National Bank of the Republic of Macedonia

Supervision, Banking Regulation and Financial Stability Sector Financial Stability and Banking Regulations Department



REPORT ON THE RISKS IN THE BANKING SYSTEM OF THE REPUBLIC OF MACEDONIA IN THE FIRST QUARTER OF 2015



Contents

I. Sı	ummary 3
II.B	ank Risks5
1.	Credit risk6
1.1	Materialization of credit risk in banks' balance sheets
1.2	Capacity of banks to absorb losses from non-performing loans12
1.3	Other possible sources of materialization of credit risk
1.4	Stress-testing - simulation of rising credit risk16
2.	Liquidity risk17
2.1	Dynamics and composition of liquid assets18
2.2	Liquidity indicators24
2.3	Maturity structure of assets and liabilities
2.4	Stress testing - simulations of liquidity shocks27
3.	Currency risk29
4.	Interest rate risk in the banking book32
5.	Insolvency risk36
5.1.	Solvency and capitalization ratios of the banking system and level of risk36
5.2.	Movements and quality of the own funds of the banking system37
5.3.	Developments and structure of capital requirements and available capital of the banking system
5.4.	Stress testing of the resilience of the banking system to hypothetical shocks40
	STRUCTURAL FEATURES, SIGNIFICANT BALANCE SHEET CHANGES AND FITABILITY OF THE BANKING SYSTEM42
1.	Number of banks and ownership structure of the banking system43
2.	Banks' activities45
2.1	Loans to non-financial entities46
2.2	Deposits of nonfinancial companies48
2.3	Other activities51
3.	Profitability54
3.1	Income, expenses and indicators of profitability and efficiency of the banking system54
3.2	Movements in interest rates and the interest rate spread
	EVEC 61



I. Summary

Against the background of an extended solid economic growth, and in circumstances of severe internal turmoil and risks and uncertainties due to the slow recovery of the EU countries, in the first quarter of 2015 total activities of the banks in the Republic of Macedonia minimally changed. Deposits of non-financial entities continued to grow, however at a slower pace, with the quarterly growth rate being the lowest in the last seven quarters. Growth in deposits is fully determined by the new household savings, although they are halved compared with the growth registered in the previous quarter. Somewhat slower denarization of deposits was noticed, which is evident from the increased quarterly and annual growth of households' foreign currency deposits. The growth of bank lending to the non-financial sector, which marked the year 2014, continued in the first three months of 2015 but at a slower pace, and the main engine of growth were household loans.

In the first quarter of 2015 the quality of the loan portfolio of the banking system was maintained, with the share of non-performing in the total loans at the common level between 11% and 12% of total loans. The growth of non-performing loans amidst slower bank lending caused some increase in the share of non-performing in the total loans as of 31 March 2015, reaching 11.6%, which was mainly driven by corporate loans. After the cut-off date of this Report, the growth of total non-performing loans slowed down, which given the acceleration of bank lending, caused some decrease in their share in total loans (11.5% in June 2015). The threat for the banks' own funds from the possible materialization of the credit risk from nonperforming loans is not high due to their high coverage with allocated impairment, but also because of the satisfactory volume and quality of banks' own funds. As for households, the rate of non-performing loans continued to decline, which amid higher non-performing loans in this sector is mainly supported by the accelerated credit growth. The present signals of possible growing future risks from the households' loan portfolio (due to the faster growth in consumer loans and eased conditions for their approval) requires from banks to strengthen their systems in the granting of consumer loans, but also to monitor the regularity of repayment and timely identification of financial difficulties among these customers.

In the first three months of 2015, banks increased their investments in government bonds, which corresponded with the increasing supply of these securities. This in turn contributed to maintaining the already high liquidity of banks. Also solvency of the banking system, observed through the rate of capital adequacy, increased due to reinvestment of profits with some banks and, consequently, the growth of own funds. The results of the stress test conducted on 31 March 2015, are generally better compared to the end of 2014 and indicate satisfactory resilience of banks to simulated shocks. The increased amount of own funds allowed further increase of "free" capital above the minimum level required to cover the risks, which represents half of the total own funds.

Other risks have little importance for the stability of the banking system. Exposure to the interest rate risk in the banking book is still negligible, despite its increase in the first quarter of 2015. The short currency position of both non-financial sectors (households and companies), highlights the importance of currency risk to their stability and consequently the stability of banks, the essential prerequisite for which is the policy of stable exchange rate of the denar in relation to the euro.



Amid still present risks from the loan portfolio of banks and amid historically low levels of interest rates on deposits and narrowed space for further cuts, maintaining profitability is a significant challenge for banks in the future period, in circumstances where the driver of the improved profitability is the decline in interest expenses.



II. Bank Risks



1. Credit risk

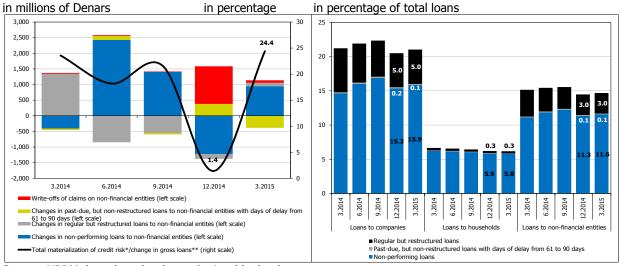
In the first quarter of 2015, the loan portfolio of the banking system maintained its quality at a level similar to the previous quarter, with a share of non-performing in the total loans at the level between 11% and 12%. In this quarter, the growth of non-performing loans, amid more pronounced slowdown of bank lending activity, contributed to some increase in the share of non-performing in total loans of 11.6%. With companies, this share reached 15.9%, which was also due to the weak credit support to this sector. However, the growth of nonperforming loans has registered some deceleration after the cut-off date of this Report, which amid the simultaneous acceleration of bank lending activity, caused a reduction in the share of non-performing loans in total loans to non-financial entities to 11.5% in June 2015. The threat for the own funds of the banking system from the possible materialization of the credit risk from non-performing loans is not high, given that these loans have high coverage with allocated impairment (83.7% with their own and over 100% with total impairment). Moreover, the high coverage of the total credit exposure to non-financial entities with some form of collateral reduces the rate of expected losses from credit exposure and subsequently "mitigates" the level of credit risk taken by banks. Lower concentration of credit risk, and the growth of restructured regular loans due to returning of part of the restructured non-performing loans in the regular status, are considered favorable developments in the first quarter of 2015. The still presence of restructured non-performing loans requires further strengthening of banks' capacity for timely and appropriate adjustment of the credit conditions to the deteriorated financial situation of the customers, which would eventually contribute to slowing the growth of non-performing loans and to overall improvement in the quality of banks' credit portfolios.

1.1 Materialization of credit risk in banks' balance sheets

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 volume of materialization of credit risk in banks' portfolios (in any of the forms analyzed) is equal to one quarter (24.4%) of the growth of gross loans of the banking system in the first quarter of 2015.

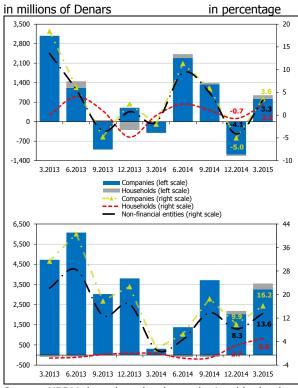


Chart 1 Materialization of credit risk in banks' credit portfolios



Note (left chart): *The total materialization of the credit risk (on annual basis) is calculated as the sum of actual write-offs of claims, the growth of foreclosures based on outstanding claims and the growth of non-performing loans, regular restructured loans and due part of non-restructured loans overdue from 61 to 90 days. ** The total change in gross loans refers to the annual growth in gross loans including claims written off for the year and the annual growth of foreclosures based on outstanding claims.

Chart 2 Quarterly (top) and annual (bottom) growth rate of non-performing loans to non-financial entities and individual sectors



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

After improving the quality of banks' loan portfolio in the last quarter of 2014, in the first quarter of 2015 there was certain acceleration in the annual growth rate of non-performing loans, which stood at 13.6%. The quarterly growth rate of non-performing loans has shifted from a negative into a positive zone of movement.

The growth of non-performing loans (quarterly and annual) is mostly due to the growth of non-performing loans to companies, with a smaller number of customers. Thus, in the first quarter of 2015, the growth of non-performing loans reflects the deteriorating performances of some customers from "construction" and "industry".

After several years of continuous maintenance of non-performing loans to households at an almost unchanged level, at the end of March 2015 there was some upward movement, on both annual and quarterly basis. Moreover, for the first time since the second quarter of 2013 non-performing loans to households registered a



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

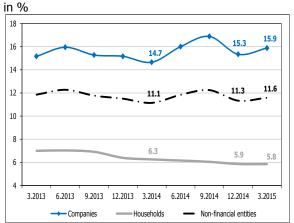
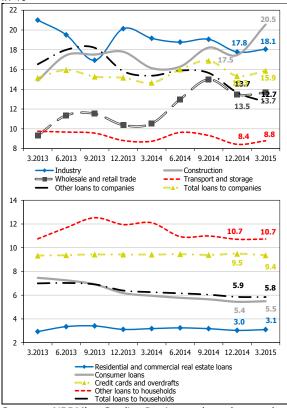


Chart 4
Share of non-performing in total loans to companies - by activities (top) and to households - by credit products (bottom) in %



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

double-digit contribution to the quarterly growth of total non-performing loans and the highest contribution to the annual growth since mid-2012. Observed by certain credit products, upward movement was most evident in the non-performing consumer, housing and credit card loans, which are also the most used types of loans.

The growth of non-performing loans amid slower bank lending activity contributed to a certain increase in the share of nonperforming loans in total loans to 11.6%. This share among companies is 15.9%, which is a result of the growth of non-performing loans, but also of the weaker credit support to this sector. The rate of non-performing loans¹ to households continued to decline and reduced to the lowest level since 2008. This movement is due to the increased lending to this sector, on which banks focused almost all their credit support in the first quarter of 2015, although non-performing loans to households registered an upward movement. The growth of nonperforming loans to households is not high, but still it deviates from previous growth rates, which moved around zero.

The rate of non-performing loans declined to some extent after the cut-off date of this Report and it reached 11.5% in June 2015.

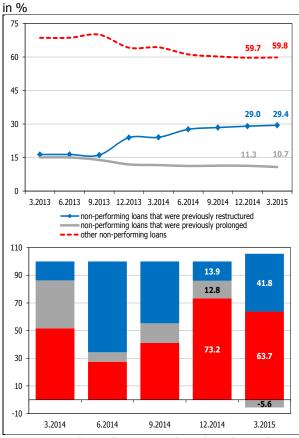
According to the rate of non-performing loans, the highest is the credit risk in banks' claims on companies from "construction" and "industry". According to the dynamics of the indicator, in the first quarter of 2015 the most significant increase in the rate of non-performing loans was registered in the "construction" of 3.1 percentage points, followed by "transport and storage" and "industry". The rate of non-performing loans among households has registered a slight upward movement in the residential and in consumer loans.

8

¹ The rate of non-performing loans is a share of nonperforming loans in total loans.



Chart 5 change in credit conditions (top) and contribution of individual types of loans to the growth in total non-performing loans (bottom)



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

Slightly less than half, or 40.2% of Structure of non-performing loans by type of total non-performing loans at the end of the first quarter of 2015 were previously prolonged or restructured, restructured after their transition to nonperforming status. All restructured nonperforming loans account for about 30% of total non-performing loans and have continuously increased their share starting from the end of 2013. This movement shows that in some cases banks belatedly restructure the claims on customers, because they already received a non-performing status. This is confirmed also by the high share of loans with non-performing status in the structure of total restructured loans (52.5%). The growth in restructured non-performing loans is in most part (60%) arising from loans that had a nonperforming status at the time of their restructuring, and to a lesser extent (40%) it is due to the previously restructured loans that migrated to a non-performing status. This is confirmed also by the lower percentage of restructured loans with regular status that over a period of one quarter turn into nonperforming loans². In the first quarter of 2015, non-performing restructured loans caused 41.8% of the growth of total non-performing loans, or three times more than at the end of 2014, when most of the growth in nonperforming loans was conditional on other loans in which there was no change in the contractual terms.

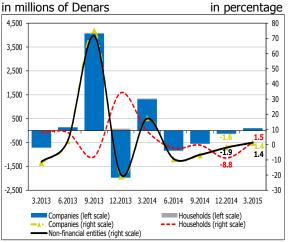
> Signal for the materialization of the credit risk is the movement of restructured regular loans, which might have received a non-performing status if banks had not changed the credit terms to customers who are facing financial difficulties. Namely, those are claims on customers faced with difficult financial situation, which is why these loans are treated as "riskier" loans. However, the growth of restructured regular loans causes only a quarter of the growth of total restructured loans which indicates the still

9

² In the first quarter of 2015, 2.0% of the restructured regular loans migrated to a non-performing status, as opposed to the 3.4% of those loans that migrated in the last quarter of 2014.

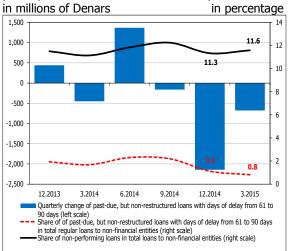


Chart 6 Quarterly change of restructured regular loans, by individual sectors



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

Chart 7 Quarterly growth in the non-restructured loans with due part for collection of principal between 61 and 90 days



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

significant contribution of restructured nonperforming loans on the dynamics of total restructured loans, but it is also an additional signal of deteriorating loan portfolio quality.

Contrary to the previous quarter, when the regular restructured loans declined due to the "failure" of restructuring or due to migration into a non-performing status, in the first quarter of 2015 there was a small increase in the restructured regular loans. Just under two thirds (62.8%) of this growth stem from the restructured non-performing loans which at the end of the guarter returned to a regular status. This favorable change gives certain signals of improvement of the customers with financial difficulties, or success of the completed restructuring. The growth of restructured regular loans to a lesser extent (37.2%³) can be considered an indicator of better performances of the banks in terms timely identifying the financial difficulties of customers consequently, timely and proper restructuring of claims according to the needs and capabilities of their customers, which should ultimately lead to improved repayment of liabilities and limited growth of nonperforming loans. The average risk level of restructured regular loans amounted to 24.0%, which corresponds to a risk category "C", in the structure of which loans to companies prevail.

Past due loans with delayed repayment of principal between 61 and 90 days represent a potential risk of increase in the non-performing loans in the following month, and also a form of possible materialization of credit risk in banks' portfolios. In the first quarter of 2015, these loans decreased⁴ (by Denar 678 million,

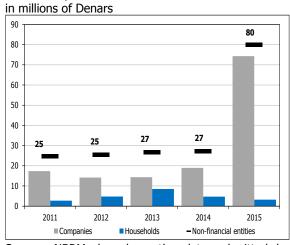
³ This part of the growth of restructured regular loans arises from new restructured loans.

⁴ The more substantial quarterly decrease of non-restructured loans past due between 61 and 90 days as of 31 December 2014 is due to the methodological change in the determination of loans past due between 61 and 90 days, which came as a result of the amendments to the regulations on credit risk from 1 January 2014 (according the Guidelines for implementing the Decision on the content and functioning of Credit Registry, "Official Gazette of RM no. 14/2014 and 83/2015"). Thus, 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.



or 27%), corresponding to the growth of nonperforming loans (of Denar 635 million or 2.2%) in January 2015, which can be interpreted as a non-repayment of maturing debt on the part of due loans between 61 and 90 days at the end of 2014, and their migration to a nonperforming status already in the following month. Assuming a similar event also in the first quarter of 2015, i.e. that the due debt of none of these loans will be collected in the following month (April), as of 31 March 2015, 0.8% of total regular loans would have become nonperforming, which entails that only on this basis, non-performing loans would rise by Denar 1,838 million, or 6.2%. However, the growth registered in the following month (April 2015) is significantly lower and equals 0.8% or Denar 223 million, indicating a satisfactory collection of the loans with past due part of 61 to 90 days.

Chart 8
Write-offs made during the first quarter, over the years

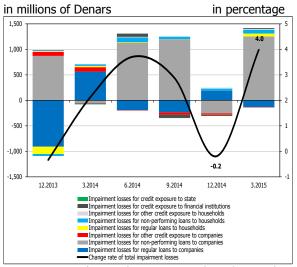


Source: NBRM, based on the data submitted by banks.

In the first quarter of 2015, Denar 80 million were written off, which is, on average, four times more than write-offs made during the first quarter in the **previous four years.** Their amount is much lower than write-offs in the previous quarter (fourth quarter of 2014) having in mind the common practice of banks to write off claims mainly at the end of the year. Write-offs made in the first quarter of 2015 have had little impact on the dynamics of nonperforming loans, so that if they would not be made, the quarterly growth rate of nonperforming loans would be higher by only 0.3 percentage points. Write-offs are almost entirely related to companies, while in the overall repayment of already written-off claims the collections from natural persons predominant. Given the high prevalence of loans classified in risk category "E" that have been provisioned for a longer period of time and are still present in the banks' balance sheets, their possible write-off in the future will lead to limiting the growth of non-performing loans. Most of the written-off loans and the further decrease in foreclosed assets based on outstanding claims due to the sale of part of

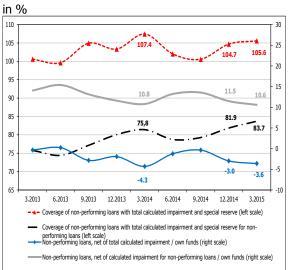


Chart 9
Quarterly change of impairment for certain sectors



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

Chart 10 Coverage of non-performing loans and share of net non-performing loans in banks' own funds



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

this property indicate continuation of last year's more pronounced involvement of banks in solving the "bad" loan portfolio. However, it should be borne in mind that the majority of the sold property, previously foreclosed on the basis of outstanding claims was sold by approving a loan to the buyer, which means establishing new credit exposure of the bank.

1.2 Capacity of banks to absorb losses from non-performing loans

In the first quarter of the year, impairment of the total loan portfolio increased by Denar 1,277 million or 4.0%. This represents the highest growth in the last two years and fully stems from the impairment of non-performing loans to companies.

The coverage of non-performing loans with allocated impairment is high.

This indicates a satisfactory capacity of the banking system to absorb potential credit losses, and it also "mitigates" the credit risk. At the end of the first quarter of 2015, the coverage with total allocated impairment increased to 105.6%, and with the impairment for the non-performing loans to 83.7%. The coverage of non-performing loans with their own impairment has increased in the last four quarters and is at historically the highest level⁵, which could indicate banks' perceptions of increased risk of their claims. Fully provisioned non-performing loans account for 60.6% in the structure of non-performing loans to nonfinancial entities, while the impairment allocated for those loans accounts for 72.5% of the impairment for the non-performing loans. If banks write off the loans that are fully provisioned, the coverage of non-performing loans with the impairment allocated for them would be reduced to 58.6%. Assuming this, the share of non-performing in total loans would be more than twice lower, i.e. it would amount to 4.9%.

⁵ This indicator has been calculated since 2009, i.e. since the availability of data on impairment only for non-performing loans.



Chart 11 Share of net non-performing loans in own funds, by bank

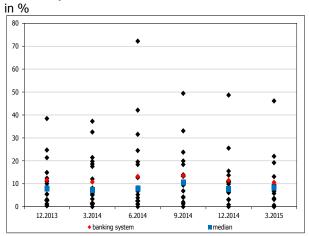
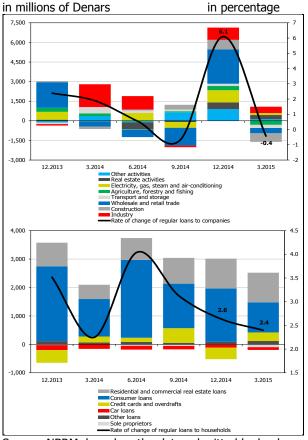


Chart 12 Quarterly growth of regular loans of companies by activity (top) and of households, by credit products (bottom)



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

In the first quarter of 2015, the share of the non-provisioned part of the non-performing loans in the own funds registered a downward movement in most banks and gradually converges towards the median. The number of banks where this share exceeds the level of the banking system is reduced to only four banks (compared with five banks in the previous quarter, and seven banks in the same quarter last year). However, with the banks which have registered a significant deviation from the median, there is a higher risk for their own funds from possible materialization of the credit risk from the non-performing loans.

1.3 Other possible sources of materialization of credit risk

In circumstances of further recovery of the domestic economy, slower growth in lending to non-financial entities in the first guarter of 2015 is partly explained by the high performances at the end of 2014⁶, but also by seasonal factors. Amid slower growth in total loans and growth in non-performing loans, regular loans to companies at the end of the first quarter of 2015 registered a downward movement. Analyzing individual sectors, the decline in regular loans is present in "construction", "wholesale and retail trade" and "transport and storage". The sharpest decline was recorded in "construction", which comes as a result of the growth of non-

13

Given the high coverage of non-performing loans, adverse effects of a possible total non-collection of these loans on the own funds of the banking system are limited. Under an extreme assumption of full uncollectability of non-performing loans and utilization of impairment that is allocated only for these loans, at the end of the first quarter of 2015, the capital adequacy ratio would have been reduced by 1.7 percentage points (almost identical to the end of 2014, 1.8 percentage points).

⁶ In the last quarter of 2014, the highest credit growth since the start of the crisis has been recorded.



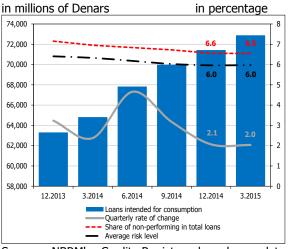
performing loans of this activity, but also the reduced construction activity in the field of construction hydro construction and residential buildings. In contrast, **growth in** regular loans was recorded in industry, which corresponds to the quarterly growth in the value added of this activity and the growth of the industrial activity. In support of the improved performances in industry are the results of the Business Tendency Survey in the manufacturing industry⁷ that point to a rise in the average capacity utilization and more favorable expectations for the future volume of production. Given the aforementioned solid performances and positive outlook of the industry, it is considered that the potential risks arising from the growth of regular loans in this sector are small.

Regular loans to households recorded a slight quarterly slowdown. Growth in the overall credit activity in the first quarter of 2015 almost entirely (93.1%) arises from lending to this sector. The housing loans and consumer loans have identical contribution to growth, after the long-time dominant contribution of consumer loans. These developments are supported by the results of the Lending Survey⁸, which indicate a further net easing of credit conditions, however at a slower pace compared to the previous quarter and increased demand for consumer and housing loans. Given the solid historic rates of collection, greater risks to the recovery of these loans are not expected.

Riskiness of loans intended for consumption⁹ (observed by the rate of non-performing loans) decreased in the first quarter of 2015. However, this type of loans should be closely monitored (both in terms of dynamics and in terms of the lending practices of banks) due to their steady rise in the recent period, amid extremely favorable credit conditions for new borrowers of these types of credit

Chart 13

Dynamics of loans intended for consumption and indicators of their riskiness



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

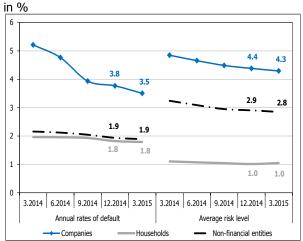
⁷ Source: State Statistical Office.

⁸ Source: Bank Lending Survey, April 2015.

⁹ Loans intended for consumption include consumer loans, credit cards and overdrafts on current accounts.



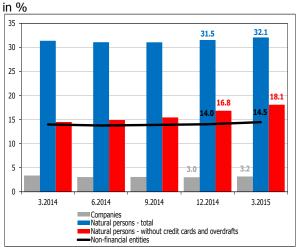
Chart 14
Annual rates of default on credit agreements and the average risk level of regular loans by individual sectors



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

Note: The average risk level is determined as the ratio between the allocated impairment and relevant loans.

Chart 15
Share of the non-collateralized credit exposure in the total credit exposure to non-financial entities and to individual sectors



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

products. For example, the growth of consumer loans, which in the past could go as high as twenty percent on an annual basis, in some way conceals the possible increased riskiness of these loans. An additional signal for the risk level of these loans is the higher rate of non-performing consumer loans relative to the total rate of non-performing loans to households. The need to monitor these loans is reflected in their low coverage with some form of collateral. Thus, non-collateralized consumer loans account for about two thirds of total consumer loans and 46.3% of total loans to households.

Banks in the Republic of Macedonia are obliged to allocate impairment also for the regular loan portfolio. Coverage of regular loans with the impairment allocated for them, i.e. the level of expected losses from these loans is usually relatively low, but it exceeds the realized annual rate of default on loans¹⁰. This points to the conclusion that the banks expect more significant losses and are more careful, so that they allocated impairment greater than the historical rate of default on the credit agreements with a regular status. The average risk level of regular loans to non-financial entities and to individual sectors has registered a downward trend in the past year, which was followed by continued downward movement also of the realized annual rate of default.

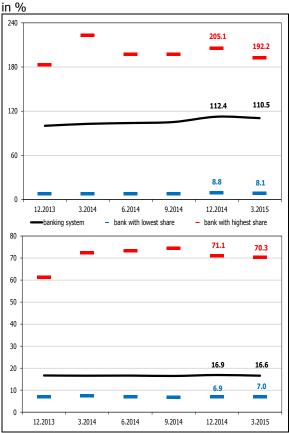
The high coverage of the total credit exposure to non-financial entities with some form of collateral (85.5% of the exposure) mitigates the level of credit risk taken by banks. At the end of the first quarter of 2015, the share of non-collateralized in total credit exposure to non-financial entities and to individual sectors continued to increase moderately, after the long-term reduction of the non-collateralized credit exposure amid tighter collateral requirements of banks.

15

¹⁰ The annual rate of default is calculated as a percentage of the credit agreements with regular status, which for a period of one year receive a non-performing status.



Chart 16 financial entities in the banks' own funds (top) and in the total credit exposure to nonfinancial entities (bottom)



Credit risk concentration, observed Share of the ten largest exposures to non- through the share of the ten largest exposures to non-financial entities in the banks' own funds decreased at the end of the first quarter of 2015, following the continuous upward movement in the previous year. Analyzed by bank, the share of the ten largest exposures to non-financial entities ranges from 8.1% to 192.2%, with a median 98.6% and third quartile 168.6%. The average level of risk of the ten largest exposures of banks is usually low and corresponds with risk categories "A" and "B," but in the structure of the largest exposures of some banks, higher risk exposures were observed. Given that the largest exposures account for a significant portion of the own funds of most banks, maintaining their low level of risk is especially important, as in the event of materialization of the risk of these exposures and the impossibility of their collection, the effect on banks' own funds would be substantial.

> At the level of the banking system, the concentration of the ten largest exposures is low, given that their share in the total credit exposure to non-financial entities decreased and amounts to 16.6%. However, analyzed by individual bank, this share ranges from 7.0% to 34.0%¹¹.

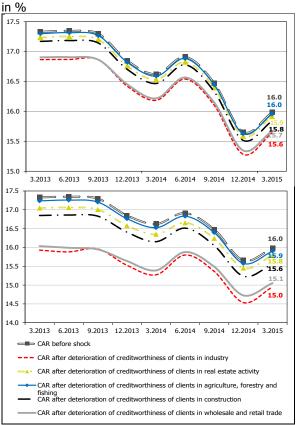
1.4 Stress-testing - simulation of rising credit risk

In order to examine the sensitivity of the banking system to deterioration of the quality of certain loan portfolio segments, regular stresstests are conducted. They consist of simulations hypothetical migration of 10% simulation) and 30% (second simulation) of credit exposure to companies (by activity) and households (by credit products), separately, and to the two sectors together, to the next two higher risk categories. The results of the simulations show resilience banking system to the simulated shocks,

¹¹ The analysis excludes MBDP AD Skopje because of its specific activities.



Chart 17
Capital adequacy ratio, by activity, before and after the first (top) and the second (bottom) simulation for both sectors



Source: NBRM, based on the data submitted by banks. Note: CAR stands for capital adequacy ratio.

and register improvement in comparison with the end of 2014. This is due to the higher capital adequacy of the banking system before the simulations, but also to the less pronounced sensitivity of some banks to the assumed shocks. Thus, the capital adequacy of the banking system does not go below 8% in any of the simulations, although individual hypothetical banks reveal need recapitalization in the event of possible materialization of the simulated shocks. In both simulations, the greatest reduction in the capital adequacy ratio was noticed in the deterioration of the creditworthiness of the customers from "industry" and "wholesale and retail trade" (Annex 27).

2. Liquidity risk

In the first quarter of 2015, banks in the Republic of Macedonia maintained a satisfactory level of liquidity that enabled appropriate liquidity risk management. The share of liquid assets in the total assets and coverage ratios for the various categories of liabilities remained stable. In the first quarter of 2015, the narrowing of the yield from the liquid instruments in denars continued, and there were no major changes in the relative importance of the differences between assets and liabilities according to their residual contractual maturity. Simulations of combined liquidity shocks confirm that the volume of liquid assets available to the Macedonian banking system provide a satisfactory level of resilience to hypothetical liquidity shocks.



Chart 18 Movement and annual growth rate of liquid assets

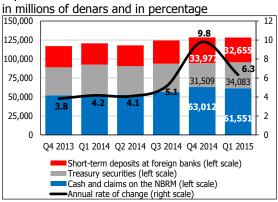
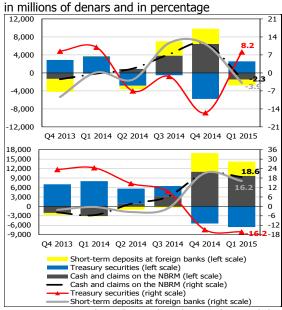


Chart 19

Absolute and relative quarterly (top) and annual (bottom) growth of individual instruments that constitute liquid assets



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

2.1 Dynamics and composition of liquid assets

In the first quarter of 2015, liquid assets¹² of the banking system amounted to Denar 128,289 million, which is a slight decline of 0.2%, i.e. Denar 209 million compared with the end of 2014. However, observed annually their growth continues, albeit at a slower pace compared to 2014. Thus, at the end of the first quarter of 2015, banks' liquid assets rose by 6.3%, i.e. Denar 7.640 million on an annual basis.

Analyzed individual bv financial instruments that constitute liquid assets, cash and funds placed with the NBRM as well as short-term deposits in foreign banks decreased on a quarterly basis. In contrast, after the three consecutive instances of quarterly decline, in the first guarter of 2015, banks' investments in government securities surged. However, these quarterly changes were not that substantial to change the initiated annual trend in the individual instruments that constitute liquid Namely, banks' investments government securities decreased on an annual basis, while investments in financial instruments with the National Bank and in short-term deposits in foreign banks registered annual growth.

¹² 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 20 Structure of cash and claims of banks on the National Bank

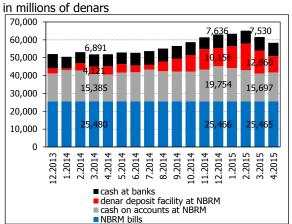
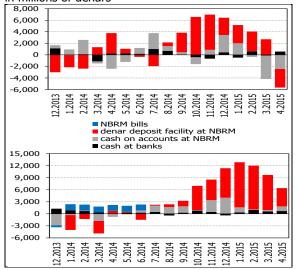


Chart 21
Quarterly (top) and annual (bottom)
absolute growth in the assets and claims of

banks on the National Bank in millions of denars



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

Despite the quarterly decline (by 2.3%), cash and claims of banks on the National Bank are still prevalent financial instruments within the banks' liquid assets, with a share of 48%. Within these frameworks, CB bills had the highest share, followed by total assets on banks' accounts in the National Bank¹³.

In circumstances of limited supply of CB bills, in the first quarter of 2015, **banks increased their investments in the deposit facility** ¹⁴ **with the NBRM.** Hence, the trend of accelerated growth of assets that banks place in a deposit facility with the National Bank and at the same time, the assets placed in this instrument made the highest contribution to the total quarterly and annual growth of total cash and claims on the National Bank.

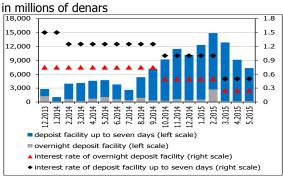
Within the deposit facility at the National Bank, banks placed a significantly higher amount in deposits up to seven days, as opposed to the overnight deposit facility. In March 2015, the National Bank halved the interest rates on the deposit facility, so they stood at 0.25% for overnight deposits and 0.5% for deposits with a maturity of seven days. The reduction of interest rates on overnight deposits, combined with the changes in the manner of implementing the auctions of CB bills, as well as the increased activity of the

¹³ According to the Decision on the reserve requirement ("Official Gazette of the Republic of Macedonia" No. 153/12, 98/13, 166/13, 143/14, 30/15 and 35/15), the average daily outstanding amounts on the bank account at the National Bank are used to meet the reserve requirement of banks based on their liabilities in denars and liabilities in denars with FX clause, as well as 30% of the calculated reserve requirements of banks on the basis of their foreign currency liabilities. Banks can fully utilize their assets on the account with the National Bank on a daily basis.

¹⁴ 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), 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.



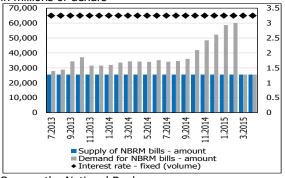
Chart 22 Amount and interest rate on deposit facility with the National Bank



Source: the National Bank

government on the primary market of treasury bills aimed at increasing the newly issued amount, caused some reduction in banks' placements in this monetary policy instrument, which is expected to continue in the further course of 2015.

Chart 23
The amount of supply and demand at auctions of CB bills of the National Bank in millions of denars



Source: the National Bank

In the first quarter of 2015, the CB bills auctions were conducted through a volume tender and interest rate amounting to 3.25%. The supply of CB bills remained to be predetermined, so that their amount did not change in the first guarter of 2015. Attractive yields that CB bills bear acted toward increasing banks' demand over the last year, which continued in the first guarter of 2015. As a result, in March 2015, the National Bank changed the method of allocating the supply among banks at the auctions of CB setting a mechanism effectively limits the banks' demand for CB bills.

In the first quarter of 2015, the net issued amount on the primary market of government securities increased¹⁶ relative to the previous quarter, mainly due to the larger issue of treasury bills. At the same time, the gradual increase in the maturity of issued government bonds continued¹⁷. Hence, **banks' investments in these instruments increased, so that in the first quarter of**

¹⁵ According to the Decision amending the Decision on the CB Bills ("Official Gazette of R.Macedonia" no. 35/2015), the National Bank may determine the method of forming banks' offers according to 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 the auction. In this case, the amount of demand for CB bills of an individual bank is closest to the amount calculated by applying its percentage share in the total supply of CB bills for the actual auction.

¹⁶ 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.

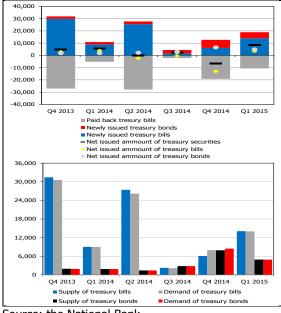
¹⁷ In the first quarter of 2015 government bonds with contractual maturity of 15 years were first issued, accounting for about one

third of the total bonds issued in the first quarter of 2015. As of 31 March 2015, the share of fifteen-year bonds in the total outstanding amount of continuous government bonds amounted to 2.9%.



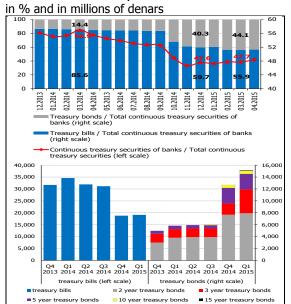
Chart 24 Quarterly dynamics of net issued amount (top) and supply and demand (bottom) of government securities

in millions of denars



Source: the National Bank

Chart 25 Structure of continuous government securities owned by banks



Source: the National Bank

Note: The calculations are made according to the nominal value of government securities owned by banks.

2015, government securities were the only component of liquid assets which registered growth (of 8.2%). Their share in total liquid assets of banks increased from 24.5% to 26.6%, on a quarterly basis. At the end of the first quarter of 2015, treasury bills accounted for about 56% in the structure of the portfolio of banks' continuous government securities. More than half of the continuous government bonds held by banks are two-year government bonds, followed by three-year bonds with a share of just over one quarter, indicating that banks still have stronger incentives to invest in government securities with shorter contractual maturity. The share of banks in the total issued government securities remained below 50% also in the first quarter of 2015.



Chart 26 Amount of short-term deposits with foreign banks (top) and change in the liquid assets by currency (bottom)

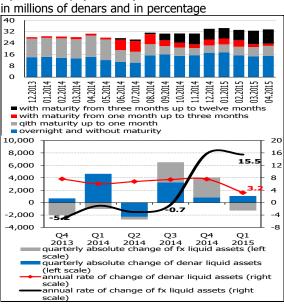
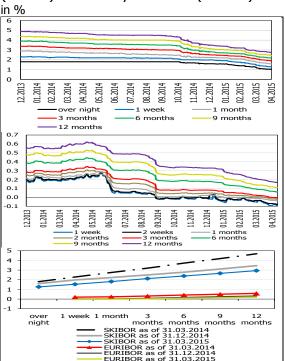


Chart 27
Dynamics of SKIBOR (top) EURIBOR (middle) and their yield curve (bottom)



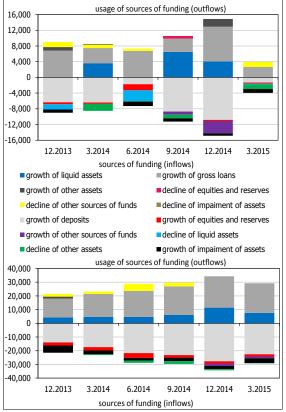
Source: National Bank for SKIBOR and website of the European Money Markets Institute for EURIBOR.

Short-term assets placed in foreign banks registered a quarterly decline of Denar 1,322 million (3.9%), and thus their share in total liquid assets decreased by 1.0 percentage point on a quarterly basis. On the other hand, these assets increased by Denar 4,450 million (16.2%) on an annual basis. Although the structure of these funds is dominated by funds on correspondent accounts in foreign banks, however, in the first quarter of 2015 the trend of increasing their maturity by growth in the share of assets with maturity between three months and one year continued, which may be explained with the intention of banks to optimize yields on these funds, in circumstances when on the international interbank markets even negative interest rates on funds placed in the short term are registered. The quarterly drop in these funds caused a decline in the liquid assets in foreign currency of 3.5% on a quarterly **basis**, whereby their share in total liquid assets of banks at the end of the first guarter of 2015 amounted to 27.7% (28.7% at the end of 2014).

Falling interest rates on the deposit facility with the National Bank create preconditions for the trend of declining interest rates on the domestic interbank market to continue in the first quarter of 2015. On the other hand, the same process is observed on the interbank markets in the Euro area, where under the influence of the stimulating measures of the ECB, interbank rates further penetrated negative zone, especially for small maturities. Thus, further narrowing of the spread between the denar interest rates in the domestic interbank market and the key interbank rates for euros in the Euro **area was registered.** Yield curves of both the SKIBOR and the EURIBOR registered downward movements for all maturity buckets, with the slope of the yield curve for SKIBOR being somewhat more pronounced, indicating a higher spread (premium) built in the domestic interbank interest rates.



Chart 28
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 percentage



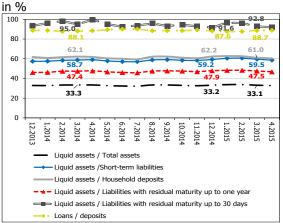
Source: NBRM, based on the data submitted by banks.

In the first quarter of 2015, a decrease in the total volume of new sources¹⁸ of financing provided by banks was registered. Namely, deposits of non-financial entities, as the main generator of the sources of financing, manifested modest quarterly growth, and the total new sources for banks were more diverse compared with the last few quarters. But analyzed on an annual basis, the growth of deposits is still predominant in the creation of new sources of funding of the Macedonian banks. On the other hand, the use of the sources of funding by banks in the first quarter of 2015 was mainly focused on the credit support for domestic non-financial entities and to a lesser extent on deleveraging, which corresponds to the quarterly decline in the other sources of funds. Due to the quarterly decline in liquid assets, they acted toward establishing new sources of funds in the first guarter of 2015, but on an annual basis banks used about a quarter of new sources of funding for investments in instruments that are part of their liquid assets.

¹⁸ 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.

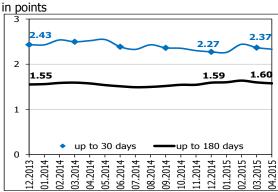


Chart 29 Indicators of solvency of the banking system



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

Chart 30 Liquidity ratios of the banking system



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

2.2 Liquidity indicators

The banking system of the Republic of Macedonia has a sufficient amount of liquid assets. Despite their decline in the first quarter of 2015, liquidity indicators of the banking system¹⁹ remained stable. The share of liquid assets in total bank assets remained at around one third. The coverage of short-term liabilities and deposits of households with liquid assets is approximately 60%, while the coverage of liabilities with contractual residual maturity up to 30 days is over 90%. The ratio between loans and deposits of the banking system as of 31 March 2015 totaled 88.7%, which is almost identical to the end of 2014.

Banking system liquidity ratios²⁰ presented as a ratio between assets and liabilities that mature in the next 30 days and 180 days, at the end of the first quarter of 2015 equaled 2.37 and 1.60 respectively, which is higher than 1, as the prescribed minimum level.

¹⁹ The calculation of the liquidity of the banking system does not take into account the resident interbank assets and liabilities.

²⁰ 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, no. 19/12 and no. 151/13).



Chart 31
Share of liquid in total assets (top), coverage of short-term liabilities with liquid assets (middle) and loans/deposits (bottom) by bank

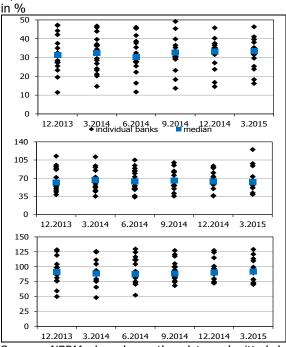
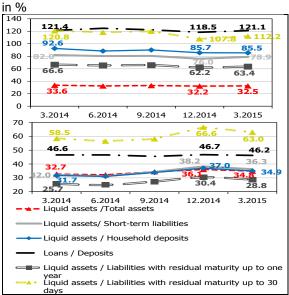


Chart 32
Banking system liquidity ratios, according to currency structure - Denars (top) and FX (bottom)



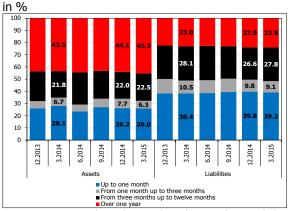
Source: NBRM, based on the data submitted by banks.

Liquidity indicators in the first quarter of 2015, were at the usual levels, also analyzed by individual banks. Thus, as of 31 March 2015 the share of liquid assets in the total assets by individual bank ranged from 16.2% to 46.3%, while the coverage of short-term liabilities with liquid assets ranged from 39.0% to 125,3%. The utilization of bank deposits for lending to the private sector by individual banks ranges from 70.1% to 128.9%, and with four banks this ratio is over 100%.

Also in the first quarter of 2015, liquidity indicators in denars remained on a far higher level compared to the indicators of external liquidity. The increase in investments in government securities contributed to the quarterly growth of denar liquidity indicators. On the other hand, as a result of the quarterly reduction in external liquidity, there was a slight decrease in external liquidity indicators in the first quarter of 2015.



Chart 33 Structure of banks' assets and liabilities by their contractual residual maturity

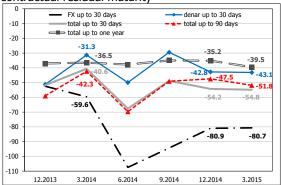


Source: NBRM, based on the data submitted by banks.

Chart 34

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

2.3 Maturity structure of assets and liabilities

The decrease in liquid assets of banks and slowing growth in deposits of non-financial entities caused some minor shifts in the structure of the assets according to their residual maturity. Namely, on a quarterly basis the share of assets with residual maturity greater than one year increased at the expense of the decline in the share of assets with residual maturity of less than three months. Regarding the structure of banks' liabilities according to the contractual residual maturity, certain increase is observed in the maturity bucket of three months to one year primarily due to term deposits.

Moderate changes in the structure of banks' assets and liabilities according to their contractual residual maturity did not cause major changes in the relative importance of the aggregate negative difference between assets and liabilities. Thus, the ratio of the gap between assets and liabilities with residual maturity up to 30 days and the assets with residual maturity up to 30 days is almost the same as at the end of 2014. A modest widening is registered in the gap between assets and liabilities with residual maturity up to 90 days, primarily due to the established dynamics of maturity of deposits that caused growth of liabilities in this maturity bucket.

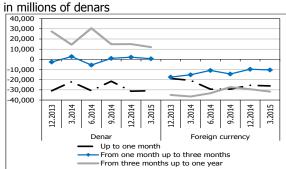
The mismatch between assets and liabilities according to their currency characteristics is still more pronounced with the foreign currency relative to the denar component. In the first quarter of 2015, the decline in liquid assets did not cause major changes in this difference in the individual maturity buckets.

Banks continue to have positive expectations about the stability of their deposits. Thus, at the end of the first quarter of 2015, banks expect that 84.1% of time deposits with residual maturity of up to three



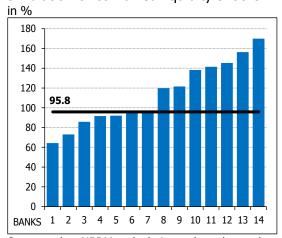
Chart 35

Currency structure of the difference between assets and liabilities according to their contractual residual maturity by individual maturity buckets



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

Chart 36 Reduction of liquid assets in the simulation of combined liquidity shocks



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

months (85.1% as of 31.12.2014) should be stable, i.e. remain in the banks. Similar stability is expected in demand deposits, including funds in transaction accounts. Namely, according to the banks' expectations, 82.6% of these sources of funding will remain available also for the next three months (83.1% as of 31.12.2014). Expected high stability of deposits is the main determinant of the positive aggregate difference between assets and liabilities according to their expected maturity, in all maturity buckets (Annex 30).

2.4 Stress testing - simulations of liquidity shocks

Banks in the Republic of Macedonia have a sufficient amount of liquid funds to service the outflows even in case of an assumed extreme liquidity shock. This shock, in a period of 30 days, would combine outflows of several types of funding sources from the banks²¹. Amid such an extreme liquidity crunch, the banking system as a whole would have sufficient liquidity to execute outflows, but they would be absorbed almost entirely (95.8%), which is almost identical to the result of such simulation at the end of 2014 (95.9%). After the conducted simulation, the share of liquid assets in the total assets of the banking system would amount to 1.82% (1.79% as of 31.12.2014), while the coverage of short-term liabilities²² with liquid assets would be 3.51% (3.45% as 31.12.2014). Analyzed by banks, lack of liquidity totaling Denar 13,148 million, for dealing with such assumed liquidity outflow would occur in seven banks, whose share in total assets of the banking system at the end of

²¹ 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 determining 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 serve in the deposit market.

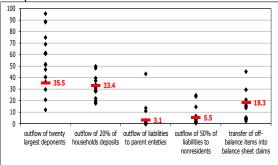
²² The simulations assume that outflows in individual shocks are proportional to the contractual maturity structure of the individual sources of funding for which the outflow as of 31.12.2014 has been assumed. Such obtained maturity structure of assumed outflows serves to calculate short-term liabilities after simulated outflows.



Chart 37

Contribution of individual combined shocks to the decline in the liquid assets in the simulation of a combined liquidity shock as percentage of decline

of liquid assets



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

the first guarter of 2015 is 26.9 %. In the other banks, after such an integrated liquidity shock the share of liquid assets in the total assets would range from 2.4% to 16.7% (3.7% to 14.9% as of 31.12.2014), while the coverage of short-term liabilities with liquid assets would range from 5.1% to 24.6% (7.1% to 22.0% as of 31.12.2014). If for the purpose of this simulation the coverage of liquid assets is expanded with certain financial instruments²³ owned by banks, which can be assumed that could be easily collected or converted into liquid assets within a time frame of 30 days, then the reduction in liquid assets at the level of the banking system in this simulation would be smaller, 85.2% (86.2% as of 31.12.2014). Of the liquidity shocks that are combined in this simulation, individually most significant is the outflow of deposits of the 20 largest depositors. It is also evident that it has a different meaning for different banks, mainly due to differences in the degree of concentration of deposits. An important contribution is also that of the outflow of 20% of the household deposits, where there is a significant similarity in the importance of individual banks, stemming from the fact that for the domestic banking system the most important source of funding are household deposits. Hence, bank liquidity management is in direct correlation with the reputational and strategic risks, primarily the maintaining of the confidence of households as their main financial supporter. From among shocks, somewhat bigger relative importance is observed in the simulation for turning selected off-balance sheet items into balance sheet claims, but with differences between individual banks. The other two shocks that are subject to combination (the share of liabilities to non-residents and funding from parent entities) have a modest share in the overall result of this simulation.

28

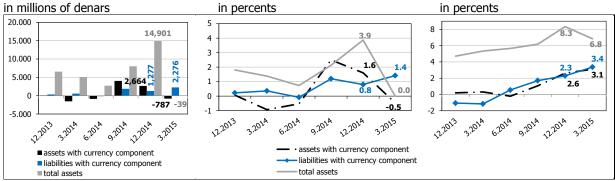
²³ In this expansion of the scope of liquid assets, in addition to financial instruments that comprise liquid assets, the following financial instruments from the balance of the banks are added: term deposits in foreign banks, money market instruments issued by non-residents, foreign government bonds, 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

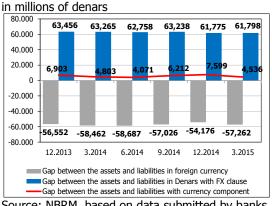
The exposure of the banking system to currency risk is relatively low, mainly due to the strategy of the National Bank to maintain a stable exchange rate against the Euro (the currency structure is dominated by the Euro). Also, in the first quarter of 2015, the gap between assets and liabilities with currency component decreased, which caused further reduction of its share in the banks' own funds. The aggregate currency position of all banks was within the prescribed limit (30%) of own funds).

Chart 38 Quarterly (left and middle) and annual (right) growth of assets and liabilities with currency component



Source: NBRM, based on data submitted by banks.

Chart 39 Structure of gap between assets and liabilities with currency component



Source: NBRM, based on data submitted by banks.

In the first quarter of 2015, the gap and liabilities with assets currency component fell by Denar 3,063 million (59.7%), reducing to Denar 4,536 million as of 31 March 2015. This decrease was entirely due to the increase of the negative gap between assets and liabilities in foreign currency (Denar 3,086 million). On the one hand, assets in foreign currency reduced (by Denar 1,237 million), mainly due to the reduction of funds on accounts in foreign banks²⁴. On the other hand, liabilities in foreign currency increased (by Denar 1,849 million) due to the growth of foreign assets of the transaction accounts of non-financial entities²⁵.

²⁴ Current accounts in foreign currency in foreign banks decreased by Denar 1,873 million.

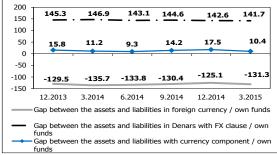
²⁵ Current accounts in foreign currency of natural persons rose by Denar 1,023 million, while the increase in current accounts of private non-financial companies in foreign currency amounted to Denar 925 million.



Chart 40

Share of the gap between assets and liabilities with currency component in the banks' own funds

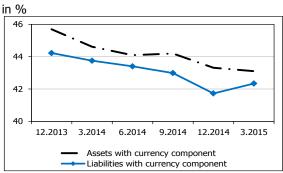
in millions of denars



Source: NBRM, based on data submitted by banks.

Chart 41

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

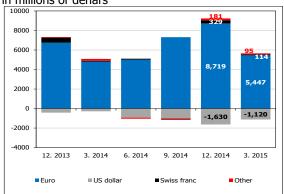


Source: NBRM, based on data submitted by banks. In the structure of the assets with currency component, loans and interest receivables are reduced by impairment. MBPR AD Skopje is not included.

Chart 42

Dynamics and structure of the gap between assets and liabilities with currency component, by currency





Source: NBRM, based on data submitted by banks.

Amid increased own funds (of about Denar 300 million), the reduced gap between and liabilities assets currency component reduced its share in own funds of the banking system. The decline of this indicator of 7.1 percentage points further reduced the already small banks' exposure to currency risk.

Denarization in banking operations However, there is certain acceleration of growth of foreign currency deposits in the first three months of 2015. This caused certain growth in the share of liabilities with currency component in the total assets of the banking system at the end of March, but there is still general downward trend in the share and assets and liabilities with currency component.

Euro, as the prevalent currency in the balance sheets of the banking system, fully contributed to narrowing the gap liabilities between assets and **currency component,** although the gap narrowed in other currencies, as well.



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

Currency	31.12	2.2014	31.3.2015		
Currency	Assets	Liabilities	Assets	Liabilities	
Euro	89.1	87.9	87.8	86.9	
US dollar	6.1	7.4	7.3	8.2	
Swiss franc	2.3	2.2	2.2 2.2		
Other	2.5	2.5	2.7	2.7	
Total	100.0	100.0	100.0	100.0	

The aggregate currency position of all banks is within the prescribed limit (30% of own funds).

Table 2 Classification of banks according to the share of the open foreign currency position by currency and the aggregate foreign currency position in the own funds

	Number of banks								
	Open currency position by currency /own funds								
Items	Euro		US Dollar		Swiss franc		Other		Aggregate currency
	Long	Short	Long	Short	Long	Short	Long	Short	position / own funds
under 5%	7		9	5	6	7	12	3	7
from 5% to 10%									
from 10% to 20%	4								4
from 20% to 30%	3		·						3
over 30%									

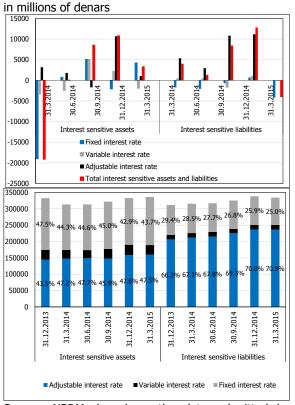
Source: NBRM, based on data submitted by banks.



4. Interest rate risk in the banking book

Banks' exposure to the risk of changing interest rates in the banking book is still negligible compared to the exposure to other risks, despite the increase in the first quarter of 2015. The ratio between the total weighted value of the banking book and own funds increased quarterly due to increased balance sheet items with fixed interest rates, which for the banks imply a risk of "losing" revenues if market interest rates rise. Yet, this risk almost fully offset the wide share of items with adjustable interest rate.

Chart 43 Quarterly growth (up), structure and stock (down) of interest sensitive assets and liabilities, by type of interest rates



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

Interest-sensitive assets and liabilities in the banks' balance sheets as of 31 March 2015 registered a quarterly growth of 1% and -1.2% respectively, which was mostly due to the items with fixed interest rates²⁶. Items with fixed interest rate on the assets side registered a quarterly increase of 3% (primarily in the placements of corresponding accounts abroad). Interest-sensitive liabilities with fixed interest rates declined by 4.8% due to the 7.8% reduction of time deposits up to one year.

In the first quarter of 2015, the structure of interest sensitive assets and liabilities recorded some changes, but items with adjustable interest rates²⁷ remained dominant.

32

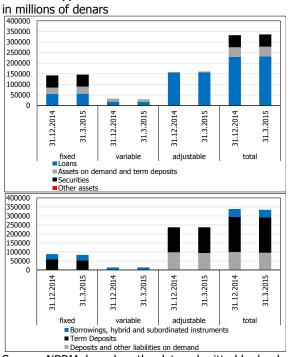
²⁶ Fixed interest rate - interest rate which remains unchanged over the entire period, i.e. the bank has no right to change the interest rate, which is nominally set in the contract.

²⁷Adjustable 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. Interest sensitive assets and liabilities with adjustable interest rate registered a quarterly growth of only 0.6% and 0.04%, respectively.



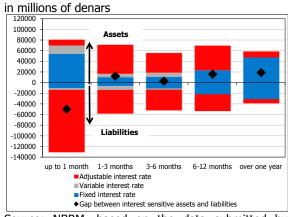
Chart 44

Structure and amount of interest-sensitive assets (top) and liabilities (bottom), according to the items in the balance sheet and the type of interest rates



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

Chart 45 Interest sensitive assets and liabilities, by maturity and type of interest rate



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

Loans with adjustable interest rate²⁸ still dominate the structure of total interest-sensitive assets.

On the other hand, reduced time deposits up to one year with a fixed interest rate (7.8%) and the quarterly reduction of transaction accounts with adjustable interest rate (5%) reduced the total interest-sensitive liabilities on a quarterly basis.

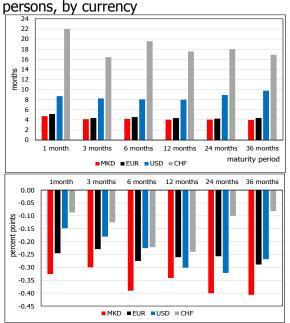
Adjustable interest rates play the main role in almost all maturity buckets of the interest sensitive assets and liabilities up to one year²⁹. Applying this type of interest rates minimizes the risk to banks from changing interest rates in the banking book. In the longer term (over one year) assets and liabilities with fixed interest rate prevail. On the part of assets, it is due to loans with fixed interest rate in the first few years, which, according to the regulations are treated as assets with fixed interest in the full amount. In the liabilities with fixed interest rates (over one year), banks' loan liabilities prevail.

33

²⁹ Exception are interest sensitive assets in the maturity bucket up to one month, where the positions with fixed interest rate prevail, as a result of banks' placements in securities. In the same maturity bucket, on the liabilities side, the largest part accounts for transaction accounts, i.e. liabilities on demand with adjustable interest rate.

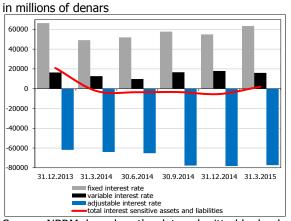


Chart 46 Frequency (up) and level (down) of changes in interest rates on deposits of natural



Source: NBRM, based on the data submitted by banks. *The analysis includes interest rates on deposits of natural persons on traditional deposits, which are deposits with adjustable interest rate for the period from December 2012 to March 2015, on a monthly basis.

Chart 47 Gap between interest sensitive assets and liabilities, by type of interest rate



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

In the past nine quarters, the highest frequency of changes has been noticed in interest rates on Denar and Euro deposits of natural persons. On average, banks in the Republic of Macedonia have changed interest rates³⁰ on deposits of natural persons every four months for Denar deposits and Euro deposits. Furthermore, they cut the interest rates on US dollar deposits under observation every eight months on average, and change the interest rates on deposits denominated in Swiss francs the least frequently, i.e. once a year, on average. Almost all changes the banks have made in interest rates on deposits of natural persons in these nine quarters are aimed at reducing, mostly Denar deposits, in all maturity buckets. Given that the bulk of the deposits are within the maturity buckets of one to three months, banks have made most pronounced changes (in the level) of interest rates on deposits with maturity of two and three years, believing that customers are less sensitive to changes in interest rates on deposits in these buckets compared to deposits up to one and up to three months.

The gap between total interestsensitive assets and liabilities is again positive after the negative value in 2014.

The positive gap was the result of the gap with fixed interest rate, which rose by 15.3% (due to the growth of correspondent accounts, despite the reduction in time deposits). The negative gap between interest sensitive positions with adjustable interest rate decreased by 1.2% due to the growth in loans despite the decrease of transaction accounts (as explained above). The positive gap between interest sensitive positions with a variable interest rate³¹ also narrowed (10.9%), mostly due to the withdrawal of funds from the current account by a parent bank.

³⁰ Usually, when changing interest rates on deposits, banks decide to apply the change to both accepted and newly accepted deposits, which is not the case with loans, where interest rate changes only apply to new loans.

³¹ Variable interest rate - interest rate that is directly dependent on a reference interest rate (EURIBOR, SKIBOR, LIBOR, etc.) increased by a certain interest margin, according to the regulations of the bank. The change in the interest rate depends on the change in the reference interest rate, but also on the change of the established margin (mostly by unilateral decision of the bank). Interest-sensitive assets and liabilities with variable interest rate registered a quarterly increase of -6.1% and 0.1% respectively, and accounted for 8.8% and 4.1%, respectively of the structure of total interest-sensitive assets and liabilities.



Chart 48

Gap between the net balance sheet items and their estimated trend, by type of interest rate

in millions of denars

10000
8000
6000
4000
2000
31.12.2013
31.3.2014
30.6.2014
30.92014
31.12.2014
31.3.2015

Gap between weighted value for activities with fixed interest rate and its trend
Gap between weighted value for activities with adjustable interest rate and its trend
Gap between weighted value for activities with variable interest rate and its trend
Gap between weighted value for activities with variable interest rate and its trend

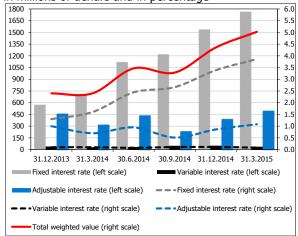
Source: NBRM, based on the data submitted by banks.

The analysis of the gap compared to its trend³² for the recent period confirmed that in the first quarter of 2015, the gap has significantly increased as a result of the positive gap in positions with fixed interest rate.

Chart 49

Weighted value and total weighted value of banking book to own assets ratio, by type of interest rate

in millions of denars and in percentage



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

In the last two quarters, total weighted value of the banking book³³ to own funds ratio went up (5% as of 31 March 2015), but well below the prescribed maximum of 20% (Annex 33). The increase in this ratio is due to the net weighted value of items with fixed interest rate for maturity buckets over one year.

$$\min \sum_{t=1}^{I} \{ (y_t - \mu_t)^2 + ((\mu_{t+1} - \mu_t) - (\mu_t - \mu_{t-1}))^2 \}$$

 $^{^{32}}$ The trend of the weighted value is calculated by using the Hodrick-Prescott filter with lambda 1600 (recommended value for quarterly data). Hodrick-Prescott filter is calculated according to a specified formula, where μ_t is the trend, y_t - μ_t is the cyclic component, and lambda - λ represents the degree of "smoothness" of the trend

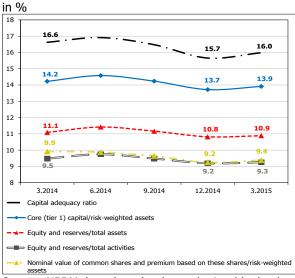
³³ The total weighted value of the banking book shows the change of the economic value of this portfolio as a result of the assessment of the change in the interest rates by using a standard interest rate shock (parallel positive or negative change in interest rates by 200 basis points). The total weighted 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

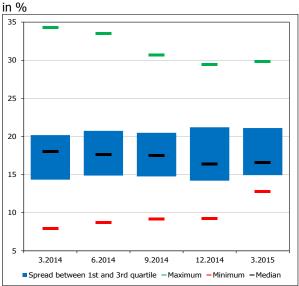
The solvency and capitalization ratios of the banking system somewhat improved in the first quarter of 2015. The own funds of the banking system registered a quarterly growth after the reduction in the last quarter of 2014, which is mostly conditioned by reinvested profits. The capital requirement for currency risk registered quarterly drop in several banks. Capital requirements for credit risk also reduced, mostly due to the smaller claims backed by commercial properties. The results of the stress test conducted on 31 March 2015 generally improved, compared to the end of 2014.

Chart 50 Solvency ratios



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

Chart 51
Distribution of capital adequacy ratio in the banking system



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

5.1. Solvency and capitalization ratios of the banking system and level of risk

In the first quarter of 2015, the solvency and capitalization ratios of the banking system somewhat increased from 0.1 percentage point (in capitalization ratios) to 0.3 percentage points (in capital adequacy ratio). The own funds of the banking system registered a quarterly growth after the reduction in the last guarter of 2014, the core capital remained unchanged, while equity and reserves kept the same pace of growth registered in the previous quarter. Risk weighted assets and total banks' activities decreased in the first quarter of 2015, while assets remained unchanged on a quarterly basis. As of 31 March 2015, all banks reported a capital adequacy ratio higher than 12%.



Chart 52 Growth rates of components of solvency ratios, quarterly (left) and annual (right)

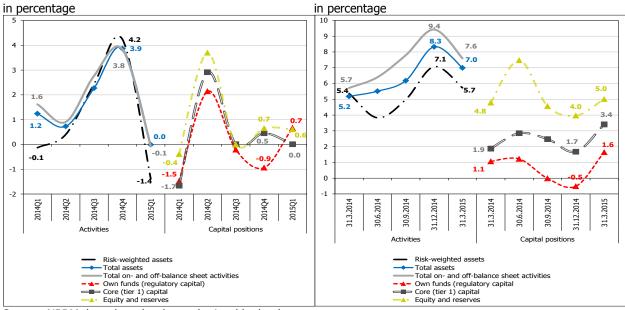
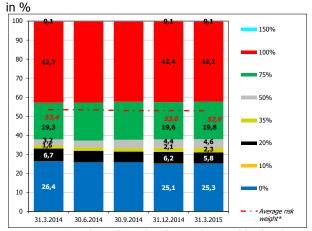


Chart 53 Structure of total on-balance sheet and offbalance sheet exposure, by risk weights



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.

The level of risk of banking activities (measured as a ratio between risk-weighted assets and on-balance sheet and off-balance sheet exposure) remained unchanged. The first quarter of 2015 registered no significant changes in the structure of total on-balance sheet and off-balance sheet exposure of the banking system, according to the regulatory risk weights. Hence, the average risk weight of the total balance sheet exposure of the banking system³⁴ decreased by negligible 0.1 percentage points and totaled 52.9% as of 31 March 2015.

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

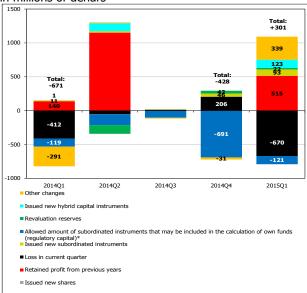
The own funds of the banking system increased by Denar 301 million (or 0.7%), which is mostly determined by the reinvested profits realized in 2014, and one bank has met the regulatory requirements to include current profit³⁵ of the first quarter of

³⁴ Calculated as a ratio between credit risk weighted assets and total balance sheet and off-balance sheet exposure of banks

³⁵ Regulatory requirements to be met for the current profit to be included in the calculation of banks' own funds are listed in item 12 sub-item 2c) of the Decision on the methodology for determining capital adequacy (Official Gazette of the Republic of Macedonia No. 47/12, 50/13 and 71/14). Inter alia, the distribution of current profit in capital stock of the bank requires a decision by the supervisory board of the bank, and its amount should be confirmed by a certified auditor.

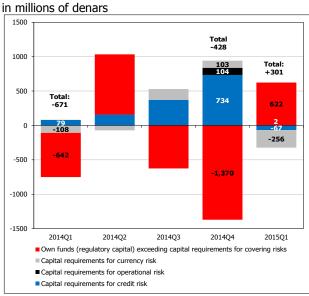


Chart 54
Structure of the quarterly growth of own funds in millions of denars



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/noncompliance with the regulatory rules for inclusion of these instruments in the calculation of own funds.

Chart 55 Structure of quarterly growth of own funds, by the purpose for covering risks



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

2015 in the calculation of own funds. One bank from the group of medium-size banks issued new hybrid capital instrument (of Denar 123 million), and another bank of the same group issued new subordinated instrument (of Denar 93 million). Additionally, the amount of subordinated instruments recorded a significant growth due to the appreciation of the value of the Swiss franc in the first quarter of 2015, which was present only in one bank. On annual basis, the own funds of the banking system increased by Denar 738 million, or 1.6%. The quality of own funds is still high with the share of core capital in total own funds of almost 87%.

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

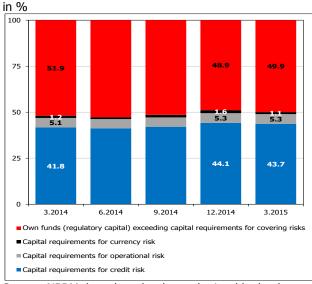
The new amount of own funds was in full "used" to increase the "free" capital above the minimum level required to cover risks. Also, part of the already engaged regulatory capital required to cover risks³⁶ was "reversed" and used for accumulation of own funds above the required minimum. Thus, in the first quarter of 2015, the "free" capital above the capital requirement for covering risks rose by Denar 622 million, or 2.8%. Simultaneously, capital requirements for covering risks decreased by Denar 321 million (or 1.4%). Reduction of capital requirements was more pronounced in the regulatory capital required to cover currency risk (by Denar 256 million or 34.5%), and was most evident in one bank³⁷. Certain quarterly decrease of Denar 67 million (or 0.3%) was registered in regulatory capital requirement for credit risk mostly due to the lower claims

³⁶ Capital requirements are determined at the level of 8% of the risk weighted assets.

³⁷ As of 31 March 2015, this bank, together with four banks, met the requirement not to determine and calculate the capital requirement for currency risk. As of previous quarterly date (31 December 2014), four of the aforementioned banks did not fulfill this requirement and accordingly, part of their regulatory capital was used to cover currency risk.



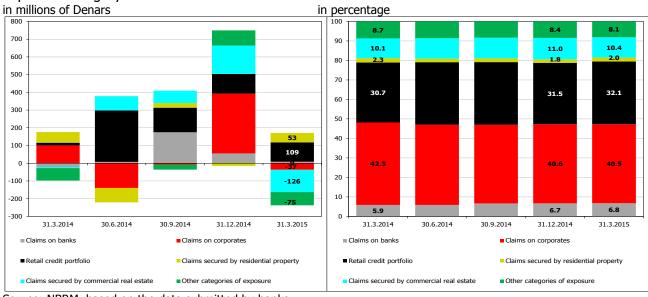
Chart 56 Structure of own funds according to the use for covering risks



backed by commercial properties. On an annual basis (31 March 2014 - 31 March 2015), the capital requirements for credit risk increased by Denar 1,199 million (or 6.4%), mostly resulting from rising claims based on retail loan portfolio. At the same time, the "free" capital of the banking system declined by Denar 498 million (or 2.1%), and annual decline was also registered in the capital requirement for currency risk (of Denar 68 million or or 3%). Capital requirements for operational recorded solid annual growth of Denar 106 million (or 19%), resulting from increased operating profits of banks in 2014.³⁸ Own funds above the capital requirement for covering risks make up almost half of the total own funds.

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

Chart 57 Quarterly growth rates (left) and structure (right) of capital requirements for credit risk, by exposure category



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

³⁸ The method of determining the capital requirement for operational risk is regulated in section X of the Decision on the methodology for determining capital adequacy (Official Gazette of the Republic of Macedonia No. 47/12, 50/13 and 71/14). Thus, the basis for calculating capital requirements for operational risk is the sum of the following positive and negative items: interest income, interest expenses, dividend income, other than income from investments in associates, subsidiaries and joint ventures, income from commissions and fees, expenses from commissions and fees, income and expense from items which are part of the trading book, income and expenses from items that are not measured at fair value through the income statement if arising from items that are part of the trading book, income and expense from items for protection of value of other items and other operating income.



For more details on capital requirements for covering risks and on the capital adequacy ratio, by 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 generally improved results, compared with 31 December 2014. 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.

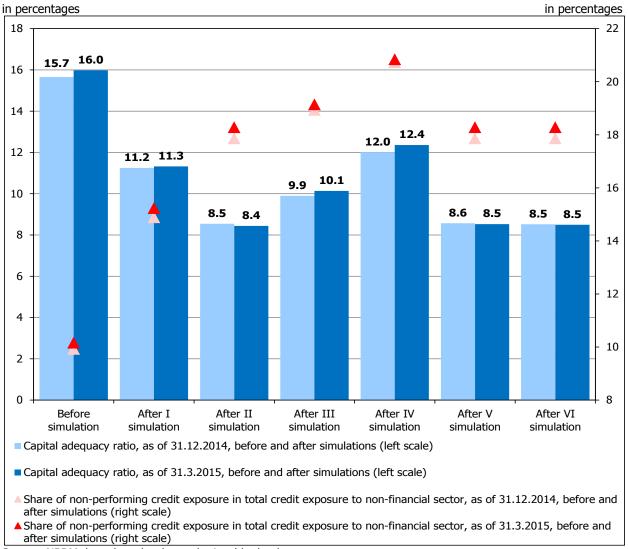
The hypothetical shocks on the part of the credit risk have the greatest impact on the stability of the banking system. Within the credit exposure to non-financial entities, the simulations show that the capital adequacy of the banking system would drop to the capital requirement of 8% only if the non-performing credit exposure rises by 84.6%, i.e. in case of migration of 13.2% from regular to nonperforming 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 9.9% to 18.7%). However, these are rather extreme and less likely simulations, especially in the short term³⁹.

40

³⁹ For comparison, in the first quarter of 2015, only 0.7% of the regular credit exposure to nonfinancial 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).



Chart 58
Comparison of results from simulations of credit and combined shocks, as of 31 March 2015 and 31 December 2014



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 "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 percentage points;

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 percentage points;

**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"

^{*}Stress testing includes the following simulations:



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



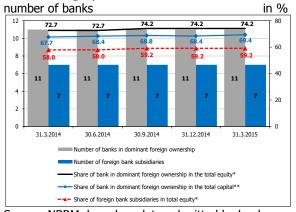
1. Number of banks and ownership structure of the banking system

As of 31 March 2015, the banking system in the Republic of Macedonia consists of fifteen banks and three savings houses. The number of banks remained unchanged, whereas the number of savings houses reduced by one⁴⁰ relative to the end of the previous year. The analysis of savings houses is not included in this report due to their insignificant share in the banking system⁴¹.

Chart 59 Number of foreign bank subsidiaries, number of banks in dominant foreign

ownership and their share in the capital of

the banking system



Source: NBRM, based on data submitted by banks. *Equity includes face value of paid-in common and

The capital of the banks in the Republic of Macedonia is mostly foreign. Of total of fifteen banks, eleven are owned by foreign shareholders, while seven are subsidiaries of foreign banks. These figures remain unchanged compared to 31 December 2014, same as the share of equity of these banks in the total equity of the banking system.⁴² Banks in dominant foreign ownership reported an increase of 1.0 percentage point of the share equity and reserves, which derives from retained earnings of previous year.

Banks in dominant foreian ownership have a leading role in the relevant items in the balance sheets of the banking system. At the end of the first quarter of 2015, these banks aggregately (with the exception of three banks) and the bank owned by the state, reported profit, unlike the banks in dominant domestic ownership which operated at a loss. The profit of banks in dominant foreign ownership is due to the capital income from sales of assets of a bank. This profit contributed even more to the growth of total income of banks in dominant foreign ownership, which accounted for 75.0%, which is by 3.7 percentage points and by 10.3 percentage points higher compared to 31 2014 31 December and March 2014. respectively, in the total income of the banking system.

preference shares.

^{***}Capital and reserves comprise equity and premiums based on paid-in shares, reserve fund, retained earnings (accumulated loss) and revaluation reserves. Capital and reserves are reduced by the current loss.

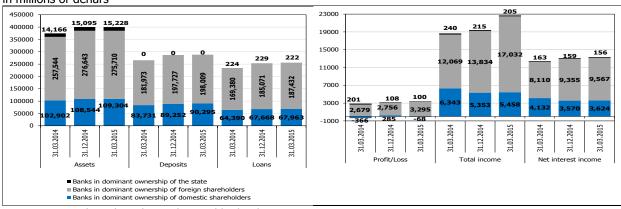
⁴⁰ With the completion of the procedure for conversion of Al Kosa savings houses AD Stip in the financial company, in the first quarter of 2015, the number of savings banks decreased by one.

The share of savings houses is only 0.7% of total assets of depository financial institutions (banks and savings banks), 1.1% of total loans to non-financial entities and 0.4% of total household deposits.

⁴² The growth of these shares in the third quarter of 2014 was due to the acquisition of Post Bank AD Skopje, which was in dominant domestic ownership, by Eurostandard Bank AD Skopje which is mostly foreign owned.

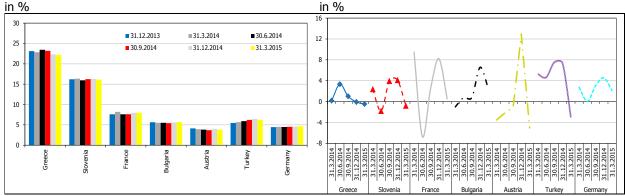


Chart 60
Structure of major banks' balance sheet positions, by banks' majority ownership in millions of denars



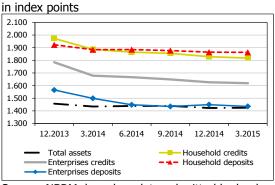
Note: The categories of the income statement are annualized. The annualization is made with a sum of values in the last twelve months for the respective categories of the income statement.

Chart 61
Market share (assets) of banks (left) and growth rate of banks' assets (right) by domicile country of the dominant foreign shareholder *



Source: NBRM, based on data submitted by banks.

Chart 62 Herfindahl index



Source: NBRM, based on data submitted by banks.

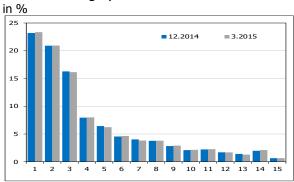
At the end of the third quarter of 2015, total market share (in assets) of banks in dominant foreign ownership is 66.8%, and is lower by 0.4 percentage points compared to the end of 2014.

The concentration of household loans and deposits, despite its downward trend, is above acceptable limits of the Herfindahl

^{*}The bank in domestic ownership and banks without major owner are not included in the chart.



Chart 63
Share of individual banks in the total assets of the banking system



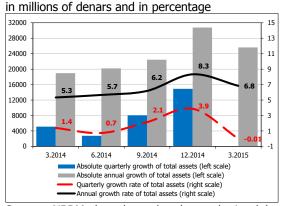
index⁴³. The concentration in corporate loans notes gradual decrease and is within the acceptable limits of the index.

The concentration of the banking system is also confirmed by the share of assets by individual bank in the total assets of the banking system. The largest four banks occupy 68.4% of assets, while nine banks have an individual share of less than 4% (jointly constituting 20.7% of the total assets of the banking system).

2. Banks' activities

Amid solid economic growth, overall banks' activities in the Republic of Macedonia minimally changed. The total assets of banks in the first quarter of 2015 remained almost unchanged compared to the previous quarter, while compared to the same period last year, it grew at a slower pace. The further 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 first quarter of 2015, loan support to the households continued to grow, while corporate loans registered minor increase. In addition, in the first three months of 2015, banks' investments in government bonds went up.

Chart 64
Assets growth of the banking system



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

In the second quarter, the growth rate of Denar deposits switched to the positive zone, but is still lower than the previously recorded rates of growth. This slowdown is attributable to the internal political turmoil in the country and the uncertainties relating to the financial position of Greece that have intensified in the second quarter of the year and had a second-round effect on the slowdown of the growth not only of Denar deposits but also of total deposits.

As of 31 March 2015, the total assets of the banking system amounted to

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.

⁴³ The Herfindahl index is calculated according to the formula $HI = \sum_{i=1}^{n} (S_j)^2$, where S is the share of each bank in the total



Chart 65 Level of financial intermediation in the Republic of Macedonia

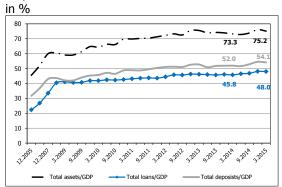
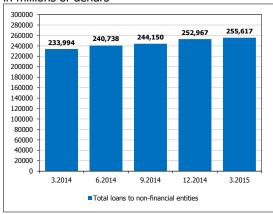


Chart 66 Stock of loans to non-financial entities in millions of denars



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

Denar 400,242 million, which is almost unchanged compared to the previous quarterly. In the first quarter of the year, except the increasing banks' investments in domestic long-term debt securities (mostly three-vear government bonds in denars) and increased lending activity, the other major categories of banks' assets declined. On annual basis, total assets of the banking system recorded a slower growth compared to the end of 2014, which mainly reflects the slower growth of deposits of non-financial entities. These developments have contributed to slight decline in the level of financial intermediation, compared to the end of 2014 (measured as total assets of the banking system to GDP ratio).

2.1 Loans to non-financial entities

The growth of bank lending to the non-financial sector⁴⁴, which marked the year 2014, continued in the first three months of 2015 but at a slower pace (both quarterly and annually). With the quarterly growth of Denar 2,467 million (or 2.4%), loans to households⁴⁵ were generators of the growth, making up 93.1% of the quarterly growth of total loans to non-financial entities.

Credit support to the corporate sector in the first quarter of 2015 is very small, with a quarterly growth rate which is the lowest in the last six quarters⁴⁶. Corporate lending remained supported by the non-standard monetary policy measure that encourages lending to net exporters and producers of electricity⁴⁷. In such conditions, the annual growth rate of total loans amounted to 9.2% at the end of March, which

⁴⁴ 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 (corporate loans), central government, local government, non-profit institutions serving households (loans to other clients), sole proprietors and natural persons (loans to households).

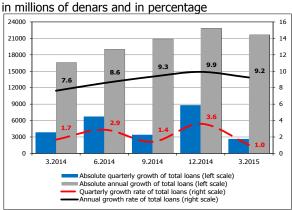
⁴⁵ Consumer loans and loans for the purchase and renovation of residential and commercial properties are the most widely used credit products in this segment (Annex 9).

⁴⁶ Lending to the corporate sector on a quarterly basis grew by only Denar 179 million, or 0.1%, and constituted 6.8% of the growth of total lending activity (for comparison, in the fourth quarter of 2014, the share of corporate loans in total credit growth was 72.7%).

⁴⁷ 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.



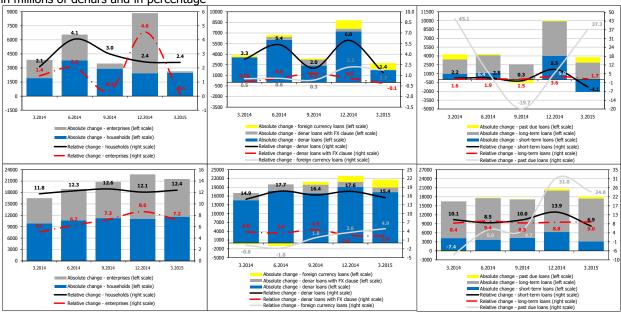
Chart 67 Growth of loans to nonfinancial entities



is lower by 0.7 percentage points compared to December 2014.

As in the past few quarters, **Denar** loans determined most of the credit growth (66.1%), but their quarterly growth rate significantly slowed down⁴⁸. On the other hand, in the first quarter of 2015, there was a significant increase in the contribution of foreign currency loans, compared to the previous quarter (share in the growth of total loans of 37.1%, versus 13.6% in the previous quarter).

Chart 68
Quarterly (up) and annual (down) growth of loans by sector, currency and maturity in millions of denars and in percentage



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

In the first three months of 2015, the maturity structure of total regular loans to non-financial entities remained almost unchanged compared to the last few quarters, still dominated by long-term loans (76.6%).

47

⁴⁸ The quarterly growth of Denar loans slowed down to Denar 1,751 million, or 1.4%. Denar loans to households registered a quarterly increase of Denar 1,223 million, or 2.2%, while Denar corporate loans increased by Denar 488 million, or 0.7%. In the first quarter of 2015, the highest growth rate (14.6%) was registered in Denar loans to other clients, but the share of these loans in total Denar loans is very low (0.2%).



Chart 69 Structure of total loans, by sector (left) and currency (middle), and by regular loans, by maturity (right)

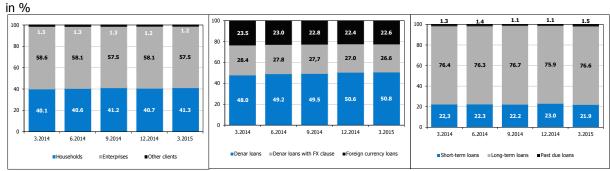
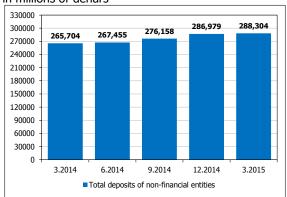
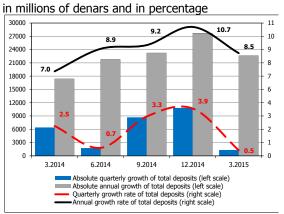


Chart 70 Stock of deposits of nonfinancial entities in millions of denars



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

Chart 71 Growth of deposits of nonfinancial entities



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

2.2 Deposits of nonfinancial companies.

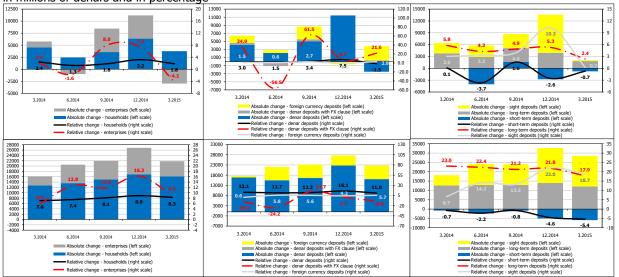
The growth of deposits of non-financial entities continued in the first quarter of 2015 but at a slower pace, both quarterly and annually. The quarterly growth rate of total deposits amounted to 0.5%, which is the lowest in the last seven quarters. The significant slowdown in the quarterly growth rate of deposits is mostly due to the high base effect of the previous quarter, when deposits registered high growth⁴⁹.

By sectors, the growth of total deposit base of banks in the first quarter of 2015 was completely determined by household deposits, although their quarterly growth (of Denar 3.748 million or 1.8%) was nearly halved compared with the growth in the previous quarter. Unlike the previous quarter, when Denar deposits comprised roughly 95% of the total growth of household deposits, in the first guarter of 2015, Denar household deposits contributed 42.2% to the total deposit growth (the contribution of foreign currency deposits was 57.8%), which is indicative of some slowdown of the denarization of deposits. In the first quarter of 2015, corporate deposits declined by Denar 2,982 million (or 4.2%), which fully arises from Denar deposits.

⁴⁹ The last quarter of 2014 registered the most intensive quarterly growth of total deposits over the recent years, and the quarterly growth of deposits reached 3.9%.



Chart 72
Quarterly (up) and annual (down) deposit growth by sector, currency and maturity in millions of denars and in percentage

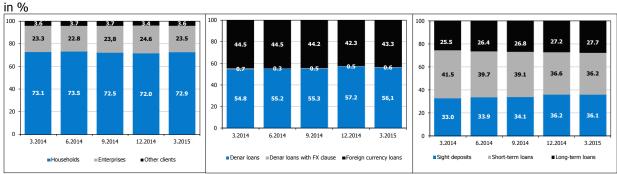


The quarterly decline of corporate Denar deposits caused the **quarterly decrease of total Denar deposits in the first quarter of the year.** In fact, total Denar deposits declined by Denar 2,499 million or 1.5% compared to the previous quarter, with significant slowdown of their annual growth rate (of 5.1 percentage point). However, **most (or more than 55%) of the total deposit base is comprised of Denar savings.** The quarterly growth of foreign currency deposits was largely influenced by households (61.7%) compared with the contribution of the companies (36.6%)⁵⁰.

⁵⁰ Foreign currency deposits of households increased by Denar 2,165 million, mostly (68.4%) due to the growth in demand deposits, which almost entirely (91.4%) determined the quarterly growth of foreign currency deposits of corporations (by Denar 1,284 million).



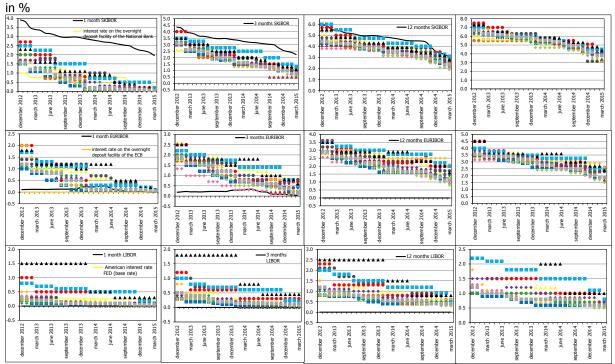
Chart 73
Total deposit structure by sector, currency and maturity



The growth of long-term deposits over the recent years, continued in the first quarter of 2015. Thus, long-term savings, with quarterly growth of Denar 1,838 million, or 2.4%, fully determined the growth of total deposit base in terms of maturity. With a quarterly growth of 1,067 million (or 1.6%), long-term household deposits make up high 58.1% of the total growth of long-term savings, which is mainly explained by the higher interest rates on deposits in the long term, which in turn, is also influenced by the setup of the reserve requirement rates (since August 2013 there is 0% reserve requirement on deposits of natural persons in national currency with contractual maturity of over two years). Shortterm deposits continued to decrease quarterly.



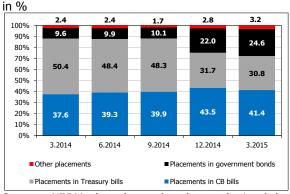
Chart 74
Growth rate of interest rates on deposits of natural persons in denars (up), euros (middle) and US dollars (down), by bank



Source: National Bank, based on data submitted by banks, ECB and Fed.

Note: The analysis includes interest rates on one-month, three-month, 12-month and 24-month deposits.

Chart 75 Structure of the securities portfolio



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

In recent years, there is a continuous decrease in interest rates on deposits of natural persons, both short- and long-term. Such changes, in most banks, are partly attributed to the movements of policy rates for each currency and the downward adjustment of the interest rates of the banks themselves.

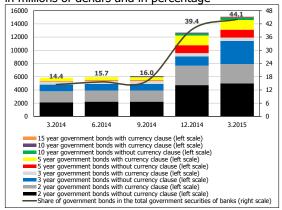
2.3 Other activities

In the first quarter of 2015, the securities portfolio of banks increased (by Denar 2,924 million, or 5.0%, on a quarterly basis), which was generally encouraged by the further rise in banks' investments in domestic government bonds. Namely, with a quarterly growth of Denar 2,217 million (or 17.2%), government bonds⁵¹ determined more than 75.0% of the growth of total banks' investments in securities. On an annual basis,

⁵¹ Most of the growth (over 85%) of government bonds derived from the three-year government bonds in denars, a smaller part (about 10%) from the two-year government bonds in denars.



Chart 76
Banks' investments in government bonds (nominal value), by currency and maturity in millions of denars and in percentage

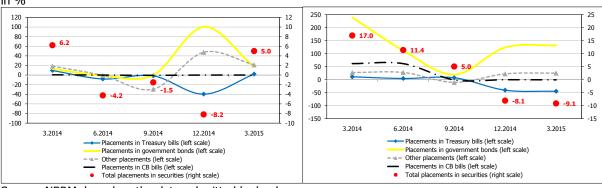


banks' investments in government bonds also rose more than double (by Denar 8,623 million, or 132.4%) and the structural share of continuous government bonds in the nominal value of the portfolio of government securities reached 44.1% (from 39.4% in December 2014, i.e. from 14.4% in March 2014).

Banks' investments in government bonds (which in the previous quarter almost halved) in the first quarter of 2015, increased by Denar 357 million, or $1.9\%^{52}$.

Amid unchanged interest rate and supply of CB bills by the National Bank, the banks' investments in CB bills remained almost unchanged.

Chart 77 Quarterly (left) and annual (right) growth rate of securities portfolio



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

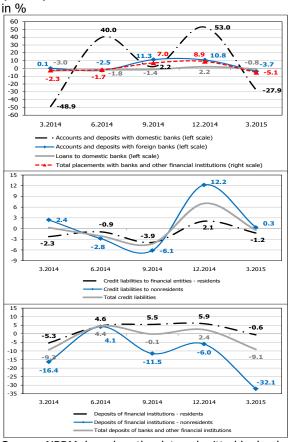
the first quarter of 2015. placements with banks and other financial institutions have declined significantly, mainly due to the reduction in funds on correspondent accounts in foreign banks. The reduction of **loan liabilities** in the first quarter of 2015 was solely determined by the reduction of loan liabilities to financial companies (residents) as a result of reduced liabilities based on credit lines marketed through the MBDP AD Skopie. Deposits from banks and other financial institutions are very small source of funding for banks (3.8% of total funding

⁵² In the first three months of 2015, the offered amount of treasury bills amounted to Denar 14,080 million.



Chart 78

Quarterly growth rate of placements with financial institutions (up), loan liabilities (middle) and deposits of financial companies (down)

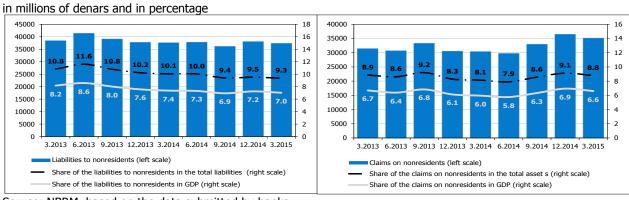


sources), and in the first quarter of 2015 they are lower compared to the previous quarter (short-term foreign currency deposits of non-resident financial institutions up to one month registered the fastest decrease as a result of the disbursement of funds from a parent bank in a medium-size bank).

In the first quarter of 2015, banks in the Republic of Macedonia continued to carry out their activities mainly on the domestic market. The share of liabilities and claims to/on non-residents in the total assets of the banking system remains low (usually around 10%)⁵³. The share of claims and liabilities on/to nonresidents in GDP is also low, and declined further in the first quarter of 2015.

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

Chart 79 Liabilities to (left) and claims on (right) nonresidents



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

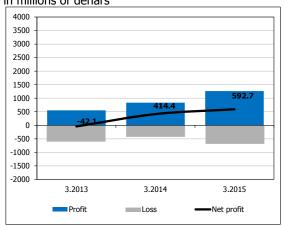
⁵³ Analyzed by individual bank, the share of banks 'claims on non-residents in total assets ranges from 1.7% to 19.7%, while the share of banks' liabilities to non-residents in the total liabilities ranges from 0.3% to 24.8% (with the exception of "MBPR" AD Skopje).



3. Profitability

Profitability of banks in the Republic of Macedonia was considerably higher in the first quarter of 2015 compared to the first quarter of 2014. Profit after taxation in the first quarter of 2015 increased by Denar 178.2 million, or 43%, compared with the last year. The main profitability indicators, return on assets and equity, have significantly improved, and the banks' operational ability to generate revenues that cover their operating costs has remarkably improved, too. Most noticeable positive impact on profitability was made by increased other income and lower interest expenses. Increased impairment made a substantial negative effect on financial assets. Despite the risks arising from the future trends in the quality of loan portfolio given the dominance of credit activities in the overall banks' activities, one of the major challenges for the banks to maintain their profitability is their future capacity to generate net interest income, which in recent years relies mainly upon the decrease in interest expenses due to lower deposit interest rates.

Chart 80 Net gain after taxation 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 quarter of 2015, total **income of banks** (total regular income⁵⁴ and extraordinary income) increased by Denar 671.9 million, or 14.9%, compared with the previous year and reached Denar 5,185.3 million. Greatest contribution (56.9%) to the increased income was made by the growth of other regular income (of Denar 382.2 million⁵⁵, or 90.1%). Additional contribution (39.2%) to the increase in total income was made by the increased net interest income, resulting from the stronger annual reduction of interest expenses (of Euro 228.3 million or 12.6%), amid simultaneous insignificant increase in interest income (of Denar 35.4 million or 0.7%). In the first quarter of the year, growth was also income from fees noticed in net commissions and extraordinary income, but with lower share in the growth of total income.

The structure of total income in 2015 has partly changed compared to the previous

_

⁵⁴ 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).

⁵⁵ The growth of other regular income (about 67%) is due to the capital profit from sale of assets of a bank.



Chart 81 Annual growth rate of major income and expenses

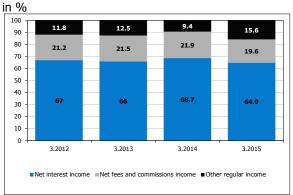
in millions of denars

1500
1000
500
0
-500
-1000
2.2013
3.2014
3.2015

Impairment losses
Operating expenses
Other regular income
Interest expenses
Net interest income
Net fees and commissions income

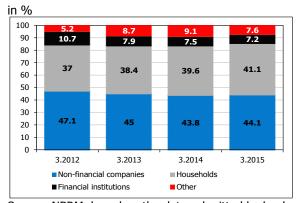
Source: NBRM, based on the data submitted by banks.

Chart 82 Structure of total income



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

Chart 83 Sector structure of interest income



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

year, but the net interest income still has the largest share in total income of banks.

Analyzing individual sectors, the increase in interest income in 2015 primarily results from interest income from households, and to a lesser extent from non-financial companies. The growth of interest income from households (of Denar 81.9 million, or 4.3%) corresponds to the annual credit growth to this sector, in spite of the downtrend of interest rates on loans to households. Income from non-financial entities have increased by Denar 28 million, or 1.3%. In 2015, there was a decrease in interest income from other entities (by Denar 73.4 million, or 16.9%)⁵⁶ and financial companies (Denar 12.9 million or 3.6%). The reduction in interest income from other entities is mainly due to the reduced investments in treasury bills and securities⁵⁷, despite the increase in income from nonresidents (Denar 3.9 million).

⁵⁶ This category includes interest income from investments in treasury bills and securities.

⁵⁷ Compared with the first quarter of 2014, investments of the banking system in treasury bills and debt securities declined by Denar 6,574 million.

M

Chart 84 Sector structure of interest expenses

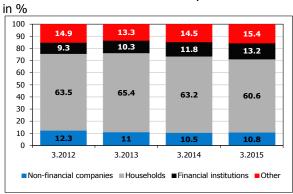
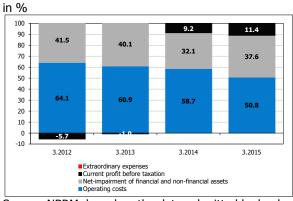
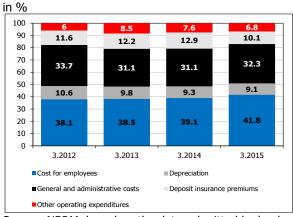


Chart 85 Usage of total income



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

Chart 86 Structure of operating costs



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

In 2015, there was a decrease in **interest expenses** from all sectors. The reasons behind are the lower deposit interest rates compared with 2014⁵⁸. Interest expenses from the household sector contributed the most (80.9%) to the decrease in total interest expenses. Interest expenses from non-financial companies (for time deposits), expenses from financial companies (for time deposits of pension funds and insurance companies), as well as interest expenses from other entities (mainly expenses for financial companies - non-residents based of loan liabilities and based on time deposits) also decreased. In spite of the pronounced decrease, interest expenses from the household sector still have the greatest share in the structure of interest expense.

The largest portion of total income of banks was spent to cover operating costs⁵⁹ and impairment. Operating costs still have a high share of 50.8%, despite the reduction in their share in total income (of 7.9 percentage points) compared to the previous year, while impairment increased its share to 37.6%.

In the first three months of 2015, banks' operating costs decreased by Denar 16.3 million, or 0.6% relative to the previous year. The decline was most noticeable in premiums for deposit insurance⁶⁰ (Denar 76.1 million, or 22.3%) and in special reserve for off-balance sheet exposure (Denar 42.7 million, or 34.1%). In contrast, staff costs registered the most pronounced growth of Denar 62.4 million, or 6.0%. Despite such developments, no major changes have been noticed in the structure of operating costs, which is still dominated by staff costs and general and administrative expenses.

⁵⁸ Compared with the first quarter of 2014, interest rates on deposits decreased by 0.2 percentage points.

⁵⁹ Banks' operating costs include: staff costs, depreciation, general and administrative expenses, deposit insurance premiums and other operating costs, except extraordinary expenses.

 $^{^{60}}$ On 1 June 2014, the rate of deposit insurance premium was cut by 0.2 percentage points and equaled to 0.5% p.a.



Chart 87 Efficiency indicators of banks

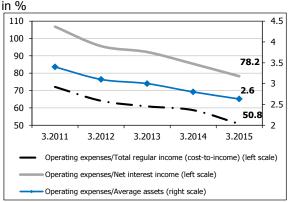
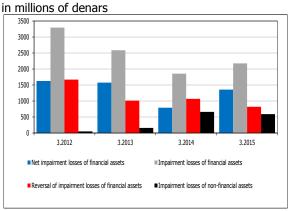


Chart 88 Impairment of financial and non-financial assets



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

The trend of improving banks' operational efficiency, which began in 2012, continued in the first quarter of 2015. Amid annual reduction of banks' costs, despite the increase in the total regular income, the amount of total regular income used to cover operating costs significantly reduced. Also other ratios between different types of costs and total regular income also decreased, which additionally confirms the improved operational efficiency of banks.

Except the net interest income and operating costs of banks which determined the higher level of profitability compared to the previous year, other components of banks' profitability acted towards its reduction. In the first three months of 2015, net impairment recognized by banks for impairment of financial assets (loans and other similar claims) reached Denar 1,356 million, which is an increase of Denar 566.3 million, or 71.7%⁶¹. Accordingly, the share of net interest income used to cover the impairment of financial assets increased from 25.5% (as of 31 March 2014) to 40.3% (as of 31 March 2015). The increase in net impairment is due to the simultaneous increase in gross impairment and reduction in released impairment⁶².

In the first quarter of 2015, the trend of increase in the impairment of non-financial assets (foreclosed assets) was interrupted. Namely, it decreased by Denar 70.4 million, or 10.7%, and reduced to Denar 589.9 million⁶³.

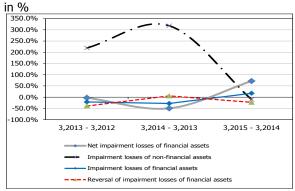
 $^{^{61}}$ For comparison, in the first quarter of 2014, net impairment of financial assets (loans and similar claims), decreased by Denar 786 million, or by 49.9%, on an annual basis.

⁶² In the first quarter of 2015, the growth was mostly due to the increase in gross impairment and the lower release of impairment of a bank. If we exclude the effect of the impairment in this bank, in the first quarter of 2015, net impairment on financial assets of the banking system would increase by Denar 72.3 million compared to 2014, rather than by Denar 566 million and would have a positive impact on the profitability of the banking system.

The reduction of impairment due to sale of foreclosed assets is mitigated by the growth of this impairment in one bank. If we exclude this effect, impairment of non-financial assets would be reduced by Denar 170.7 million.



Chart 89
Annual growth rate of impairment cost



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, there was an increase in the rates of return on assets and equity, as well as in the profit margin⁶⁴ of the banks, and all indicators based on rates that are influenced by net interest income.

Table 3 Profitability and efficiency indicators of the banking system

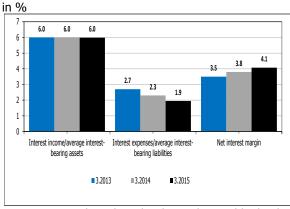
in %		
	03.2014	03.2015
Rate of return on average assets (ROAA)	0.4	0.6
Rate of return on average equity (ROAE)	4.0	5.5
Cost-to-income ratio	58.7	50.8
Non-interest expenses/Total regular income	64.4	56.8
Labor costs /Total regular income	23.0	21.2
Labor costs /Operating expenses	39.1	41.8
Impairment losses of financial and non-financial assets /Net interest income	46.8	57.8
Net interest income /Average assets	3.3	3.4
Net interest income /Total regular income	68.7	64.9
Net interest income /Non-interest expenses	106.6	114.2

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

Chart 90 Net interest margin

Non-interest income/Total regular income

Financial result/Total regular income



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

In the first guarter of 2015, the net **interest margin**⁶⁵ increased by 0.3 percentage points compared to March 2014. The increase reflects the more evident annual growth in net interest income (8.5%) compared to the growth of interest-bearing assets (7.1%). In fact, the main generator of the increase in the interest margin again are the reduced interest expenses (-12.6%), while the rise in interest-bearing liabilities also contributed to the annual reduction of interest expenses per unit of interest-bearing liabilities (from 2.3% to 1.9%). On the other hand, the reduced lending interest rates amid higher interest-bearing assets resulted in a slight increase in interest income (0.7%), and nearly the same level of interest

37.1

41.2

11.4

⁶⁴ Profit margin is the ratio of operating profit (loss) to total regular income.

⁶⁵ Net interest margin is calculated as a ratio between net interest income and average interest-bearing assets. Average interest-bearing assets are calculated as an arithmetic mean of the amounts of interest-bearing assets at the end of the current year and at the end of the previous year.



Chart 91
Income/expenses to interest-bearing assets/liabilities (up)
Net interest margin, by bank (down)

Bank I I Bank I Bank

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

income per unit of interest-bearing assets (6.0%).

Analyzing by bank, six of fifteen banks reported higher net interest margin than the net interest margin earned by the banking system.

3.2 Movements in interest rates and the interest rate spread

Lending and deposit interest rates of banks continued falling in the first quarter of 2015⁶⁶, although the National Bank's policy rate remained unchanged⁶⁷. Compared to the first quarter of 2014, the spread reduced from 4.8 percentage points to 4.6 percentage points.

⁷ In the period under observation, interest rate at CB bill auctions remained at the same level of 3.25%.

-

⁶⁶ The cut in interest rates is more pronounced in loans (by 0.3 percentage points), compared to deposits (by 0.2 percentage points).



Chart 92 (down)

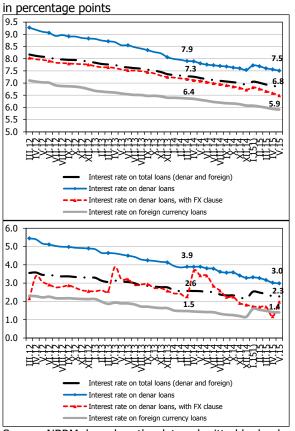
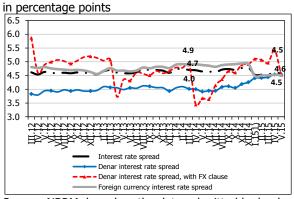


Chart 93 Interest spread, by currency



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

In terms of currency, interest rate Lending (up) and deposit interest rates spread in foreign currencies decreased (by 0.4 percentage points), while the interest rate spread in denars increased (0.4 percentage points). This trend in foreign currencies is a result of the cut in interest rates on foreign currency loans (0.4 percentage points), compared to the interest rates on foreign currency deposits, which remained the same. Analyzing the Denar interest rate spread, deposit interest rates registered a faster decline (0.7 percentage points), compared to lending rates (which fell by 0.7 percentage points). Also, interest rates on deposits with foreign currency clause registered a faster decline (0.6 percentage points) compared to the interest rates on loans with foreign currency clause (which declined by 0.5 percentage points).



ANNEXES