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 2015

December 2015

Contents

I. Summary

In the third quarter of 2015, the Macedonian economy continued its solid growth, supported by bank lending, which in terms of healthy solvency and liquidity position and increased profitability have urged the supply of credit.

Despite the gradual exhaustion of the effects of the economic and political developments in Greece and the domestic political events in summer, their impact on the bank activities continued. The banks' assets growth slowed down, primarily because of the further slowdown in deposits. Unlike the preceding quarter, the increase in the banks' deposits is fully due to the new household savings, amid a decline in corporate deposits, which corresponds with the credit market developments in this period. Namely, in the third quarter of 2015, the loan support to the households continued to grow, whereas corporate loans registered a minor decrease. The uptrend of long-term savings was interrupted, so that the increase of deposits was driven by sight deposits as well as foreign currency deposits, which in turn indicates a slowing process of denarization of deposit activity. In order to foster long-term savings and savings in domestic currency, a new monetary policy measure has been applied since September 2015[1].

The credit portfolio quality has been preserved, with the non-performing loans to total loans ratio hovering within the usual level for the last two years, between 11% and 12%. The annual increase in non-performing loans slowed down visibly, and compared to September 2014, reduced the share of non-performing loans to total loans by 0.6 percentage points to 11.7% at the end of the third quarter of 2015. However, compared with June 2015, this indicator slightly deteriorated. This is due solely to fluctuations in non-financial companies, where, amid reduced credit support, non-performing loans to total loans ratio as of 30 September 2015 registered a more pronounced rise. Yet, it is below the level of the same month in 2014. The largest contributors to the rise in non-performing loans are construction and activities related to real estate, and wholesale and retail, while industry contributed to their reduction. Among households, the rate of non-performing loans continued to decline, mainly influenced by the rapid credit growth in this sector. However, signals have been noticed for possible growing risks of the household sector due to the extended rapid growth of consumer loans under easier credit standards.

The high coverage of loans with allocated impairment offsets the risk to the banks' own funds from any materialization of credit risk, i.e. from materialization of an extreme assumption of full default of non-performing loans.

The faster growth of loans compared to deposits in the third quarter of 2015, caused a minor decrease in the liquid assets of the banking system. But they are still at a satisfactory level and provide satisfactory coverage of the banks' short-term liabilities and deposits of households. Simulations of combined liquidity shocks assure that the liquid assets of the Macedonian banking system is sufficient to cover extreme hypothetical liquidity outflows.

Other risks to the Macedonian banks have little importance.

[1] The amendments that started to apply on 1 September 2015, reduced the reserve requirement rate for the bank liabilities to natural persons in domestic currency with contractual maturity over one year from 8% to 0%, with these liabilities obtaining the same treatment as the liabilities (both denar and foreign currency) with maturity over two years, which have been a subject to 0% rate for about three years.

The banking system solvency is high. In the third quarter of 2015, the capital adequacy ratio decreased insignificantly. Yet it remains twice the regulatory capital adequacy requirement and equals 16.1%. An additional factor for the strong solvency of the Macedonian banking system is the high quality of own funds, of which only one half is "used" to regulatory risk coverage.

Profitability of the banking system continues to strengthen, whereby the profit generated in the first nine months of 2015 is significantly higher compared to the same period of 2013 and 2014. The reason behind the increased profit is the growth in net interest income, due to the faster decline in interest expenses compared to the decline in interest income, and the growth of other regular income. Slower growth of deposits, despite being linked with the domestic political turmoil and developments in Greece, indicates that saving has become more sensitive to the downward changes in interest rates, signaling that their further reduction could adversely affect the volume of deposits. Risks to the current strategies of banks have increased because any increase in the general level of interest rates on deposits, combined with the inherent risks in the loan portfolio of banks, will have a direct effect on their balance sheets, which requires timely review of existing strategies in terms of strengthening and expanding deposit base, revision of interest rate policy and finding new sources of profitability.

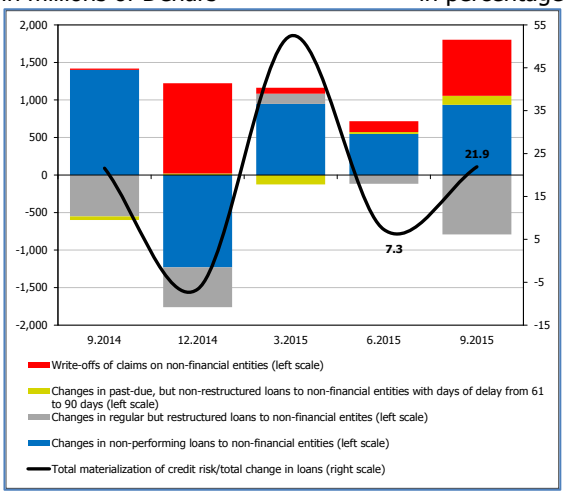
II. Bank Risks

1. Credit risk

In the third quarter of 2015, the quality of the loan portfolio of the banking system was mainly maintained, with the non-performing to total loan ratio remaining within the normal level of this indicator over the past two years, ranging between 11% and 12%. In this quarter, the growth of non-performing loans, amid more pronounced slowdown of bank lending activity, increased the share of non-performing loans in total loans to 11.7%. While the growth in non-performing loans of non-financial companies was not high, their share in total loans reached 16.6%, due to the reduced credit support to this sector, rather than the growth of non-performing loans. Among households, the rate of non-performing loans continued to decline, mainly influenced by the rapid credit growth. The low level of credit risk of retail lending also stems from the great dispersion of banks' claims, both by amount and by number of clients. The growth of household loans is mostly driven by consumption loans. This, amid easing credit standards, may signal an expectation for increasing risks of consumer loans. Therefore a need has been created for closer monitoring of regularity in repayment and early detection of financial difficulties of these customers, to strengthen the criteria of banks in granting consumption loans, but also to take measures to limit any risk arising from the rapid growth of consumption loans. The risk to the own funds of the banking system from any materialization of credit risk from non-performing loans is not high, given that these loans have high coverage with impairment (83.1% with their own impairment and over 100% with total impairment).

Chart 1
Materialization of credit risk in banks' credit portfolios

in millions of Denars in percentage



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

1.1 Materialization of credit risk in banks' balance sheets

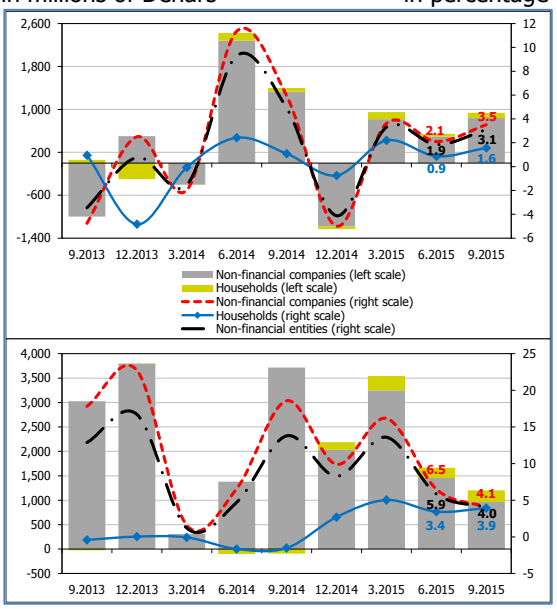
In the third quarter of 2015, changes in the categories that denote materialization of credit risk (growth of non-performing loans, write-offs, foreclosures and the like) compared with the growth of total loans show that **the materialization of credit risk in banks' portfolios is significantly higher compared to the previous quarter and makes up 21.9% of the growth of loans of the banking system in the third quarter of 2015[2].**

The quality of the banking system's loan portfolio, measured by the changes in non-performing loans to non-financial companies registered divergent

[2] The total materialization of credit risk is calculated as the sum of actual write-off of claims, the quarterly growth (the decrease is not taken into account) of foreclosures based on outstanding claims and the quarterly change in non-performing loans, regular restructured loans and non-restructured loans overdue from 61 to 90 days. The total change in loans refers to the quarterly change in loans including claims written off for the quarter and the quarterly growth of foreclosures.

Chart 2
Quarterly (up) and annual (down) growth rate of non-performing loans to non-financial entities

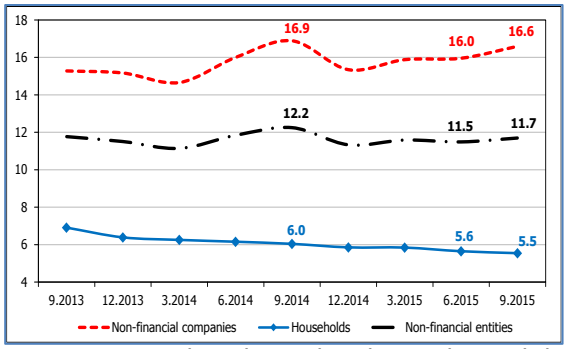
in millions of Denars in percentage



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

Chart 3
Share of non-performing loans to total loans of non-financial entities, and by sector

in %



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

movements, i.e. quarterly deterioration and some annual improvement. However, the quarterly growth rate of non-performing loans does not cause concern, given its slight acceleration compared to the previous quarter and its maintenance below the level of the same quarter last year. In general, the annual growth rate of non-performing loans decreased and at the end of the third quarter of 2015 was reduced to 4.0%, which is a record low in the last fourteen months.

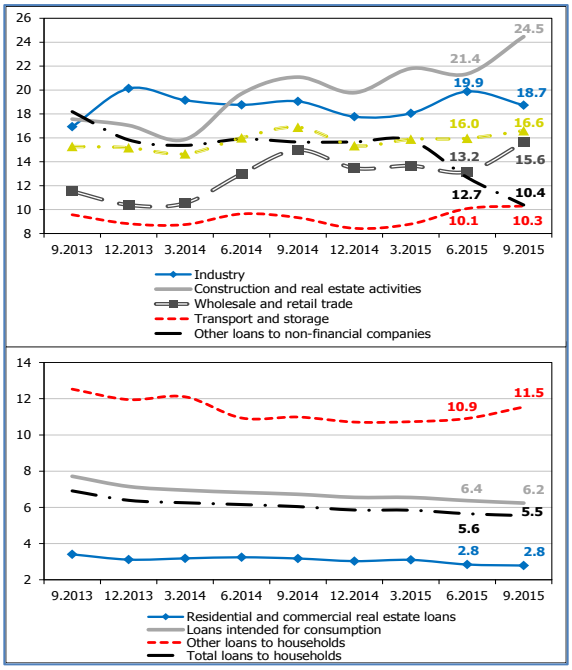
The growth of non-performing loans (quarterly and annual) is mostly due to the growth of non-performing loans of few non-financial companies. Thus in the third quarter of 2015, the growth of non-performing loans reflects the deteriorating performance of some wholesale and retail trade businesses, and construction and activities related to real estate.

Non-performing loans of household sector continued to move upwards at an accelerated pace, both quarterly and annually. Non-performing loans to households have registered a double-digit contribution to the annual growth of total non-performing loans for the second consecutive quarter, which was last seen at the end of 2010. Although their growth is not worrisome, these loans should be followed with caution due to the deviation from their normal movement, as well as the intensified growth of lending to this sector recently.

The growth of non-performing loans amid slowing bank lending activity **increased the share of non-performing loans in total loans to 11.7%.** This share of non-financial companies has seen significant upward movement and at the end of the third quarter reached 16.6%, which despite the growth of non-performing loans, also results from the reduced credit support to this sector. On the other hand, the rate of non-performing loans[3]

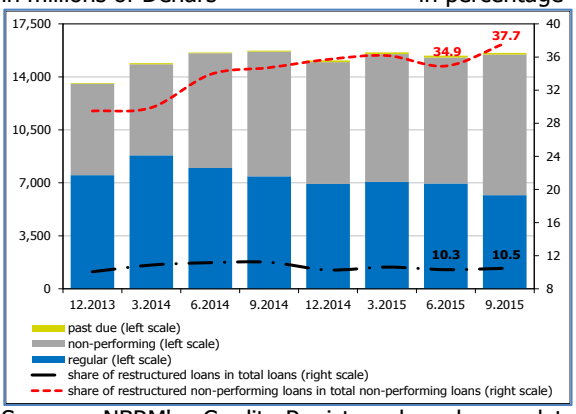
[3] The rate of non-performing loans is a share of nonperforming loans in total loans.

Chart 4
Share of non-performing in total loans to non-financial companies - by activity (up) and to households - by credit product (down)
in %



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

Chart 5
Dynamics of restructured loans to non-financial companies, by status (regular or non-performing)
in millions of Denars in percentage



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

of households has been declining and has reached a record low since 2008. This movement is due to the further enhanced lending to this sector to which banks focused all their credit support in the third quarter of 2015.

According to the rate of non-performing loans, the credit risk is the highest among banks' claims on non-financial companies engaged in construction and activities related to real estate, and industry.

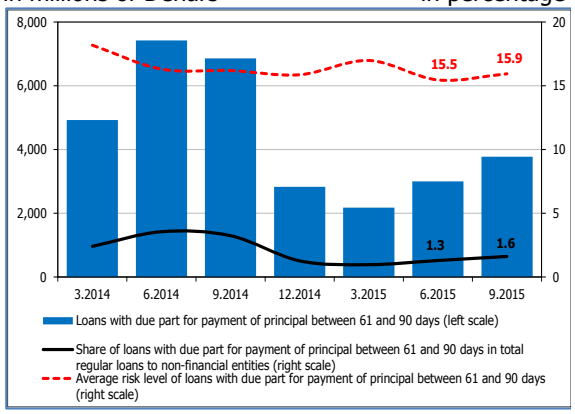
The rate of non-performing loans of households mainly records favorable movements in some credit products. However, the rate of non-performing consumer loans, as the fastest growing category of household loans, still exceeds the level of the indicator for the whole household sector.

The dynamics and the volume of restructured loans are additional indicators of the risk of loans to non-financial companies. In the third quarter of 2015, restructured non-performing loans of non-financial companies increased compared to the decline of those with regular status. The direction of movement of regular restructured and non-performing loans points to the conclusion that some of the previous restructurings have not been successful and failed to prevent the migration to non-performing status. This is also confirmed by the higher percentage of restructured loans with regular status that turned into non-performing loans[4] in a quarter. Under such developments, the share of restructured loans in total loans to non-financial companies rose to 10.5%, while the share of restructured non-performing loans to total non-performing loans hit a record high of 37.7% (34.9% as of 30 June 2015).

[4] In the third quarter of 2015, 20.9% of the restructured regular loans to non-financial companies acquired a non-performing status, as opposed to the 3.0% of those loans that migrated in the second quarter of 2015. The high migration in the third quarter results from restructured loans classified in B-regular risk category, which migrated to the higher risk categories, primarily in B-non-performing risk category.

Chart 6
Dynamics and average risk level for loans with due part for payment of principal between 61 and 90 days

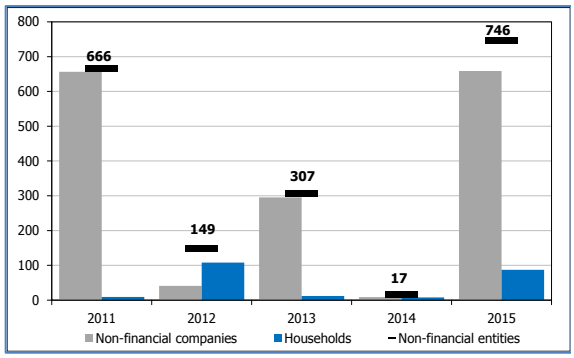
in millions of Denars in percentage



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

Chart 7
Write-offs made during the third quarter, over the years

in millions of denars



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

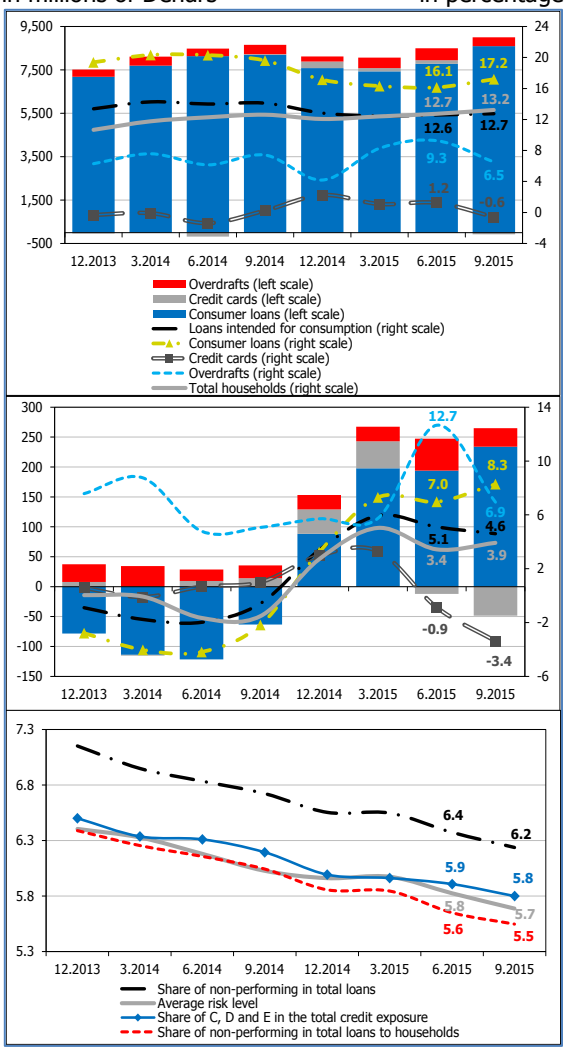
Delay in repayment of individual claims longer than 90 days is one of the major criteria for acquiring a non-performing status. Hence, due loans with delayed repayment of principal between 61 and 90 days[5] represent a potential risk of migration to non-performing loans and accordingly, of increase in the level of non-performing loans the following month, i.e. potential materialization of credit risk in banks' portfolios. Assuming that the past due debt of none of the due loans between 61 and 90 days will be collected in the next month, as of 30 September 2015, 1.6% of total regular loans would become non-performing, and therewith only on this basis, non-performing loans would rise by Denar 3,776 million, or 12.1%. However, the growth registered in the following month (October 2015) is significantly lower compared to this extreme assumption and equals 1.1% or Denar 347 million, indicating a **solid collection of the loans with past due part of 61 to 90 days.**

In the third quarter of 2015, Denar 746 million were written off, which is, on average, almost three times more than write-offs made during the third quarter in the previous four years. Typical for this quarter is the greater involvement of banks in clearing the "bad" credit portfolio, as opposed to their usual practice to write off most of the claims in the last quarter of the year. The written off claims are mostly (88.3%) related to non-financial companies, while the overall recovery of already written off claims is dominated by collections from households. The vast amount of written-off claims on non-financial companies is due to write-offs made by one bank, while the higher amount of written-off claims on households than usual is attributable to the write-off of claims on natural persons, pursuant to the Law on One-time Write-off of Citizens' Debts[6].

[5] Starting from 31 December 2014, the analysis includes loans that are past due between 61 and 90 days only in the repayment of the principal, while the analysis for the previous quarters covers the loans which are past due between 61 and 90 days on any item (principal, interest or other claim) on the reporting date.
[6] Official Gazette of the Republic of Macedonia No. 112/2014.

Chart 8
Annual growth of total consumer loans (up), non-performing loans (middle) and consumer loan risk indicator (down)

in millions of Denars in percentage



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

Write-offs made in the third quarter of 2015 influence the dynamics of total non-performing loans, so that if they have not been made, the quarterly growth rate of non-performing loans would have been higher by 2 percentage points. The impact of write-offs is greater among non-financial companies, so that the exclusion of their effect would increase the quarterly growth rate by 2.2 percentage points.

Larger write-offs made in the third quarter have slightly decreased the share of fully provisioned non-performing loans to total non-performing loans, which could also reflect the attempts of banks to clean this loan portfolio. However, the share of fully provisioned loans to total non-performing loans remains high, at 59.6%. In anticipation of further "cleansing" of banks' balance sheets from such fully provisioned claims, one can expect a reduction of non-performing loans on this basis. Assuming that these loans will be written off, the share of non-performing loans to total would be by two times lower.

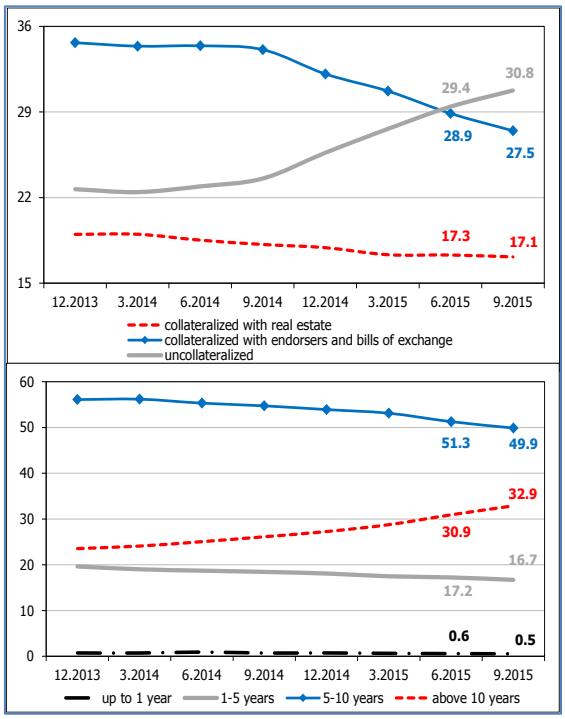
1.2 Analysis of risk of significant credit products for households

The sustainability of the high growth of **consumption loans**[7] in the past two years, given the extremely favorable credit standards for new borrowers of these types of credit products, requires more careful monitoring of their pace. Also, the growth of consumer loans, which in the third quarter further accelerated and reached 17.2% annually, hides any potential increasing risks of these loans, i.e. likelihood of increased share of non-performing loans to total loans.

Contrary to the accelerated growth of total consumption loans, the growth of non-performing loans arising from this type of products has slowed down annually. This is due to the reduction in non-performing loans based

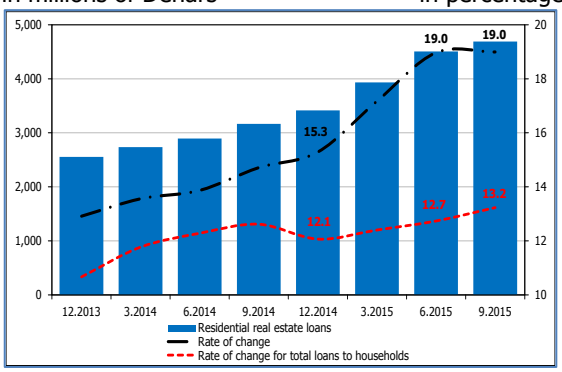
[7] In this analysis, consumption loans consist of consumer loans and loans based on credit cards and overdrafts on transaction accounts.

Chart 9
Structure of consumer loans by collateral (up) and by contractual maturity (down)
in %



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

Chart 10
Housing loans (annual growth)
in millions of Denars in percentage



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

on credit cards. However, the non-performing part of consumer loans has been growing rapidly, contributing to the overall growth of non-performing loans to households for nine consecutive months. This is a reflection of their increased risk. **The rate of non-performing consumption loans (6.2% as of 30 September 2015) is higher than the rate of non-performing loans of the household sector (5.5%).** These loans are marked by low coverage with collateral.

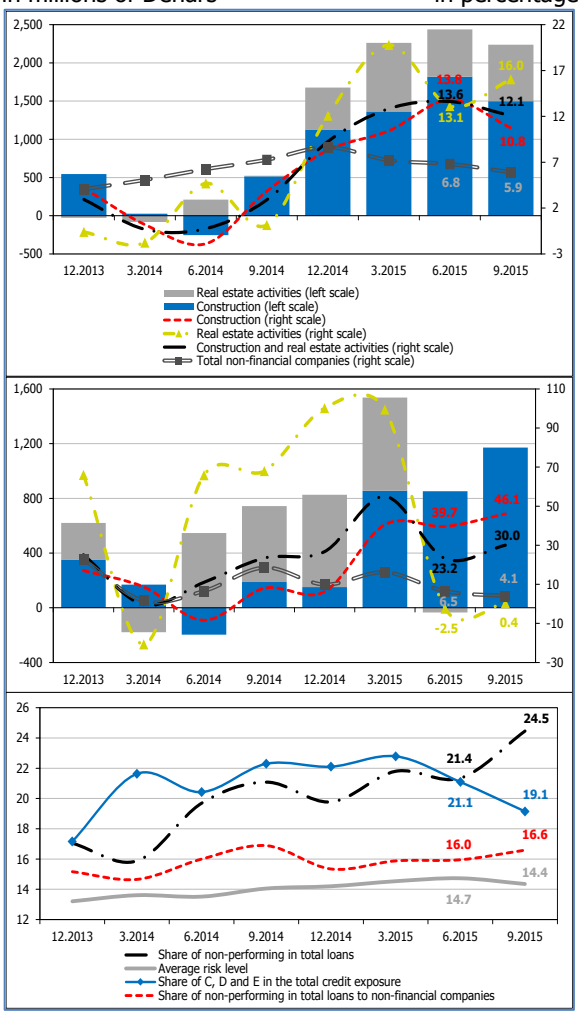
Consumer loans are most common in the structure of total consumption loans. The share of uncollateralized portion of these loans (30.8% as of 30 September 2015) has registered an exceptionally pronounced upward trend in the last five quarters[8]. This brings to the fore the potential risks of consumer loans, due to the easing of credit standards (more liberal collateral requirements).

Further signal of growing risks due to easier credit standards (for consumer loans) is the extension of the contractual maturity of consumer loans, which at the end of the third quarter hit a record high. Namely, at the end of September, 82.8% and 32.9% of total consumer loans are with maturity over 5 years and over 10 years, respectively. Longer repayment period may be indicative of the deteriorating creditworthiness of the borrowers of consumer loans (who, in order to be able to repay the monthly installment due to increased borrowing, divide the repayment of the loan into more monthly installments).

[8] For comparison, as of 30 June 2014, uncollateralized consumer loans accounted for 22.9% of total consumer loans.

Chart 11
Annual growth of total loans to construction and activities related to real estate (up), of non-performing loans (middle) and risk indicators of this activity (down)

in millions of Denars in percentage



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

The steady growth in consumption loans, given the simultaneous increase in the non-performing part of these loans, requires greater vigilance in monitoring this type of lending, primarily in terms of the standards for their approval.

The growth of **housing loans** has significantly accelerated (annually) since the beginning of 2015 (from 15.3% as at 31 December 2014 to 19.0% as of 30 September 2015), and the quality of these placements sends out no worrying signals due to the slower growth of non-performing loans. The low rate of non-performing housing loans (2.8%) and the high collateralization of these loans with residential property[9] (86.0%) confirms their low risk.

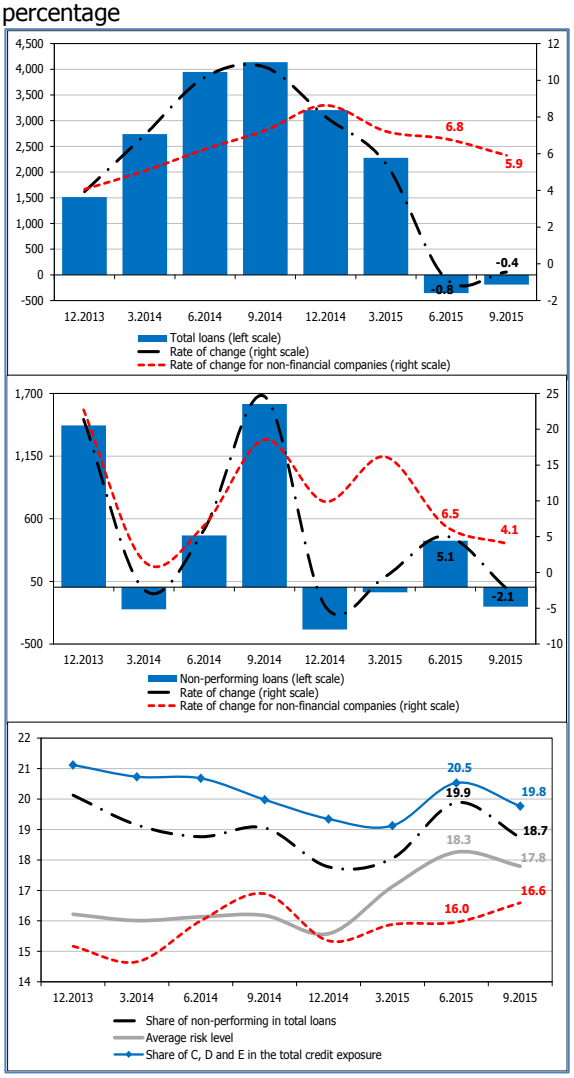
1.3 Analysis of credit risk exposures to non-financial companies, by activity

In the third quarter of 2015, lending to non-financial companies recorded a quarterly decrease (from 1.6% as at 30 June 2015 to -0.4% as at 30 September 2015), while the annual growth of credit support to this sector slowed down (from 6.8% as of 30 June 2015 to 5.9% as of 30 September 2015). Such movement, amid growth of non-performing loans to non-financial companies, has increased the already high risk of banks' claims on this sector.

The construction sector is one of the fastest growing industries in terms of the volume of lending and at the same time, most of the growth in assets of the corporate sector in 2014 originated from this industry. At the end of September 2015, the annual growth of loans to the construction and activities related to real estate[10] (12.1%) experienced a slight slowdown compared to the previous quarter (when it was 13.6%), but it is still twice as high compared to the credit growth to non-

[9] Residential property and rented residential property and other residential properties.
[10] Construction and activities related to real estate merged into one activity due to the similarity of the activities they perform.

Chart 12
Annual change of total loans to industry (up), of non-performing loans (middle) and risk indicators of this activity (down)
in millions of Denars in percentage



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

financial companies, which is associated with the solid annual growth in the value of completed construction works.

The risk of claims on this sector, perceived through data from the final accounts for 2014, indicates that construction has seen the greatest annual worsening of debt indicators relative to other activities in the corporate sector. The level of debt indicators[11] suggest limited opportunities to finance growth through new credit support, i.e. limited capacity of the construction sector for new borrowings. **The share of non-performing loans in this sector are highest (24.5%) compared with other activities of the non-financial companies sector, which makes this activity the riskiest.** In the third quarter of 2015, this share reached a new record high, due to the acceleration of the already high annual growth rate of non-performing loans to construction (which was 39.7% as at 30 June 2015 and 46.1% as at 30 September 2015), amid a slight slowdown in the growth of total loans to this sector. The growth of non-performing loans to construction does not reflect the performance of the entire industry, but only of a few non-financial companies.

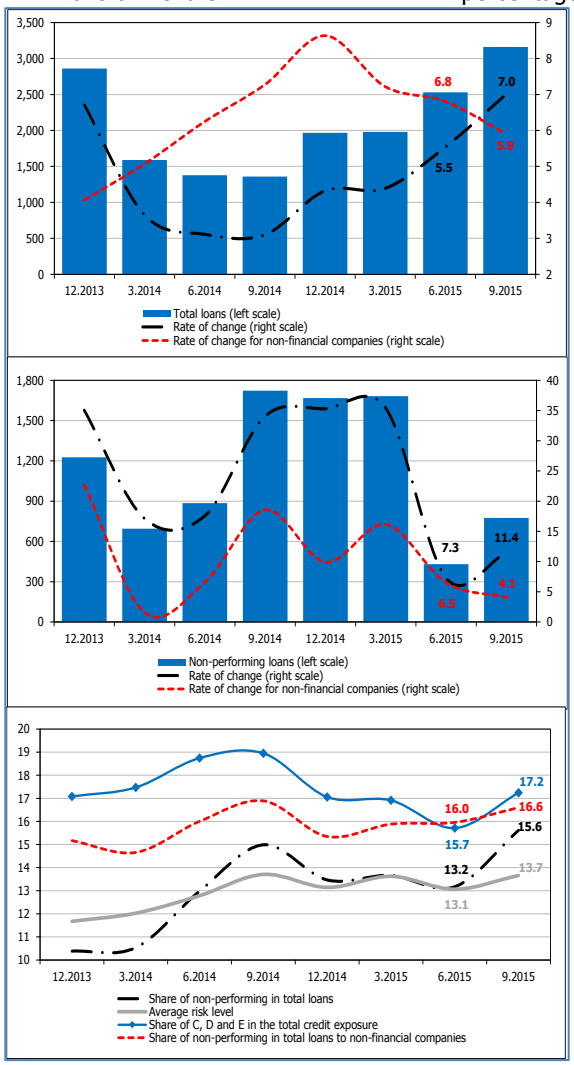
In terms of credit risk, industry stands out as the second riskiest activity. This activity is particularly important for bank lending, given the fact that it accounts for nearly 30% of total credit support to non-financial companies. The third quarter of 2015 is the second consecutive quarter of reduced lending to the industry annually, despite the favorable trends in the industrial output.

The movement of **non-performing loans of the industry** has been volatile over the past two years. In the third quarter of 2015, they **experienced a moderate annual decrease** of 2.1%, which was mainly due to the write-off of some old claims and foreclosure of asset for recovery of a claim which was sold

[11] Debt indicators include total debt ratio, long-term debt ratio, debt/equity ratio, leverage ratio (assets/equity) and ratio of the coverage of funding costs with regular operating profit.

Chart 13
Annual growth of total loans to wholesale and retail (up), of non-performing loans (middle) and risk indicators of this activity (down)

in millions of Denars in percentage



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

(recovered) in the same quarter. This applies to several clients from the industry, namely textile, and manufacture of metals, machinery, tools and equipment.

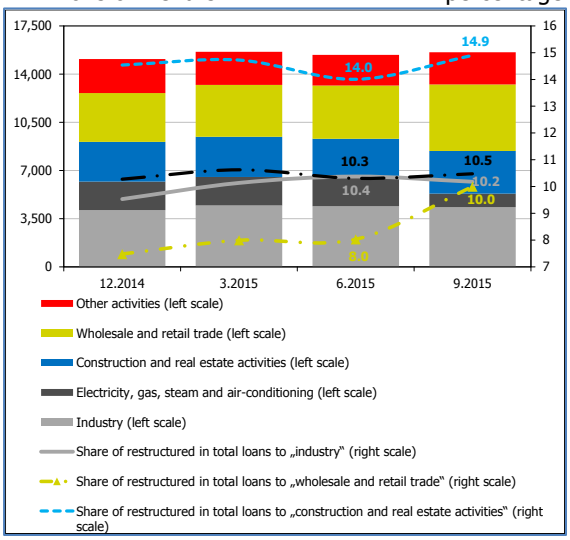
These developments improved the risk indicators of the industry sector. Thus, the share of non-performing to total loans decreased to 18.7%, but still exceeds the level of this indicator for the sector of non-financial companies.

Significant deterioration of credit risk indicators was registered in the wholesale and retail. This activity is important because lending to companies makes up almost one third of the total loan portfolio to non-financial companies. At the end of September 2015, the annual growth of loans to wholesale and retail accelerated (5.5% as of 30 June 2015 to 7.0% as of 30 September 2015), despite the slower annual growth of the turnover in total trade.

The annual increase in non-performing loans to wholesale and retail also accelerated (from 7.3% as of 30 June 2015 to 11.4% as of 30 June 2015), but this growth is mostly due to the reclassification of a larger non-financial company engaged in electricity, gas, steam and air conditioning. The level of this growth is not worrisome and is much smaller than the three times higher growth of non-performing loans of this activity recorded at the end of last year and early this year.

However the growth of non-performing loans caused deterioration of risk indicators of the wholesale and retail. Thus, the share of non-performing to total loans increased (from 13.2% as of 30 June 2015 to 15.6% as of 30 September 2015) and became closer to the rate of non-performing loans of non-financial companies.

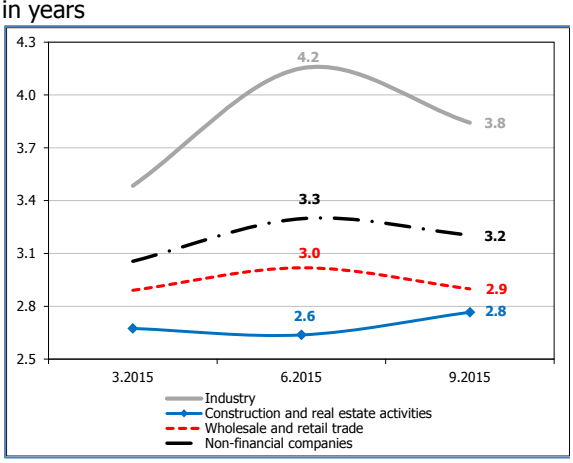
Chart 14
Structure of restructured loans of non-financial companies, by activity
in millions of Denars in percentage



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

The dynamics of restructured loans and the share of these loans to total loans confirms the higher risk of banks' claims on non-financial companies from the three analyzed sectors. Thus, the share of restructured loans to total loans of construction and activities related to real estate exceeds the share of the sector of non-financial companies (10.5%) and at the end of the third quarter, it increased to 14.9%. In industry, and wholesale and retail, this share (10.2% and 10.0%, respectively) is similar to the share of non-financial companies, but significant 58.8% of the restructured loans of non-financial companies are of businesses in these two sectors.

Chart 15
Average length of delay of the amount irregularly repaid for non-financial companies and by activity
in years

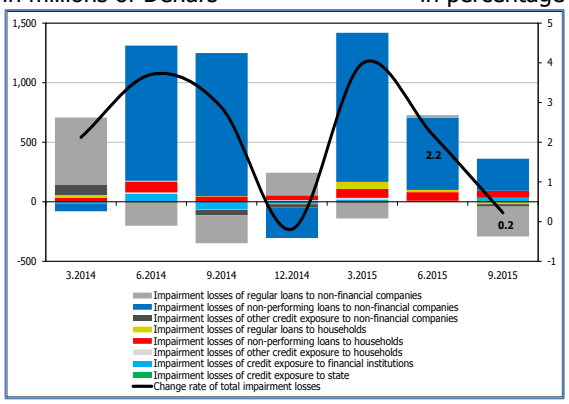


Source: NBRM's Credit Registry, based on data submitted by banks.

The riskiness of the three most important sectors in terms of credit risk is reflected by the average length of delay[12] in payments, which is the highest for the industry sector and equals 3.8 years, which exceeds the average delay of the sector of non-financial companies. The length of average delay of the amount irregularly repaid indicates gradual "maturing" of some part of the non-performing loan portfolio[13] of the banks.

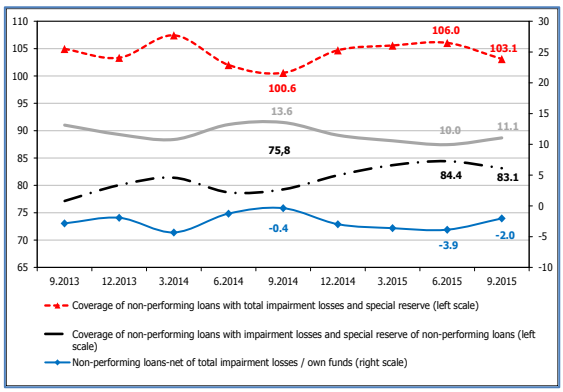
[12] The average delay of the amount of delay for each activity is calculated as a weighted average of the number of days of delay for each credit agreement, with the weight being the share of the amount in delay of each loan agreement in the total amount in the delay of all credit agreements included in the appropriate category.
[13] Given the fact that about 85% of the total amount in delay of non-financial companies refers to a delay longer than 90 days.

Chart 16
Quarterly growth of impairment, by sector
in millions of Denars in percentage



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

Chart 17
Coverage of non-performing loans of non-financial companies and share of net non-performing loans in banks' own funds
in %



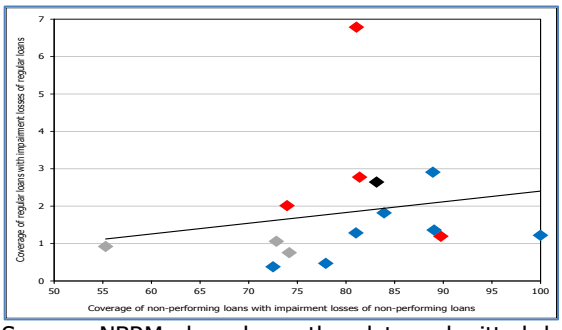
Source: NBRM, based on the data submitted by banks.

1.4 Banks' capacity to absorb any loss from non-performing loans

In the third quarter of 2015, impairment of the total banks' loan portfolio increased by only Denar 75 million or 0.2%. This growth, although slower, comes entirely from the impairment for non-performing loans.

The coverage of non-performing loans with allocated impairment is high, which indicates a satisfactory capacity of the banking system to absorb potential credit losses. At the end of the third quarter of 2015, the coverage with total impairment somewhat decreased, but still exceeds 100%. Downward movement, though weaker, is observed in the coverage of non-performing loans with own impairment, after the constant increase of this indicator over the previous four quarters.

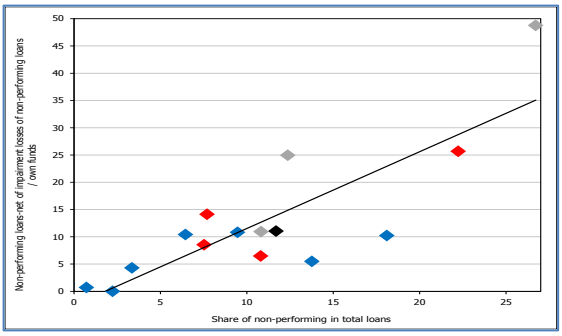
Chart 18
Comparison between the coverage of non-performing loans and regular loans of non-financial companies with own impairment, by bank
in %



Source: NBRM, based on the data submitted by banks.
Note: Large banks are marked in red, medium-size banks in blue, and small-size banks in gray, while the black point indicates the banking system. The black line is the trend. The MBPR AD Skopje was excluded from the analysis because of its specific activities (a small number of non-financial clients). This note also applies to the following two charts.

Given the high coverage of non-performing loans, adverse effects of any total loan default on the own funds of the banking system are limited. The non-provisioned part of non-performing loans absorbs merely 11.1% of total own funds of the banking system, which would cover unexpected losses in extreme hypothetical event of full default on these loans. Under such an extreme assumption, at the end of the third quarter of 2015, the capital adequacy ratio would have decreased by only 1.8 percentage points (0.2 percentage points more than the estimated decrease in the previous quarter, due to the higher amount of non-provisioned non-performing loans).

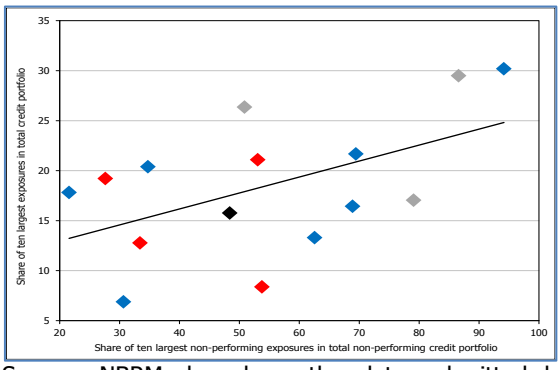
Chart 19
Comparison between non-performing loan rate and share of net non-performing loans in own funds, by bank
in %



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

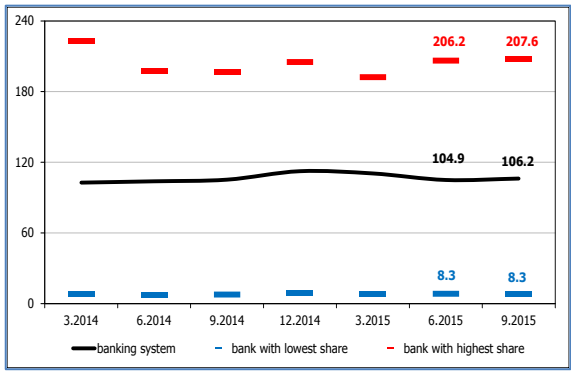
Despite the limited adverse effect of the non-provisioned non-performing loans on own funds of the banking system, some banks with high rate of non-performing loans reported high share of non-provisioned part of non-performing loans in their assets, i.e. greater risk to their own funds from the potential full default of these loans. This situation in some banks shows that the lower coverage of non-performing loans with their own impairment can present a risk to their capital positions.

Chart 20
Comparison between the concentration of total and non-performing loan portfolio to non-financial companies, by bank
in %



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

Chart 21
Share of the ten largest exposures to non-financial companies in banks' own funds
in %



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

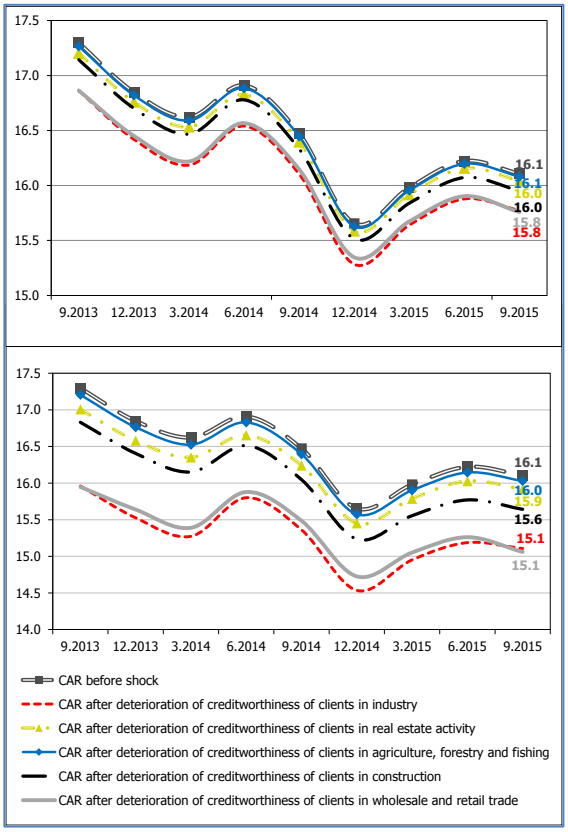
The concentration of total loan portfolio of the banking system is small, given that the ten largest exposures account for 15.8% of total credit exposure to non-financial companies. In contrast, the share of 48.4% of the ten largest non-performing exposures indicates **high concentration of non-performing loan portfolio to non-financial companies.** This implies that non-performing exposures of banks mainly derive from several major customers. By bank, the share of the ten largest exposures in total credit exposure ranges between 6.9% and 30.2%[14], while the share of the ten largest non-performing exposures in the non-performing part of the portfolio ranges from 21.6% to 94.2%.

However, the ten largest exposures to non-financial entities occupy a significant portion of banks' own funds (106.2%), in the range from 8.3% to 207.6%, by bank. The average risk level of these bank exposures is usually low and corresponds with A and B risk categories, but higher risk exposures have been observed in the structure of the large exposures of some banks. **Given the high share of large exposures to banks' own funds, maintaining low risk level is especially important,** because in the event of materialization of any risk of these exposures and the impossibility of their collection, the effect on banks' own funds would be substantial. **The largest non-performing exposures of banks are well provisioned, and therefore, any contingent losses from these exposures are small,** which also makes the potential effect on capital insignificant.

[14] If the analysis includes MBPR AD Skopje, the upper limit of the interval for concentration of total loan portfolio will be 75.3%.

1.5 Stress-testing - simulation of rising credit risk

Chart 22
Capital adequacy ratio, by activity, before and after the first (top) and the second (bottom) simulation for both sectors
in %



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

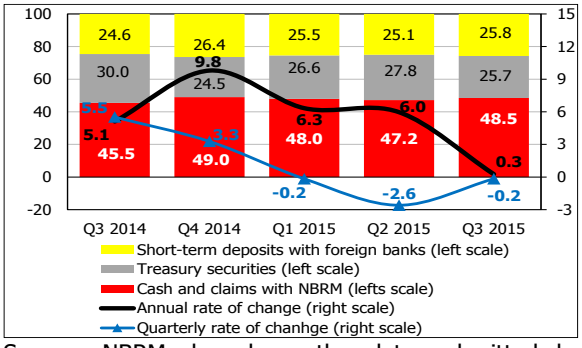
Regular stress tests are aimed to investigate the sensitivity of the banking system during the deterioration of the quality of certain segments of the loan portfolio. They consist of simulations of hypothetical migration of 10% (first simulation) and 30% (second simulation) of credit exposure to non-financial companies (by activity) and households (by credit product), separately, and to the two sectors jointly, to the following two higher risk categories. **The results of the simulations show resilience of the banking system to the simulated shocks, but are somewhat weaker in comparison with the preceding quarter.** This is due to the somewhat lower capital adequacy of the banking system before the simulations, but also to the increased sensitivity of some banks to the assumed shocks. Yet, the capital adequacy of the banking system does not fall below 8% in any of the simulations, although individual banks reveal hypothetical need for recapitalization, but only in the event of simulated shocks of the second extreme simulation. In both simulations, the greatest reduction in the capital adequacy ratio was noticed in the deterioration of the creditworthiness of the clients from the industry and wholesale and retail trade businesses, due to the high share of these activities in the total exposure to the non-financial companies, of 25.7% and 32.5% respectively (Annex 27).

2. Liquidity risk

In the third quarter of 2015, the liquid assets of the Macedonian banking system registered moderate fall, which was fully due to the reduced bank investments in government securities, while the other components of the liquid assets registered an increase. The downward trend of the liquid assets is present throughout 2015, but it is not a reason for concern, since the banks have high initial level of liquid assets. However, its endurance in long run may cause changes in business behavior of the banks, particularly by reducing the propensity for lending. The influence of the specific factors from domestic and external environment was felt in the third quarter, as well, which contributed also for a slight increase in the deposits, and accordingly, the newly received sources of financing of the banks. The trend of slight decline in the liquidity indicators from the first half of 2015 continued also in the third quarter of the year, but at slower pace. However, the structure of the banks' assets by residual maturity did not undergo major changes, while regarding the liabilities, the gradual maturity of deposits contributed to the decrease in the share of liabilities with longer residual maturity. Simulations of a hypothetical combined liquidity shocks show that the liquid assets of the Macedonian banking system would be fully absorbed and used as a response to extreme liquidity outflows.

2.1 Dynamics and composition of liquid assets

Chart 23
Movement and growth rate of the liquid assets
in millions of denars and in %

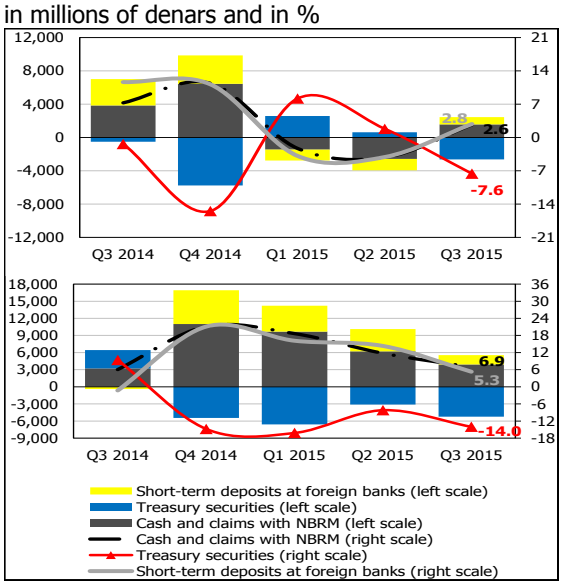


Source: NBRM, based on the data submitted by banks.

At the end of the third quarter of 2015, liquid assets[15] of the banking system amounted to Denar 124,757 million. The banks' liquid assets register moderate fall for three consecutive quarters. In the third quarter, the decrease in liquid assets equaled 0.2%, i.e. Denar 206 million, which is lower compared to the previous quarter. The annual growth rate of liquid assets, which at the end of the third quarter of 2015 equaled 0.3%, registered its lowest level in the years after the global financial crisis.

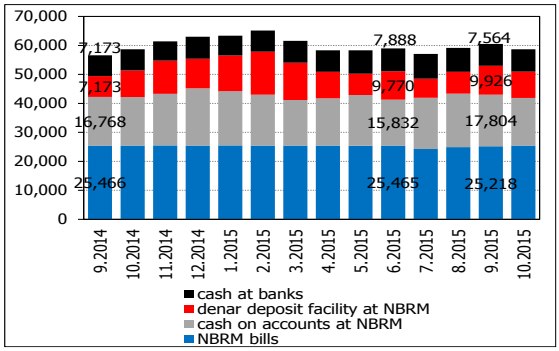
[15] The liquid assets encompass: 1) assets and claims on the National Bank, which include cash, assets on the accounts of banks with the National Bank, deposit facility with the National Bank and CB bills; 2) short-term deposits with foreign banks, including the assets of the banks on their correspondent accounts abroad and 3) the carrying amount of the investments in securities issued by the Republic of Macedonia. For the purposes of analyzing the liquidity, assets and liabilities in denars with foreign exchange clause are considered denar assets and liabilities.

Chart 24
Annual (top) and quarterly (bottom) absolute and relative change of individual instruments that constitute liquid assets
in millions of denars and in %



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

Chart 25
Structure of cash and claims of banks on the National Bank
in millions of denars



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

The slower growth of the banks' liquid assets during 2015, in part, stems from major fluctuations in their funding sources, mainly caused by the volatile environment in which banks operate, but on the other hand, also from the stronger propensity for lending, which might have been triggered by the changes in the operational monetary policy framework that the National Bank of the Republic of Macedonia has made during this year[16]. After the cut-off date of this report, in October 2015, the liquid assets increased on a quarterly basis by 4.6% and annually they increased by 3.7%.

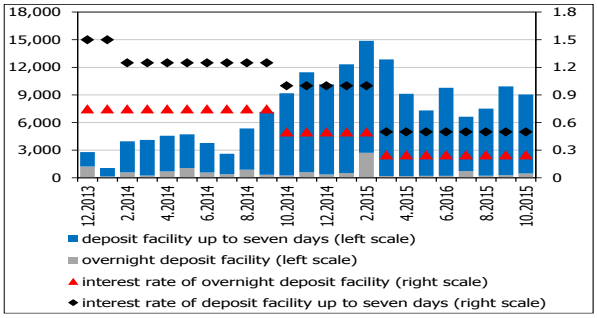
Analyzed by financial instrument, the decrease in the banks' liquid assets in the third quarter of 2015, was due to the banks' investments in government securities. These investments fell by 7.6% on a quarterly basis, i.e. by 14.0%, annually. Cash and the placements in the NBRM, as well as the short-term deposits in foreign banks recorded a slight increase over the third quarter of 2015.

The cash and the banks' claims on the National Bank, as a component with the largest share in banks' liquid assets, at the end of the third quarter of 2015 was also a component that registered the highest annual growth of 6.9%. The structure of this liquid assets' component has changed, i.e. the share of cash on accounts at the National Bank increased, while the share of investments in CB bills, as well as the available cash of the banks, reduced. The fastest growth in the third quarter of 2015 of 12.5% was recorded in the cash that the banks maintain on the account at the National Bank, thus being the main generator of the quarterly increase in total cash and claims on the National Bank. [17]Amid unchanged interest rate and supply of

[16] In the first quarter of 2015 the National Bank reduced the interest rate on banks' overnight deposit facilities from 0.5% to 0.25% and the deposit facilities up to seven days from 1.0% to 0.5%. Also, in the first and third quarter of 2015, the way the auctions of treasury bills are organized has been changed, i.e. a mechanism to limit the demand of banks for this instrument was applied. Also in the first quarter of 2015, the banks were allowed, in need on a daily basis, to fully use the funds on their account with the National Bank, while in the third quarter of 2015, the reserve requirement ratio in the amount of 0% for liabilities to natural persons in domestic currency with contractual maturity of over one year was introduced.

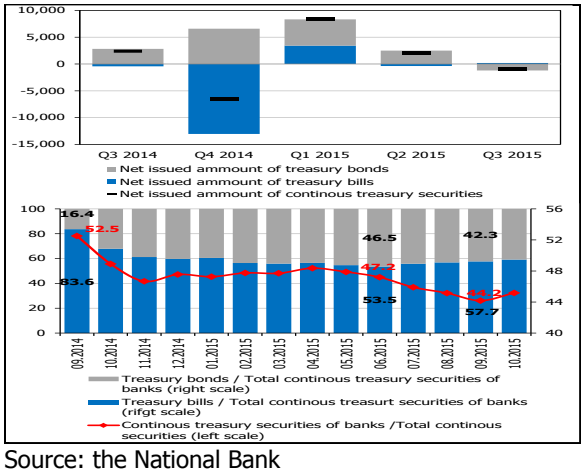
[17] In 2015, the CB bills auctions were conducted once a month through a volume tender and interest rate amounting to 3.25%. In August 2015, the National Bank changed the method of allocating offers between the banks at the CB bills auctions and starting from

Chart 26
Amount and interest rate on the overnight deposit facilities with the National Bank
in millions of denars and in %



Source: the National Bank

Chart 27
Quarterly dynamics of the net issued amount of government securities (top) and structure of the continuous government securities owned by banks (bottom)
in millions of denars and in %



Source: the National Bank
Note: The calculations are made at the nominal value of the continuous government securities.

CB bills, the banks' investments in CB bills registered no larger changes. In the third quarter of 2015, the banks' deposit facilities with the National Bank[18] increased by Denar 156 million, i.e. by 2.0%. Hence, in the third quarter of 2015, the deposit facilities with NBRM had positive contribution to the rise in the banks' liquid assets[19].

The total nominal amount of issued government securities registered a decrease in the third quarter of 2015. Thus at the end of the third quarter of 2015, the amount of the issued government securities is smaller by 1.5%, in comparison with the end of the second quarter of 2015, while annually, it registers a moderate increase of 2.6%. Due to the reduced activity of the Government on the primary government securities market, the net issued amount[20] of the government securities was negative in the third quarter of 2015, as well. Hence, **the placements in banks' government securities registered quarterly drop of 7.4%.** In the structure of government securities owned by banks, stronger participation of government bills, compared to government bonds is evident, which suggests stronger inclination of banks to invest in government securities with shorter contractual maturity. This is confirmed by the fact that nearly three quarters of the maturity structure of the government bonds owned by banks, account for two-year or three-year bonds. Decrease in the banks' share in the total issued government securities was also registered in the third quarter of 2015 and on

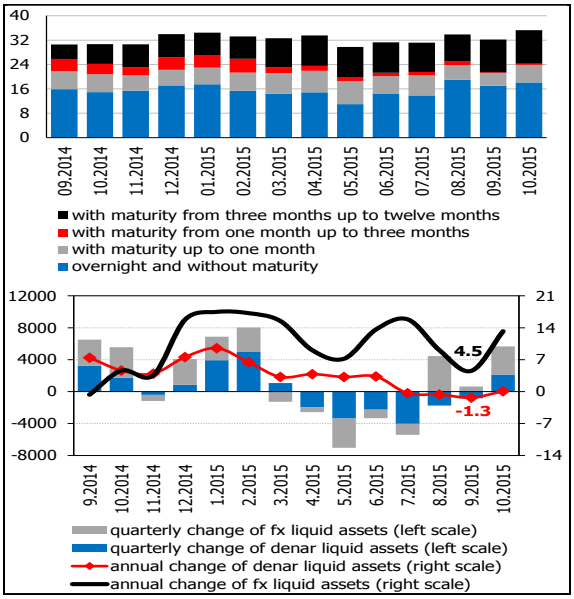
the auction in September 2015 the banks' offers are limited by the percentage share of the bank's liabilities in domestic currency without currency clause of the base for calculating the reserve requirement, in the total liabilities of the banking system in domestic currency without a currency clause of the base for calculating the reserve requirement for the fulfillment period that begins on the day of the auction. Previously, starting from March 2015, as a basis for limiting the banks' offers, the percentage share of bank's denar reserve requirement in the total denar reserve requirement of the banking system during the fulfillment period which begins on the date of auction was used.

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

[19] Before the change in the manner of conducting the CB bills auctions in March 2015, the banks the claims of which exceeded the potential demand for CB bills, were required to place the difference as deposit facilities with maturity of up seven days with the National Bank.

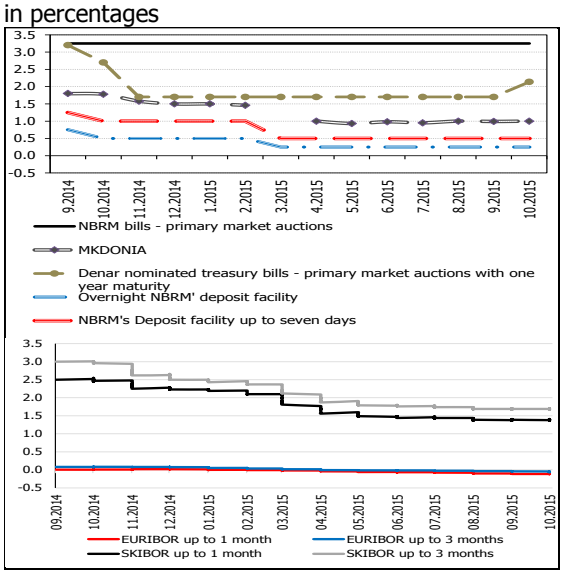
[20] Net - issued amount of government securities on the primary market is calculated as the difference between the amount of newly issued government securities within a certain period and the amount of due government securities in the relevant period.

Chart 28
Amount of short-term deposits at foreign banks (up) and change of liquid assets by currency (down)
In millions of denars and in %



Source: the National Bank
Note: The calculations are made at the nominal value of the continuous government securities.

Chart 29
Movement of the key interest rates
in percentages



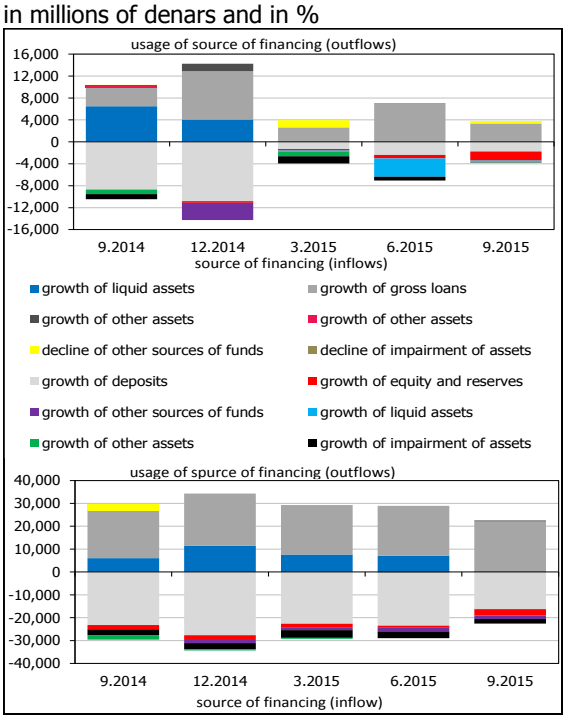
Source: National Bank for SKIBOR and website of the European Money Markets Institute for EURIBOR.

30 September 2015 it reached 44.2%, which is its lowest level ever

After the decrease in the first two quarters of 2015, the short-term assets placed in foreign banks in the third quarter registered an increase of 2.8%. The main place in the maturity structure of these funds belongs to assets on the correspondent accounts in foreign banks and overnight deposits, which are usually used for payment operations purposes. As for the assets in foreign banks deposited for a certain period, in the third quarter of 2015, the trend of gradual increase in their contractual maturity continued, especially the funds deposited for more than three months, at the expense of the decrease in the assets deposited up to three months. A key factor contributing to such changes in the maturity structure of assets invested in foreign banks are the historically low interest rates on the international interbank markets, causing even negative return on investments with shorter maturities. These movements of assets placed in foreign banks caused the increase in liquid assets in foreign currency of 1.9% and 4.5% on quarterly and annual basis, respectively. In contrast, the denar liquid assets on both quarterly and annual basis registered a decrease and completely caused quarterly fall in the total liquid assets at the level of the banking system.

In conditions of unchanged interest rates on instruments of the National Bank, the interest rates on the domestic interbank market (SKIBOR and MKDONIA), in the third quarter of 2015 remained at historically low levels and registered no significant changes. Also in the third quarter of 2015, the key interest rates on the interbank markets in the euro area were extremely low, and even negative for certain maturities.

Chart 30
Amount of the new sources of funding of the banking system and their use on a quarterly (top) and annual (bottom) basis
in millions of denars and in %

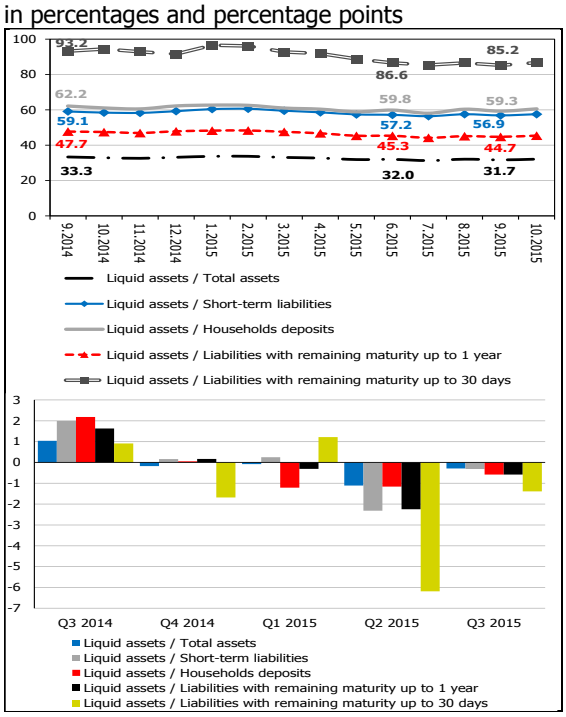


Source: NBRM, based on the data submitted by banks.

The uncertainty in the environment in which domestic banks operated was present also in the third quarter of 2015, which in turn contributed to limited opportunities for finding larger scale of new sources of funding[21]. Hence, the new sources of funding of banks in the third quarter of 2015 were smaller compared to previous quarters. The deposit growth f non-financial entities and the growth of capital and reserves had almost identical share in their creation, due to the reinvestment of undistributed last year gain with one bank. The fall in the banks' liquid assets in the third quarter had moderate contribution to the creation of new sources of funding. Analyzed on an annual basis, the growth of deposits is still predominant (over 70%) in the creation of new sources of funding of the Macedonian banks. In the third quarter of 2015, the use of the sources of funding was mainly focused on bank lending, while about 12% were aimed for deleveraging of banks, i.e. the repayment of other non-deposit sources of funding.

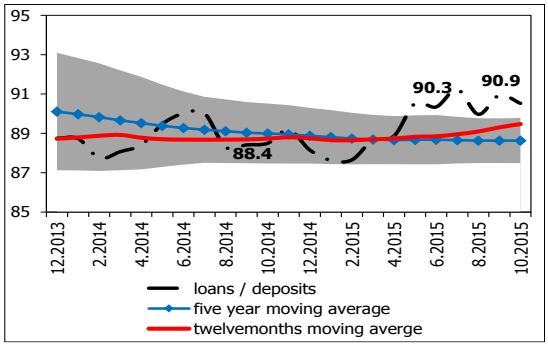
[21] The new sources of funding for banks and their use are obtained in an indirect calculation, i.e. by changing the balances of individual accounts of the banks' balance sheet. The effect on the banks' cash flows, which is due to the income and expenditures that do not represent cash outflow or inflow (e.g. loan write-offs, revaluation of securities available for sale or held for trading, depreciation of fixed assets, net foreign exchange differences, etc.) is an integral part of the change in the corresponding balance sheet items, the respective inflow or outflow refers to. * The category of other assets includes assets that are not loans to non-financial companies and are not included in the category of liquid assets (placements in securities that are not part of the liquid assets, long-term placements in foreign and domestic banks, foreign exchange reserve requirement, foreclosures, fixed assets, etc.) The category "other sources of financing" includes all sources of funding that are not included in the deposits of non-financial entities, capital and reserves, subordinated and hybrid capital instruments (deposits of financial institutions, borrowings, other liabilities, current profit etc.) and the effect of the change in impairment of assets.

Chart 31
Movement (top) and quarterly change (bottom) of the liquidity indicators of the banking system
in percentages and percentage points



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

Chart 32
Movement of the credit-to-deposit ratio for the banking system
in %



Source: NBRM, based on the data submitted by banks.
Note: The shaded part in the chart denotes the range of one standard deviation above and below the five-year moving average of the indicator.

2.2 Liquidity indicators

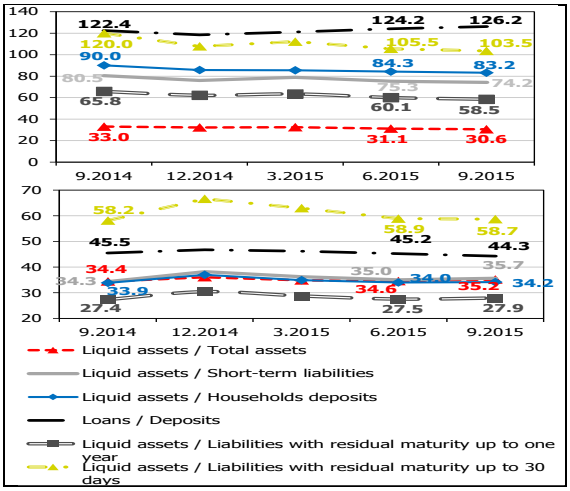
The liquidity indicators are mainly stable, although register a trend of slight decrease,[22] which continued also in the third quarter of 2015, but in slightly slower dynamics compared to the second quarter of the year. As of 30 September 2015, the share of the liquid assets in the total assets equals 31.7%, registering slight quarterly and annual decline. Although the coverage of the different categories of banks' liabilities with liquid assets also declined, it is still satisfactory. The largest quarterly decrease of 1.4 percentage points was registered by the indicator of the coverage of liabilities with residual maturity up to 30 days.

Analyzed by bank[23], at the end of the third quarter of 2015, the liquid assets participate in the total assets from 16.4% to 40.0%, the coverage of the short-term liabilities with liquid assets ranges from 34.8% to 97.2%, while the coverage with liquid assets of the liabilities with contractual residual maturity up to one year ranges from 25.9% to 63.7%.

In the third quarter of 2015, the credit-to-deposit ratio at the level of the banking system also continued to grow. Thus, this indicator increased on both quarterly and annual basis by 0.6 and 2.1 percentage points, respectively. Also, this indicator is above one standard deviation of its five-year moving average, indicating that **there is mismatch between the paces of the credit growth with the growth of deposits as the main source of funding of banks.** On 30 September 2015, the credit-to-deposit ratio by bank ranges from 67.1% to 130.5% (72.1% and 130.0% as of 30 June 2015), and with seven banks (joint participation in the total assets of the banking system of 26.9%), this

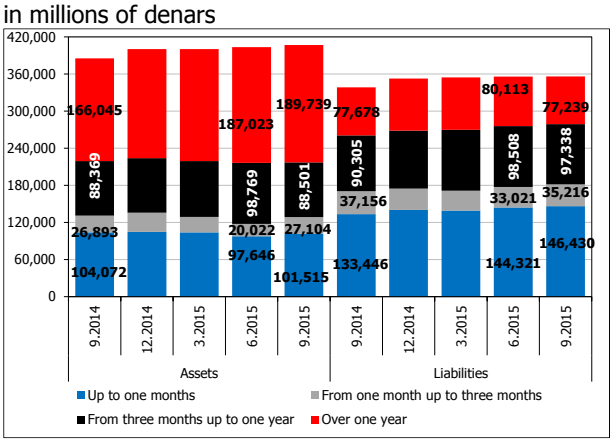
[22] The calculation of liquidity ratios of the banking system does not include resident interbank assets and liabilities.
[23] The indicators by bank are presented by excluding the respective indicators for the Macedonian Bank for Development Support AD Skopje, which due to the specific nature of activities, and especially because of the legal restriction for collecting deposits from non-financial entities, register especially high indicators for coverage of the liabilities with liquid assets.

Chart 33
Banking system liquidity ratios, according to currency structure - Denars (top) and FX (bottom)
in %



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

Chart 34
Structure of banks' assets and liabilities by their contractual residual maturity
in millions of denars



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

ratio is higher than 100%. The liquidity ratios of the banking system[24] resented as a ratio between assets and liabilities that fall due in the following 30 and 180 days, at the end of the third quarter of 2015 exceed the prescribed minimum of 1.

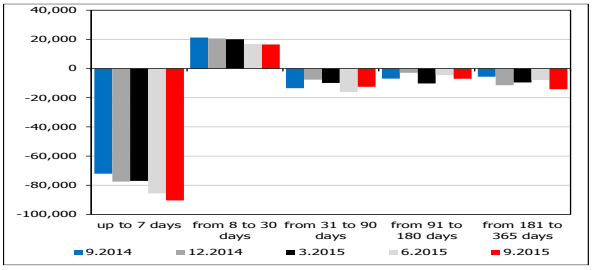
Given that the liquid assets in denars were the main generator of the quarterly decrease in liquid assets in the third quarter of 2015, **the denar liquidity indicators registered slightly more pronounced decrease compared to the indicators of foreign currency liquidity.** At the same time, the banks continue to maintain the liquidity indicators in denar at fairly high level compared to liquidity indicators in foreign currency.

2.3 Maturity structure of assets and liabilities

The fall in the banks' liquid assets in the third quarter of 2015 caused no larger changes in the structure of the banks' assets according to their contractual residual maturity. The changes in the assets' contractual maturity structure are moderate and relate to increase in the share of assets with residual maturity shorter than three months, at the expense of the decline in the share of assets with residual maturity from three months to one year. Regarding the banks' liabilities, in the third quarter of 2015 there was a gradual reduction in the share of liabilities with longer contractual maturity, at the expense of the rise in the liabilities with residual maturity with shorter residual maturity, primarily due to the gradual maturity of previously deposited term deposits, in the absence of stronger growth of deposits. This bank structure of assets and liabilities by residual contractual maturity caused widening of the negative difference between assets and liabilities with contractual residual maturity of up to seven days (Annex no. 29). Usually, only in the

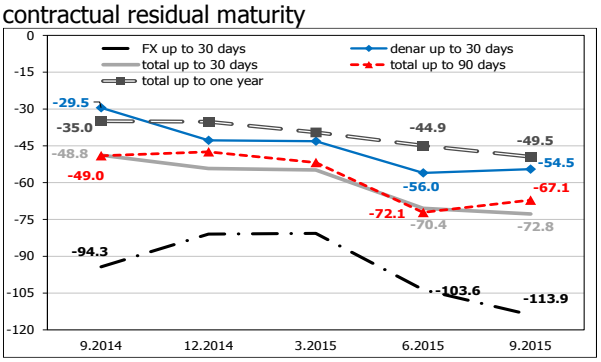
[24] The method of calculation of liquidity ratios up to 30 and up to 180 days is determined by the Decision on the liquidity risk management of banks ("Official Gazette of the Republic of Macedonia" no. 126/11, 19/12 and 151/13).

Chart 35
Contractual residual maturity mismatch between assets and liabilities by maturity buckets
in millions of denars



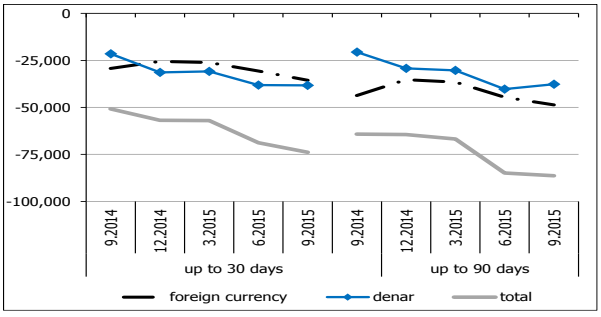
Source: National Bank, based on the data submitted by banks.

Chart 36
Relative importance of the cumulative difference between banks' assets and liabilities according to the contractual residual maturity
percentage of cumulative assets with the same contractual residual maturity



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

Chart 37
Difference between assets and liabilities by their contractual residual maturity up to 30 and 90 days
in millions of denars



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

maturity segment of 8 days to one month there is a positive gap in the contractual residual maturity of assets and liabilities, mainly due to the fact that banks' investments in CB bills are classified in this maturity segment.

The relative importance of the aggregate negative difference between assets and liabilities according to their contractual residual maturity up to 30 days, presented through the correlation of this difference to total assets with the same residual maturity, in the third quarter of 2015 registered slight enhancement of 2.4 percentage points. The widening of this cumulative gap arises from the gap between the foreign currency assets and liabilities with residual maturity up to 30 days, while in the gap between the denar assets and liabilities up to 30 days there is moderate reduction. A quarterly drop of five percentage points is registered also in the gap between assets and liabilities with residual maturity up to 90 days.

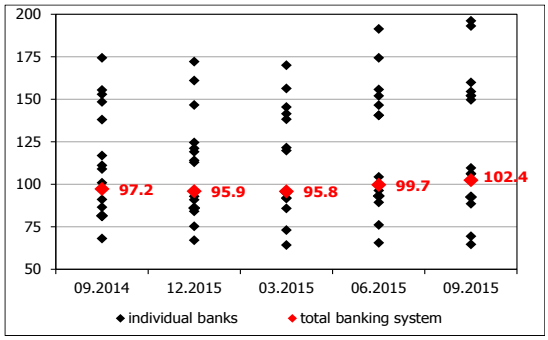
The absolute volume of the mismatch between assets and liabilities up to 30 days almost identically matches their currency features, while the contractual residual maturity up to 90 days is slightly higher in the foreign exchange component. On the other hand, the relative significance with the assets and liabilities gap is almost twice higher compared to the gap between denar assets and liabilities.

The banks further expect their deposits stability to be maintained. At the end of the third quarter of 2015, the banks expect 83.1% of the term deposits with residual maturity up to 3 months (82.0% as of 30 June 2015) to remain in the bank also in the following three months. For demand deposits, including the funds on transaction accounts, the expected rate stability according to the banks amounted to 83.4% (82.0% on 30 June 2015). The aggregate difference between assets and liabilities according to their expected maturity is positive in all maturity segments (Annex. 30).

2.4 Stress-simulations for liquidity shocks

The decrease in liquid assets result in a lower performance of banks under extreme simulation testing combined outflow outside the banking system of certain funding sources[25]. Namely, on 30 September 2015, the results of the combined liquidity outflow show complete absorption of the banks' liquid assets. In certain assumed liquidity shocks, the Macedonian banks have sufficient liquid funds to repay outflows. However, by combining different liquidity shocks and simultaneous liquidity outflow, the banking system would use all liquid assets to respond to such extreme liquidity blow and it would need additional liquidity in the amount of Denar 2.913 million, which banks could cover by certain financial instruments[26] in their ownership, which are supposed to easily convert in liquid assets within the time frame of 30 days. By inclusion of these assets, the decrease in the liquid assets of the banking system in case of combined simulations would be 91.7% (88.7% as of 30 June 2015). Out of the individual liquidity shocks combined for the needs of this simulation, usually as individually the most important is the outflow of the deposits of the 20 largest depositors (causing 37.5% of the total simulated outflow), followed by the outflow of 20% of the household deposits (34.7% of the total simulated outflow).

Chart 38
Reduction of liquid assets in the simulation of combined liquidity shocks
in %



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

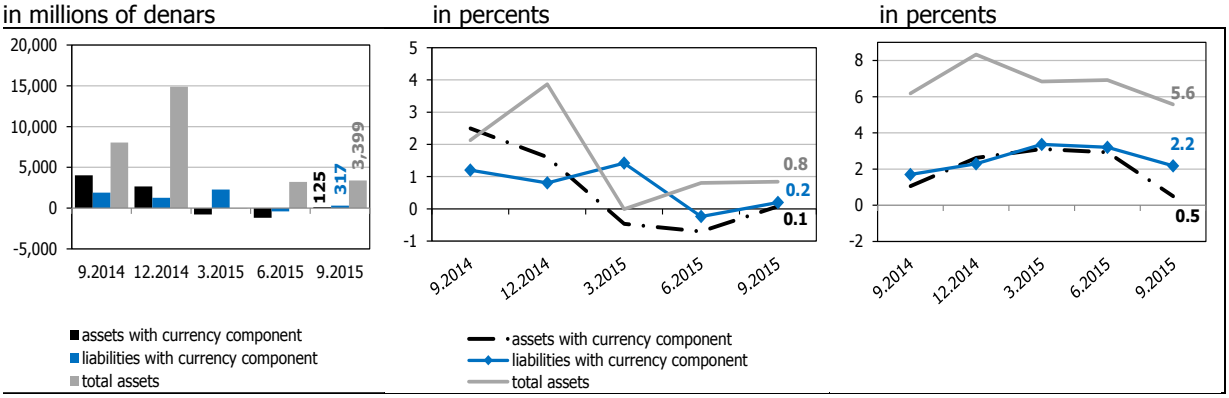
[25] The simulation assumes outflow of deposits of the twenty largest depositors, 20% of household deposits, liabilities to parent entities with the exception of liabilities on subordinated instruments and hybrid capital instruments that are excluded from the simulation as according to the regulations for calculating capital adequacy the possibility for their early repayment is limited, 50% of the liabilities to non-residents (excluding liabilities which are already covered by one of the previous simulations) and full 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 the Macedonian Bank for Development Promotion AD Skopje, because of the legal restriction to be present on the deposit market. The simulations assume that outflows in individual shocks are proportional to the contractual maturity structure of the individual sources of funding for which the outflow as of 31 December 2014 has been assumed. The maturity structure of assumed outflows obtained in such a manner serves to calculate short-term liabilities after simulated outflows.

[26] In this expansion of the scope of liquid assets, in addition to financial instruments that comprise liquid assets, the following financial instruments from the balance of the banks are added: term deposits in foreign banks, money market instruments issued by non-residents, foreign government bonds, loans with contractual residual maturity of up to 30 days and the effect of reducing the reserve requirement for foreign currency liabilities of banks, which is allocated in foreign currency due to the outflow of households' foreign currency deposits.

3. Currency risk

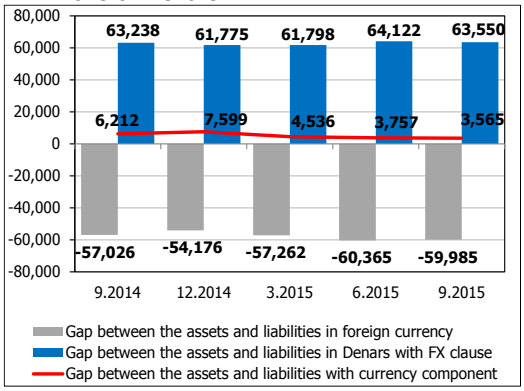
The monetary strategy of the National Bank to maintain a fixed exchange rate against the euro diminishes the currency risk for domestic banks, which also maintain a relatively low exposure to this risk. In the third quarter of 2015, the gap between assets and liabilities with currency component narrowed, simultaneously registering a decrease in its share in the banks 'own funds, which is an indicator to further reduce banks' exposure to currency risk. The value of the US dollar and the British pound continues to increase, but these movements had no significant effects on the domestic banking system, since they were less present in the banks' balance sheets. As of 30 September 2015, all banks adhered to the prescribed limit for the aggregate open currency position, which equals 30% of the own funds.

Chart 39
Quarterly (left and middle) and annual (right) growth of assets and liabilities with currency component



Source: NBRM, based on data submitted by banks.

Chart 40
Gap between assets and liabilities with currency component

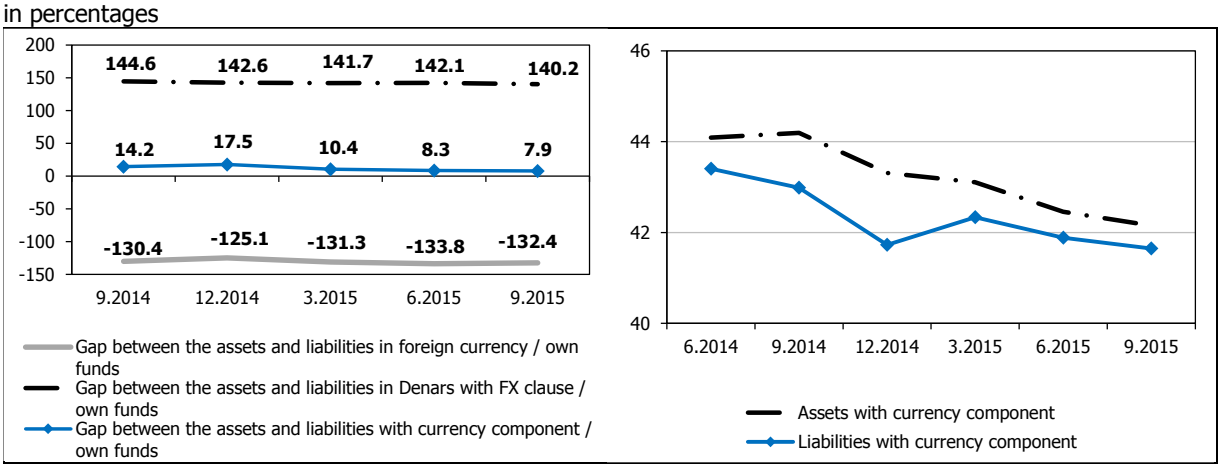


Source: NBRM, based on data submitted by banks.

As of 30 September 2015, the gap between assets and liabilities with currency component amounted to Denar 3,565 million. The assets and liabilities with currency component register structural changes, but their gap narrowed by only Denar 192 million compared to 30 June 2015. The narrowing of the gap is due to the higher increase in the liabilities with currency component (which amounted to Denar 317 million), compared to the increase in assets with currency component (which amounted to Denar 125 million). The narrowing of the gap between assets and liabilities with currency component on the one hand, and the increase in the own funds on the other (Denar 210 million), contributed to the

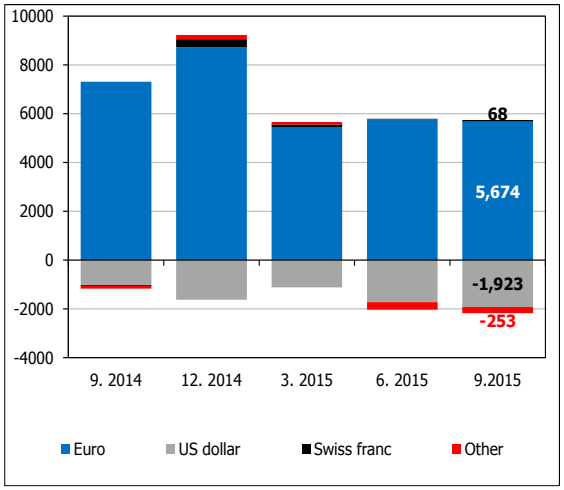
reduction of the share of this gap in the banks' own funds by 0.5 percentage points.

Chart 41
Share of the gap between assets and liabilities with currency component in the banks' own funds (left) and share of the assets and liabilities with currency component * in the total banks' assets
in percentages



Source: NBRM, based on data submitted by banks.

Chart 42
Dynamics and structure of the gap between assets and liabilities with currency component, by currency
in millions of denars



Source: NBRM, based on data submitted by banks.

In conditions of low growth in assets and liabilities with currency component in terms of significantly faster growth in total assets, **the share of assets and liabilities with currency component in the total assets decreased** by 0.3 and 0.2 percentage points, respectively and on 30 September 2015 it equaled 42.2% and 41.6%, respectively.

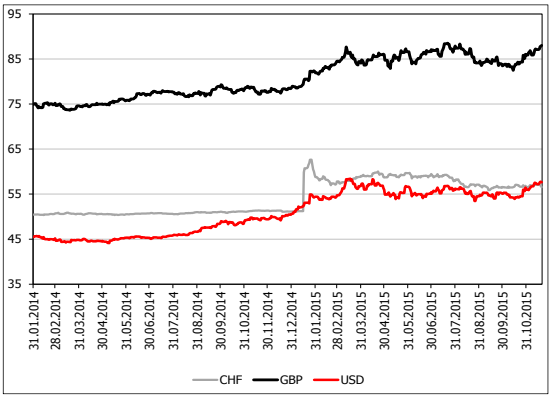
As of 30 September 2015, the American dollar has contributed the most for the narrowing of the gap between assets and liabilities with currency component. In the third quarter of 2015, the natural persons' deposits in US dollars increased, but in the banking system, their share is still very low. The euro remains the most common currency in both, the currency structure of the assets and liabilities with currency component and their gap.

Table 1
Currency structure of assets and liabilities with currency component
in %

Currency	30.6.2015		30.9.2015	
	Assets	Liabilities	Assets	Liabilities
Euro	89.5	88.0	89.2	87.6
US dollar	6.6	7.8	6.8	8.1
Swiss franc	1.5	1.5	1.5	1.5
Other	2.5	2.8	2.5	2.7
Total	**100.0**	**100.0**	**100.0**	**100.0**

Source: NBRM, based on data submitted by banks.

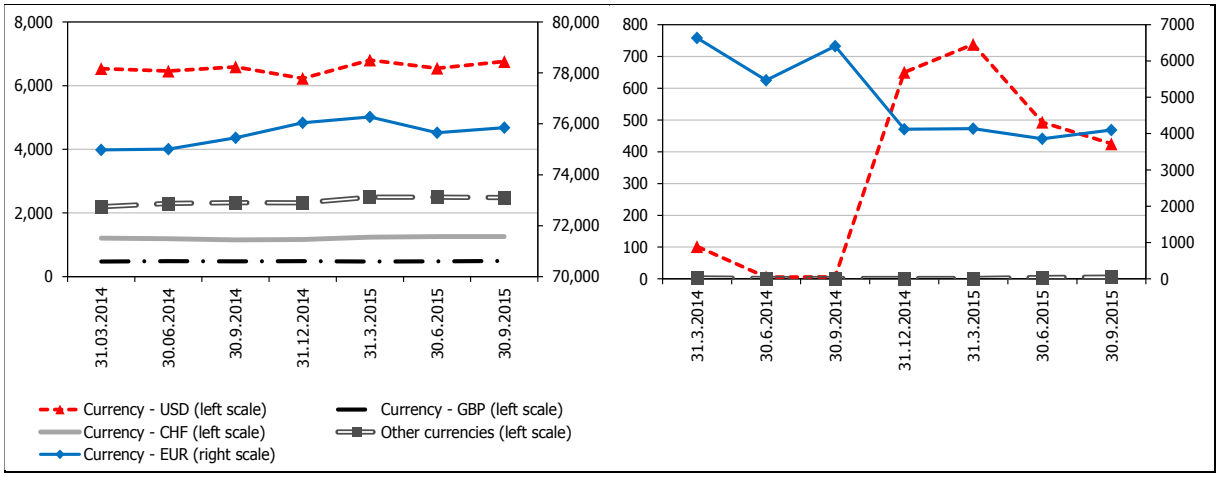
Chart 43
Movement of the denar exchange rate against the US dollar, Swiss franc and the British pound
- in Denar



Source: NBRM.

On the international foreign exchange markets, the value of the US dollar and the British pound continues to increase, but these movements have no significant impact on the stability of the Macedonian banking system, due to the low share of these two currencies in the banks' balance sheets.

Chart 44
Deposits in foreign currency* of the natural persons (left) and non-financial corporations (right)
in millions of denars



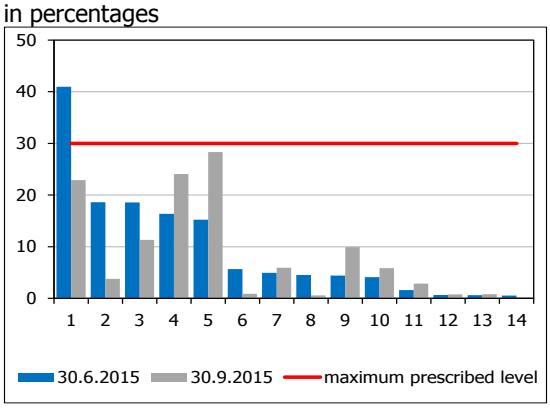
Source: NBRM, based on data submitted by banks.
The deposits do not include the current accounts of the natural persons and non-financial corporations

Table 2
The bank distribution according to the share of the open currency position by currency and aggregate currency position in the own funds

Items	Number of banks								
	Open currency position by currency /own funds								Aggregate currency position / own funds
	Euro		US Dollar		Swiss franc		Other		
	Long	Short	Long	Short	Long	Short	Long	Short	
under 5%	5	2	8	6	9	4	10	3	7
from 5% to 10%	2	1							3
from 10% to 20%	1						1		1
from 20% to 30%	2	1							3
over 30%									

Source: NBRM, based on data submitted by banks.

Chart 45
Aggregate currency position to own funds ratio, by bank
in percentages



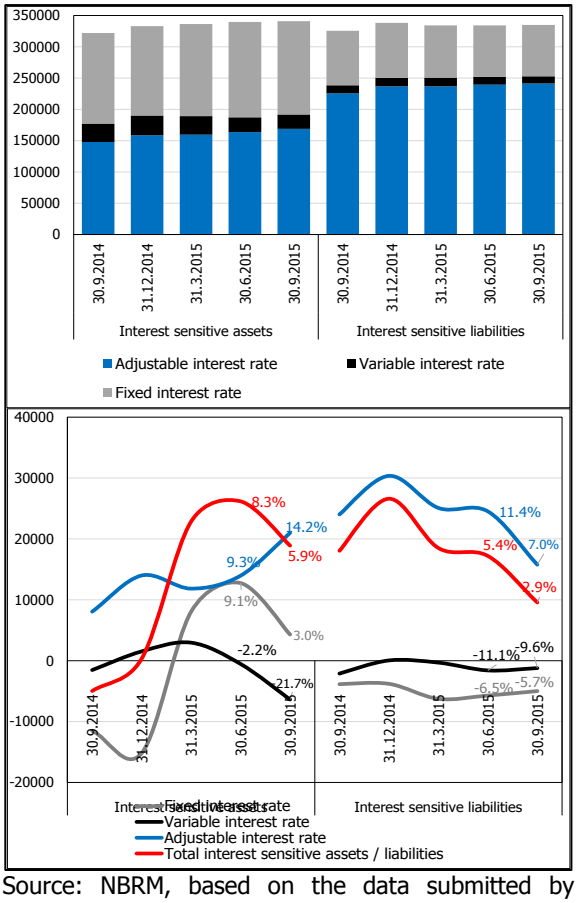
Source: NBRM, based on data submitted by banks.

As of 30 September 2015, all banks were in line with the prescribed limit for the aggregate currency position, which equals 30% of own funds.

4. Interest rate risk in the banking book

The exposure of the banks in the Republic of Macedonia to interest rate risk in the banking book registered no changes compared to the previous quarter. The significance of this risk remains marginal compared to the exposure to other risks. It is caused by the low ratio between the total weighted value of the banking book and the own funds, and the application of adjustable interest rates by the banks. This type of interest rates represents a tool for banks to minimize the interest rate risk in the banking book, but on the other hand, they are quite non-transparent as a cost of bank products for the bank customers.

Chart 46
Structure (top) and annual change (bottom) of the interest sensitive assets and liabilities, by interest rate type
in millions of denars



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

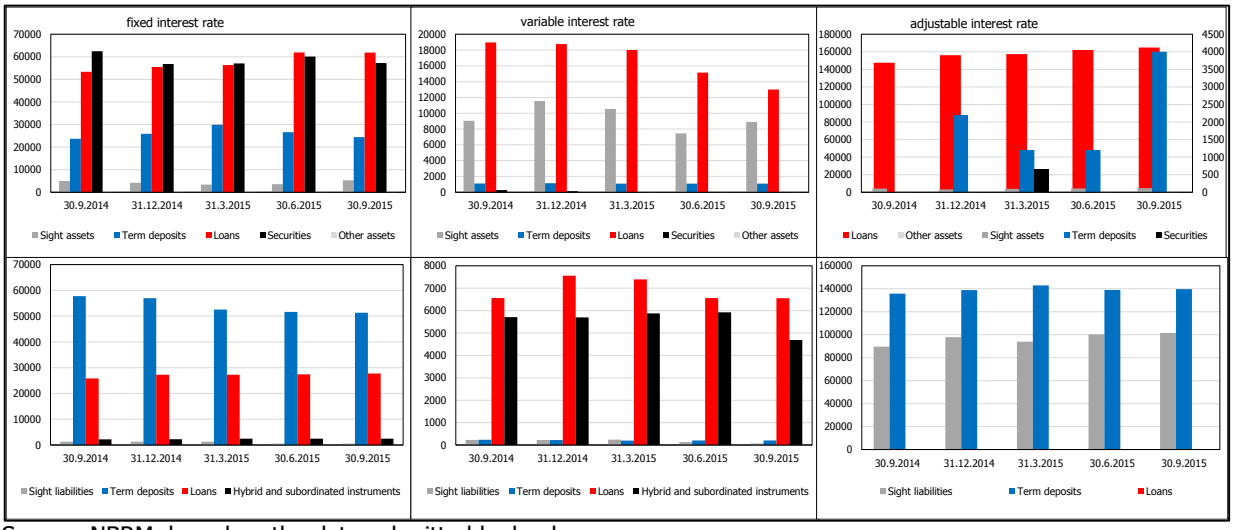
At the end of the third quarter of 2015, the total interest sensitive assets and liabilities of the banking system reached Denar 340,899 and Denar 334,974 million, respectively, and showed certain deceleration in the annual and quarterly growth. The interest sensitive assets and liabilities increased by 0.4% and 0.2%, respectively, as a result of the positions with adjustable interest rate[27].

Analyzed by the type of interest rates, the loans with adjustable interest rate register the highest quarterly growth (1.8%), but twice lower compared to growth in the previous quarter (3.5%). In the assets with adjustable interest rate, the term deposits in domestic banks in foreign currency rose secondary (mostly in one large bank). In the assets with fixed interest raters[28] the most common were the loans that registered minor rise (by 1.4%), while the investments in government securities registered quarterly drop (of 5.2%).

The liabilities with variable interest rate, which increased by 0.9%, contributed to the quarterly growth of the banks' interest sensitive liabilities, as well. Among them, the largest increase was registered by the sight deposits (transaction accounts) and the term deposits by 1.3% and 0.9%, respectively.

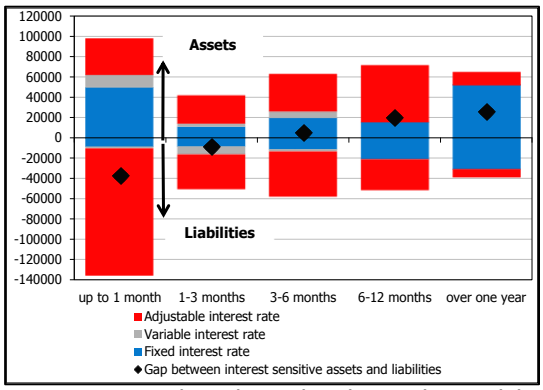
[27] Adjustable interest rate - interest rate which is adjusted on the basis of a decision of the bank, rather than on the basis of a reference interest rate or index. By using the unilaterally adjustable interest rates, banks pass their own interest rate risk on their customers, and they may serve as an instrument for managing banks' liquidity and profitability.
[28] Fixed interest rate - interest rate which remains unchanged over the entire period, i.e. the bank has no right to change the interest rate, which is nominally set in the contract.

Chart 47
Balance of the interest-sensitive assets (top) and liabilities (bottom), according to the on-balance sheet items and interest rate type
in millions of denars



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

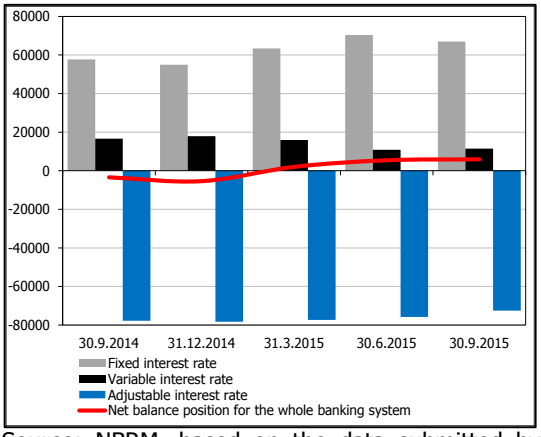
Chart 48
Composition of the interest sensitive assets and liabilities, by maturity and interest rate type
in millions of denars



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

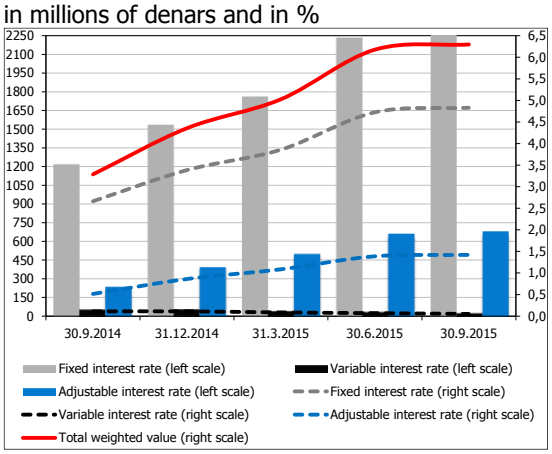
According to maturity, the adjustable interest rates dominate in the interest sensitive assets and liabilities in the maturity segments up to one year. The assets and liabilities with fixed interest rate prevail on the long term (over 1 year). In the assets, it is due to loans with fixed interest rates (due to the application of the fixed interest rate during the first few years). In the liabilities with fixed interest rates (over one year), the term deposits and the banks' loan liabilities prevail.

Chart 49
Gap between interest sensitive assets and liabilities, by type of interest rate
in millions of denars



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

Chart 50
Weighted value (left scale) and total weighted value of banking book to own assets ratio (right scale), by type of interest rate
in millions of denars and in %



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

The gap between the interest sensitive assets and liabilities in the third quarter increased by 9.2%, as a result of the increase in the loans on the assets side relative to the decelerated rise in the term deposits on liabilities side. This is due to larger gap between the positions with adjustable and variable interest rates, while the largest amount of gap (negative) results from the positions with adjustable interest rates, where there is a high share of deposits with adjustable interest rates. The gap in the positions with fixed interest rates narrowed as a result of reduced investments in securities (2.8 million) on the assets side, as opposed to the reduced term deposits (by about Denar 1 million) in liabilities.

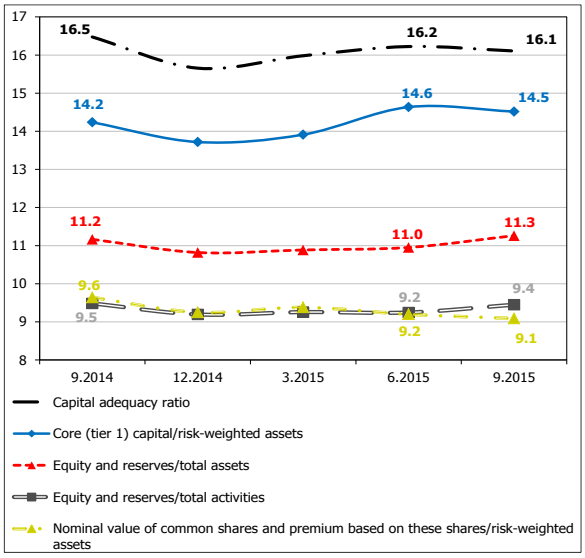
In the third quarter, the ratio between the total weighted value of the banking book[29] own funds did not change compared to the second quarter (6.3%), which remains below the prescribed maximum (20%).

[29] The total weighted value of the banking book shows the change of the economic value of this portfolio as a result of the assessment of the change in the interest rates by using a standard interest rate shock (parallel positive or negative change in interest rates by 200 basis points). The total weighted value of the banking book of the banking system is obtained by aggregating the weighted values of the banking book of individual banks.

5. Insolvency risk

In the third quarter of 2015, the capitalization rates of the banking system registered certain increase, while the capital adequacy ratio and the ratio between core capital and risk-weighted assets declined marginally. The own funds of the banking system increased, which is mostly conditioned by the reduced current loss in the third quarter of 2015. The new amount of own funds was fully "used" for meeting the additional capital requirements for credit risk coverage, which arise from the increased retail loan portfolio and the higher amount of claims on other companies and claims covered by residential buildings. The results of the stress-test are slightly weaker compared to the previous quarter, which is conditioned by the minimal fall in the capital adequacy ratio of the banking system in the third quarter of 2015.

Chart 51
Solvency ratios
in %

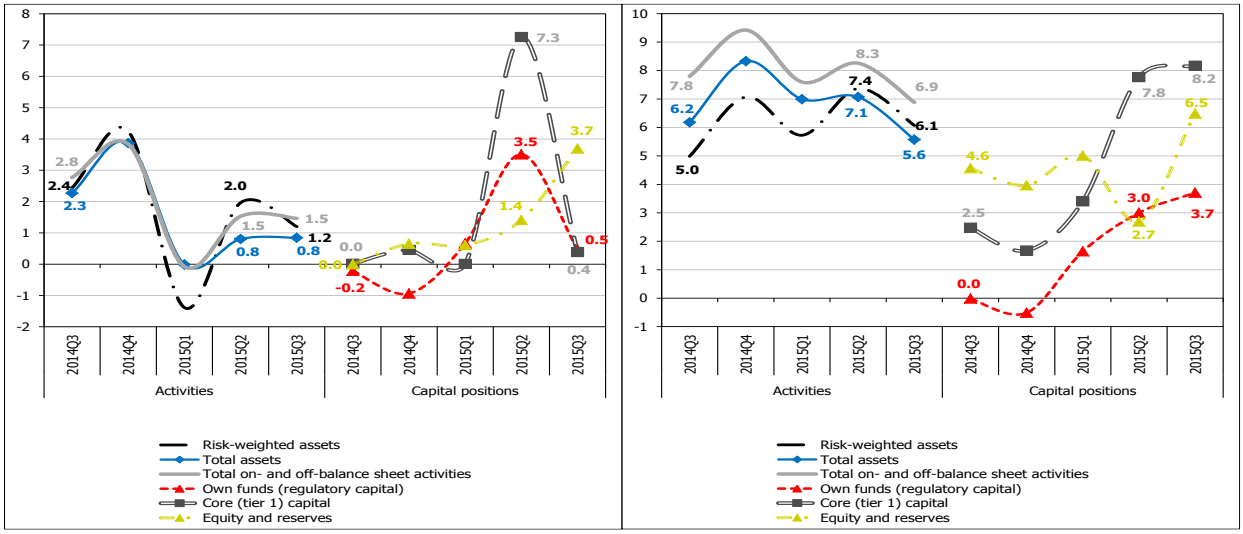


Source: NBRM, based on the data submitted by banks.

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

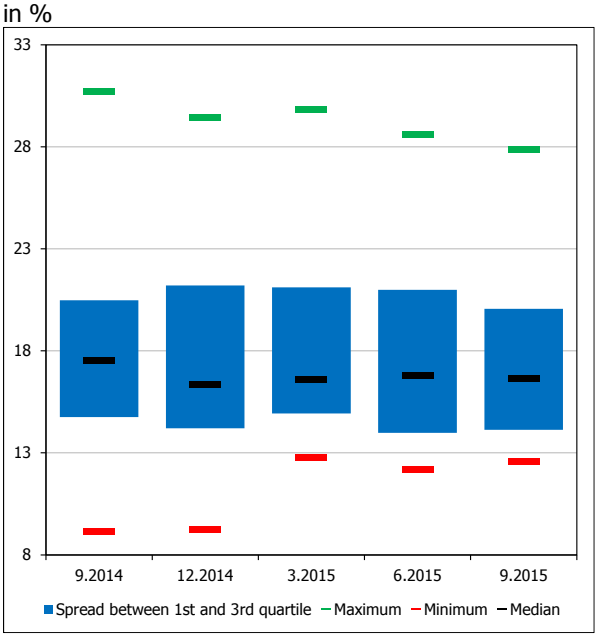
In the third quarter of 2015, the capitalization rates of the banking system registered certain increase, while the capital adequacy ratio ratio and the ratio between core capital and risk-weighted assets declined by minimal 0.1 percentage point.

Chart 52
Quarterly (left) and annual growth rates (right) of solvency indicator components
in %



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

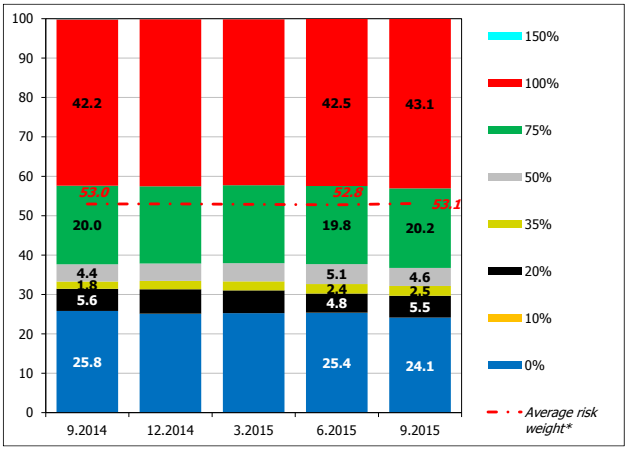
Chart 53
Measures for distribution of capital adequacy ratio in the banking system
in %



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

The improvement in the capitalization rates originates from the quarterly increase in capital and reserves in one of the large banks, which reinvested the gain registered in 2014. Keeping the gain on capital positions from where the bank could potentially pay to its shareholders in future, disable simultaneous inclusion of the retained gain also in the bank's own funds, which in turn decelerated the growth of own funds of the banking system. However, the capital adequacy of the banking system is twice higher than the legal minimum and it equals 16.1%. As of 30 September 2015, all banks reported a capital adequacy ratio higher than 12%.

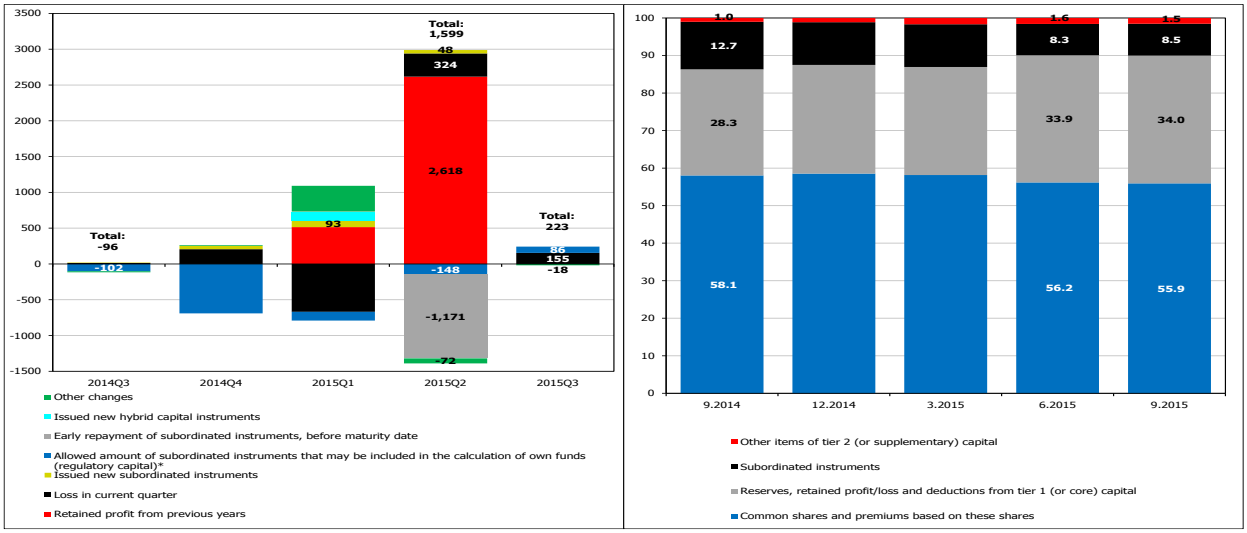
Chart 54
Structure of total on-balance sheet and off-balance sheet exposure, by risk weights
in %



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

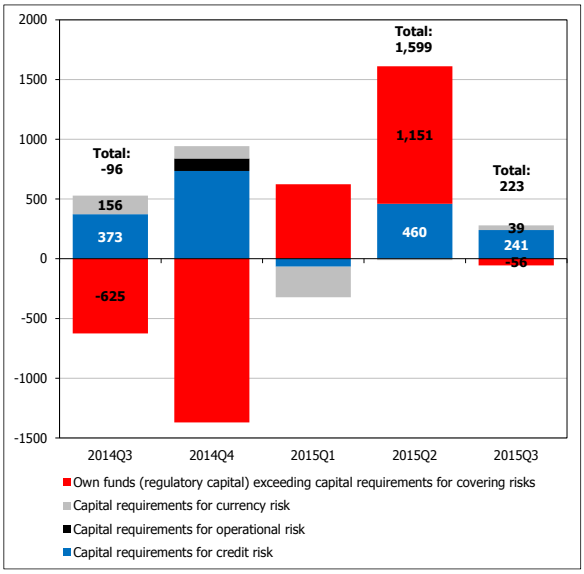
In conditions of slower credit growth and quarterly decrease in the liquid assets of the banking system, the risk weighted assets also registered decelerated quarterly growth, while the level of riskiness of the bank activities (measured as a ratio between credit risk weighted assets and the total on-balance sheet and off-balance sheet exposure) increased by 0.3 percentage points and reached 53.1%. In the third quarter of 2015, the risk-weighted assets grew at a rate of 1.2%, which is almost twice lower than the growth rate recorded in the second quarter of 2015. In the structure of the total on-balance sheet and off-balance sheet exposure of the banking system, the share of the bank activities, which in the calculation of the risk-weighted assets are included with risk weight of 75% and 100%, registers an increase, at the expense of the decrease in the share of activities which in the determining of the risk-weighted assets are included with a risk weight of 0%. Also, there is certain increase in the share of activities with risk weight of 20%, due to increased claims from banks.

Chart 55
Structure of the quarterly changes (left) and the balance of the own funds (right)
in %



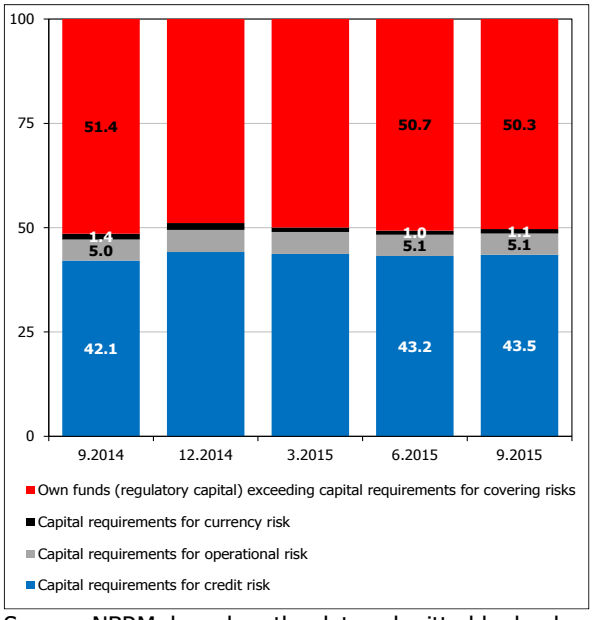
Source: NBRM, based on the data submitted by banks.
Note: * Refers to the changes in the amount of already issued subordinated instruments arising from the compliance/non-compliance with the regulatory rules for inclusion of these instruments in the calculation of own funds.

Chart 56
Structure of quarterly growth of own funds, by the purpose for covering risks
in millions of denars



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

Chart 57
Structure of own funds according to the use for covering risks
in %



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

5.2 Movements and quality of the own funds of the banking system

Own funds of the banking system increased by Denar 223 million (or 0.5%), which derives mostly from a reduction in the current loss in the third quarter of 2015, primarily caused by the changes with one bank. Part of the increase in the own funds is due to the increase in the allowed amount of subordinated instruments included in the calculation of own funds with one bank from the group of large banks[30]. The share of the core capital in the total own funds (before deductions of core and additional capital) decreased by 0.2 percentage points, but it is still high (30 September 2015 totaled 89.9%).

More details about the level of own funds of individual groups of banks are presented in Annex 34.

5.3 Developments and structure of capital requirements and available capital of the banking system

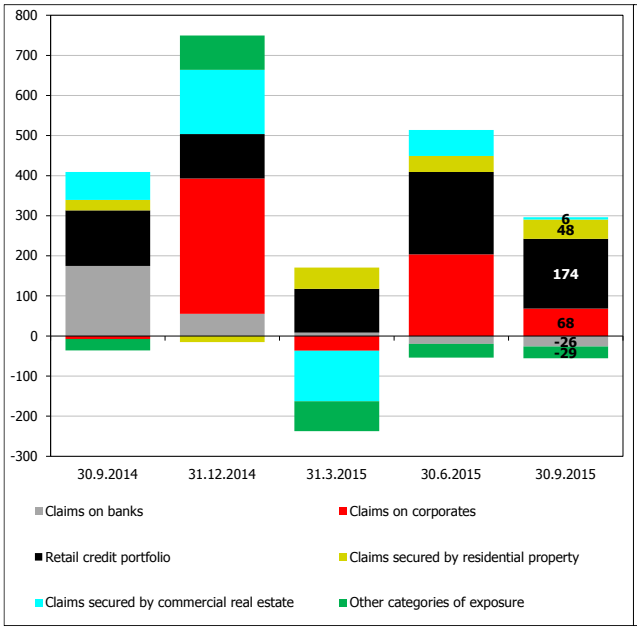
The new amount of own funds was fully "used" for the capital requirements for risk coverage. At the same time, also part of the "free" capital above the minimum required level was "used" for risk coverage. In the third quarter of 2015, the banks' capital requirements increased by Denar 280 million, or 1.2%. Most of the increase in the capital requirements was conditioned by the increase in the regulatory capital for credit risk coverage (of Denar 241 million, or 1.2%), which largely derives from the increased retail loan portfolio and the higher amount of claims from other companies and claims secured with residential buildings. One part of the quarterly increase in capital requirements account for the increase in regulatory capital for currency risk coverage, which increased by Denar 39 million, or 8.2%.

[30] The bank has prolonged the maturity of one of the issued subordinated instruments, thus becoming eligible for full inclusion in the calculation of own funds. Before the prolongation of the instrument's maturity, it was included in the calculation of own funds with a certain discount, because the residual maturity of the subordinated instrument was shorter than five years.

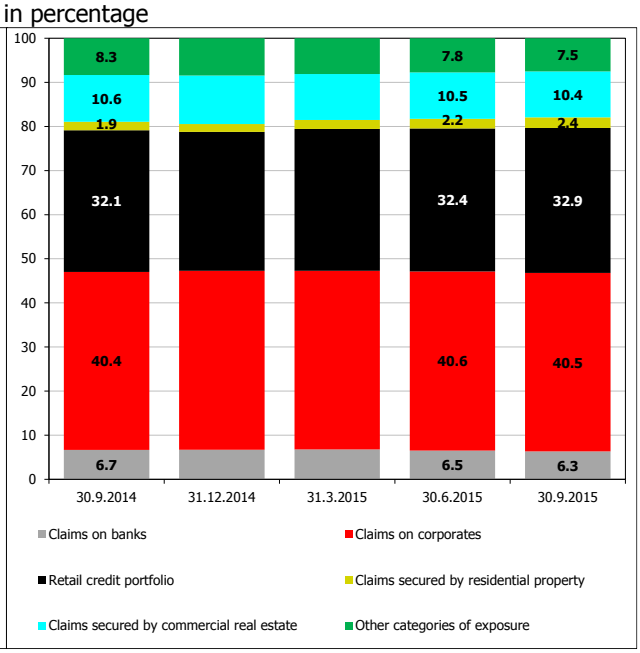
Own funds above the capital requirement for covering risks make up more than half of the total own funds.

Chart 58
Quarterly growth rates (left) and structure (right) of capital requirements for credit risk, by exposure category

in millions of Denars



in percentage



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

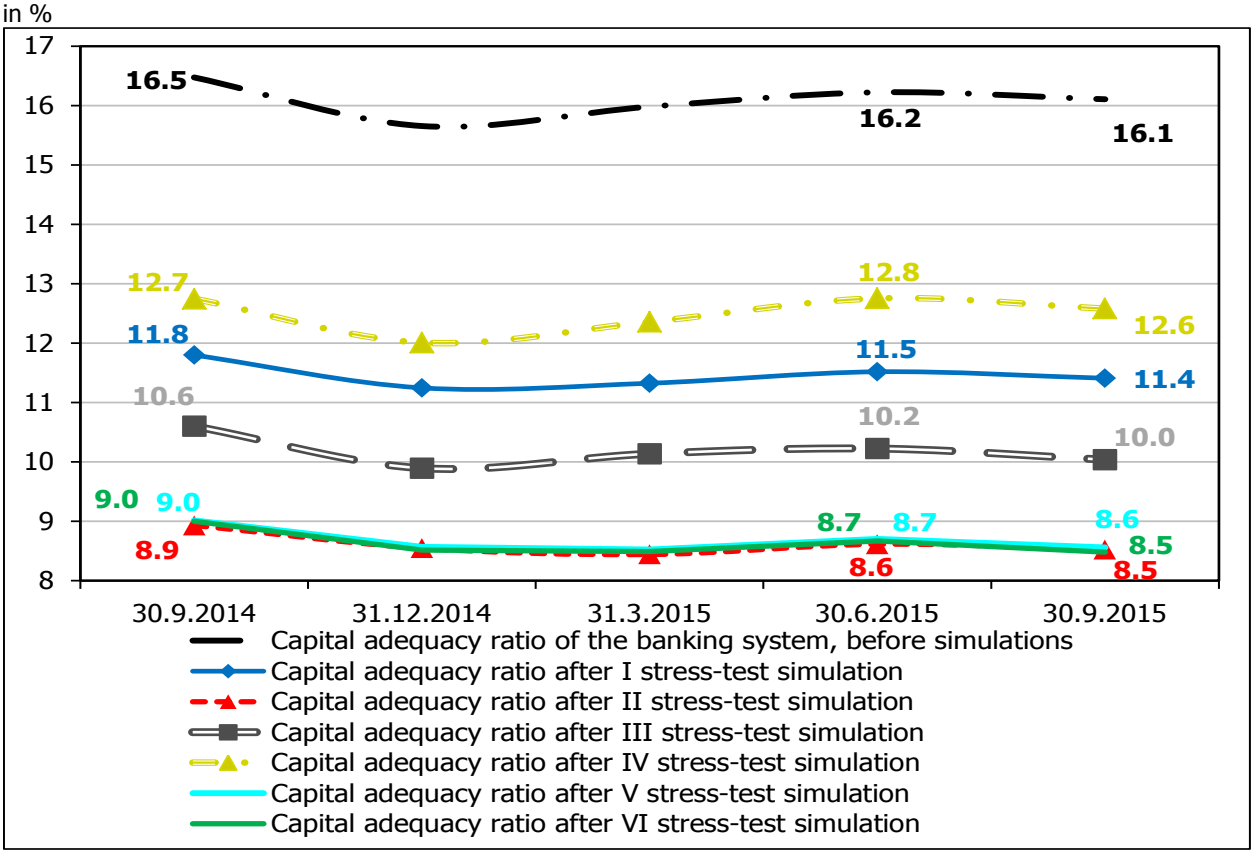
For more details of the capital requirements for covering risks and the capital adequacy ratio, by individual group of banks, see Annex 35.

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 slightly poorer results compared to 30 June 2015. Such results of the stress-tests are mostly conditioned by minimal decrease in the capital adequacy of the banking system in the third quarter of 2015 (before simulations). The capital adequacy of the banking system does not go below 8% in any of the simulations, although individual banks reveal hypothetical

need for recapitalization in the event of possible materialization of the simulated extreme shocks.

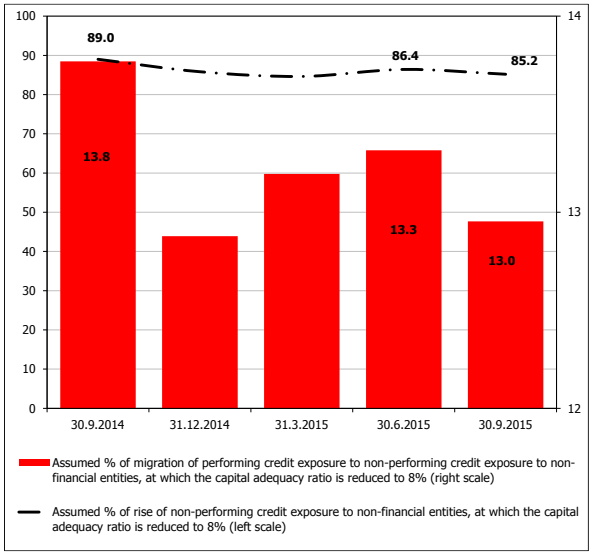
Chart 59
Comparison of results from simulations of credit and combined shocks
in %



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 category "C - non-performing" of the five largest credit exposures to non-financial entities (including related entities);
V simulation: Increasing the non-performing credit exposure to non-financial entities by 80% and increase in interest rates from 1 to 5 pp.;
VI simulation: Increasing the non-performing credit exposure to non-financial entities by 80% depreciation of the Denar exchange rate by 30%, and increase in interest rates from 1 to 5 pp.;
**Note: Credit exposure to non-financial entities includes the total credit exposure decreased by the exposure of banks to financial institutions and the government, i.e to customers from the "financial activities and insurance activities" and "public administration and defense and compulsory social security"

The hypothetical shocks on part of the credit risk have the greatest impact on the stability of the banking system. Within the credit exposure to non-financial entities, the simulations show that the capital adequacy of the banking system would drop to the capital requirement of 8% only if the non-performing

Chart 60
Necessary deterioration of the quality of credit exposure to cause a decline in the capital adequacy of the banking system to 8%
in %



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

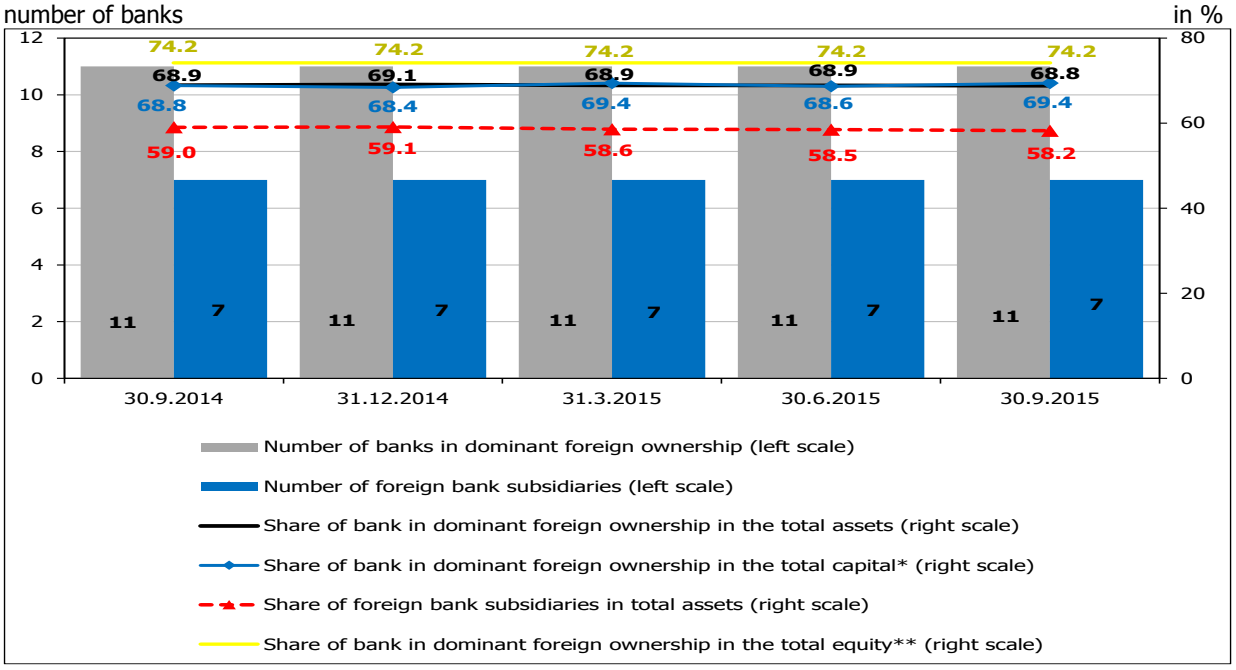
credit exposure rises by 85.2%, i.e. in case of migration of 13% from regular to non-performing credit exposure. These simulations would result in almost doubling of the share of non-performing in the total credit exposure to non-financial entities (from the current 10.1% to 18.6%). However, these are rather extreme and less likely simulations, especially in the short term. For comparison, in the third quarter of 2015, only 1% of the regular credit exposure to non-financial entities migrated to non-performing exposure (in the last six years, the historic maximum for this data was 2.1% and was reached in the second quarter of 2009).

III. STRUCTURAL FEATURES, SIGNIFICANT BALANCE SHEET CHANGES AND PROFITABILITY OF THE BANKING SYSTEM

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

As of 30 September 2015, the banking system in the Republic of Macedonia consists of fifteen banks and three savings houses[31]. The number of these institutions is unchanged compared to the previous quarter. Also, the number of banks that are predominantly owned by foreign shareholders (eleven banks), and the number of subsidiaries of foreign banks (seven) is unchanged.

Chart 61
Number and market share of banks in predominant foreign ownership

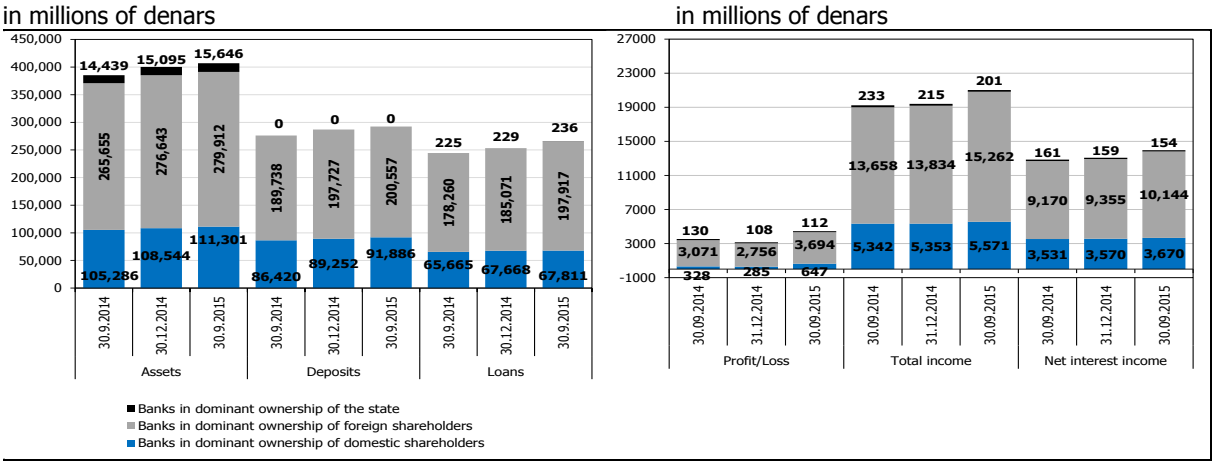


Source: NBRM, based on data submitted by banks.
*Equity includes face value of paid-in common and preference shares.
**Capital and reserves comprise the equity capital and premiums based on paid-in shares, reserves, retained earnings (accumulated loss) and revaluation reserves. Capital and reserves are reduced by the current loss.

Banks that are predominantly owned by foreign shareholders remain dominant in the domestic banking system. Their share in all major balance sheet items of banks is almost unchanged, with small exception in the share in the item "capital and reserves" which increased by 0.8 percentage points. The increased share of this item is due to one large bank which in the third quarter of 2015 performed reinvestment of profits from 2014 (Denar 1,512 million).

[31] The analysis of savings houses is not covered in this Report due to their insignificant role in the banking system, accounting for only 0.7% of total assets (banks and savings houses) and 0.9% and 0.3% of total loans and total deposits of non-financial entities. The risk profile and the scope of activities of savings houses is analyzed in the reports on the financial stability of the Republic of Macedonia.

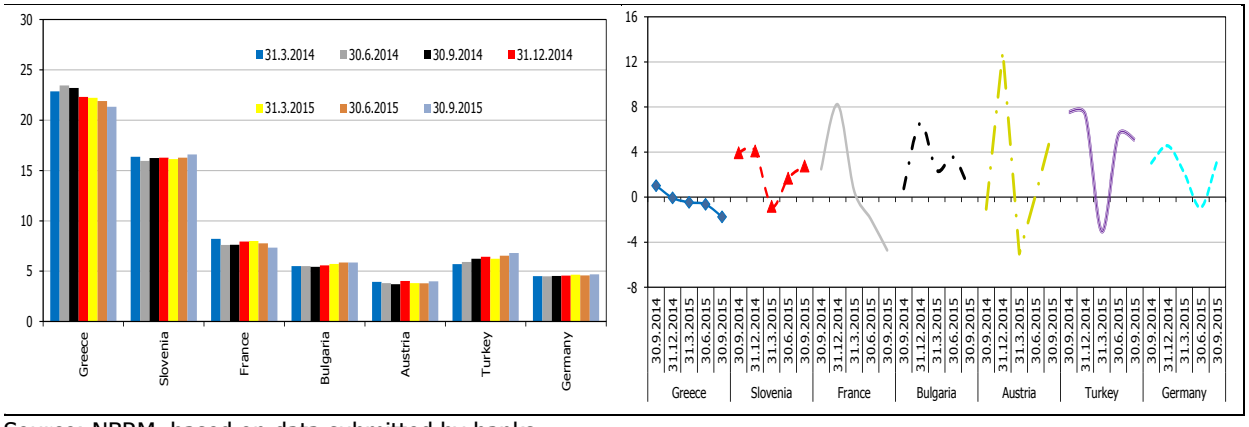
Chart 62
Structure of major banks' balance sheet positions, by banks' majority ownership



Source: NBRM, based on data submitted by banks.
Note: The categories of the income statement are annualized. Categories are annualized by summing up the values in the last twelve months for the respective categories of the income statement.

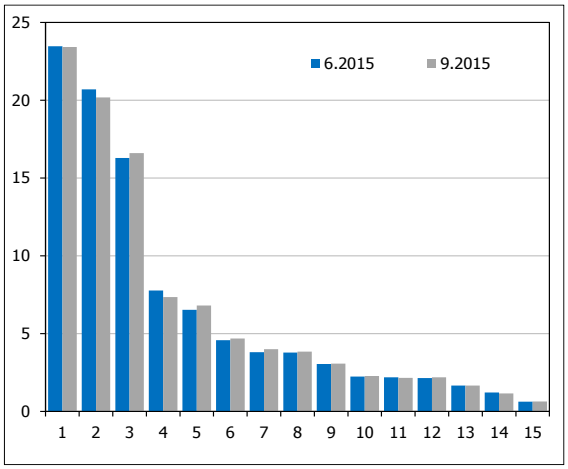
In the last five quarters, the market share of banks with prevailing shareholder from Greece is in permanent decline, while the bank with prevailing shareholder from Turkey mainly increased its market share. In the third quarter of 2015, the share of total assets of the banking system of banks with prevailing shareholder from Greece and France decreased, while the share of banks with prevailing owner from Turkey, Slovenia and Austria increased.

Chart 63
Market share of banks by assets (left) and growth rate of the assets (right), by country of origin of the prevailing foreign shareholder*



Source: NBRM, based on data submitted by banks.
*The bank in domestic ownership and banks without prevailing owner are not included in the chart.
Three banks have a prevailing shareholder from Bulgaria, two from Greece, while five banks have a prevailing shareholder from Slovenia, France, Austria, Turkey and Germany.

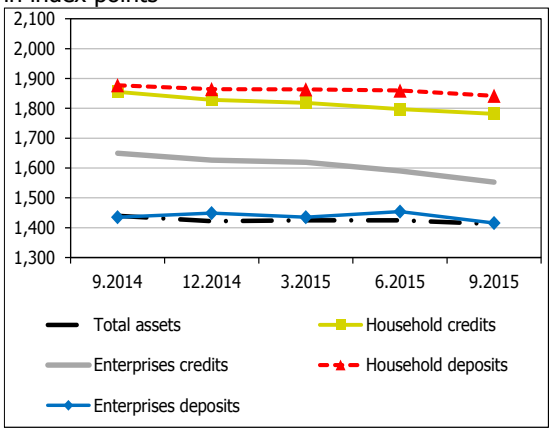
Chart 64
Share of individual banks in the total assets of the banking system
in %



Source: NBRM, based on data submitted by banks.

Market share of individual banks, as well as the Herfindahl index[32] for the banking system in the Republic of Macedonia show substantial but declining concentration in the banking system. The three largest banks still account for slightly more than 60% of the total assets of the banking system, while ten banks constitute less than 5%, individually, although almost all of them registered a small increase in market share.

Chart 65
Herfindahl index
in index points



Source: NBRM, based on data submitted by banks.

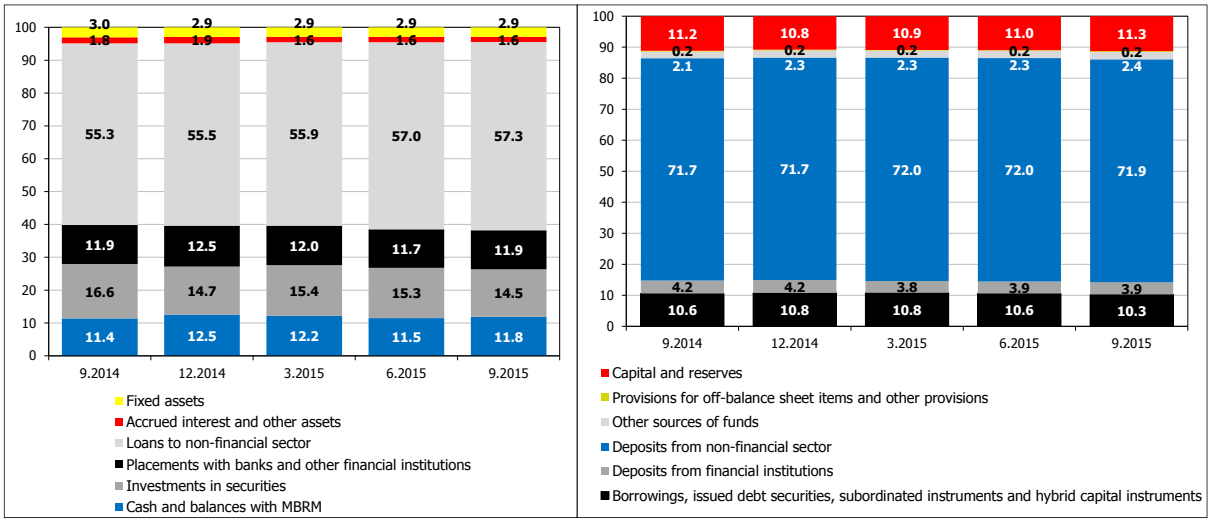
The Herfindahl index of household deposits is above acceptable limits, but in the analyzed periods is in permanent decline. In other analyzed items, this index is within the acceptable level and also registers mostly downward trend.

[32] The Herfindahl index is calculated according to the formula $HI = \sum_{j=1}^{n} (S_j)^2$, where S is the share of each bank in the total amount of the analyzed category (e.g., total assets, total deposits, etc..), where n is the total number of banks in the system. When the Herfindahl index ranges from 1,000 to 1,800 units, the concentration ratio in the banking system is considered acceptable.

2. Banks' activities

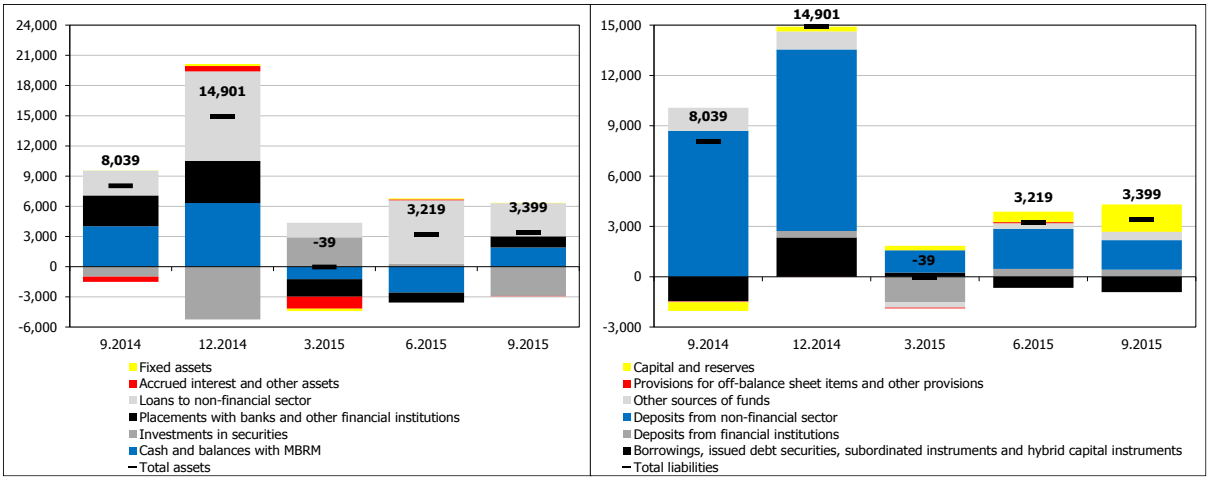
In the third quarter of 2015, amid further solid economic growth and gradually abating of the impact of domestic political developments and uncertainty about the financial position of Greece, the activities of the domestic banking system continued to grow, but at a slower pace. The increase of banks' deposit potential is fully due to the new household savings, amid a decline in corporate deposits, which corresponds with the credit market developments in this period. Namely, in the third quarter of 2015, loan support to the households continued to grow, while corporate loans registered minor decrease, as opposed to the performance in the previous quarter. In terms of maturity and currency, long-term and Denar loans fully contribute to the realized quarterly increase in total loans. In deposits, in terms of currency and maturity, growth in the third quarter resulted from foreign currency deposits and demand deposits. Despite the signs of somewhat slower denarization of deposits, however more than half of the total deposit base belongs to Denar savings.

Chart 66
Structure of the assets (left) and liabilities (right) of the banking system
in %



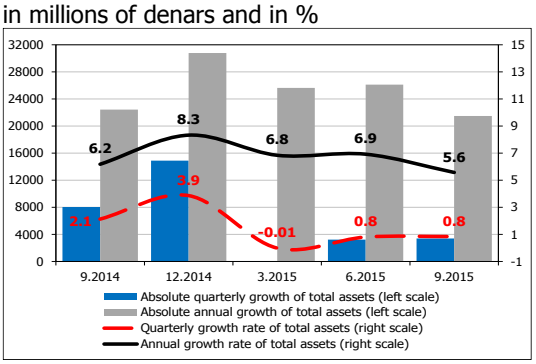
Source: NBRM, based on the data submitted by banks.

Chart 67
Absolute quarterly growth of the components of assets (left) and liabilities (right) of the banking system
in millions of denars



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

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

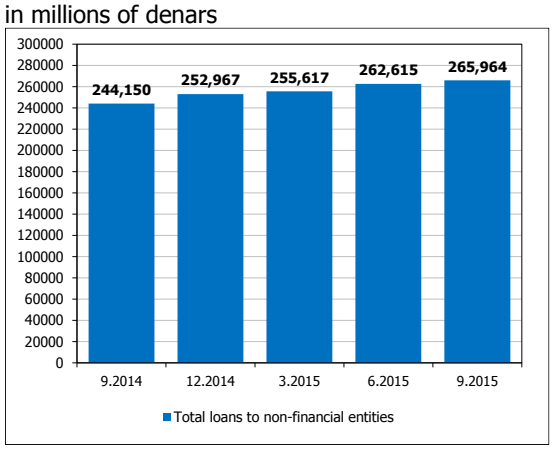


Source: NBRM, based on the data submitted by banks.

In the third quarter of 2015, total assets of the banking system amounted to Denar 406.860 million. Their growth slowed to an annual level. On a quarterly basis, the growth in assets was almost identical to the growth in the previous quarter, which is equally due to the growth of deposit activity and capital and reserves with one large bank (which reinvested profits realized in 2014). Within assets, loans to non-financial entities held more than twice higher growth rate, compared with the growth rate of deposits. The other more significant changes in assets are increase in cash and assets on banks' accounts in the National Bank, the increase in placements with banks and other financial institutions and the reduction of banks' investments in securities.

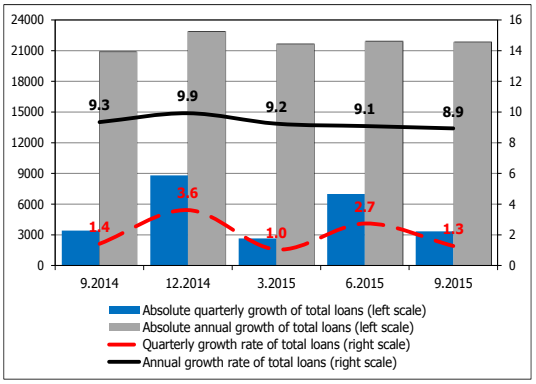
2.1 Loans to non-financial entities

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



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

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



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

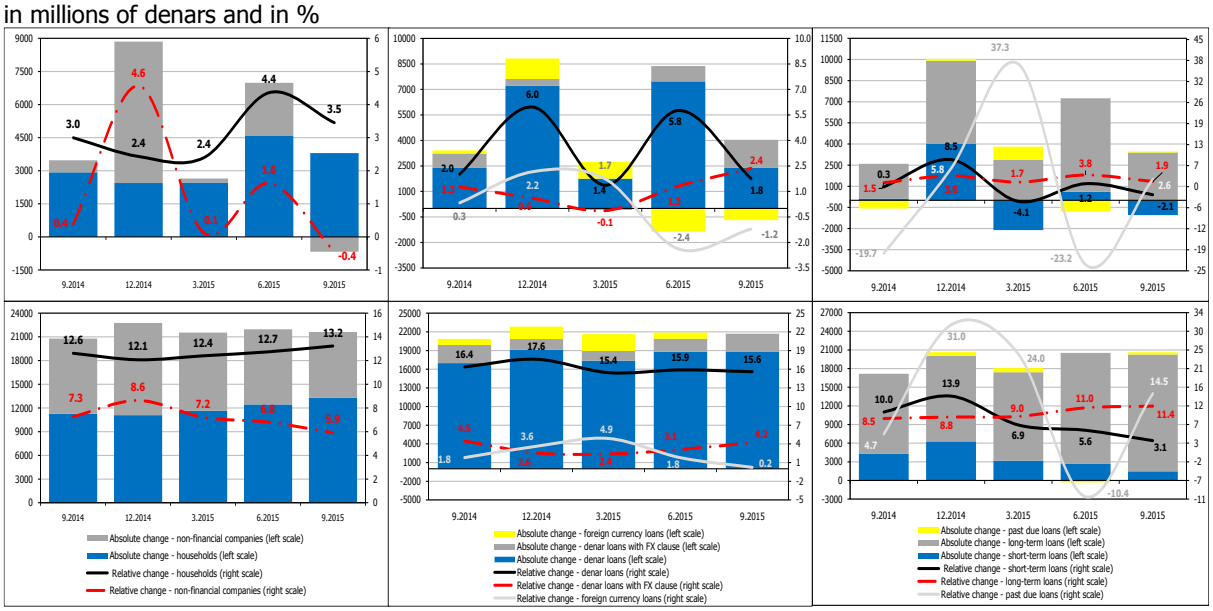
In the third quarter of 2015, the growth of banks' lending activity to non-financial sector[33] continued, but at a slower pace (on a quarterly and annual basis). Total loans to non-financial entities, on a quarterly basis, are higher by Denar 3.349 million (or 1.3%), which is twice less than the growth in the previous quarter of the year (by Denar 6.998 million, or 2.7 %). The slowdown of bank lending activity to non-financial sector was mostly evident in the **reduced credit support to non-financial companies**[34], whose quarterly movements in the past few years, are highly variable. In the third quarter of 2015, lending to non-financial companies remained supported by the non-standard monetary policy measure that encourages lending to net exporters and producers of electricity[35].

On the other hand, **banks' credit support to the households continued to grow,** but at a slower pace on a quarterly basis (by Denar 3,799 million or 3.5%). On an annual basis, unlike the slower growth in non-financial companies, the growth rate of loans to households is highest in the past few years.

Accordingly, the contribution of lending to the households[36] reached 61.0% (from 54.0% in the same period last year) in the annual growth of total lending activity of banks to non-financial entities.

[33] Loans to non-financial entities include the loans to resident and non-resident non-financial entities, including loans to private and public non-financial companies, central government, local government, non-profit institutions serving households (loans to other clients), sole proprietors and natural persons (loans to households).
[34] Lending to non-financial companies on a quarterly basis decreased by Denar 670 million, or 0.4%, and constituted 0.4% (for comparison, in the second quarter of 2015, the contribution of corporate loans in total credit growth reached 34.1%).
[35] The application of non-standard measure for reduction of the reserve requirement base of banks for the amount of new loans to net exporters and domestic electricity producers is extended to 31 December 2015.
[36] Consumer loans and loans for the purchase and renovation of residential property are the most widely used credit products in the households.

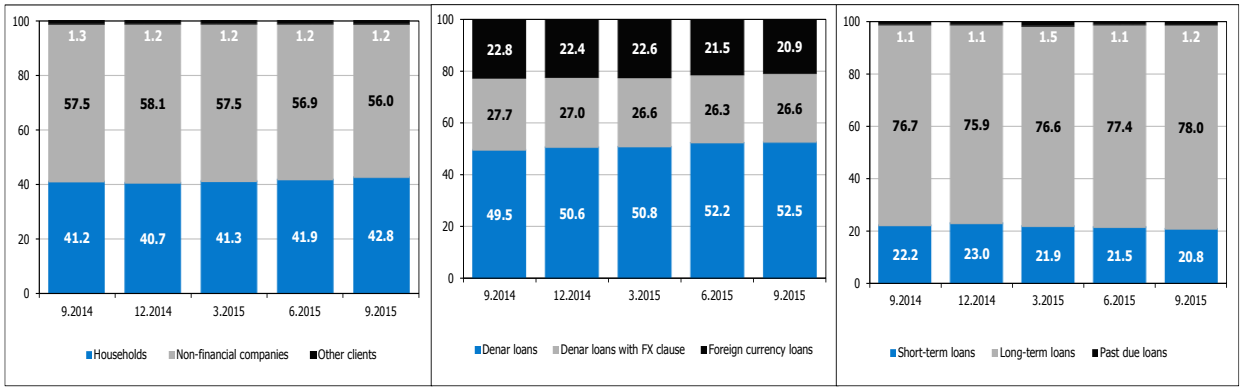
Chart 71
Quarterly (top) and annual (bottom) growth of loans by sector, currency and maturity
in millions of denars and in %



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

In terms of currency, most of the quarterly growth of total loans resulted from Denar loans[37]**.** The growth of Denar loans is completely due to the growth of loans to households (by Denar 2.583 million, or 4.4%) compared to the Denar loans to non-financial companies, which registered a quarterly decline. On the other hand, in the

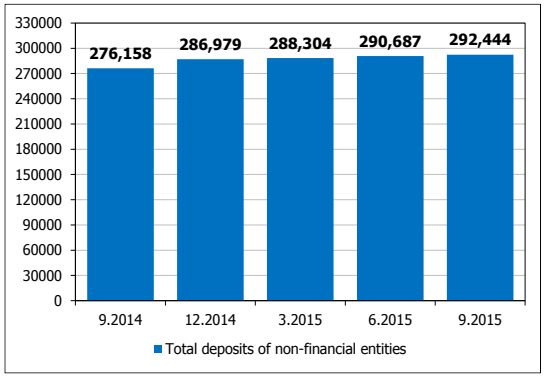
Chart 72
Structure of total loans, by sector (left) and currency (middle), and by regular loans, by maturity (right)
in %



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

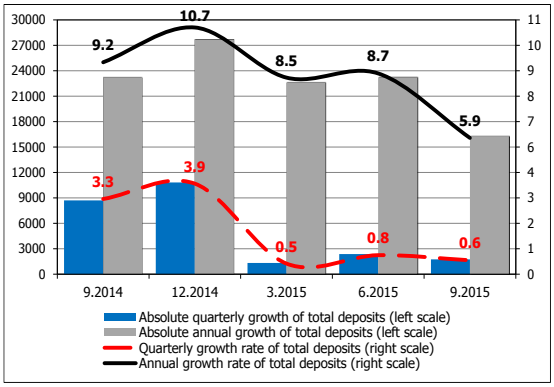
[37] The quarterly growth of Denar loans amounted to Denar 2,402 million, or 1.8%.

Chart 73
Stock of deposits of non-financial entities
in millions of denars



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

Chart 74
Growth of deposits of non-financial entities
in millions of denars and in %



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

third quarter of 2015, loans in foreign currency continued to decrease, but with twice smaller rate of decrease (1.2%) than the rate registered in the previous quarter (of 2.4%). The reduction of foreign currency loans in this quarter of the year fully stems from the non-financial companies.

In terms of maturity, long-term lending remains the main driver of the overall quarterly increase in total loans to non-financial entities, despite the slower growth in the third quarter of 2015.

2.2 Deposits of non-financial entities

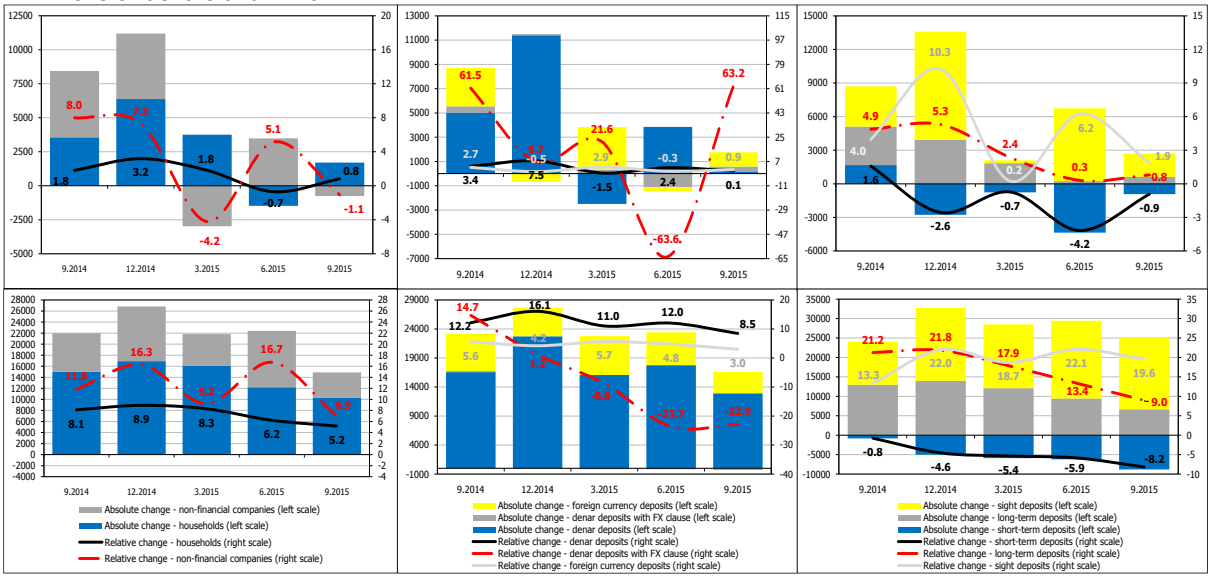
In the third quarter the effects of the perceptions of the public about the increased risks due to internal political developments and developments in Greece from the previous quarter were felt again, as perceived by the weaker performances in the deposit base. In the third quarter of 2015, amid stronger increase in household deposits, with a negative contribution of deposits of non-financial companies, the total deposit potential of the banking system grew, but at a slower pace, compared to the previous quarter and the same period last year. In September 2015, total deposits of non-financial entities realized an annual growth of 5.9%, which is a slowdown compared to the annual growth of 9.2% realized in September 2014, i.e. in terms of the annual growth of 8.7%, realized in June 2015[38]. In the third quarter of 2015, in circumstances of certain weakening of the impact from the domestic political developments and developments in Greece, household deposits increased by 0.8%, on a quarterly basis. Deposits from non-financial companies by their nature are more volatile and quarterly decreased by 1.1%. However deposits from non-financial entities remain the main source of funds for banks and occupy 71.9% of total

[38] In the third quarter of 2015, on a quarterly basis, growth of deposits of non-financial entities slowed down to 0.6%, compared to the previous quarter, when it was 0.8%.

assets (household deposits in total deposits dominated, accounting for 72.0%).

In terms of currency, unlike the previous quarter when the growth of the deposit base of banks resulted solely from Denar deposits of non-financial companies**, in the third quarter of 2015, foreign currency deposits of households had the largest (77.5%) contribution to the total deposit growth** (as opposed to their stronger decrease in the second quarter of the year).

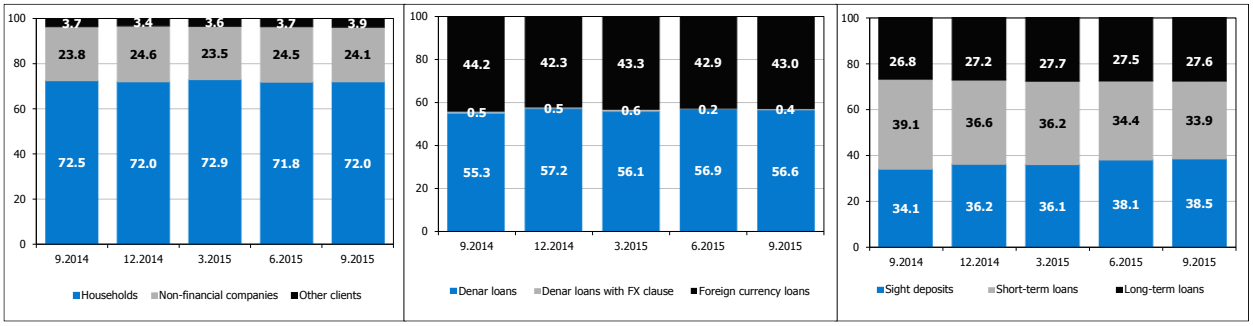
Chart 75
Quarterly (top) and annual (bottom) deposit growth by sector, currency and maturity
in millions of denars and in %



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

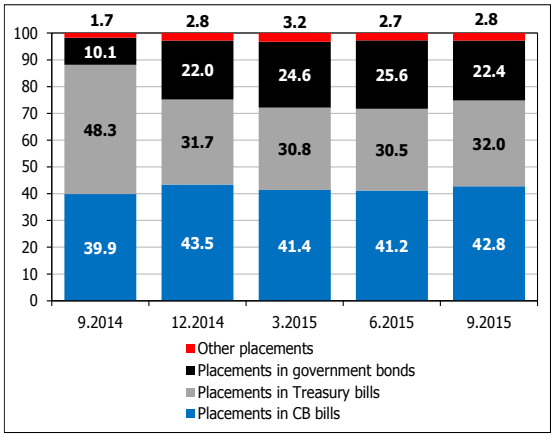
The quarterly decline of Denar deposits of non-financial companies conditioned significant slowdown in the quarterly growth rate of total Denar deposits (from 2.4% in the previous quarter to only 0.1% in this quarter of the year) and significantly slowed their annual growth rate (of 3.6 percentage points), indicating **some slowdown of the process of denarization of the deposit activity of the Macedonian banking system**. However, most (or more than 55%) of the total deposit base is comprised of Denar deposits, of which 65% are household deposits. The latest amendments to the Decision on the reserve

Chart 76
Total deposit structure by sector, currency and maturity
in %



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

Chart 77
Structure of the securities portfolio
in %



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

requirement[39], which started to be implemented on 1 September 2015, encouraged household savings in domestic currency (in a longer term).

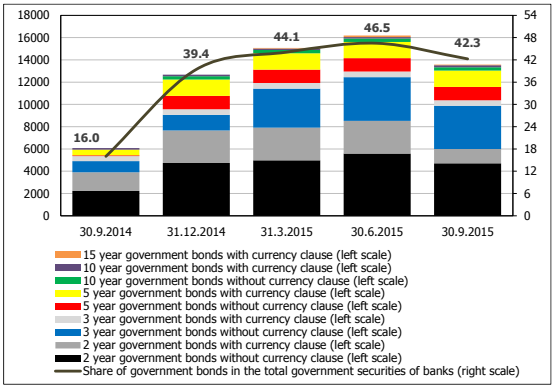
In terms of maturity, **the growth** of household deposits, and total deposit potential of the banking system, **mostly stems from demand deposits,** whose growth rate on a quarterly basis, multiply increased[40]. Moreover, the constant growth of long term deposits of households continued, and it accelerated on a quarterly basis, while the contribution of short-term deposits of households was again negative, despite the decline of these deposits was almost halved compared to the previous quarter. With non-financial companies, short-term deposits grew only (by Denar 309 million or 2.5%), as opposed to their quarterly decline of 9.5% in the first quarter, i.e. from 14.0% in the second quarter of the year.

2.3 Other activities

In contrast to the growth in the past two quarters, **the banks' securities portfolio in the third quarter of 2015 decreased** (by Denar 2.901 million, or 4,7%), mostly due to the reduced investments in government

[39] The amendments reduce the reserve requirement rate for the bank liabilities to natural persons in domestic currency with contractual maturity over one year from 8% to 0%, with these liabilities obtaining the same treatment as the liabilities (both denar and foreign currency) with maturity over two years, for which rate of 0% around three years was applied.
[40] The quarterly growth rate of sight deposits of the households at the end of September was 3.7%, compared to 0.7% at the end of June 2015.

Chart 78
Banks' investments in government bonds (nominal value), by currency and maturity
in millions of denars and in %



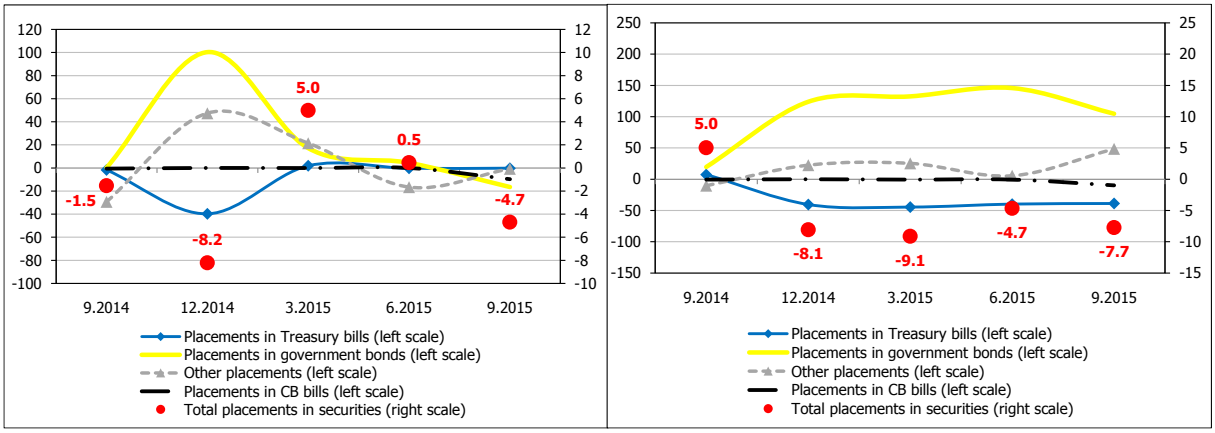
Source: NBRM, based on the data submitted by banks.

bonds[41]. The quarterly decrease in banks' investments in treasury bills was minimal (by Denar 32.7 million, or 0.2%). Amid unchanged interest rate and supply of CB bills by the National Bank, the banks' investments in CB bills remained almost unchanged.

Placements with banks and other financial institutions increased (by Denar 1.336 million, or 2,9%), whereby their share in the total assets of banks increased by 11.7% (from 11.4% in June 2015), **on a quarterly basis**. The increase in time deposits in domestic banks in foreign currency from one to three months, as well as the increase in the assets of the regular accounts in foreign currency in foreign banks caused most of the quarterly increase in the total placements with banks and other financial institutions.

Within the liabilities, **liabilities based on loans** increased on a quarterly basis, which resulted solely from the increased liabilities on the basis of the loans from non-residents - financial companies, as a result of the increased liabilities based on credit lines placed through "MBDP" AD Skopje.

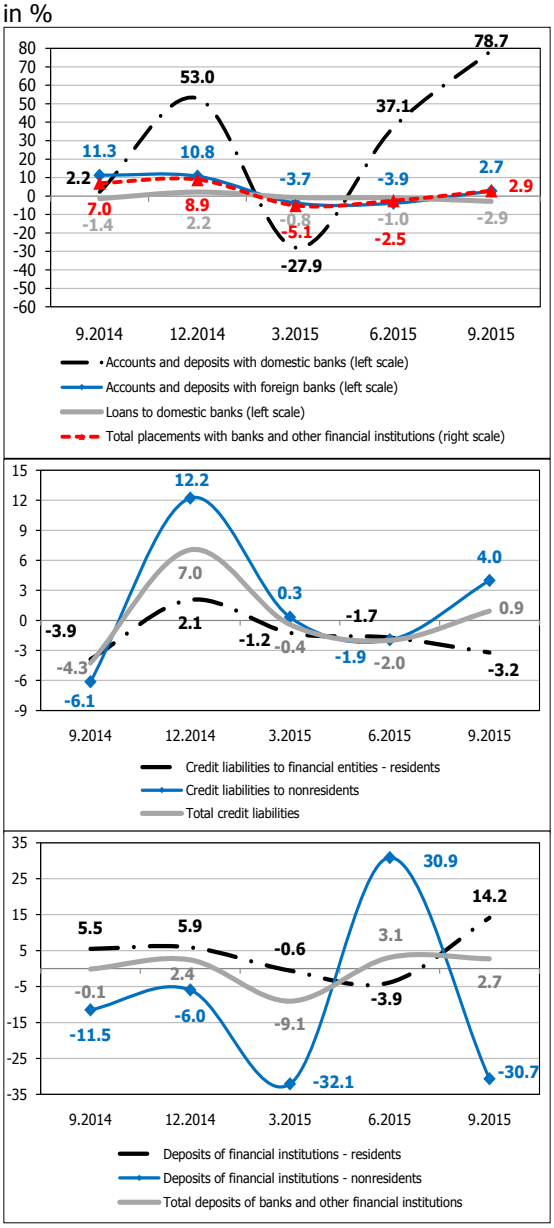
Chart 79
Quarterly (left) and annual (right) growth rate of securities portfolio
in %



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

[41] As of 30 September 2015, the banks' investments in government bonds amounted to Denar 13,196 million, which is a decrease of Denar 2,610 million, or 16.5% compared to 30 June 2015.

Chart 80
Quarterly growth rate of placements with financial institutions (top), loan liabilities (middle) and deposits of financial companies (bottom)
in %



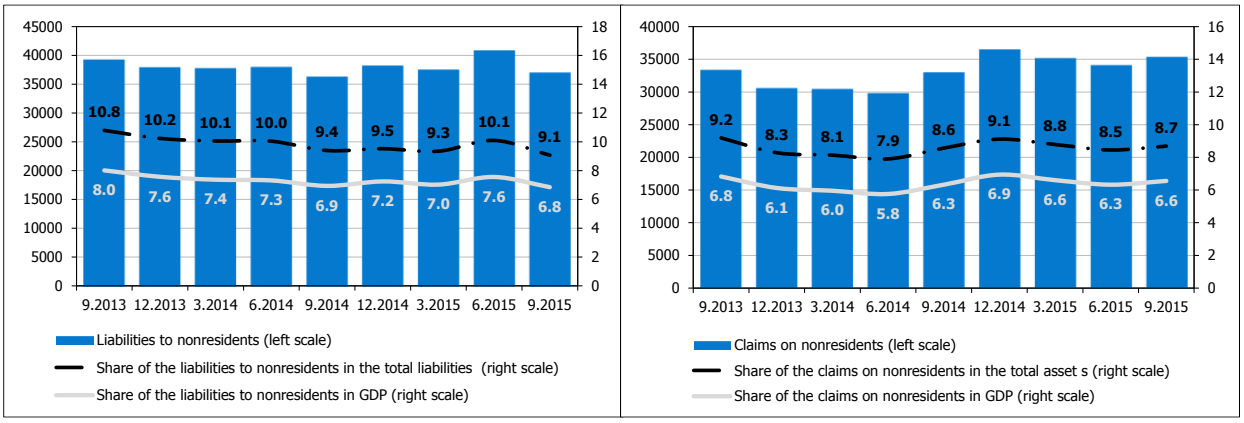
Source: NBRM, based on the data submitted by banks.

Deposits from banks and other financial institutions are very small source of funding for banks (3.9% of total funding sources), which in the third quarter of 2015, increased, primarily due to the increased short-term deposits of domestic banks[42].

Banks in the Republic of Macedonia carry out their activities mainly on the domestic market. Their **claims and liabilities to non-residents remain low and normal of around 10% in total assets and 9% in total liabilities[43].**

[42] Short-term foreign currency deposits of domestic banks (from one up to three months) increased several times and reached the amount of Denar 771 million (from Denar 185 million in the previous quarter) on a quarterly basis.
[43] Analyzed by individual bank, the share of banks 'claims on non-residents in total assets ranges from 1.2% to 19.2%, while the share of banks' liabilities to non-residents in the total liabilities ranges from 0.3% to 20.7%. "MBDP" AD Skopje was excluded from this analysis.

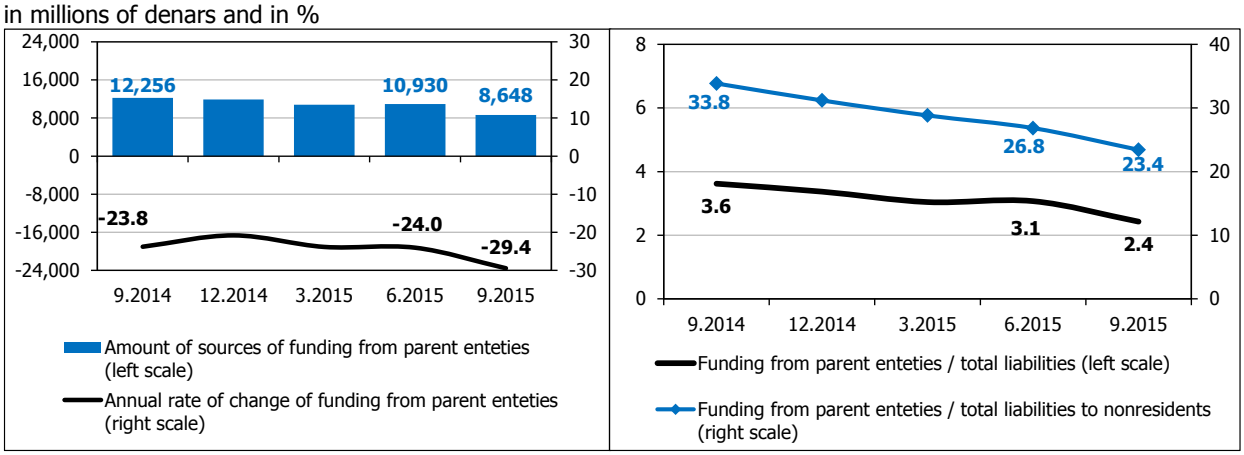
Chart 81
Liabilities to (left) and claims on (right) non-residents
in millions of denars and in %



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

The Macedonian banking system is characterized by the gradual reduction of the importance of the sources of funding provided by parent entities. Thus, the share of liabilities to parent entities (including subordinated liabilities and hybrid capital instruments) in the total liabilities of the domestic banking system, as well as liabilities to non-residents constantly decreased and in the third quarter of 2015 it was reduced to 2.4% and 23.4%, respectively.

Chart 82
Liabilities to parent entities of banks
in millions of denars and in %

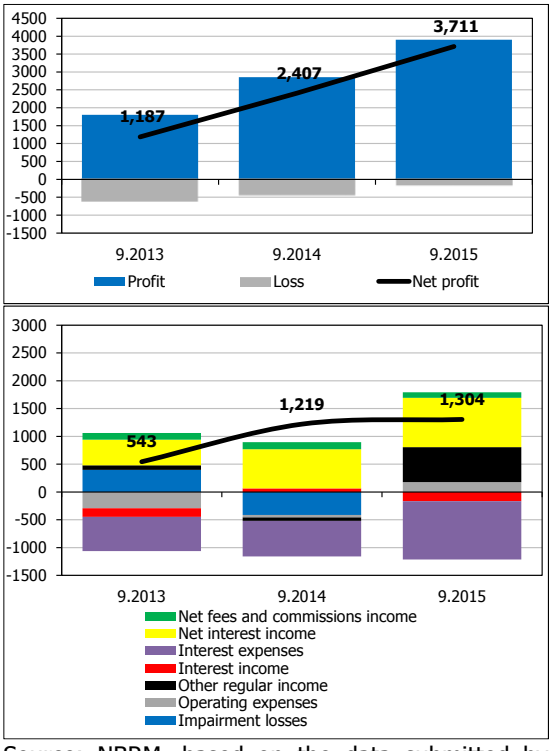


Source: NBRM, based on the data submitted by banks.

3. Profitability

Profitability of the banking system continues to strengthen, whereby the profit realized in the first nine months of 2015 increased by 54,2% compared to the profit realized in the same period last year. The reason for the increased profits are the decreased interest expenses that caused growth of the net interest income, as well as the growth of other regular income. Profitability indicators have improved, and the banks' operational capability of generating revenues that cover the costs of operation has increased, too. Compared with September 2014, the number of banks that have made profits increased from nine to ten, and their share in total assets of the banking system from 68.6% buildup to 90.7%. Positive financial results are generated mainly by larger banks, with almost 86% of the total financial result being concentrated. The reduction of lending and deposit interest rates continued in the first nine months of 2015.

Chart 83
Net profit after taxation (top) and annual change in main income and expenses (bottom)
in millions of denars



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

3.1 Income, expenses and indicators of profitability and efficiency of the banking system

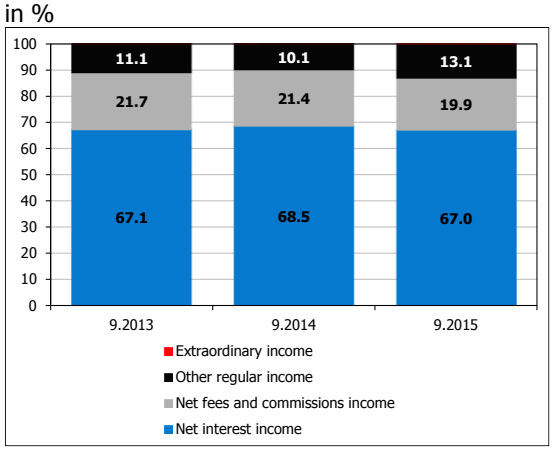
In the first nine months of 2015, **total income of banks** (total regular income[44] and extraordinary income) increased by Denar 1,632 million, or 11.6%, compared with the previous year and reached Denar 15,723 million. The largest contribution (of 54.3%) is that of the increased net interest income (by Denar 885.4 million or 9.2%), which, in turn, was due to the **reduction of interest expenses** (by Denar 1,050 million, or 19.5%) with the **insignificant decrease of interest income** (by Denar 164.3 million or 1.1%). An additional contribution (of 38.6%) to the increase in total revenues had other regular income, which increased by Denar 629.8 million[45], or 44.3%. Other income categories (net income from commissions and extraordinary income) had a smaller contribution (of 6.2% and 0.9%, respectively) in the growth of total revenues.

These developments have caused insignificant changes in the structure of total revenues in the first nine months of 2015 compared to the previous year. Thus, **net**

[44] Total regular income includes: net interest income, net commission income and other regular income (net trading income, net income from financial instruments carried at fair value, net income from exchange rate differentials, income from dividends and equity investments, net gains from sale of financial assets available for sale, capital gains from assets sales, release of provisions for off-balance sheet items, release of other provisions, income from other sources and income based on collected claims previously written off).

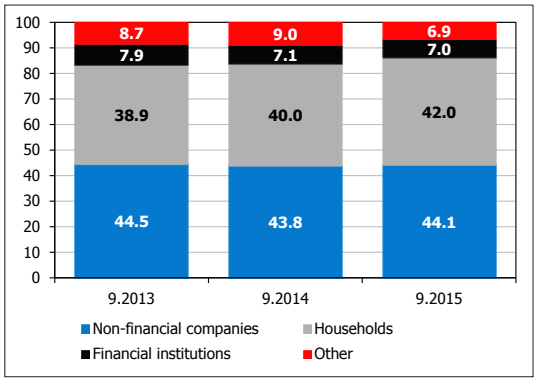
[45] The growth of other regular income (about 58%) is due to the capital profit from sale of assets of one bank.

Chart 84
Structure of total income
in %



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

Chart 85
Sector structure of interest income
in %



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

interest income still has the largest share in total revenues of banks.

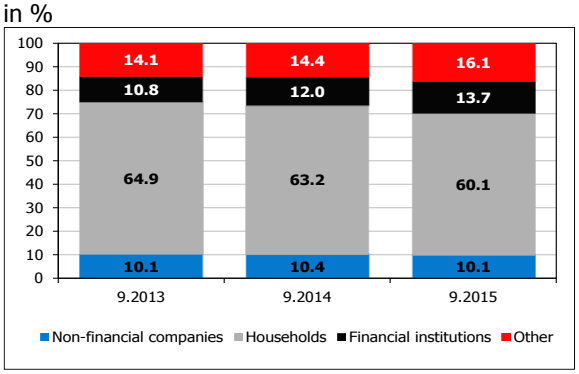
Analyzing individual sectors, the decrease in interest income, in the first nine months of 2015 primarily results from decrease in interest income from other entities, and to a lesser extent from financial companies. **Interest income from other entities**[46] **declined** by Denar 316.7 million or 24.3%, corresponding to almost halved investments in treasury bills. Interest income from financial companies also declined (by Denar 22.4 million, or 2.2%) due to lower interest rates on overnight deposit facility and deposit facility up to seven days with the National Bank[47].

This decline was mitigated by the growth of interest income from households and the growth of interest income from non-financial companies had small contribution. **The growth of interest income from households** (of Denar 274.9 million, or 4.8%) is mainly due to the credit growth to this sector, given the fact that interest rates on loans to households have different trend, but mostly downward[48]. Income from non-financial companies minimally increased, by 0.3%.

The largest contribution (of 76,1%) to the decline in the total interest expenses is that of interest expenses from the household sector, which registered an annual decline of Denar 798.6 million, or 23.5%, amid slower growth in household deposits[49] and decline in interest rates[50] on received deposits from this sector. In spite of the decrease, **interest expenses from the**

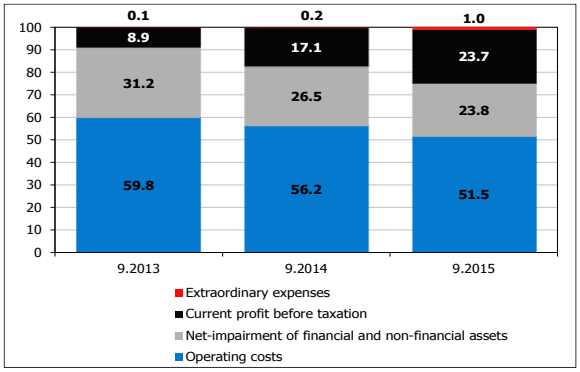
[46] This category includes interest income from investments in treasury bills and securities.
[47] The interest rate on overnight deposit facility with the National Bank decreased from 0.75% (September 2014) to 0.25% (September 2015) and deposits up to 7 days from 1.25% (September 2014) to 0.5% (September 2015).
[48] When comparing September 2015 with September 2014, interest rates on all types of loans (Denar with/without foreign currency clause and foreign currency loans) have decreased, with the exception of interest rates on overdrafts on current accounts and credit cards, which increased. Interest rates on all types of new loans, with the exception of long-term loans registered an upward trend. For more details about the course of interest rates on the website of the National Bank.
[49] For more details on the movements of deposits see the section III. 2.1.2 Deposits of non-financial entities.
[50] When comparing September 2015 with September 2014, interest rates on household Denar term deposits with and without foreign currency clause decreased by 1.1 and 3.3 percentage points, respectively, while foreign currency term deposits of households fell by 0.5 percentage points. In the same period, interest rates on newly received deposits also decreased, so that interest rates on Denar term deposits without foreign currency clause reduced from 3.2% to 2.3%, with foreign currency clause from 6.2% to 2.0%, and the foreign currency term deposits from 1.3% to 1.2%.

Chart 86
Sector structure of interest expenses
in %



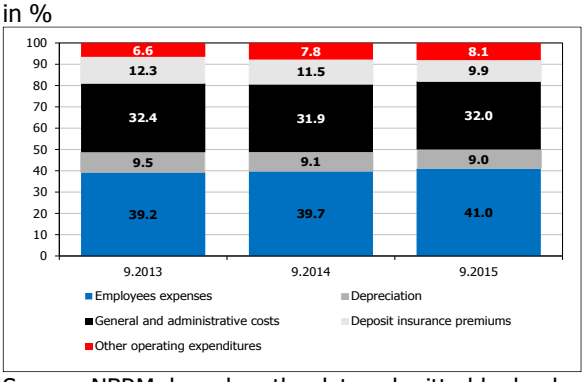
Source: NBRM, based on the data submitted by banks.

Chart 87
Usage of total income
in %



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

Chart 88
Structure of operating costs
in %



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

household sector still have the greatest share in the structure of interest expenses. Contribution (of 11.5%) to the reduction of interest expenses of banks was also made by the reduction in interest expenses from non-financial companies (based on time deposits)[51], and interest expenses from other entities (mainly interest expenses for financial companies-non-residents based on borrowings), which contributed 7.5% of the total decrease. Interest expenses from financial companies (for term deposits of pension funds and insurance companies) also contributed (5.0%) for the reduction in total interest expenses.

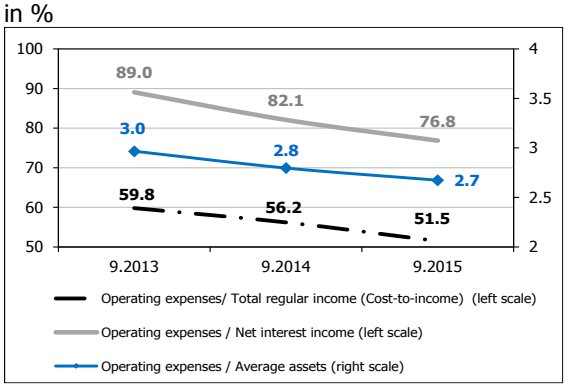
Operating costs[52] and impairment, despite their reduced share still "spend" most of the total income of banks. The lower amount of total regular income that is spent to cover operating costs is an indicator of the **improved operational efficiency of the banking system,** which is also confirmed by other indicators.

However, despite the lower share in total income in the first nine months of 2015, banks' operating costs increased by Denar 176 million, or 2.2% relative to the previous year. The increase was mainly conditioned by the growth of staff costs (of Denar 176 million or 5.6%) as well as the growth of general and administrative expenses, other operating costs[53] and depreciation. In contrast, within the operating costs, the decline was most noticeable in premiums for deposit insurance[54] (by Denar 108 million, or 11.9%) and in special reserve for off-balance sheet exposure (by Denar 31 million, or 8.8%).

No major changes have been noticed in the structure of operating costs. Staff costs and general and

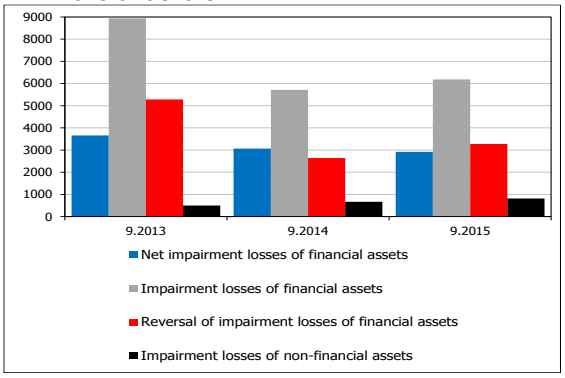
[51] Compared with September 2014, a downward trend was observed in all interest rates on deposits of non-financial companies.
[52] Banks' operating costs include: staff costs, depreciation, general and administrative expenses, deposit insurance premiums and other operating costs, except extraordinary expenses.
[53] Other operating costs consist of: special reserve for off-balance sheet exposure, other provisions and expenses from other sources.
[54] As of 1 June 2014, the rate of deposit insurance premium was lower by 0.2 percentage points and equals 0.5% annually, but the fall in deposits as the basis for calculating the premium has also caused a reduction of these costs.

Chart 89
Bank efficiency indicators
in %



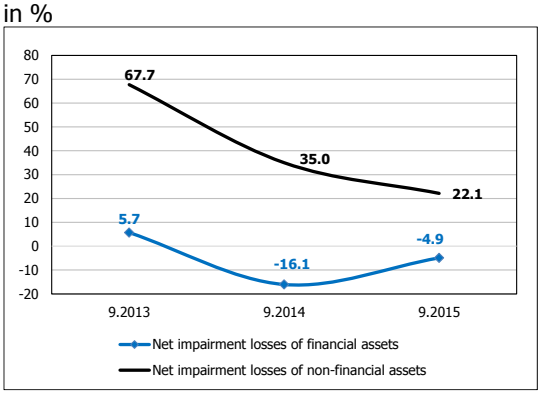
Source: NBRM, based on the data submitted by banks.

Chart 90
Impairment of financial and non-financial assets
in millions of denars



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

Chart 91
Annual growth rate of impairment loss
in %



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

administrative expenses have further main share (73.0%).

In the first nine months of 2015, banks allocated less impairment of financial assets, by Denar 150 million, or 4,9%[55]. The decrease in net impairment is due to the strong increase of released impairment than the increase in gross impairment (which is related to slower growth in non-performing loans)[56]. Accordingly, the share of net interest income used to cover the impairment of financial assets decreased from 31.8% (as of 30 September 2014) to 27.7% (as of 30 September 2015).

The impairment of non-financial assets (foreclosed property) continues to grow, but at a slower pace and at the end of September amounted to Denar 818 million (by Denar 148 million, or 22,1% more compared to the same period last year). This increase is mainly due to the regulatory annual impairment of foreclosed assets of at least 20%.

In 2015, the increased profit of the banking system had a positive impact on the main indicators of banks' profitability. Compared to the previous year rates of return on assets and equity have increased, and also, banks' profit margin[57] has significantly improved.

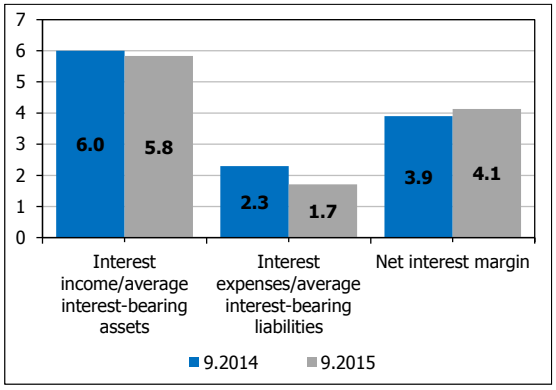
[55] For comparison, at the end of September 2014, net impairment of financial assets (loans and similar claims), decreased by Denar 587 million, or by 16.1%, on an annual basis.
[56] In the first nine months of 2014, non-performing loans had growth of 12.9%, while growth in the first nine months of 2015 amounted to 8.5%.
[57] Profit margin is the ratio of operating profit (loss) to total regular income.

Table 3
Profitability and efficiency indicators of the banking system
in %

	9.2014	9.2015
Rate of return on average assets (ROAA)	0.9	1.2
Rate of return on average equity (ROAE)	7.6	11.1
Cost-to-income ratio	56.2	51.5
Non-interest expenses/Total regular income	62.3	58.2
Labor costs /Total regular income	22.3	21.1
Labor costs /Operating expenses	39.7	41.0
Impairment losses of financial and non-financial assets /Net interest income	38.8	35.5
Net interest income /Average assets	3.4	3.5
Net interest income /Total regular income	68.5	67.0
Net interest income /Non-interest expenses	109.9	115.2
Non-interest income/Total regular income	37.6	39.7
Financial result/Total regular income	17.1	23.6

Source: NBRM, based on the data submitted by banks.
Indicators by groups of banks are shown in Annex 36.

Chart 92
Net interest margin
in %

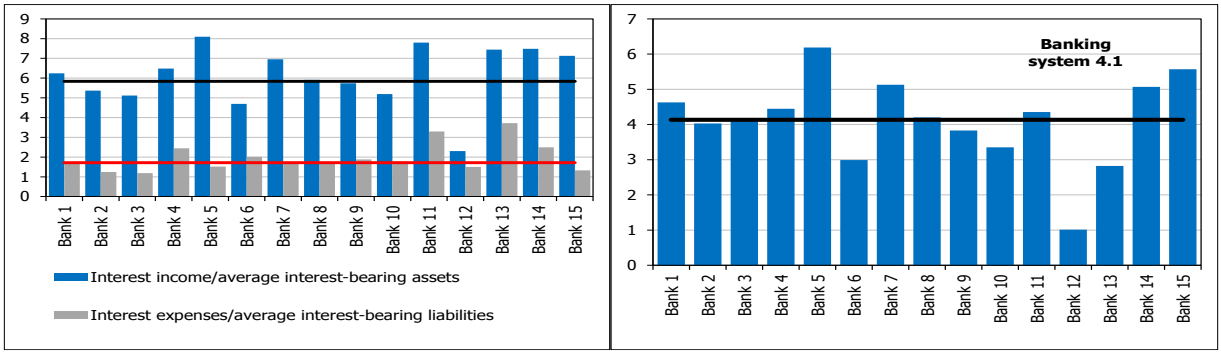


Source: NBRM, based on the data submitted by banks.

The annual increase in the net interest margin[58] reflects the more evident annual growth in net interest income (by 9.2%) compared to the growth of the average interest-bearing assets (by 1.7%). In fact, the main cause of the increase in the interest margin again are the reduced interest expenses, which also contributed to the annual reduction of interest expenses per unit of interest-bearing liabilities. On the other hand, reduced lending interest rates have caused a slight decrease in interest income per unit of interest-bearing assets. Analyzing by bank, six of fifteen banks reported higher net interest margin than the net interest margin earned by the banking system, which stood at 4.1% as of 30 September 2015.

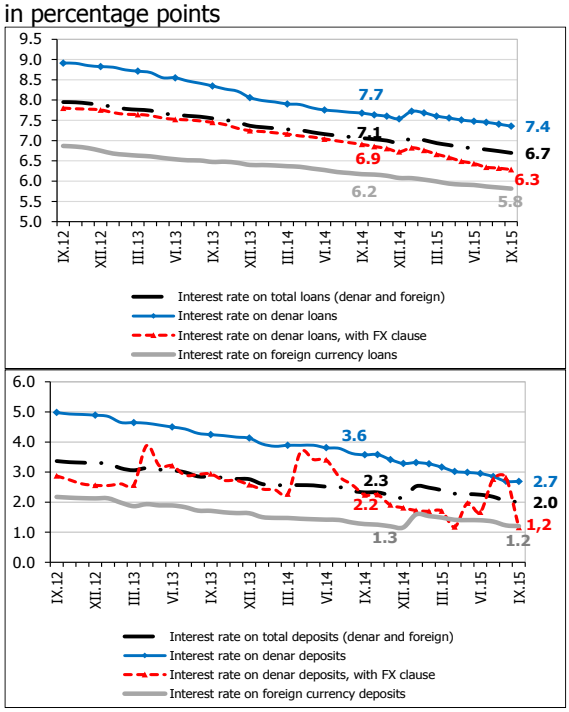
[58] Net interest margin is calculated as a ratio between net interest income and average interest-bearing assets. Average interest-bearing assets are calculated as the arithmetic average of the amounts of interest-bearing assets at the end of the first six months of the current year and the end of the previous year.

Chart 93
Income/expenses in relation to interest-bearing assets/liabilities (left) and net interest margin, by banks (right)
In %



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

Chart 94
Lending (top) and deposit interest rates (bottom)
in percentage points



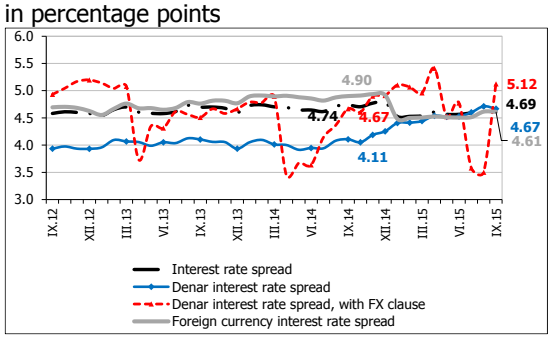
Source: NBRM, based on the data submitted by banks.

3.2 Movements in interest rates and interest rate spread[59]

The reduction in lending and deposit interest rates continued in the first nine months of 2015, amid unchanged level[60] of the policy rate of the National Bank, but some loosening of other instruments. With this analysis, it should be taken into account that from January 2015, data on interest rates of banks and savings houses are collected according to the new methodology (data according to the new and previous methodology can not be fully compared, so that the annual difference for September 2015, compared to September 2014, despite the change of the relevant interest, it includes in itself the effect of methodological changes)[61]. In relation to September 2014, **the interest rate spread slightly decreased** (by 0.05 percentage points), mainly due to more pronounced reduction in lending and deposit interest rates. According to currency structure, **the interest rate spread recorded**

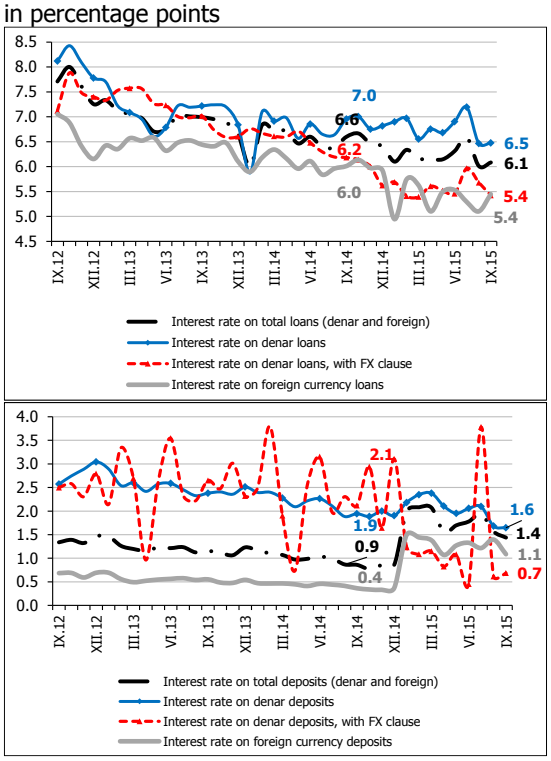
[59] The analysis of interest rates and interest rate spreads is based on time series which includes only the weighted interest rates on deposits in euros and in dollars, whereby it should be borne in mind that over 90% of foreign currency deposits are in euros.
[60] Since the last change in July 2013, the interest rate on CB bills (3.25%) remained unchanged.
[61] Differences between the old and the new methodology include: 1) banks and savings houses are now considered reporting entities, unlike previously when this function was performed only by banks; 2) household sector, besides natural persons and self-employed professionals, includes non-profit institutions serving households, unlike the old methodology; 3) inclusion of financial lease in the financial instrument - loans; 4) interest rates on sight deposits and overnight deposits are not included in the calculation of total deposits as in the old methodology, but are being recorded in a separate form; and 5) revolving loans are not included in the calculation of interest rates on overdrafts (as was the case in the old methodology), but are reported in a separate form. The new interest rate methodology mainly affected the level of deposit interest rates because interest rates on sight deposits and overnight deposits are no longer included in the calculation of interest on total deposits.

Chart 95
Interest spread, by currency
in percentage points



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

Chart 96
Lending (top) and deposit interest rates (bottom) of new loans and newly accepted deposits
in percentage points

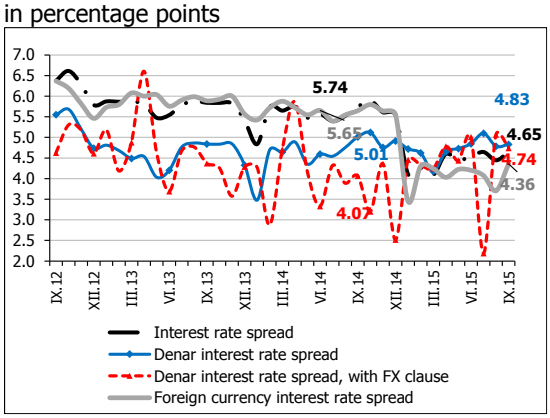


Source: NBRM, based on the data submitted by banks.

narrowing due to larger decrease in interest rates on foreign currency loans (by 0.4 percentage points), in terms of reduction of interest rates on foreign currency deposits (by 0.1 percentage points). On the other hand, **the interest rate spread in denars increased** as a result of the faster decline in deposit interest rates than lending interest rates.

The reduction in lending and deposit interest rates is more pronounced if the analysis covers only new loans and newly accepted deposits (but not the stock of total loans and deposits). The interest rate spread narrowed by 1.1 percentage points, mainly due to the growth of interest rates on total deposits, with a decline in interest rates on total loans. The mentioned methodological changes affected the determining of the interest rates, as well.

Chart 97
Interest rate spread, new loans and newly accepted deposits
in percentage points



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

The interest rate spread in foreign currencies decreased by 1.3 percentage points, while the reduction in the interest rate spread in denars (without currency clause) was lower and amounted to 0.2 percentage points. This trend in foreign currencies is a result of the cut in interest rates on new foreign currency loans (0.6 percentage points), compared to the interest rates on newly accepted foreign currency deposits, which grew by 0.7 percentage points compared to the level in September 2014. Analyzing the Denar interest rate spread, lending interest rates registered a faster decline (0.5 percentage points), compared to deposit rates (which fell by 0.3 percentage points). The interest rate spread in denars with foreign currency clause is variable due to the extremely small amount of Denar deposits with foreign currency clause.

ANNEXES