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 SECOND QUARTER OF 2017

October 2017

CONTENT

Summary

Contrary to the downward trends of the banking activities in the first quarter of 2017, the same trends in the second quarter of this year are favorable and have positive tendencies. The total assets increased by 0.6%; the deposits also increased this quarter (albeit with minimum growth), and the growth was the biggest in the crediting. The growth of the deposits from non-financial entities is mainly due to the solid growth (7.9%) of the sight deposits in denars from the households, contrary to the corporate deposits that were reduced. The faster growth of the denar deposits, compared to the foreign currency deposits of the households, which is noticeable in the second quarter of 2017 (and continues in the third quarter as well) is a signal of gradual returning of the 'denarization' of the deposits which almost stopped in the second quarter of the previous year under the influence of the domestic political events in that period. The assets used from parent entities are not significant source of financing of the activities of the domestic banks, regardless of their growth in the second quarter. In the second quarter of 2017 the banks used one part of the liquid assets for more intense credit activity. For example, the loans to non-financial entities are increasing (2.2%) mainly as a result of the long-term loans approved to households but also as a result of short-term loans approved to non-financial companies.

The quality of the credit portfolio featured slight worsening in this quarter. The total non-performing loans of the banking system increased by 8.1%, hence their share in the total loans was also increased by 0.4 percentage points and now it is at a level of 6.8% (11.6% if we exclude the write-offs effect[1]). The increased share of the non-performing loans in the total loans was almost entirely focused on the corporate credit portfolio, where this share increased to 10.6% (17.4% if we exclude the write-offs effect), in a situation of quarterly growth of the non-performing loans to non-financial companies of 10.9%. The share of the non-performing loans in the total loans to households remained on the same level of 2.5% (5% if we exclude the write-offs effect) but we must also not neglect the continuous growth of the non-performing loans towards this sector in the last five quarters. The coverage of the non-performing loans with own impairment remained at a high level (76.9%) which, in a situation of satisfactory volume and quality of the own assets of the banks, limits the consequences from eventual complete uncollectability of these loans on the solvency items of the banks.

The liquidity of the banking system remained at a satisfactory level, witnessed through the relatively stable share of the liquid assets in the total assets and the satisfactory coverage of the short-term liabilities and the household deposits with liquid assets. The quarterly reduction of the liquid assets of the banks (-1.7%) was more present at the denar-nominated liquid assets, but equally distributed among the different financial instruments that make up these assets. The maturity transformation of the sources of financing was strengthened in the second quarter of 2017, especially among the liabilities with contractual residual maturity of up to 30 days, which reached a level that is twice greater compared to the assets with same contractual residual maturity. On the other hand, the banks, from their experience, are expecting high level of stability of the deposits and absence of significant outflows of the liabilities on short term.

[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). Following the initial write-offs of more significant amounts of non-performing loans in the second quarter of the last year, the effects of these changes in the regulation, when analyzing the trend of non-performing loans, are gradually wearing off.

The profitability and efficiency ratios of the banking system have a trend of continuous improvements, and they are at a solid level. Still, the profit of the banking system in the current year slows down the growth, compared to the same period of 2016. In a situation of limited room for further (significant) reduction of the interest rates of the deposits, the contribution of the net interest revenues in the increase of the profit is significantly reduced compared to the previous years. The banks are trying to compensate for this with higher net revenues from commissions, improved cost-efficiency (reduction of the operational costs) and reduction of the impairment costs (mainly by selling assets forfeited on the basis of uncollected receivables). The banks continue to deliver high rates of return of the average capital and of the average assets (12.7% and 1.4%, respectively), which is especially relevant in the process of internal generation of capital, in a situation of almost entire absence of recapitalizations through emission of shares.

The indicators of solvency and capitalization of the banking system increased in the second quarter of 2017, which is mainly result of the growth of the capital items, primarily due to the retention of the profit earned in 2016. In a situation of further 'narrowing' of the net open currency position of the banks (for two consecutive quarters), the credit activity with the households and with the non-financial companies contributed the most to the increase of the risk-weighted assets. The faster growth of the own assets of the banks, compared to the risk-weighted assets, provided for improvement of the capital adequacy rate up to the level of 15.8% and increase of the available capital above the minimum level required for covering of risks and for maintenance of the required capital buffer for protection of the capital. The recently introduced obligation for maintenance of capital buffers is additional instrument, especially for the banks significant for the system – starting from 30 September 2017 the banks significant for the system are required to meet half of the established capital buffer.

I. Structure of the banking system

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

As on 30 June 2017, there are fifteen banks in operations 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.

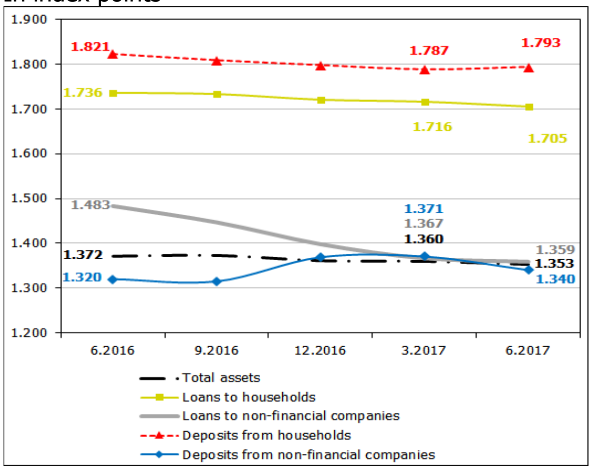
Table 1
Overview of the more relevant items from the Balances, in accordance with the majority ownership of the banks (as on 30 June 2017)
In millions of denars and in %

Type of ownership	Number of banks	Capital and reserves		Assets		Loans to non-financial sector		Deposits from non-financial sector		Total revenues*		Financial result*	
		Amount	In %	Amount	In %	Amount	In %	Amount	In %	Amount	In %	Amount	In %
Banks in dominant ownership of foreign shareholders	**11**	**34.779**	**69,9%**	**309.119**	**70,3%**	**221.675**	**77,9%**	**221.450**	**69,6%**	**16.928**	**73,6%**	**5.651**	**86,2%**
- subsidiaries of foreign banks	*6*	*30.005*	*60,3%*	*253.849*	*57,7%*	*182.300*	*64,1%*	*183.752*	*57,7%*	*14.079*	*61,2%*	*5.327*	*81,3%*
- Austria	1	2.344	4,7%	17.062	3,9%	12.332	4,3%	10.772	3,4%	907	3,9%	131	2,0%
- Bulgaria	1	1.202	2,4%	8.398	1,9%	5.604	2,0%	6.299	2,0%	378	1,6%	19	0,3%
- Greece	1	11.458	23,0%	85.533	19,4%	61.374	21,6%	66.792	21,0%	5.274	22,9%	2.332	35,6%
- Slovenia	1	7.413	14,9%	69.613	15,8%	50.475	17,7%	55.050	17,3%	4.160	18,1%	1.973	30,1%
- Turkey	1	4.612	9,3%	39.458	9,0%	26.512	9,3%	21.643	6,8%	1.698	7,4%	535	8,2%
- France	1	2.976	6,0%	33.785	7,7%	26.003	9,1%	23.197	7,3%	1.662	7,2%	337	5,1%
- other banks in dominant foreign ownership	*5*	*4.774*	*9,6%*	*55.269*	*12,6%*	*39.375*	*13,8%*	*37.698*	*11,8%*	*2.849*	*12,4%*	*324*	*4,9%*
- Bulgaria	2	1.824	3,7%	18.334	4,2%	12.106	4,3%	13.208	4,1%	921	4,0%	120	1,8%
- Germany	1	2.034	4,1%	21.388	4,9%	16.812	5,9%	13.363	4,2%	1.070	4,7%	236	3,6%
- Switzerland	2	917	1,8%	15.547	3,5%	10.457	3,7%	11.127	3,5%	858	3,7%	-33	-0,5%
Banks in dominant ownership of domestic shareholders	**4**	**14.994**	**30,1%**	**130.844**	**29,7%**	**62.890**	**22,1%**	**96.848**	**30,4%**	**6.072**	**26,4%**	**901**	**13,8%**
- private ownership	*3*	*12.529*	*25,2%*	*117.123*	*26,6%*	*62.890*	*22,1%*	*96.848*	*30,4%*	*5.893*	*25,6%*	*811*	*12,4%*
- state ownership	*1*	*2.465*	*5,0%*	*13.721*	*3,1%*	*1*	*0,0%*	*0*	*0,0%*	*179*	*0,8%*	*90*	*1,4%*
Total:	**15**	**49.773**	**100,0%**	**439.962**	**100,0%**	**284.565**	**100,0%**	**318.298**	**100,0%**	**23.000**	**100,0%**	**6.552**	**100,0%**

Source: NBRM, using data provided by the banks.
* The total revenues and the financial result are calculated for the last twelve months (30 June 2016-30 June 2017).

The banks in majority foreign ownership dominate in all relevant items of the balance sheets of the banks, but their market shares are especially high when it comes to credit activity (77.9%) and the same goes for the financial result (86.2%). Furthermore, these banks also have dominant share in the capital and in the reserves of the banking system (69.9%), regardless of the decline of 0.5 percentage points in relation to the first quarter of 2017. The share of the foreign capital in the total share capital of the banking system (74.8%) also declined in the first half of 2017, but this

Graph 1
Herfindahl index*
In index points



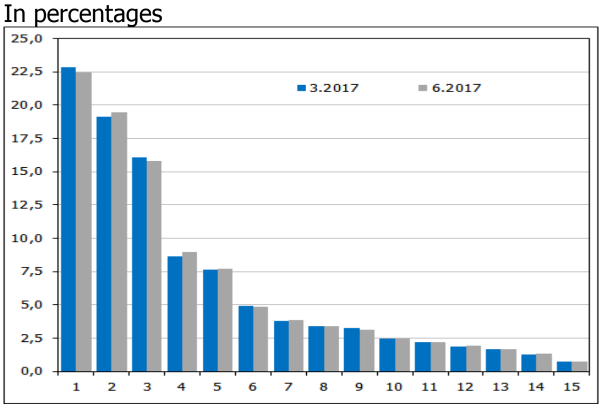
Source: NBRM, using data provided by the banks.

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

Position	30.06.2017		31.03.2017	
	CR3	CR5	CR3	CR5
Total assets	57,7	74,4	58,1	74,3
Loans to households	62,2	79,1	62,6	79,2
Loans to non-financial companies	53,1	73,3	54,0	73,6
Deposits from households	70,4	79,8	70,2	79,6
Deposits from non-financial companies	51,1	77,3	52,3	77,9
Financial result*	75,1	88,4	73,1	86,2
Total revenues*	62,2	76,8	61,4	75,7

Source: NBRM, using data provided by the banks.
**The total revenues and the financial result are calculated for the last twelve months (30.6.2016 - 30 June 2017).

Graph 2
Shares of the individual banks in the total assets of the banking system
In percentages



Source: NBRM, using data provided by the banks.

decline is by modest 0.2 percentage points[2]. In terms of country of origin of the major foreign shareholder, there was increase in the market share in the total assets of the banks that are majority owned by shareholders from Turkey and Greece, by 0.3 percentage points respectively, on the account of the market participation of the bank that is majority owned by a shareholder from Slovenia.

The concentration in the banking system does not feature some more significant changes compared to the previous quarter and, in general, follows the trend of decline. The Herfindahl index[3] is reducing for all analyzed categories of activities, except with regards to household deposits, where the index is slightly increasing but is still within the acceptable parameters of the index[4]. Both the CR3 and CR5 ratios show quarterly increase of the concentration of the household deposits, but also of the total revenues and financial results of the banks.

In the second quarter of 2017, the differences in the volume of activities (monitored through the share in the total assets of the banking system) between the large and the small banks in the system continue to be large. The spread between the bank with highest (22.5%) and the bank with lowest (0.7%) share was reduced by 0.3 percentage points in this quarter. On the other hand, nine banks together have only one fourth in the share in the total assets of the banking system.

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[2] The foreign non-bank financial institutions reduced their share in the shareholder capital of one bank that belongs to the group of large banks by 1.4 percentage points, on the account of increase of the share of the domestic individuals (by 1 percentage points) and non-financial legal entities (by 0.3 percentage points). There are smaller changes in the ownership structure in another four banks.
[3] 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.
[4] The concentration level is considered acceptable if this index is somewhere between 1,000 and 1,800.

II. Bank risks

1. Credit risk

In the second quarter of 2017, the total non-performing loans of the banking system were increased by 8.1%, thus putting an end to the trend of their quarterly reduction that was present in the last one-year period. The changes in the regulation of the National Bank[5] on mandatory write-off had significant impact on the downward tendency of the level of these loans. However, having in mind the tendency of weakening of the monthly mandatory write-offs, as well as the fact that the largest write-offs were done in June 2016, the effects of this measure are gradually wearing off. The share of the non-performing loans in the total loans at the end of the second quarter was increased by 0.4 percentage points and now it is 6.8% (11.6% if we exclude the effect of the write-offs and identical growth of 0.4 percentage points). This worsening of the quality of the credit portfolio is concentrated in the corporate loans. The main reason for this is the more emphasized growth of the non-performing loans in relation to the growth of the credit activity of the banks towards this segment of the credit market. Most of the non-performing loans originate from the corporate sector. Still, the slower growth of the non-performing loans to households (present in the last ten months), accompanied by the growth of the prolonged loans and of the loans where the repayment is late between 61 and 90 days, points out to the need of more careful monitoring of this portfolio.

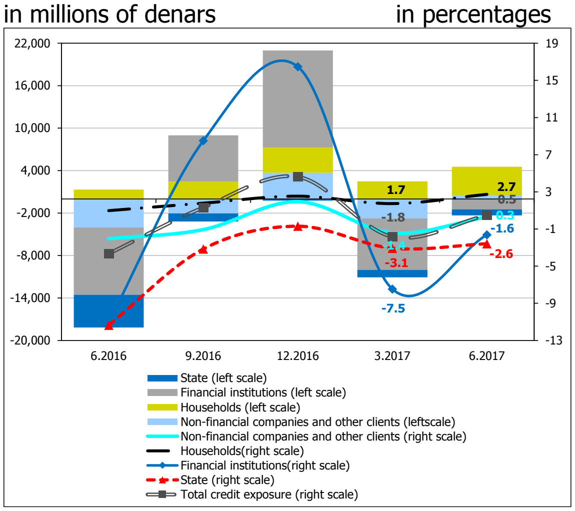
The high coverage of the non-performing loans with the allocated impairment, and especially the satisfactory volume and quality of the own assets of the banks, limits the risks for the solvency of the banks from eventual uncollectability of these loans.

The success of the banks in the evaluation of the creditworthiness of their clients, not only in the course of approval but also the follow-up monitoring, is of exceptional relevance for the quality of the credit portfolios of the banks i.e. for the volume and trend of the non-performing loans.

The National Bank recently proposed a draft-strategy for stimulation of dealing with, and improvement of, the management with the non-performing loans. The implementation of this Strategy requires coordinated activities by a number of different institutions in the country, in terms of changes and explanations in the legislation with regards to enforcement, evaluation, taxation, write-offs, supervision, etc., as well as activities for creating conditions for functioning of non-performing receivables market.

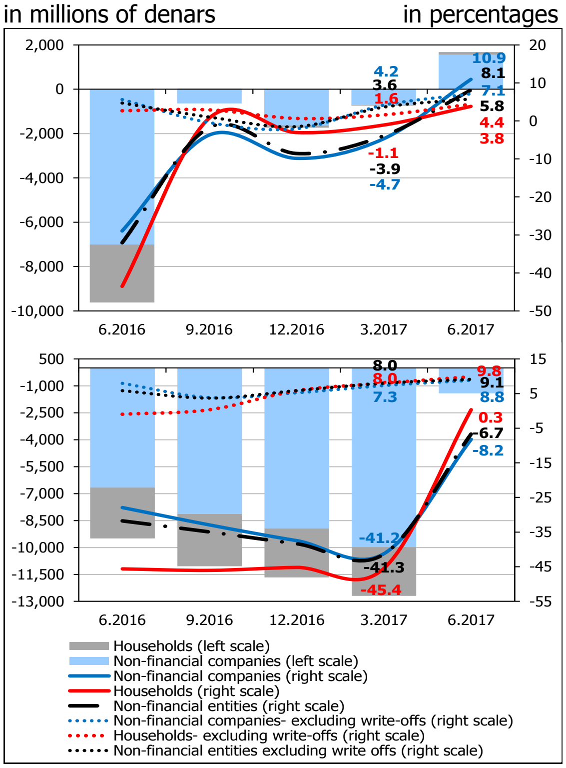
[5] Decision on Changes and Amendments of the Decision for Credit Risk Management ("Official Gazette of the Republic of Macedonia" No. 223/15), according to which the banks were obliged, in the period 1 June - 30 June 2016, to start the transfer of all receivables which are entirely reserved for more 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. The largest initial write-off on these grounds was done in June 2016.

Graph 3
Quarterly growth of the credit exposure, per sectors
in millions of denars in percentages



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

Graph 4
Quarterly (above) and annual (below) change of the non-performing loans to non-financial entities and per sectors
in millions of denars in percentages



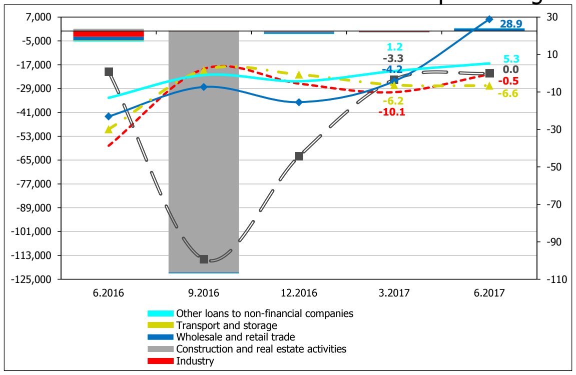
Source: NBRM, using data provided by the banks.

In the second quarter of 2017, **the total credit exposure** of the banking system was increased by 0.5% (by 2,218 million denars), reaching 463,305 million denars. In this quarter the banks intensified their credit support to the household (growth of the credit exposure by 3,985 million denars i.e. by 2.7%), and in significantly less extent to non-financial companies (growth of 565 million denars i.e. by 0.3%). The decline of the exposure towards financial institutions (by 1,463 million denars i.e. 2.6%), mainly due to the decline in the assets in foreign banks and the reduced placements in the National Bank – had their respective impact on the weaker growth of the total credit exposure.

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

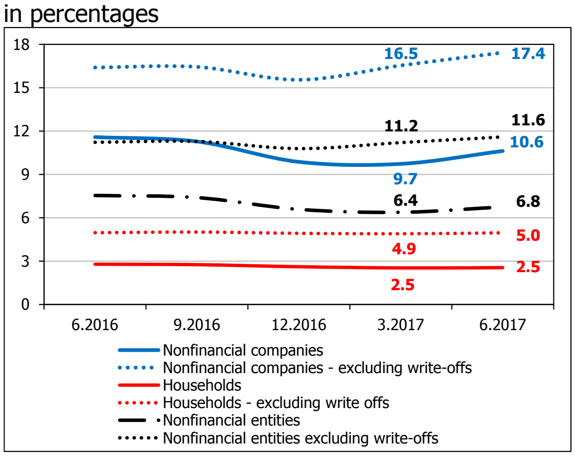
The total non-performing loans of the banking system were increased by 8.1% during the second quarter of 2017, following their continuous quarterly reduction in the last one-year period. This is also the highest growth of the non-performing loans in the last three years. There is significant quarterly growth in the non-performing loans to non-financial companies (10.9%), and the last time something like this was registered was in the second quarter of 2014 (since then, their tendencies had weak upward trend, until the mandatory write-off measure was introduced, after which they started to decline). In the households segment, the quarterly growth rate of the non-performing loans is 3.8%, which is the highest quarterly growth in the last four years. These tendencies point out to certain worsening of the quality of the crediting of the non-financial entities, especially because, after the first "strike" of write-offs that happened in June 2016, the other amounts of the mandatory write-offs are insignificant. The absolute amount of growth of the non-performing loans in the second quarter of 2017 is higher compared to the common average quarterly growth of these loans (calculated for the period 1 January 2015 - 31 August 2017). However, at the beginning of the

Graph 5
Quarterly growth of the non-performing loans per sectors
in millions of denars in percentages

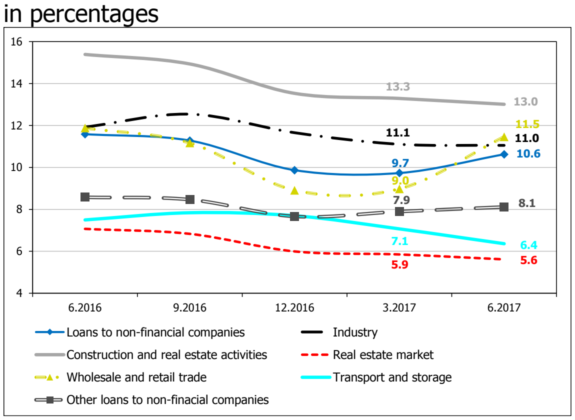


Source: Credit registry of the National Bank, using data provided by the banks.

Graph 6
Rate of non-performing loans to non-financial entities
in percentages



Graph 7 Rate of non-performing loans to non-financial companies, per sectors
in percentages



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

third quarter of this year, their growth returns to the usual levels. The growth in the second quarter is due to the worsened operational and business results of several larger clients in the following sectors: "Wholesale and retail trade" and "Information and communications", and also due to the increase in the non-performing consumer loans.

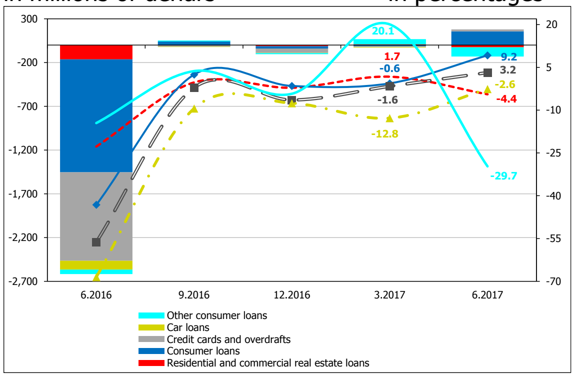
At the end of the second quarter of 2017 there is still the influence from the mandatory write-offs on the annual dynamics of the non-performing loans. As a consequence of the write-offs effect, the non-performing loans continue to decline, but if we exclude their effect, the annual growth of the non-performing loans is accelerating and at the end of the second quarter of 2017 is 9.1% (8.0% as on 31 March 2017). This dynamic is mainly determined by the non-performing loans to companies.

There is certain worsening in the quality of the credit portfolio. This can be seen through the share of the non-performing loans in the total loans to non-financial entities, which increased by 0.4 percentage points in the second quarter of 2017 and reached 6.8%. This is the first quarterly upward tendency of this rate after the introduction of the regulatory changes for mandatory write-offs. If we exclude the write-offs effect, this share is 11.6% and features the same quarterly growth of 0.4 percentage points.

With regards to the non-financial companies, the non-performing loans rate[6] increased for the first time in the last one-year period by 0.9 percentage points, as a result of the (by almost three times) faster quarterly growth of the non-performing loans, compared to the growth of the total loans to non-financial companies[7]. Therefore, at the end of the June the non-performing loans rate is 10.6%.

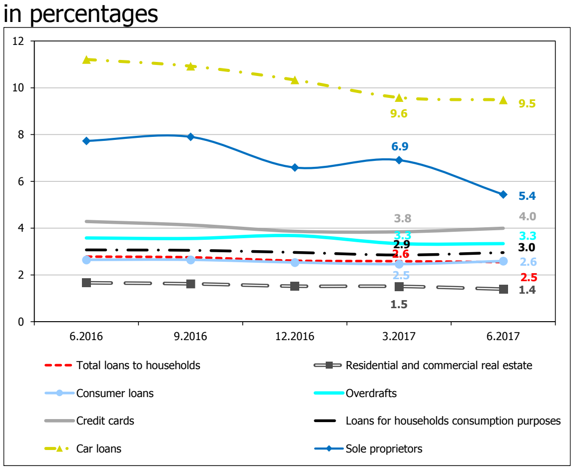
[6] The rate of non-performing loans is the share of the non-performing loans in the total loans.
[7] If we exclude the write-offs effect, this rate is 17.4%, which is identical quarterly increase (0.9 percentage points) like the increase caused by the write-offs.

Graph 8
Quarterly absolute and relative change of the non-performing loans to specific credit profits for households
in millions of denars in percentages



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

Graph 9
Share of the non-performing loans in the total loans to households, per specific credit products
in percentages



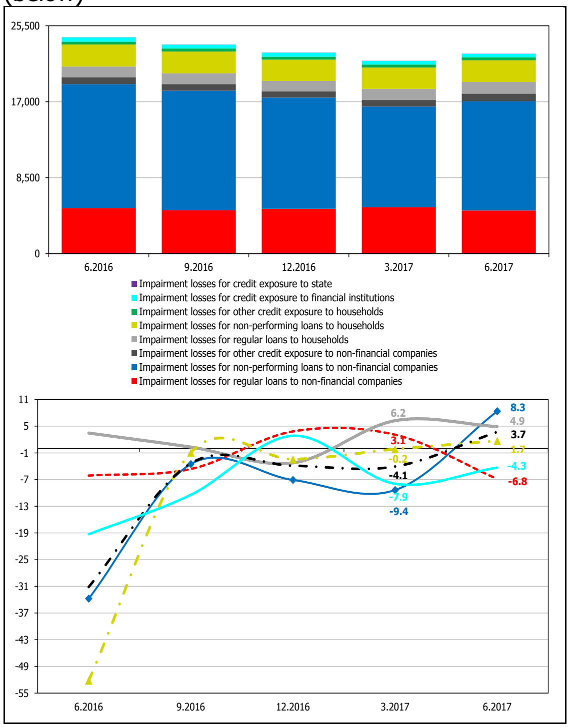
Source: Credit registry of the National Bank, using data provided by the banks.

With regards to specific sectors, the non-performing loans rate is the highest among the clients in the following sectors: "Construction and real estate related activities", "Wholesale and retail trade" and "Industry". However, this rate features quarterly decline in these sectors, except in "Wholesale and retail trade"[8] where it is again getting worse for a second consecutive quarter, caused by the significantly accelerated quarterly growth of the non-performing loans (8.9%), compared to the growth of the total loans to the clients in this sector (0.9%). Having in mind these shifts, the rate of the non-performing loans to "Wholesale and retail trade" at the end of June reached two-figure number and exceeded the rate of the non-performing loans in the "Industry" sector.

The rate of non-performing loans to households is low - 2.5% and remains unchanged in comparison to the previous quarter (in general, this rate has remained unchanged for quite some time now). The increase in the household non-performing loans, which is more prominent in the last ten months, did not have impact on the indicators of quality of the loans towards this sector (in other words, on the rate of the non-performing loans), solely because of the credit growth rate (twice greater) towards this sector**. As per specific credit products**, the non-performing loans rate is increasing only in "credit cards" segment which, in a situation of growth of the non-performing loans (by 4.1%) is due to the lower volume of new crediting on these grounds, compared to the previous quarter.

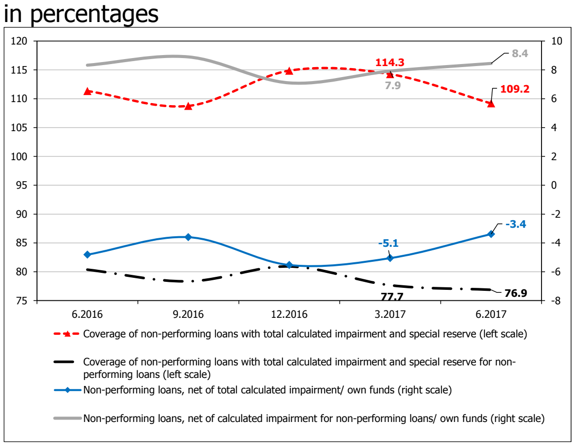
[8] The credit exposure towards clients in the "Wholesale and retail trade" sector has the highest participation in the total credit exposure towards the non-financial companies (33.6%). Furthermore, the non-performing loans towards the clients in this sector have the largest share of 36.2% in the total non-performing loans to non-financial companies.

Graph 10
Structure (above) and annual change rates (below) of the impairment, per sectors
in millions of denars (above) in percentages (below)



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

Graph. 11
Coverage of the non-performing loans and participation of the net non-performing loans in the own assets of the banks
in percentages



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

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

In the second quarter of 2017, the allocated impairment for the total credit portfolio of the banks was increased by 800 million denars i.e. 3.7%. The increase of the allocated impairment is mostly from the allocated impairment for the non-performing loans to non-financial companies.

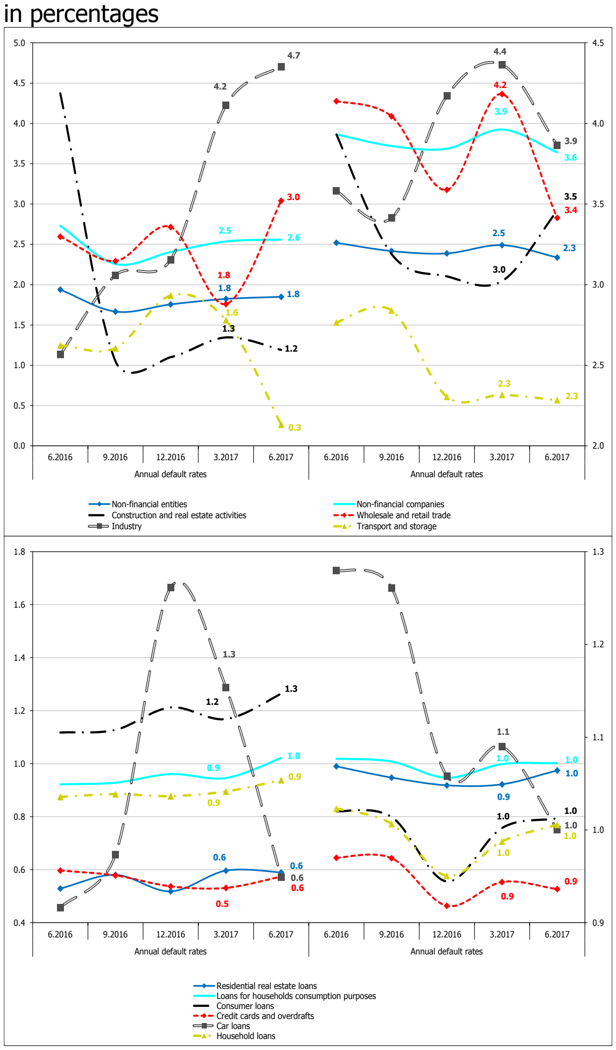
The coverage of the non-performing loans with allocated impairment is high, which contributes towards better resilience of the banking system to unexpected credit losses. This coverage of the non-performing loans limits the negative effects from eventual total uncollectability on the own assets of the banking system. The portion of the non-performing loans which is not reserved absorbs only 8.4% 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 1.3 percentage points (almost identical with the previous quarter).

1.3 Other possible sources of credit risk

In the second quarter of 2017, **the annual rate of uncollectability** of the credit exposure with regular status[9] is 1.8% (March 2017: 1.8%) and is slightly lower compared to the average level of risk of the regular loans to non-financial entities[10] (2.3%), as established by the banks. This means that the banks are more cautious and they do slightly higher impairment of the regular loans compared to what is

[9] 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.
[10] Calculated as a ratio between the allocated impairment of the regular loans and the gross amount of the regular loans.

Graph 12
Annual rates of uncollectability of the credit exposure with regular status and average level of risk on the regular loans, per sectors (above) and credit products (below)
in percentages



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

suggested by the historical rate of uncollectability these receivables which, in turn, also contributes towards better resilience of the banking system.

There are different situations and tendencies in different sectors. The annual uncollectability rates generally do not change, except the worsening in the "Wholesale and retail trade" and "Industry" sectors, which is due to the transfer into 'non-performing' status of some larger clients in the wholesale trade with foodstuff, the textile industry and from the processing industry. The worsening of the annual uncollectability rate did not result in higher impairment for the regular loans from these activities, but resulted in reduction of the same, which leads to conclusion that the banks have lower ascertainments with regards to the actual realization of the credit risk from the loans to these two sectors[11].

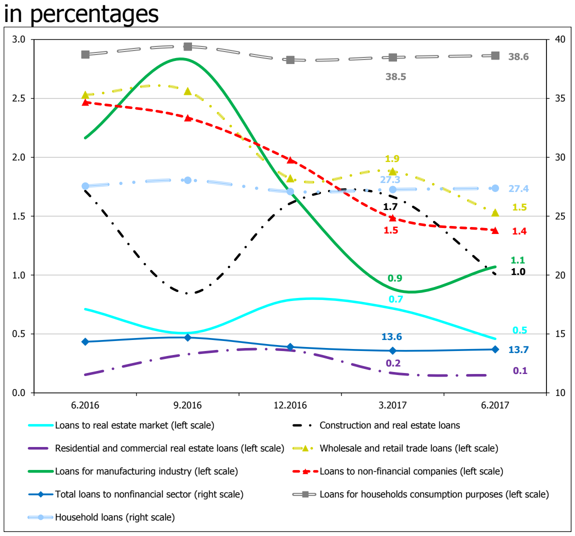
With regards to the households, both in total and per specific credit products, the trends of the annual uncollectability rates remain unchanged in general.

In addition to the appropriate coverage of the regular loans with allocated impairment, traditionally **high is also the volume of the loans for which collateral is provided** (85.9% of the total regular loans to non-financial entities), which is somehow mitigating the level of the credit risk undertaken by the banks, and can be also used a secondary collection source. These two factors are of exceptional importance having in mind other aspects of the credit portfolio of the banks that could increase the credit losses beyond the expectations of the banks, especially in situation of unfavorable business circumstances (these aspects are elaborated in more details in the text below).

The losses due to actual realization of the credit risk can go beyond the expectations of the banks due to the **relatively high concentration of the credit portfolios of**

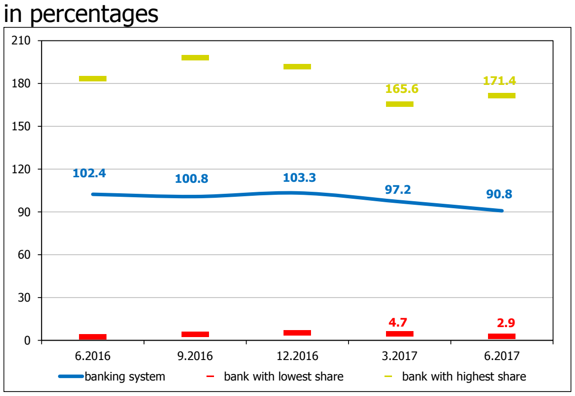
[11] These two sectors participate with 58.2% of the total loans approved to non-financial companies and with 62.2% of the non-performing loans.

Graph 13
Participation of the unsecured regular loans in the total regular loans, per sectors and credit products
in percentages



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

Graph 14
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.

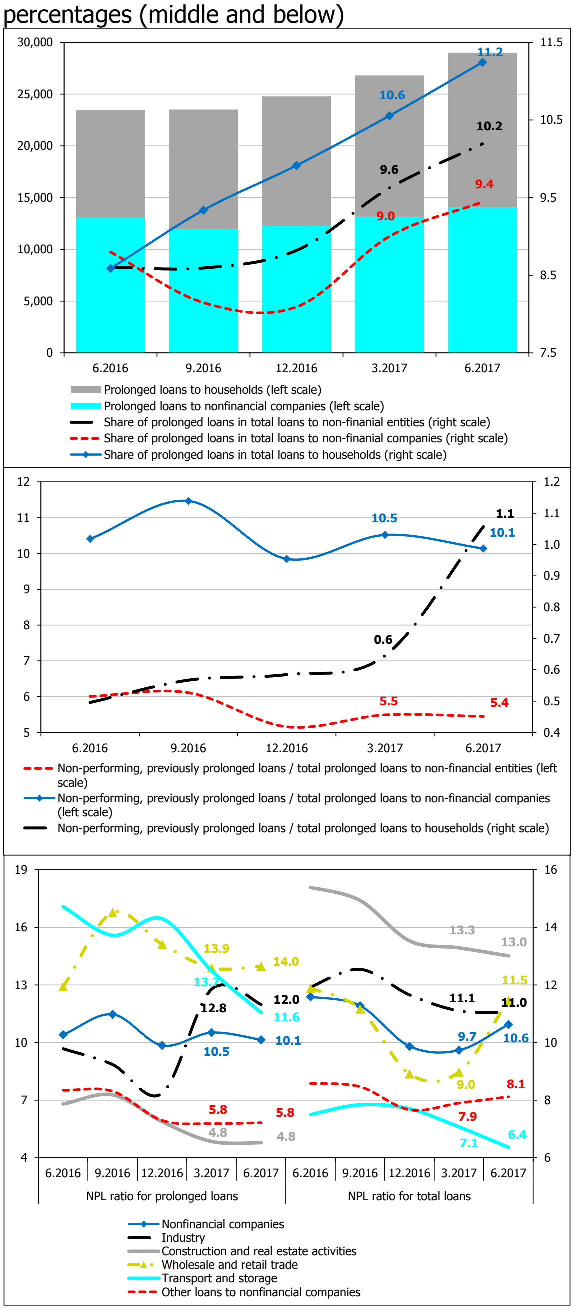
some banks (per specific clients, per belonging to specific sectors, etc.). At the end of the second quarter of 2017 **the ten largest exposures of the banks to non-financial entities occupy significant portion (90.8%) of own assets of the banks**. Per individual banks, this indicator varies between 2.9% and 171.4%. On aggregate level these exposures have low risk (they mainly belong to risk categories "A" and "B"), but still in the largest exposures structure we can also notice exposures with higher risk.

The prolonged loans[12] participate with 10.2% in the total loans to non-financial entities. This participation level is similar for both segments of the non-financial sector (9.4% at the non-financial companies and 11.2% at the households). There is a prominent increase of the participation of the prolonged household loans in the past one year, but the quality of these prolonged loans[13] is exceptionally good. The rate of non-performing loans to non-financial companies that were initially prolonged[14] (10.1%) is in decline (by 0.4 percentage points), vs the total credit portfolio of the non-financial entities, where this rate was increased. The rate of non-performing loans that were initially prolonged exceeds the amount of this indicator for the total credit portfolio in the following sectors: "Wholesale and retail trade" (14.0%), "Industry" (12.0%) and "Transport and storage" (11.6%)[15]. With the households, the rate of non-performing loans that were initially prolonged was increased to 1.1% (by 0.4 percentage points), due to the increase of this rate among the consumer loans.

The receivables of the banks where the period of late repayment of the principal is between 61 and 90 days, are potential sources of materialization of the credit risk if they are late more than 90 days, as one of

[12] According to the regulation, the continuation of the maturity of the loans is not a consequence of the worsened financial situation of the clients.
[13] Measured through the share of the non-performing loans that were initially prolonged, in the total prolonged household loans (1.1% as on 30 June 2017) and the average level of riskiness of the regular prolonged household loans (0.3% on 30 June 2017).
[14] This rate shows the average share of the non-performing loans to non-financial companies that were initially prolonged, in the total prolonged loans.
[15] The rates show the status of these loans as on 30 June 2017.

Graph 15
Indicators of prolonged loans, in total (above) and non-performing, per sectors (middle) and sectors (below)
in millions of denars and in percentages (above), in percentages (middle and below)

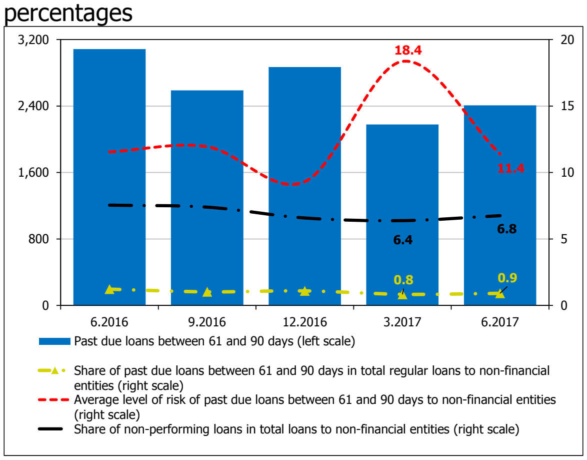


Source: Credit registry of the National Bank, using data provided by the banks.

the key criteria for assigning of 'non-performing' status. The amount of these matured loans was increased in the second quarter of 2017 by 10.5% i.e. by 229 million denars, which is due to the worsening of the quality of the receivables from households, in relation to consumer loans and credit cards. If we assume that none of the loans matured between 61 and 90 days will not be possible to be collected in the following month, 0.9% of the total regular loans (as on 30 June 2017) would be transferred to 'non-performing' category. With this, solely on this basis, the total non-performing loans would increase by 2,408 million denars i.e. by 12.5%. However, the volume of these loans is small and their average level of risk shows moderate credit risk (11.4%). Furthermore, during the following month (July), only 1.7% of the loans matured between 61 and 90 days were assigned the 'non-performing' status in the following month, which is an indicator of solid collection of the matured portion between 61 and 90 days.

The tendencies of the restructured regular loans are important signal for materialization of the credit risk. These loans would have been assigned 'non-performing' status if the banks did not change the credit requirements (the restructuring of the receivables is done towards clients facing financial distress). In the second quarter of 2017 these loans were reduced by 2.5% (by 126 million denars). The downward tendency of the regular restructured loans was focused in the non-financial companies segment (and these dominate in the portfolio of restructured loans), which was 3.0% (by 140 million denars). Per sectors, the largest decline of the regular restructured loans of 22.4% (367 million denars) happened in the "Wholesale and retail trade" sector which, in a situation of simultaneous increase of the non-performing restructured loans in this activity of 14.0%, (292 million denars), points out to partial transfer into 'non-performing' status, while the rest is related to the collection of some of the regular restructured loans. The reduction of the regular restructured loans is also obvious in other sectors, but mainly in those with smaller share in

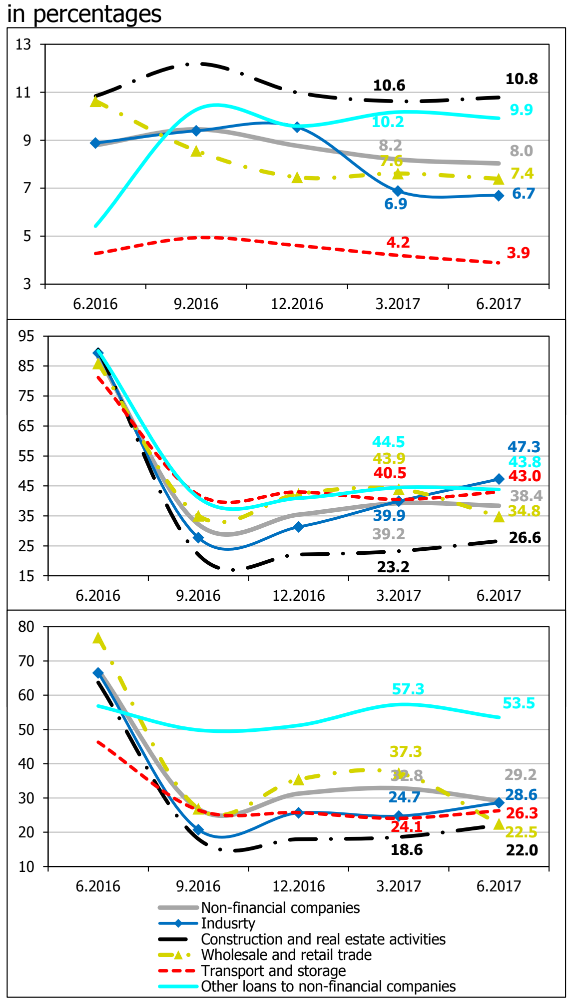
Graph 16
Dynamics and average level of riskiness of the loans with matured part in the repayment of the principal between 61 and 90 days
in millions of denars In percentages



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

the total credit exposure of the banking system ("Education", "Administrative and auxiliary service activities ", "Accommodation buildings and service activities with food" and "Agriculture, forestry and fishing").

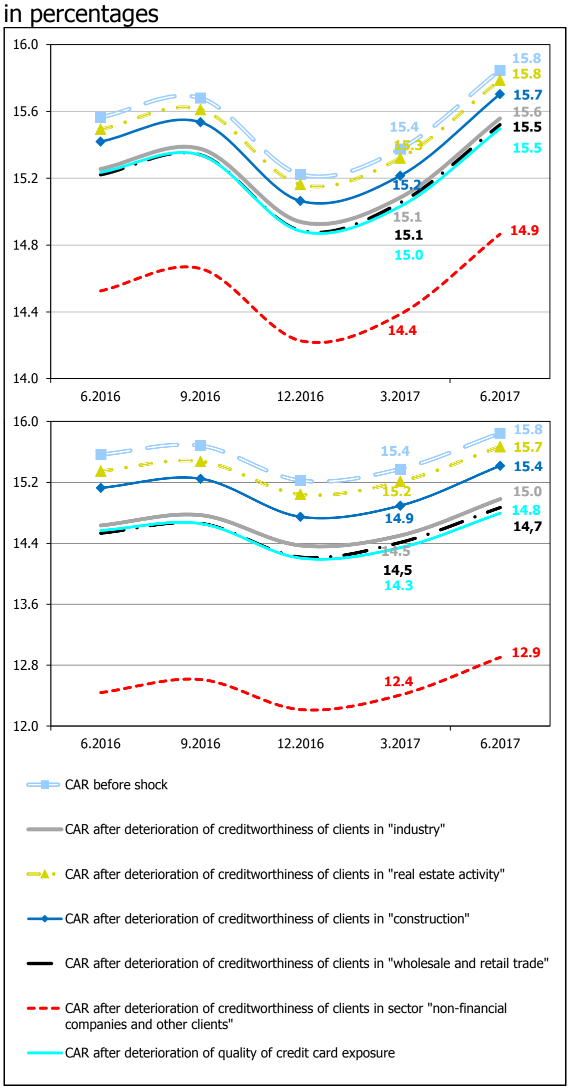
Graph 17
Share of the restructured loans in the total loans (above) and of the restructured regular loans in the total restructured loans (middle) and in the total non-performing loans (below), per sectors
in percentages



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

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 in the non-financial

Graph 18
Capital adequacy rate per specific sectors and credit products, in the first (above) and the second (below) simulation for both sectors together
in percentages



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

sector at the end of the second quarter of 2017 would be higher by 1.7 percentage points. With regards to the non-financial companies, this rate would be higher by 3.1 percentage points, which confirms the higher risk of the loans to corporate sector[16].

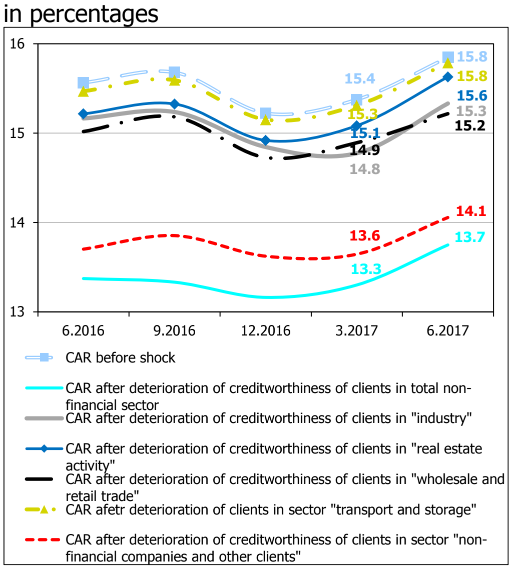
1.4 Stress-test simulation of the banking system's resilience to the increase of the credit risk

The stress-tests that are carried out on regular, quarterly basis, aim to examine the sensitivity of the banking system to worsening of the quality of specific segments of the credit portfolio. They include simulations 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 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 effect on the capital adequacy ratio is exercised by the simulated worsening 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.

The resilience of the banking system is also tested by implementing three hypothetical

[16] Per sectors, the biggest increase of the non-performing loans rate, in situation of hypothetical failure to implement the restructuring, is 3.2 percentage points ("Industry"), 2.9 percentage points ("Construction and real estate related activities") and 2.6 percentage points ("Wholesale and retail trade").

Graph 19
Capital adequacy rate before and after the three combined shocks, per sectors of the non-financial companies
in percentages



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

simulations of worsening of the quality of the credit portfolio to non-financial entities. More specifically, it is assumed that (1) all non-performing loans to non-financial entities are completely uncollectable, (2) the total regular restructured exposure is assigned 'non-performing' status, and (3) the banks do new restructurings of the regular part of the credit portfolio which, according to the volume, correspond to the amount of the restructured exposures that were assigned 'non-performing' status. In a case of this extreme simulation, the capital adequacy rate of the banking system is reduced by 2.1 percentage points (same as in the previous quarter). In this simulation, the biggest decline of the capital adequacy rate is noticed in the hypothetical worsening of the creditworthiness of the clients in sectors "Industry" and "Wholesale and retail trade", which confirms the exceptionally high sensitivity of the quality of the credit portfolio in a case of worse performance of the clients in these sectors.

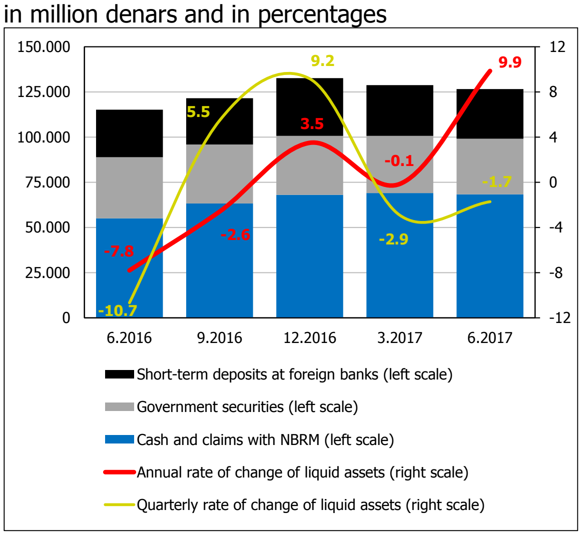
2. Liquidity risk

In the second quarter of 2017, the liquidity of the banking system, as one of the key factors of its stability and resilience to shocks, was maintained on satisfactory level. In the second quarter of 2017 the banks used one portion of the liquid assets for more intensive credit activity. The small quarterly decline of the liquid assets caused certain worsening of the liquidity ratios, which was a bit more emphasized in the liquidity ratios, but they continue to be at a satisfactory level. The shifts in the structure of the assets according their residual maturity were towards reduction of the assets and increase of the liabilities with shorter (smaller) 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).

2.1 Dynamics and composition of the liquid assets

The liquid assets[17] on the banking system level at the end of the second quarter of 2017 are 126,577 million denars and, compared to the end of the first quarter of 2017, are slightly declining by 1.7% i.e. by 2,213 million denars. The quarterly reduction of the liquid assets of the banks was equally distributed among the different financial instruments that make up the liquid assets – the correspondent accounts and the short-term deposits placed in foreign banks, the government securities and the cash assets and receivables from the National bank. In the second quarter of 2017, the banks used one portion of the liquid assets for more intensive credit activity (in a situation of growth of the credit support – both to the population and to the corporate sector), following the decline of the loans in the previous quarter.

Graph 20
Liquid assets, structure and growth
in million denars and in percentages

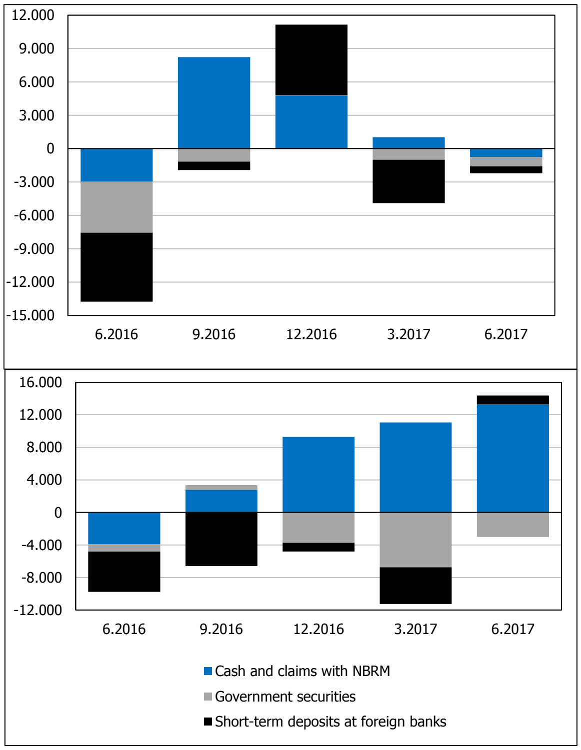


Source: NBRM, using data provided by the banks.

The cash assets and receivables of the banks from the National Bank still have the largest share in the liquid assets of the banks (54%), regardless of their quarterly decline of

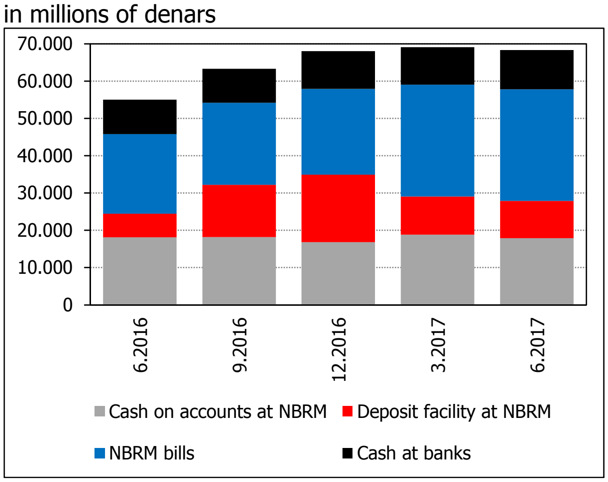
[17] The liquid assets include: 1) assets and claims on the National Bank, which include cash, assets on the accounts of banks with the National Bank, deposit facility with the National Bank and CB bills; 2) short-term deposits with foreign banks, including the assets of the banks on their correspondent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

Graph 21
Quarterly (above) and annual (below) absolute change of the liquid assets per specific components
in millions of denars



Source: NBRM, using data provided by the banks.

Graph 22
Structure of cash assets and receivables of the banks from National Bank, per specific instruments
in millions of denars



Source: NBRM, using data provided by the banks.

1.1%. In their frames, the investments of the banks in CB bills[18] of the National Bank have the greatest share, followed by assets of the banks kept on accounts and invested in deposits in the National Bank. The quarterly decline of the cash assets and receivables of the banks from the National Bank in the second quarter of 2017 is entirely due to the reduced assets of the banks on the denar account of the National Bank and the repayment of the matured foreign currency deposits by the National Bank[19], while their investments in the available deposits[20] increased.

In accordance with the reduced offer of government securities[21], the investments of the banks in domestic government securities quarterly declined by 3.1% (according their nominal value), which was entirely due to the reduction of the placements in treasury bills (by 966 million denars i.e. 4.8%), while the investments in domestic government bonds were slightly increased (by 11 million denars i.e. 0.1%). With that, the participation of the banks in the issued continuous[22] government securities, at the end of June, was reduced to 35.9% (decline of 1.3 and 6.1 percentage point on quarterly and on annual basis, respectively). Their share was exceeded by the share of the pension funds. Still, the characteristics of these financial instruments[23], in terms of their liquidity

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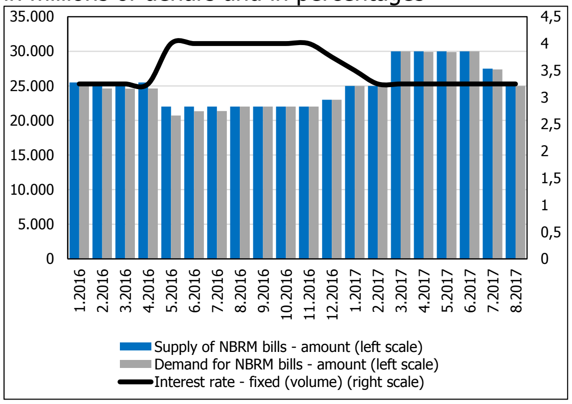
[18] The assets of the banks placed in CB bills remained unchanged in the second quarter of 2017, compared to the previous quarter of the year, in a situation of no-change in the interest rate (3,25%) and no-change in the amount offered.
[19] Since October 2016, the National Bank stopped organizing auctions for foreign currency deposits.
[20] The interest rates of these deposits remained unchanged in the second quarter of 2017 and were 0,25% for the overnight deposits and 0.5% for the seven-day maturity deposits.
[21] The net issued amount of the government securities is obtained as a difference between the amount realized on auctions of government securities for specific time period, and the amount of government securities that matures in the same time period – this is negative in the second quarter of 2017.
[22] Also considered as continuous government securities are the treasury bills and the government bonds issued on the domestic financial market, and excluded are the structural securities i.e. bonds for denationalization.
[23] Pursuant to the List of Securities for implementation of monetary operations ("Official Gazette of the Republic of Macedonia" No. 154/14), the government securities can be used as collateral instrument by the National bank when implementing the monetary operations, which provides opportunity for these securities to be used in the operational management with the liquidity. In the same

Graph 23
Offer and demand, including interest rates of the auctions of the CB bills of the National Bank
in millions of denars and in percentages

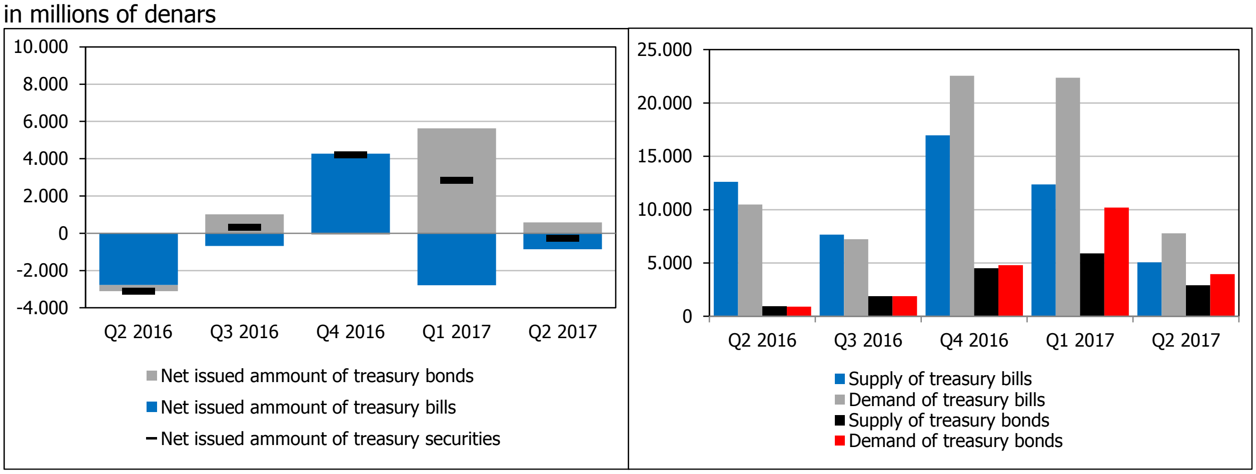


Source: National Bank.

but also in terms of their yield, including the modest offer of other alternatives for placement of the liquid assets – make them attractive for the domestic banks. Therefore, the investments in these financial instruments have important place in the structure of the liquid assets of the banks, with share of 24.3% at the end of the second quarter of 2017.

The structure of the government securities owned by the banks is still dominated by the participation of treasury bills (they participate with around two thirds), compared to the government bonds, which points out to a stronger tendency of the banks to invest in government securities with shorter residual maturity, but also shows the low level of liquidity on the secondary market of government securities. The government bonds owned by the banks are mainly continuous government bonds issued by the Republic of Macedonia, where half of them are two-year bonds. The investments in government bonds issued by other countries have

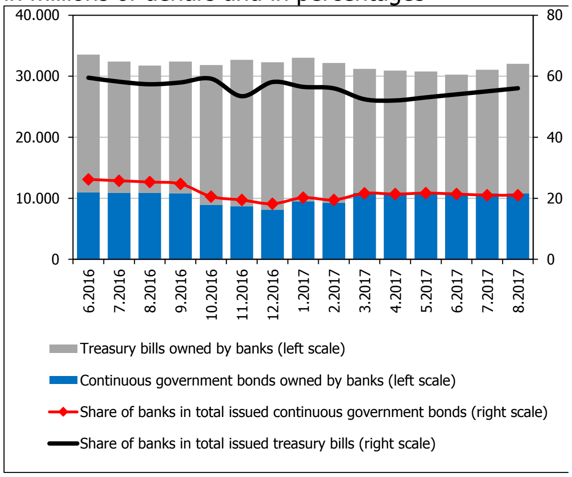
Graph 24
Net issued amount (left) and offer and demand (right) of the domestic government securities
in millions of denars



Source: Ministry of Finance and the National Bank.

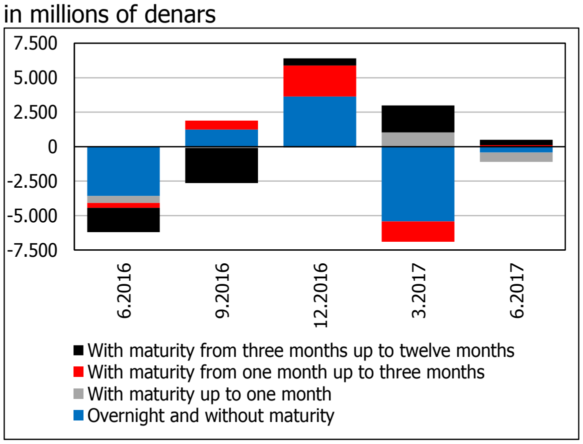
time, pursuant to item 47 of the Decision on the Methodology for Establishment of the Capital Adequacy ("Official Gazette of the Republic of Macedonia" No. 47/12, 50/13, 71/14, 223/15 and 218/16), risk weighting of 0% is applied on the receivables of the banks from the central Government of the Republic of Macedonia when calculating the assets weighted according to the credit risk, so for them the banks do not have to calculate the equity required to cover the credit risk.

Graph 25
Investments of the banks in domestic government securities
in millions of denars and in percentages



Source: Ministry of Finance and the National Bank, using information provided by the banks.
Note: the investments in government securities are shown according to their nominal value.

Graph 26
Quarterly change of the short-term assets in foreign banks
in millions of denars



Source: NBRM, using data provided by the banks.

modest participation of around 2% in the total portfolio of the government securities of the banks which is due to, *inter alia*, the negative yields on the international financial markets.

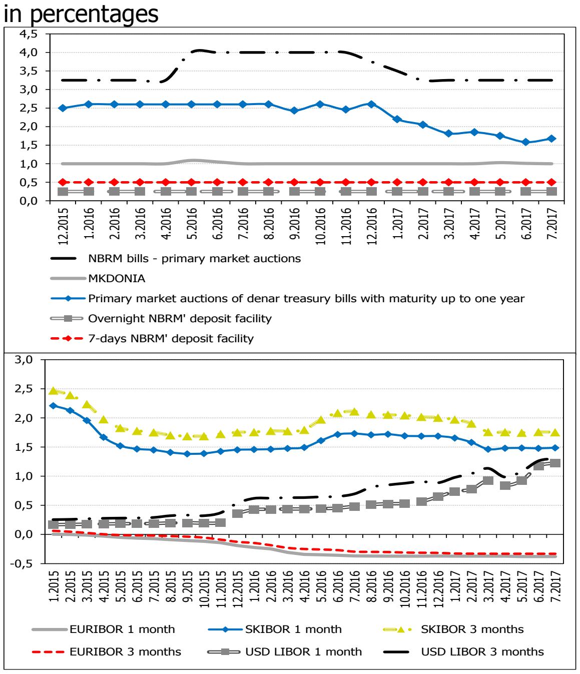
The most important foreign currency component of the liquid assets of the banks[24] are the assets placed in foreign banks with residual maturity of less than one year. In the second quarter of 2017 these assets continued to decline, albeit at significantly slower pace (by 615.5 million denars i.e. 2.2%), compared to the previous quarter of 2017. Regardless of the decline, the share of these assets in the total liquid assets remained stable (22%), which makes them possible to be used for both operational purposes and for management with the liquidity and the currency risk. Most of the short-term liabilities in foreign banks are placed overnight i.e. they are placed on correspondent accounts of the domestic banks abroad that have low yield, which can sometimes even be negative.

In the second quarter of 2017, the interest rates on the domestic inter-bank market (SKIBOR and MKDONIA) remained on relatively stable level, which corresponds to the no-change situation of the monetary policy of the National Bank in this period of the year[25]. As a consequence, the interest spread between the base interest rates (of the ECB and of the National Bank of the Republic of Macedonia), as well as between the indicative market interest rates (in Macedonia and in the Eurozone) also remained relatively stable.

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 second quarter of the year. Contrary to that, following the decision by FED to increase the base interest rate

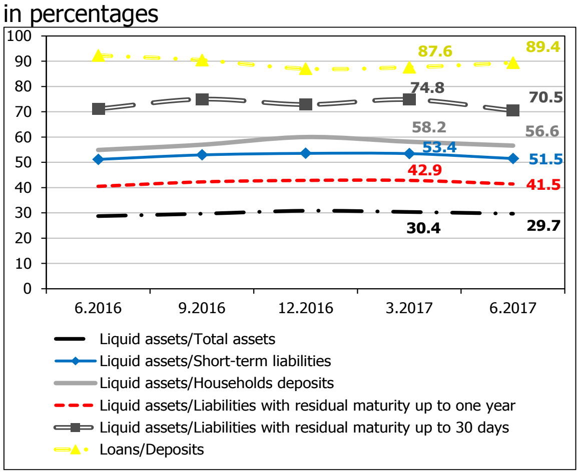
[24] The FX liquid assets include the short-term deposits in foreign banks, including funds on the correspondent accounts, investments in foreign government securities, the foreign currency cash and the placements in foreign currency deposits in the National Bank.
[25] Since the last change in February 2017, the interest rate of CB bills remains unchanged (3,25%).

Graph 27
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 28
Liquidity ratios of the banking system
in percentages



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

Per individual banks, as on 30 June 2017, the share of the liquid assets in the total assets is between 15.3% and 44.2%, with median of 26.4% March 2017: between 16.8% and 43.6%). The coverage of the short-term liabilities with liquid assets is between 33.4% and 89.4%, with median of 52% (March 2017: between 34.6% and 85.5%), and the coverage of the liabilities with contractual residual maturity of up to 30 days is between 37.9% and 227.2%, with median of 68.8% (March 2017: between 38.4% and 195.3%).

in June 2017 (by 25 base points), the inter-bank interest rate LIBOR for US dollar was increased.

2.2 Liquidity ratios

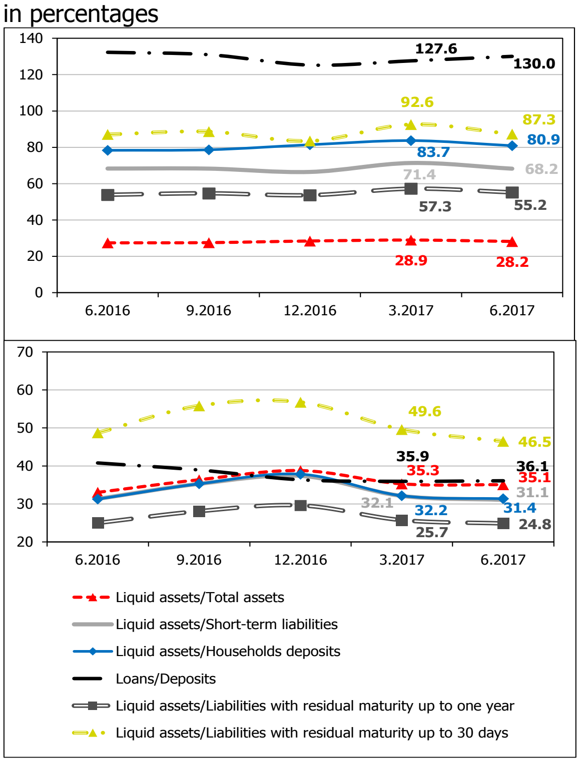
In the second quarter of 2017, **the liquidity ratios[26] of the banking system** feature slight worsening due to the reduced volume of liquid assets in the banks in this period of the year. However, the parameters of these ratios are on satisfactory level and they do not deviate from their common values. The biggest decline is in the ratio of coverage of the liabilities with residual maturity of up to 30 days with liquid assets, mainly because of the more significant increase of these liabilities, in a situation of simultaneous decline of the liquid assets. The ratio between the loans and deposits on banking system level is still below 100%[27], although it increased by 1.8 percentage points in comparison to the end of the first quarter of 2017, mainly because of the faster quarterly increase of the loans and less of the deposits.

In the second quarter of 2017, **the denar liquidity ratios**[28] featured slightly higher decline compared to the **foreign currency liquidity ratios**, because of the larger absolute quarterly decline of the liquid assets in denars. Nevertheless, the denar liquidity ratios continue to be on a high level compared to the foreign currency liquidity ratios.

The regulatory rates for liquidity of the banking system, shown as ratio between the assets and liabilities maturing in the next 30 days and 180 days, were maintained above the prescribed minimum of 1 (1.4 and 1.9, respectively).

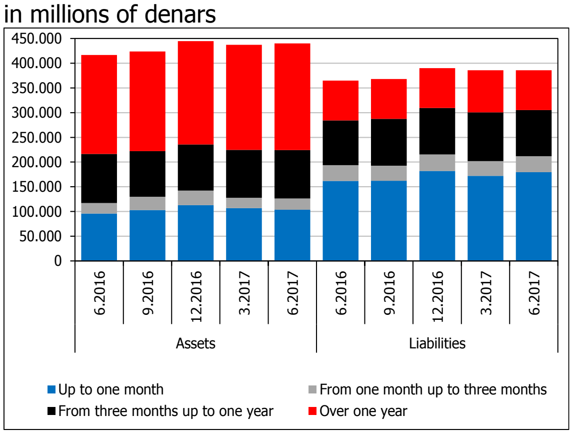
[26] The residential inter-bank assets and liabilities were not taken into account in the calculation of the liquidity ratios on the level of the banking system.
[27] Per individual banks, this ratio is between 61.6% and 125.8%, with median of 95.2% (March 2017: between 60.5% and 123.8%, with median of 94.1%). In five banks, that contributed with 26.1% in the total assets of the banking system on 30 June 2017, this ratio is greater than 100%.
[28] The receivables and liabilities with foreign currency clause are considered to be in denars, because their cash flow is in denars.

Graph 29
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.

Graph 30
Structure of the assets and liabilities according their contractual residual maturity
in millions of denars



Source: NBRM, using data provided by the banks.

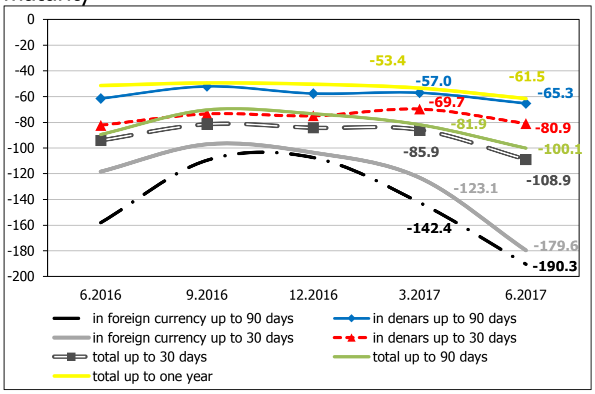
2.3 Maturity structure of the assets and the liabilities

In the second quarter of 2017, the changes in the residual structure of the assets are modest and they are about increase of the share of the assets with residual maturity of up to three months vs reduction of the share of the assets with residual maturity of less than three months. On the other hand, in the structure of liabilities of the banks, the share of the liabilities with greater residual maturity features reduction, on the account of the increase of the share of the liabilities with shorter residual maturity, which also corresponds to the emphasized inclination of the depositors to do their deposits on shorter terms[29]. The liabilities of the banks on sight and without determined maturity, that are included in the maturity bucket of up to seven days, contributed to additional deepening of the already high non-compliance between the assets and liabilities with contractual residual maturity of up to seven days.

These shifts in the structure of the assets and liabilities of the banks according their contractual residual maturity contributed towards increase of the relative importance of the summed negative difference between the assets and the liabilities, regardless of the residual maturity. The negative gap between the assets and liabilities with residual maturity of up to 30 days, expressed as ratio between the total assets with the same residual maturity, at the end of the second quarter of 2017 is deeper by 23 percentage points and is -108.9%, which is the highest level in the last several years. The deepening on quarterly basis is also noticed in the gap between the assets and liabilities with residual maturity of up to 90 days, and with residual maturity of up to one year. Although the absolute size of the non-harmonization between the assets and the liabilities depending on their

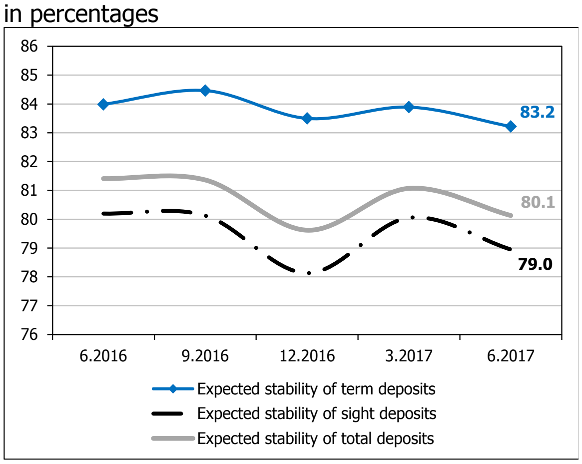
[29] In the second quarter of 2017, the growth of the deposits potential of the banking system was almost entirely due to the increase of the sight denar deposits of the households.

Graph 31
Relative significance of the summed difference between the assets and liabilities of the banks according to the residual maturity
percentage of the summed assets with same residual maturity



Source: NBRM, using data provided by the banks.

Graph 32
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.

currency characteristics is similar (for both segments of up to 30 and up to 90 days), still the relative size of the gaps is by far the largest in their foreign currency component.

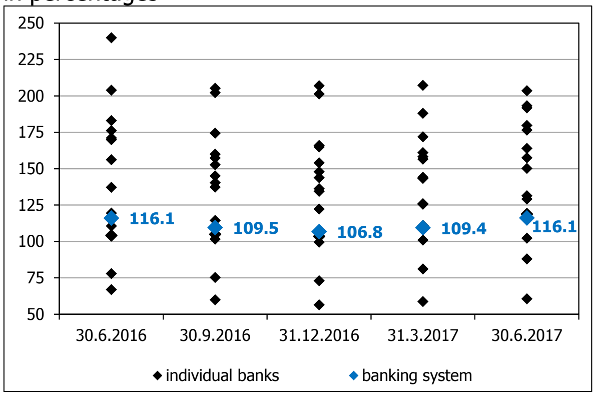
In the second quarter of 2017 the banks continue to expect that the deposits will have high stability. Hence, at the end of the second quarter of 2017, the banks were expecting that 83.2% of the termed deposits to remain in the banks. Similar stability is also expected with the sight assets, including 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).

2.4 Stress-simulations for liquidity shocks

In the light of the satisfactory level of the liquid assets available to the Macedonian banks, the results of the simulations for liquidity shocks carried out using the situation as on 30 June 2017, point out to stable liquid position of the Macedonian banking system. The full utilization (116.1% as on 30 June 2017) of the liquid assets would happen only in a situation of extreme liquidity shock, which includes combined outflows from a number of different sources of financing[30] outside the banks. If, for the purpose of this simulation, we expand the usual inclusion of the liquid assets to also cover other financial instruments[31] owned by the banks, which are considered to be quickly and easy-to-collect by the banks, or converted into cash assets by the

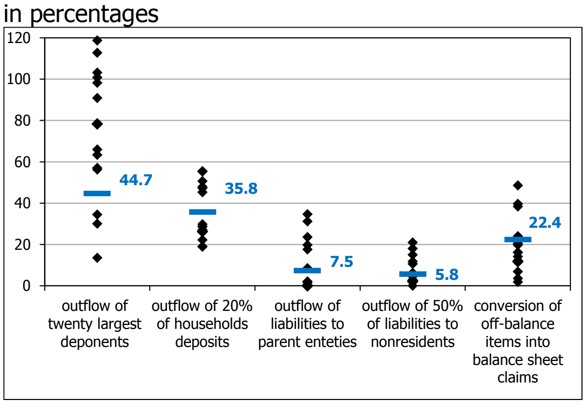
[30] The simulation assumes outflow of deposits of the twenty largest depositors, 20% of household deposits, liabilities to parent entities with the exception of liabilities on subordinated instruments and hybrid capital instruments that are excluded from the simulation as according to the regulations 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.
[31] 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 33
Reduction of the liquidity assets in the simulation of combined liquidity shocks (for all shocks)
in percentages



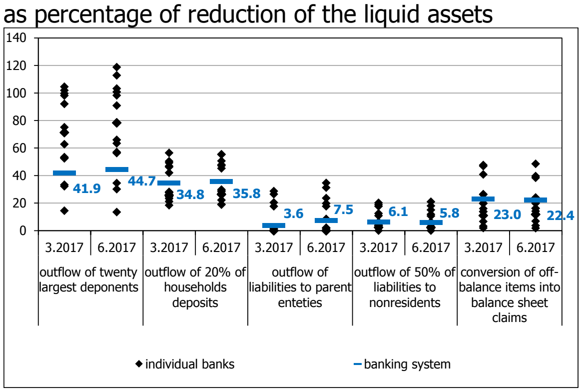
Source: Calculations by NBRM, using data provided by the banks.

Graph 34
Reduction of the liquidity assets in the individual shocks, in the simulation of combined liquidity shocks
in percentages



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

Graph 35
Contribution of specific shocks to the reduction of liquidity assets in the simulation of combined liquidity shocks
as percentage of reduction of the liquid assets



Source: NBRM, using data provided by the banks.

banks, in that case the decline of the liquid assets on a level of the banking system in this simulation would be smaller.

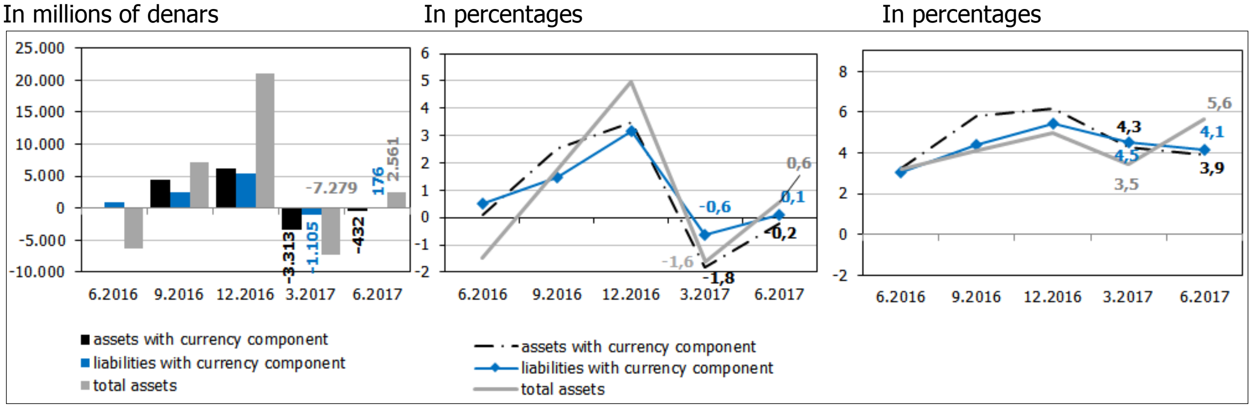
When applying individual simulations of liquidity shocks, the banks have sufficient liquid assets to pay-off the simulated cash outflows. In this regard the most relevant are the simulations of deposits outflows of the 20 largest depositors and the outflow of 20% of the household deposits. The former 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 outflows of the liabilities towards the parent enterprises without a treatment of capital instruments – have modest influence.

3. Currency risk

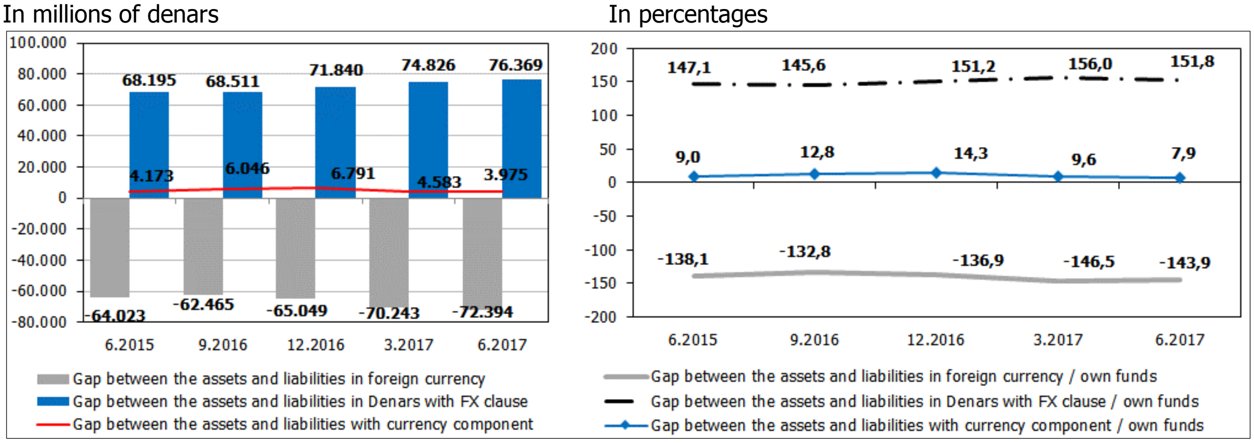
In the second quarter of 2017 there was reduction in the exposure of the banking system to currency risk, measured through the participation of the gap between the assets and liabilities with currency component in the own assets, which declined to a level of 7.9%. There was also reduction of the share of the receivables and liabilities with currency component in the total assets and liabilities of the banking system. As on 30 June 2017, all banks comply to the prescribed limit for aggregate foreign currency position, which is 30% of own assets. The relevance of the currency risk is reduced in a situation of accepted strategy for stable nominal foreign currency exchange rate of the denar in relation to the euro, because the euro continues to be the dominant foreign currency in the balances of the banks.

Graph 36
Quarterly (left and middle) and annual (right) change in the assets and liabilities with currency component
In millions of denars In percentages In percentages



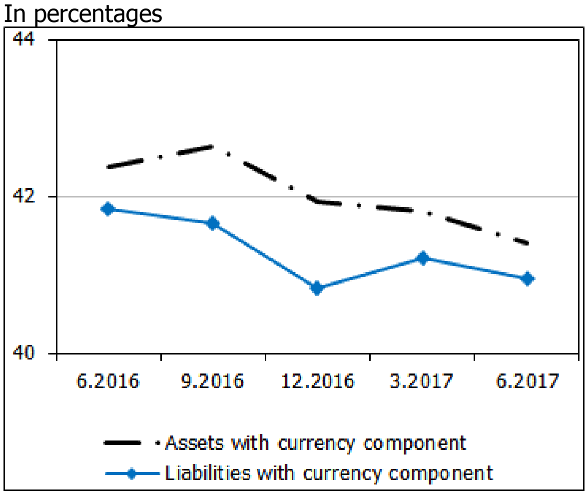
Source: NBRM, using data provided by the banks.

Graph 37
Gap between the assets and liabilities with currency component, structure (left) and share in the own funds (right)
In millions of denars In percentages



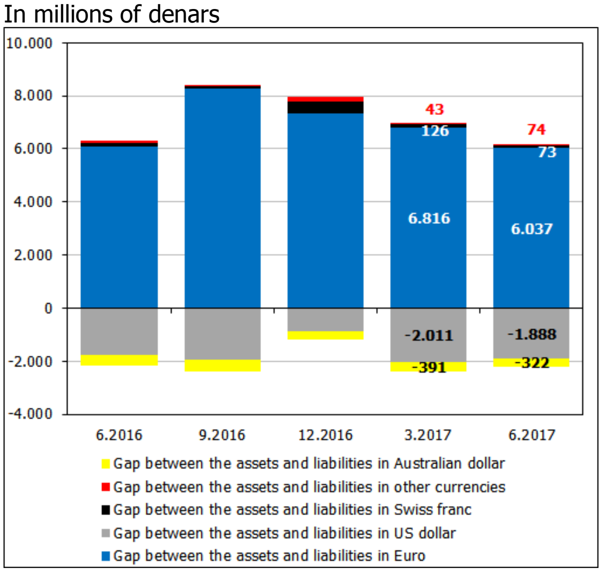
Source: NBRM, using data provided by the banks.

Graph 39
Share of the assets and liabilities with currency component* in the total assets of the banks
In percentages



Source: NBRM, 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.

Graph 38
Currency structure of the gap between assets and liabilities with currency component
In millions of denars



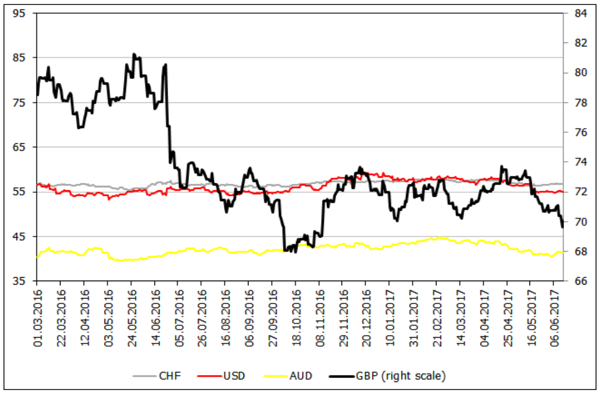
Source: NBRM, using data provided by the banks.

Following the decline in the first quarter of 2017[32], the gap between the assets and the liabilities with currency component declined again in the second quarter of the year by 608 million denars (13.3%). The narrowing of the gap is due to the quarterly decline of the assets with currency component (by 432 million denars i.e. by 0.2%) in a situation of simultaneous increase of the liabilities with currency component (by 176 million denars i.e. by 0.1%)[33]. This narrowing of the gap, in a situation of more significant quarterly growth of the own assets, contributed towards reduction of the ratio between the gap and the own assets of the banking system by 1.7 percentage points. The decline of the assets in currency component, in a situation of simultaneous increase of the total assets in the banking system by 2,561 million denars (0.6%), contributed towards reduction of its share in the total assets of 0.4 percentage points. On the other hand, the slower growth of the liabilities with currency component compared to the growth of the total liabilities, contributed towards quarterly reduction of the share of the liabilities with currency component by 0.3 percentage points.

Analyzed per individual currencies, the narrowing of the gap between the assets and the liabilities with currency component originates from the euro, the positive gap of which was reduced by 779 million denars. The narrowing of the gap in euros is due to the reduced placements of the banks in deposits and current accounts designated in euros, in a situation of simultaneous increase of the liabilities in relation to deposits from non-residents in this currency.

[32] In the first quarter of 2017 this gap was reduced by 2,208 million denars (32.5%).
[33] The decline of the assets with currency component is mainly due to the quarterly reduction of the placements of the banks in deposits and on current accounts in foreign banks. On the other hand, the quarterly growth of the liabilities with currency component is due to the increase of the liabilities on the basis of deposits from non-residents and current accounts of individuals and private non-financial companies.

Graph 40
Exchange rate of the denar against the British pound, the US dollar, the Swiss frank and the Australian dollar
In denars



Source: NBRM.

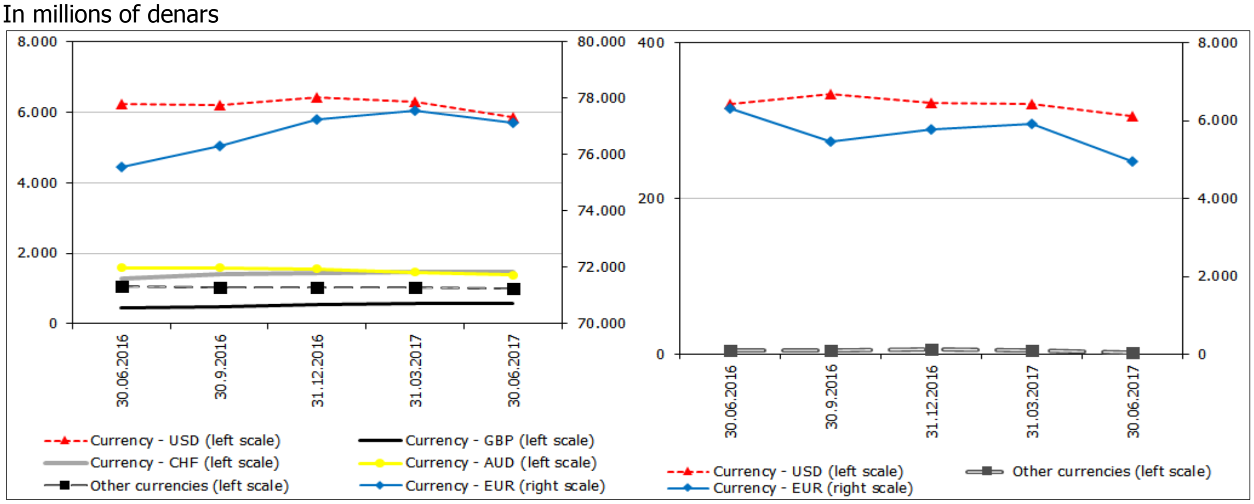
The structure of the assets and liabilities with currency component continues to be dominated by the euro – over 87%. The applied Strategy of Stable Exchange Rate of the Denar in Relation to the Euro is of exceptional importance for the low probability of exposure of the banks to currency risk. Other currencies have relatively low presence in the assets and liabilities of the banks and the volatility of their values are not considered risk for the domestic banking system and its stability.

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

Currency	31.03.2017		30.06.2017	
	Assets	Liabilities	Assets	Liabilities
Euro	89,0	87,4	88,9	87,5
US dollar	6,7	8,0	6,7	7,9
Swiss franc	1,8	1,8	1,8	1,8
Australian Dollar	0,9	1,2	0,9	1,1
British pound	0,6	0,7	0,6	0,7
Other	1,0	0,9	1,0	1,0
Total	**100,0**	**100,0**	**100,0**	**100,0**

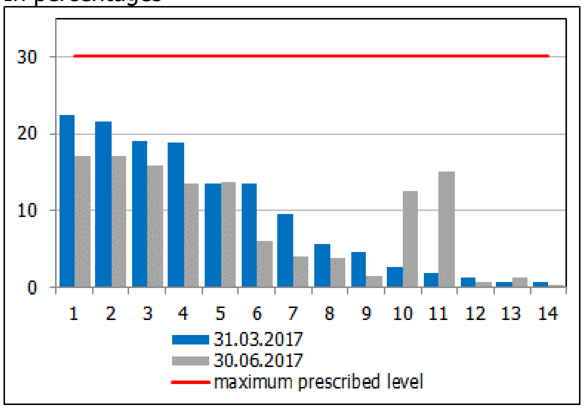
Source: NBRM, using data provided by the banks.

Graph 41
Deposits in foreign currency* of the 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 42
Aggregate currency position to own funds ratio, by bank
In percentages



Source: NBRM.

As on 30 June 2017, all banks complied with the prescribed aggregate limit for 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

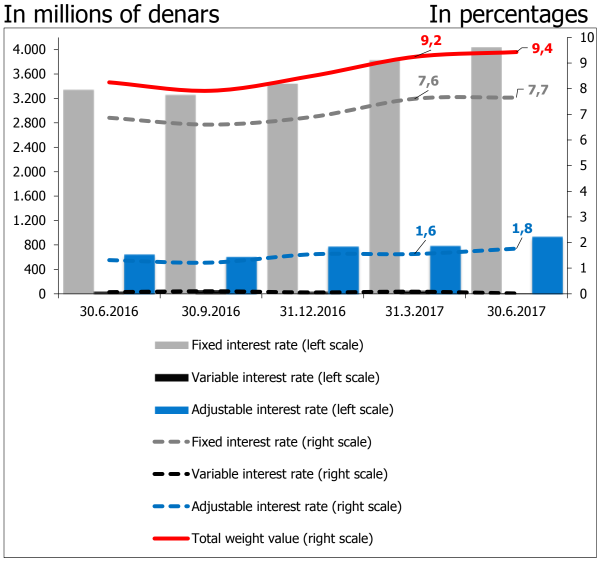
Items	Number of banks										
	Open currency position by currency / own funds										Aggregate currency position / own funds
	Euro		US Dollar		Swiss franc		Australian Dollar		Other		
	Long	Short	Long	Short	Long	Short	Long	Short	Long	Short	
under 5%	3	3	9	5	7	6	6	1	10	2	6
from 5% to 10%	1								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

Source: NBRM, using data provided by the banks.

4. Interest rate risk in the banking book

At the end of June 2017, the exposure of the banking system to interest rate risk in the banking book featured minimal increase, which was due to the growth of the interest-sensitive items with fixed interest rate. In the second quarter of this year we can also notice reduced use of the adjustable interest rates[34], which is especially visible in the sight liabilities. The continuation of this trend in the future period will contribute towards reduction of the reputational and legal risks, and the banks should strengthen their capacities for managing interest rate risk in the banking book.

Graph 43
Total weighted value of the banking book*, per type of interest rate, in absolute amount (left) and in relation to the own assets (right)
In millions of denars In percentages

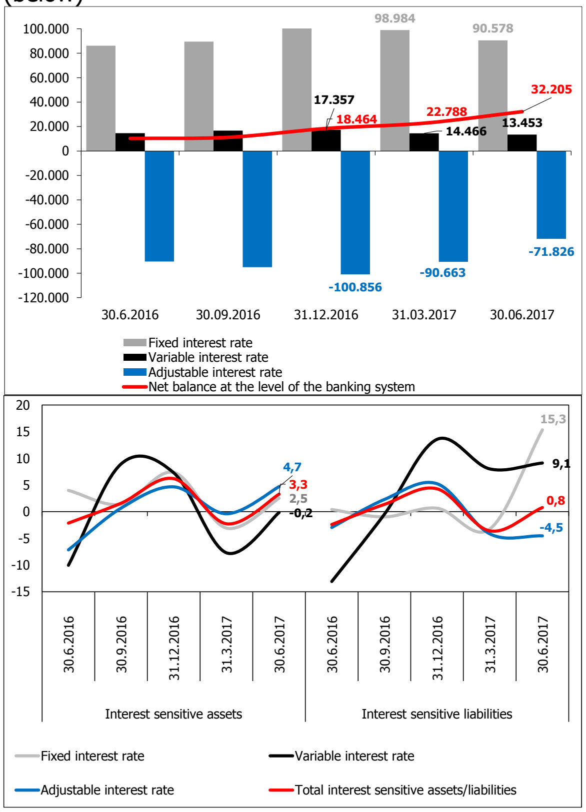


Source: NBRM, using data provided by the banks.
**The total weighted value of the banking book refers to the potential loss of the economic value of this portfolio, in a case of hypothetical unfavorable interest

In the second quarter of 2017, the potential loss of the economic advantage of the banking book, in a situation of assumed unfavorable interest rate shock of ±2 percentage points, was increased by only 0.2 percentage points and reached 9.4% of the own assets of the banking system. The largest contribution in this quarterly increase is provided by the items with fixed interest rate. If analyzed at a level of individual banks, the ratios between the potential losses of the economic values of the items in the banking book and own assets of the banks vary between 1.1% to 14.4%, which is below the level of 20%[35].

[34] The interest rates are variable on the basis of decision by a relevant body of the bank.
[35] According to the regulation, in a situation when the ratio between the total weighted value of the banking book and the own assets of the bank exceeds 20%, the bank is obliged to propose measures for reduction of this ratio, and the National Bank can also require from the bank to allocate specific capital amount for covering of the interest rate change risk in the banking book.

Graph 44
Interest-sensitive assets and liabilities according to the type of interest rate, gap (above) and quarterly change (below)
In millions of denars (above) and in percentages (below)

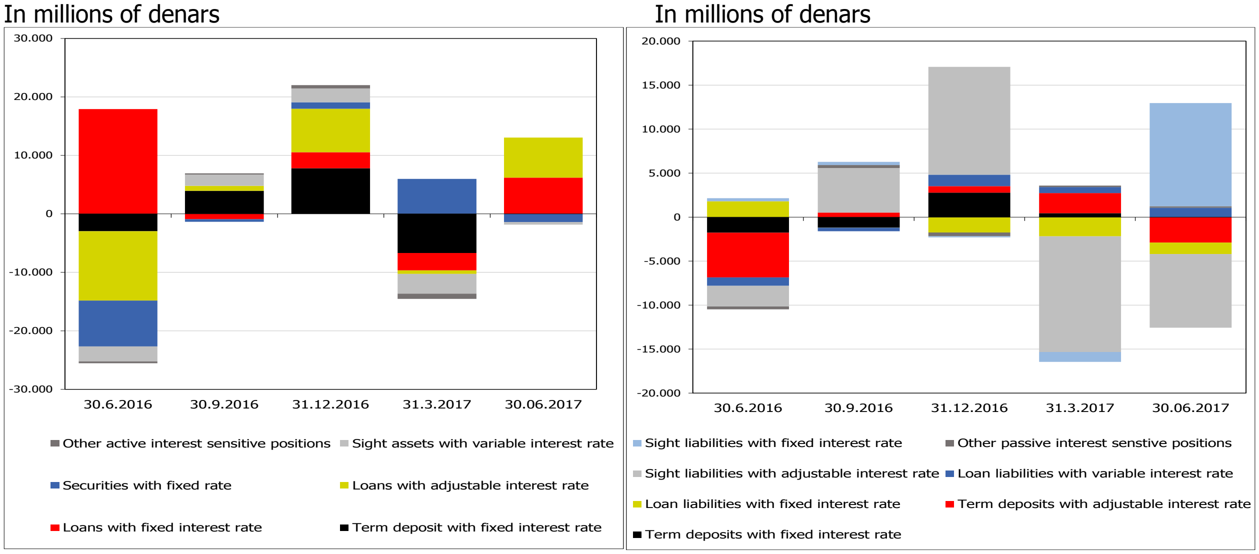


Source: NBRM, using data provided by the banks.

The gap between the interest-sensitive assets and liabilities significantly increased in the second quarter of 2017 by 41.3% (9,417 million denars), which is due to the smaller negative gap at the positions (items) with adjustable interest rates (by 18,837 million denars) vs narrowing of the positive gap in the items with fixed interest rates (by 8,406 million denars) and with variable interest rates (by 1,013 million denars). The narrowing of the gap in the items with adjustable (negative gap) and fixed interest rates (positive gap) is mainly result of the tendencies in the liabilities related to transaction accounts and sight assets/ deposits. More specifically, the sight liabilities with adjustable interest rates are declining for a second consecutive quarter (in this quarter by 8,379 million denars i.e. 7.4%), partially because of the transformation of these liabilities from items with adjustable interest rates into items with fixed interest rates. This is related to the joint efforts of the banks and the National Bank (that accelerated in the middle of the year) to reduce the use of the adjustable interest rates in the banking portfolio. Furthermore, in the first semester of 2017 there is decline of the sight liabilities, as interest-sensitive item, in the balance sheets of the banks.

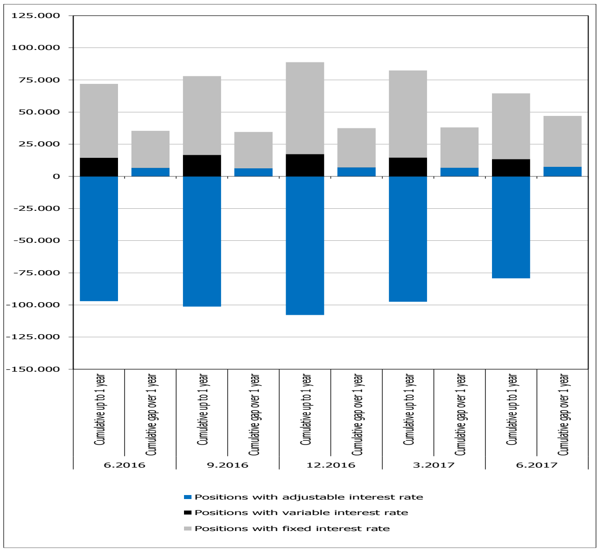
Graph 45
Quarterly changes of the interest-sensitive assets (left) and liabilities (right), according to the type of instrument and type of interest rate
In millions of denars

In millions of denars



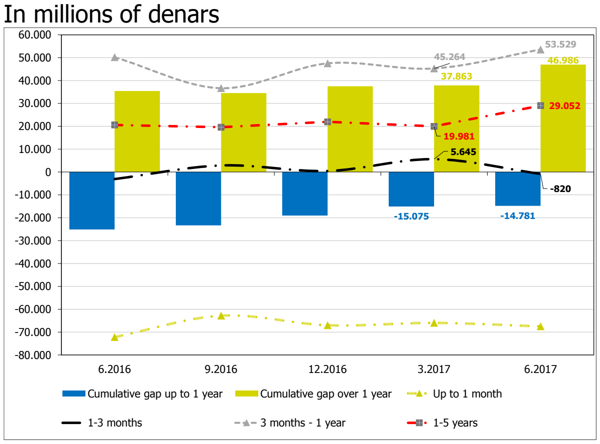
Source: NBRM, using data provided by the banks.

Graph 46
Structure of the gaps between the active and passive items, per type of interest rate
In millions of denars



Source: NBRM, using data provided by the banks.

Graph 47
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.

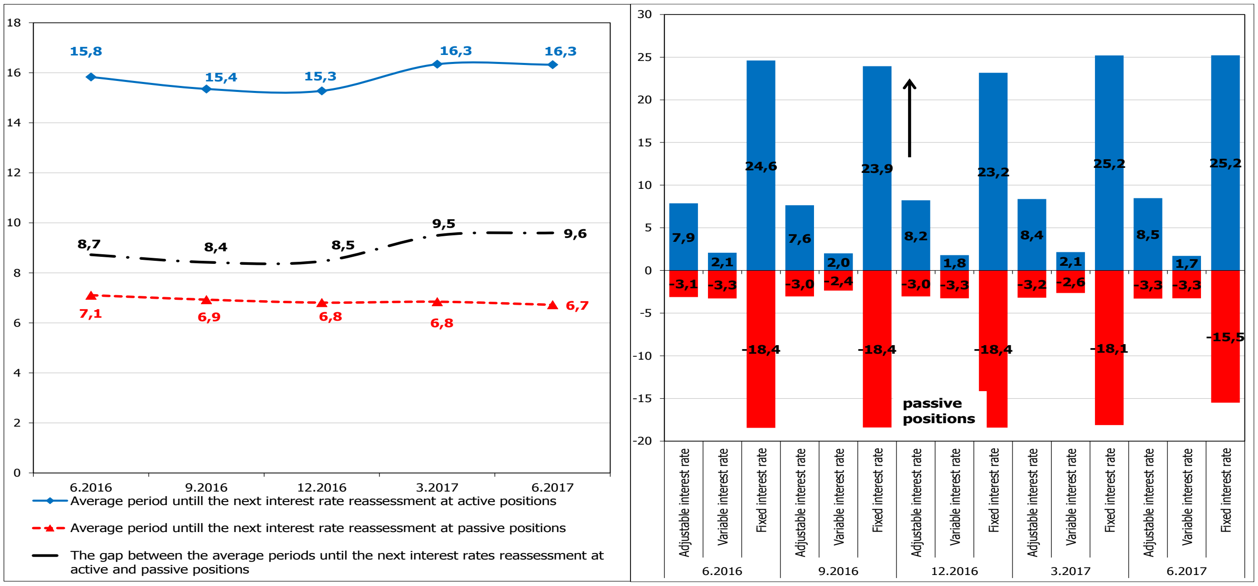
On the other hand, there was decline in the positive gap between the items with variable interest rate, primarily due to the increase of the liabilities related to loans with variable interest rate by 14.5%.

The positive gap between the average periods till next reevaluation of the interest rates in the active and passive positions points out to exposure of the banks to risk of future increase of the interest rates, especially taking into account the fact that the positive gap is primarily due to the gap in the items with fixed interest rates. In the second quarter of 2017, the banks reduced the average period till next reevaluation of the interest rates for the passive items, while this period remained unchanged for the active interest-sensitive items. If analyzed per specific types of interest rates, we can notice the reduction of the average period of reevaluation of the interest rates for the liabilities of the banks with fixed interest rate as a result of the increase in the sight liabilities with fixed interest rate. With regards to other interest-sensitive items, there are no significant quarterly changes in the average period till next reevaluation of the interest rates.

The increase of the positive gap between the total interest-sensitive assets and liabilities stems out of the positive gap of the assets and liabilities whose next reevaluation of the interest rates[36] (that is, with residual maturity deadline among the items with fixed interest rates) is a period longer than one year. This gap widened in the second quarter of 2017 as a result of the items with fixed interest rates (mainly the approved loans).

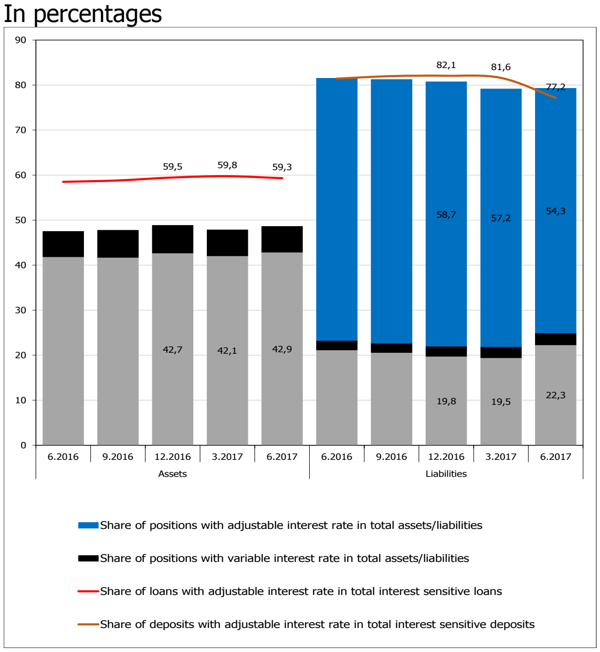
[36] The residual maturity deadline is taken into consideration in the items with fixed interest rates.

Graph 48
Average period till next reevaluation of the interest rates*, total (left) and per type of interest rate (right)
In number of months



Source: NBRM, using data provided by the banks.
* The average period till next reevaluation of the interest rates is calculated as share of the amount of the active/ passive eat of each of the maturity blocks, in the total interest-sensitive assets/ liabilities, multiplied by the maturity of each maturity block, expressed in months. In items that have fixed interest rate, the average period till next reevaluation pertains to the average residual maturity deadline.

Graph 49
Structure of assets and liabilities, per type of interest rate
In percentages



Source: NBRM, using data provided by the banks.

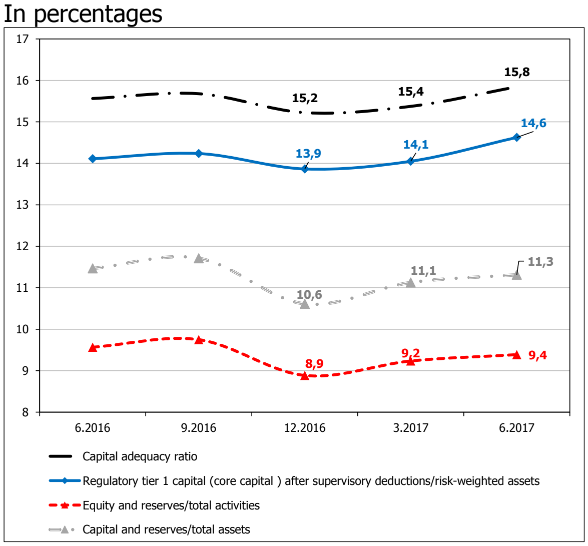
The adjustable interest rates are still quite present in the operations of the banks, especially on the side of sources of financing, where they are dominant. However, in the second quarter of 2017 the share of the interest-sensitive liabilities with adjustable interest rates declined primarily due to the mentioned decline in the sight liabilities. In other words, in the first quarter there was reduction in the use of the adjustable interest rates primarly towards the sight deposits (that have high share in the interest-sensitive liabilities), while on the side of the assets there is still no proper transformation. The gradual abandoning of the use of adjsutable interest rates will reduce the presence of the legal and reputational risk for the banks, and the indirect credit risk will continue to be present. In addition, the use of the fixed interest rates that will not be possible to change in the agreed maturity deadline, regardless of the changes of the market interest rate, or the use of variable interest rates the change of which will be done on the basis of market parameters, points out to the need for the banks to increase their capacities for managing the risk related to changes 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 indicators for solvency and capitalization of the banking system improved in the second quarter of 2017, which is mainly due to the increase of the capital items, because of the reinvesting of the profit made in the previous year. The risk-weighted assets are also featuring quarterly increase which is mostly due to the increased credit activity of the banks to households, but also to non-financial entities. Most of the quarterly growth of the own assets was used by the banks to increase the "available" capital above the minimum level required to cover the risks and to maintain the capital buffer for protection of the capital. The results of the stress-test simulations using the data as on 30 June 2017 are better in comparison to the second quarter.

Graph 50
Solvency indicators
In percentages



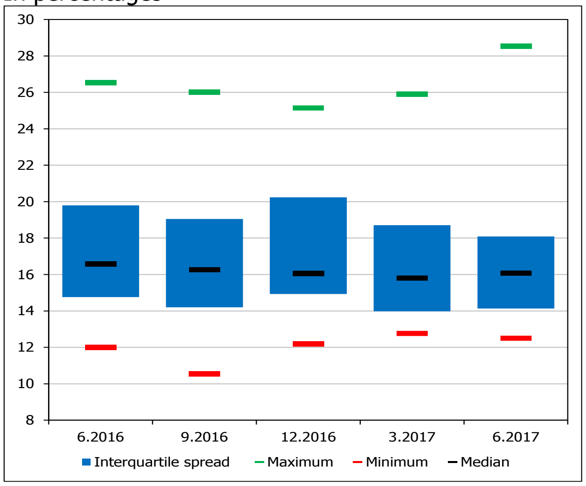
Source: NBRM, using data provided by the banks.
* Starting from March 2017, the domestic regulatory requirements for solvency and capital adequacy of the banks comply to the Basel 3 requirements. Presently, the banks do not have additional core capital i.e. core capital is entirely consisted of instruments pertaining to the more quality regular core capital.

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

At the end of the second quarter of the year, all solvency indicators of the banking system were improved, which was due to the higher quarterly growth rates of the capital positions (items), compared to the activities of the banking system. In this regard, the capital items of the banking system accelerated the growth (except of the capital and reserves – their growth was slowed[37]) which varied between 2.3% and 4.9% in the second

[37] The slowed down quarterly growth of the capital and the reserves stems out of the decline in the retained profit available for distribution to shareholders in one bank that belongs to the group of large bank, because of the payment of dividend to the shareholders of this bank. The profit available for distribution to shareholders is not part of the core capital and the own assets of bank, hence the changes in the profit have no effect on the size of these capital items.

Graph 51
Measures for distribution of the capital adequacy rate in the banking system
In percentages



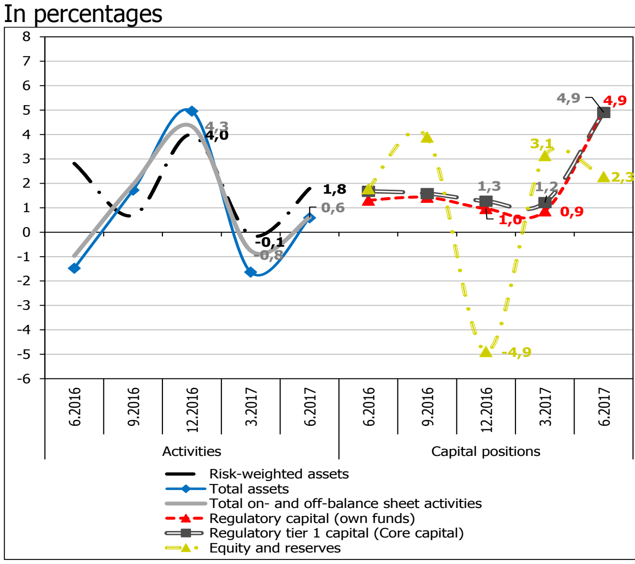
Source: NBRM, using data provided by the banks.

quarter of 2017[38]. The growth of the capital items is mainly due to the reinvested profit generated in 2106. The risk-weighted assets were increased by 1.8% i.e. 5,824 million denars) as a result of the increase of the credit-risk-weighted assets (their growth was 6,593 million denars i.e. 2.3%) which, in turn, is mainly due to the higher credit activity of the banks with households, but also due to the solid growth of the loans to non-financial companies in this quarter.

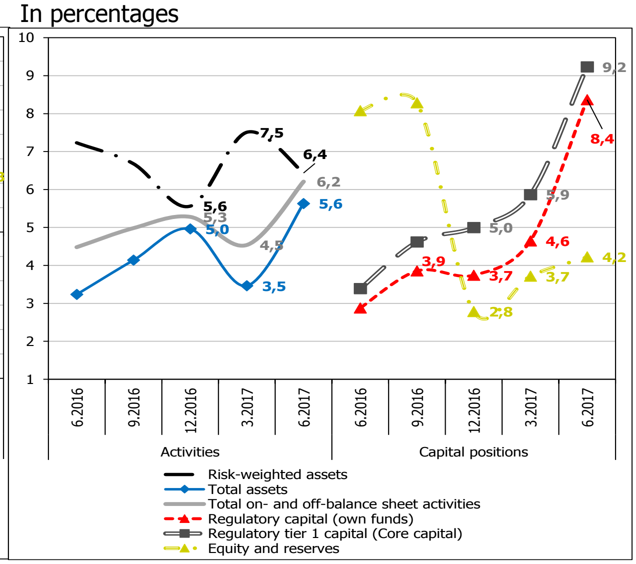
Analyzed per individual banks, the capital adequacy rate as on 30 June 2017 in all banks is higher than 12%[39], and this rate was increased in eight banks (which is also based on the increase of the own assets in relation to the quarterly growth of the risk-weighted assets).

Graph 52
Change rates of the components that make up the solvency ratios, quarterly (left) and annual (right)

In percentages



In percentages



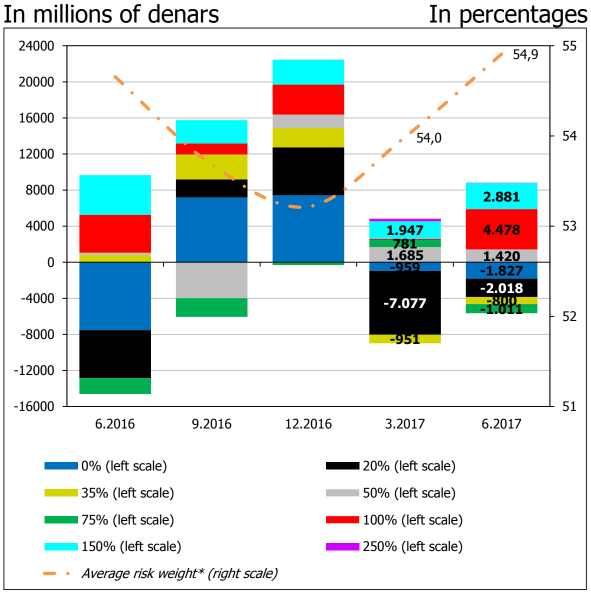
Source: NBRM, using data provided by the banks.

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 0.9 percentage

[38] The capital and the reserves are increased by 2.3%, and the core capital and the own assets featured quarterly growth of 4.9%.

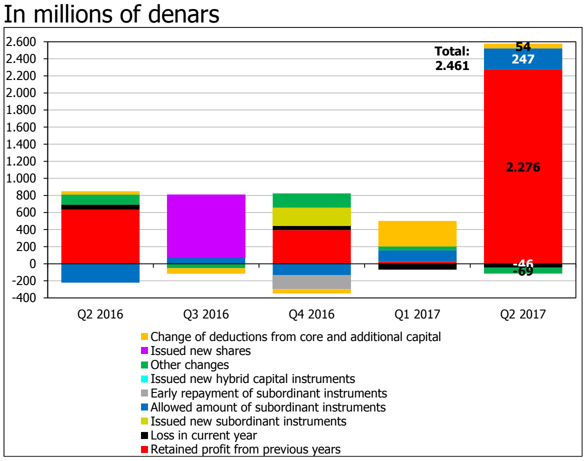
[39] Since 31 March 2017, the banks are required to maintain a capital buffer, for preservation of the capital at 2.5% ratio from the risk-weighted asset, which will accordingly increase the capital adequacy rate. Furthermore, seven banks, designated by the National Bank as banks significant for the 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 31.3.2018

Graph 53
Quarterly changes in the total balance sheet and off-balance sheet exposure, per risk weights
In millions of denars In percentages



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

Graph 54
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 assets.

points and totaled 54.9% as on 30 June 2017. This increase of the average weight of riskiness is mainly because of the increase of the receivables that are included in the calculation of the credit-risk-weighted assets with a risk weight of 100% и 150% (receivables from other companies and small loans portfolio), in a situation of simultaneous decline of the receivables with risk weight of 20% (receivables from banks) and 0% (receivables from the state).

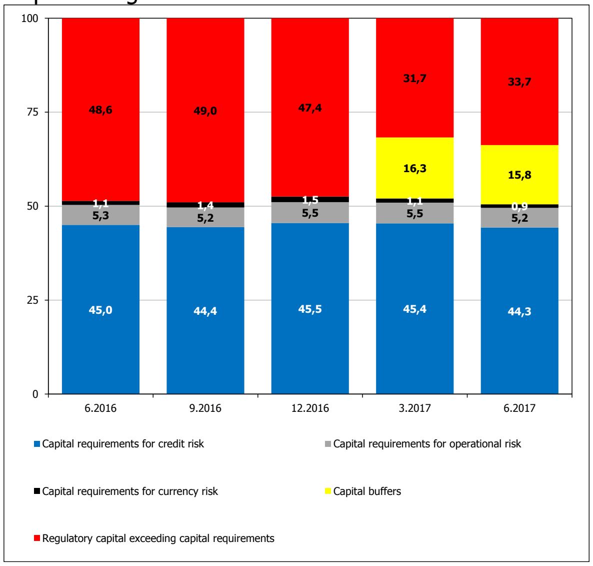
5.2 Movements (tendencies) and quality of the own funds/assets of the banking system

In the second quarter of 2017, the own assets of the banking system increased by 2,461 million denars i.e. 4.9%. The quarterly growth of the own assets is mainly due to the retention of the profit generated in 2016, in the capital funds of the banks. More specifically, in the second quarter of 2017 a total of nine banks reinvested (part of) the 2016 profit into own assets.

The quality of own funds is at a high level, with participation of the regular core capital (which is the most quality component of the own assets) in the total own assets of 91.4%.

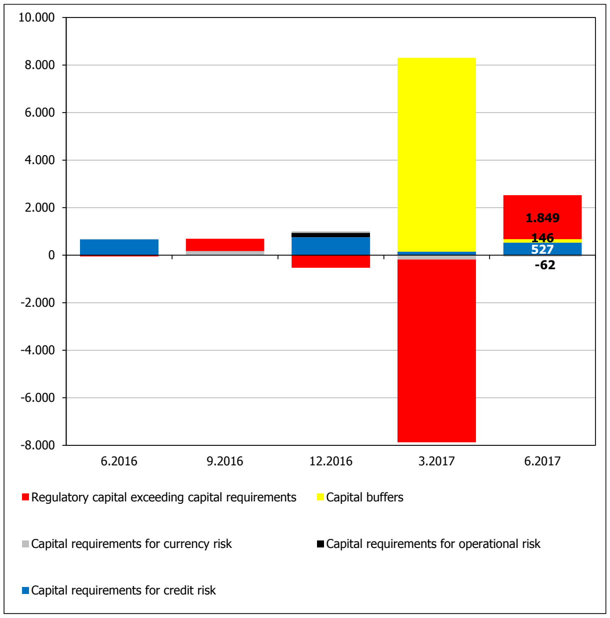
More details about the level of own funds/assets by groups of banks are included in Annex 38.

Graph 55
Structure of own assets, according to their use for covering of specific risks and for maintaining the required capital buffers*
In percentages



Source: NBRM, using data provided by the banks.
*The banks are required to ensure, on ongoing basis, maintenance of the capital buffer for protection of the capital.

Graph 56
Quarterly changes in the own assets, according to their use to cover specific risks and for maintenance of the required capital buffers
In millions of denars



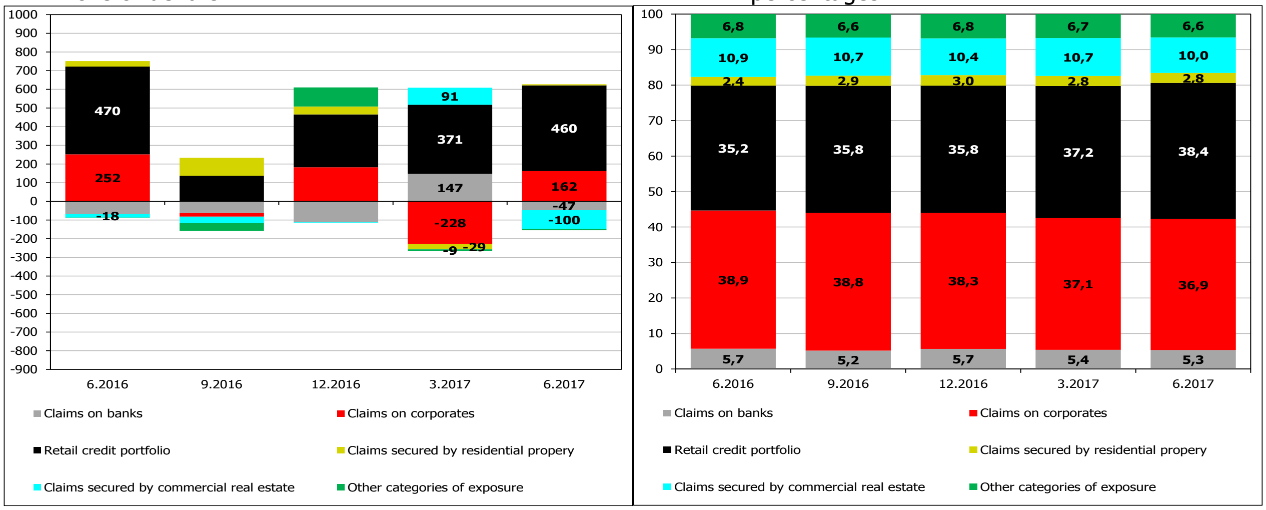
Source: NBRM, using data provided by the banks.
*Since 31 March 2017, the banks are required to maintain capital buffer for protection of the capital.

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

The quarterly growth of the own assets provided for increase of the "available" capital above the minimum level required for covering of the risks and maintenance of the capital buffer for protection of the capital (by 1,849 million denars i.e. 11.6%). The capital requirements for covering of the risks feature growth (by 466 million denars i.e. 2%), which is due to the increase of the capital required for covering of the credit risk (by 527 million denars i.e. 2.3%). The increase of the regulatory capital required for covering of the credit risk is mainly due to the increase of the portfolio of small loans and receivables from other companies. Contrary to that, the capital required for covering of the currency risk had a quarterly decline of 62 million denars i.e. 11.1%), because of the narrowing of the gap between the assets and liabilities with currency component (primarily those with euro component). The "available" own assets above the minimum level required for covering of the risks and for maintenance of the capital buffer for protection of the capital are around one third (33.7%) of the total own assets of the banks.

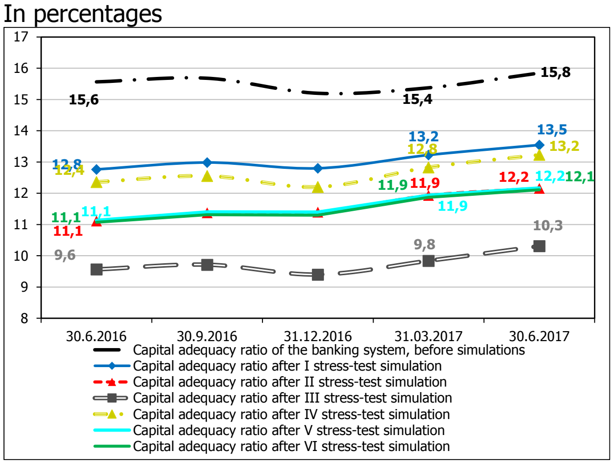
More details on the capital requirements for covering of the risk and the capital adequacy rate, by groups of banks, are included in Annex 39.

Graph 57
Quarterly changes (left) and structure (right) in 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.

Graph 58
Simulation results – credit and combined shocks
In percentages



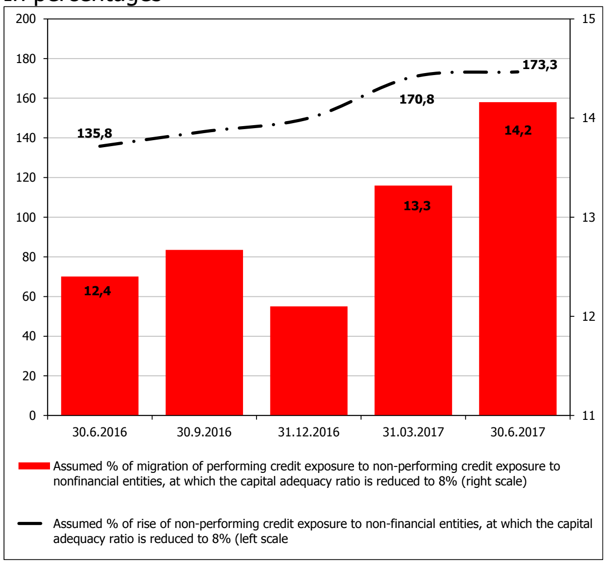
Source: NBRM, based on the data submitted by banks.
*Stress testing includes the following simulations:
I simulation: Increasing the non-performing credit exposure to non-financial entities by 50%;
II simulation: Increasing the non-performing credit exposure to non-financial entities by 80%;
III simulation: Migration of 10% of the regular to a non-performing 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.

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

The results of the stress-testing show improved resilience of the banking system and of the individual banks in the Republic of Macedonia to simulated shocks, compared to 31 March 2017. 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 hypothetical 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

Graph 59
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, based on the data submitted by banks.

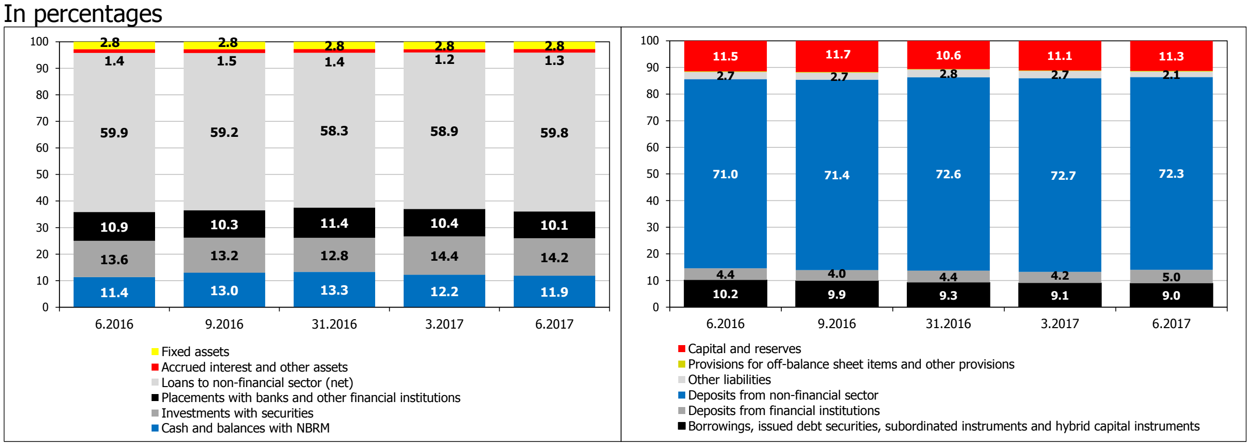
entities of 173.3% i.e. migration of 14.2% from regular to non-performing credit exposure, in order for the capital adequacy of the banking system to drop to the level of 8%. These extreme simulations would result in almost tripling of the share of non-performing exposure in the total credit exposure to non-financial entities (from 5.7% to 15.7%).

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

1. Activities of the banks

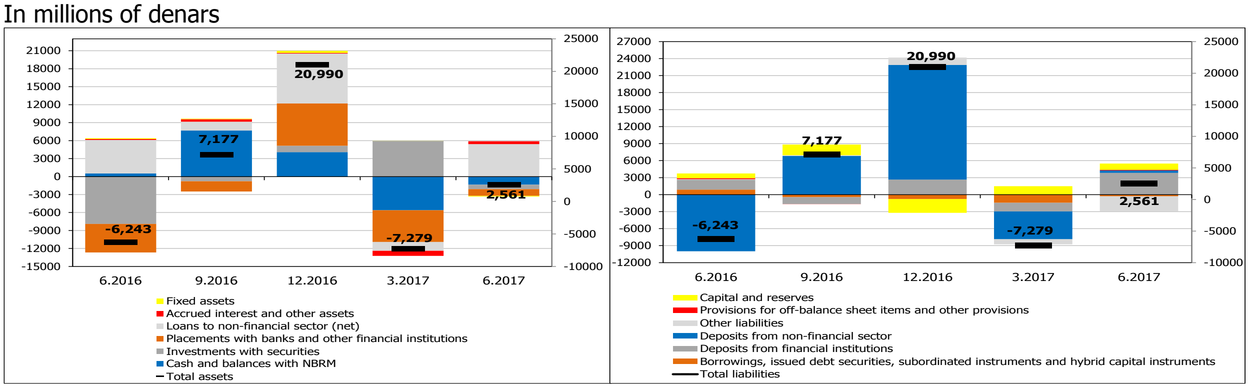
Regardless of the reduced economic activity and the still present risks from the domestic political events and from the global environment, the total activities of the Macedonian banking system featured growth, both on quarterly and on annual basis. This growth was mainly due to the increased credit activity to households but also due to the moderate growth of the corporate crediting. In terms of currency, there is significant growth in the crediting in domestic currency, while the growth of the denar loans with currency clause is more modest. At the same time, there is decline in the loans in foreign currency. Following the actual decline of the deposits potential in the first quarter of 2017, which was due to seasonal factors, in this quarter the total deposits base increased, albeit quite modestly. The increase of the deposits was completely due to the denar deposits of the households, in a situation of simultaneous decline in the corporate deposits. In a situation of this minimal growth of the deposits of non-financial entities, the liabilities towards parent entities of the banks (mainly in a form of deposits) contributed the most to the quarterly growth of the sources of funds/ assets of the banking system.

Graph 60
Structure of the assets (left) and liabilities (right) of the banking system
In percentages



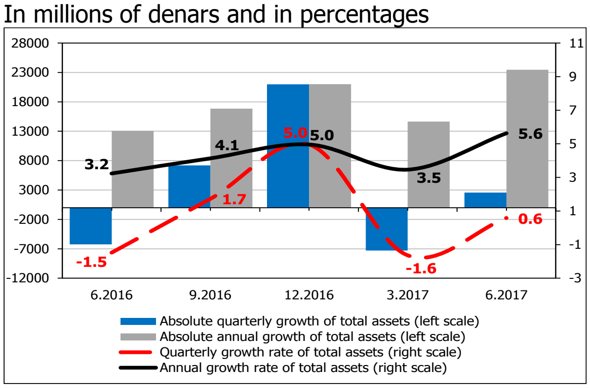
Source: NBRM, using data provided by the banks.

Graph 61
Quarterly growth of the components of the assets (left) and liabilities (right) of the banking system
In millions of denars



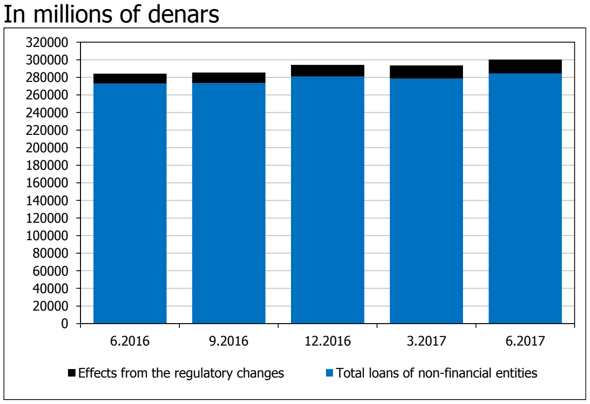
Source: NBRM, using data provided by the banks.
Note: The left graph shows the loans on net basis, reduced by the impairment.

Graph 64
Banking system assets
In millions of denars and in percentages



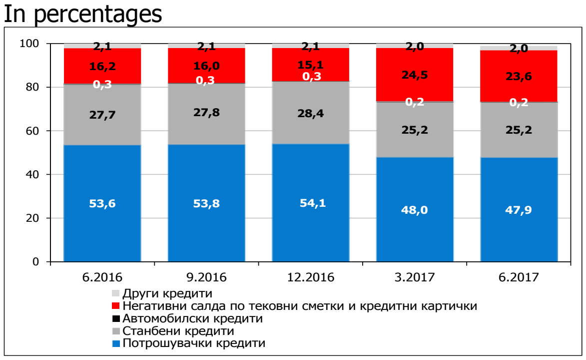
Source: NBRM, using data provided by the banks.

Graph 63
Amount of the loans to non-financial entities
In millions of denars



Source: NBRM, using data provided by the banks.

Graph 65
Structure of the loans to households, per products
In percentages



Source: NBRM, using data provided by the banks.

As on 30 June 2017, total assets of the banking system are 439,962 million denars, which is quarterly growth of 2,561 million denars i.e. 0.6%. The growth is almost entirely due to the increased credit activity to non-financial entities. In terms of liabilities, there is a significant growth of the deposits from financial institutions, mainly originating from the parent entities of the banks (following some decline in these sources of funds in the first quarter of 2017). The deposit activity of the non-financial entities featured minimal quarterly growth compared to the more significant decline registered in March 2017.

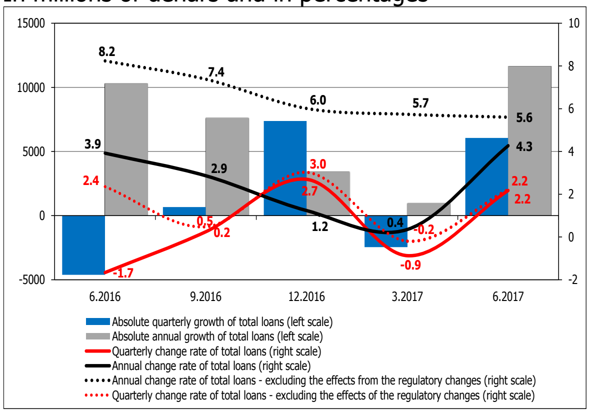
1.1 Loans to non-financial entities

In the second quarter of 2017, the crediting of the non-financial entities featured solid growth. On quarterly basis, the loans to non-financial entities[40] are greater by 6,060 million denars i.e. 2.2%, while on annual basis they increased by 4.3% (0.4% in the first quarter of 2017). If we isolate the effect caused by the mandatory write-offs, the annual growth of crediting to non-financial entities is 5.6%, (5.7% as on 31 March 2017). The crediting to non-financial entities is also growing in July and in August 2017.

The increase of the credit activity is mainly due to the increased credit support to households, but also due to the moderate growth of the corporate crediting. In this respect, the loans to households[41] increased by 3% in the second quarter of 2017 (vs the actual growth of 2.2% in the first quarter of the year). The loans to companies featured quarterly growth of 1.6% vs the reduction of 3.3% in the first quarter of 2017. On annual basis, the loans to households were growing at accelerated rate and reached the growth rate of 9.7% (7.9% as on 31 March 2017), while the corporate loans featured modest

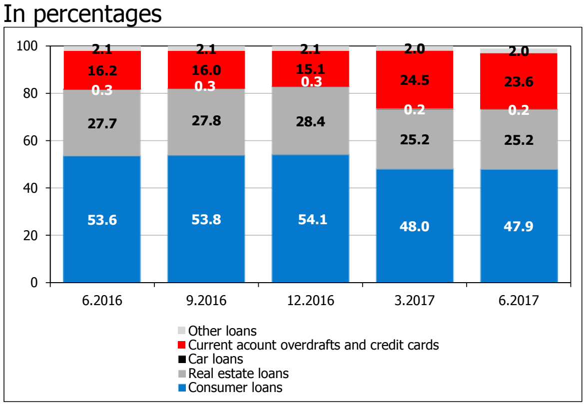
[40] The loans to non-financial entities include the loans to non-financial persons – residents and non-residents i.e. loans to both private and public non-financial entities, the central government, the local self-government, the non-profit institutions serving the households (loans to other clients), sole proprietors and the individuals (loans to households).
[41] The consumer loans and the credit cards are the most commonly used credit products among the households.

Graph 67
Growth of loans to non-financial entities
In millions of denars and in percentages



Source: NBRM, using data provided by the banks.

Graph 66
Structure of the loans to households, per products
In percentages



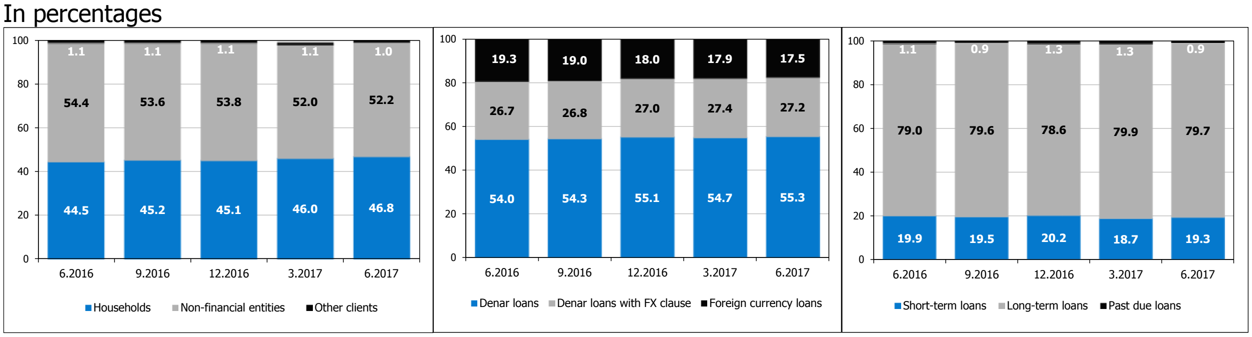
Source: NBRM, using data provided by the banks.

annual growth of 0.1% (decline of 5.4% as on 31 March 2017). If we consider the effects from the regulatory changes[42], on quarterly level we can notice very similar growth rates (before and after the write-offs) of both the loans to households and of loans to non-financial companies, thus exhausting the regulatory effects from the mandatory write-offs on the tendencies of the loans. However, the regulatory changes still have impact on the annual growth of the loans to non-financial entities. In other words, if we exclude the write-off effects, the annual growth rate of the loans to households would be 10% (vs 10.6% as on 31 March 2017), while the annual growth of the loans to non-financial companies would be 2.4% (2.3% as on 31 March 2017).

Analyzed per credit products, almost 71% of the loans to individuals are intended for financing of non-specific consumption of the individuals (consumer loans, overdrafts and credit cards). Specifically, more and more banks are orienting towards crediting of the households due to the perceptions for smaller risks and greater diversification in comparison to the corporate crediting. As on 30 June 2017, in six banks (from a total of fourteen banks)[43], the share of the loans in the credit portfolio of the banks is larger compared to the share of the corporate loans. Two of these six banks belong to the group of large banks and contribute with 39.3% in the total loans to non-financial entities on banking system level.

[42] 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), by December 2015 the banks were obliged to transfer all receivables which are entirely reserved for more than two years, in off-balance sheet. The banks were required to do the first transfer no later than 30 June 2016. In this regard, in June 2016 a total of 11,331 million denars were written-off (35.5% of the non-performing loans as on 1 January 2016).
[43] "MBPR " AD Skopje is excluded from this analysis.

Graph 68
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

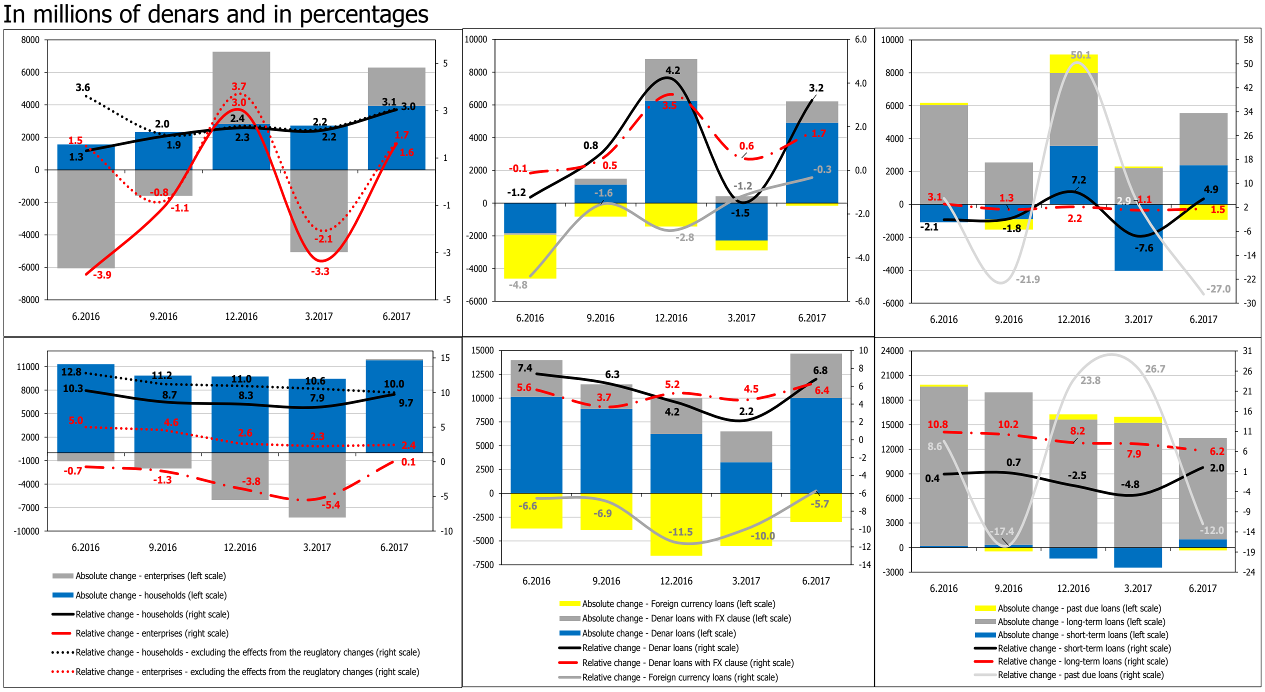


Source: NBRM, using data provided by the banks.

In the second quarter of 2017, the denar loans retained the key role in the currency structure of the total loans, and they were the main reason for their quarterly growth. The increase of the denar loans in most part (54.9%) was due to the loans to households[44], compared to the share (44.9%) of the loans to corporate sector. There is also increase among the denar loans with currency clause, where both the households and the non-financial companies had almost equal share. On the other hand, the quarterly reduction of the crediting in foreign currency[45] is mainly due to the loans to non-financial companies.

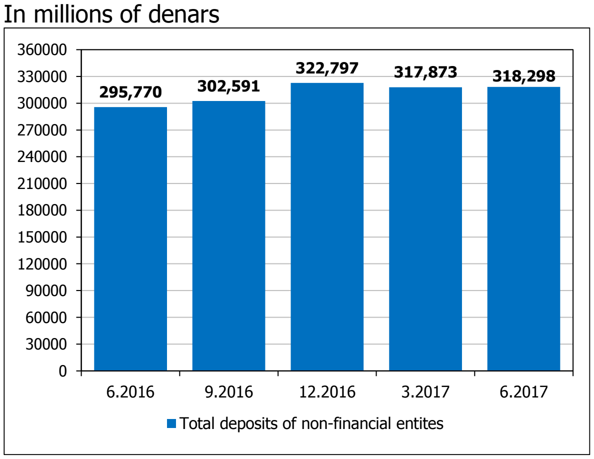
[44] The denar loans to households on quarterly basis are greater by 2,697 million denars (3.9%), while the quarterly growth of the denar loans to non-financial companies is 2,206 million denars (2.7%).
[45] The foreign currency loans to non-financial companies on quarterly basis declined by 163 million denars (1.2%).

Graph 69
Quarterly (above) and annual (below) growth of the loans, according to the sector, currency and maturity
In millions of denars and in percentages



Source: NBRM, using data provided by the banks.

Graph 70
Status with deposits of the non-financial entities
In millions of denars



Source: NBRM, using data provided by the banks.

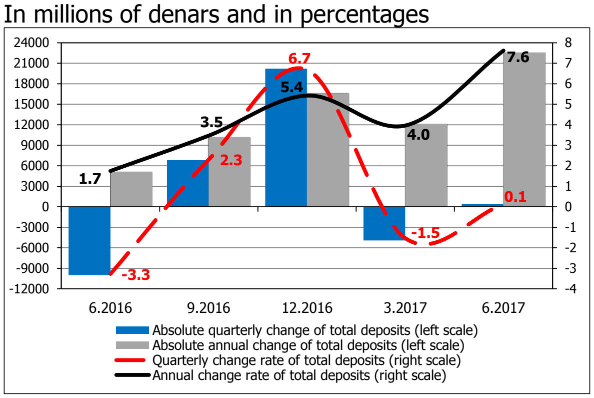
In terms of maturity, the long-term crediting continues to be the main driver of the growth of the credit activity. The long-term loans featured quarterly growth of 1.5%, most of which (77.1%) is due to the denar loans to households[46]. The increased credit activity in this quarter was also partially due to the growth of the short-term loans which, in turn, is mainly (59.8%) due to the increase of the short-term denar loans to non-financial companies.

1.2 Deposits of non-financial entities

Following the decline in the first quarter of the year, in the second quarter of 2017 the deposits from non-financial entities featured minimal growth which is due to the increase of the denar deposits from the households. The quarterly growth of

[46] The long-term loans to households are increasing on quarterly basis by 3,672 million denars, which is mainly due to the increase of the long-term denar loans to households (2,438 million denars).

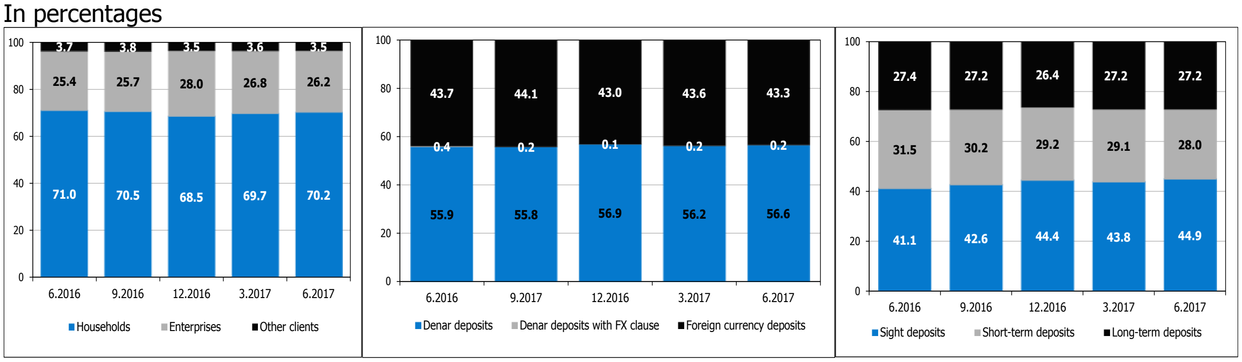
Graph 71
Change in the deposits of the non-financial entities
In millions of denars and in percentages



Source: NBRM, using data provided by the banks.

the deposits base of the banks is only 425 million denars i.e. 0.1%. Still, the growth of the deposits base on annual level is accelerating[47], and as on 30 June 2017 the total deposits featured annual growth of 22,528 million denars i.e. 7.6% (4%, as on 31 March 2017). The households**,** which traditionally are the most important depositor in the Macedonian banking system (with share of over 70% in the total deposits), in the second quarter of 2017 increased their funds in the banks by 2,103 million denars i.e. 0.9% (0.2% in the first quarter of 2017). On the other hand, the deposits of non-financial companies reached quarterly decline of 1,594 million denars (1.9%). The annual dynamics of the deposit base of the banks was mostly (60.8%) determined by the deposits of the households, the growth of which (of 13,700 million denars i.e. 6.5%) was significantly higher than the annual growth of the corporate deposits which was 8,475 million denars (11.3%).

Graph 72
Structure of the total deposits, per sector (left), currency (middle) and maturity (right)
In percentages

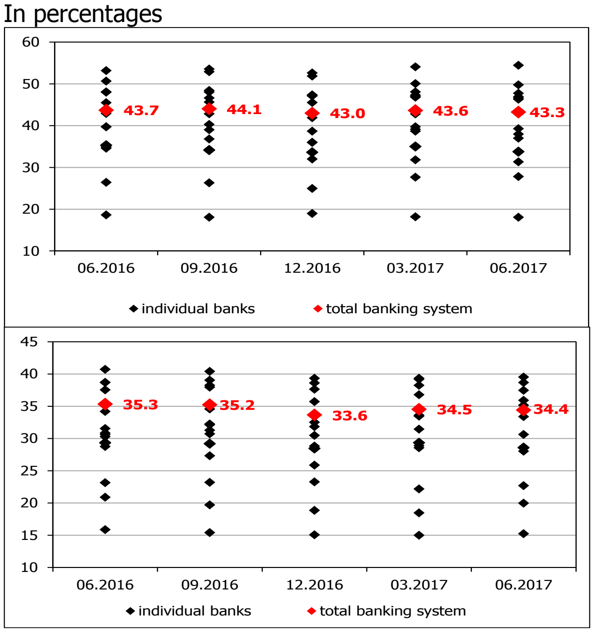


Source: NBRM, using data provided by the banks.

In the second quarter, the quarterly growth of the total deposits was fully determined by the denar deposits that grew in the amount of 1,501 million denars (0.8%), compared to the more significant reduction in the previous quarter (5,059 million denars i.e. 2.8%). This quarterly growth of the denar deposits was entirely due to the deposits of the households, in a situation of reduction of the denar deposits of the non-financial companies. Most of the total deposits

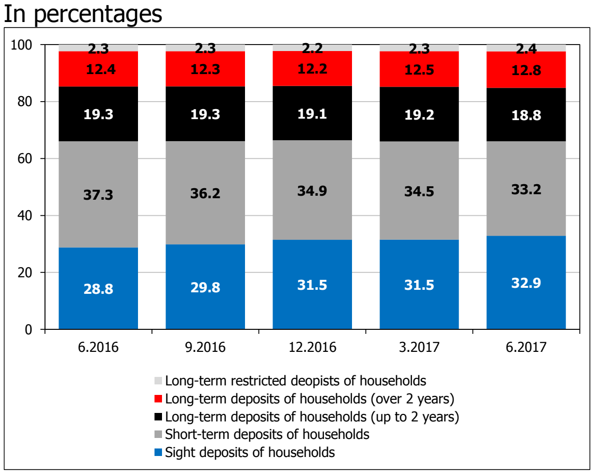
[47] At the lower comparative base from the second quarter of 2016, following the escalation of the political crisis.

Graph 73
Share of the total foreign currency deposits (above) and of the foreign currency deposits of the households (below) in the total deposits in the banking system
In percentages



Source: NBRM, using data provided by the banks.

Graph 74
Maturity structure of the household deposits
In percentages



Source: NBRM, using data provided by the banks.

base (56.6%) continues to be in a form of denar savings, in which the household deposits have the biggest share (63.3%). The deposits in foreign currency reduced on quarterly basis by 1,006 million denars (0.7%), which is mainly due to the reduction of the deposits of the non-financial companies, and less (20%) due to the quarterly decline of the denar deposits of the households.

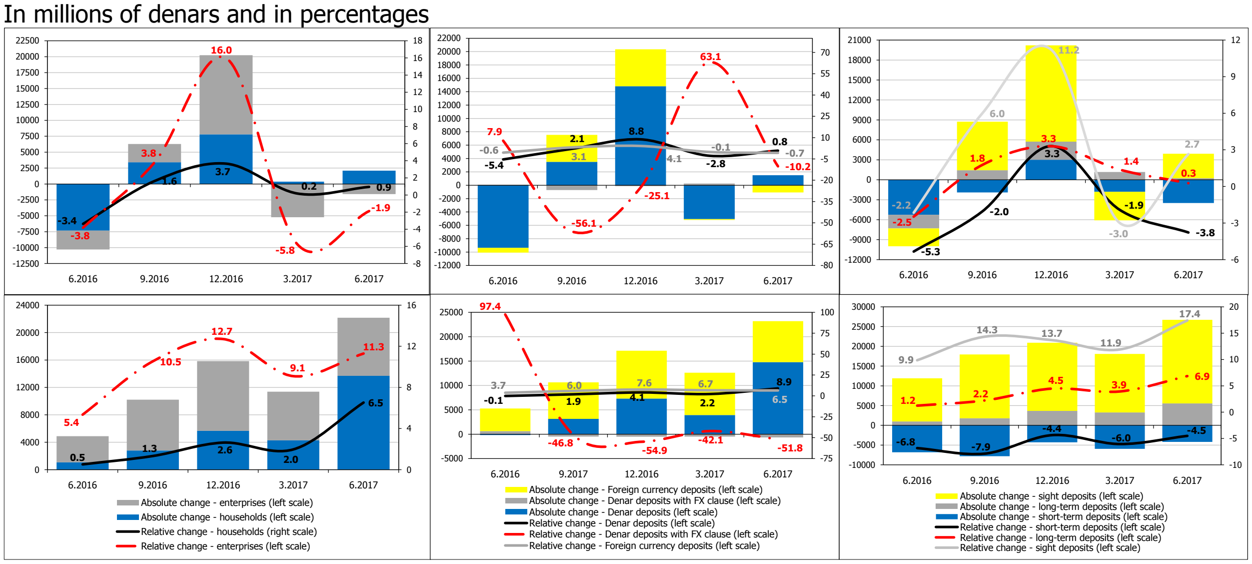
In terms of maturity, the quarterly growth of the deposits base of the banks was mainly determined by the sight deposits which increased by 3,687 million denars (2.7%). The growth of the sight deposits was entirely due to the households[48], where the denar deposits had the biggest contribution (80.2%). Same as in the last several quarters, **the short-term deposits** feature decline. Contrary to that, on 30 June 2017 **the long-term deposits** featured growth of only 228 million denars (0.3%), which was mainly due to the foreign currency deposits of the households[49].

[48] The quarterly growth of the sight deposits of households is 3,648 million denars (5.2%), most of which (80.2%) was in denar deposits and less (18.7%) in foreign currency deposits.
[49] The quarterly growth of the long term deposits to households is 1,038 million denars (1.4%), where the share of the denar deposits is 56.4% and the share of the foreign currency deposits is less –43.6%.

Graph 75

Quarterly (above) and annual (below) change of the deposits, according to the sector, currency and maturity

In millions of denars and in percentages

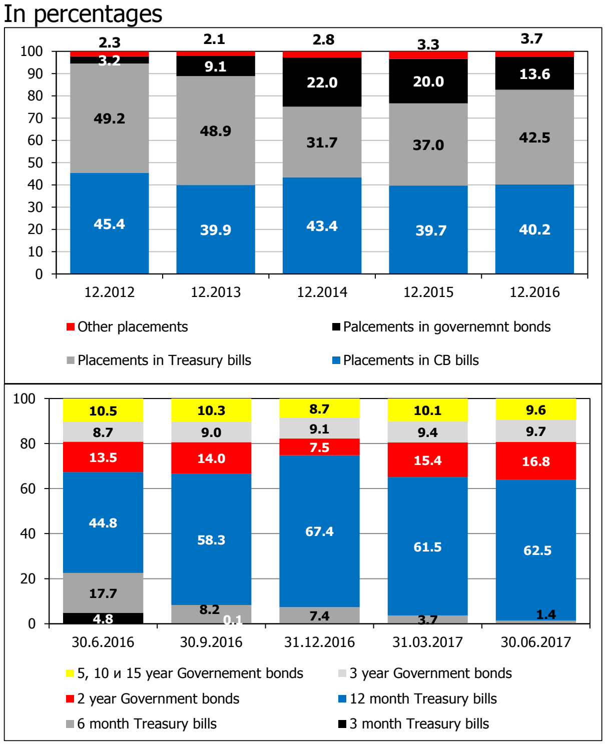


Source: NBRM, using data provided by the banks.

Graph 76

Portfolio structure of securities (above) and maturity structure of the investments in government securities (below)

In percentages



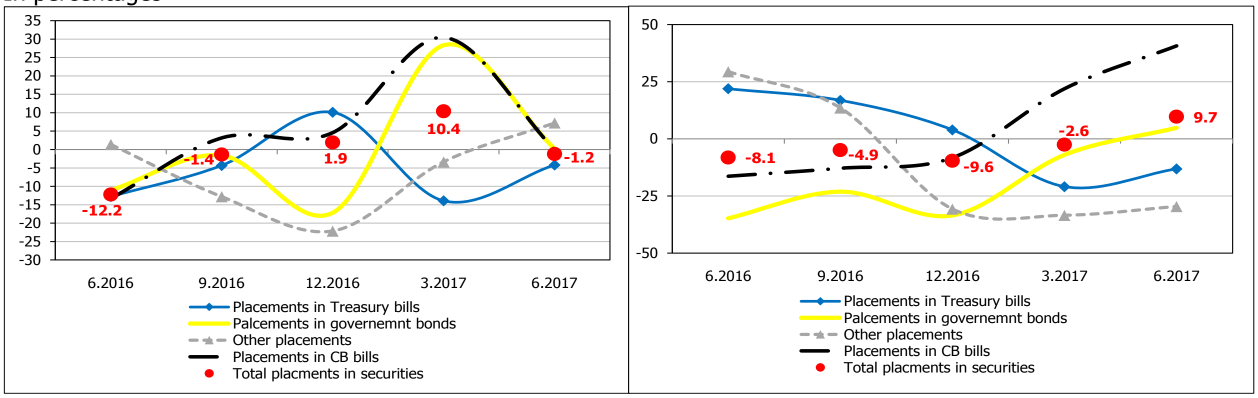
Source: NBRM, using data provided by the banks.

2.3. Other activities

The investments of the banks in securities[50] (according to the net carrying amount), in the second quarter of 2017 declined by 749 million denars (1.2%) and their share in the total assets of the banks featured minimal increase of 14.2% (14.4% as on 31 March 2017). The quarterly decline of the investments of the banks in the treasury bills (by 877 million denars i.e. 4.2%) was the key reason for reduction of the total portfolio of securities. On the other hand, the investments of the banks in domestic long-term securities (maximum in two-year government bonds) featured minimal growth of 27 million denars (0.2%). The investments of the banks in CB bills (in a situation of no-change in the interest rate and in the amount offered) was not changed compared to the first quarter of 2017.

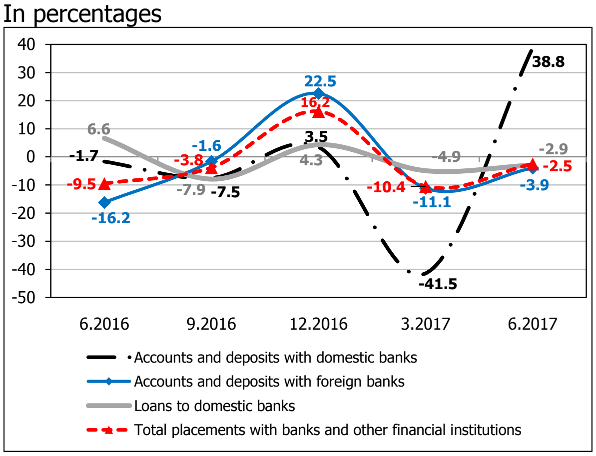
[50] Including investments in affiliates.

Graph 77
Quarterly (left) and annual (right) change in the securities portfolio
In percentages



Source: NBRM, using data provided by the banks.

Graph 78
Quarterly change in the placements in the financial institutions
In percentages



Source: NBRM, using data provided by the banks.

In the second quarter of 2017, the placements in banks and in other financial institutions declined by 1,126 million denars i.e. 2.5%), which is due to the reduced placements in foreign banks, reduced long-term loans of the domestic banks in foreign currency (entirely concentrated in the MBPR AD Skopje) and due to the payment of the matured foreign currency deposits[51] in the National Bank.

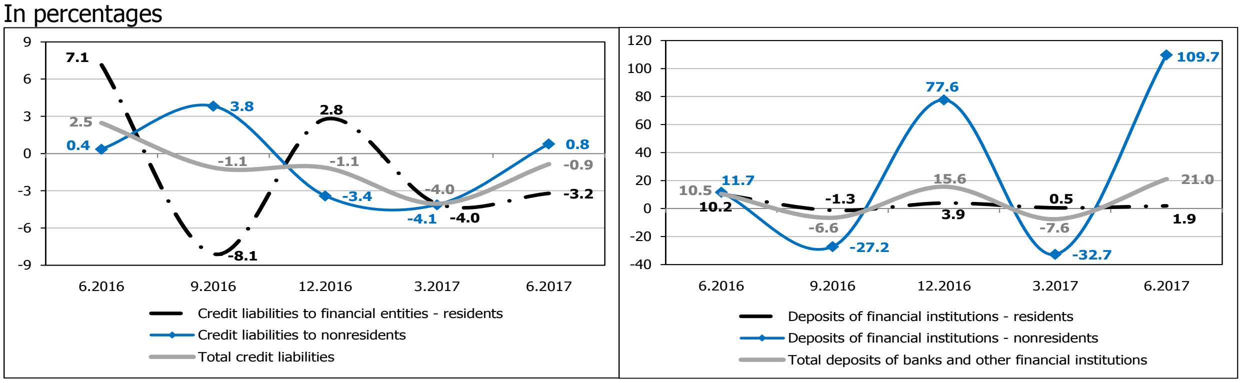
The quarterly decline of the liabilities in relation to loans (by 297 million denars i.e. 0.9%) was due to the reduced liabilities by 704 million denars, on the basis of long-term loans in foreign currency towards the domestic banks (repayments of the other domestic banks towards MBPR AD Skopje) and due to the reduced liabilities in relation to long-term loans to financial institutions – non-residents, by 1,025 million denars (total repayment by MBPR AD Skopje towards international financial institutions). On the other hand, the liabilities in relation to short-term loans in foreign currency increased by 1,183 million denars as a result of the increased liabilities on the basis of loans towards the parent entity of one large bank.

In the second quarter of 2017, **the deposits from banks and other financial institutions** featured growth of 3,843 million denars (21%). This growth was due to the increase of the deposits from the parent entities

[51] Since October 2016, the National Bank sopped organizing auctions of foreign deposits.

of the banks (increase on the balances of the current accounts in foreign banks, in denars, and increase of the short-term deposits in foreign currency). The deposits from the banks and other financial institutions continue to have small share in the total liabilities (5% as on 30 June 2017).

Graph 79
Quarterly growth of the liabilities in relation to loans (left) and deposits of financial companies (right)
In percentages

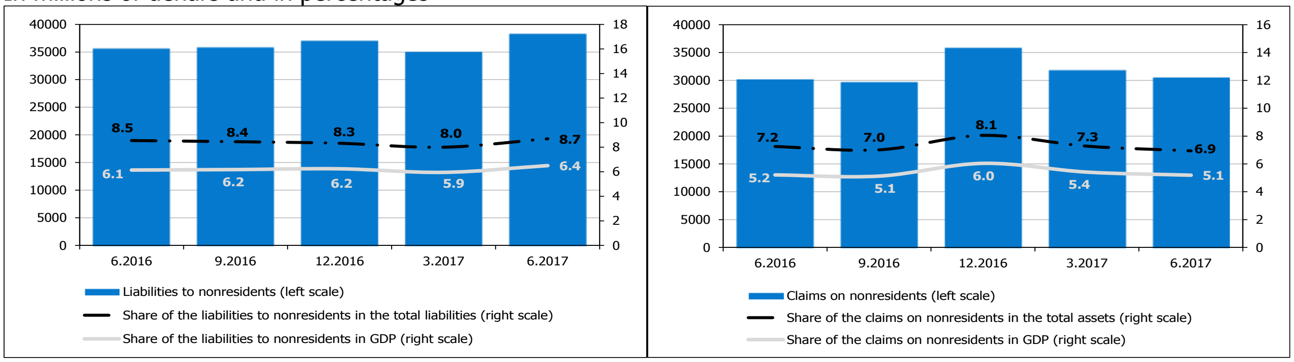


Source: NBRM, using data provided by the banks.

The banks in the Republic of Macedonia usually do activities on the domestic market, which makes them net-debtors towards abroad[52]. In the second quarter of 2017, the receivables of the banks from non-residents reduced by 1,302 million denars (4.1%) and their share in the total assets of the banking system was reduced to 6.9%[53]. This reduction was due to the reduced placements in foreign banks. On the other hand, the **liabilities of the banks towards the non-residents** were increased by 3,224 million denars (9.2%) almost entirely due to the increase of the deposits from the parent entities of the banks. Therefore, the share of the liabilities towards the non-residents in the total liabilities was increased to 8.7%[54].

[52] As on 30 June 2017, eight out of fifteen banks are net-debtors towards non-residents.
[53] Analyzed per individual banks, the share of the receivables of the banks from the non-residents in the total assets is between 0.5% and 16.8%.
[54] Analyzed per individual banks, the share of the liabilities of the banks to non-residents in the total liabilities is between 0.1% and 18.6%. "MBPR" AD Skopje is excluded from this analysis.

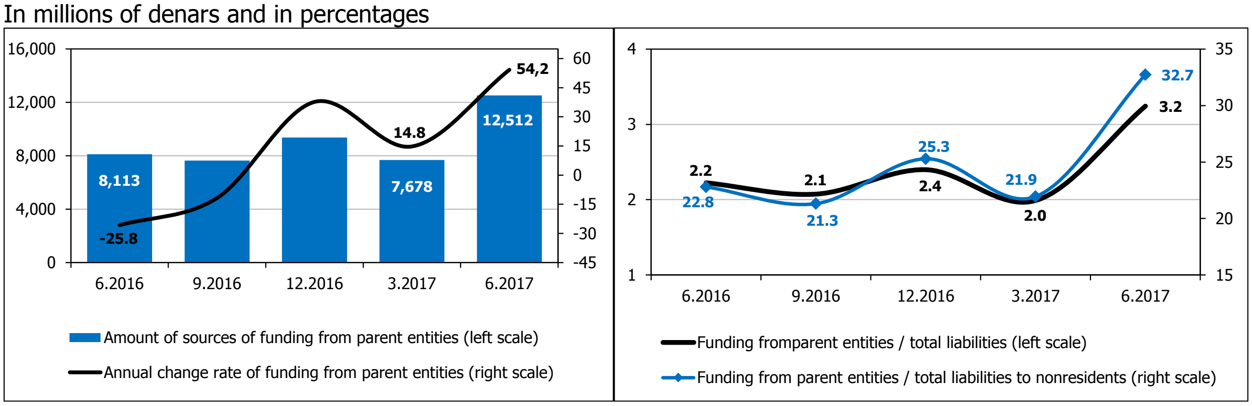
Graph 80
Liabilities (right) towards non-residents and receivables (right) from non-residents
In millions of denars and in percentages



Source: NBRM, using data provided by the banks.

The assets used by the parent entities are not significant source of financing of the activities of the domestic banks. In the second quarter of 2017, the total liabilities of the banks towards their parent entities increased on quarterly basis by 4,834 million denars (63%). However, this growth does not equal full support from the "parent companies" because almost 40% of it is due to liabilities for payment of dividends to foreign shareholders (paid in the third quarter of the year). If we exclude the effect from this type of obligation, the share of the assets used[55] by the parent enterprises in the total liabilities, at the end of June 2017, would be on the usual levels (between 2 and 2.5%) and the growth of the assets used by the parent entities would be 2,949 million denars (38.4%).

Graph 81
Liabilities towards parent entities of the banks
In millions of denars and in percentages



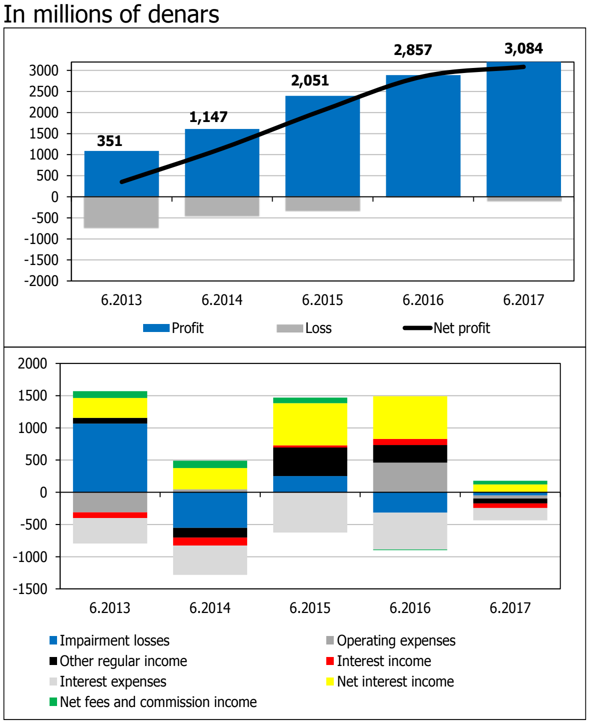
Source: NBRM, using data provided by the banks.
Per individual bank, the share of the liabilities of the banks towards the parent entities in the total liabilities towards the non-residents is between 17.5% and 86.4%, while their share in the total liabilities is in the interval from 1% to 12.4%.

[55] 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.

2. Profitability[56]

In the first semester of 2017 the financial results of the banking system featured slowed growth, compared to the same period of 2016. The net interest rates contributed with one half to the growth of the profit. The net revenues from commissions and the reduced costs for impairment also had significant contribution to the growth of the profit. The reduction of the impairment costs is mainly due to the sale of forfeited property. The indicators of profitability and efficiency of the banking system generally feature further improvement, and they are on a solid level. In the first semester of 2017 there is continuation of the trend of reduction of the active and passive interest rates of the banks, albeit with slower pace.

Graph 82
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.

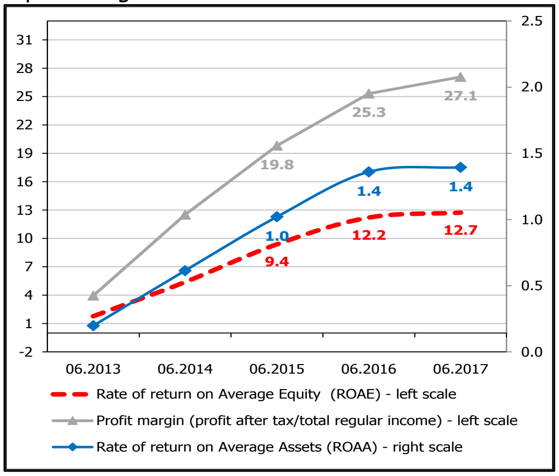
2.1 Indicators of profitability and efficiency of the banking system

Following the accelerated growth of the financial result of the banks in the last several years, in the first semester of 2017 its growth slowed down and is 7.9% i.e. 227 million denars (by comparison, in the first six months of 2016 the financial result of the banking system was larger by 39.3% i.e. 806 million denars compared to the same period of 2015). The biggest influence on this slowed growth was exercised by the smaller growth of the net interest revenues, which contributed with more than a half into the growth of the financial result (as a comparison, the contribution in the first six months of 2016 was 82.5%).

The slowed growth of the profit in the first six months of 2017 had impact on the indicators of profitability and efficiency of the banking system. The return rates of the average capital and reserves[57], as well as the profit margin of the banking system, feature slowed growth, while the rate of return of the average assets[58] remained on the same level from June 2016. The indicators of profitability

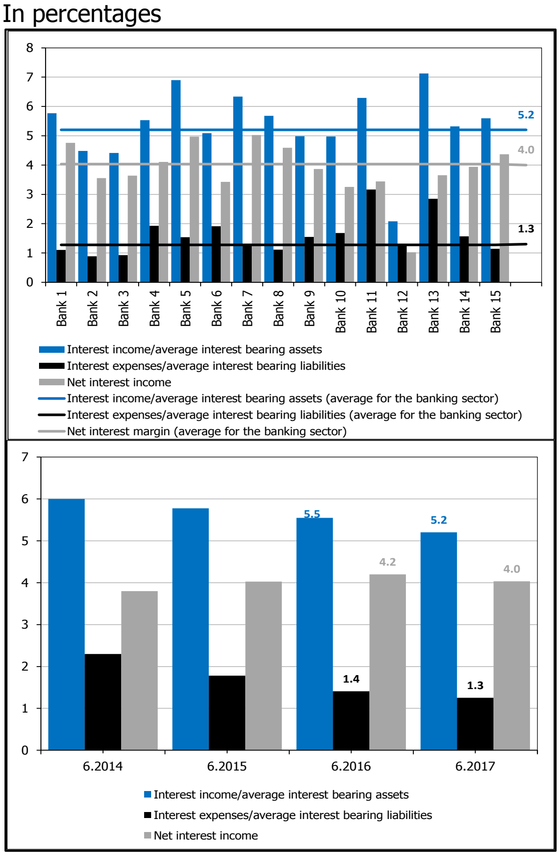
[56] All data in this section of the Report that originate from the Income Statement of the banks (revenues, expenditures, profit, loss, etc.) pertain to the first six months of 2017, and their size is compared with the same period from the previous or some other year. The data that originate from the 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 six months of 2017. This calculated average is then compared against the average calculated for the first six 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.
[57] The average equity and reserves are calculated as average from the situation with the equity and reserves at the analyzed date and 31 December of the previous year.
[58] The average assets are calculated as average from the situation with assets on the analyzed date and 31 December of the previous year.

Graph 83
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.

Graph 84
Net interest margin per specific bank* (above) and net interest margin on the level of the banking system (below), as on 30 June 2017
In percentages



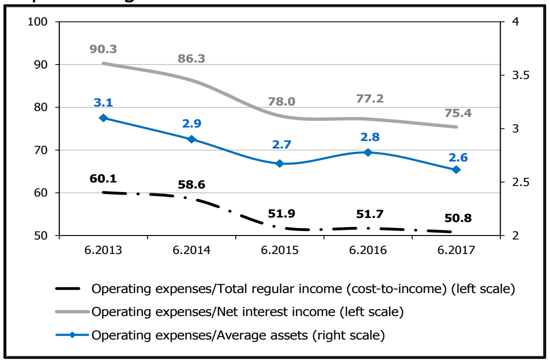
Source: NBRM, using data provided by the banks.
* The indicators on banking system level are shown with lines.

and efficiency of the banking system and the specific groups of banks are shown in Annex 40.

The net interest margin rate realized by the banks from the credit and deposit activity featured modest decline of 0.2 percentage points and at the end of the June 2017 was 4%. The financial mediation with the households usually had the biggest contribution in the increase of the net interest revenues and in the growth of the average interest-yielding assets. The decline of the interest margin is reflection of the significant annual growth of the average interest-yielding assets by 5.8% (21 billion denars), compared to the growth of the net interest revenues of 1.6% (122 million denars)[59]. The slowed growth of the net interest-yielding revenues is due to the slowed decline of the interest expenditures which are smaller by 8% (193 million denars)[60]. In the same time, the reduced active interest rates and the low annual growth of the credit activity caused modest decline of the revenues from interest by 0.7% (71 million denars)[61]. The reduction of the interest expenditures is entirely originating from the "Households" sector, where the interest expenditures declined by 16% (223 million denars)[62]. 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 323 million denars i.e. 7.8%), regardless of the increase in the interest revenues from operations with the households (by 266 million denars i.e. 6.2%)[63]. Lastly, the credit activity with the "Households" sector in the first semester of 2017 was the main

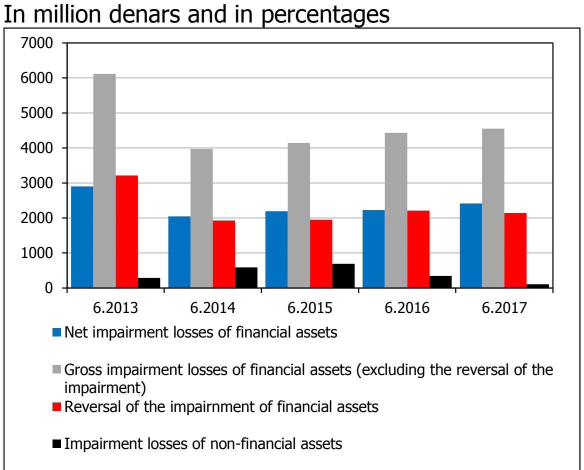
[59] In the first semester of 2016, the interest revenues increased by 9.7%, i.e. 665 million denars, compared to the same period of 2015.
[60] Decline of the expenditures per interest-yielding asset units by 0.1 percentage points.
[61] Decline of the revenues from interests per interest-yielding asset units by 0.3 percentage points.
[62] Contrary to that, the interest expenditures from the operations of the banks with non-financial entities are increased by 21 million denars (8.3%), while the interest expenditures from operations with financial companies increased by 15 million denars (4.1%).
[63] There is also growth of 62 million denars (14.7%) of the interest revenues from the placements in the National Bank.

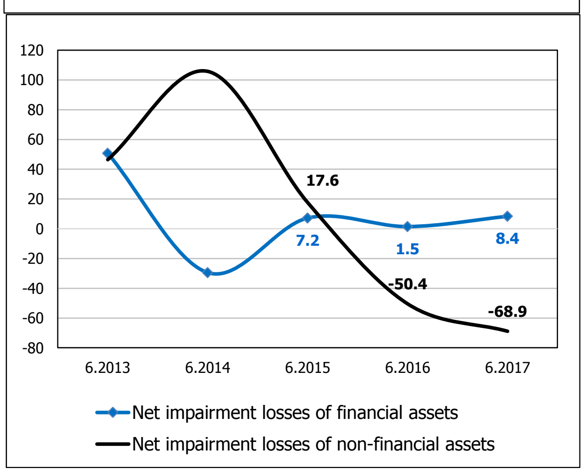
Graph 85
Operational efficiency indicators
In percentages



Source: NBRM, using data provided by the banks.

Graph 86
Costs for impairment of the financial and non-financial assets, amount (above) and annual change rates (below)
In million denars and in percentages





Source: NBRM, using data provided by the banks.

contributor to the total growth of the interest-yielding assets of the banking system, with almost 69%.

The reduction of the operational costs by 48 million denars (0.8%) provided for improvement of all operational efficiency indicators. The reduction of the operational costs is mainly due to the reduced other reservations and miscellaneous costs[64]. On the other hand, the total revenues from regular operations of the banks increased by 0.9% (103 million denars), which is due to increase of the net interest revenues and of the net revenues from commissions.

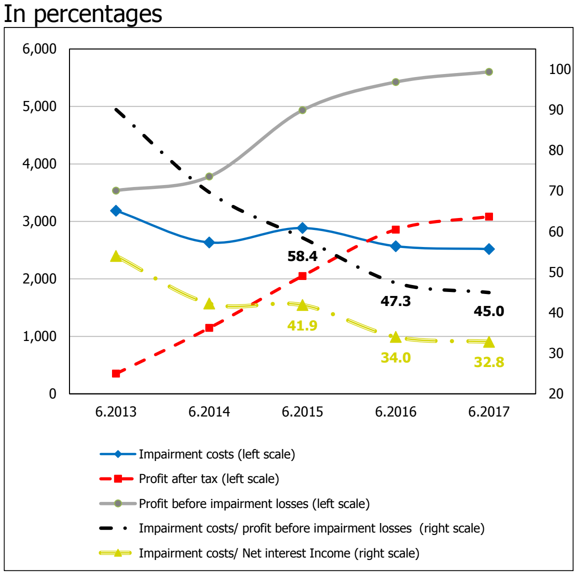
In the first six months of 2017, the total costs for impairment were reduced by 1.9% (by 50 million denars), compared to the same period in 2016, thus contributing with one fifth to the growth of the profit of the banking system. The reduction of the impairment costs comes from the sales of the foreclosed assets and the follow-up reduction of the costs for impairment of the foreclosed assets[65]. On the other hand, the impairment costs for the financial assets are increased by 8.4% (186 million denars).

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

In the first semester of 2017, the downward trend of the interest rates of the banks continued, and the active and passive interest rates featured insignificant decline (0.2 percentage points each, compared to December 2016 i.e. by 0.4 and 0.2 percentage

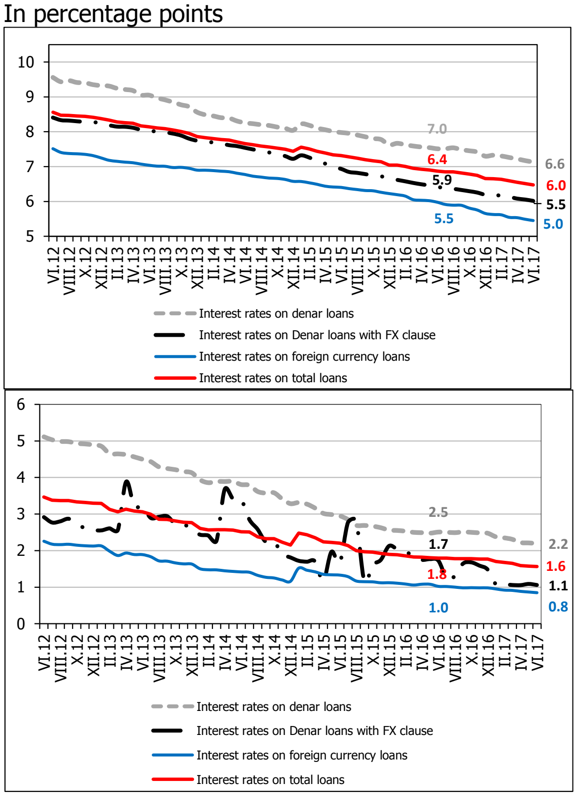
[64] The declining of these operational costs in these categories stems out of the higher amount of these costs realized in the first semester of 2016, caused by events that are very rare.
[65] The average amount of the gross forfeit assets in relation to uncollected receivables in the first six months of 2017 was reduced by 6.6% (349 million denars), compared to the same period of the last year.

Graph 87
Indicators of the ratio between the impairment costs (on one side) and the profit and net revenues from interest (on the other side)
In percentages



Source: NBRM, using data provided by the banks.

Graph 88
Active (above) and passive interest rates (below)
In percentage points

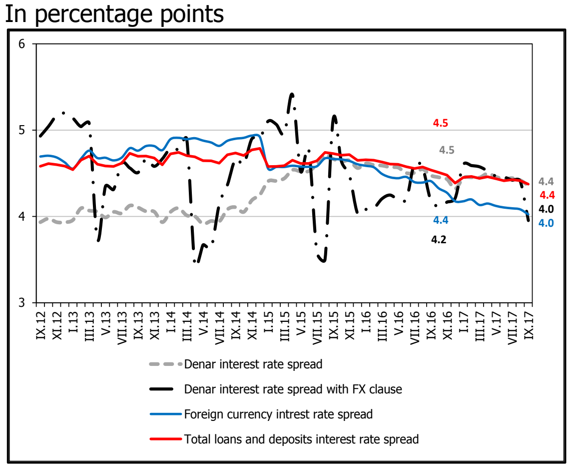


Source: NBRM, using data provided by the banks.

points respectively, compared to June 2016). In other words, the average weighted active interest rate for the first semester of 2017 is 6.1% (6.5% for the first semester of 2016), while the average passive interest rate for the same period is 1.6% (1.8% 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[66].

In June 2017, the spread between the active and passive interest rates remained on the same level like in the previous quarter - 4.4 percentage points. On the other hand, the average spread between the active and passive interest rates for the first semester of 2017 declined by 0.2 percentage points compared to the same period of 2016, which is essentially the same trend like in the first quarter of the year.

Graph 88
Interest rate spreads
In percentage points



Source: NBRM, using data provided by the banks.

[66] The average amount of denar deposits with foreign currency clause in the first semester of 2017 is minimal 0.2% of the total deposits placed in the banking sector, because of which there is likelihood of significant oscillations of the interest rates for this product.

ANNEXES