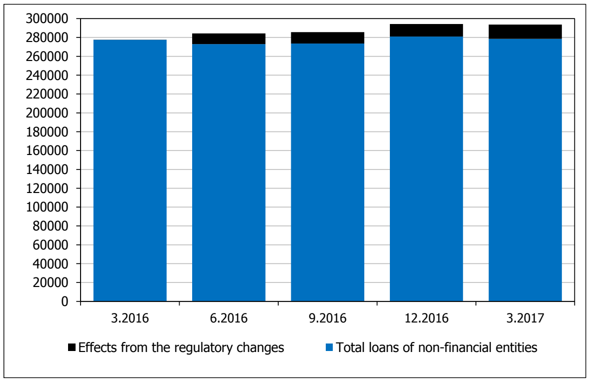
As on 31 March 2017, the total assets of the banking system were 437,402 million denars. The quarterly reduction in the assets of the banks (by 7,279 million denars i.e. by 1.6%) is a direct reflection of the more significant quarterly decline in the deposits base, and to a lesser extent is also attributable to the reduced sources of financing that originate from the parent companies of the banks (following the increase in these sources of funds in the last quarter of 2016). When it comes to assets, the biggest decrease is noticed in the funds placed in foreign bank accounts, in the placements for short-term deposits in the National Bank (both in denars and in foreign currency) and in treasury bills, and to lesser extent in loans to non-financial entities.

1.1. Loans to non-financial entities

In the first quarter of 2017, the crediting of the non-financial entities is in decline, which slowed down the annual rate of growth of the loans. The loans to non-financial entities[44] in the first quarter were reduced by 2,457 million denars i.e. by 0.9%, while on annual level they increased by only 0.4% (1.2% in 2016). If we isolate the effect

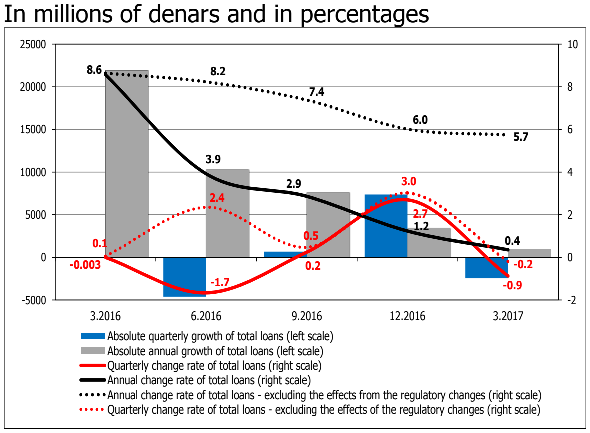
[44] The loans to non-financial entities include the loans to non-financial persons – residents and non-residents i.e. loans to both private and public non-financial entities, the central government, the local self-government, the non-profit institutions serving the households (loans to other clients), sole proprietors and the individuals (loans to households).

Graph 59
Amount of the loans to non-financial entities
In millions of denars



Source: NBRM, using data provided by the banks.

Graph 60
Changes in the loans to non-financial entities
In millions of denars and in percentages



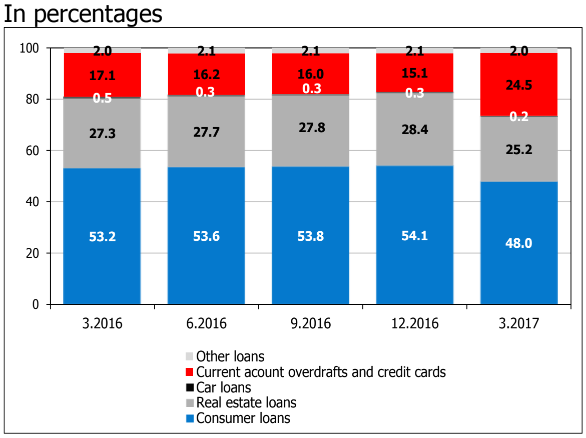
Source: NBRM, using data provided by the banks.

caused by the changes in the regulatory framework of the National Bank[45] for migration of some of the bad debts of the banks into off-balance records, the quarterly decline of the crediting of the non-financial entities is more modest and is 0.2%, while the annual growth is more solid and is 5.7% (6% at the end of 2016).

The reduction of the total loans to non-financial entities is entirely caused by the reduced crediting to corporate clients, in a situation of increased credit support to the households. In other words, the loans to enterprises were reduced by 3.3% in the first quarter of 2017 (excluding the effect of the mandatory write-offs this reduction is less – 2.1%) vs the actual growth of 3% in the last quarter of 2016. The reduction of the corporate crediting in the first quarter of the year has seasonal character, so on annual basis the loans to enterprises are still increasing by 2.3% (which is a decline of 5.4% if we also include the mandatory write-offs). In the last period there are more and more banks that focus on crediting of the households because of the smaller risks but also because of the greater diversification in comparison to the corporate crediting. The household loans[46] had quarter increase of 2.2%, which is almost identical with the increase in the last quarter of 2016 (2.3%). On annual basis, the crediting of the households increased by 10.6% (7.9% if we exclude the effect of the regulatory changes).

[45] Decision on Changes and Amendments of the Decision on Credit Risk Management (Official Gazette of the Republic of Macedonia No.223/15) from December 2015 according which the banks are required, starting from 1 January 2016, but no later than 30 June 2016, to start transferring into off-balance sheet all receivables that are entirely reserved for longer than two years.
[46] The consumer loans and the credit cards are the most commonly used credit products among the households.

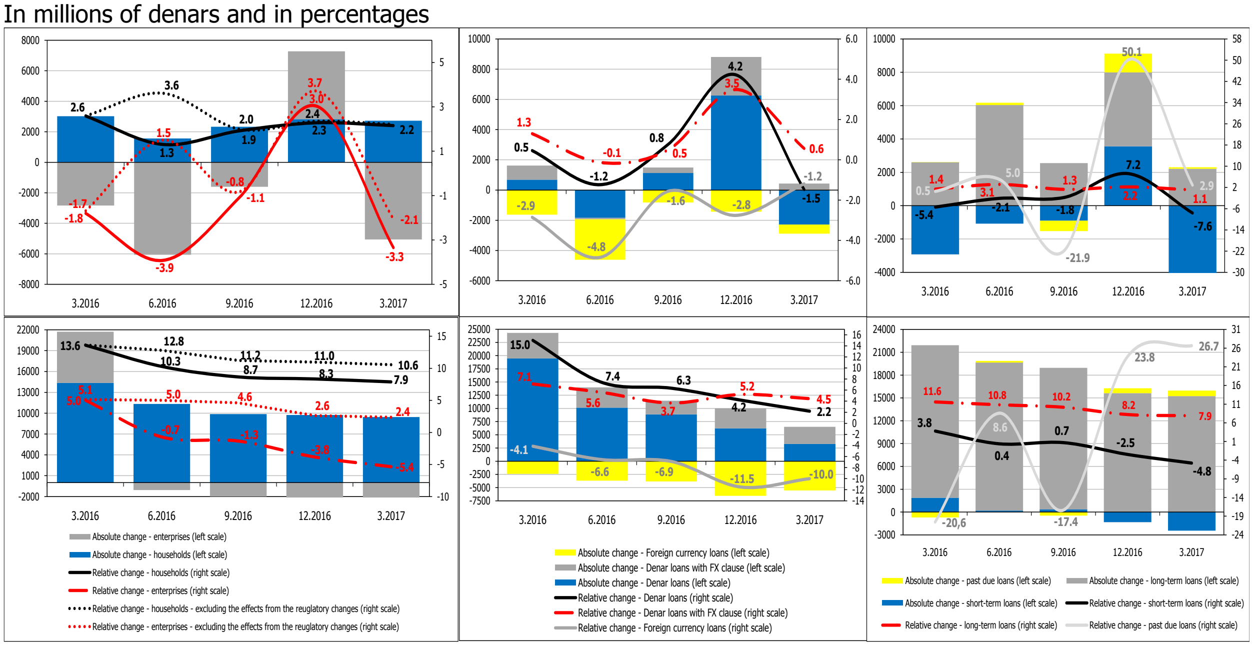
Graph 61
Structure of the credit exposure of the households, per products
In percentages



Source: NBRM, using data provided by the banks.

Almost 73% of the household loans are intended for financing of non-specific consumption of the individuals (consumer loans, overdrafts and credit cards).

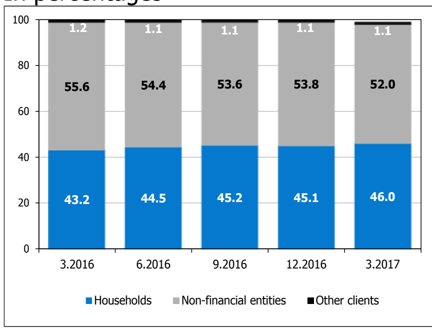
Graph 62
Quarterly (above) and annual (below) change of the loans, according to the sector (left), currency (middle) and maturity (right)
In millions of denars and in percentages

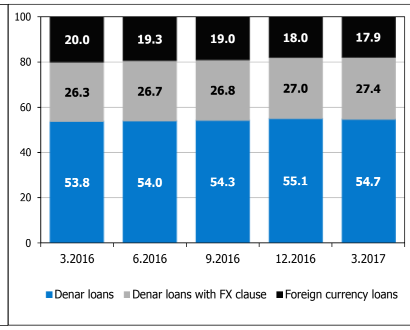


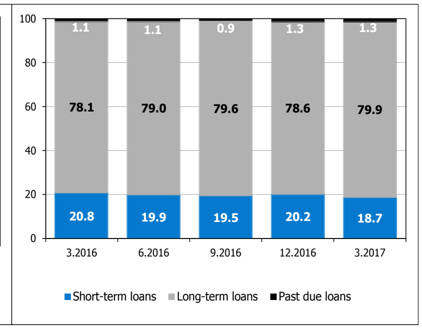
Source: NBRM, using data provided by the banks.
The graphs on the right side do not include the non-performing loans.

In the first quarter of 2017, there is decline in both denar and foreign currency loans, which is almost entirely due to the loans to enterprises. When analyzing the currency changes in the crediting we cannot isolate the effect of the mandatory write-offs, because there is data on the mandatory write-offs only per sector, but not per currency and maturity.

Graph 63
Structure of the total loans according to the sector (left) and currency (middle), and structure of the regular loans according to maturity (right)
In percentages

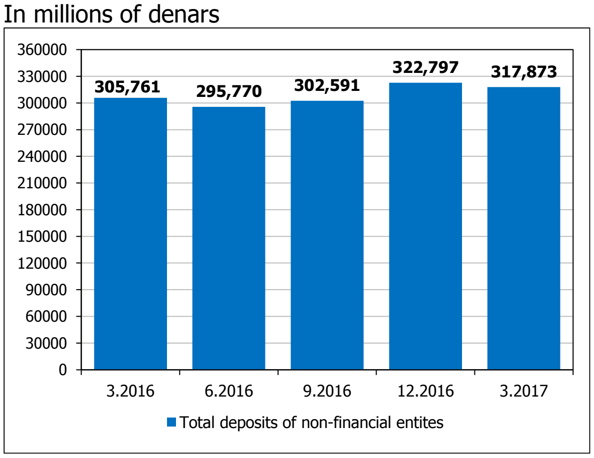






Source: NBRM, using data provided by the banks.
The graph on the right side do not include the non-performing loans.

Graph 64
Situation with the deposits of non-financial entities
In millions of denars



Source: NBRM, using data provided by the banks.

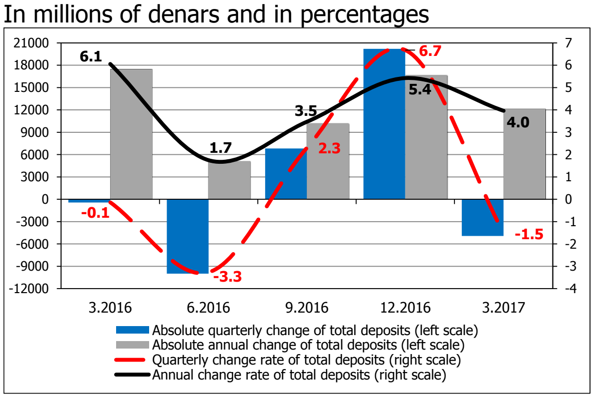
In the first quarter of 2017 the increase of maturity of the credit activity continued. The long-term crediting achieved quarterly growth of 1.1% thus additionally strengthening the participation in the structure of the total loans. Most of the increase in the long-term loans is due to household loans, mostly in denars with foreign exchange clause[47]. On the other hand, the reduced credit activity in this quarter was caused by the significant reduction in the short-term loans (which is almost entirely deriving from the decline in the short-term denar loans for enterprises).

1.2. Deposits of non-financial entites

In the first quarter of 2017, the deposits of the non-financial entities were reduced, mainly because of the seasonal factor, but there was also the influence by the uncertainty related to the domestic political situation, seen through the slowed increase of the household deposits. In the

[47] The long-term loans to households are increasing on quarterly basis by 2,331 million denars, which is mainly due to the increase of the long-term denar loans to households with foreign currency clause (1,228 million denars) and less to the increase of the long-term denar loans to households (915 million denars), both consumer and housing loans.

Graph 65
Change in the deposits of the non-financial entities
In millions of denars and in percentages

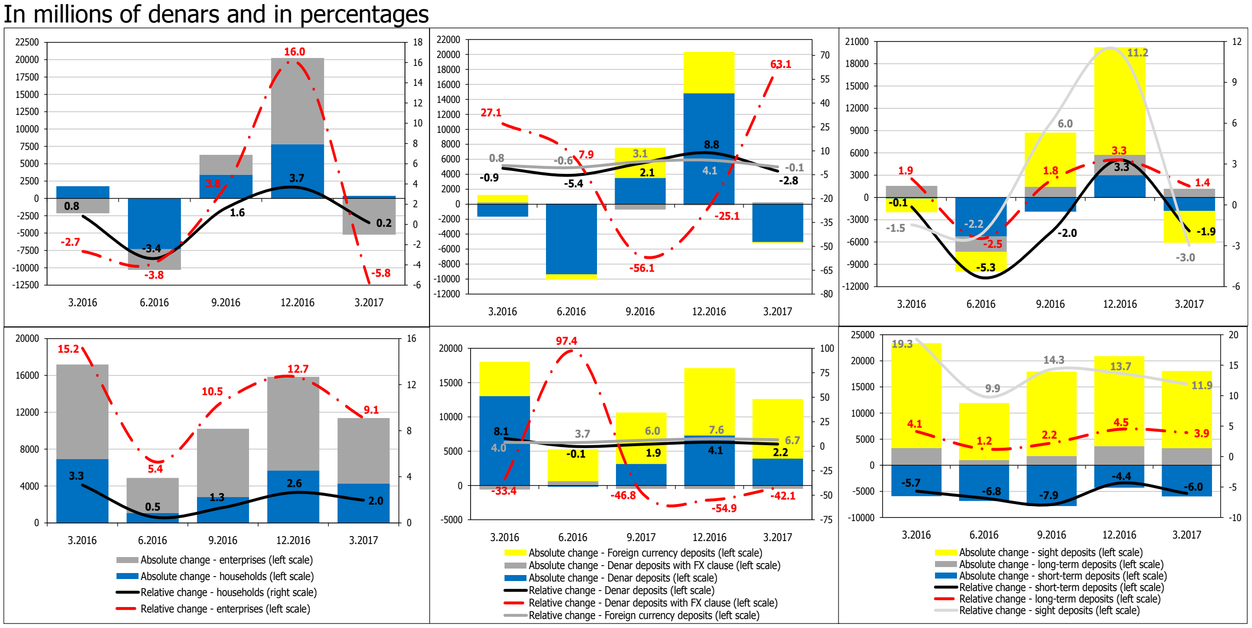


Source: NBRM, using data provided by the banks.

first quarter of 2017 the total deposits base of the banks was reduced by 4,924 million denars i.e. 1.5%. On the other hand, the dynamics of increase of the deposit base on annual level continued, and at the end of March 2017 it was 12,112 million denars i.e. 4%.

The quarterly decline in the total deposits is due to the reduction of the deposits from non-financial entities (by 5,226 million denars i.e. 5.8%), mainly under the influence of seasonal factors, while on annual basis the deposits of the non-financial entities had a solid growth rate of 9.1%. The households, which traditionally are the most important depositor in the Macedonian banking system (with participation of around 70% in the total deposits), in the first quarter of 2017 increased their funds in the banks by 371 million denars i.e. 0.2%, while their annual growth rate is 2% (2.6% in 2016).

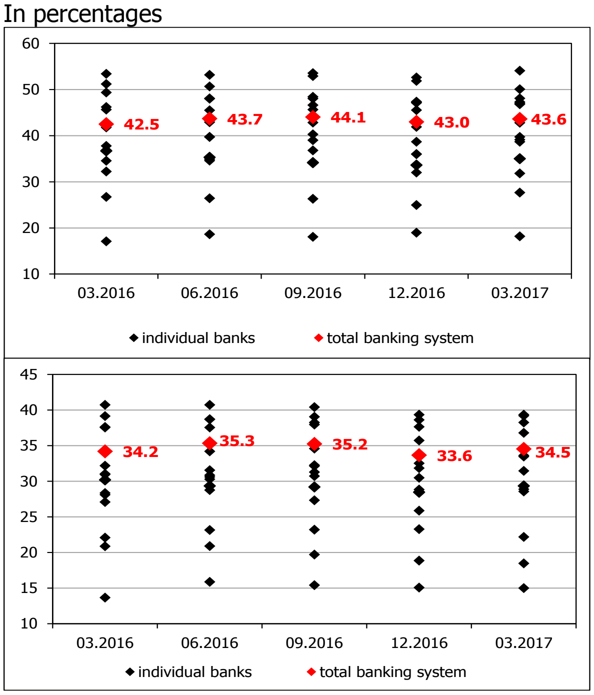
Graph 66
Quarterly (above) and annual (below) change of the deposits, according to the sector (left), currency (middle) and maturity (right)
In millions of denars and in percentages



Source: NBRM, using data provided by the banks.

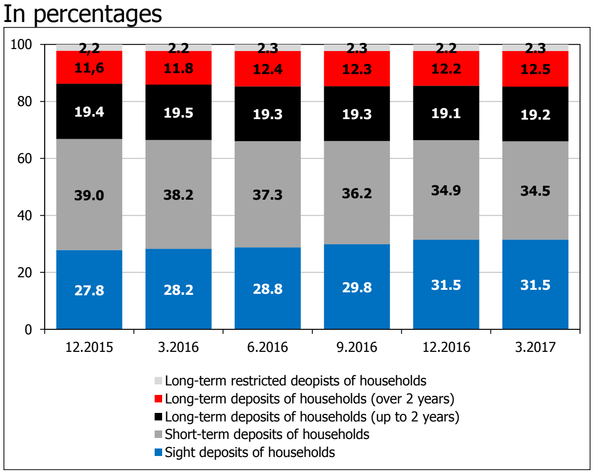
In the first quarter of 2017, the deposits in denar currency were significantly reduced by 5,059 million denars

Graph 67
Share of the total foreign currency deposits (above) and of the foreign currency deposits of the households (below) in the total deposits of the banking system
In percentages



Source: NBRM, using data provided by the banks.

Graph 68
Maturity structure of the household deposits
In percentages



Source: NBRM, using data provided by the banks.

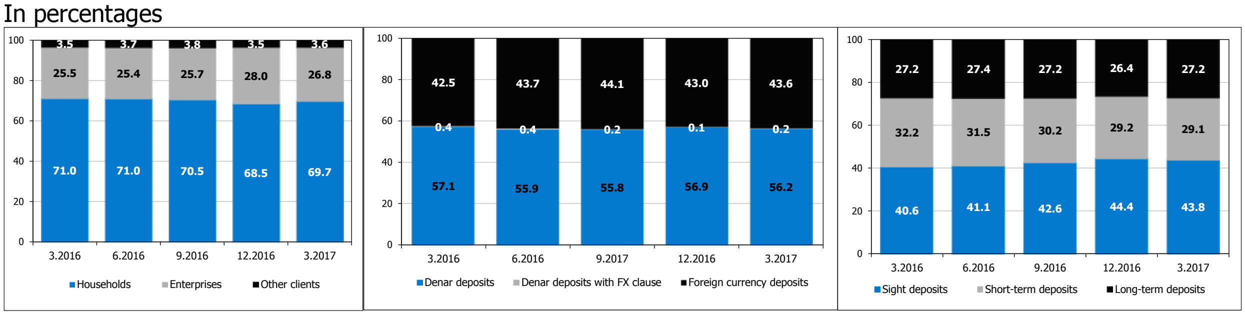
(2.8%), compared to the solid growth in the previous quarter (8.8%). This was primarily due to the corporate deposits (81.4%).

The foreign currency deposits of the households increased on quarterly basis by 1,139 million denars i.e. 1%. Regardless of these tendencies, the majority of the total deposits base (56.2%) still goes to denar deposits, where the household deposits have the biggest share (62.6%).

In terms of maturity, the biggest contribution (87.1%) in the quarterly reduction of the deposit base was from the sight deposits, which were reduced by 4,289 million denars i.e. 3%. Their reduction is mainly (77.3%) due to the decline in the denar deposits of the enterprises, again related to the above-mentioned seasonal factors. It has been a tendency now that the **short-term deposits** have negative rate of change, which was 1.9% in the first quarter of 2017 (1,809 million denars). On the other hand, the **long-term deposits** achieved quarterly increase of 1,174 million denars (1.4%) which is mainly conditioned by the household deposits (88.4%)[48].

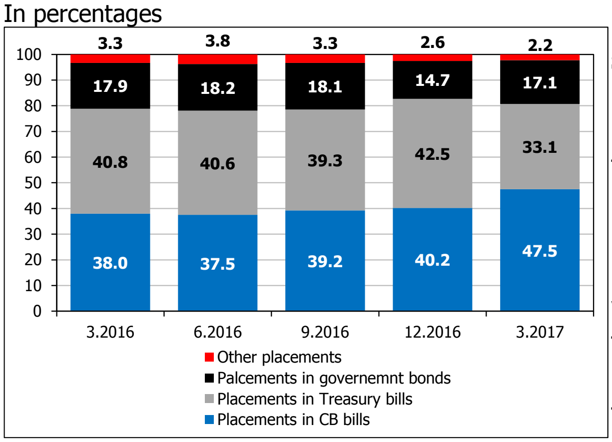
[48] The quarterly growth of the long-term deposits of the households is 1,038 million denars (1.4%), where the share of the denar deposits is 56.4%.

Graph 69
Structure of the total deposits according to the sector (left), currency (middle) and maturity (right)
In percentages



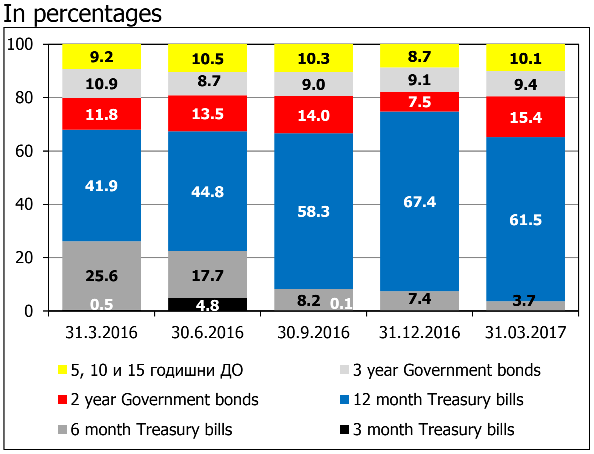
Source: NBRM, using data provided by the banks.

Graph 70
Structure of the securities portfolio
In percentages



Source: NBRM, using data provided by the banks.

Graph 71
Maturity structure of the investments by the banks in state securities
In percentages

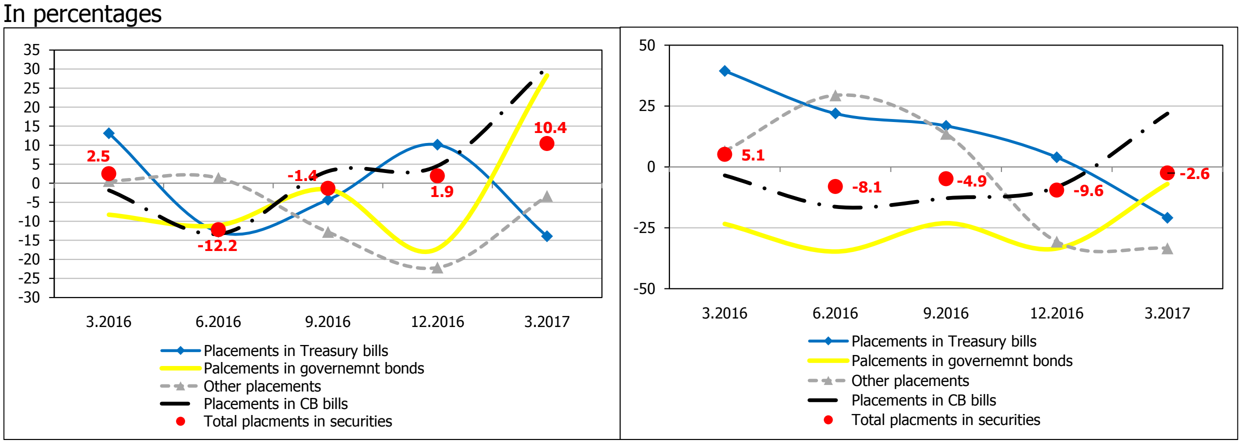


Source: NBRM, using data provided by the banks.

1.3. Other activities

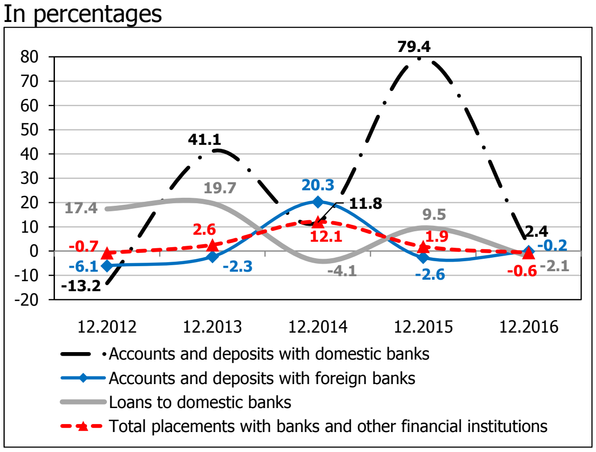
In the first quarter of 2017, the securities portfolio of the banks increased by 5,943 million denars i.e. 10.4%. With that, the participation of this portfolio in the total assets of the banking system reached 14.4% (increase of 1.6 percentage points in relation to December 2016). The quarterly increase in CB bills investments (6,993 million denars i.e. 30.4%) was the main contributor to the increase of the total securities portfolio. The increased investments by the banks in CB bills correspond to the increase in the amount of CB bills offered in January and in March 2017. There was also increase of 2,378 million denars (28.3%) in the investments by the banks in long-term domestic and foreign securities (most of which went to two-year government bonds). On the other hand, the investments of the banks in treasury bills declined.

Graph 72
Quarterly (left) and annual (right) change of the securities portfolio
In percentages



Source: NBRM, using data provided by the banks.

Graph 73
Quarterly change of the placements in the financial institutions
In percentages

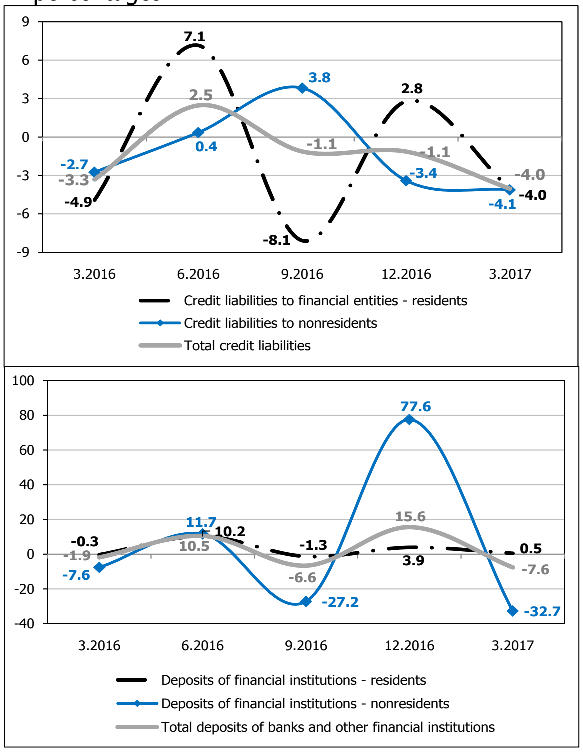


Source: NBRM, using data provided by the banks.

The placements of the banks in other banks and financial institutions decreased by 5,294 million denars i.e. 10.4%, mainly because of the reduced assets on the current accounts in foreign banks. Furthermore, in the first quarter of 2017 there was a significant decline in the funds placed by the domestic banks in short-term deposits in denars (by 5,956 million denars) and, because of the maturity of bank funds placed in foreign currency deposits in the National Bank, their amount was reduced by 1,958 million denars.

On the liabilities side, the reduction on the **bank liabilities based on loans** (by 1,463 million denars i.e. 4%) was mostly result of the reduced liabilities on the basis of long-term loans towards non-residents – financial companies, but also because of the reduction in the inter-bank lending.

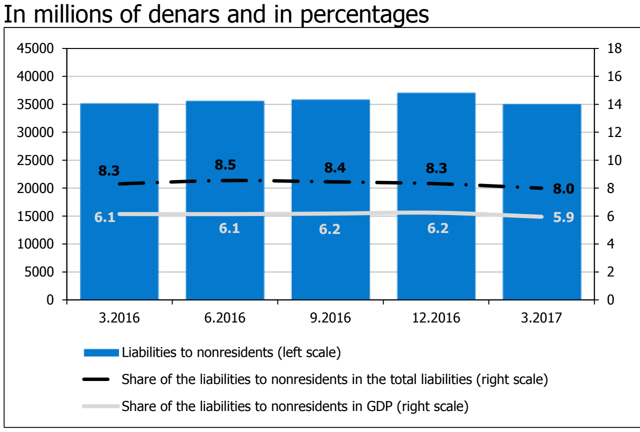
Graph 74
Quarterly change of the liabilities of the banks in relation to loans (above) and deposits of the financial companies (below)
In percentages

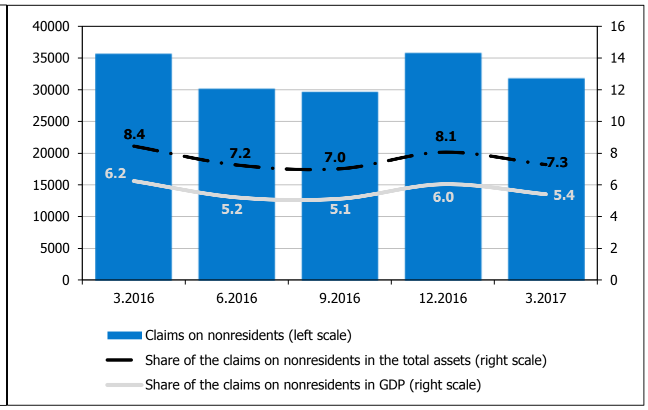


Source: NBRM, using data provided by the banks.

The deposits from the banks and other financial institutions continue to be very small source of funding for the banks. Their share in the total liabilities was further reduced in the first quarter of 2017 (and is 4.2%) as a result of the reduction in the deposits of non-residents – financial companies i.e. of the balances on the current accounts of foreign banks in denars.

Graph 75
Liabilities (right) towards non-residents and receivables (right) from non-residents
In millions of denars and in percentages





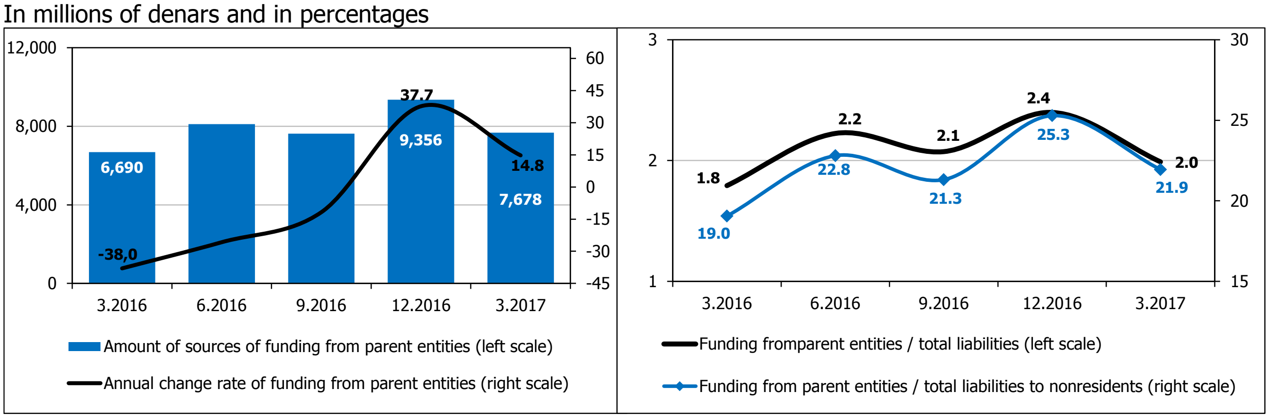
Source: NBRM, using data provided by the banks.

The reduced funds on the current accounts in foreign currency in foreign banks, and the reduced deposits of non-residents – financial companies, had their respective impact on **reduction in the receivables and liabilities of the banks towards the non-residents.** The receivables from non-residents were reduced by 3,999 million denars i.e. 11.2%, and their share in the total assets of the banking system was reduced to 7.3%[49]. With the reduction of the liabilities the banks have towards the non-residents (by 2,005 million denars i.e. 5.4%), their share in the total liabilities of the banking system was reduced to exactly 8%[50].

Graph 76

Liabilities towards parent entities of the banks

In millions of denars and in percentages



Source: NBRM, using data provided by the banks.

Following the solid growth, in the last quarter of 2016, the liabilities of the domestic banks towards their parent companies[51] in the first quarter of 2017 featured quarterly decline of 1,678 million denars i.e. 17.9%. Hence, the share of the liabilities of the banks towards the parent companies (including here the subordinated liabilities and the hybrid capital instruments) in the total liabilities of the domestic banking system and in the liabilities towards the non-residents was reduced to 2% and 21.9%[52], respectively.

[49] Analyzed per individual bank, the share of the receivables of the banks from the non-residents in the total assets is between 0.8% and 18.1%.

[50] Analyzed per individual bank, the share of the liabilities of the banks to non-residents in the total liabilities is between 0.1% and 16.1%. "MBPR"AD Skopje is excluded in this analysis.

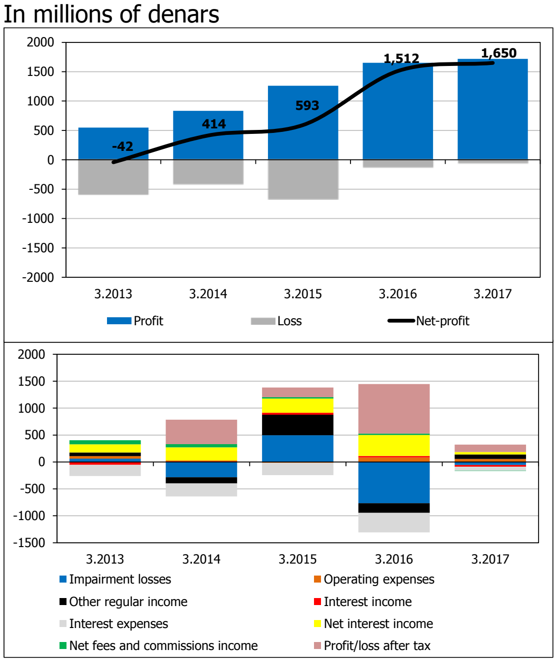
[51] The sources of funding of the banks from parent entities are usually in a form of short-term deposits, long-term liabilities in relation to loans and liabilities related to subordinated instruments.

[52] Analyzed per individual bank, the share of the liabilities of the banks to parent entities in the total liabilities to non-residents is between 1.1% and 84.3%. Analyzed per individual bank, the share of the liabilities of the banks to parent entities in the total liabilities is between 0.1% and 9.5%.

2. Profitability[53]

In a situation of stagnating economic activity and prolonged domestic political instability, the profit of the banking sector, for the first time after long time period, features slowed single-figure growth rate. The biggest contributor in the profit growth is the increase of the non-interest revenues and the reduced impairment costs. The net interest revenues had modest increase, contributing with almost one third towards the increase of the banking system profit, mainly because of the reduced total interest revenues in a situation of larger decline (albeit a slow one) of the interest expenditures. Regardless of the much more modest increase in the profits of the banking system (compared to the last three years), the continued upward trend of the financial result is especially relevant in the process of internal creation of capital, in a situation of absence or very small amounts of recapitalization using share emissions. The indicators of profitability and efficiency of the banking system in general feature continuous improvement and they are at a solid level. The trend of reduction of the active and passive interest rates of the banks is still declining in the beginning of 2017, albeit at a slower rate.

Graph 77
Net profit after taxation (above) and annual change in the main revenues and expenditures (below)
In millions of denars



Source: NBRM, using data provided by the banks.

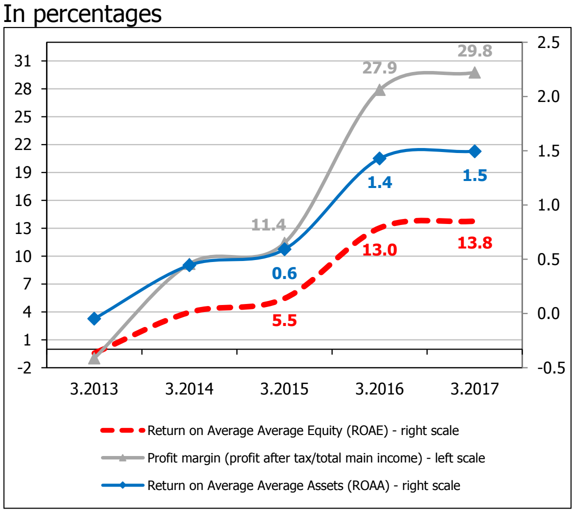
2.1 Indicators of profitability and efficiency of the banking system

The net profit after taxation in the first quarter of 2017 is higher by 9.1% (138 million denars) compared to the same period of 2016. For the first time after several years, the group of small banks ended the last year (2016) with positive financial result, but the end of the first quarter of 2017 again resulted in losses for this group of banks.

The slowed increase of the profits in the first three months of 2017 also had impact on the tendencies of the indicators of profitability and efficiency of the banking system. The return rates of the average asset and of the average capital and reserves[54], as well as the profit margin of the banking system, following a continuous accelerated growth in the last couple of years, feature a slow growth in the first three months of 2017, compared to the

[53] All data in this section of the Report that originate from the Income Statement of the banks (revenues, expenditures, profit, loss, etc.) pertain to the first three months of 2017, and their size is compared with the same period from the previous or some other year. The data that originate from the Balance Sheet (assets, loans, deposits, capital, etc.) or those related to the amount of active and passive interest rates in this part of the Report as shown as averages for the first three months of 2017. This calculated average is then compared against the average calculated for the first three months of 2016 or some other year. If the presentation of the data is made on other basis, different from the one mentioned here, that basis will be mentioned in the text.
[54] The average assets and equity and reserves are calculated as average from the situation with the assets i.e. the equity and the reserves at the analyzed date and 31 December of the previous year.

Graph 78
Rates of return of the average assets and of the average capital and reserves, including profit margin
In percentages



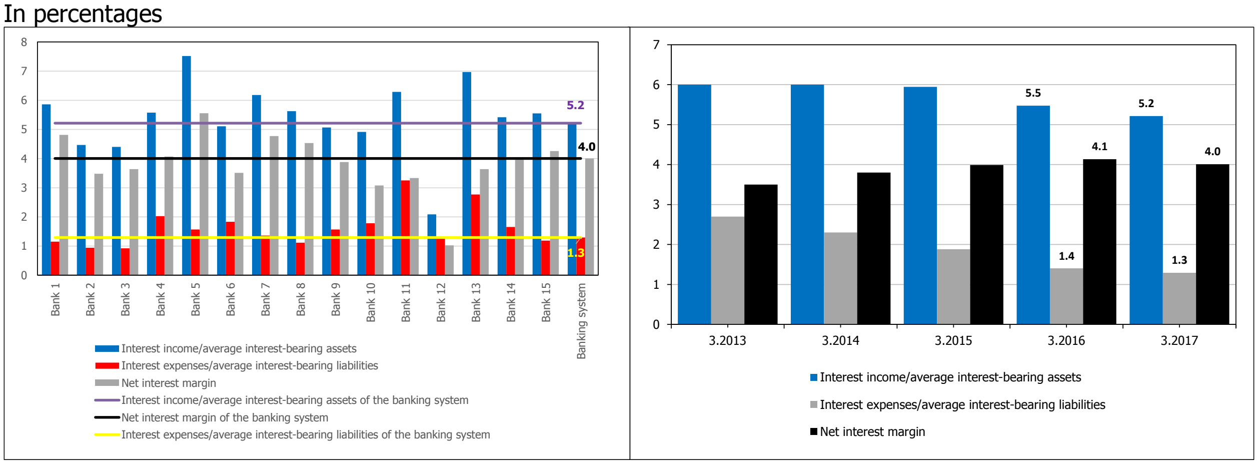
Source: NBRM, using data provided by the banks.

same period of the last year. The indicators of profitability and efficiency of the banking system and the specific groups of banks are shown in Annex 40.

Net interest margin realized by the banks in the process of financial mediation was slightly reduced and on 31 March 2017 this margin is 4%. The credit and deposit activity of the banks with the household was the biggest contributor not only to the increase in the net interest revenues but also in the increase of the average interest-yielding assets.

In an environment of low interest rates and modest annual growth of the credit activities, the interest revenues of the banks for the first time in the last several years were reduced, albeit insignificantly, by 0.6% (31 million denars). In the same time, the banks reduced the interest expenditures by 6% (74 million denars)[55], thus the interest revenues increased by only 1.1% (43 million denars) and contributed with almost one third to the total increase of the net profit after taxation. The average interest-yield assets in the first quarter of 2017 are greater by 4.5% (15.8

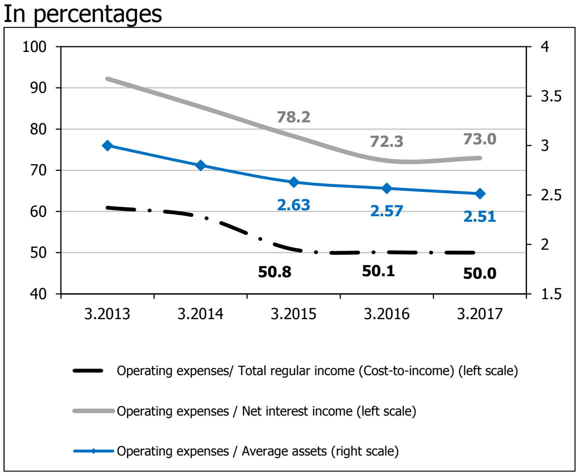
Graph. 79
Net interest margin per individual banks (left)* and on banking system level (right), as on 31 March 2017
In percentages



Source: NBRM, using data provided by the banks.
* The indicators on banking system level are shown with lines.

[55] As comparison, the interest expenditures in the first quarter of 2016 were reduced by 23% in relation to the same period of 2015. The interest expenditures declined by 12.6% and 11.7% in the first quarter of 2015 and the first quarter of 2014, respectively, compared to the same period in the relevant previous year.

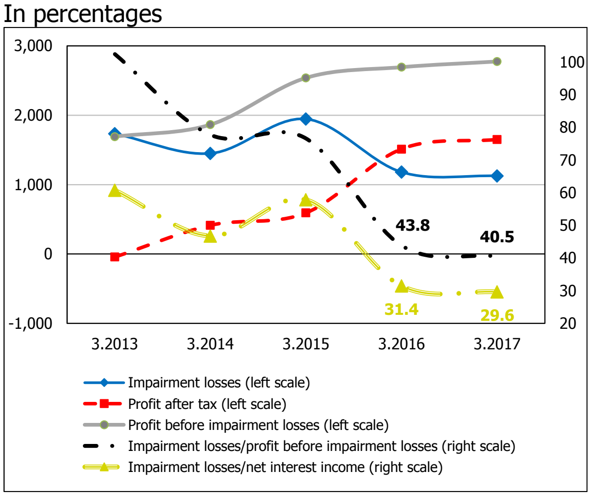
Graph 80
Operational efficiency indicators
In percentages



Source: NBRM, using data provided by the banks.

billion denars) compared to the same period in 2016. The reduction of the interest expenditures is entirely originating from the "Households" sector, where there is a decline of 15% (104 million denars)[56]. In the same time, the decline of the total interest revenues is mainly due to the reduced interest revenues coming from the credit operations with the "Non-financial companies" sector (these revenues are smaller by 148 million denars i.e. 7.1%), regardless of the increase in the interest revenues from operations with the households (by 130 million denars i.e. 6.2%)[57]. Lastly, the credit activity with the "Households" sector in the first quarter of 2017 was the main contributor to the total increase of the interest-yielding assets of the banking system, with almost 79%.

Graph 81
Indicators of the ratio between the impairment costs on one side, and the profit and net interest revenues from other side
In percentages

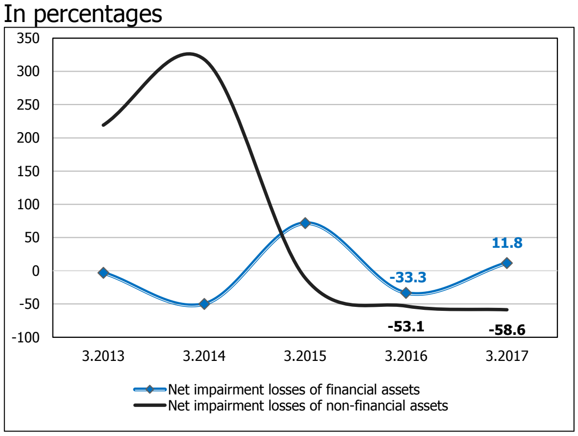


Source: NBRM, using data provided by the banks.

Regardless of the increase in the operational costs in the amount of 55 million denars (2%), still the operational efficiency of the banks was maintained at almost the same level as the one in the first three months of 2016. The indicator of the ratio between the operational costs and the net interest revenues is the only one that features mild worsening. The increase of the operational costs almost equally originates from the increased special reserve for off-balance exposure, the higher costs for general and administrative operations, and the higher depreciation costs. **On the other hand, the non-interest revenues mainly contributed towards the increase of the total regular revenues.** In other words, the total revenues from regular operations[58] of the banks increased by 2.2% (122 million denars), the biggest contributor here (with 70%) being other regular

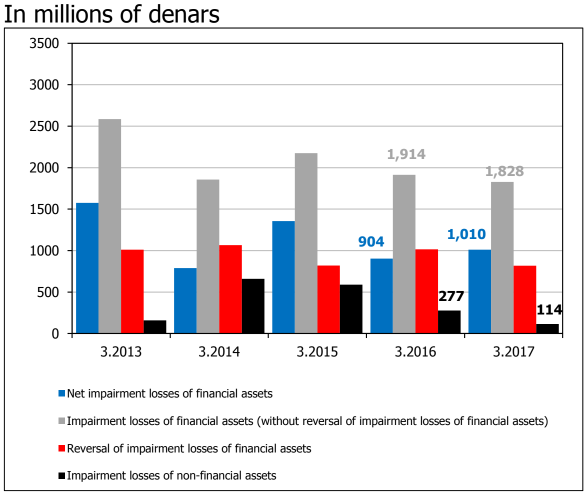
56 Contrary to that, the interest expenditures from the operations of the banks with non-financial entities are increased by 11 million denars (8.9%), similar like the interest expenditures from operations with financial companies, which was increased by 15 million denars (8.3%).
57 There is slight increase of 19 million denars (9%) in the interest revenues from placements with the Central Bank.
58 The total revenues from regular operations include net interest revenues, net revenues from commissions and other regular revenues.

Graph 82
Annual rates of change in the impairment costs for the financial and non-financial assets
In percentages



Source: NBRM, using data provided by the banks.

Graph 83
Impairment costs for the financial and non-financial assets
In millions of denars



Source: NBRM, using data provided by the banks.

revenues[59] that also contributed with 62.1% in the increased profits of the banking system[60].

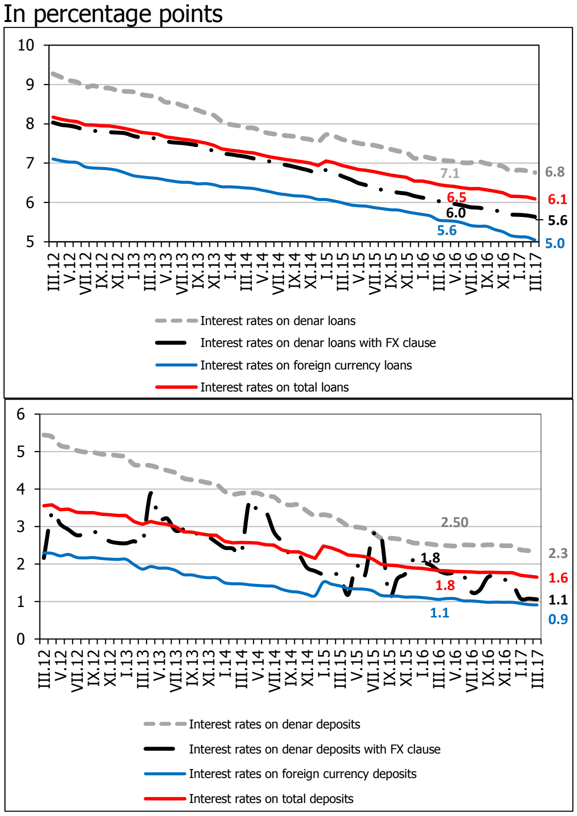
In the first quarter of 2017, the total costs for impairment were reduced by 4.7% (56 million denars), compared to the same period in 2016, thus contributing with almost 41% in the increase of the profit of the banking system. The reduction of the impairment costs comes from the sales of the foreclosed assets and the follow-up reduction of the costs for impairment of the foreclosed assets[61]. On the other hand, the impairment costs for the financial assets are increased by 11.8% (107 million denars).

2.2 Movements/ tendencies in the interest rates and interest rate spread

The trend of reduction of the interest rates of the banks continued also in the first quarter of 2017, when the active and passive interest rates featured insignificant decline of 0.1 and 0.2 percentage points, respectively for the period December 2016 – March 2017 and, on average, they are smaller by 0.4 and 0.2 percentage points, respectively, in comparison to the same period of 2016. In other words, the average weighted active interest rate for the first quarter of 2017 is 6.1% (6.5% in the first quarter of 2016), while the average passive interest rate for the same period is 1.7% (1.9% for the same period of 2016). If analyzed per currency, on the loans side, the average weighted interest rate for the foreign currency loans features the largest decline of 0.5 percentage points, while in terms of deposits the biggest decline of 0.8 percentage points exists with the average weighted interest rate for the denar deposits with foreign currency clause.

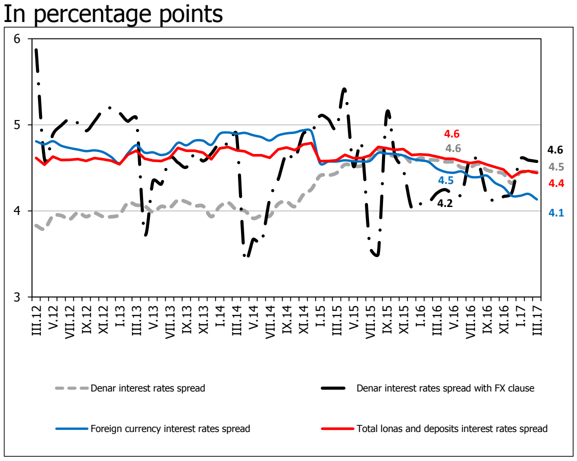
[59] Around 85% of the growth of other regular revenues is due to collected receivables that have be previously written-off, by two large banks.
[60] The net interest revenues contributed with more than one third to the growth of the total regular revenues, and the net revenues from commissions feature modest decline of 0.6% compared to the same period of 2016.
[61] The average amount of the gross forfeit assets in relation to uncollected receivables in the first three months of 2017 was reduced by 4.2% (233 million denars), compared to the same period of 2016.

Graph 84
Active (above) and passive (below) interest rates
In percentage points



Source: NBRM, using data provided by the banks.

Graph 85
Interest spreads, per currency
In percentage points



Source: NBRM, using data provided by the banks.

In March 2017, the spread between the active and passive interest rates was 4.4 percentage points and this spread remains unchanged compared to December 2016. On the other hand, the average spread between the active and passive interest rates for the first three months of 2017 was reduced by 0.2 percentage points compared to the same period of 2016. There are larger occasional oscillations of the interest spread among the denar interest rates with foreign exchange clause and they are caused by the increased volatility of the interest rates for the denar deposits with foreign exchange clause, that banks very rarely offer to their clients as deposit product.

ANNEXES