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 THIRD QUARTER OF 2017

December 2017

CONTENT

Summary

In the third quarter of 2017, in a situation of gradual stabilization of the expectations of the domestic economic entities, the total activities of the Macedonian banking system continued to grow (the quarterly growth is 0.2%), but this is slower compared to the previous quarter and also compared to the same period of the least year. Following the minimum growth of the deposits activity of the banks in the second quarter of 2017, the increase of the deposits from non-financial entities accelerated in the third quarter of the year, but this increase is quite modest (0.4%). The increase in the deposits is originating from the household deposits, in a situation of further decline of the corporate deposits. The tendency to save money in domestic currency, which was reduced as a result of the domestic political crisis in 2016, is slowly returning, which can be seen through the modest increase of the denar deposits from the households (0.2%). In general, the modest increase of the bank activities confirms the significance the deposits have for their financing, and the potential growth of the deposits highly depends on the events and the actions of the banks on the deposit market, as well as on the maintenance of the trust among the domestic depositors.

The credit growth also continued in the third quarter of 2017 (0.3%), but this increase is slower compared to the previous quarter (2.2%). The increase of the credit activity is originating from the denar loans to households, in a situation of reduced loan support to corporate clients. In a situation of modest change in the credit and in the deposit activity, in the third quarter of 2017, some other items in the balance sheets of the banks were subject of change. On the assets side, there is obvious increase of the short-term placements in foreign banks (14%), and in the same time there is reduction in the investments in securities (-5.3%). On the liabilities side, the higher financial result in the third quarter of 2017 (regardless of its decline on annual basis) determined the growth of the total financial potential of the banking system. In the same time, the liabilities towards the parent entities of the banks declined in the third quarter of 2017, (-12.2%), having in mind the expected temporary growth of these liabilities that actually happened in the second quarter of the year (for dividend payment purposes).

The credit risk ratios remained stable. The total non-performing loans of the banking system reduced by 2.0% on quarterly basis, which is mainly due to the closing of the non-performing receivables from non-financial entities with forfeiting of assets established as collateral for those receivables. Such forfeited property was sold, with capital gain, already in October, and the share of the non-performing loans in the total loans to non-financial sector featured some quarterly reduction (0.2 percentage points) and reached the level of 6.6%. The reduction of the share of the non-performing loans in the total loans was also present in the non-financial entities segment (this share was 10.4% as on 30 September 2017), where the non-performing loans had faster quarterly decline compared to the reduction of the credit activity of the banks towards these clients. On the other hand, the non-performing loans of the households featured accelerated growth (which was already present since the beginning of 2017), along with the simultaneous increase of the prolonged loans and of the loans for which the repayment is late between 61 and 90 days, points out to the need for more careful monitoring of this portfolio. Still, the higher credit growth towards the households is maintained by the share of the non-performing loans in the total loans on a stable level (2.6% as on 30 September 2017). The high coverage of the non-performing loans with own impairment (78.3%), in a situation of

satisfactory volume and quality of the own assets of the banks, limits the risks from eventual total uncollectability of these loans on the solvency of the banks.

The liquidity of the banking system is on satisfactory level, as seen through the relatively stable share of the liquid assets in the total assets and the satisfactory coverage of the short-term liabilities and household deposits with the liquid assets. In the third quarter of 2017, in a situation of slowed growth of the total sources of financing, the liquid assets of the Macedonian banking system featured modest reduction (-0.5%), albeit the slowed quarterly increase in the credit activity of the banks. The small quarterly decline of the liquid assets caused minimum reduction of the liquidity ratios of the banking system, and this reduction was present only at the denar liquidity ratios. On the other hand, in the third quarter of 2017, there was narrowing of the gap between the assets and liabilities according their residual maturity, for most of the maturity segments analyzed, but mostly in the 'up to seven-days' segment.

The ratios of profitability of the banking system, in the first nine months of 2017, continue to remain on solid level, regardless of their reduction in comparison to the same period of 2016. The profit in the banking system featured certain decline on annual basis, happening for the first time after the six-year continuous high growth. The reduced financial result is consequence of the increased cost for impairment of the financial assets, as well as of the quite slow increase of the net interest revenues, mainly because of the increased decline of the net interest revenues from non-financial companies but also because of the significant slowdown of the growth of these revenues from the households segment. Hence, unusually for the traditional Macedonian banking system, in the first three quarters of 2017 the non-interest revenues of the banks, especially the net revenues from commissions and fees, had the biggest contribution in the increase of the total revenues from regular business operations – this increase was two thirds. Still, the banks continue to deliver high rates of return of the average capital and of the average assets –12.6% and 1.4%, respectively. Furthermore, on annual basis, the operational efficiency of the banks was improved, where the operational costs now participate with half in the total revenues from business operations (which is an improvement of a half percentage point).

The ratios on solvency and capitalization of the banking system increased in the third quarter of 2017, mainly because of the growth of the capital items, in a situation of quite modest growth, even reduction of certain categories of activities. The increase of the own funds, due to the issuing of new subordinated instruments, with simultaneous reduction of the risk-weighted assets due to the reduced credit activity with non-financial entities, provided for improvement of the capital adequacy rate up to the level of 16.2%. In addition to the requirement to comply to the obligation for capital buffer for protection of the capital[1], in accordance with the regulations, starting from 30 September 2017, the banks that are significant for the system (seven in total) are obliged to meet at least half of the established capital buffer. This amount of the capital buffer engaged additional 3.9% of the own assets of the banking system (these banks are obliged to fully meet the capital buffer established for the banks that are significant for the system, by 31 March 2018). The results of the stress-testing in this quarter confirm the stability of the banking system and its resistance to shocks, where the capital adequacy of the banking system is not falling below 8% in any of the simulations that were carried out.

[1] As of 1 March 2017, the banks are required to continuously comply to this requirement for capital buffer, in the amount of 2.5% of the risk-weighted assets.

In summary, the third quarter of the year featured stability and resilience of the banking system, which is mainly due to the satisfactory liquid position of the same, including its stable and high solvency, although there is still a weak performance of the core banking activities, including the credit and deposit activity.

I. Structure of the banking system

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

As on 30 September 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) and the number of subsidiaries of foreign banks (six).

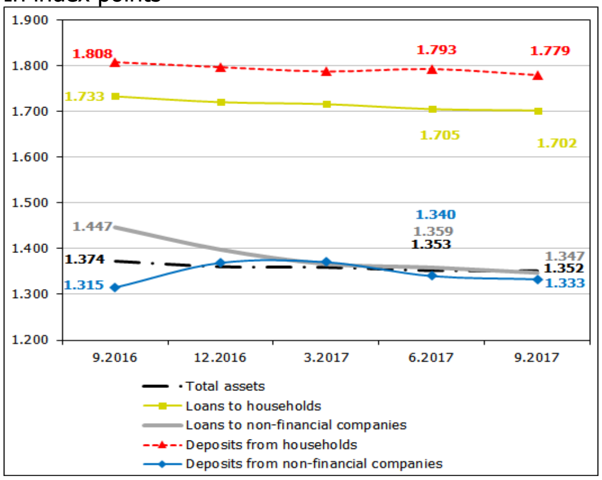
Table 1
Overview of the more relevant items from the Balances, in accordance with the majority ownership of the banks (as on 30 September 2017)
in million denars and in %

Type of ownership	Number of banks	Capital and reserves		Assets		Loans to non-financial sector		Deposits from non-financial sector		Total revenues*		Financial result*	
		Amount	In %	Amount	In %	Amount	In %	Amount	In %	Amount	In %	Amount	In %
Banks in dominant ownership of foreign shareholders	**11**	**35.121**	**70,1%**	**309.636**	**70,3%**	**223.052**	**78,1%**	**221.925**	**69,4%**	**17.307**	**74,7%**	**5.311**	**89,2%**
- subsidiaries of foreign banks	*6*	*30.347*	*60,6%*	*254.136*	*57,7%*	*182.934*	*64,1%*	*183.558*	*57,4%*	*14.480*	*62,5%*	*5.091*	*85,5%*
- Austria	1	2.344	4,7%	17.347	3,9%	12.322	4,3%	10.625	3,3%	906	3,9%	60	1,0%
- Bulgaria	1	1.199	2,4%	8.629	2,0%	5.682	2,0%	6.619	2,1%	382	1,6%	17	0,3%
- Greece	1	11.460	22,9%	83.552	19,0%	62.078	21,7%	66.315	20,8%	5.364	23,2%	2.266	38,1%
- Slovenia	1	7.756	15,5%	71.603	16,2%	49.660	17,4%	55.927	17,5%	4.389	18,9%	1.998	33,6%
- Turkey	1	4.612	9,2%	39.650	9,0%	27.321	9,6%	22.506	7,0%	1.753	7,6%	531	8,9%
- France	1	2.976	5,9%	33.355	7,6%	25.872	9,1%	21.567	6,7%	1.687	7,3%	219	3,7%
- other banks in dominant foreign ownership	*5*	*4.774*	*9,5%*	*55.500*	*12,6%*	*40.117*	*14,1%*	*38.367*	*12,0%*	*2.827*	*12,2%*	*220*	*3,7%*
- Bulgaria	2	1.796	3,6%	17.871	4,1%	12.288	4,3%	13.063	4,1%	952	4,1%	124	2,1%
- Germany	1	2.222	4,4%	21.369	4,8%	16.990	6,0%	13.510	4,2%	1.079	4,7%	286	4,8%
- Switzerland	2	757	1,5%	16.260	3,7%	10.839	3,8%	11.794	3,7%	796	3,4%	-189	-3,2%
Banks in dominant ownership of domestic shareholders	**4**	**14.988**	**29,9%**	**131.037**	**29,7%**	**62.407**	**21,9%**	**97.646**	**30,6%**	**5.855**	**25,3%**	**641**	**10,8%**
- private ownership	*3*	*12.523*	*25,0%*	*117.947*	*26,8%*	*62.407*	*21,9%*	*97.646*	*30,6%*	*5.687*	*24,6%*	*559*	*9,4%*
- state ownership	*1*	*2.465*	*4,9%*	*13.090*	*3,0%*	*0*	*0,0%*	*0*	*0,0%*	*168*	*0,7%*	*83*	*1,4%*
Total:	**15**	**50.109**	**100,0%**	**440.672**	**100,0%**	**285.458**	**100,0%**	**319.570**	**100,0%**	**23.162**	**100,0%**	**5.952**	**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 September 2016 - 30 September 2017).

In the third quarter of 2017, the banks in majority foreign ownership increased the participation in all relevant items of their balance sheets, and their participation continues to be the highest when it comes to credit activity (78.1%) and financial result (89.2%). In the third quarter of 2017, the market share of the banks in majority ownership of foreign shareholders featured significant increase in the total financial result (by 3 percentage points) and in the total revenues (by 1.1 percentage points).

Graph 1
Herfindahl index
In index points



Source: NBRM, using data provided by the banks.

The concentration of the banking system, measured using the Herfindahl index[2], continues to slide downward. The level of concentration is reduced in all analyzed category activities, hence the index is within the acceptable parameters[3] already for a fourth quarter in a row. The indicators of the share of the three and the five largest banks in the system, in the particular categories of activities, feature slight changes (less than 1 percentage points), except their participation in the financial result which is greater on quarterly basis by 5 and 2.5 percentage points, respectively.

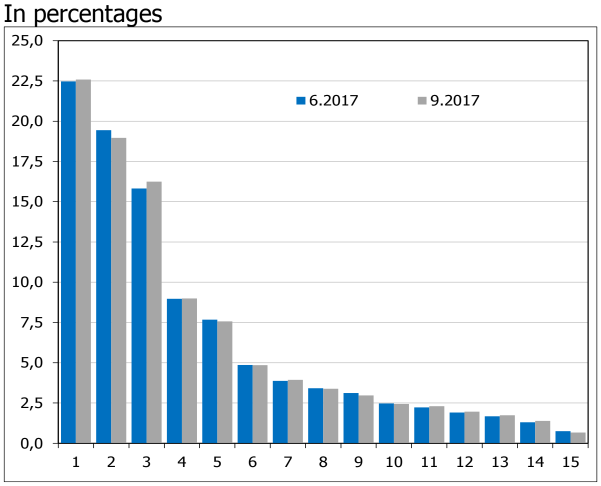
Table 2
Concentration indicators for the more relevant items in the balances of the three (CR3) and the five (CR5) largest banks
In percentages

Position	30.09.2017		30.06.2017	
	CR3	CR5	CR3	CR5
Total assets	57,8	74,4	57,7	74,4
Loans to households	61,9	79,0	62,2	79,1
Loans to non-financial companies	52,4	72,7	53,1	73,3
Deposits from households	70,0	79,5	70,4	79,8
Deposits from non-financial companies	51,7	76,9	51,1	77,3
Financial result*	80,1	90,9	75,1	88,4
Total revenues*	62,2	77,1	62,2	76,8

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

The differences in the amount of assets between the banks are high. The market share of the individual banks in the total assets of the banking system remained on almost the same level compared to 30 June 2017, except for two banks from the group of large banks, whose participation is increasing. Ten banks, whose individual participations are less than 5%, altogether participate with one fourth in the total assets of the banking system. The spread between the bank with highest (22.6%) and the bank with lowest (0.7%) participation increased by 0.2 percentage points in this quarter.

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.

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[2] 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.
[3] The concentration level is considered acceptable if this index is somewhere between 1,000 and 1,800.

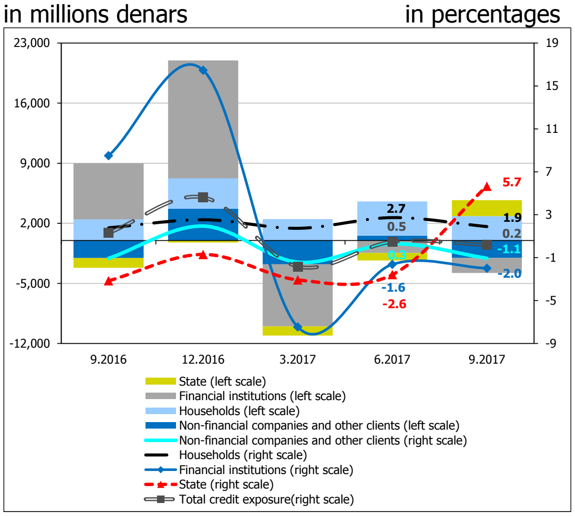
II. Bank risks

1. Credit risk

In the third quarter of 2017, the total non-performing loans of the banking system reduced by 2.0%, which is mainly due to the closing of the non-performing receivables from non-financial entities with forfeiting of assets that were established as collateral for those receivables[4]. These tendencies provided for reduction of 0.2 percentage points of the participation of the non-performing loans in the total loans to non-financial sector, which was 6.6% as of 30 September 2017. The reduction of the non-performing loans rate[5] was present in the segment of non-financial companies, where the non-performing loans featured faster quarterly decline compared to the reduction of the credit activity of the banks towards these clients. On the other hand, the non-performing loans of the households feature accelerated growth (which was already present since the beginning of 2017), along with the simultaneous increase of the prolonged loans and of the loans for which the repayment is late between 61 and 90 days – points out to the need for more careful monitoring of this portfolio. Still, due to the faster credit growth in a situation of favorable expectations and evaluations of the banks of the risk profile of the credit demand by households and their (still) low level of indebtedness, there is no worsening of the indicators of quality of this segment of the credit portfolio. The high coverage of the non-performing loans with own impairment limits the risks from eventual total uncollectability of these loans on the solvency of the banks.

Graph 3
Quarterly growth of the credit exposure, per sectors

in millions denars	in percentages



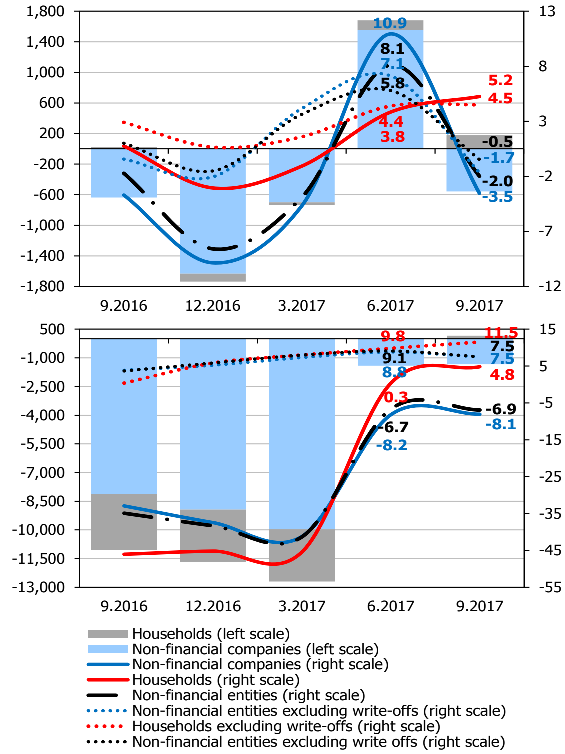
Source: Credit registry of the National Bank, using data provided by the banks.

In the third quarter of 2017, **the total credit exposure** of the banking system increased by 0.2% (905 million denars) and reached 464,210 million denars. In this quarter, the banks continued the solid credit support of the households (increase of the credit exposure by 2,839 million denars i.e. 1.9%), although to a less extent compared to the previous quarter. The reduced credit exposure of the banking system towards the non-financial entities, in a situation of solid growth of the new crediting towards this sector[6], is due to the decline in the non-performing loans towards non-financial entities by forfeiting the collateral for these loans, and less due to the collection of some regular exposures in the sectors "Other processing industry" and "Real estate related activities". In the third quarter of 2017, the banks redirected some of the investments in CB bills and in placements in the NBRM by investing in treasury bills. This influenced the reduction of the

[4] In October 2017 this forfeited property was sold with capital gain.
[5] The rate of non-performing loans is the participation of the non-performing loans in the total loans.
[6] The total newly approved loans to non-financial companies in the third quarter of 2017 are higher by 6.8% from the newly approved loans in this sector in the second quarter of 2017.

Graph 4
Quarterly (above) and annual (below) change of the non-performing loans to non-financial entities

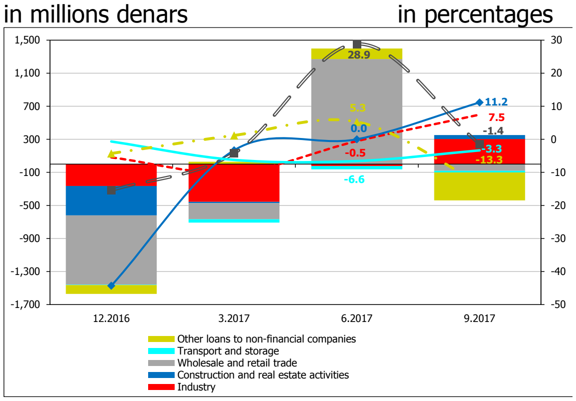
in millions denars | in percentages



Source: NBRM, using data provided by the banks. According to the regulation, starting from 1 January 2016, the banks are obliged, on regular basis, to write-off all receivables that are entirely reserved longer than two years. The largest write-off in this regard was done in June 2016.

Graph 5
Quarterly growth of the non-performing loans of specific activities of non-financial companies

in millions denars | in percentages



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

placements of the financial institutions by 1,757 million denars i.e. 2.0%) with simultaneous increase of the exposure towards the state (by 1,857 million denars i.e. 5.7%).

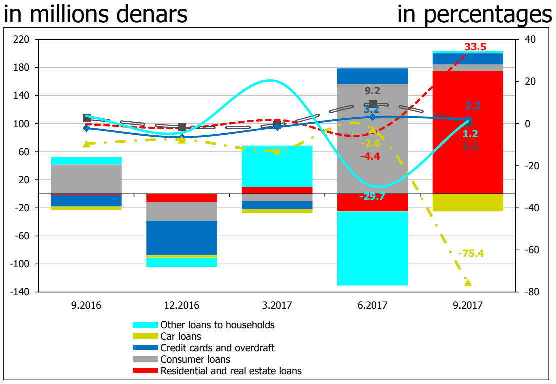
1.1 Realization of the credit risk in the balances of the banks

The total non-performing loans of the banking system were reduced during the third quarter of 2017 by 2.0%, which was concentrated in the segment of non-financial companies (decline of 3.5%) and is caused by the closure of the uncollected receivables with forfeiting of assets provided as collateral for those receivables. The forfeited property comes from a non-financial company in the "Construction" sector and some other smaller non-financial companies related to this company which, in addition to "Construction", are also classified in the "Administrative and auxiliary service activities" sector. After the cut-off date of this Report, the banks that have forfeited the property of this company sold it immediately and achieved capital gain. If we exclude the effect of these activities, the non-performing loans to non-financial companies are essentially increasing on quarterly basis, which is due to the worsened creditworthiness of several larger clients in the following sectors: "Food industry", "Production of metals, machinery, tools and equipment" and "Information and communications".

When it comes to households, the quarterly growth rate of the non-performing loans was additionally accelerated (5.2%) compared to the previous quarter. Furthermore, this is the highest quarterly growth of the non-performing loans to households in the last seven years i.e. after 2010 when the negative effects of the global financial crisis (2007 – 2008) were gradually wearing off and the increase of the non-performing loans was moderate.

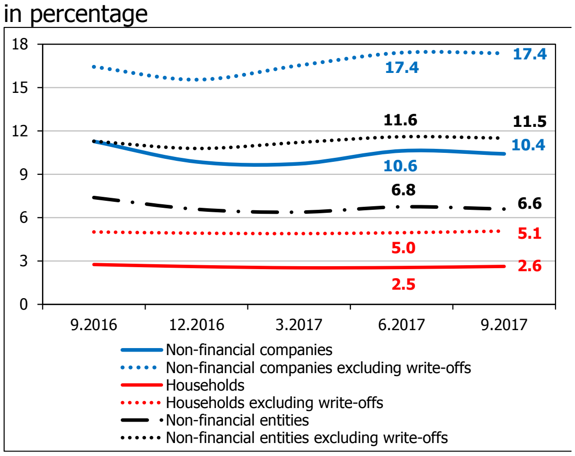
As of the end of the third quarter of 2017, the annual dynamics of the non-performing loans is still under the influence of the mandatory

Graph 8
Quarterly growth of the non-performing loans of specific credit products to households
in millions denars in percentages



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

Graph 7
Rate of non-performing loans of non-financial entities
in percentage



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

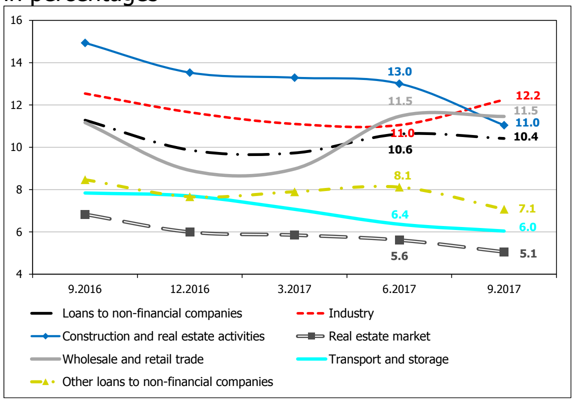
write-offs. Hence, due to the effect of these write-offs, the non-performing loans continue to decline, but if we exclude the effects of these write-offs, the annual growth of the non-performing loans is slowing down, so at the end of the third quarter of 2017 is 7.5% (9.1% as on 30 June 2017). This dynamic is primarily determined by the non-performing loans of the companies (their annual increase is 7.5% vs 8.8% as on 30 June 2017). The non-performing loans of the households are also increasing with the inclusion of the effects of the write-offs, by 11.5% (9.8% as on 30 June 2017). The two-figure annual growth of the non-performing loans to households was last time noticed in the midst of the global economic crisis (2007 - 2008), which is additional indicator of the potential growing risks from the loans approved in this sector (especially because of the stable growth the crediting to households, in a situation of eased credit requirements in terms of provision of collateral that could be used as secondary collection source).

The participation of the non-performing loans in the total loans to non-financial entities was reduced by 0.2 percentage points in the third quarter of 2017, and they reverted to the level that was at the end of 2016 (6.6%).

With regards to the non-financial companies, the non-performing loans rate reduced by 0.2 percentage points, same as with the total non-financial sector. This reduction is due to the stronger quarterly decline of the non-performing loans, compared to the decline of the total loans to non-financial companies. At the end of September, the non-performing loans rate was 10.4%.

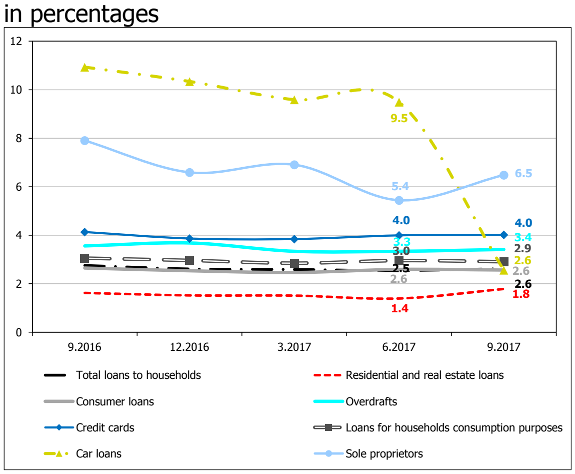
In terms of specific sectors, the non-performing loans rate is the highest among clients that belong to sectors like "Industry", "Wholesale and retail trade", "Construction and real estate related activities". In the third quarter of 2017, more significant increase of the non-performing loans rate was noticed in solely in the

Graph 9
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.

Graph 10
Rate of non-performing loans to households, per specific credit products
in percentages



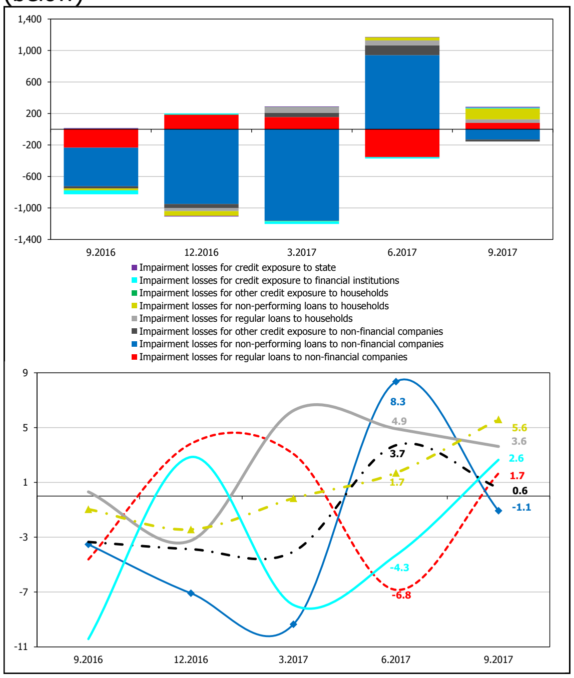
Source: Credit registry of the National Bank, using data provided by the banks.

"Industry" sector, in terms of credit exposure[7] (by 1.2 percentage points), which is due to the accelerated quarterly growth of the non-performing loans (7.5%), with simultaneous reduction in the total loans to clients in this sector (-3.0%). Additional influence in this regard also came from the reduction of the non-performing loans rate in the "Construction and real estate related activities" sector, due to the above-mentioned closure (from accounting perspective) of the non-performing loans by forfeiting the property offered as collateral for the uncollected receivables, hence this sector lost the status of being "the champion" among sectors with highest rate of non-performing loans (this sector was the "champion" from the middle of 2014 until 30 June 2017).

The rate of non-performing loans to households is low - 2.6%, and features minimal upward tendency compared to the previous quarter (in general, this rate is maintained at stable level for quite some time now). The growth of non-performing loans to households, which is more noticeable since the beginning of 2017, did not have impacts on the amount of the non-performing loans rate solely because of the maintenance of the solid credit growth towards this sector. **Per specific credit products**, the rate of non-performing loans[8] is increasing solely among "Housing loans" which, in a situation of stable growth of the total loans, is caused by the exceptionally high quarterly growth of the non-performing loans (by more than 30%), mainly because of the change of status (into 'non-performing') of several credit users of larger housing loans. However, this segment of the credit portfolio of the banks, consisted of households, is still with the highest

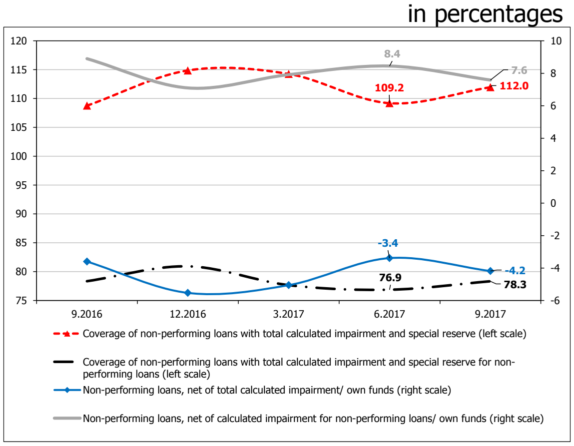
[7] The credit exposure to clients in the "Industry" sector participates with 21.6% in the total credit exposure to non-financial companies. In the same time, the non-performing loans to clients in this sector participate with 29.0% in the total non-performing loans to non-financial companies.
[8] With automobile loans, this rate was reduced by 6.9% and reached the record low level of 2.6%, following number of years in which the rate of non-performing loans was the highest for this type of credit product. In other words, in the last couple of years there is a trend of termination of this credit product in the balances of the banks and "cleansing" of the portfolio from non-performing loans.

Graph 11
Quarterly absolute (above) and relative (below) change in the impairment, per sectors
in millions denars (above) and in percentages (below)



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

Graph 12
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.

quality, measured according to the rate of non-performing loans, and presently is not showing worrying signs. Furthermore, we need to be aware of the high participation of the housing loans where residential apartments are provided as collateral, in the total housing loans portfolio[9] (82.1%) and the relatively low level of the annual uncollectability rate (0.6%).

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

In the third quarter of 2017, the allocated impairment for the total credit portfolio of the banks was increased by 131 million denars i.e. by 0.6%. The increase of the allocated impairment comes from the impairment for the non-performing loans to households, and smaller part from the non-performing loans to non-financial companies.

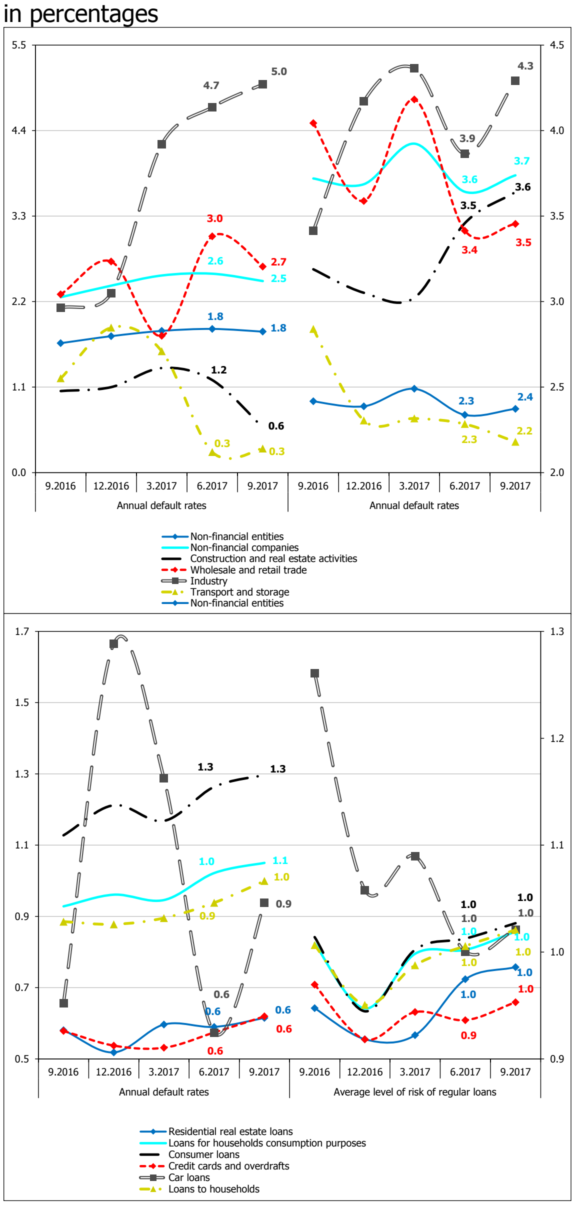
The coverage of the non-performing loans with own impairment is high, which mitigates the negative effects from eventual complete uncollectability of the non-performing loans. In other words, the non-reserved portion of the non-performing loans covers only 7.6% of the own assets of the banking system 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 wold be reduced by only 1.2 percentage points (almost identical to the previous quarter).

1.3 Other possible sources of credit risk

In the third quarter of 2017, **the annual rate of uncollectability** of the credit exposure with regular status[10] is 1.8% (no change for a

[9] Residential space for living and renting for living purposes, as well as other residential space.
[10] The annual rate of uncollectibility of the credit exposure is calculated as a percentage of the amount of the credit exposure

Graph 13
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.

fourth consecutive quarter), which is lower in comparison to the average level of riskiness of the regular loans to non-financial entities[11] (2.4%), as established by the banks. This means that the banks are more cautious and they did slightly higher impairment of the regular loans compared to what is suggested by the rate of uncollectability of these receivables.

If broken down per industry sectors, the annual uncollectability rates, in general, are improving[12], except the worsening in the sector "Industry", which is due to the transfer into 'non-performing' status of several larger clients dealing with production of foodstuff and production of metals. The worsening of the annual rate of uncollectability was accompanied with higher impairment for the regular loans in this sector, which points out to increased identification by the banks of the risk related to the loans in this sector[13]. In the same time, the banks continue to be aware of the higher risk when crediting clients in the sector "Construction and real estate related activities", which is pointed out by the higher impairment of the regular loans, regardless of the improvement of the annual uncollectability rate in this sector.

In addition to the appropriate coverage of the regular loans with allocated impairment, **equally high is the participation of the loans for which collateral is provided** (83.4% of the total regular loans to non-financial entities) which can be used as secondary source of collection in a case of default

The high participation of the loans for which specific collateral is provided is mainly typical for the regular receivables from non-financial entities (98.0%). In the households sector, the participation of the regular loans for

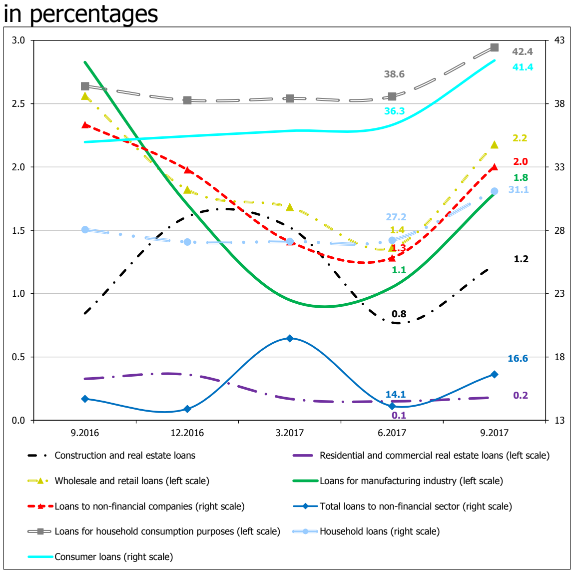
with regular status that, within a period of one year, was assigned with 'non-performing' status.

[11] Calculated as a ratio between the impairment for regular loans and the gross amount of the regular loans.

[12] The improvement of the annual uncollectability rates is due to the faster annual decline of the loans that have been transferred from 'regular' into 'non-performing' status, compared to the annual decline of the regular loans in the sector "Wholesale and retail trade" i.e. the significantly lower growth of the regular loans to the sector "Construction and real estate related activities".

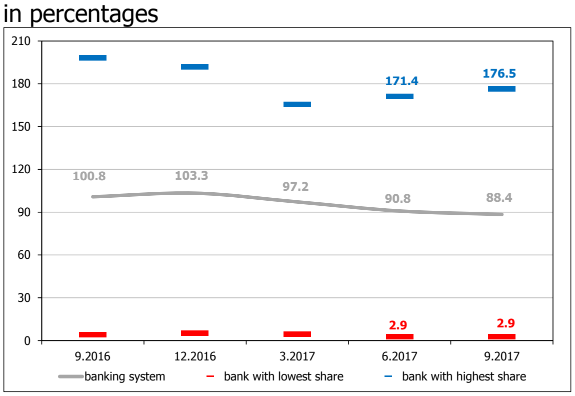
[13] The share of this sector is 24.4% in the total loans approved to non-financial companies, 23.9% in the regular loans and 29.0% of the non-performing loans.

Graph 14
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 15
Participation of the 10 largest exposures to non-financial entities in the own assets of the banks
in percentages



Source: NBRM, using data provided by the banks.

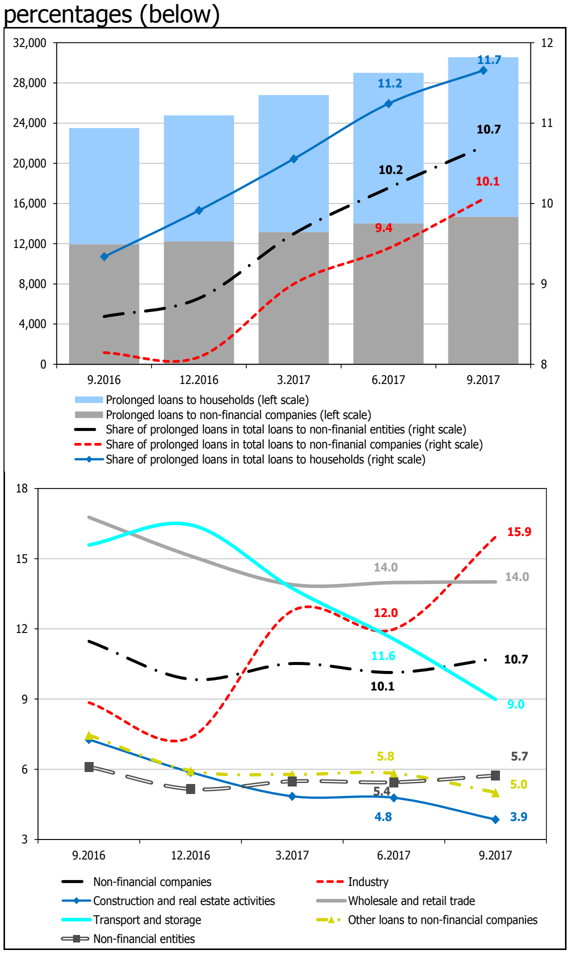
which collateral is provided in the total regular loans is a bit more than two thirds, and for the first time it is below 70%, which is due to the more relaxed requirements for collaterals for consumer loans[14]. Furthermore, in 35.4% of the regular consumer loans with collateral, the actual collateral includes only guarantor and bill (draft).

The relatively high concentration of the credit portfolios of specific banks (per individual clients, per categorization in specific sectors, etc.) could increase the losses because the credit risk could go beyond the expectations of the banks for specific clients. Regardless of the declining share, at the end of the third quarter of 2017, **the ten largest exposures of the banks towards non-financial entities continue to participate with significant part (88.4%) in the own assets of the banks** which, per individual bank, varies between 2.9% and 176.5%. These exposures have lower risk on aggregate level (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[15] participate with 10.7% in the total loans to non-financial entities. This participation level is similar for both segments of the non-financial sector (10.1% at the non-financial companies and 11.7% at the households), and for the first time ever they reached two-figure level among the non-financial companies. In 2017, the increase of the prolonged loans exceeded the growth of the total loans, both at the households and at the non-financial companies[16].

[14] The share of the loans with no collateral in the total regular consumer loans exceeded 40% for the first time ever, in the third quarter of 2017.
[15] According to the regulation, the prolonging of the maturity of the loans is not consequence of the worsened financial situation of the clients.
[16] In the third quarter of 2017, the prolonged loans to households and to non-financial companies increased by 5.9% and 4.8%, respectively (vs the growth of 9.8% and 6.6% in the second quarter).

Graph 16
Dynamics of prolonged loans and structural indicators (above), and rate of non-performing loans for the prolonged loans portfolio, per specific sectors (below)
in millions denars and in percentages (above), in percentages (below)



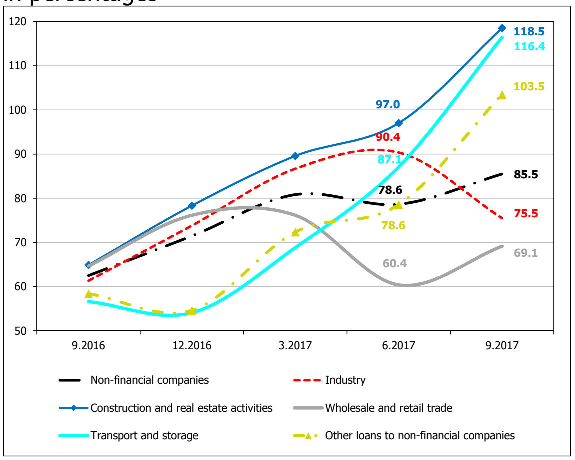
Source: Credit registry of the National Bank, using data provided by the banks.

The rate of non-performing loans to non-financial companies that were initially prolonged (10.7%)[17] is on increase (by 0.6 percentage points), vs the total credit portfolio of the non-financial entities, where this rate was reduced. In addition, the rate of the non-performing loans that were initially prolonged exceeds the amount of this indicator for the total credit portfolio, in the following sectors: "Industry" (15.9%), "Wholesale and retail trade" (14.0%) and "Transport and storage" (9.0%). The prominent difference between these two rates, but also the actual high growth of the rate of non-performing loans that were initially prolonged in the "Industry" sector, points out that the growth of the rate of the total non-performing loans in this sector is due to the prolonged loans that were flagged with 'non-performing' status. This further points out to conclusion that in some of these prolonged loans, the worsened financial situation of the clients was the probable reason for prolonging of the maturity (according to the regulations, the prolonging of the loans deadline because of worsened financial situation of the client should be treated as restructuring, not as prolonging). The average risk level of the regular prolonged loans to non-financial entities is 3.3% (3.7% for the total regular loans to non-financial entities), and the simulation of the eventual complete migration of the regular prolonged loans into non-performing loans would double the rate of non-performing loans to non-financial entities (in other words, this rate would be 19.1%). In the households sector, the quality of the prolonged loans is on a far higher level. For example, the non-performing loans to this sector, that were initially prolonged, participate with only 1.1% in the total prolonged loans to households, while the average level of risk of the regular prolonged loans to households is 0.3%, as on 30 September 2017.

The amount of matured loans for which the late period of repayment of the principal is between 61 and 90 days, was increased in the third quarter of 2017 by

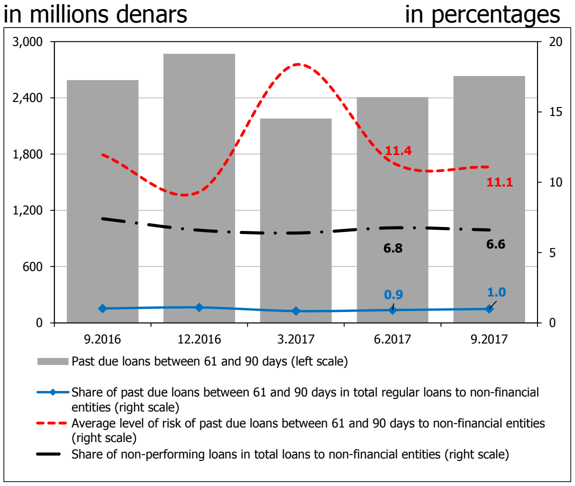
[17] This rate shows the share of the non-performing loans to non-financial companies that were initially prolonged, in the total prolonged loans.

Graph 19
Share of the regular prolonged loans in the total non-performing loans, per sectors of the non-financial companies
in percentages



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

Graph 18
Dynamics and average level of risk of the loans with matured repayment of the principal between 61 and 90 days
in millions denars in percentages



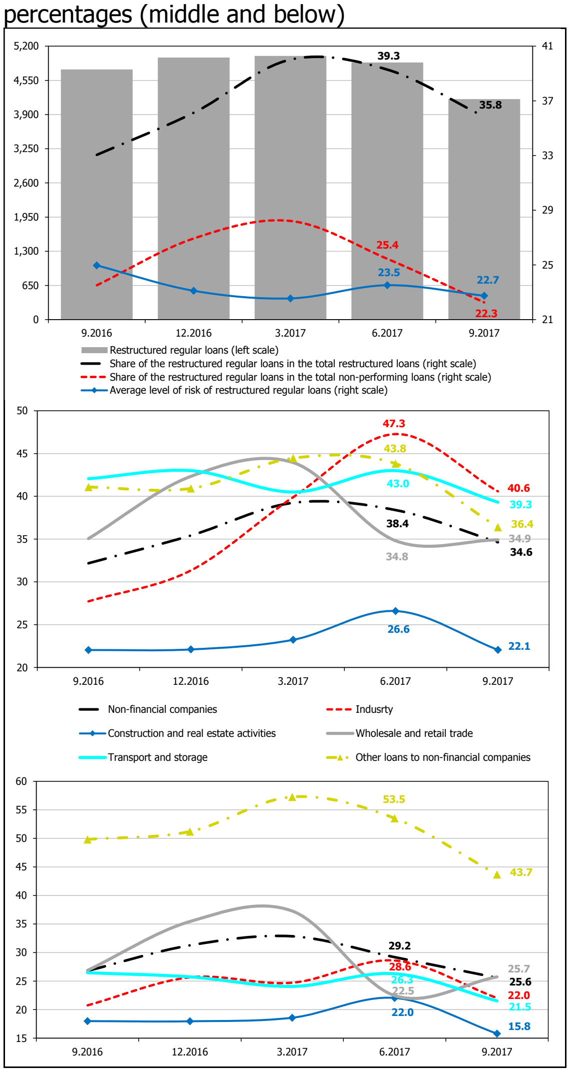
Source: Credit registry of the National Bank, using data provided by the banks.

9.3% i.e. by 225 million denars. These tendencies are due to the late servicing by several clients in the following sectors: "Wholesale and retail trade", "Information and communications", "Industry" and "Expert, scientific and technical activities". The increase of these loans to households is due to the worsened situation in the repayment of the housing loans and in the area of credit cards, including the negative balances on current accounts. When running a simulation that none of the loans to non-financial sector matured in the period between 61 and 90 days will not be collected in the following month, 1.0% of the total regular loans (as on 30 September 2017) would be transferred to non-performing loans, so only on the basis of these grounds the total non-performing loans would increase by 2,633 million denars i.e. by 14.0%. However, in the following month (in October), only 1.7% of the loans matured between 61 and 90 days were assigned 'non-performing' status, which points out to solid collection rate of the portion matured between 61 and 90 days. In the households sector, 4.2% of these loans[18] were assigned 'non-performing' status[19] in October, which emphasizes the potential growing risks from this sector.

Important signal for actual happening of the credit risk is the tendency of the restructured regular loans to be assigned 'non-performing' status if the banks did not change the loan conditions to their clients facing financial distress. In the third quarter of 2017, the restructured regular loans were reduced by 14.3% (by 697 million denars), which was mainly concentrated in the non-financial companies (which, *in alia*, dominate in the portfolio of restructured loans), and the decline in the regular restructured loans was 15.5% (by 708 million denars). The decline of the restructured regular loans is mainly due to the transfer into 'non-performing' status of several larger restructured receivables from clients in the following sectors: "Food industry", "Wholesale

[18] In the non-financial companies, the percentage of transfer of these loans into 'non-performing' status is on a lower level compared to the total non-financial sector (1.2%).
[19] Most of the transferred non-performing loans are consumer loans.

Graph 20
Dynamics of the restructured regular loans and indicators of their quality (above), and share of the restructured regular loans in the total restructured loans (middle) and in the total non-performing loans (below), per specific sectors of the non-financial companies
in millions denars and in percentages (above), in percentages (middle and below)



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

and retail trade" and "Information and communications", and less from the collection of initially restructured loans[20] which also include one larger loan to a client in the sector of "Real estate related activities". This points out to the fact that in some cases the banks were late in identifying the financial distress of the clients and, accordingly, they were late to undertake restructuring of the credit liabilities, nor they (the loans) were properly tailored to the needs and capacities of the clients. In term of particular sector, the biggest reduction of the regular restructured loans of 39.3% (242 million denars) happened in the "Construction and real estate related activities", where the simultaneous reduction of the non-performing restructured loans in this sector[21] of 22.2% (376 million denars) is due to the collection of a single large restructured loan with regular status in the "Real estate related activities". The reduction of the regular restructured loans is also noticeable in other sectors, except the "Wholesale and retail trade".

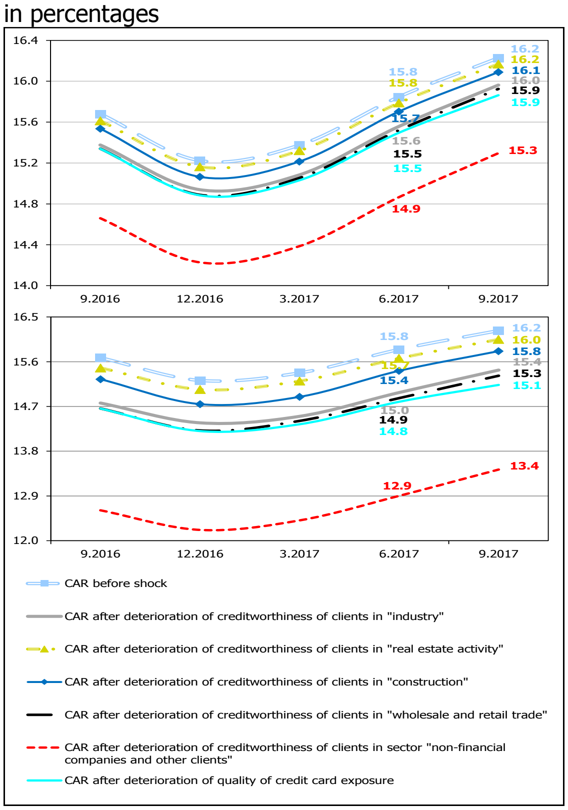
If we assume that the restructuring of the regular loans was unsuccessful and these loans were assigned a 'non-performing loan' status, the non-performing loans rate at the end of the third quarter of 2017 would be higher by 1.5 percentage points. With regards to the non-financial companies, this rate would be higher by 2.6 percentage points[22].

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

In order to examine the sensitivity of the banking system to worsening of the quality of specific segments of the credit portfolio, simulations are carried out for hypothetical migration of 10% (first simulation) and 30% (second simulation) of the credit exposure to

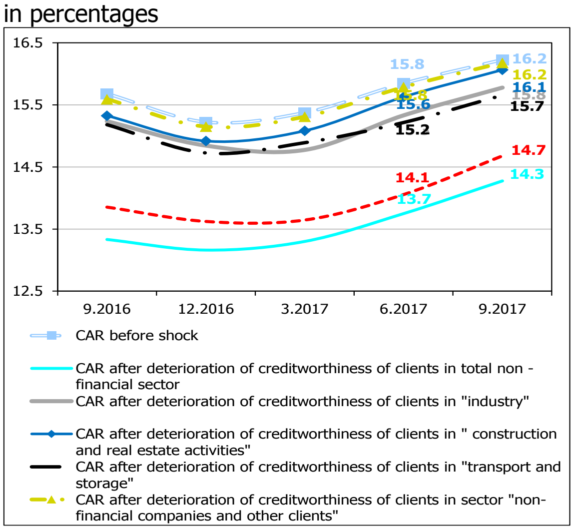
[20] The collection of the restructured regular loans is about receivables from several clients that belong to sectors: "Real estate related activities", "Wholesale and retail trade" and "Mining and extraction of stone".
[21] Due to the above-mentioned forfeiting of the property because of uncollected receivables by one larger client in this sector.
[22] Per sectors, the increase of the rate of non-performing loans, in a situation of assumed failure of the implemented restructuring, is 2.9 percentage points in the "Wholesale and retail trade", 2.7 percentage points in the "Industry" and 1.7 percentage points in the "Construction and real estate related activities".

Graph 22
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.

Graph 21
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.

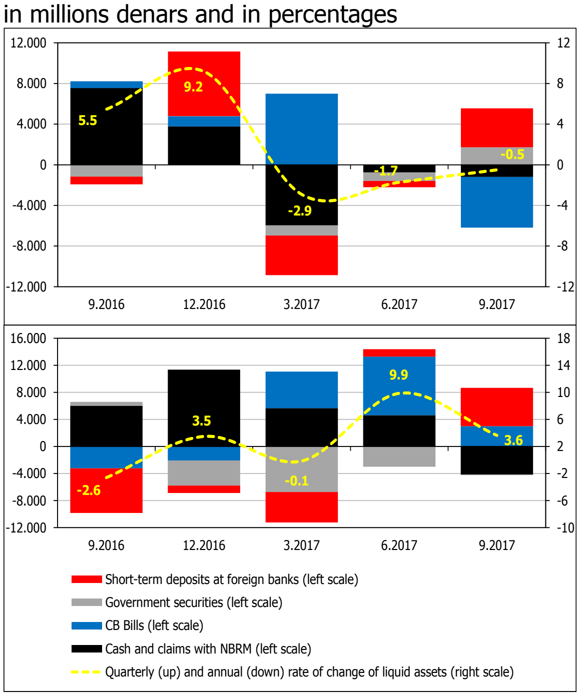
non-financial companies (by activity sectors) and households (by credit products), separately, and then to the two sectors jointly – from the existing ones towards the following two higher risk categories. **The results of the simulations confirm the resilience of the banking system to the simulated shocks and they register improvement compared to the previous quarter.** This mainly due to the higher rate of the capital adequacy of the banking system prior to the stimulations 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, in none of the individual banks, which was not the case in the previous quarters when hypothetical need for recapitalization was identified in some banks. The largest decrease in the capital adequacy ratio is noticed when simulating worsened creditworthiness of the clients in the sectors: "Industry" and "Wholesale and retail trade", as well as in the exposure related to consumer loans.

The sensitivity of the banking system on the credit risk realization is also tested by implementing three hypothetical simulations based on three assumptions (combination of shocks): (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 2.0 percentage points (almost identical with the previous quarter). In this simulation, the biggest effect on the capital adequacy rate is exercised by the assumed worsening of the creditworthiness of the clients in sectors "Industry" and "Wholesale and retail trade", which emphasizes the relevance of the performance of the clients in these sectors for maintenance of the quality of the credit portfolio on a satisfactory level.

2. Liquidity risk

In the third quarter of 2017, in a situation of slowed growth of the total sources of financing, the liquidity assets of the Macedonian banking system featured modest decline, regardless of the slowed quarterly growth of the credit activity of the banks. The quarterly decline of the liquid assets was mostly present in the placements of the banks in CB bills and in foreign currency deposits in the National Bank[23]. These changes in the liquid assets cased minimum reduction of the liquidity ratios of the banking system, and only of the denar liquidity ratios (the denar assets and liabilities), but they continue to remain on a satisfactory level. In this quarter of the year, the gap between the assets and the liabilities according their residue maturity narrowed, in most part of the analyzed matured segments, but mainly in the seven-day segment. 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.

Graph 23
Quarterly (above) and annual (below) change of the liquid assets, per instruments
in millions denars and in percentages



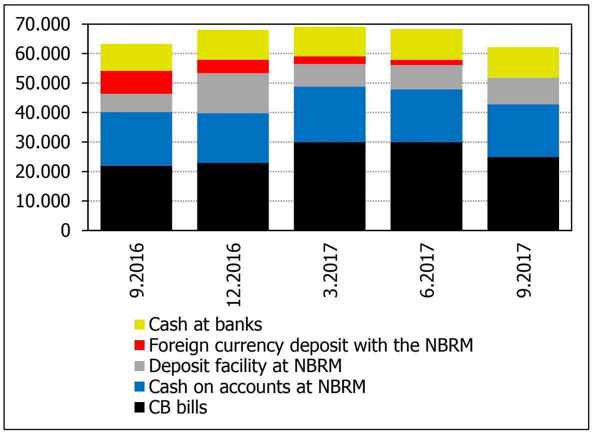
Source: NBRM, using data provided by the banks.

2.1 Dynamics and composition of the liquid assets

The liquid assets[24] on the system level at the end of the third quarter of 2017 are 125,944 million denars, and are declining for three consecutive quarters. In the third quarter of 2017, the reduction of the liquid assets is 0.5% i.e. 633 million denars, which is less compared to the actual decline in the previous quarter (by 1.7% i.e. by 2,213 million denars). However, if analyzed on annual basis, the liquid assets continued to grow (by 3.6% i.e. by 4,424 million denars), albeit with slower dynamics compared to the previous quarter (by 9.9% i.e. by 11,265 million denars). The quarterly reduction of the liquid assets was mainly present in the investments of the banks in CB bills[25] and in the placements in foreign currency deposits in the National Bank which, in the absence of new auctions for foreign currency deposits[26] fully matured in the third quarter of 2017 and were actually paid off by the National

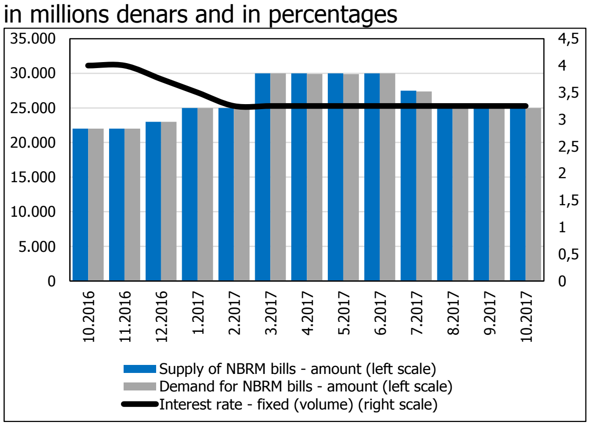
[23] The foreign currency deposits matured in the third quarter of 2017 and the National Bank paid them off in full.
[24] The liquid assets include: 1) assets and claims on the National Bank, which include cash, assets on the accounts of banks with the National Bank, deposit facility with the National 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.
[25] In the third quarter of 2017, the auctions of CB bills were organized through tender, in amounts and with limited offered amount that was reduced twice: in July 2017 from 30,000 million denars to 27,500 million denars, and in August 2017 to 25,000 million denars. The interest rate of the CB bills remained unchanged (3.25%).
[26] Since October 2016, the National Bank stopped organizing auctions for foreign currency deposits.

Graph 24
Structure of the cash assets and receivables of the banks from the National Bank, per instruments
in millions denars



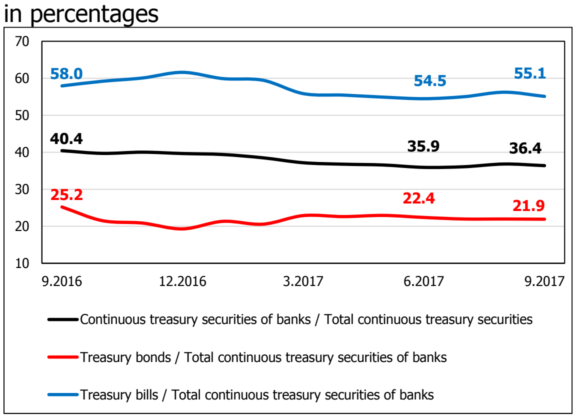
Source: NBRM, using data provided by the banks.

Graph 26
Offer and demand and interest rate of the auctions of CB bills of the National Bank
in millions denars and in percentages



Source: NBRM

Graph 25
Relative significance of the banks on the primary market of state securities
in percentages



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

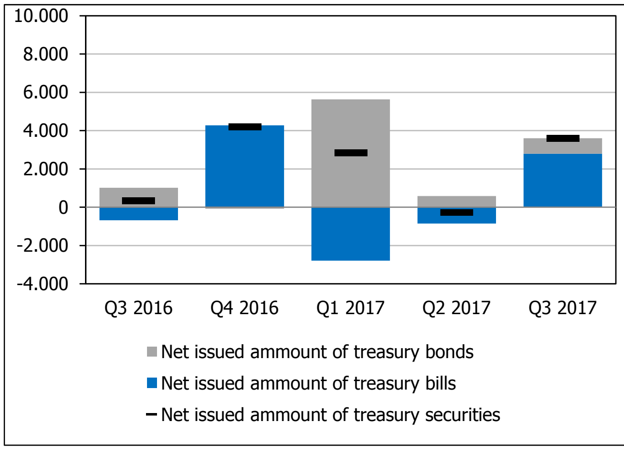
Bank.

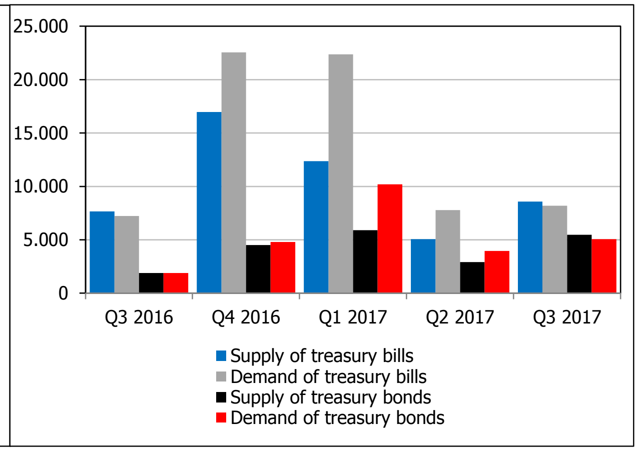
Regardless of the quarterly decline of 9.1%, the cash assets and receivables of the banks from the National Bank are still the most present financial instruments in the frames of the liquid assets of the banks, with share of 49.3%. In their frames the biggest is the participation/ share of the CB bills (regardless of their decline by 4,994 million denars i.e. by 16.7%, on quarterly basis), followed by the assets on the bank accounts in the National Bank[27]. The only component of the cash assets and receivables of the National Bank that increased were the deposits available in the National Bank[28].

The investments of the banks in domestic government securities featured a quarterly growth of 5.7% (according their nominal value), which was entirely determined by the increase of the placements in treasury bills (by 1,764 million denars i.e. by 9.1%), while the investments in domestic government bods featured a modest decline (by 54 million denars i.e. by 0.5%)[29]. Hence, the participation of the investments of the banks in the government securities in liquid assets was increased by 1.5 percentage points and reached 25.8% at the end of the third quarter of 2017.

[27] In the third quarter of 2017, the funds on the accounts of the banks in the National Bank featured minimal decline of 129 million denars i.e. by 0.7%.
[28] Pursuant to the Decision on Deposit Facility ("Official Gazette of the Republic of Macedonia" No. 49/12, 18/13, 50/13, 166/13 and 35/15), the banks could place deposits with the National Bank every working day and once a week with maturity of seven days. These deposits are placed without the possibility of partial or full early withdrawal. In the third quarter of 2017, the interest rates on these deposits remained unchanged – they equaled 0.25% on overnight deposits and 0.5% on seven-day deposits.
[29] The participation of the banks in the issued continuous government securities at the end of September is 36.4%, vs the pension funds that participate with 36.9%.

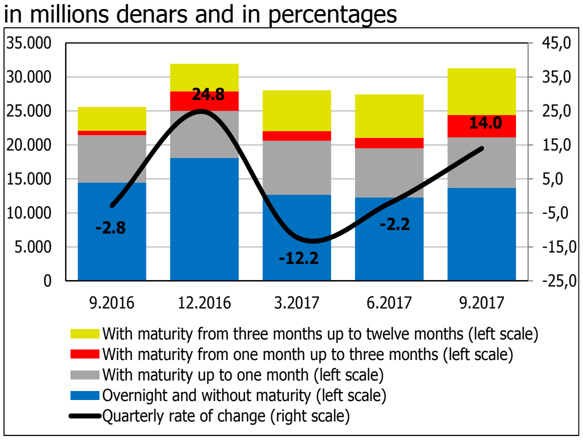
Graph 27
Net issued amount (left) and offer and demand (right) for the domestic government securities
in millions denars





Source: Ministry of Finance and the National Bank.

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



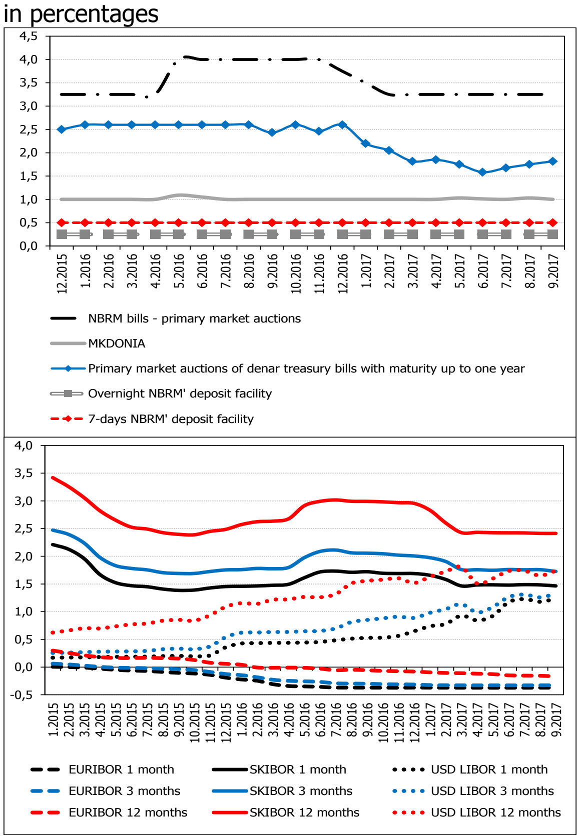
Source: NBRM, using data provided by the banks.

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. 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 and the remainder have longer maturity (three, five, ten and fifteen years). The investments in government bonds issued by other countries have modest participation of around 2% in the total portfolio of the government securities of the banks.

Following the decline in the first two quarter so 2017, the assets placed in foreign banks with residual maturity of less than one year significantly increased (by 14%) in the third quarter. With this, the already high share of these assets in the total foreign currency liquid assets[30] was additionally increased and reached 86%. The prominent place in the maturity structure of these assets goes to the assets on the correspondent accounts in

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

Graph 29
Basic domestic interest rates (above) and basic inter-bank interest rates SKIBOR, EURIBOR and LIBOR for US dollar, for selected maturities (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.

foreign banks and to the funds invested over night (in the third quarter of 2017, these assets additionally increased by 1,423 million denars i.e. by 11.6%), and are usually use for the payment operations abroad. In terms of assets in foreign banks invested on specific term, in the third quarter of 2017 there was significant increase of the assets termed between one and three months – their amount was doubled. One part of the increase in the assets placed in foreign banks goes to deposits made in US dollars for which the yields are higher, compared to euro deposits, for the respective maturity segment.

In a situation of no-change in the monetary policy of the National Bank[31], during the third quarter of 2017 no significant shifts happened on the level of interest rates on the domestic inter-bank marking (SKIBOR and MKDONIA). Furthermore, the basic interest rates of the international inter-bank market remained at exceptionally low level, even negative for some maturities, which corresponds to the no-change situation in the monetary policy of the ECB and of FED in the third quarter of the year. 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.

Reforms in the determination of the interest rate benchmarks, on global level, with special emphasis on the key interest rate benchmarks for the euro

Relevance of the interest rate benchmarks and initiative for reforms in their determination

The interest rate benchmarks have a key role in the financial and the banking systems, but also in the economies in general. They are used by various economic agents, starting with the banks that receive deposits and approve loans to the real sector, all the way to the participants on derivative instrument markets. There are three main reasons why the interest rate benchmarks are necessary for smooth operation of the financial market: *first*, the use of the interest rate benchmarks in determination of the price (variable interest rate) of the financial contracts reduces the complexity of these contracts and further facilitates their standardization: *secondly,* the interest rate benchmarks are widely used in the evaluation of the balance sheet items (they can be used as discount rate for some financial instruments, or when doing evaluation for accounting purposes); and *third*, the interest rate benchmarks are widely

[31] Since the last change in February 2017, the interest rate of the CB bills remains unchanged (3.25%).

used on the financial markets with derivative instruments such as, for example, swamps, options and time-bound contracts.

Instigated by a number of well-document cases of manipulation efforts and false reporting in relation to the key interest rate benchmarks (on global level), combined with the reduced liquidity on the inter-bank markets of deposits with no collateral, the international forum G-20, since a number of years ago), requested from the Financial Stability Board – FSB) to reconsider the key rate benchmarks and to develop a plan for reform thereof. For this purpose, in July 2014 the FSB published a Report for Reforming of the Interest Rate Benchmarks[32]. In order to ensure a high level of robustness of the interest rate benchmarks and their use by the market participants, FSB recommended the use of the so called multi-rate approach, that has two main purposes: 1) strengthening of the existing interest rate benchmarks based on costs for financing of the banks through the markets of deposits with no collateral[33], as much as possible, using data on the transactions closed on these markets[34] (and as least as possible using data on listed interest rates); and 2) in order to provide greater choice between different market rates, to develop alternative interest rate benchmarks that will be close to risk-free rates (these rates are more appropriate for use for specific financial transactions, including the derivative transactions). In July 2016 and in October 2017, FSB published documents on the progress achieved in the implementation of the FSB recommendations[35]. The monitoring and implementation of these recommendations are implemented by the bodies of the FSB and the member states, through the FSB Official Sector Steering Group – OSSG, consisted of representatives of central banks and/ or bodies of the monetary institutions in a number of countries: Australia, Brazil, Canada, Hong Kong, Japan, Mexico, Singapore, South Africa, Switzerland, UK, USA and representatives from ECB (European Central Bank), EBA (European Banking Authority), ESMA (European Securities and Markets Authority), IOSCO (International Organization of Securities Commissions) etc., together with the respective administrators of the interest rate benchmarks.

Interest rate benchmarks for the euro

Presently, the EURIBOR (Euro Inter-bank Offer Rate)[36] EONIA (Euro OverNight Index Average)[37] are the two most commonly used interest rate benchmarks for euro-based contracts. These interest rate benchmarks are administered by the European Money Markets Institute – EMMI. EMMI is a non-profit association with headquarters in Brussels, responsible for the methodology of establishment and implementation of the operational aspects of the process of setting these interest rates.

The reforms in relation to these two interest rate benchmarks are implemented by EMMI and their aim is harmonization with the new EU regulations on interest rate benchmarks[38] published in 2016 and will enter into force in January 2018. This new EU regulation also stems out of the initiative of FSB for reforming of

[32] FSB report Reforming Major Interest Rate Benchmarks.

[33] This is about interest rates established on the inter-bank markets of unsecured deposits (the common abbreviation for these rates is IBOR), such as: Euro Interbank Offered Rate (EURIBOR), London Interbank Offered Rate (LIBOR), Tokyo Interbank Offered Rate (TIBOR), Australian Bank Bill Swap Rate (BBSW), Brazil Overnight Interbank Offered Rate (DI rate), Canadian Dollar Offered Rate (CDOR – the Canadian IBOR), Hong Kong Interbank Offered Rate (HIBOR), Mexico Interbank Equilibrium Interest Rate (TIIE), Singapore Interbank Offered Rate (SIBOR), Johannesburg Interbank Average Rate (JIBAR), South African Benchmark Overnight Rate (SABOR), CHF LIBOR, Swiss Average Rate Overnight (SARON), etc.

[34] These improved rates are called "IBOR +".

[35] Progress report on implementation of July 2014 FSB recommendations (July 2016) and Progress report on implementation of July 2014 FSB recommendations (October2017).

[36] EURIBOR is interest rate at which the benchmark banks on the money market in the Eurozone are ready to sell deposits to other benchmark banks. This interest rate is calculated as average of the listed interest rates of selected panel banks (presently there are 20 banks that voluntarily participate, with headquarters in EU countries, and banks that have headquarters in non-EU countries but have significant volume of operations in the Eurozone), EURIBOR is available in several maturities (one and two weeks, one, two, three, six, nine and twelve months). It is calculated on daily basis and is also published on daily basis at 11:00 hours.

[37] EONIA is interest rate on the money market in the Eurozone, calculated as weighted average of the interest rate of all transactions closed overnight between the benchmark banks (presently 28 banks). The inter-bank interest rate EONIA fluctuates in the spread between the interest rates o the available loans and the overnight deposits of the ECB. EONIA is published daily at 19:00 hours.

[38] Benchmarks - Regulation (EU) 2016/1011.

the interest rate benchmarks. In the last few years, EMMII devised a plan for gradual reforming of EURIBOR in order to determine this interest rate benchmark, as much as possible, using data on closed transactions (and to be determined, as least as possible, using interest rate listings). The methodology (developed by EMMA in cooperation with ECB is based on data on closed transactions and was tested by EMMI during 2016, as well as in May 2017[39]. It was concluded that at the current market conditions it is impossible to determine EURIBOR which will be entirely based on closed transactions data. Hence, EMMI decided to consider the possibility of using hybrid model which will provide the setting of EURIBOR to be based on closed transactions data whenever that is possible, but in the same time the determination of this rate to be also based on other relevant market sources of the prices. For that purpose, a new working group was established to collect feedback from the market participants that will assist in the designing of the new EURIBOR methodology.

In relation to EONIA, in April 2017 EMMI announced that it finished the first revision of this interest rate which included defining of the regulatory framework in accordance with the new regulatory requirements, consisted of the following: (1) Management Code, related to EMMI in fulfilling of its role as administrator; (2) Obligations Code which is related to the banks panel; and (3) Methodology for Determination of the Interest Rate Benchmark EONIA. This regulatory framework is supposed to enter into force in 2018. Currently, EMMI implements the second phase of the EONIA revision which is about analysis of the market and verification of the applicability of the revised EONIA.

The reforming of the two interest rate benchmarks is based on the volunteer contributions of two different bank panels[40]. However, the number of the banks in these boards drastically reduced in the last couple of years. Therefore, in order to ensure a stable number of banks that will contribute towards reforming of the determination of the interest rate benchmarks in the Eurozone, the EU regulation on interest rate benchmarks foresees mechanism that will make this contribution mandatory for the banks in both panels. This means that the regulator of these interest rate benchmarks, the Belgium Financial Services and Markets Authority – FSMA, can require from the banks in the two panels to mandatory contribute to the planned changes in the area of interest rate benchmarks in the Eurozone. This obligation is limited to a maximum time period of two years.

In addition to reforms in the current interest rate benchmarks, ECB started to establish a new interest rate benchmark for the overnight transactions without collateral, for contracts in euros, which is supposed to be established before 2020, using the already available data of the European system of Central Banks (Eurosystem). This new rate (in accordance with the second FSB recommendation for existence of alternative, close to risk-free, interest rate benchmark) will be aimed to supplement the existing interest rate benchmarks and will include the transactions in euros that were reported by the banks that meet the initially set criteria[41]. Presently 52 banks are included, and the eventual decision for inclusion of other banks is supposed to be made before the end of 2018. The EONIA and the interest rate benchmark of RCB for the overnight transactions will have a common characteristic – that both interest rates shall be established on the basis of the interest rates achieved with the overnight transactions closed on the inter-bank market of unsecured deposits. However, there are several characteristics that will differentiate these two rates. First, EONIA is administered by the private sector through EMII, while ECB acts as an agent[42],

[39] Euribor pre-live verification program outcome.

[40] The banks panel that contributes to EONIA (consisted of 28 banks) and the banks panel that contributes to EURIBOR (consisted of 20 banks) is consisted of banks from EU (from the Eurozone and outside of it) and banks with headquarters outside of EU whose operations are significant for the EU.

[41] The criteria are integral part of the existing regulations for ECB's money market statistical reporting – MMSR. The money market statistical reporting -MMSR is regulated with the Regulation No. 1333/2014 of the ECB from 26 November 2014 (ECB/2014/48) and includes the statistics pertaining to the money markets. The collection of daily data by the ECB, in cooperation with several national central banks, started in July 2016 with main purpose to provide comprehensive, detailed and harmonized statistical information about the money market in the Eurozone.

[42] ECB acts as agent in the calculation of EONIA, on behalf of its administrator - EMMI. This means that ECB collects the daily information from the banks panel that participates in the establishment of EONIA (presently with 28 banks) and submits the final rate, obtained as weighted average, to EMMI.

and the new overnight rate of the ECB will be administered by the European System of Central Banks. Further on, EONIA is established on the basis of volunteer input of data on a panel of 28 banks, in way that each bank calculates its average interest rate, weighted with the actual turnover, while the new ECB rate will be established on the basis of daily information of the banks that report in accordance with the statistical reporting regulation (MMCP) i.e. for each individual transaction. In addition, EONIA is a weighted average rate, while the methodology for the new rate of ECB is still not precisely formulated and, together with the other elements that will have stake in the establishment of the new rate, is still under discussion in the frames of the Eurosystem. In terms of content of the Methodology, ECB intends to initiate public consultations in the beginning of 2018 in order to ensure transparency and collect feedback regarding the implementation of the new rate. Regardless of the introduction of this new interest rate benchmark, ECB will continue to be agent for calculation of EONIA. As long as EONIA plays key role in the functioning of the financial markets, the inclusion of ECB is planned to be essential in terms of ensuring continuity in its calculation, including its implementation.

The FSB progress reports on the reforms related to the interest rate benchmarks, it can be concluded that the administrators of interest rates that are established on the inter-bank markets of unsecured deposits (IBOR) are undertaking important steps towards implementation of the FSB recommendations. Hence, not only the EURIBOR administrator but also the remaining key interest rate benchmarks – LIBOR and TIBOR undertook different measures for testing and improvement of their methodologies for determination of IBOR. The relevant authorities of the member states of the Committee for Management and Monitoring of the FSB Project continued to implement steps towards strengthening of the methodologies for establishment of the existing inter-bank interest rates in their jurisdiction, while the regulators in these countries also undertook different steps towards development of new, or change of the existing, regulatory and supervisory standards regulating the interest rate benchmarks. In the same time, the members of the Committee for Management and Monitoring of the FSB Project also achieved progress in supporting the activities focused on identification of new or already existing (almost) risk-free interest rates that will be possible to be used instead of IBOR rates in large number of contracts, especially with the derivative instruments. In Australia, Brazil, Canada, Hong Kong, Japan, Switzerland, UK and USA[43] the identification i.e. selection of risk-free interest rates was already done. Other jurisdictions, such as Mexico and South America, work on proposals for development of risk-free interest rate. The FSB recommendations from 2014 do not define deadline for finalization of the process for introduction and use of alternatives that are (close to) risk-free interest rate benchmarks and move towards their application, where appropriate, but mainly among the derivative instruments and transactions thereof.

2.2 Liquidity ratios

The liquidity ratios[44] are generally stable, although they have a trend of mild reduction that continued in the third quarter of 2017, but with slower pace compared to the second quarter of the year. The values of these ratios are at a satisfactory level and they do not deviate from their common levels. The share of the liquid assets in the total assets of the banks retained at a level of almost one third. The coverage of the short-term liabilities and of the household deposits with liquid assets is a bit more than one half, while the coverage of the liabilities with residue maturity of up to 30 days is over 70%. The ratio between the loans and deposits on banking system level is still below 100%[45] and, compared to the previous

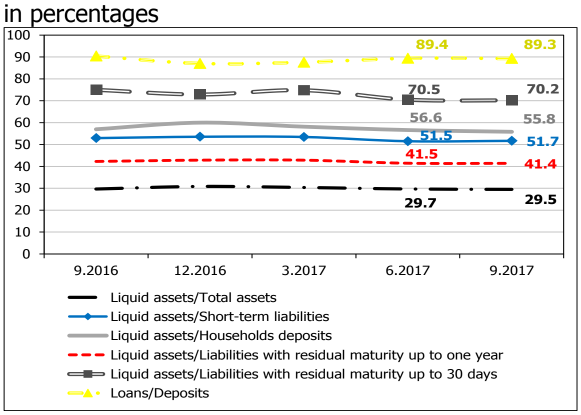
[43] For more information on the choice of FED: https://www.newyorkfed.org/medialibrary/microsites/arrc/files/2017/ARRC-press-release-Jun-22-2017.pdf

[44] The residential inter-bank assets and liabilities were not included in the calculation of the liquidity ratios on banking system level.

[45] Per individual banks, this ratio/ indicator varies between 60.5% and 125.8%, with median of 93.9% (June 2017: between 61.6% and 125.8%, with median of 94.3%). In four banks, that had a share of 25.4% in the assets of the banking system on 30 September 2017, this ratio is greater than 100%.

quarter, was reduced by only 0.1 percentage points, mainly because of the faster quarterly increase of deposits, in comparison to the loans.

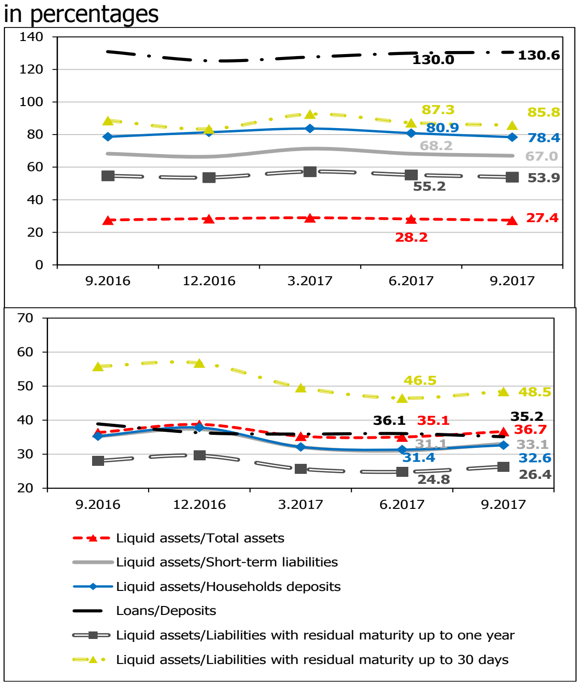
Graph 30
Liquidity ratios of the banking system
in percentages



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

Per individual banks, as on 30 September 2017, the share of the liquid assets in the total assets is between 14.1% and 44.7%, with median of 25.5% (June 2017: between 15.3% and 44.2%). The coverage of the short-term liabilities with liquid assets is between 30.5% and 104.2%, with median of 52.1% (June 2017: between 33.4% and 89.4%), and the coverage of the liabilities with contractual residual maturity of up to 30 days is between 35% and 258%, with median of 66% (June 2017: between 37.9% and 227.2%).

Graph 31
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.

The denar liquidity ratios[46] in the third quarter of 2017 are generally better than the **foreign currency liquidity ratios**, regardless of their reduction on quarterly basis (vs the increase of 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).

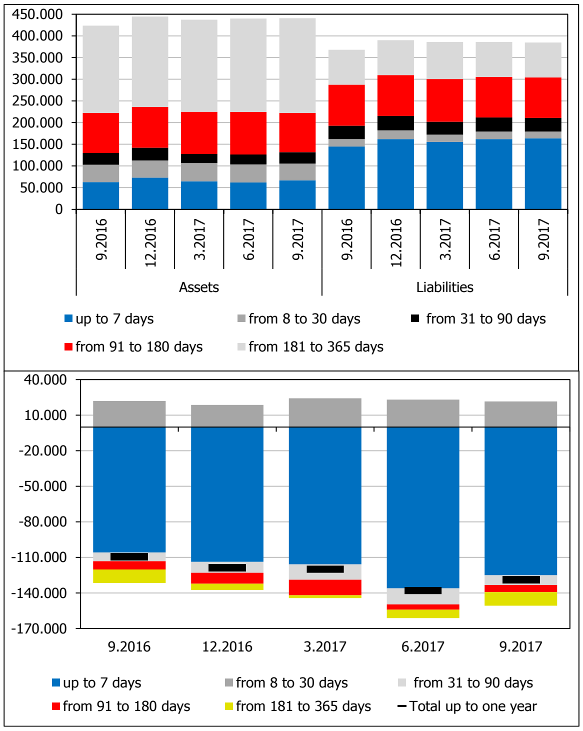
2.3 Maturity structure of the assets and the liabilities

If analyzed per contractual residual matury, the changes in the assets and liabilities in the third quarter of 2017 were towards reduction of the gap between the assets and liabilities in most of the maturity segments that were analyzed. The biggest reduction of the gap was noticed in the seven-day residual maturity, which caused certain narrowing of the longer cumulative gaps (up to thirty days, up to ninety days, etc.). The reduction of the negative gap in the seven-day maturity segment stems out of the significant increase in the assets (in most part the assets on the correspondent accounts in foreign banks, and less due to the termed deposits abroad), comparison to the increase of the liabilities with seven-day residue maturity, which is significantly smaller. The narrowing of the gap between the assets and the liabilities was very evident at the foreign currency gap (in a situation of quarterly increase of the foreign currency liquid assets), while the narrowing of the denar gap was somewhat smaller (in a situation of quarterly decline of the denar liquid assets).

In the third quarter of 2017 the expectations of the banks on the stability

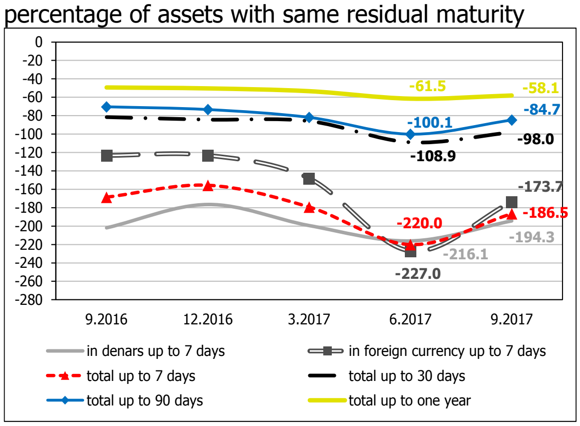
[46] The receivables and liabilities with FX clause are considered as denar receivables and liabilities because their cash flow is in denars.

Graph 32
Structure of the assets and liabilities of the banks according their contractual residual maturity (above) and structure of the gap between the assets and the liabilities with residual maturity of up to one year (below)
in millions denars



Source: NBRM, using data provided by the banks.

Graph 33
Relative significance of the difference between the assets and liabilities of the banks according to the residual maturity
percentage of assets with same residual maturity



Source: NBRM, using data provided by the banks.

level of the deposits were improved. Hence, at the end of the third quarter of 2017, the banks were expecting that 84.9% of the termed deposits with residual maturity of up to three months (83.2% as on 30 June 2017) to show stability i.e. to remain in the banks. Similar stability is also expected with the sight assets, including the assets on the transaction accounts. The high expected stability of the deposits is the key determinant of having a positive sum difference between the assets and the liabilities in terms of their expected maturity, in all maturity buckets (Annex 33).

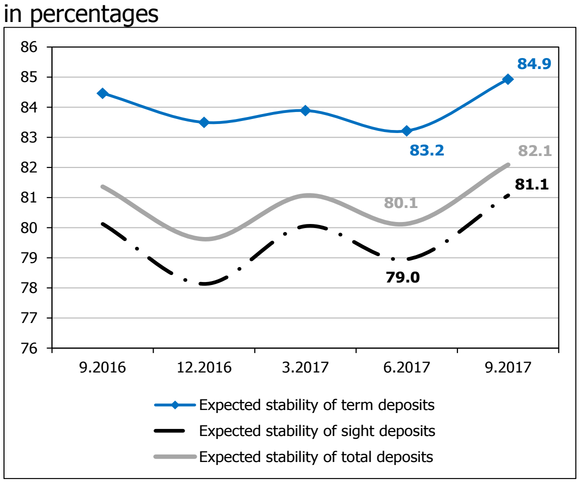
2.4 Stress-simulations for liquidity shocks

The liquidity shock simulations carried out as on 30 September 2017 confirm the stable liquidity position of the banking system, which is mainly due to the satisfactory level of liquid assets that are available to the banks. In other words, when doing separate application of the individual simulations of liquidity shocks, the banks have sufficient liquid assets to repay the simulated cash outflows. Only in the simulation of significantly extreme liquidity shock, which includes combined outflows[47] from the banks, there could be a total absorption of the liquid assets of the banks (114% as on 30 September 2017). If, for the purpose of this simulation, we expand the usual inclusion of the liquid assets to also cover other financial instruments[48] owned by

[47] 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.

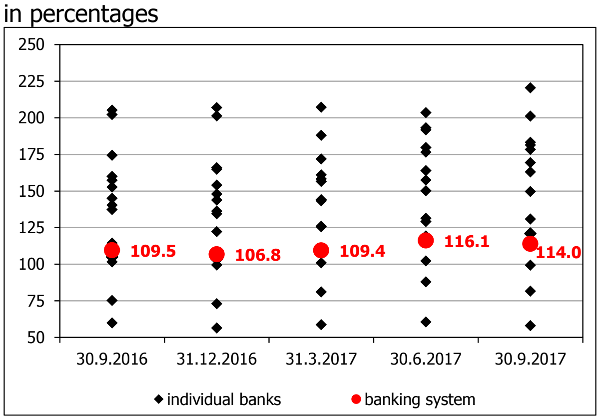
[48] In addition to the financial instruments that make up the liquid assets, the following financial instruments are also created (if they are present in the assets of the banks): long-term deposits in foreign banks, instruments on the money market issued by foreign non-government issuers, loans with 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

Graph 34
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.

Graph 35
Reduction of the liquidity assets in the simulation of combined liquidity shocks (for all shocks)
in percentages



Source: NBRM, using data provided by the banks.

the banks, which are considered to be quickly and easy-to-collect by the banks, or will be converted into cash assets by the banks, in that case the decline of the liquid assets on a level of the banking system in this simulation would be slightly smaller (102% as on 30 September 2017).

If we consider the individual simulations of liquidity shocks, that are combined for the needs of this simulation, usually as the most important one is the simulation of deposits outflow of the twenty largest depositors, and the simulation for outflow of 20% of the household deposits. The former of these shocks has different relevance for particular banks, mainly because of the differences in the deposits concentration level. The latter simulation (20% outflow of the household deposits) has significantly greater similarity in the results for particular banks. This confirms the relevancy of the deposits for financing of their activity i.e. that the sustainability of the liquid position of the banks, as well as the potential increase of their activities, highly depends on the events on the deposit market and the actions of the banks, as well as of the maintenance of the trust among the domestic depositors.

In terms of other shocks, there is some relatively higher relevance when it comes to the simulation of conversion of some banks' off-balance sheet positions to on-balance sheet receivables, and the shocks related to the outflow of the liabilities towards the non-residents, or the outflow of the liabilities towards the parent enterprises without a treatment of capital instruments – have modest influence.

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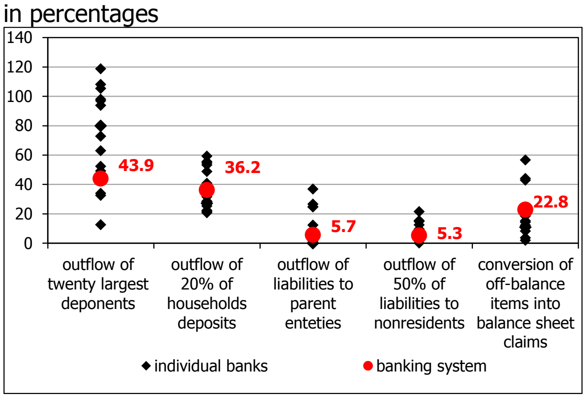
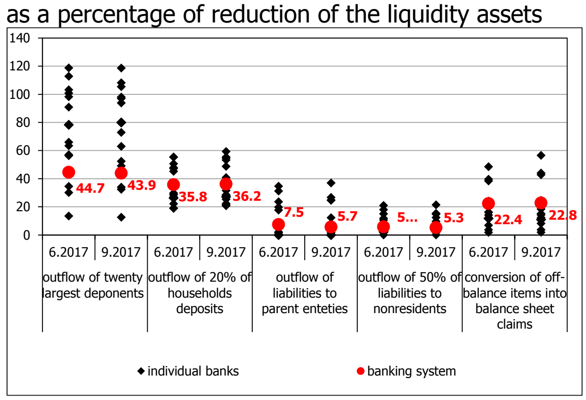
allocated in foreign currency due to the simulated outflow of the foreign currency deposits of the households.

Graph 36
Reduction of the liquidity assets in the individual shocks, in the simulation of combined liquidity shocks
in percentages



Source: NBRM, using data provided by the banks.

Graph 37
Contribution of specific shocks to the reduction of liquidity assets in the simulation of combined liquidity shocks, per bank
as a percentage of reduction of the liquidity assets

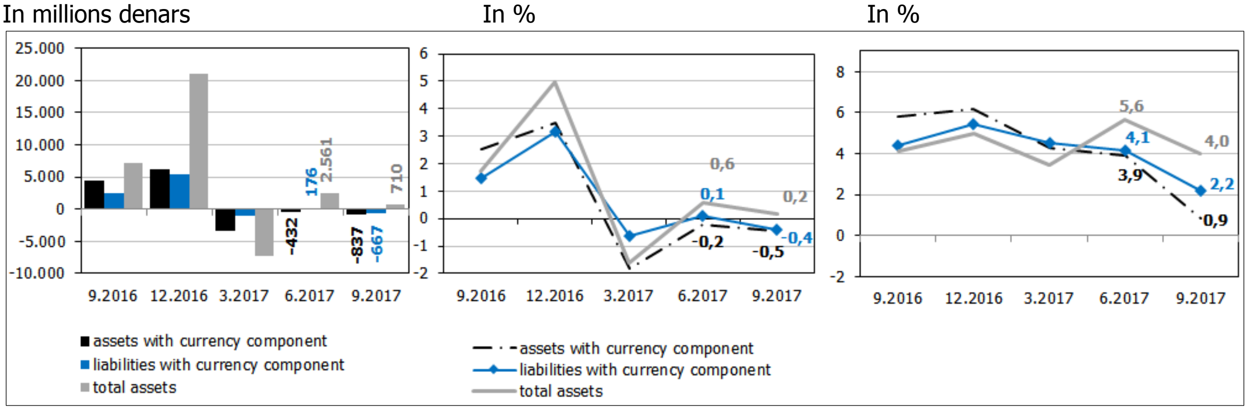


Source: NBRM, using data provided by the banks.

3. Currency risk

The reduction of the exposure of the banking system to currency risk continued also in the third quarter of 2017, where the participation of the gap between the assets and liabilities with currency component[49] in banks' own funds dropped to the level of 7.4%. 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 September 2017, all banks comply to the prescribed limit for aggregate foreign currency position, which is 30% of own assets. The euro continues to be the dominant currency in the structure of the assets and liabilities with currency component.

Graph 38
Quarterly (left and middle) and annual (right) change in the assets and liabilities with currency component
In millions denars In % In %



Source: NBRM, using data provided by the banks.

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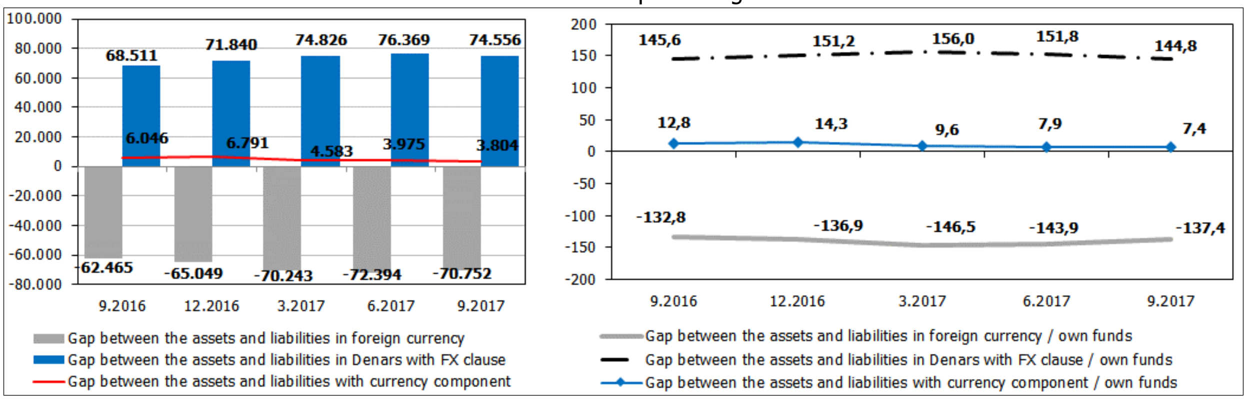
[49] In items with "foreign currency component", items expressed in foreign currencies are included, as well as the items expressed in denars with FX clause, adjusted on regular basis.

Graph 39
Gap between the assets and liabilities with currency component, structure (left) and share in the own funds (right)

In millions denars

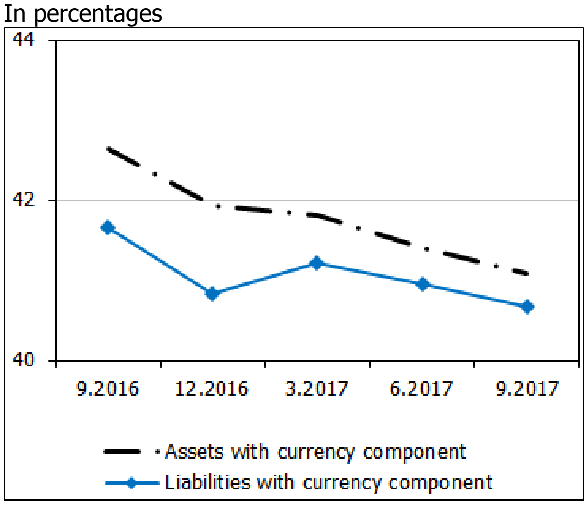
In percentages



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

Graph. 40
Share of the assets and liabilities with currency component* in the total assets and liabilities of the banks

In percentages



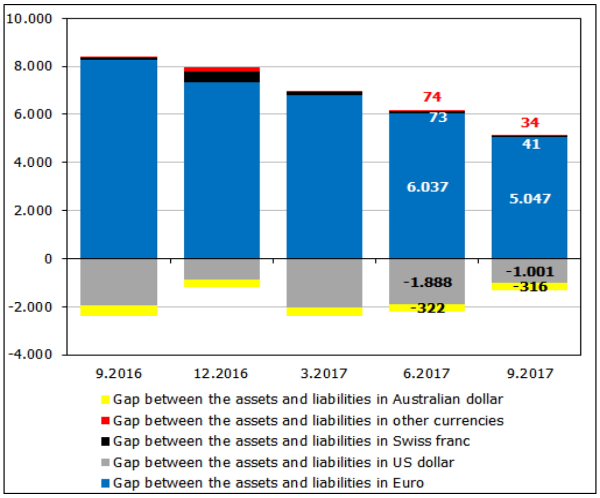
Source: National Bank, using data provided by the banks.
*In the assets, the loans are taken on net basis i.e. they are reduced by the amount of the actual impairment. MBPR AD Skopje is excluded.

The gap between the assets and the liabilities with currency component is reducing for a third consecutive quarter, albeit at slower pace. The narrowing of the gap is due to the higher quarterly decline of the assets with currency component (by 837 million denars i.e. by 0.5%) in comparison to the decline of the liabilities with currency component (by 667 million denars i.e. by 0.4%)[50]. The narrowing of the gap between the assets and liabilities with currency component, in a situation of simultaneous growth of own assets, contributed towards further decline of the ratio between them, by 0.5 percentage points. On the other hand, in a situation of decline of the assets and liabilities with currency component, and simultaneous increase of the total assets of the banking system, there is obvious reduction of their shares in the total assets (and liabilities) by 0.3 percentage points for both.

The narrowing of the gap between the assets and liabilities with currency component entirely originates from the euro, whose positive gap was reduced by 990 million denars. The narrowing of the positive gap in euros, including the foreign currency component in euros, was mainly due to

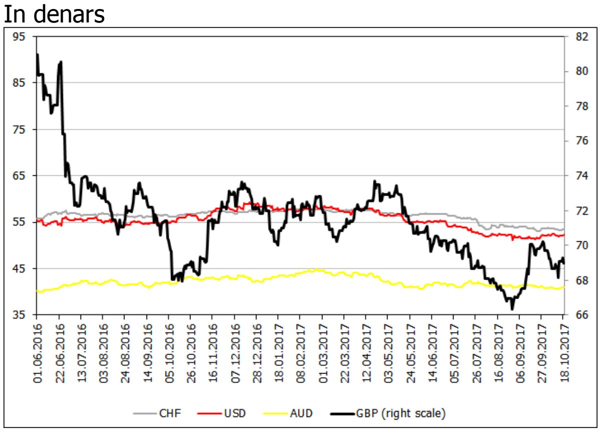
[50] The decline of the assets with currency component is primarily due to the reduction of the loans with currency component. On the side of the currency component liabilities, the decline of the deposits in foreign currency from non-residents and the decline of the liabilities related to loans with currency component – were the largest contributors in the quarterly reduction of the liabilities with currency component.

Graph 41
Currency structure of the gap between assets and liabilities with currency component
In millions denars



Source: NBRM, using data provided by the banks.

Graph 42
Exchange rate of the denar against the British pound, the US dollar, the Swiss frank and the Australian dollar
In denars



Source: NBRM.

the reduced placements of the banks in loans and deposits. In the third quarter of 2017, there is also narrowing of the negative gap in US dollars (by 887 million denars), which is due to the increased placements of the banks in deposits designated in US dollars, in the same time having a reduction of the liabilities in relation to current accounts and deposits designated in this currency.

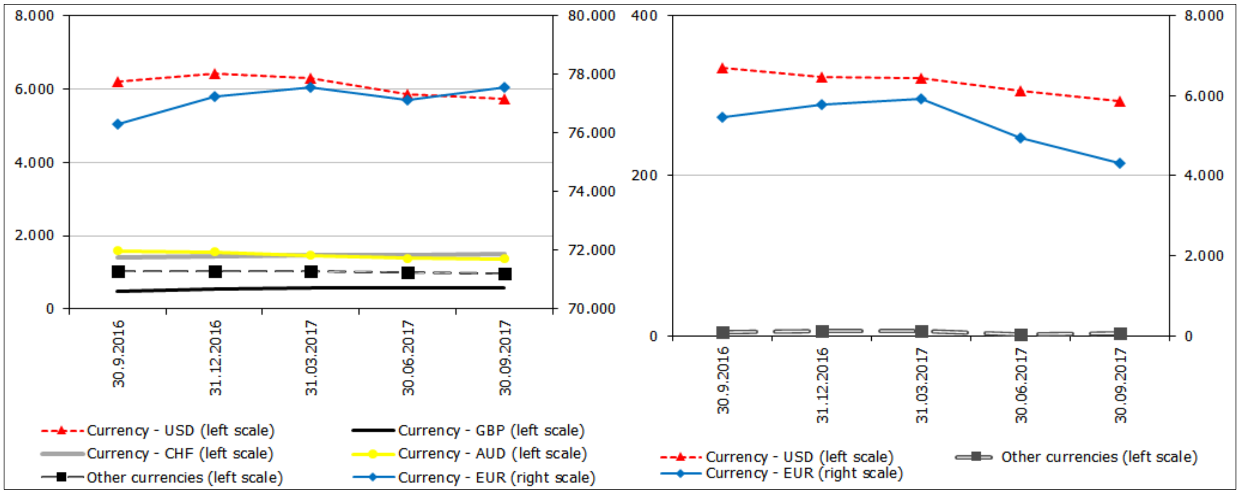
The euro is the dominant currency in the assets and liabilities with currency component of the banking system, with share of 88.6% or 87.7%, respectively. Hence, the accepted strategy of stable exchange rate of the denar in relation to the euro has exceptional importance for the low probability of exposure of the banks to currency risk. Other currencies have relatively low presence and the volatility of their value would not have significant impact on the stability of the banks.

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

Currency	30.06.2017		30.09.2017	
	Assets	Liabilities	Assets	Liabilities
Euro	88,9	87,5	88,6	87,7
US dollar	6,7	7,9	6,9	7,7
Swiss franc	1,8	1,8	1,9	1,9
Australian Dollar	0,9	1,1	0,9	1,1
British pound	0,6	0,7	0,6	0,7
Other	1,0	1,0	1,0	0,9
Total	100,0	100,0	100,0	100,0

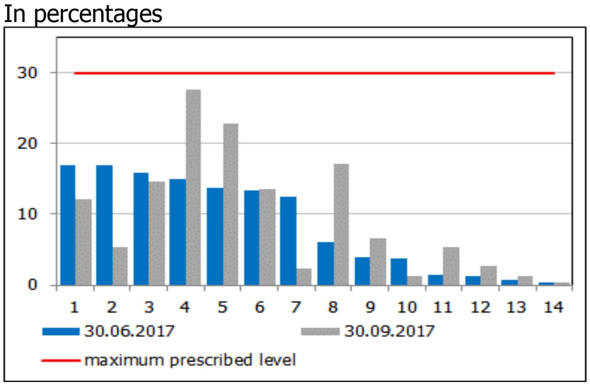
Source: NBRM, using data provided by the banks.

Graph 43 Deposits in foreign currency* of the individuals (left) and of the non-financial companies (right)
In millions denars



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

Graph 44
Aggregate currency position to own funds ratio, by bank
In percentages



Source: NBRM.

In the third quarter of 2017, all banks complied with the prescribed aggregate foreign currency position requirement, which must not go beyond 30% of the own funds. This ratio exceeds 20% only in two banks. 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 currencies.

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

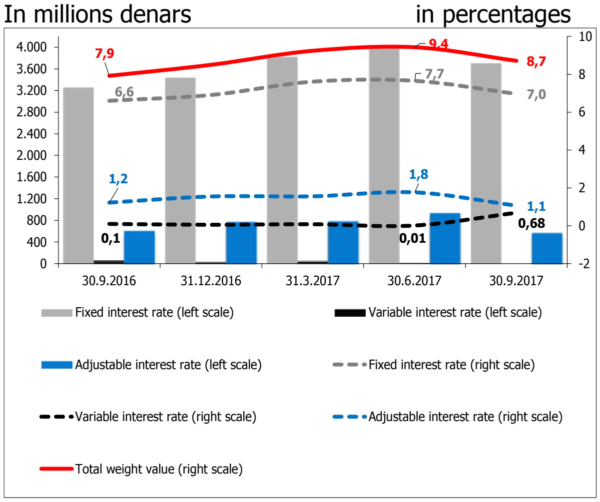
Items	Number of banks										
	Open currency position by currency / own funds										Aggregate currency position / own funds
	Euro		US Dollar		Swiss franc		Australian Dollar		Other		
	Long	Short	Long	Short	Long	Short	Long	Short	Long	Short	
under 5%	5	2	13	1	8	5	9		10	4	5
from 5% to 10%	1										3
from 10% to 20%	4										4
from 20% to 30%	2										2
over 30%											

Source: NBRM, using data provided by the banks.

4. Interest rate risk in the banking book

In the third quarter of 2017, the exposure of the banking system to interest rate risk in the banking book was reduced, which was due to the tendencies of the interest-sensitive items with variable and fixed interest rate. During this quarter we can also notice reduced use of the adjustable interest rates, on the account of the increased use of variable interest rates, which corresponds to the intentions of the banks for gradual reduction of the use of adjustable interest rates that were exposing them to reputational and legal risk.

Graph 45
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 denars in percentages



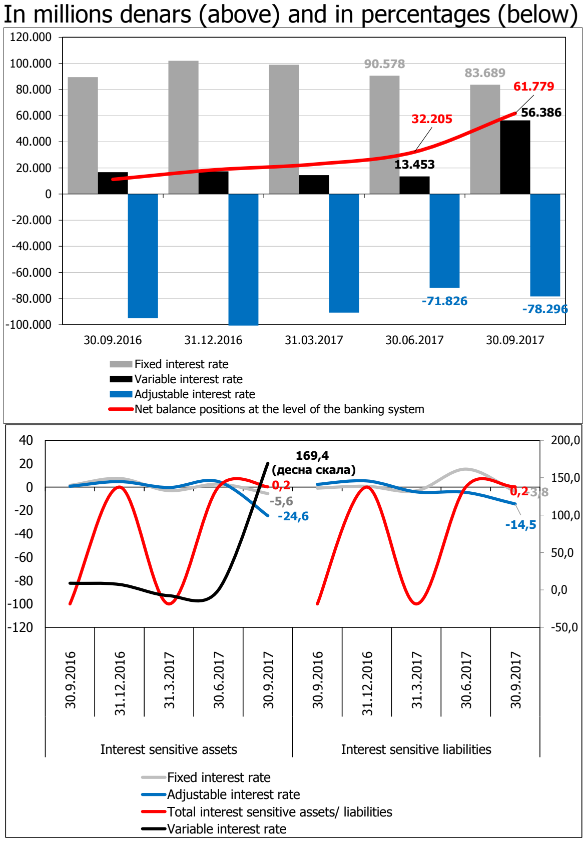
Source: National Bank, using data provided by the banks.
*The total weighted value of the banking book refers to the potential loss of the economic value of this portfolio, in a case of hypothetical unfavorable interest shock of ±2 percentage points.

In the third quarter of 2017, the indicator for exposure of the banking system to interest rate risk in the banking book was reduced. More specifically, the potential loss of the banking book's economic value, in a situation of assumed unfavorable interes rate shock of ±2 percentage points, was quarterly reduced to a level of 8.7% of the own assets of the banking system. Largest contribution in the quarterly reduction of the total weighted value of the banking book is provided by the interest-sensitive items with adjustable and fixed interest rate. If analyzed at a level of individual banks, the ratios between the potential losses in a case of standard interest rate shock of ±2 percentage points and own assets of the banks vary between 0.7% to 14.2%, which is below the level of 20%[51].

The gap between the interest-sensitive assets and liabilities features quarterly increase of whooping 91.8% (by 29,574 million denars), which is primarily due to the expansion of the positive gap at the positions (items) with variable interest rates (by 42,933 million denars), in a situation of simultaneous narrowing of the positive gap in the positions (items) with fixed interest rates (by 6,889 million denars) and expansion of the negative gap in the positions (items) with adjustable interest rates by 6,470 million denars). These changes stem out of the transformation of one part of the loans with adjustable interest rate

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

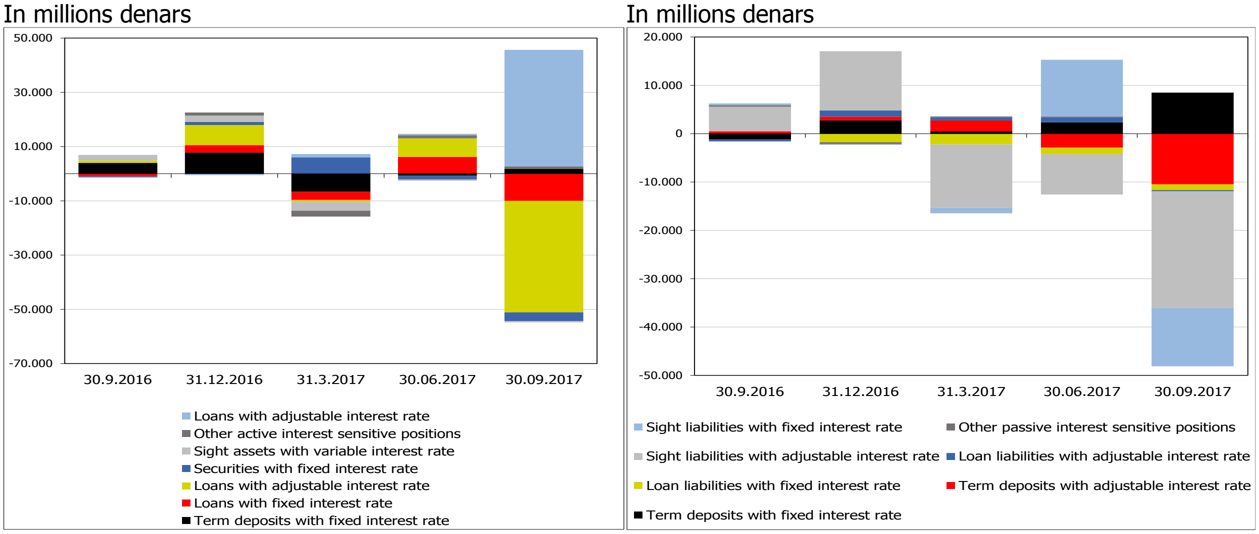
Graph 46
Interest-sensitive assets and liabilities according to the type of interest rate, gap (above) and quarterly change (below)
In millions denars (above) and in percentages (below)



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

(in the third quarter of 2017 they were reduced by 41,106 million denars) into loans with variable interest rate (these increased by 42,937 million denars). In the same time, in the third quarter of 2017 there is also a transformation of one portion of the liabilities related to termed deposits with adjustable interest rate (they are reduced by 10,470 million denars) into deposits with fixed interest rate (these increased by 8,503 million denars).

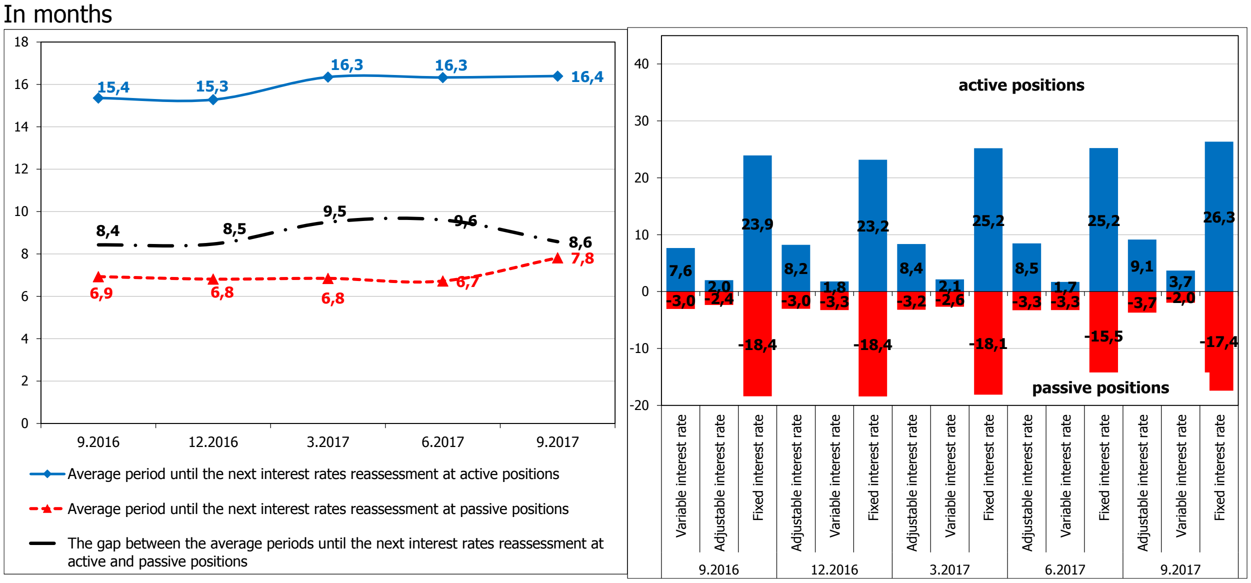
Graph 47
Quarterly changes of the interest-sensitive assets (left) and liabilities (right), according to the type of instrument and type of interest rate
In millions denars
In millions denars



Source: NBRM, using data provided by the banks.

This transformation[52] of the type of the interest rate used in the contracts for loans and deposits is linked to the joint efforts of the banks and the National Bank to reduce the use of the adjustable interest rates in the banking portfolio. Furthermore, in the third quarter of 2017, the sight liabilities with fixed interest rates are reduced (by 12,098 million denars), and this goes especially for the sight liabilities with adjustable interest rate (by 24,096 million denars), which contributed towards absolute reduction of the gap among the items with fixed interest rates and expansion of the negative gap among the items with adjustable interest rates. In other words, we can notice in 2017 a general tendency of reduction of the sight liabilities, as interest-sensitive item in the balances sheets of the banks, because of the decision of some banks to stop calculating interest on these liabilities (that is, to apply interest rate of 0.0%).

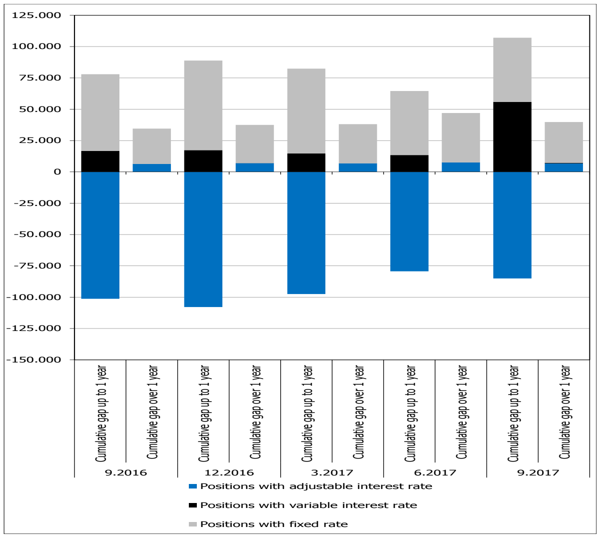
Graph 48
Average period till next reevaluation/ change of the interest rates, total (left) and per type of interest rate (right)
In months



Source: NBRM, using data provided by the banks.
* The average period till next reevaluation of the interest rates 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.

[52] For denar loans and deposits where, instead of adjustable, variable interest rate is foreseen to be used, the banks foresaw the use of weighted average interest rate on the denar deposits without foreign currency clause (calculated on system level and expressed on annual basis), as benchmark interest rate in the contracts with the clients. This interest rate is calculated and published by the National Bank, starting from June 2017, upon request by the banks.

Graph 49
Structure of the gaps between the active and passive items, per type of interest rate
In millions denars

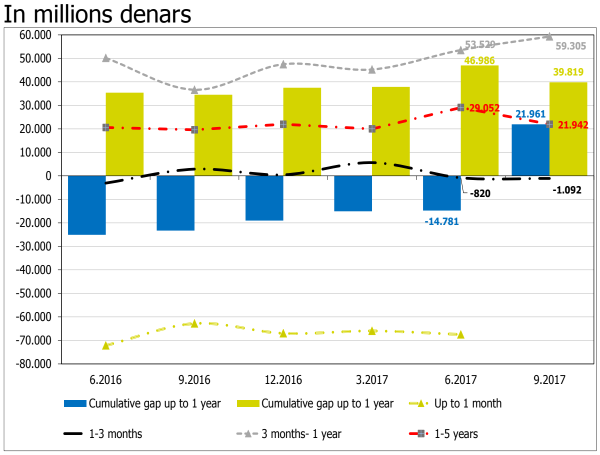


Source: NBRM, using data provided by the banks.

In the third quarter of 2017, the banks increased the average period till next reevaluation of the interest rates, and this goes more for the passive than for the active positions (items), thus the gap between the average periods till next reevaluation of the interest rates for the active and passive positions (items) was reduced.

The analysis per interest rates types shows there is increase of the average remaining deadline till maturity of the liabilities of the banks with fixed interest rate among the termed deposits, which contributed to the increase of the average period till next reevaluation of the interest rates for the passive positions (items) of the banks.

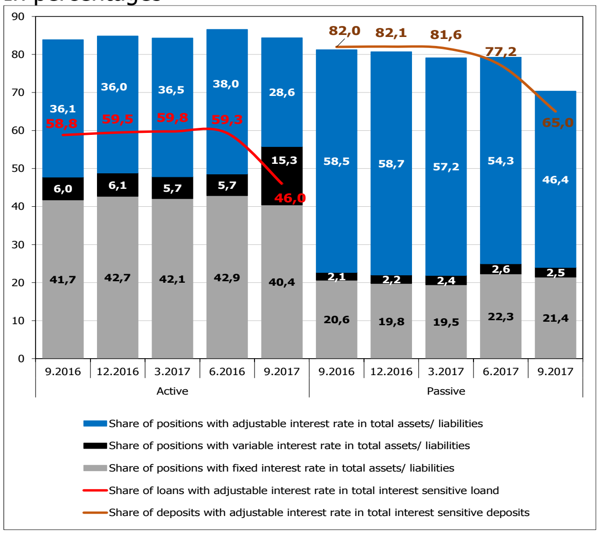
Graph 50
Gap between the active and passive positions, according to the period till next reevaluation of the interest rates
In millions denars



Source: NBRM, using data provided by the banks.

The reduction of the sight interest-sensitive liabilities in the third quarter of 2017 caused change in the prefix of the gap between the interest-sensitive assets and liabilities whose next reevaluation of the interest rates is up to one year – from negative to positive. According to the structure of the gap between the active and passive items, according to the type of interest rate whose next reevaluation (that is, with residual maturity deadline for the items with fixed interest rates) is up to one year, the gap is negative for the items with adjustable interest rates, and the gap is positive for the items with variable and fixed interest rates.

Graph 51
Structure of assets and liabilities, per type of interest rate
In percentages



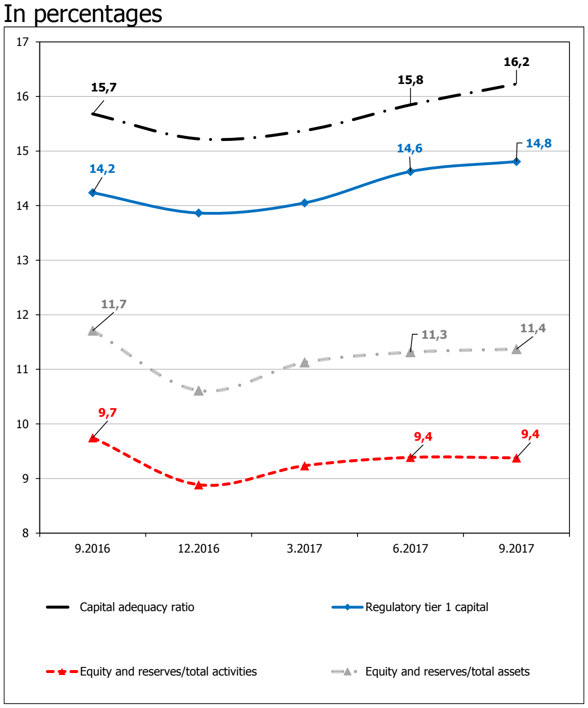
Source: NBRM, using data provided by the banks.

The reduction of the application of the adjustable interest rates among the loans (which was accompanied with greater use of variable interest rates), as well as the transformation of the sight assets from interest-sensitive to non-interest-sensitive items (because of the decision of some of the banks to stop calculating interest on the sight liabilities) **resulted in reduction of the participation of the adjustable interest rates in the structure of the interest-sensitive assets (by around ten percentage points) and liabilities (by around 8 percentage points).** The use of interest rates that are determined in advance, and 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 increased in the third quarter of 2017, which is mainly due to the increase of the capital items, in a situation of quite modest increase, even a decline, of the particular activity categories. The growth of the own assets is caused by the issuance of new subordinated instruments in the third quarter of 2017. The risk-weighted assets declined as a result of the decline in the credit-risk weighted assets. Most of the quarterly growth of the own assets was used for compliance to the capital buffer requirements among the banks significant for the system. In other words, as on 30 September 2017 seven banks, designated by NBRM as significant banks for the system, are required to meet half of the capital buffer for the system significance. The results of the stress-test simulations using the data as on 30 September 2017 are better in comparison to the second quarter.

Graph 52
Solvency indicators
In percentages

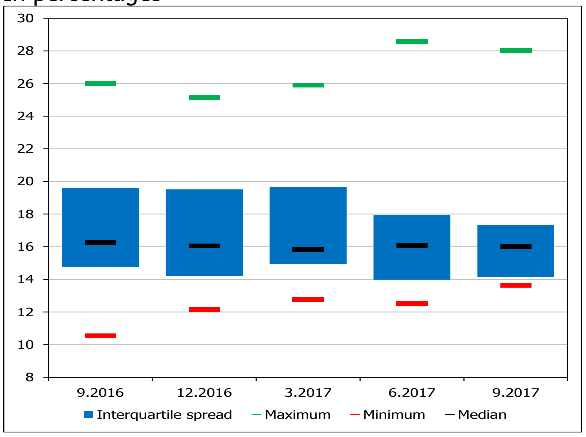


Source: NBRM, using data provided by the banks.
*Starting from March 2017, the domestic regulatory requirements for solvency and capital adequacy of the banks comply to the Basel 3 requirements. Presently, the banks do not have additional core capital i.e. core capital is entirely consisted of instruments 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 third quarter of the year, almost 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 which, in the third quarter of 2017, was in the interval between 2.3% and 4.9%. The activities of the banking system featured quarterly growth (of 0.2% - 0.8%), which is still smaller compared to the increase of the capital items in the third quarter of 2017. However, the total risk-weighted assets were reduced by 0.1% i.e. 465 million denars, which is due to the decline in the credit-risk-weighted assets (by 0.2% i.e. by 661 million denars), which, in turn, mainly stems out of the reduced credit activity of the banks to non-financial companies.

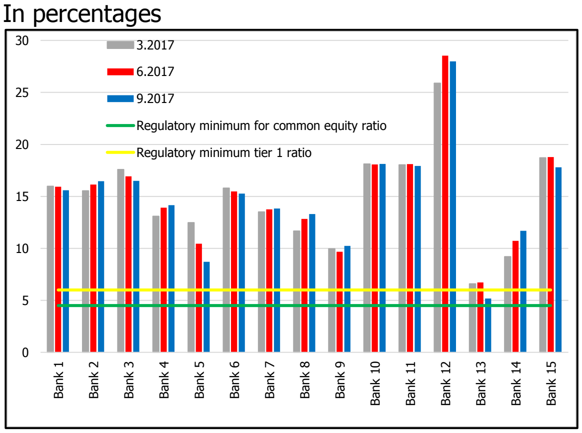
Graph 53
Measures for distribution of the capital adequacy rate in the banking system
In percentages



Source: NBRM, using data provided by the banks.

The capital adequacy rate is increased by 0.4 percentage points in the third quarter of 2017. Analyzed per individual banks, the capital adequacy rate as on 30 September 2017 in all banks is higher than 13%[53], and this rate was increased in seven banks. The capital adequacy rate is mainly based on the increase of own assets of the banks in relation to the quarterly reduction of the risk-weighted assets.

Graph 54
Rate of the (regular) core capital, per bank
In percentages



Source: NBRM, using data provided by the banks.
*Since the banks presently do not have additional core capital, the rate of the core capital and of the regular core capital is the same.

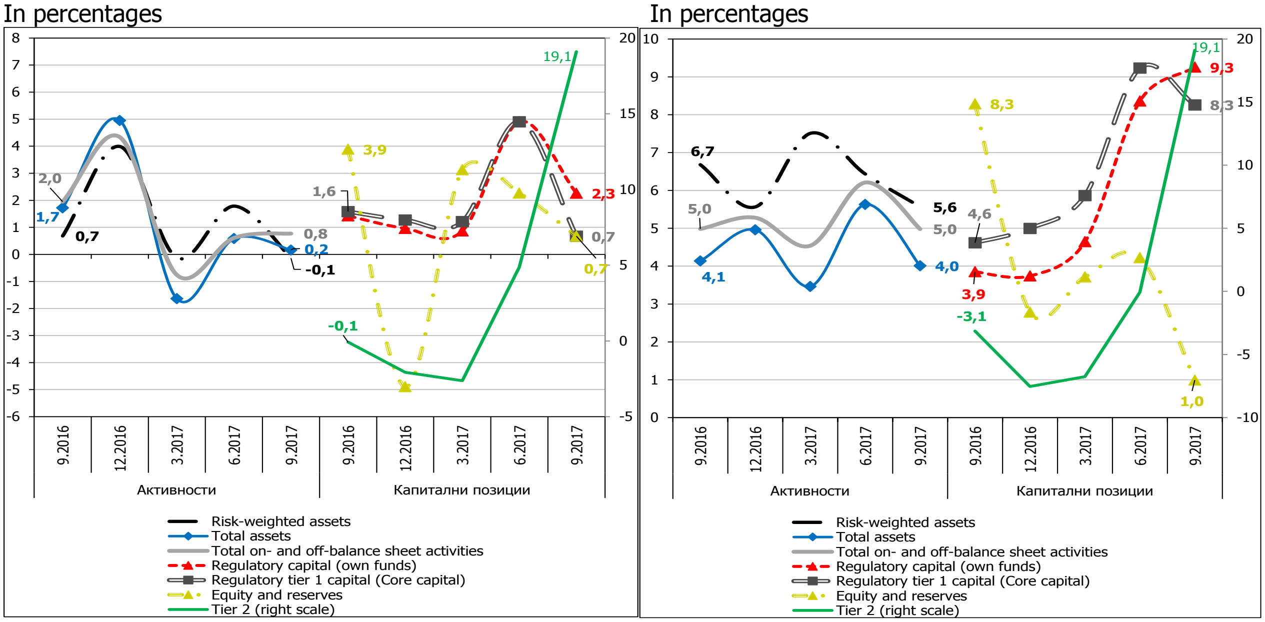
The regular core capital rate[54] (regular core capital in relation to the risk-weighted assets) was increased by 0.1 percentage points in relation to the second quarter of 2017. The increase of the core (regular) capital rate is mainly due to the increase of the cumulative comprehensive profit in one bank in the group of larger banks, as a result of the higher revaluation reserve due to the forfeiting of assets in relation to uncollected receivables[55]. The conversion of the hybrid capital instrument in one bank into ordinary shares also had some impact on the increase of the core (regular) capital rate.

[53] Since 31.3.2017, the banks are required to maintain a capital buffer, for preservation of the capital at 2.5% ratio from the asset weighted according to the risks, which will accordingly increase the capital adequacy rate. Furthermore, seven banks, designated by the National Bank as banks significant for the system, are required to meet half of the capital buffer for banks significant for the system, as on 30 September 2017, for the total capital buffer, no later than 31 March 2018.
[54] With the changes in the Law on Banks, in addition to the existing provision on the amount of the capital adequacy rate of at least 8% of the risk-weighted assets, two additional legal requirements were introduced regarding the capital adequacy amount: 4.5% of the risk-weighted assets for the regular core capital, and 6% of the risk weighted assets for the core capital. The structure of the core capital differentiates between the regular core capital and the additional core capital – the regular core capital includes the capital items of highest quality (share capital, reserve fund, profit if certain requirements are met, etc.) which are entirely and immediately available to cover the risk and losses during the operation of the bank. Since the banks currently do not have additional core capital, the rate for both the core and the regular core capital is the same.
[55]The closed adjustment for non-performing receivable was greater than the adjustment for forfeited property on the basis of uncollected receivable and, in that case, as long as the forfeited property is sold, the bank is obliged to record that positive difference in the revalorization reserve, which is shown in the structure of the own assets within the comprehensive cumulative profit or loss from the regular core capital of the banks.

Graph 56
Change rates of the components that make up the solvency ratios, quarterly (left) and annual (right)

In percentages

In percentages

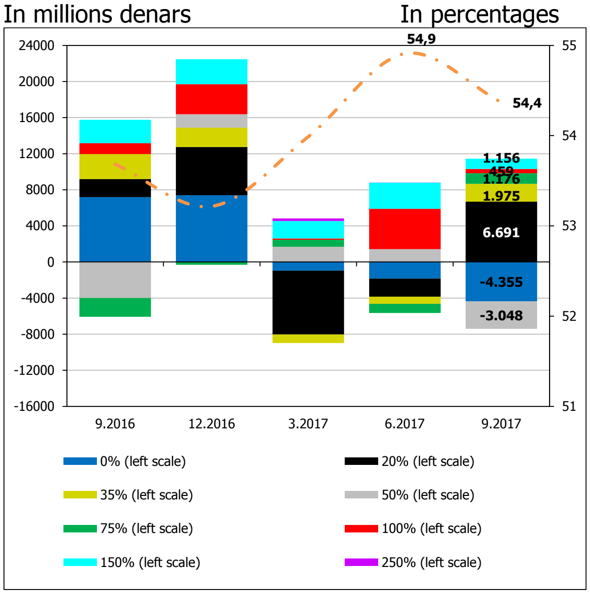


Source: NBRM, using data provided by the banks.

Graph 55
Quarterly changes in the total balance sheet and off-balance sheet exposure, per risk weights

In millions denars

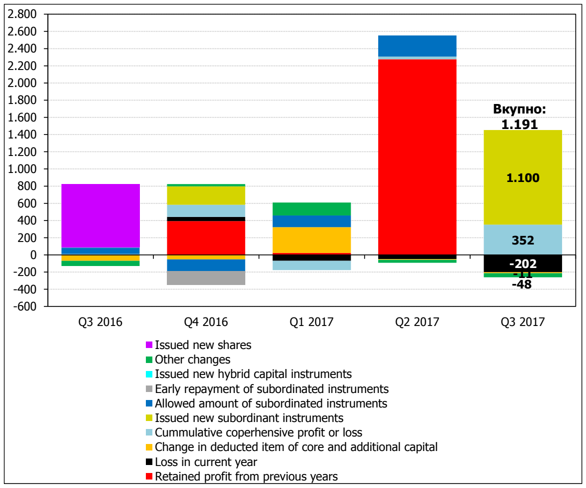
In percentages



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.

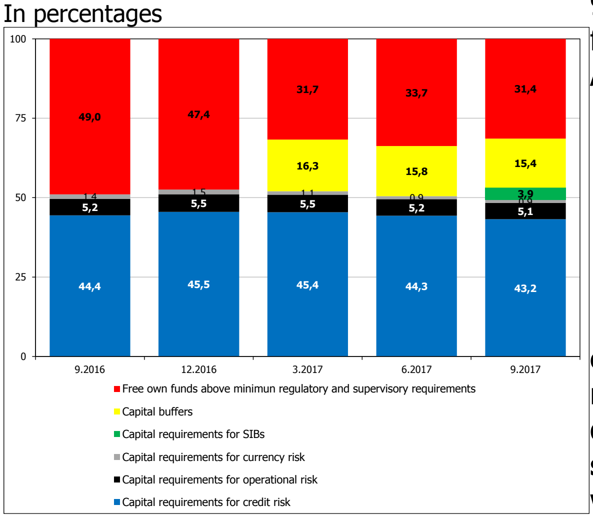
The level of risk of the banking activities (measured as a ratio between the credit risk-weighted assets and the total on-balance sheet and off-balance sheet exposure), reduced by 0.5 percentage points and totaled 54.4% as on 30 September 2017. This reduction of the average weight of riskiness is mainly because of the increase in the total balance and off-balance sheet receivables according to the credit risk. In this respect, there were changes in the credit risk-weighted assets, increase in the receivables which are included in the calculation of the credit risk-weighted assets of 20% (receivables from banks) and 35% (receivables covered by residential buildings), and 75% and 150% (receivables covered with business buildings and small loans portfolio), in a situation of simultaneous decline in the receivables with risk weight of 0% (placements in CB bills) and 50% (receivables from banks).

Graph 57
Structure of quarterly changes in the own funds
In millions 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.

Graph 58
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.
*This does not take into account the eventual additional capital requirements for specific banks established through the process of identification of the internal capital of the banks and the process of supervisory assessment and evaluation

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

In the third quarter of 2017, the own assets of the banking system increased by 1,191 million denars i.e. by 2.3% (on annual basis, the own assets are increased by 4,560 million denars i.e. by 9.3%). The quarterly growth of the own funds is mainly due to the issuing of new subordinated instruments by three banks. Furthermore, one bank converted the hybrid capital instrument into ordinary shares, which improved the quality of the own assets of this bank. Contrary to the previous quarter, second in a row in the quarterly growth is the cumulative comprehensive profit, as an item in the own assets of the banks.

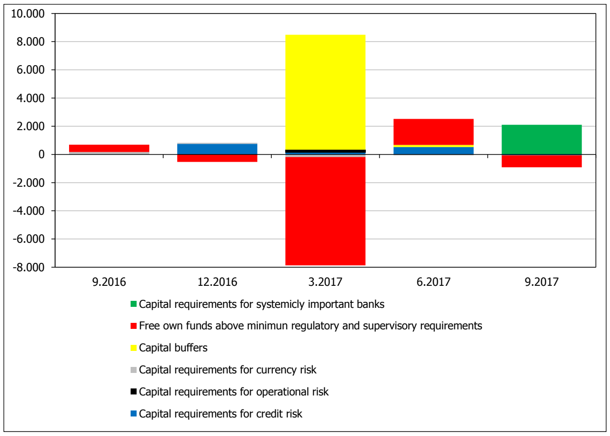
The quality of own funds is at a high level, with participation of the regular core capital (which is the most quality component of the own assets) in the total own assets of 90.0%. More details about the level of own funds/assets by groups of banks are included in Annex 38.

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

Most of the quarterly growth of the own assets was used to comply to the requirement for capital buffer by the banks designated by the National Bank as significant banks for the system. In other words, as on 30 September 2017, the seven banks designated as significant for the system were required to meet half[56] of the necessary capital buffer for system significance (per individual bank, this

[56] The banks are obliged to meet, in full, the capital buffer of the capital for banks significant for the system no later than 31 March 2018.

Graph 59
Quarterly changes in the own assets, according to their use to cover specific risks and for maintenance of the required capital buffers
In millions denars



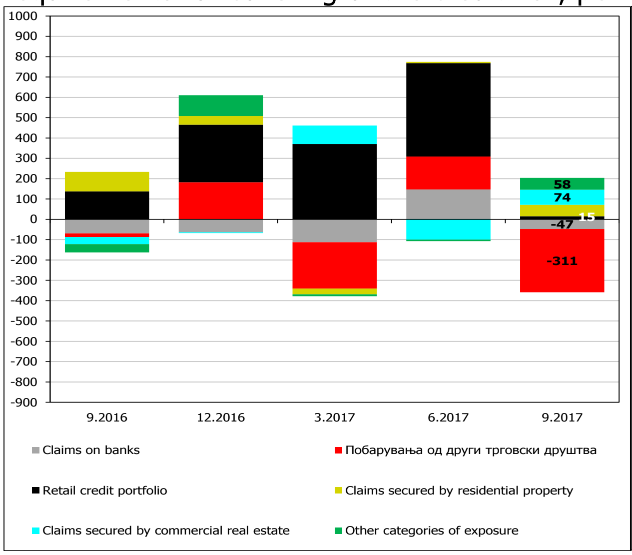
Source: NBRM, using data provided by the banks.
*This does not include the eventual additional capital requirements for some banks, determined in the process of establishment of the internal capital of the banks and the process of supervisory assessment and evaluation.

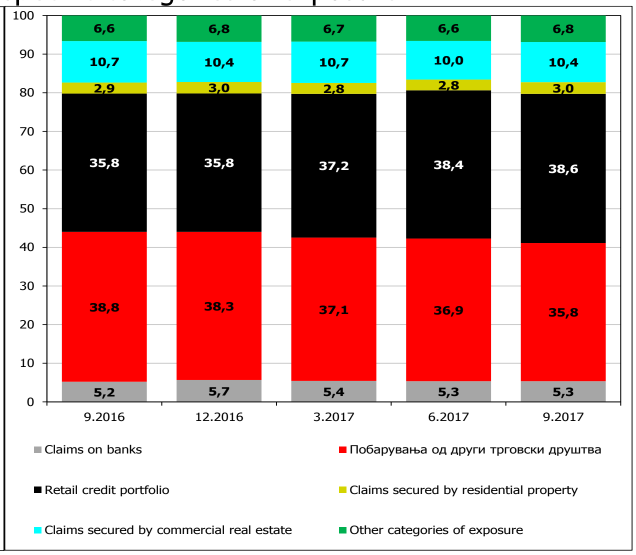
capital bank varies between 1% and 2% of the risk-weighted assets). Therefore, the participation of the "available" capital above the minimum level required for coverage of the risks was reduced to 31.4% (33.7% on 30 June 2017).

The capital requirements for covering of the risks are declining (by 37 million denars i.e. by 0.2%), which is due to the reduction of the capital required for covering of the credit risk (by 53 million denars i.e. by 0.2%). This reduction of the regulatory capital required for covering of the credit risk is mainly due to the reduced receivables from other companies. Contrary to that, the capital required for covering of the currency risk increased quarterly by 16 million denars i.e. by 2.8%.

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.

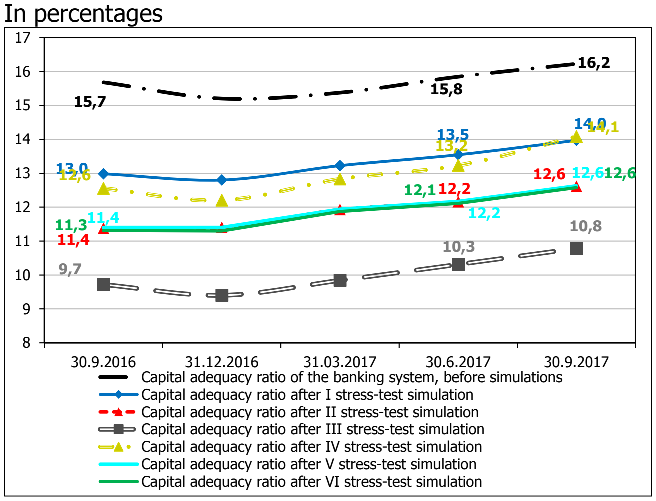
Graph 60
Quarterly changes (left, in millions denars) and structure (right, in percentages) in the capital requirements for covering of the credit risk, per specific categories of exposure





Source: NBRM, using data provided by the banks

Graph 61
Stress-test simulation results
In percentages



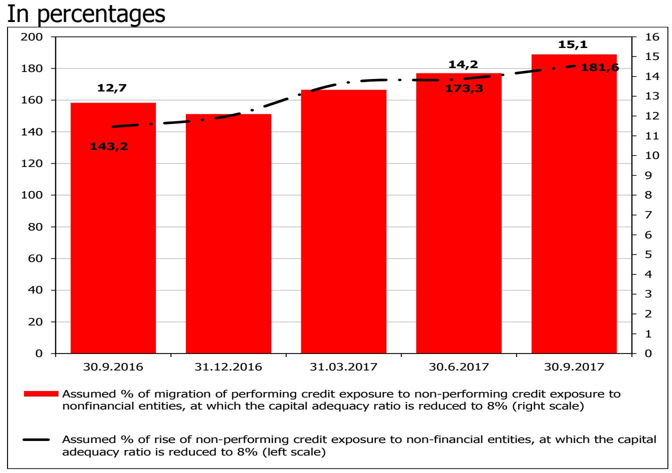
Source: NBRM, based on the data submitted by banks.
*Stress testing includes the following simulations:
I simulation: Increasing the non-performing credit exposure to non-financial entities by 50%;
II simulation: Increasing the non-performing credit exposure to non-financial entities by 80%;
III simulation: 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 stress testing of the resilience of the banking system and individual banks in the Republic of Macedonia to simulated shocks indicates improved results compared to 30 June 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 simulated shocks.

The hypothetical shocks on the part of the credit risk have the greatest impact on the stability of the banking system. The simulations show that it is necessary to have growth of the non-performing credit exposure to non-financial entities of 181.6% i.e. migration of 15.1%[57] from regular to non-performing credit exposure, in order for the capital adequacy of the banking system

Graph 62
Required worsening of the credit exposure quality, in order for the capital adequacy of the banking system to drop to 8%.
In percentages



Source: NBRM, using data provided by the banks.

[57] In the third quarter of 2017, 1.8% of the regular credit exposure to non-financial entities was assigned 'non-performing' status.

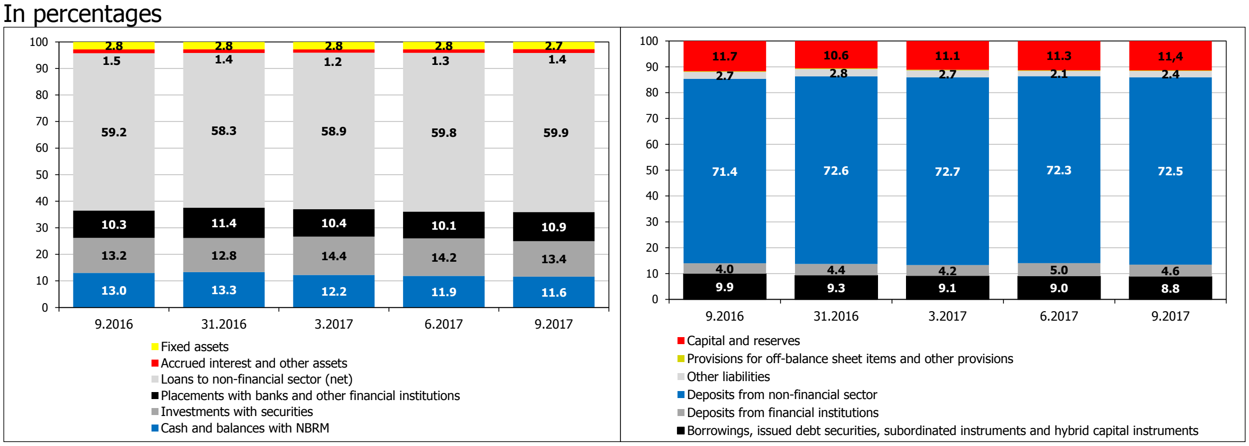
to drop to the legally required minimum level of 8%. These simulations would result in almost tripling of the share of non-performing exposure in the total credit exposure to non-financial entities (from 5.6% to 15.8%).

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

1. Activities of the banks

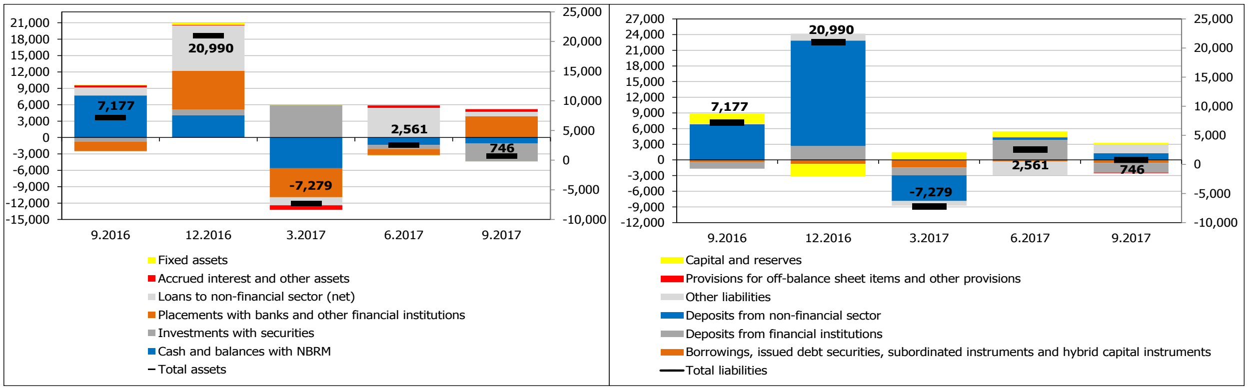
In the third quarter of 2017, in a situation of gradual stabilization of the expectations of the domestic economic entities, the total activities of the Macedonian banking system continued to grow, albeit with slower pace compared to the previous quarter and also compared to the same period of the last year. In a situation of reduced investments in securities, the increase of the banking system assets is mainly due to the increase of the placements in foreign banks and less due to the credit growth, albeit the slowdown in the third quarter of 2017. The credit growth is due to the denar loans to households, in a situation of reduced credit support to corporate clients. The higher financial result in the third quarter of 2017 had significant contribution in the increase of the banking system activities. In the same time, the deposits activity of the non-financial entities was increasing with modest but accelerated pace in comparison to the previous quarter of the year. The increase of the deposit potential of the banks is due to the household deposits, in a situation of further reduction of the corporate deposits. The increase of the denar deposits from the households is modest and is reflection of the slow returning of the tendency to save money in domestic currency, which shows that it takes time for sustainable improvement of the currency preferences of the depositors. Following the more significant growth in the second quarter of 2017, the liabilities towards parent entities of the banks were reduced in the third quarter of 2017, which is mainly result of dividend payments by one large bank towards its foreign shareholder.

Graph 63
Structure of assets (left) and liabilities (right) of the banking system
In percentages



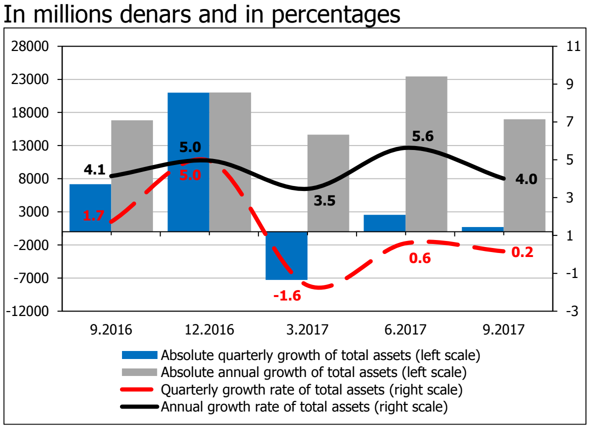
Source: NBRM, using data provided by the banks.

Graph 64
Quarterly growth of the components of the assets (left) and liabilities (right) of the banking system
In millions denars



Source: NBRM, using data provided by the banks.

Graph 65
Banking system assets
In millions denars and in percentages



Source: NBRM, using data provided by the banks.

As on 30 September 2017, the total assets of the banking system were 440,672 million denars, which is quarterly increase of 710 million denars i.e. 0.2%. **The increase of the assets is mainly due to the increase in the deposited funds and the deposits in foreign banks, and less due to the growth of the loans to non-financial entities. On the other hand, the investments in securities (primarily CB bills[58]) featured quarterly decline. The growth of the assets in this quarter was mainly a reflection of the higher financial result and of the growth of the deposits by non-financial entities, while the liabilities towards the parent entities of the banks declined.**

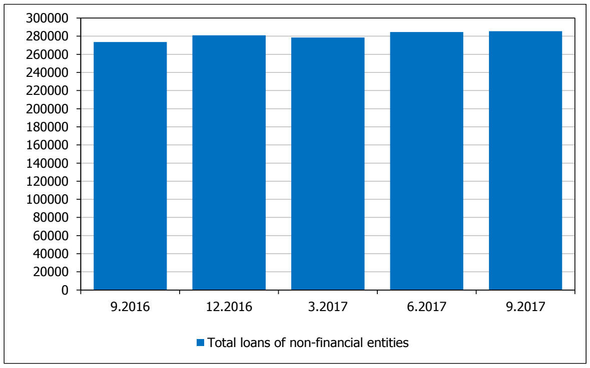
1.1 Loans to non-financial entities

In the third quarter of 2017, the crediting of the non-financial entities[59] featured slowed growth, which is 893 million denars i.e. 0.3% (2.2% in the second quarter of 2017). On annual basis, the loans increased by 11,876 million denars i.e. by 4.3%, which is a no-change rate compared to 30 June 2017. If we

[58] The quarterly reduction in the investments of the banks in CB bills is due to the reduced offer of B bills during the third quarter of 2017.

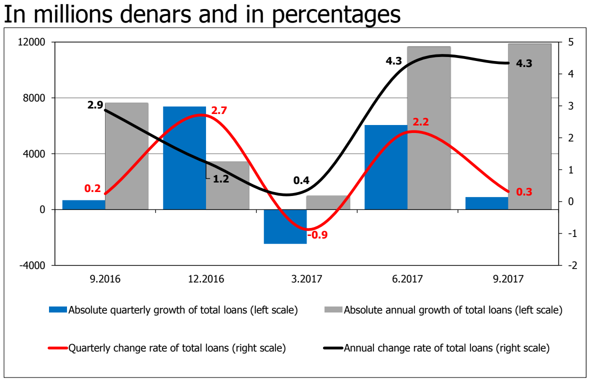
[59] The loans to non-financial entities include the loans to non-financial persons – residents and non-residents i.e. loans to both private and public non-financial entities, the central government, the local self-government, the non-profit institutions serving the households (loans to other clients),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

Graph 66
Amount of the loans to non-financial entities
In millions denars



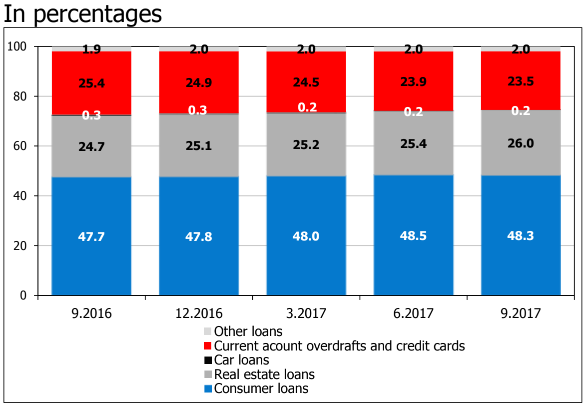
Source: NBRM, using data provided by the banks.

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



Source: NBRM, using data provided by the banks.

Graph 68
Structure of the loans to individuals, per products
In percentages



Source: NBRM, using data provided by the banks.

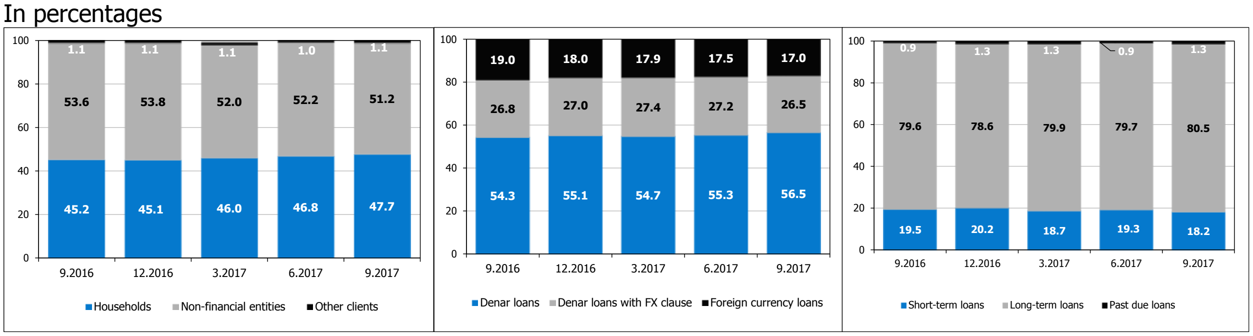
isolate the effect caused by the mandatory write-offs[60], the crediting of the non-financial entities would create a quarterly growth of 0.4%, while the annual growth would be 5.5% (5.7% as on 30 June 2017).

The increase of the credit activity was entirely due to the increased credit support to households, in a situation of reduced crediting to corporate clients. In other words, the loans to households[61] were increased by 2.2% in the third quarter of 2017 (vs the actual growth of 3% in the second quarter of the year). On annual basis, the loans to households were growing at accelerated rate and reached a solid growth rate of 10% (9.7%, as on 30 June 2017). The loans to enterprises were reduced by 1.6% so the annual change rate is negative and is 0.4%. The changes in the regulation on mandatory write-offs still have impact on the annual growth of the corporate loans. In that regard, if we exclude the write-off effects, the annual growth rate of the loans to non-financial entities would be positive - 1.8% (vs 2.4% as on 30 June 2017).

Analyzed per credit products, almost 72% of the loans to individuals are intended for financing of non-specific consumption of the individuals (consumer loans, overdrafts and credit cards). As on 30 September 2017, in six banks (from a total of fourteen banks[62]), the share of the loans in the credit portfolio of the banks is larger compared to the share of the corporate loans.

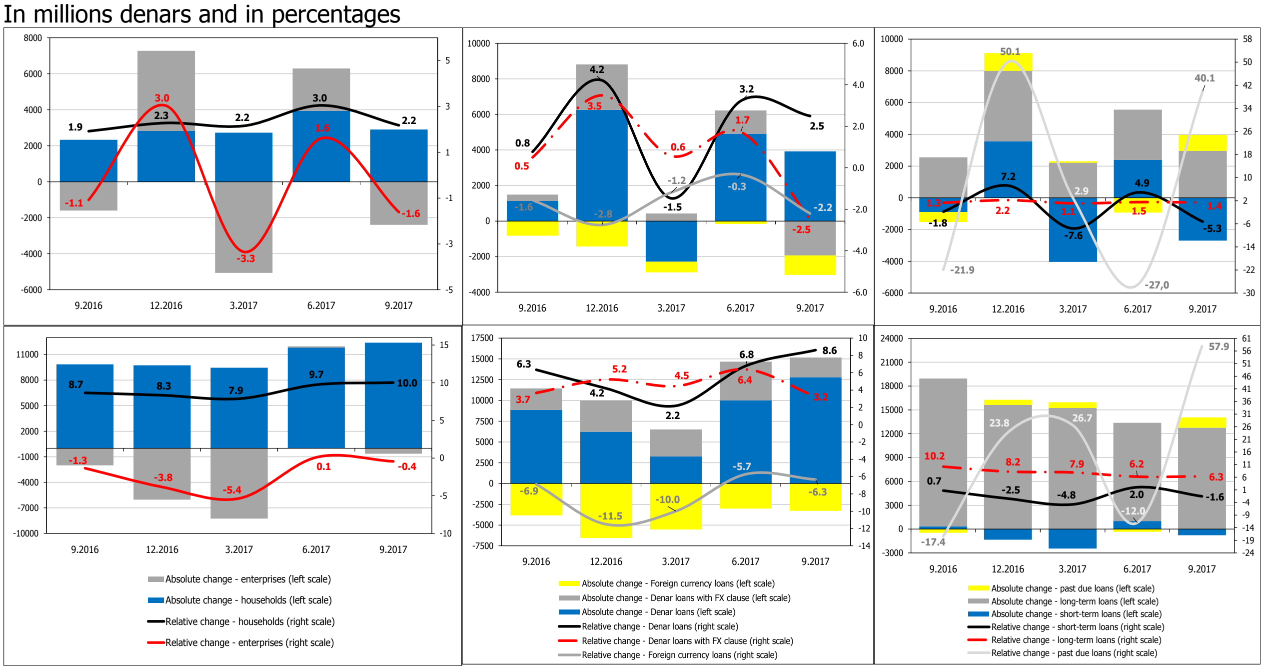
[60] According to the regulation, since June 2017 the banks are required to transfer all receivables which are entirely reserved for more than two years, in off-balance sheet.
[61] The consumer loans and the credit cards are the most commonly used credit products by the households.
[62] MBRP AD Skopje is excluded from this analysis.

Graph 69
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.
Note: The graph on the right side does not include the non-performing loan.

Graph 70
Quarterly (above) and annual (below) growth of the loans, according to the sector, currency and maturity
In millions denars and in percentages



Source: NBRM, using data provided by the banks.

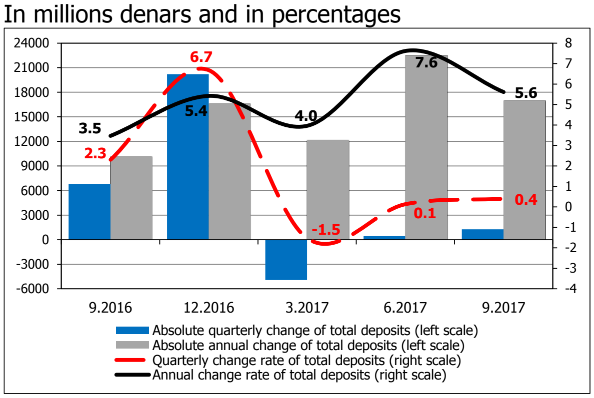
In the third quarter of 2017, the denar loans increased, on the account of almost equal reduction of the crediting with currency component. The denar loans are increasing more at the households (growth of 1,972 million denars i.e. by 2.8%) compared to the corporate sector (growth of 1,783 million denars i.e. by 2.1%). On the other hand, the reduction of the denar loans with currency component and of the loans in foreign currency[63] is

[63] The denar loans with foreign currency clause to non-financial companies on quarterly basis declined by 2,401 million denars

entirely due to the non-financial companies. The denar loans retained the primary role in the currency structure of the total loans, with participation of 56.5%.

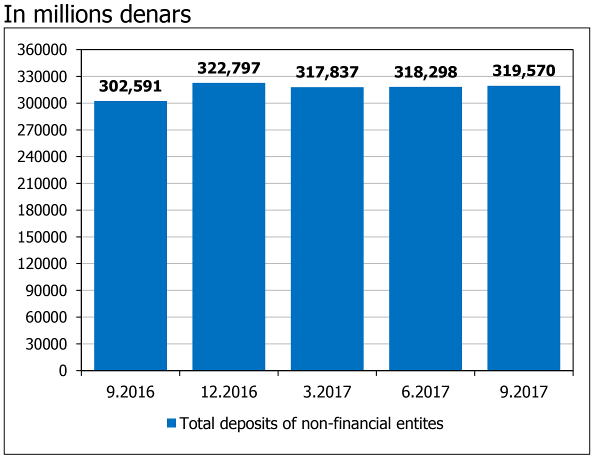
In the third quarter of 2017, the increase of the maturity of the credit activity continued. The long-term crediting achieved quarterly growth of 1.4%, thus additionally strengthening the participation in the structure of the total loans. Most of the increase (56.3%) in the long-term loans is due to denar loans to households[64]. On the other hand, the slowing down of the credit activity growth in this quarter was due to the more significant reduction of the short-term loans (which is entirely due to the loans to non-financial companies[65]).

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



Source: NBRM, using data provided by the banks.

Graph 72
Status with deposits of the non-financial entities
In millions denars



Source: NBRM, using data provided by the banks.

1.2 Deposits of non-financial entities

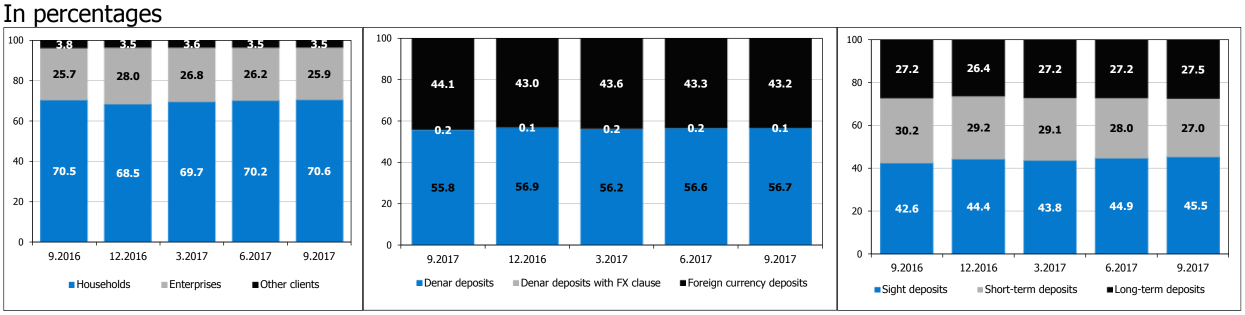
Following the minimal growth in the second quarter of the year, in the third quarter of 2017 the deposits from non-financial entities continued to grow at a faster pace. Still, the actual quarterly growth of the deposits base is modest, while the annual growth rate is slowing down compared to 30 June 2017. The quarterly growth of the deposits base of the banks is 1,272 million denars i.e. 0.4% (0.1% in the second quarter of 2017), while the annual growth reached 16,979 million denars i.e. 5.6% (7.6% as on 30 June 2017). **The households,** which traditionally are the most important depositor in the Macedonian banking system (with share of 70.6% in the total deposits), in the third quarter of 2017 increased their funds in the banks by 2,064 million denars i.e. by 0.9%. **The deposits of non-financial companies** continued to decline in this quarter (by 699 million denars i.e. 0.8%), while on annual basis the corporate deposits had a solid growth rate of 6.3% (i.e. 4,919 million denars). The annual growth of the household deposits (12,341 million denars i.e. 5.8%) in the third quarter of 2017 is 2,5 times greater than the growth of the corporate deposits.

(10.9%), while the quarterly decline of the foreign currency loans to non-financial companies is 1,775 million denars (4.3%).

[64]The long-term loans to households are increasing on quarterly basis by 2,522 million denars, which was mainly due to the increase of the long-term denar loans to households (1,663 million denars), both consumer and housing loans.

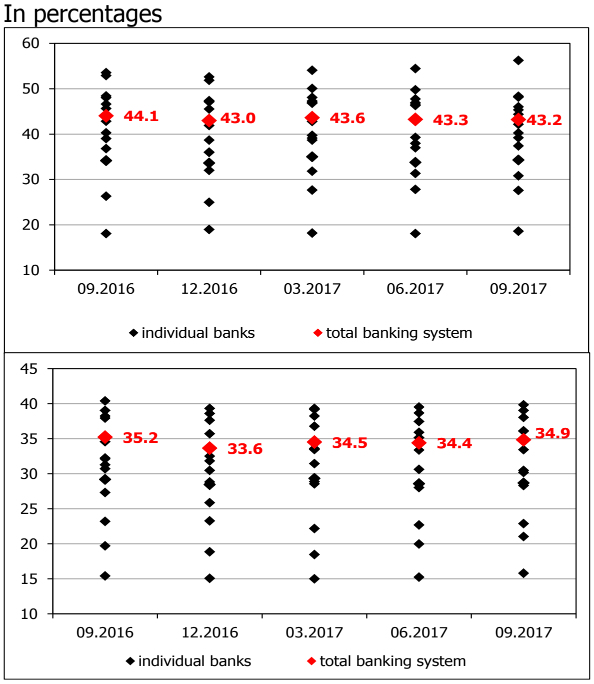
[65]The short-term loans to non-financial companies declined on quarterly basis by 2,864 million denars (6.8%), most of which (53.1%) is due to the short-term loans to non-financial companies with currency component, and less (46.9%) due to the short-term foreign currency loans to non-financial companies.

Graph 74
Structure of the total deposits, per sector (left), currency (middle) and maturity (right)
In percentages



Source: NBRM, using data provided by the banks.

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

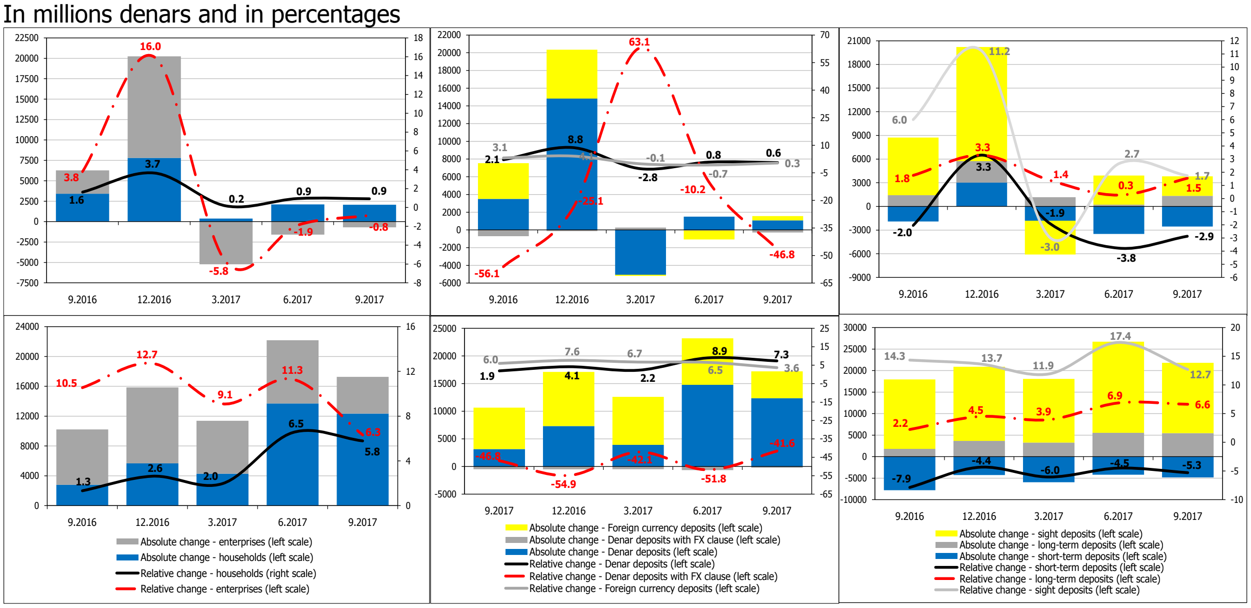


Source: NBRM, using data provided by the banks.

In terms of the currency structure, the denar deposits almost entirely determined the quarterly growth of the total deposits, and they increased by 1,078 million denars (0.6%). The deposits of non-financial companies had greater contribution (80.5%) in the growth of the denar deposits, compared to the household deposits (21%). Majority of the total deposit base continues to be in denar savings (56.7% as on 30 September 2017, similar to the share of 56.6% on 30 June 2017), in which the household deposits have the largest share (63.1%). The deposits in foreign currency featured quarterly increase of 481 million denars i.e. 0.3% which was entirely from the household deposits.

Graph 75 Quarterly (above) and annual (below) change of the deposits, according to the sector, currency and maturity

In millions denars and in percentages

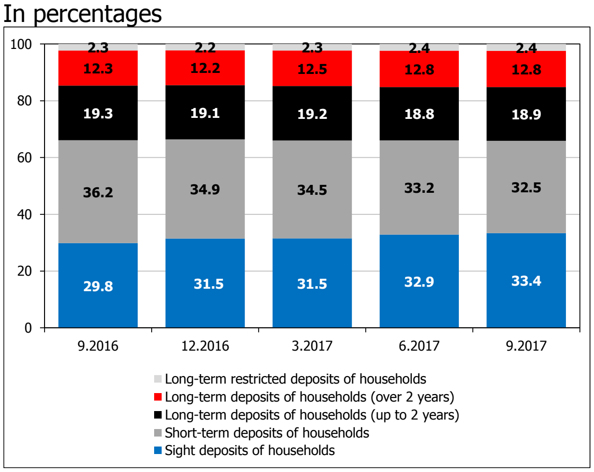


Source: NBRM, using data provided by the banks.

Graph 76

Maturity structure of the household deposits

In percentages



Source: NBRM, using data provided by the banks.

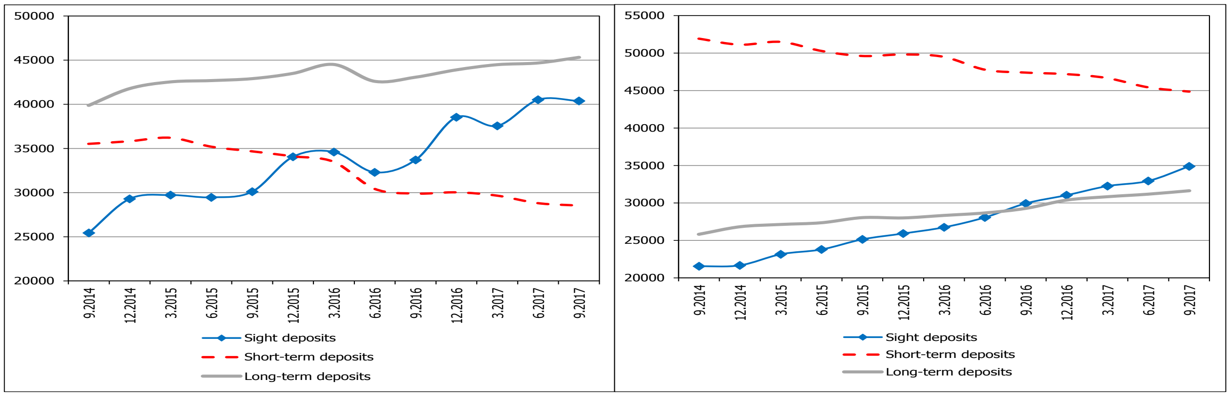
In the third quarter of 2017, the growth of the sight assets, albeit slowed, continues to be the biggest contributor to the increase of the total deposits. However, the long-term deposits accelerated the growth and the contribution of the short-term deposits in the deposit growth continues to be negative. In the third quarter of 2017, **the short-term deposits**[66] feature negative growth rate (-2.9%) and the amount of their decline (2,552 million denars) is very similar to the quarterly growth of the sight assets. **The sight assets/ deposts** increased by 2,484 million denars (1.7%) which was mainly due to the household deposits[67], primarily foreign currency deposits. **The long-term deposits** achieved quarterly growth of 1,340 million denars (1.5%), most of which (81%) is due to the household deposits[68].

[66] The contribution of the non-financial companies in the quarterly decline of the short-term deposits is 62.5%, and the contribution of the household deposits is less - 32.9%.

[67] The quarterly growth of sight assets/deposits was primarily due to the growth of the foreign currency deposits of households (by 1,950 million denars i.e. 5.9%), and less from the growth of the denar deposits of non-financial companies (by 1,576 million denars i.e. 3.6%).

[68] The quarterly growth of the long-term deposits of households is 1,085 million denars (1.4%), where the share of the denar deposits is 58.2% and the share of the foreign currency deposits is less - 41.8%.

Graph 77
Denar deposits (left) and foreign currency deposits (right) of the households, per maturity
In millions denars

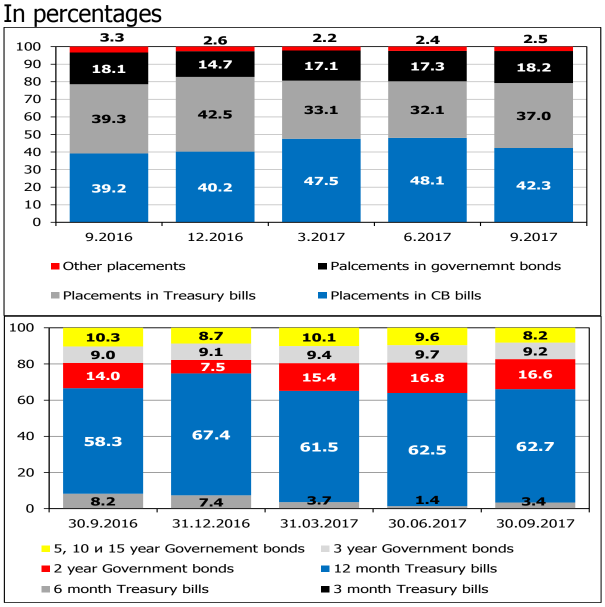


Source: NBRM, using data provided by the banks.

The analysis of the maturity and the currency structure of the household deposits points out to the sight assets/ deposits, as fastest growing component in the last period, both among the denar and foreign currency deposits in this sector. In this regard, the sight assets/ deposits in denars show greater instability, probably because the individuals keep their money in the banks in this format for payment purposes.

The payment motive is less present among foreign currency sight deposits, which feature strong but stable growth in the last period. The short-term deposits feature continuous downward trend, regardless of the currency, on the account of the growth of the long-term deposits. The reasons for the above-mentioned tendencies in the household deposits structure should be sought in the quite low (and still declining) interest rates of the deposits, as well as in the psychological pressures stimulated by some crisis episodes domestically (the domestic political crisis) or internationally (for example, the Greek crisis).

Graph 78
Portfolio structure of securities (above) and maturity structure of the investments in government securities (below)
In percentages

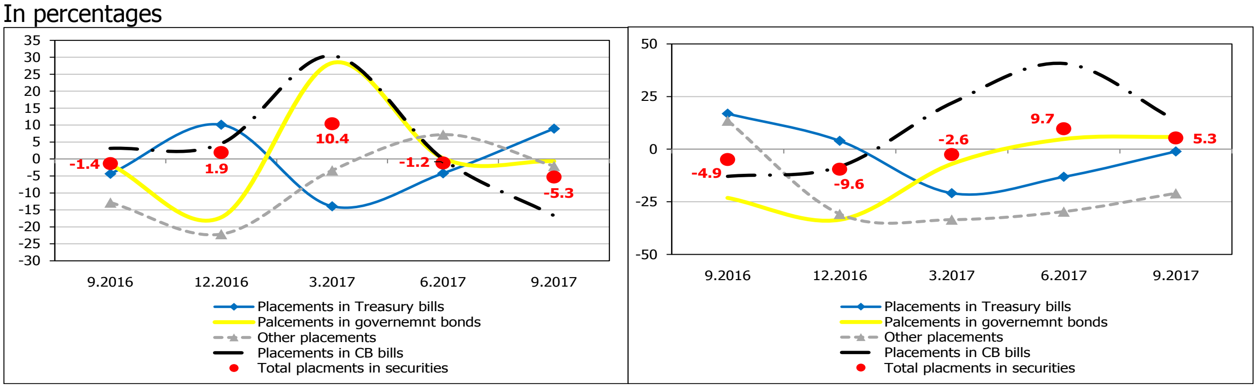


Source: NBRM, using data provided by the banks.

1.3 Other activities

In the third quarter of 2017, the investments of the banks in securities[69] (according to the carrying amount) declined by 3,301 million denars (5.3%), while their share in the total assets of the banks is 14.2% which is no-change compared to 30 June 2017. The significant quarterly decline of the investments of the banks in CB bills (by 4,994 million denars i.e. by 16.7%) had the largest contribution in the reduction of the total portfolio of the securities (in the third quarter of 2017, the National Bank reduced the amount of CB bills offered[70], in a situation of unchanged interest rate of 3.25%). There was also reduction of 68 million denars (0.6%) in the investments of the banks in domestic long-term securities (five-year, ten-year and fifteen-year government bonds). On the other hand, the investments of the banks in treasury bills increased by 1,792 million denars (by 9%).

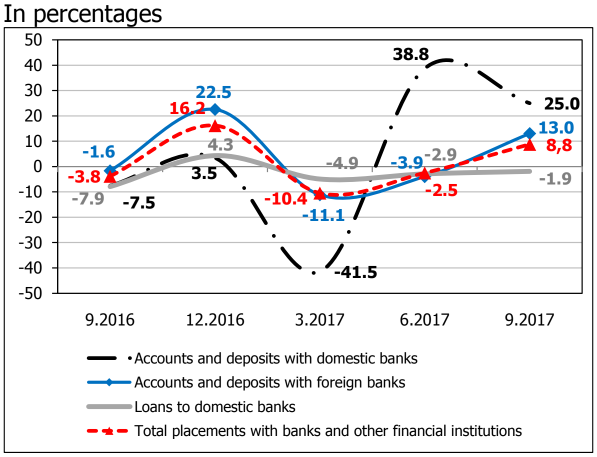
Graph 79
Quarterly (left) and annual (right) change in the securities portfolio
In percentages



Source: NBRM, using data provided by the banks.

[69] Including investments in affiliates.
[70] The National Bank reduced the offered amount of CB bills in July 2017 (from 30,000 million denars to 27,500 million denars) and in August 2017 (from 27,500 million denars to 25,000 million denars).

Graph 80
Quarterly change in the placements in the financial institutions
In percentages

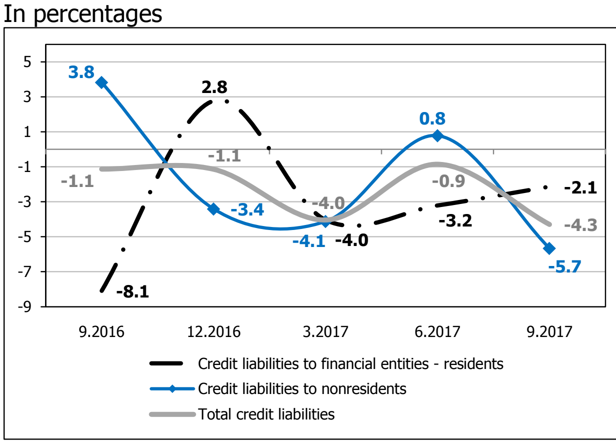


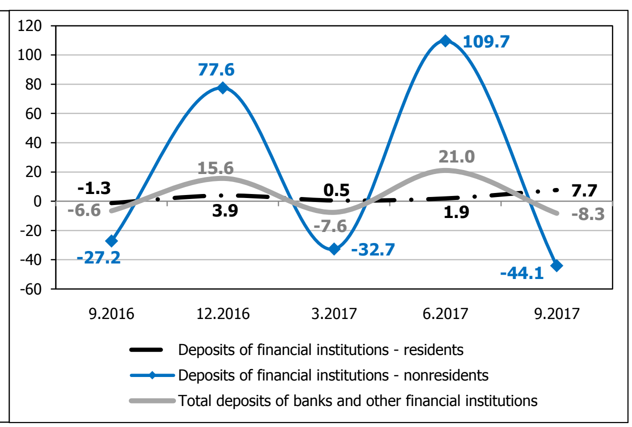
Source: NBRM, using data provided by the banks

In the third quarter of 2017, the placements in banks and in other financial institutions increased (by 3,894 million denars i.e. by 8.8%), which is entirely due to the growth in the balances of the current accounts in foreign banks, and the growth of the short-term termed deposits of the domestic banks abroad. On the other hand, the loans of the domestic banks are declining due to the reduced long-term loans towards the domestic banks in foreign currency (distributed through MBPR AD Skopje).

On the liabilities side, the reduction of the **loan-based liabilities** (by 1,479 million denars i.e. 4.3%) was result of the reduced liabilities on the basis of long-term loans towards financial institutions – non-residents, by 1,734 million denars (total repayment by MBPR AD Skopje towards international financial institution and by one large bank towards its parent bank). There is also reduction by 182 million denars in the liabilities in relation to long-term loans in foreign currency towards the domestic banks (because of the repayment by other domestic banks towards MBPR AD Skopje). On the other hand, the liabilities in relation to short-term loans in foreign currency increased by 570 million denars as a result of the increased liabilities on the basis of loans towards the parent entity of one large bank.

Graph 81 Quarterly growth of the liabilities in relation to loans (left) and deposits of financial companies (right)
In percentages

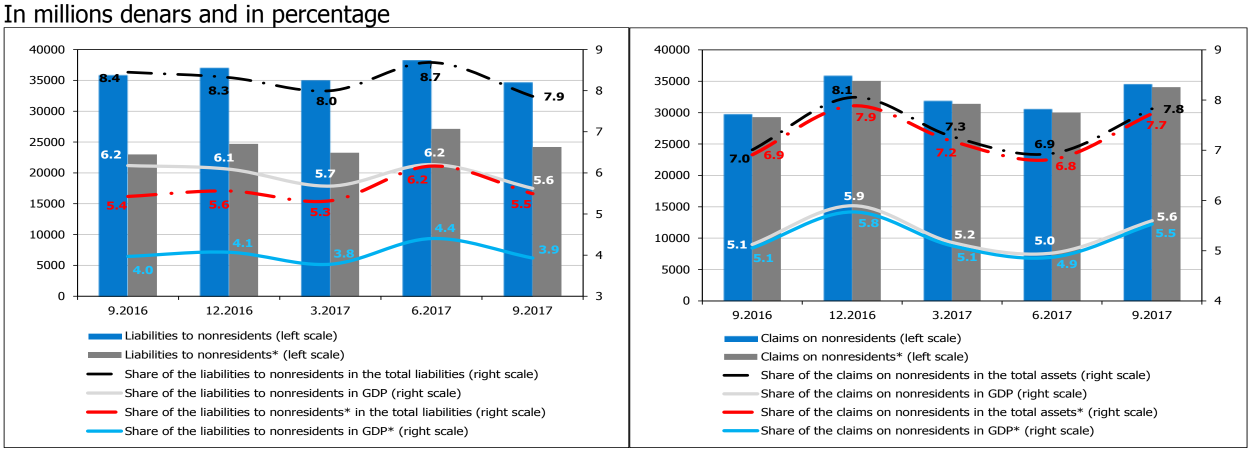




Source: NBRM, using data provided by the banks.

The deposits from banks and other financial institutions continue to be very small source of funding for the banks, and their participation in the total assets additionally declined in the third quarter of 2017 (it is 4.6%). The deposits from the banks and other financial institutions featured decline of 1,828 million denars i.e. 8.3%, which is due to the reduction in the deposits from the parent entities of the banks (reduction in the balances on the current accounts in denars at the parent company of one large bank for payment of dividend) and due to the reduction of the short-term deposits in foreign currency by non-residents (international financial institution).

Graph 82
Liabilities (right) towards non-residents and receivables (right) from non-residents
In millions denars and in percentage

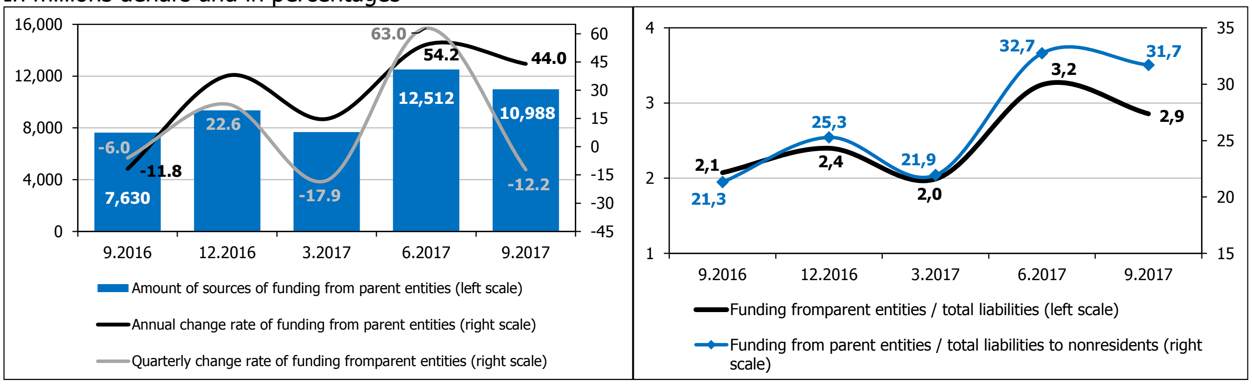


Source: NBRM, using data provided by the bank.
*Note: MBPR AD Skopje is excluded.

In the third quarter of 2017, the banking system owes more than it claims from the non-residents[71]. However, the volume of the activities performed by the domestic banks with non-residents is relatively small. The receivables of the banks from non-residents increased by 3,973 million denars (13%) and their share in the total assets of the banking system reached 7.8%[72]. This increase is due to the increase on the balances on the regular current accounts in the foreign banks and the growth of the short-termed deposits in foreign currency. On the other hand, the **liabilities of the banks towards the non-residents** were reduced by 3,562 million denars i.e. by 9.3% almost entirely as a result of the reduction of the deposits from the parent entities of the banks and the short-termed deposits in foreign currency of one international financial institution. In this respect, the share of the liabilities towards non-residents in the total assets was reduced and is now 7.9%. If we exclude MBPR AD Skopje from this analysis, the quarterly decline of the liabilities of the banks towards the non-residents is 2,919 million denars (10.8%) while their share in the total liabilities is 5.5%[73].

[71] As on 30 September 2017, nine out of fifteen banks are net-debtors towards non-residents.
[72] Analyzed per individual banks, the share of the receivables of the banks from the non-residents in the total assets is between 1.0% and 19.4%.
[73] Analyzed per individual banks, the share of the liabilities of the banks to non-residents in the total liabilities is between 0.1% and 17%. MBPR AD Skopje is excluded from this analysis.

Graph 83
Liabilities towards parent entities of the banks
In millions denars and in percentages



Source: NBRM, using data provided by the banks.

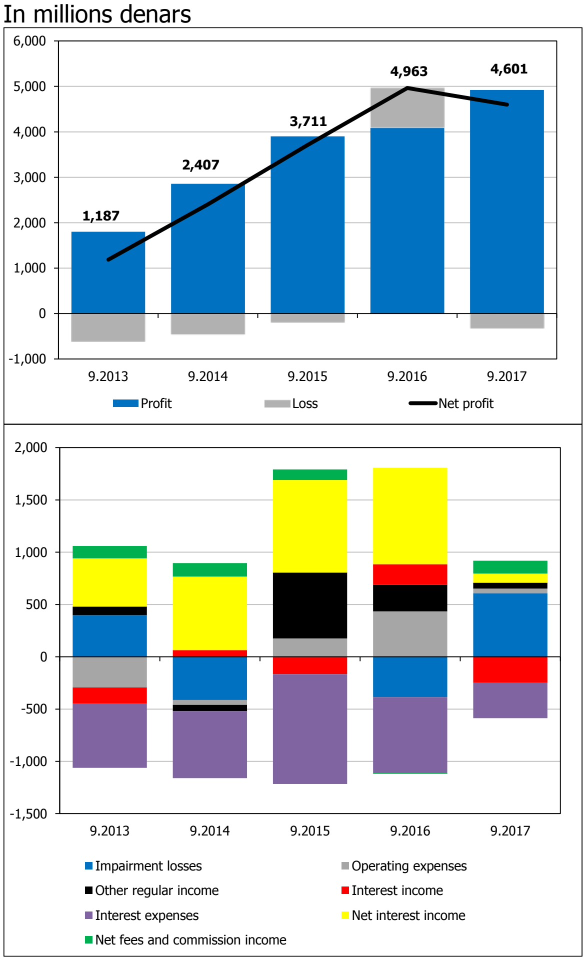
Typical for the Macedonian banks is the small significance of the sources of funding obtained from the parent entities. Following the growth realized in the second quarter of the year, the liabilities of the banks towards their parent entities reduced on quarterly basis by 1,524 million denars (by 12.2%), which is mainly due to the actual payment of dividend by one large bank towards its foreign shareholder. Hence, the share of the liabilities of the banks towards the parent companies (including here the subordinated liabilities and the hybrid capital instruments) in the total liabilities of the domestic banking system and in the liabilities towards the non-residents was reduced to 2.9% and 31.7%[74], respectively. The sources of funding of the banks from parent entities are usually in in a form of short-term deposits, long-term liabilities towards loans and liabilities in relation to subordinated instruments.

[74] Analyzed per individual banks, the share of the liabilities of the banks to parent entities in the total liabilities to non-residents is between 24.6% and 85.9%. Analyzed per individual bank, the share of the liabilities of the banks to parent entities in the total liabilities is between 1% and 13.1%.

2. Profitability[75]

In the first nine months of 2017, the banking system of the Republic of Macedonia achieved smaller financial result compared to the same period of the last year. The reduced financial result is consequence of the increased costs for impairment of the financial assets, as well as the slowed growth of the net interest revenues from the non-financial entities. In the first three quarters of 2017, the non-interest revenues of the banks, especially the net revenues from commissions and fees, had the biggest contribution (two thirds) in the growth of the total revenues from regular operations. The operational efficiency of the banking system features further improvement, but that is not sufficient to compensate for the unfavorable tendencies of the impairment costs and the net interest revenues, and to enable growth of the profit. The trend of decline of the active and passive interest rates of the banks continued also in the first nine months of 2017.

Graph 84
Net profit after taxation (above) and annual change in the main revenues and expenditures (below)
In millions denars



Source: NBRM, using data provided by the banks.

2.1 Indicators of profitability and efficiency of the banking system

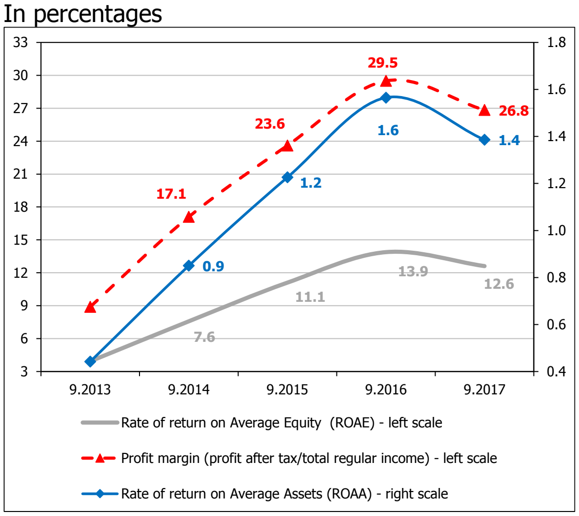
The net profit after taxation realized in the first nine months of 2017 is 4.6 billion denars and is declining for the first time following six-year continuous growth, by 7.5% (by 373 million denars), compared to the same period of the previous year. The increased cost for impairment, the reduced net interest revenues from operations with non-financial companies and the slowed growth of the net interest revenues from the households – are the key reasons for the reduced financial result in the first nine months of the current year.

The smaller profit in the first three quarters of 2017 resulted in reduction of the return rates of the average assets and of the average capital[76] and reserves, as well as of the

[75] 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 nine months of 2017, and their size is compared with the same period from the previous year (2016) 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 nine months of 2017. This calculated average is then compared against the average calculated for the first nine 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.

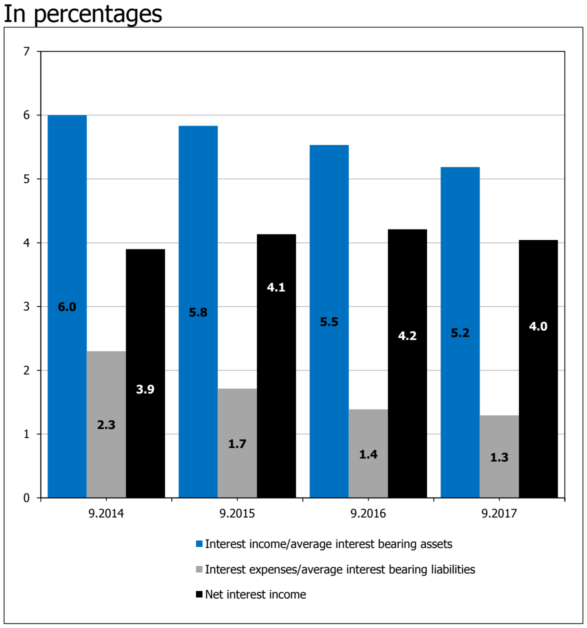
[76] In the calculation of the rates of return of the average assets and the average capital and reserves, the average assets and the average capital and reserves are calculated as averages of the

Graph 85
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.
*The average assets and the average capital and reserves are calculated as average of the current assets i.e. the capital, and the reserves at the end of the third quarter of the respective year, and at the end of the previous year.

Graph 86
Net interest margin on banking system level
In percentages



Source: NBRM, using data provided by the banks.

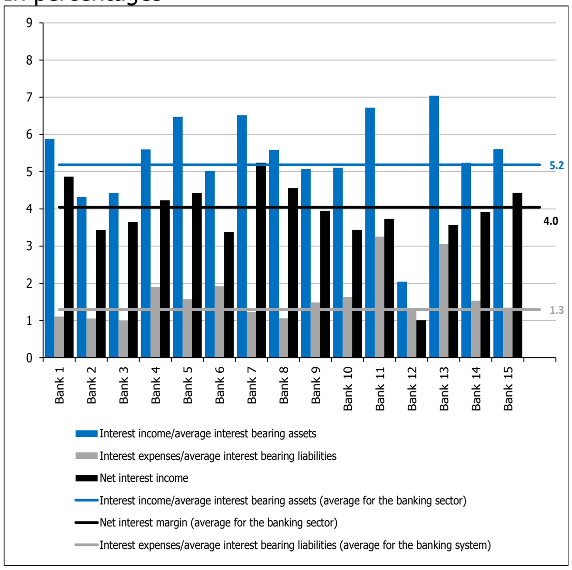
profit margin of the banking system. The indicators of profitability and efficiency of the banking system and the specific groups of banks are shown in Annex 40.

The net interest margin rate featured modest decline of 0.2 percentage points, and on 30 September 2017 is at a level of 4%. The credit and deposit activity of the non-financial companies provided the biggest contribution in the reduction of the net interest margin which, in turn, is one of the reasons for decline in the profit in the first nine months of 2017, compared to the same period of the previous year. On the other hand, the credit and deposit activity of the banks to households had the biggest contribution in the creation of the net interest margin. The credit activity in the sector of "Households", in the first nine months of 2017, contributes with almost 69% in the total increase of the average interest-yield assets of the banking system, which is higher by 4.9% (17,831 million denars) compared to the average amount calculated for the same period of the previous year of 2016.

In an environment of decline of the interest rates and modest growth of the credit and deposit activity, the banks were faced with reduction in the interest revenues of 1.7% (by 250 million denars), but in the same time they also reduced the interest expenditures by 9.4% (by 337 million denars), which resulted only in slower growth of the net interest revenues of 0.8% i.e. by 87 million denars (for comparison, the net interest revenues in the first nine months of 2016 were higher by 923 million denars (8.8%) compared to the same period of 2015). In this regard, the net interest revenues contributed with only 23% in the total growth of the net profit after taxation (for comparison, these revenues in the first nine months of 2016 contributed with 73.1% in the total growth of the profit in that period, compared to the same period of 2015).

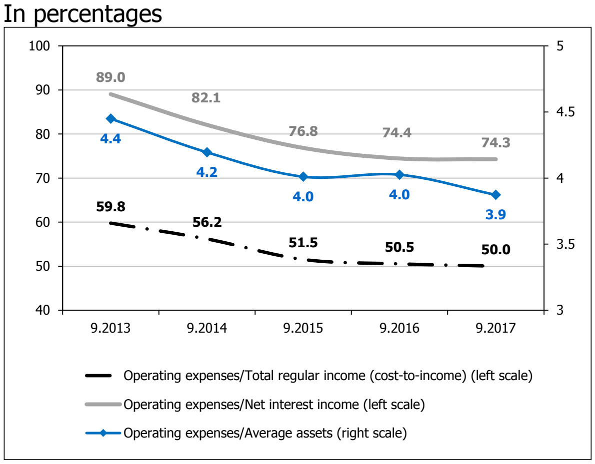
status of assets i.e. of the capital and reserves as on 31 December 2016 and on 30 September 2017.

Graph 88
Net interest margin, per individual bank, as on 30 September 2017
In percentages



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

Graph 87
Operational efficiency indicators
In percentages

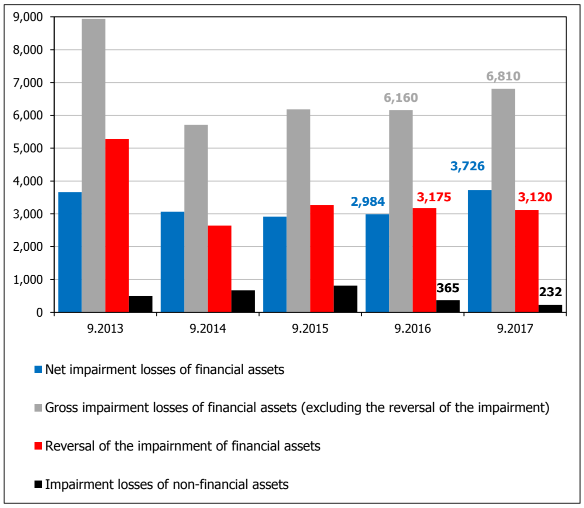


Source: NBRM, using data provided by the banks.
* The 'total regular revenues' category includes the net interest revenues, the net revenues from commissions and fees, other net financial revenues and other revenues.

According to sector structure, the new interest revenues from dealing with the households were the ones with largest increase (706 million denars i.e. 15.9%), but even their growth is slowing down (the increase is by 288 million denars i.e. by 13 percentage points lower compared to the same period of the previous years). The banks managed to increase the interest revenues from the households by 373 million denars i.e. by 5.8% (in the last year this increase was 451 million denars i.e. 7.5%) and in the same time to reduce the interest expenditures by 333 million denars i.e. by 16.2% (in the last year this reduction was 543 million denars i.e. 20.9%). The net interest revenues from the non-financial companies reduced by 482 million denars i.e. by 8.4% (the net interest revenues from the non-financial companies also reduced in the first nine months of 2016, but this reduction was less - 146 million denars i.e. 2.5%) and they were the biggest contributor to the slowed growth of the total net interest revenues. In other words, in the first three quarters of 2017 the interest revenues from the non-financial entities were reduced by 463 million denars i.e. by 7.5% (in the same period of the last year, the interest revenues from the non-financial companies were less by 203 million denars), while the interest expenditures from this sector were increased by 19 million denars in the same period of the last year, the interest expenditures from the non-financial companies were reduced by 57 million denars). Some contribution to the increase of the net interest revenues was also provided by the sector of financial institutions, mainly as a result of the higher average amount of the placements in CB bills of the National Bank of the Republic of Macedonia in the first nine months of 2017 (compared to the same period of the last year).

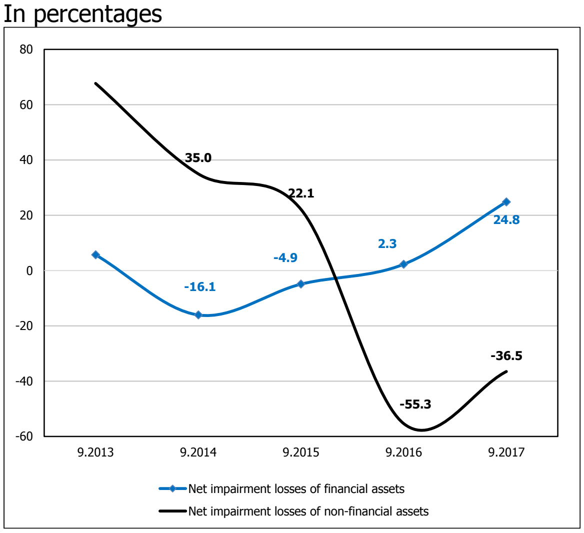
The operational efficiency of the banks featured minimal improvement, which is due to the slower increase of the operational costs, compared to the revenues and the average assets of the banking system. The operational costs of the banks in the first nine months of 2017 are higher

Graph 90
Changes in costs for impairment of the financial and non-financial assets
In millions denars



Source: NBRM, using data provided by the banks.

Graph 89
Annual rates of change in the impairment costs for the financial and non-financial assets
In percentages



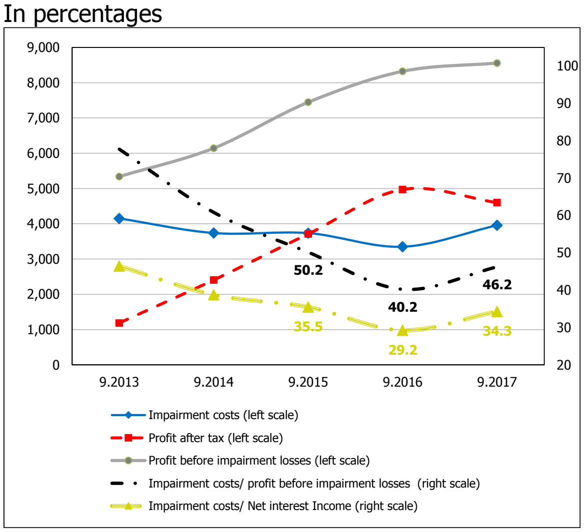
Source: NBRM, using data provided by the banks.

by only 0.5% (by 44.5 million denars) compared to the same period of the previous year (2016). The increase of the operational costs is mainly consequence of the increase of the general administrative costs (3.5% or 91 million denars), the increased costs for employees (54 million denars i.e. 1.6%) and the depreciation costs (7.2% i.e. 53 million denars). In the same time, the other operational costs were significantly reduced by 190 million denars (mainly the costs for other reserves and other expenditures[77]). The total revenues from regular operations also had modest growth of 266 million denars i.e. by 1.6% (in the first nine months of 2016 these revenues were higher by 1,170 million denars or by 7.4% compared to the same period of 2015). It is also relevant to mention that the non-interest revenues of the banks (especially the net revenues from commissions) had the biggest contribution (around two thirds) to the growth of the total revenues from regular operations.

In the first nine months of 2017 there is significant increase of the total costs (net[78]) for impairment by 18.2% (i.e. by 608 million denars) compared to the same period of previous 2016. Furthermore, this cost had the biggest contribution on the reduction of the actual profit of the banks. The increased costs (net) for impairment are due to the actual higher costs (net) for impairment of the financial assets (growth of 741 million denars i.e. 24.8%) which, in turn, is consequence of the worsened creditworthiness of clients in the sectors of production of metal, machinery, tools and equipment; food industry; and wholesale and retail trade, in September 2017. On the other hand, the costs (net) for impairment of the non-financial assets have declined by 133 million denars (36.5%) which is due to the sale of the previously forfeited property on the grounds of uncollected receivables, regardless of the more

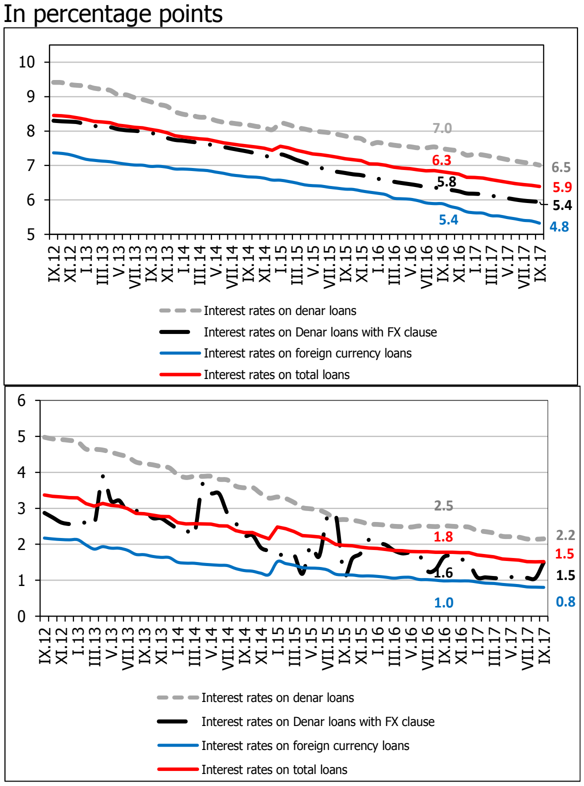
[77] The 'other operational costs' category includes the costs intended for special reserve for off-balance sheet exposure, costs for other reservations and miscellaneous expenditures.
[78] The costs for impairment are shown as net and they include the impairments done (loss because of damages), reduced by the release of the impairment (loss because of damages).

Graph 91
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 92
Monthly frequency of the active (above) and passive interest rates (below)
In percentage points



Source: NBRM, using data provided by the banks.

significant increase in forfeited assets in September 2017.

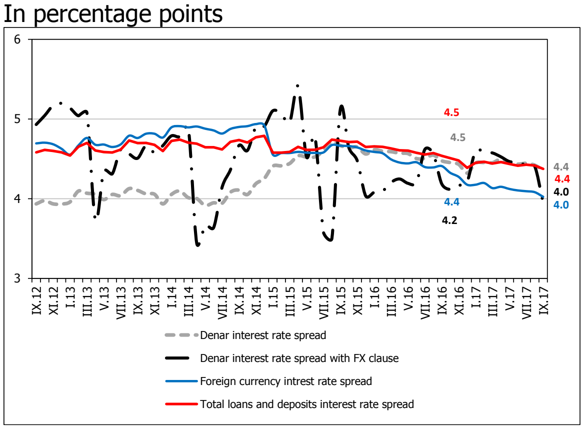
2.2 Movements/ tendencies in the interest rates and interest rate spread

In the period December 2016 – September 2017, the active and passive interest rates of the banks continued to decline and, on average, are smaller by 0.4 and 0.2 percentage points, respectively, compared to the same period of 2016. The average weighted active interest rate for the first nine months of 2017 is 6.0% (6.4% for the first nine months of 2016), while the average passive interest rate for the same period is 1.6% (1.8% for the first nine months of 2016). If analyzed per currencies, the average weighted interest rate of the denar loans with foreign currency clause features the largest decline of 0.5 percentage points. On the deposits side, the biggest decline of 0.6 percentage points is with the average weighted interest rate of the denar deposits with foreign currency clause.

In September 2017, the spread between the active and passive interest rates was 4.4 percentage points and this spread remains unchanged compared to December 2016. On the other hand, the average spread between the active and passive interest rates for the first nine months of 2017 (4.4%) is reduced by 0.2 percentage points compared to the same period of 2016 (4.6%). Occasional oscillations of the interest spread among the denar interest rates with foreign exchange clause can be noticed and they are caused by the increased volatility of the interest rates for the denar deposits with foreign exchange clause that banks very rarely offer to their clients as deposit product.[79].

[79] In the first three quarter of 2017 there is a decline in the denar deposits with foreign currency clause by 44.5% (464 million denars), compared to the same period of 2016. The average share of these deposits in the total deposits is marginal – only 0.2%.

Graph 91
Monthly frequency of the interest rate spreads, by currency (below)
In percentage points



Source: NBRM, using data provided by the banks.

ANNEXES