

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



***REPORT ON RISKS IN THE BANKING SYSTEM  
OF THE REPUBLIC OF MACEDONIA  
IN THE THIRD QUARTER OF 2014***

December 2014

## Contents

<b>I. Summary.....</b>	<b>3</b>
<b>II. Bank Risks .....</b>	<b>4</b>
<b>1. Credit risk .....</b>	<b>5</b>
1.1. Quality of credit portfolio of the banking system.....	5
1.2. Stress test simulation of the banking system's sensitivity to higher credit risk.....	12
<b>2. Liquidity risk.....</b>	<b>13</b>
2.1. Dynamics and composition of liquid assets.....	13
2.2. Liquidity indicators.....	16
2.3. Maturity structure of assets and liabilities.....	20
2.4. Stress testing - simulations of liquidity shocks .....	21
<b>3. Currency risk .....</b>	<b>22</b>
<b>4. Interest rate risk in the banking book.....</b>	<b>24</b>
<b>5. Insolvency risk .....</b>	<b>28</b>
5.1. Indicators for the solvency and capitalization of the banking system .....	28
5.2. Movements and quality of own funds of the banking system .....	29
5.3. Movements and structure of capital requirements and available capital of the banking system.....	30
5.4. Stress testing of the resilience of the banking system to hypothetical shocks .....	32
<b>III. Structural Features, Significant Balance Sheet Changes and Profitability of the Banking System .....</b>	<b>34</b>
<b>1. Structure of the banking system .....</b>	<b>35</b>
<b>2. Banks' activities .....</b>	<b>37</b>
2.1. Loans to non-financial entities.....	38
2.2. Deposits of non-financial entities.....	40
2.3. Other activities .....	42
<b>3. Profitability.....</b>	<b>45</b>
3.1. Movement and structure of incomes and expenses of the banking system, and profitability and efficiency indicators.....	45
3.2. Movements in interest rates and interest rate spread.....	50
<b>IV. ANNEXES.....</b>	<b>51</b>



## I. Summary

The recovery of the domestic economy had a positive impact on the growth of the activities of domestic banks, especially the growth of the deposit base. Thus, in the third quarter of 2014, deposits of non-financial entities grew rapidly, while the growth in lending slowed down and the liquid assets increased. Loans to households were generators of the growth in lending. However, annual changes point to accelerating credit growth. In the last two years, the credit market developments are quite variable on a quarterly basis, especially loans to the corporate sector, while the annual changes since late 2013 indicate a steady growth. Thus, the annual growth rate of lending to the corporate sector increased from 0.9% at the end of September 2013, to 7.3% at the end of September 2014. This and the revival of lending in October 2014, indicate a gradual improvement of the banks' expectations for the risk profile of the credit demand and the second-round effects of monetary loosening. However, given the still uncertain environment and the presence of risks in the real sector, it takes time to assess the reliability of the positive developments in the credit market. In the third quarter of 2014, the trend of positive changes in the currency profile of funding sources and banks' placements continued.

In the third quarter of 2014, the growth of non-performing loans accelerated and their share reached 12.2%. However, the risk to banks' own funds from materialization of the credit risk of these loans mitigates because of their high coverage with allocated impairment. Given the further positive economic developments, starting from the existing structure and the quality of the loan portfolio of banks (satisfactory recovery of past due loans, low risk of loans that mature within the next year etc.) non-performing loans are not expected to increase significantly. Banks' capacity needs to be enhanced for the purposes of early identification of signals of financial difficulties of their clients and consequently, timely restructuring of their clients' liabilities, which will further contribute towards slowing the growth of bad loans. Also, in the next period, it will be particularly important for banks to raise initiatives supported by policy makers and regulation, to find additional ways and approaches to reduce non-performing loans.

Stable liquidity and solvency of the banking system constitute the fundamentals of its stability and resilience to hypothetical shocks. Capital adequacy equals 16.5%, which is twice higher than the capital requirement of 8%. Liquid assets enable satisfactory coverage of short-term bank liabilities. Amid fewer opportunities to recapitalize from parent entities, the profit is extremely important for the further strengthening of the capital base of the banks. The profitability of the banking system continued to improve, primarily because of the lower interest costs and lower impairment of banks' financial assets (loans and other similar claims), due to the lower growth in non-performing loans in the first nine months of 2014 compared with the same period of 2013. The main profitability indicators of banks, ROA and ROE are doubled at 0.9% and 7.6%, respectively. Also, there is an apparent improvement of the operational ability of banks to create income that cover their operational costs.



## **II. Bank Risks**



## 1. Credit risk

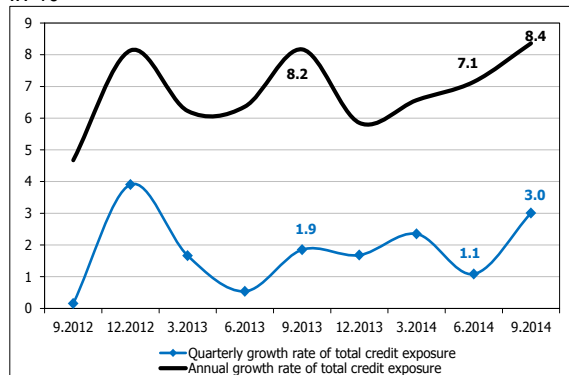
In the third quarter of 2014, the loan portfolio of the banking system kept on growing rapidly due to the increased credit support to the non-financial entities and the increasing exposure to financial institutions, whereas the exposure to the government registered a downward trend. Non-performing loans to total loans ratio increased by 0.4 percentage points to 12.2% at the end of September 2014. The upward trend of non-performing loans continued after the cut-off date of this report, so that in October 2014, their share in total loans equaled 12.6%. Despite this trend, the risk for banks' own funds from any materialization of the credit risk arising from non-performing loans is not high due to their high coverage with allocated impairment (79.3% with own impairment and over 100% with total impairment). Given the further positive economic developments, starting from the existing structure and the quality of the loan portfolio of banks (satisfactory recovery of loans "in default", low risk of loans that fall due within the next year etc.) non-performing loans are not expected to increase significantly. There is a need of enhancement of the banks' capacity for early identification of signals of financial difficulties of their clients and consequently, timely, justified and appropriate restructuring of their liabilities, which will further contribute towards slowing the growth of bad loans.

### 1.1. Quality of credit portfolio of the banking system

In the third quarter of 2014, total credit exposure<sup>1</sup> of the banking system increased by Denar 12,035 million to Denar 412,373 million. Unlike the previous quarter when its growth entirely resulted from the increased credit support to non-financial entities, in the third quarter, this growth is equally distributed between the non-financial entities and financial institutions<sup>2</sup>. Exposure by activity in the corporate sector and by purpose of households is presented in Annexes 17-19.

**The quality of loan portfolio of the banking system, followed by changes in non-performing loans to non-financial**

Chart 1  
Growth rates of total credit exposure  
in %

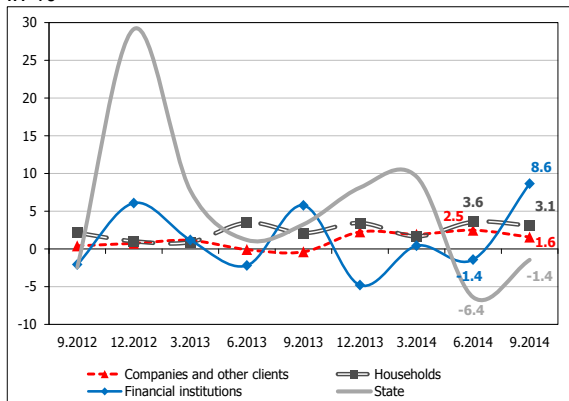


Source: Credit Registry of the National Bank, based on data submitted by banks.

<sup>1</sup> The total credit exposure includes balance sheets (loans, deposits, financial leases, payments made on the basis of guarantees, letters of credit, backing guarantees and other off-balance sheet positions, interest, commissions, fees, investments in securities and other financial instruments available for sale or held to maturity) and off-balance sheet claims (unused irrevocable lines of credits, unused irrevocable credits based on overdrafts and credit cards, letters of credit, guarantees, etc.), which expose the bank to credit risk.

<sup>2</sup> Exposure to financial institutions increased by Denar 6,393 million or 8.6% due to the increased assets with foreign banks and the National Bank, and reduced investments in government securities. Exposure to non-financial entities increased quarterly by Denar 6,223 million, or 2.2%. The largest contribution to growth was made by construction (corporate sector) and consumer loans (household sector). Compared to the previous quarter, the growth is slower because of the weaker credit support to companies in this quarter.

**Chart 2**  
Quarterly growth rate of credit exposure, by sector in %

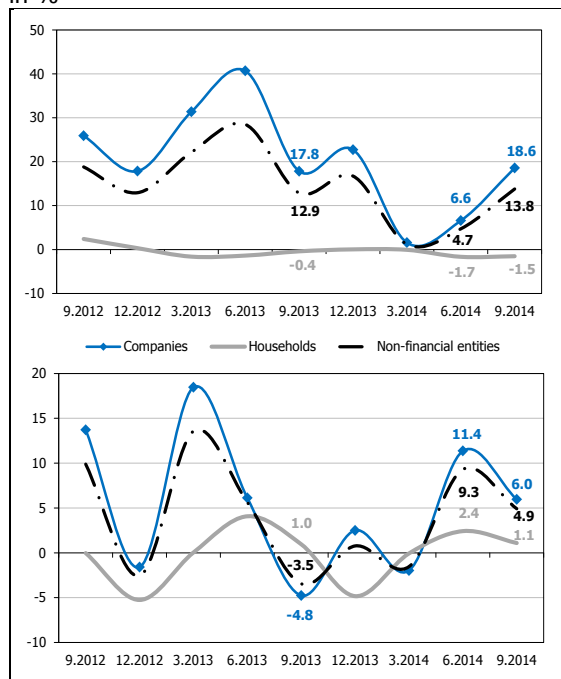


Source: Credit Registry of the National Bank, based on data submitted by banks.

**entities<sup>3</sup> has deteriorated** on both quarterly and annual basis, but at different pace (acceleration of the deterioration of the quality on an annual basis, and its quarterly slowdown).

The growth of non-performing loans (quarterly and annual) entirely derives from the increase in **non-performing loans to companies<sup>4</sup>** and reflects worsened performances of some clients from the wholesale and retail trade sector, industry, construction and activities related to real estate. In October 2014, the annual growth rate of non-performing loans reached 16.2%.

**Chart 3**  
Annual (up) and quarterly (down) growth rate of non-performing loans in %



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

**Non-performing loans to households**

remain at the same level, and within their framework, non-performing consumer loans and credit cards loans increased, with a simultaneous reduction of non-performing car loans.

For a better understanding of the quality of loan portfolio, **besides the non-performing loans, the analysis is also extended to all loans that are significantly impaired<sup>5</sup>**. Observing the structure of these loans, the share of non-performing loans has been increasing, whereas the share of restructured regular loans has been decreasing (both in total loans to corporate sector, and aggregately to non-financial entities).

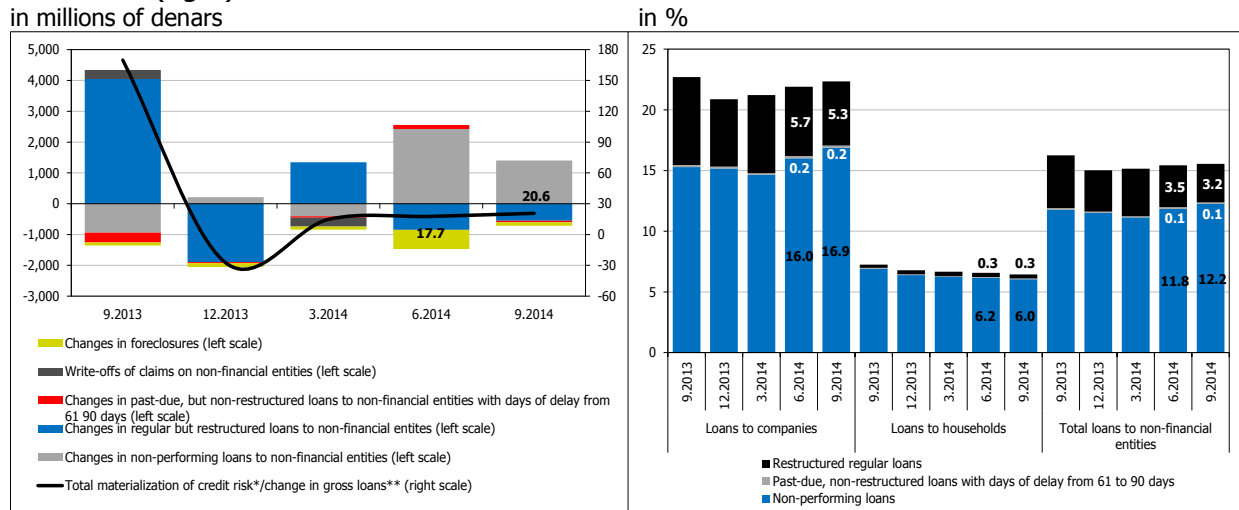
<sup>3</sup> Hereinafter, the overall analysis of the non-performing, restructured and prolonged loans, as well as write-offs refers only to non-financial entities.

<sup>4</sup> In this text, corporate sector includes corporations and other clients.

<sup>5</sup> Significantly impaired loans include non-performing loans, restructured loans and loans in default from 61 to 90 days.



**Chart 4**  
**Materialization of credit risk in banks' portfolios (left) and share of significantly impaired loans in total loans (right)**  
 in millions of denars

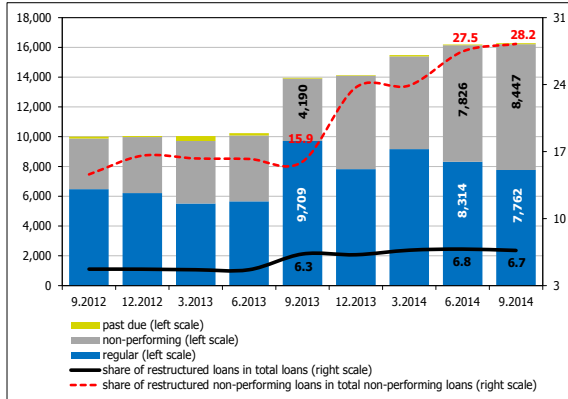


Source: National Bank, based on data submitted by banks.

\*Note (left chart): The total materialization of credit risk is calculated as the sum of the quarterly changes in non-performing loans, regular restructured loans, non-restructured loans in default between 61 to 90 days, written-off claims and foreclosed assets. The total change in gross loans refers to the quarterly change in gross loans including change of written off loans and foreclosed assets, since they were once loans.

**Early identification of the clients' financial difficulties by banks, and consequently, timely and proper restructuring of their clients' liabilities are particularly important to the future pace of non-performing loans in the banking system.** In the third quarter of 2014, the change in total restructured loans is small and their share in total loans to non-financial entities is relatively stable (6.7% as of 30 September 2014, 6.8% as of 30 June 2014). Yet, in the last three quarters, in the structure of restructured loans there is a **tendency of growth of restructured non-performing loans** and reduction of restructured regular loans. On one hand, this stems from the new restructured loans with non-performing status during the restructuring, as well as from the previously restructured claims that received a non-performing status in this quarter. Restructured non-performing loans account for 28.2% of total non-performing loans (27.5% as of 30 June 2014 and 15.9% as of 30 September 2013). Only in the third quarter of 2014, 48.1% of the new non-performing loans were restructured earlier, but their share in the total

**Chart 5**  
Structure of restructured loans, by status (regular/non-performing), by quarter in millions of denars and in %

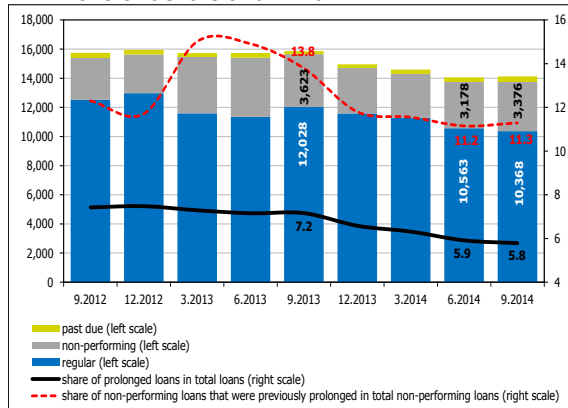


Source: Credit Registry of the National Bank, based on data submitted by banks.

non-performing loans is minor (2.5%). **The trend of constantly increasing share of restructured non-performing loans to total non-performing loans as of September 2013 shows that the banks (or some of them) delay the restructuring of their claims on clients who are experiencing financial difficulties and whose liabilities received non-performing status,** and that some of the completed restructuring of loan liabilities of some clients were not well designed or just postponed the recognition of credit losses. In the structure of total restructured loans, non-performing loans account for 51.9%, which confirms the conclusion that banks perform late restructuring of claims. The rise of restructured non-performing loans and the proportional growth of impairment determined for them<sup>6</sup> increase the average level of risk of total restructured loans to 43.7% (41.8% as of 30 June 2014).

Corporate sector is the driver of these changes in the restructured loans.

**Chart 6**  
Structure of prolonged loans, by status (regular/non-performing), by quarter in millions of denars and in %



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

**Another indicator of the quality of banks' loan portfolio and the management of its risks is the transfer of prolonged regular loans to non-performing loans.** Although, according to the regulations, the change in the contractual lending terms through extension of maturity of the liabilities is not associated with the poor financial condition of the clients<sup>7</sup>, however, as of 30 September 2014, 11.3% of total non-performing loans were previously prolonged. Moreover, almost a quarter (23.9%) of the previously prolonged loans received a non-performing status at the end of the third quarter of 2014, pointing to the need for greater caution by banks in the analysis of the financial condition of the clients in order to make appropriate decision on whether to prolong or restructure loans.

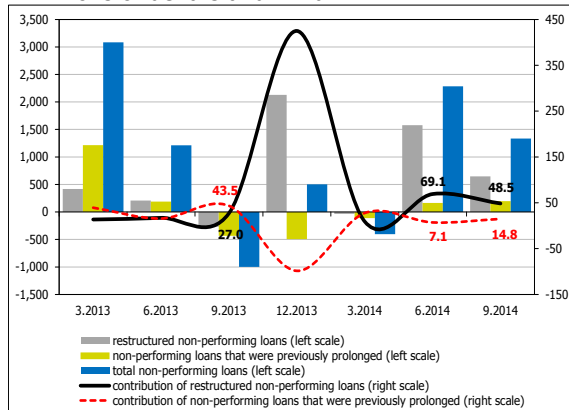
<sup>6</sup> The average risk level of restructured non-performing loans increased to 61.9% (59.5% as of 30 June 2014).

<sup>7</sup> According to the regulations, restructuring is the extension of maturity as is a result of the client's worsened financial position.





**Chart 7**  
Quarterly change of types of non-performing loans and their contribution to the growth of total non-performing loans in millions of denars and in %

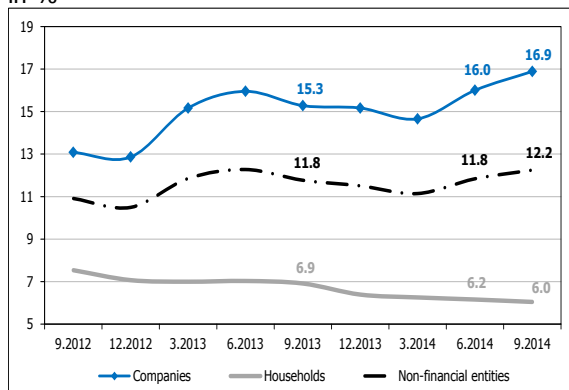


Source: Credit Registry of the National Bank, based on data submitted by banks.

**In summary, non-performing loans that were previously prolonged and restructured occupy 39.5% of total non-performing loans and contribute significant 58.4% to the quarterly growth of total non-performing loans<sup>8</sup>.** Analyzing the corporate sector, these loans account for 48.8% of total non-performing loans and determine nearly two thirds (63.4%) of the quarterly growth of non-performing loans.

**Write-offs made during the third quarter total Denar 16.7 million and are at the lowest level in five years, which may be an indication of underestimation of the current amount of non-performing loans.** On the other hand, the large presence of loans in the E risk category, which are fully provisioned and as such are retained longer in the banks' balance sheets, suggests the possibility of more write-offs in the coming period.

**Chart 8**  
Share of non-performing loans in total loans to non-financial entities and individual sectors in %

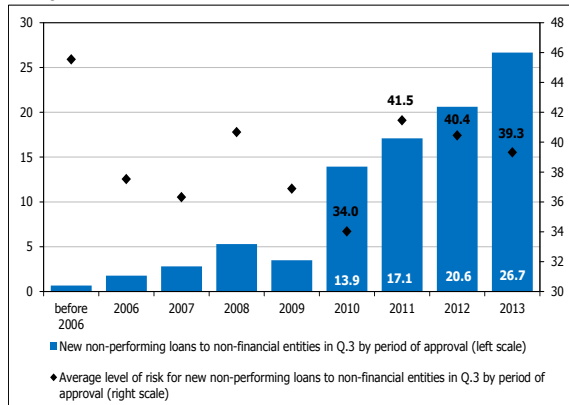


Source: National Bank, based on data submitted by banks.

**At the end of the third quarter of 2014, the share of non-performing loans to total loans reached 12.2%.** In the corporate sector, this share rose to 16.9%, which is the highest level since 2006. On the other hand, the rate of non-performing loans to households continued to decline and reduced to the lowest level after 2008, due to the significant growth of total loans to this sector, with a slight increase in non-performing loans. The rate of non-performing loans continued to move upwards and in October 2014 rose to 12.6%.

<sup>8</sup> The last quarter of 2013 registered a smaller increase in total non-performing loans compared to the growth of restructured non-performing loans since much of the previous non-performing loans returned to regular. This is also associated with the amendments to the credit risk management regulation from 1 December 2013, which allow for exclusion of the non-performing status of claims with collected full amount that is more than 31 days past due.

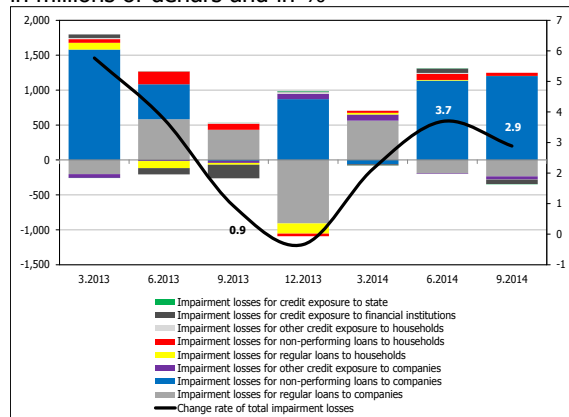
**Chart 9**  
Distribution of new non-performing loans as of 30 September 2014, by period of approval in %



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

**Most of the new non-performing loans incurred during the quarter originate from the post-crisis period, and some of them are "due" to the banks' "bad" credit decisions.** According to the approval period, about 75% of the loans that received non-performing status in the third quarter (as of 30 June 2014, they were regular) have been approved in the last four years. The average risk level of these loans is in C risk category (40.8%). At the end of the third quarter, most of the new non-performing loans (70%) approved in 2012 and 2013 refer to corporate sector, mainly to clients from construction businesses, wholesale and retail and industry, while the highest average risk level is in loans to wholesale and retail trade (D risk category).

**Chart 10**  
Quarterly change of impairment losses, by sector in millions of denars and in %



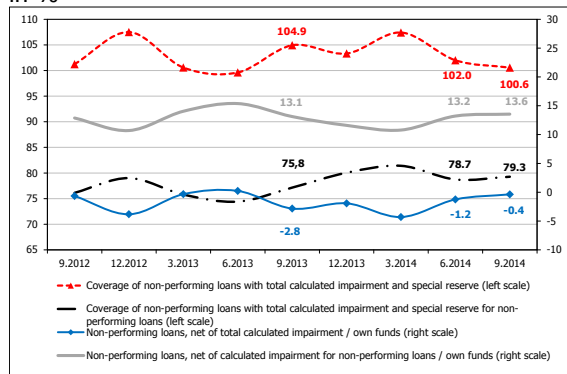
Source: Credit Registry of the National Bank, based on data submitted by banks.

**The coverage of non-performing loans with allocated impairment is high.** The coverage with total impairment decreased, but still exceeds 100%. This stems from the downward movement of impairment for regular loans (Denar 232 million, or 3.6%). In contrast, the faster growth of impairment for non-performing loans compared with the growth of non-performing loans increased the coverage with impairment determined for them, to 79.3%. Fully reserved non-performing loans account for 51.9% of the structure of non-performing loans to non-financial entities, while impairment determined for them occupies two-thirds (66.5%) of the total impairment for non-performing loans and about half (52.4%) of the impairment of the total credit portfolio. If we exclude fully provisioned loans in E risk category, the coverage of non-performing loans with total impairment would equal 99.5%, while the coverage of non-performing loans with impairment determined for them would reduce to 55.2%. On this basis, the share of non-performing loans in total loans would be twice lower, or 6.3%.

**The high coverage of non-performing loans with impairment "mitigates" the risks of their upward movement.** Under the assumption of full non-collectability of

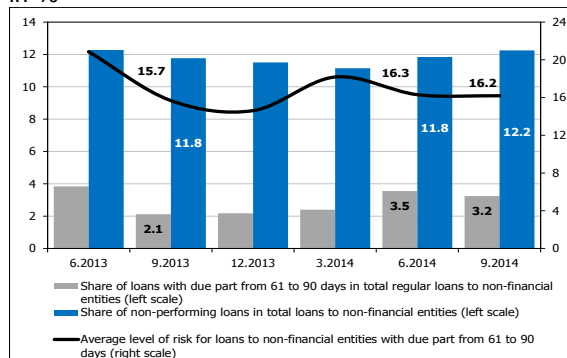


**Chart 11**  
Coverage of non-performing loans and share of net non-performing loans in banks' own funds  
in %



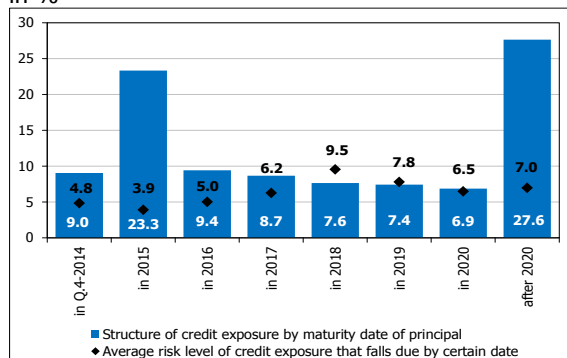
Source: National Bank, based on data submitted by banks.

**Chart 12**  
Average risk level of loans with 61 to 90 days due debt  
in %



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

**Chart 13**  
Structure and average risk level of credit exposure to nonfinancial entities, by principal due date  
in %



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

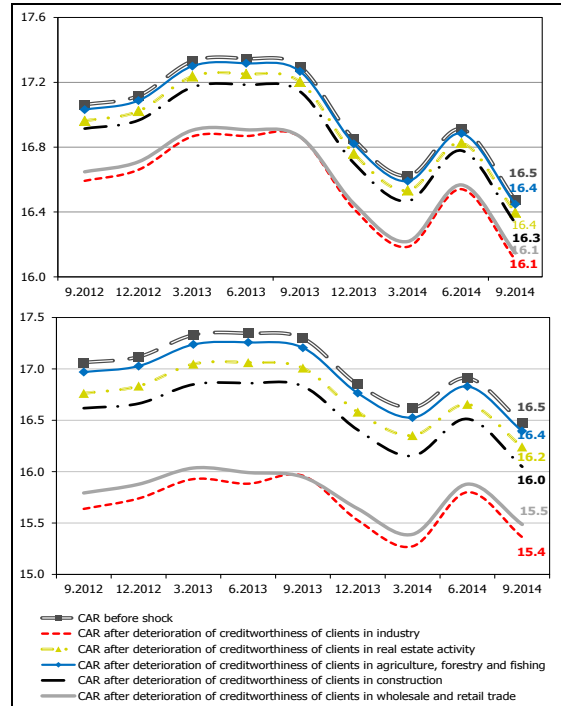
nonperforming loans, at the end of this quarter, the own funds would have decreased by 13.6% (0.3 percentage points more than the assumed reduction at the end of the second quarter).

**Due loans in default between 61 and 90 days are a potential risk of increasing non-performing loans in the next month.**

Assuming that the due debt of none of these loans will be collected in the next month, as of 30 September 2014, 3.2% of total regular loans would have become non-performing, which entails that only in this respect, non-performing loans would rise by Denar 6,859 million, or 22.9%. Yet, their growth in the next month (October 2014) was significantly lower, amounting to 3.5% or Denar 1,038 million, indicating a satisfactory recovery of the 61 to 90 days due debt.

According to the agreed maturity of the principal, by the end of this year, 9.0% of the total credit exposure to non-financial entities as of 30 December 2014 is expected to fall due. Given their low average level of risk, no serious difficulties are expected in the collection of these exposures. Credit exposure classified in A and B risk categories accounts for 94.4% of total credit exposure that falls due by the end of 2014 and about two-thirds (69.4%) refer to corporate sector, particularly clients from the industry and wholesale and retail trade, whose average risk level is in B risk category. The structure of credit exposure by contracting maturity shows that one third of the exposure falls due by the end of 2015, thus creating space for maintaining the volume of lending to non-financial entities (through extension of their maturity, given that only 17.8% of loans falling due by the end of 2015 has annuity payments and through replacing loans that will be collected). Banks will continue facing the challenge of growth of the loan portfolio for the purposes of achieving their projected goals.

Chart 14  
Capital adequacy ratio by activity, prior and after the first (up) and second (down) simulation for both sectors aggregately in %



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

## 1.2. Stress test simulation of the banking system's sensitivity to higher credit risk

Stress tests conducted on a regular basis tend to examine the sensitivity of the banking system in case of deterioration of the quality of certain segments of the loan portfolio. They consist of simulations of hypothetical transition of 10% (first simulation) and 30% (second simulation) of credit exposure to companies (by activity) and households (by credit products) separately, and to the two sectors jointly, to the next two higher risk categories. **The results of the simulations show resilience of the banking system to the simulated shocks.** However, compared to the previous quarter, there is some deterioration of the results for the most part due to the lower capital adequacy ratio prior to the shocks, while the stronger deterioration of this ratio of certain banks stems from their greater sensitivity to assumed shocks. The largest decrease in the capital adequacy ratio during the implementation of the two simulations was recorded in the case of deterioration of the creditworthiness of clients from the industry and wholesale and retail trade businesses (Annex 26).

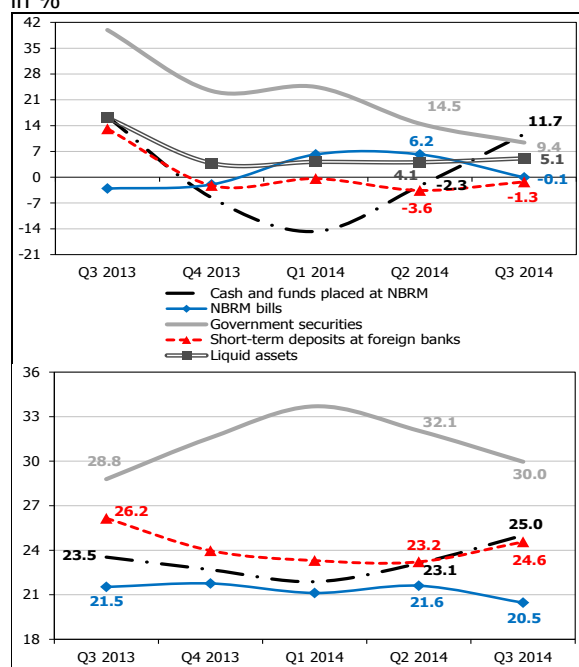


## 2. Liquidity risk

In the third quarter of 2014, liquid assets of banks grew rapidly on both annual and quarterly basis. Their total volume and their share in total assets remained satisfactory. The growth of liquid assets is generated by investments in deposit facilities with the National Bank and investments in short-term deposits in foreign banks. In the third quarter of 2014, the growth of liquid assets caused a slight improvement of liquidity indicators, which is particularly visible in the foreign currency liquidity indicators. Also, the gap between assets and liabilities according to their contractual residual maturity narrowed. During the third quarter of 2014, the banks continued with the deleveraging process to their parent entities even at a stronger pace. Simulations for combined liquidity shocks show a solid level of resilience of the banking system to various liquidity shocks.

### 2.1. Dynamics and composition of liquid assets

Chart 15  
Annual growth rate (up) and structure (down) of liquid assets  
in %

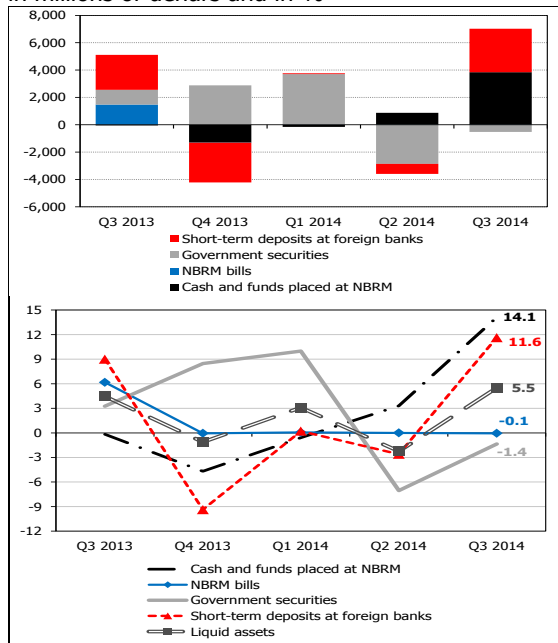


Source: National Bank, based on data submitted by banks

At the end of the third quarter of 2014, liquid assets<sup>9</sup> of the banking system amounted to Denar 124,497 million which is an annual growth of Denar 6,052 million. Their annual growth rate accelerated and was about one percentage point higher as of 30 September 2014 compared with 30 June 2014. At the same time, on a quarterly basis, liquid assets increased by Denar 6,500 million, or 5.5%. Contrary to the previous quarter when liquid assets decreased quarterly, in the third quarter of 2014, the changes in the banks' liquid assets indicate a higher tendency of banks to invest in liquidity instruments, despite the trend of a slight reduction in their yield during the third quarter of 2014 (when there was a slight decline in interest rates on treasury bills, interbank interest rates and EURIBOR, as a main interbank interest rate in the euro area).

<sup>9</sup> This report is the first that includes changes in the method of determining liquid assets, i.e. all risk-free securities are added as its integral elements, regardless of their maturity (under the previous methodology, liquid assets included non-risk securities with maturity of up to one year). With this methodological change, liquid assets increased by Denar 6,448 million or 5.5%. Thus, according to the new methodological approach, liquid assets include cash equivalents and cash on accounts with the National Bank, CB bills, correspondent accounts and short-term deposits with foreign banks and investments in securities issued by the government. For the purposes of analyzing liquidity, assets and liabilities in denars with FX clause are considered denar assets and liabilities.

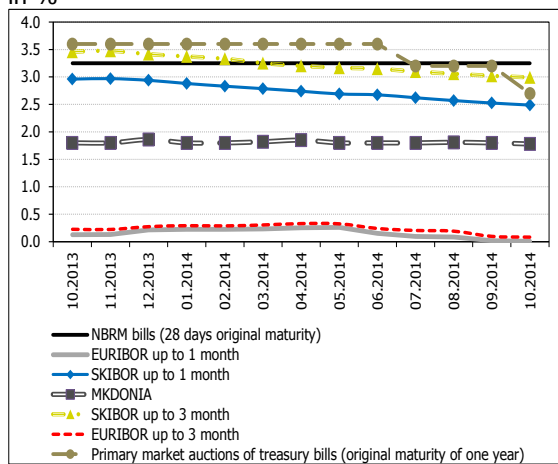
**Chart 16**  
Absolute (up) and relative (down) quarterly growth of liquid assets in millions of denars and in %



Source: National Bank, based on data submitted by banks

Analyzing financial instruments that compose liquid assets, **cash and funds placed with the National Bank showed the fastest annual growth, and the growth in this category stems from the Denar deposit facilities in the National Bank<sup>10</sup>. CB bills registered almost insignificant quarterly and annual change, when their share in the structure of the liquid assets of banks decreased.**

**Chart 17**  
Dynamics of key interest rates relevant for domestic banks in %

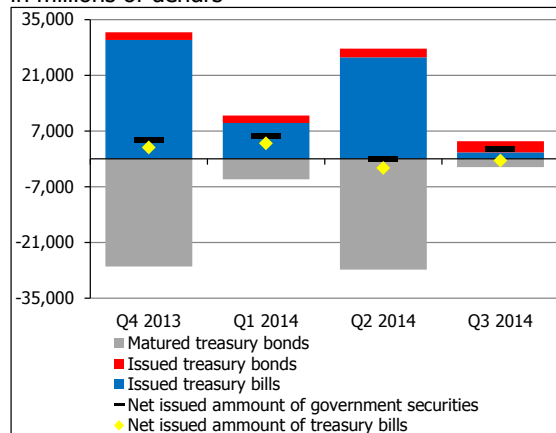


Source: National Bank and EURIBOR website.

<sup>10</sup> According to the decision on deposit facilities (Official Gazette of the Republic of Macedonia No. 49/12, 18/13, 50/13 and 166/13), banks may place deposits with the National Bank each working day with maturity of one day and once a week with maturity of seven days. In the third quarter of 2014, the interest rates on these deposits equaled 0.75% on overnight deposits and 1.25% on seven-day deposits. As of 15 October 2014, the interest rates on these deposits decreased by 0.25 percentage points.

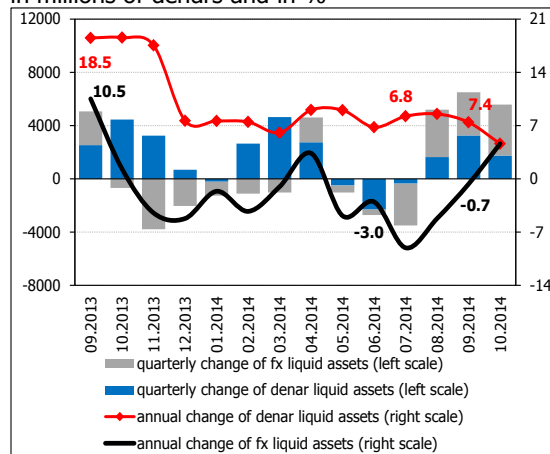


**Chart 18**  
 Quarterly dynamics of issued and due government securities  
 in millions of denars



Source: National Bank, based on data submitted by banks

**Chart 19**  
 Absolute quarterly and relative annual growth of liquid assets, by currency  
 in millions of denars and in %



Source: National Bank, based on data submitted by banks

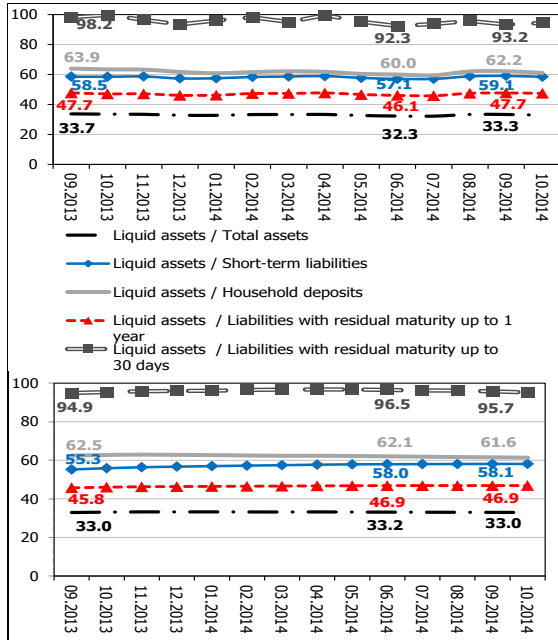
**Banks' investments in government securities** declined by 1.4% during the third quarter of 2014. This is due to changes in the primary market that significantly reduced the offered amount of treasury bills, which was the basis of quarterly decrease in the share of government securities in total liquid assets of banks by 2.1 percentage points. However, on an annual basis, the investments of Macedonian banks in domestic government securities have increased by 9.4%.

In the third quarter, **banks' assets on correspondent accounts and short-term deposits in foreign banks registered a remarkable growth of 11.6%**, which together with deposits with the National Bank, in fact, completely determined the quarterly and annual growth of liquid assets. This caused an upward trend in the annual rate of change in the foreign currency component of liquid assets, which in October 2014 received a positive sign, which is only the second time in 2014. Record low interest rates in the international interbank market resulted in a relatively low yield of liquid foreign exchange instruments, which in turn allowed prevalence of negative growth rates on foreign currency liquid assets over the past year. This explains the historically relatively low share of foreign currency liquidity in total liquidity, which, at the end of the third quarter of 2014, equaled was 27.0%<sup>11</sup>. At the end of the third quarter, the denar component of liquid assets increased annually by 7.4% and its share in total liquid assets equals 73.0%.

<sup>11</sup> Five-year average share of foreign currency liquidity in total liquid assets totaled 31.2% as of 30 September 2014.

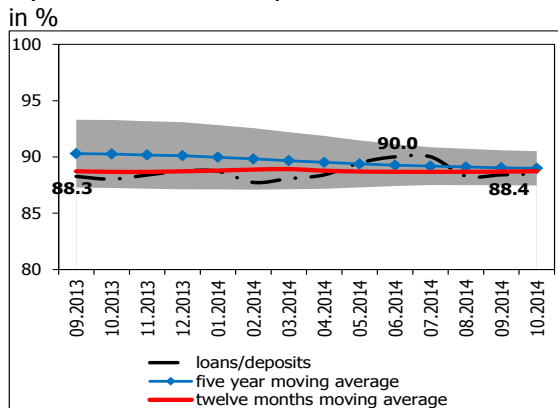
## 2.2. Liquidity indicators

Chart 20  
Liquidity ratios of the banking system – level (up) and twelve-month moving average (down) in %



Source: National Bank, based on data submitted by banks

Chart 21  
Dynamics of loan/deposit ratio in %



Source: National Bank, based on data submitted by banks

Note: Shaded parts in the chart represent a span of one standard deviation above and below the five-year moving average of the indicator.

In the third quarter of 2014, the acceleration of the growth of liquid assets triggered positive changes in the liquidity indicators of the banking system<sup>12</sup>. Liquid assets account for almost one-third of the total banks' assets, which directly illustrate the stable liquidity position of the domestic banks. Liquid assets cover almost 60% of the short-term liabilities of banks and more than 90% of the contractual obligations with residual maturity of up to 30 days.

In the third quarter of 2014, the loan/deposit ratio of non-financial entities remained stable at about 90%. The dynamic growth of deposits in the third quarter of 2014, compared with the growth of loans, caused this indicator to note modest reduction on a quarterly basis and to drop below the level of its twelve-month and five-year moving average. Observing by banks, at the end of the third quarter of 2014, this ratio ranged from 68.3% to 127.2%. In four banks, this ratio was above 100%, indicating full utilization of deposits for lending to the private sector.

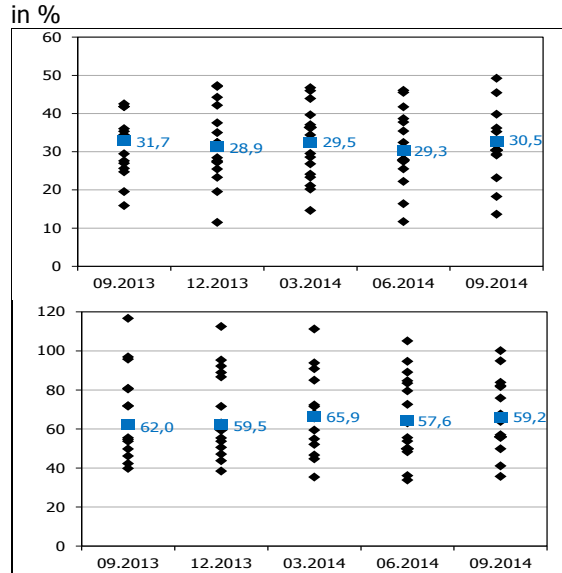
<sup>12</sup> Calculations of liquidity ratios of the banking system do not take into account resident interbank assets and liabilities.





Chart 22

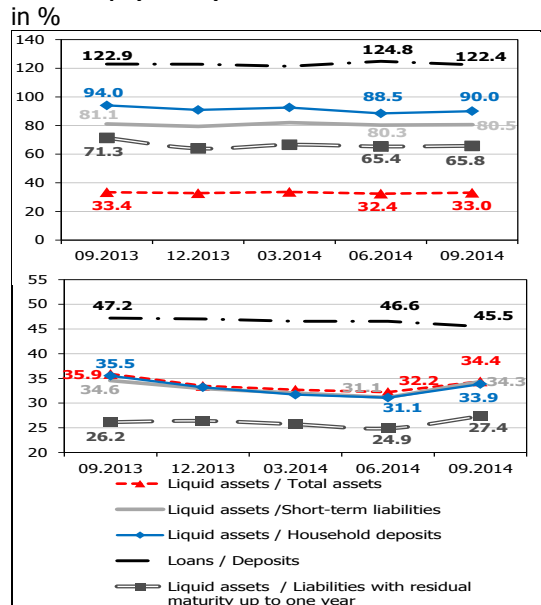
Dynamics of the share of liquid assets in total assets (up) and the coverage of short-term liabilities with liquid assets (down), by bank



Source: National Bank, based on data submitted by banks

Chart 23

Liquidity ratios of the banking system by currency - Denar (up) and foreign currency (down)



Source: National Bank, based on data submitted by banks

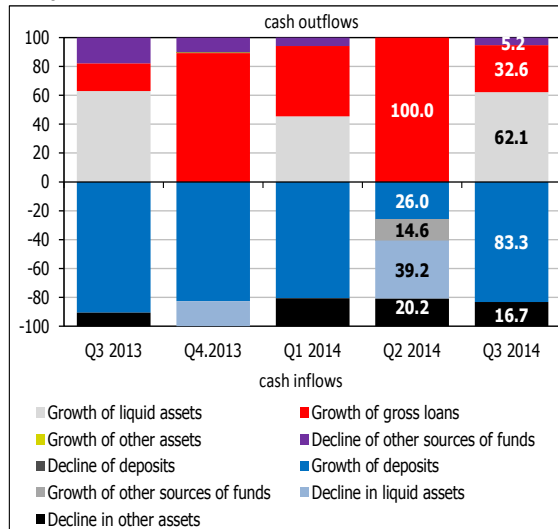
**Observed by banks, the share of liquid assets in total assets and the coverage of individual categories of liabilities with cash mainly increased in the third quarter of 2014.** An exception is the coverage of the total deposits with liquid assets, which, due to the dynamic growth of deposits, slightly decreased in most of the banks.

In the third quarter of 2014, **liquidity indicators also registered an upward trend according to the currency features of assets and liabilities.** The increase in indicators is more pronounced in foreign currency liquidity indicators, primarily due to the growth of short-term deposits in foreign banks.

**Liquidity rates of the banking system<sup>13</sup>**, which are the ratio between assets and liabilities falling due in the next 30 days and 180 days equal 2.4 and 1.5 respectively, at the end of the third quarter of 2014 which is significantly higher than 1, as a prescribed minimum.

<sup>13</sup> For the method of calculating banks' liquidity ratios also see the Decision on managing banks' liquidity risk (Official Gazette of the Republic of Macedonia No. 126/11, 19/12 and 151/13).

Chart 24  
Structure of cash inflows and outflows of the banking system  
in %



Source: National Bank, based on data submitted by banks

\* The category of other assets includes assets that are not loans to nonfinancial entities and are not included in the category of liquid assets (placements in securities that are not part of the liquid assets, long-term loans in foreign and domestic banks, foreign exchange reserve requirement, foreclosures, fixed assets, etc.) as well as the effect of impairment of financial and nonfinancial assets whose increased follows the decrease of other assets.

\*\* The category of other sources of funds includes all sources of funding which are not deposits of nonfinancial entities (equity and reserves, deposits of financial institutions, loans, subordinated instruments etc.).

Unlike the previous quarter, when the total cash outflows<sup>14</sup> of banks were used for lending, in the third quarter of 2014, investments in liquid assets had the largest share in the banks' cash outflows (which corresponds with the acceleration of their quarterly growth rate). Loan growth made up around one third of the cash outflows of banks in the third quarter of 2014. Quarterly changes were observed in the structure of banks' cash inflows. Unlike the previous quarter, when banks' cash inflows came from multiple sources, in this quarter, cash inflows are dominated by deposits of non-financial entities (83.3%).

Deposits also made the largest contribution to the growth of **banks' total sources of funding** in the third quarter of 2014. Deposit growth fully offset the decline in sources of funding based on borrowings, which on a quarterly basis decreased by 3.4% mainly due to the servicing of short-term liabilities to foreign parent entities. Observing by maturity, more than half of the growth of the sources of funding comes from short-term sources, mainly due to the growth of corporate deposits. The growth of long-term funding sources constituted one-third of the total quarterly growth of the sources of funding, primarily due to the growth of long-term household savings.

<sup>14</sup> Cash outflows and cash inflows of banks have been obtained indirectly, i.e. by changing the balances of individual accounts of the banks' balance sheets. The effect on banks' cash flows, which is due to expenses and income that do not represent cash outflow or inflow (e.g. written-off loans, revaluation of securities available for sale or held for trading, depreciation of fixed assets, net exchange rate differences etc.) is an integral part of the change in the respective balance sheet items to which the respective inflow or outflow refers.

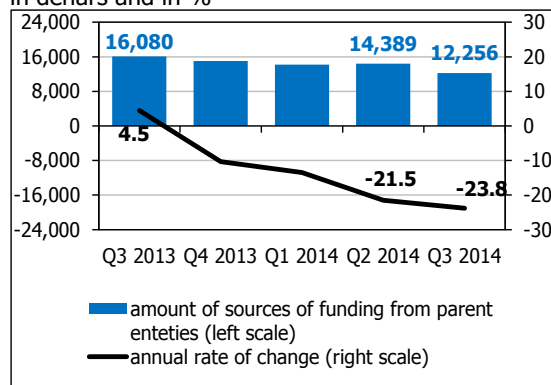


Table 1 Banks' sources of funding  
in millions of denars and in %

Types of sources of funding	30.6.2014		30.9.2014		Quarterly change	
	Amount (in millions of denars)	Share in structure	Amount (in millions of denars)	Share in structure	Absolute	Relative
<b>Deposits of non-financial entities</b>	<b>267,616</b>	<b>71.1%</b>	<b>276,187</b>	<b>71.8%</b>	<b>8,571</b>	<b>3.2%</b>
-o.w. parent entities	0	0.0%	0	0.0%	0	0.0%
<b>Deposits of financial institutions</b>	<b>16,233</b>	<b>4.3%</b>	<b>16,205</b>	<b>4.2%</b>	<b>-28</b>	<b>-0.2%</b>
-o.w. parent entities	5,156	1.4%	4,598	1.2%	-558	-10.8%
<b>Loans, issued debt securities subordinated liabilities and hybrid capital instruments</b>	<b>42,290</b>	<b>11.2%</b>	<b>40,840</b>	<b>10.6%</b>	<b>-1,450</b>	<b>-3.4%</b>
-o.w. parent entities	9,152	2.4%	7,608	2.0%	-1,544	-16.9%
<b>Equity and reserves</b>	<b>45,317</b>	<b>12.0%</b>	<b>45,981</b>	<b>12.0%</b>	<b>664</b>	<b>1.5%</b>
<b>Other sources of financing</b>	<b>5,072</b>	<b>1.3%</b>	<b>5,422</b>	<b>1.4%</b>	<b>350</b>	<b>6.9%</b>
-o.w. parent entities	81	0.0%	50	0.0%	-31	-38.0%
<b>Total sources of financing</b>	<b>376,528</b>	<b>100.0%</b>	<b>384,635</b>	<b>100.0%</b>	<b>8,106</b>	<b>2.2%</b>
<b>Long-term sources of financing</b>	<b>146,089</b>	<b>38.8%</b>	<b>148,757</b>	<b>38.7%</b>	<b>2,668</b>	<b>1.8%</b>
-o.w. parent entities	9,779	2.6%	9,199	2.4%	-580	-5.9%
<b>Short-term sources of financing</b>	<b>180,050</b>	<b>47.8%</b>	<b>184,475</b>	<b>48.0%</b>	<b>4,425</b>	<b>2.5%</b>
-o.w. parent entities	4,529	1.2%	3,006	0.8%	-1,523	-33.6%
<b>Equity and reserves</b>	<b>45,317</b>	<b>12.0%</b>	<b>45,981</b>	<b>12.0%</b>	<b>664</b>	<b>1.5%</b>
<b>Other sources of financing</b>	<b>5,072</b>	<b>1.3%</b>	<b>5,422</b>	<b>1.4%</b>	<b>350</b>	<b>6.9%</b>
-o.w. parent entities	81	0.0%	50	0.0%	-31	-38.0%
<b>Total sources of financing</b>	<b>376,528</b>	<b>100.0%</b>	<b>384,635</b>	<b>100.0%</b>	<b>8,106</b>	<b>2.2%</b>

Source: Data were submitted by the banks on special request of the National Bank and therefore, differences may occur relative to the balance sheet data that banks regularly submit on a regular basis as specified by the Decision on submitting data on the stock and flow on accounts in the banks' chart of account and financial reports

Chart 25  
Used funding sources from parent entities  
in denars and in %

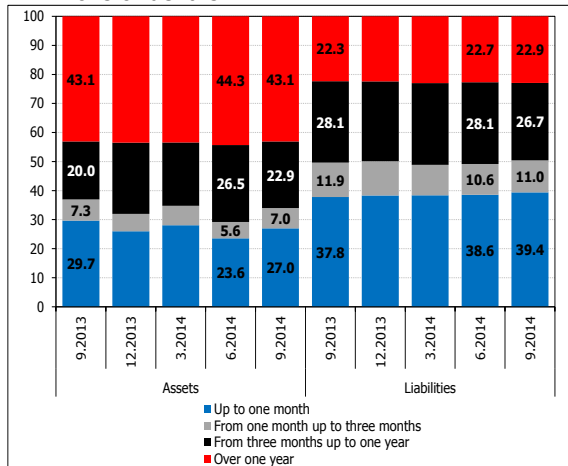


Source: National Bank, based on data submitted by banks

**Banks' deleveraging to their parent entities continued in the third quarter of 2014.** For four consecutive quarters, the annual growth rate of the funding sources from parent entities is negative, at -23.8% at the end of September 2014. Almost three quarters of the quarterly decline in liabilities to parent entities is due to the repayment of the short-term borrowing of a bank to its parent entity. Thus, **at the end of the third quarter of 2014, the share of liabilities to parent entities in total banks' liabilities equaled 3.6%, which is the lowest level since 2008.** At the end of the third quarter of 2014, their share in total banks' liabilities to non-residents equaled 33.8%, which is by 4.2 and 7.3 percentage points less on a quarterly and annual basis, respectively. The repayment of short-term liabilities to parent entities increased the long-term component in the maturity structure of the sources of funding of domestic banks to parent entities, with almost 55% of liabilities to parent entities being subordinated and hybrid capital instruments.

### 2.3. Maturity structure of assets and liabilities

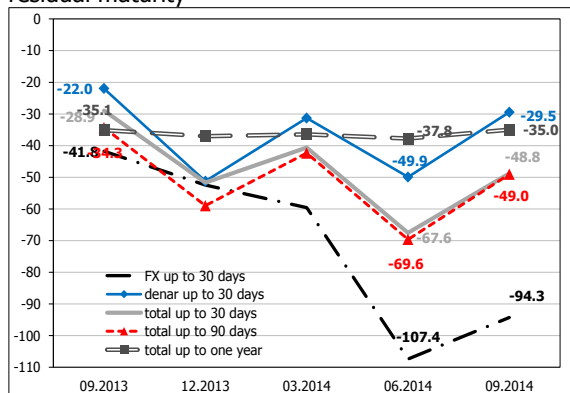
Chart 26  
Structure of banks' assets and liabilities by their contractual residual maturity in millions of denars



Source: National Bank, based on data submitted by banks

In the third quarter of 2014, the structure of banks' assets according to their contractual residual maturity (Annex 28) registered an increase in the share of assets with shorter contractual maturity. This is especially visible in the assets with residual maturity of up to one month, mainly due to the quarterly growth of deposits placed with the National Bank and the short-term deposits in foreign banks. In contrast, the share of assets with residual maturity from three months to one year and over one year decreased. Similar developments can also be observed in the structure of liabilities according to their contractual residual maturity, but with significantly smaller changes in the structural shares of liabilities with certain residual maturity.

Chart 27  
Cumulative difference between assets and liabilities of banks, by contractual residual maturity  
% of cumulative assets with same contractual residual maturity



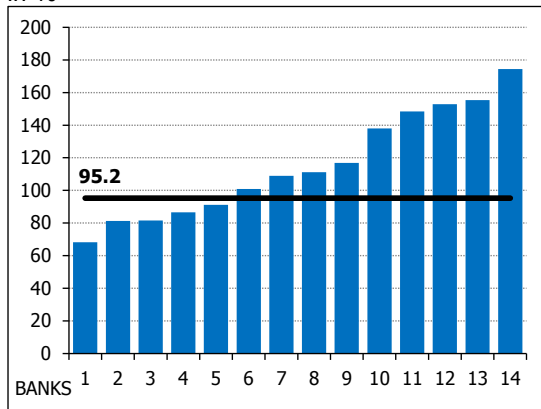
Source: National Bank calculations, based on data submitted by banks

More pronounced changes in the maturity profile of assets, compared with changes in the residual maturity of the banks' liabilities caused a remarkable quarterly reduction of the aggregate negative difference between assets and liabilities of banks according to their contractual residual maturity. This movement was more pronounced in the denar gap, while somewhat smaller narrowing was observed in the foreign exchange gap. The main driver of this improvement of the maturity mismatch between assets and liabilities according to their contractual maturity was the growth of liquid assets in the third quarter.

Banks express positive expectations for the stability of deposits as the main source of funding their activities, and according to their expectations, the cumulative difference between assets and liabilities in all maturity segments is positive (Annex 29). As of 30 September 2014, the banks expect 80.2% of deposits with residual maturity of up to three months (84.3% as of 30 June 2014) to show stability and to remain in the banks in the next three months.

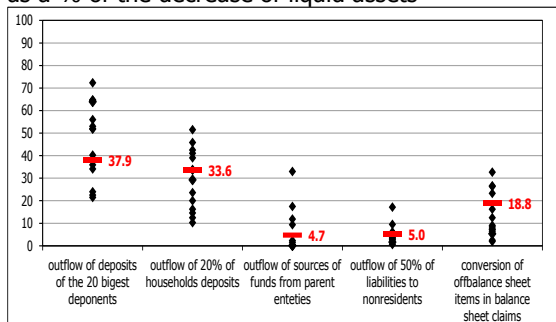
## 2.4. Stress testing - simulations of liquidity shocks

Chart 28  
Decrease of liquid assets in simulation for combined liquidity shocks  
in %



Source: National Bank calculations, based on data submitted by banks

Chart 29  
Contribution of combined shocks to the decrease of liquid assets in simulation for combined liquidity shock  
as a % of the decrease of liquid assets



Source: National Bank, based on data submitted by banks

Simulations of liquidity shocks confirm the stable liquidity position of banks, mainly due to their satisfactory level of liquid assets. Liquid assets of the banking system are at a level that can service the most extreme liquidity shock, which in a period of 30 days, would combine outflows of several types of funding sources<sup>15</sup> from the banks.

Individual assumed shocks have various contributions to the total percentage of reduction of liquid assets. The largest contribution to the reduction of liquid assets and thus, the highest relative importance for the banks, results from the outflow of deposits of the 20 largest deponents, followed by the potential outflow of 20% of the household deposits. Hypothetically, withdrawal of sources of funding from parent entities and the outflow of 50% of liabilities to non-residents, have a relatively modest impact on the overall liquidity outflow in this simulation, which primarily comes from their modest share in the total structure of the sources of funding of the domestic banks.

<sup>15</sup> The simulation assumes outflow of deposits of the twenty largest deponents, 20% of household deposits, source of funding from parent entities with the exception of liabilities on subordinated instruments and hybrid capital instruments that are excluded from the simulation because according to the regulations for calculating capital adequacy the possibility for their early payment is limited, 50% of the liabilities to non-residents (excluding liabilities to non-resident parent entities of banks) and conversion of certain off-balance sheet liabilities of the banks (uncovered letters of credits, irrevocable credit lines and unused limits based on approved credit cards and overdrafts) in the balance sheet's accounts receivable. The simulations of liquidity shocks exclude MBDP AD Skopje, because of the legal restriction to serve in a deposit market.

The simulations assume that outflows in individual shocks are proportional to the contractual maturity structure of the sources of funding for which the outflow as of 30 September 2014 has been assumed. Such obtained maturity structure of assumed outflows serves to calculate short-term liabilities after simulated outflows.

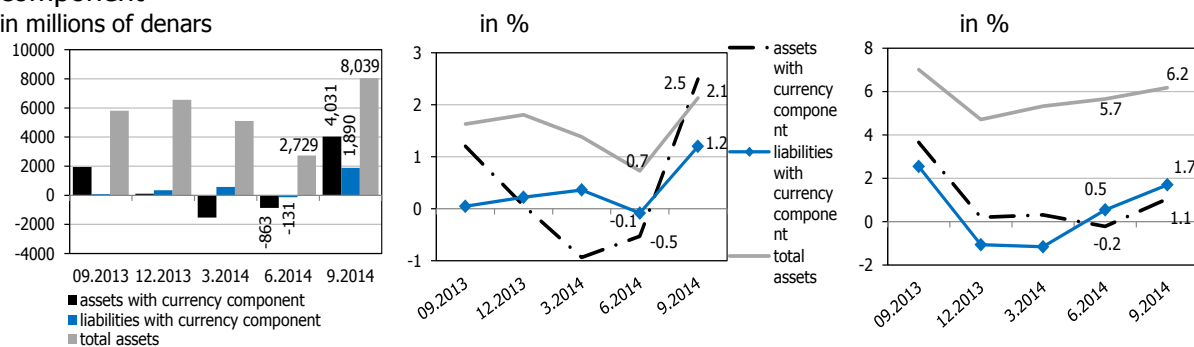
### 3. Currency risk

In the third quarter of 2014, the significance of currency risk for the stability of the banking system, as measured by the share of the gap between assets and liabilities with FX clause in the banks' own funds remained relatively low. It further decreased given the stable exchange rate of the denar against the euro (euro is the most common foreign currency in the banks' balance sheets). As of 30 September 2014, all banks have observed the limit of aggregate foreign currency position (30% of own funds).

Chart 30

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

in millions of denars

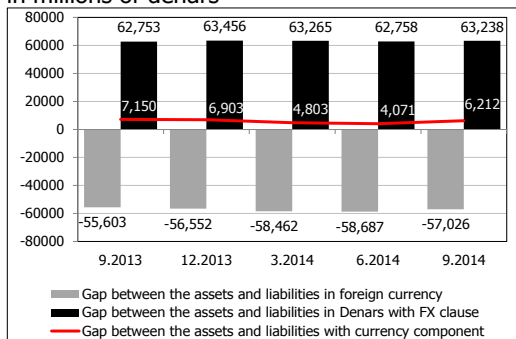


Source: National Bank, based on data submitted by banks

Chart 31

Structure of gap between assets and liabilities with a currency component

in millions of denars



Source: National Bank, based on data submitted by banks

In the third quarter of 2014, the gap between assets and liabilities with FX clause was valued at Denar 6,212 million, which is a significant increase of Denar 2,141 million or 52.6% compared with the previous quarter. The gap expansion in the third quarter results from the increase in foreign currency assets (Denar 3,114 million)<sup>16</sup>, amid simultaneous growth of foreign currency liabilities (Denar 1,453 million)<sup>17</sup>. The increase of foreign currency clause positions is slower.

The composition of assets and liabilities with currency component is shown in Annexes 30 and 31.

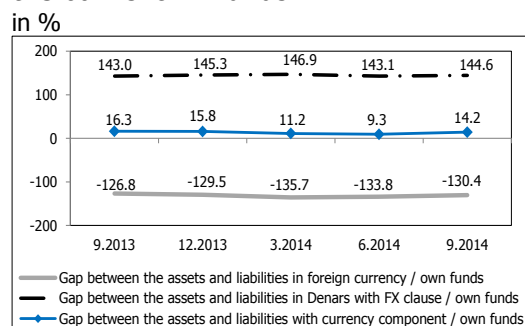
Despite the significant increase in the share of the gap between assets and liabilities with currency component in the banks' own funds

<sup>16</sup> Within the foreign currency assets, current accounts in foreign banks recorded the fastest increase.

<sup>17</sup> The increase in foreign currency liabilities primarily arises from current accounts.

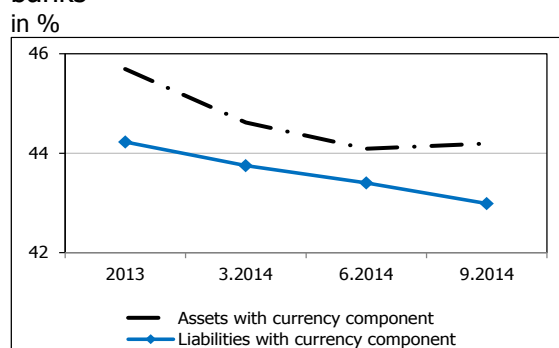


**Chart 32**  
Share of gap between assets and liabilities with a currency component in the banks' own funds



Source: National Bank, based on data submitted by banks

**Chart 33**  
Share of the assets and liabilities with a currency component\* in the total assets of banks



Source: National Bank, based on data submitted by banks

\* Within assets, loans and interests are reduced by the amount of impairment. MBDP AD Skopje is not included.

**Table 2** Currency structure of assets and liabilities with currency component

Currency	31.3.2014		30.6.2014		30.9.2014	
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
	EUR	88.8	88.4	88.7	87.8	89.1
USD	6.8	7.2	6.8	7.5	6.5	7.4
CHF	2.1	2.1	2.1	2.1	2.0	2.1
Other	2.4	2.4	2.4	2.5	2.4	2.5
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Source: National Bank, based on data submitted by banks

(of 4.9 percentage points)<sup>18</sup>, the banking system's exposure to currency risk, as measured by this indicator, is low.

In the third quarter of 2014, the growth of foreign assets ended the downward trend of the share of assets with currency component in the total assets of the banking system, which reported a marginal increase of 0.1 percentage points. On the other hand, the share of liabilities with currency component continued to move downwards in the third quarter of 2014.

As of 30 September 2014, all banks meet the required limit for aggregate foreign exchange position (30% of own funds), while the euro remained the most common currency in the banks' assets and liabilities.

**Table 3** Distribution of banks by the share of open currency position, by currency and aggregate foreign currency position in the own funds

Item	Number of banks								Aggregate currency position/ own funds
	Open currency position by currency / own funds								
	EUR		USD		CHF		Other		
	L	S	L	S	L	S	L	S	
under 5%		3	7	7	7	6	13	1	3
from 5% to 10%									
from 10% to 20%	6	1							7
from 20% to 30%	4								4
over 30%									

Explanation of the shortage : L-long currency position, S-short currency position.

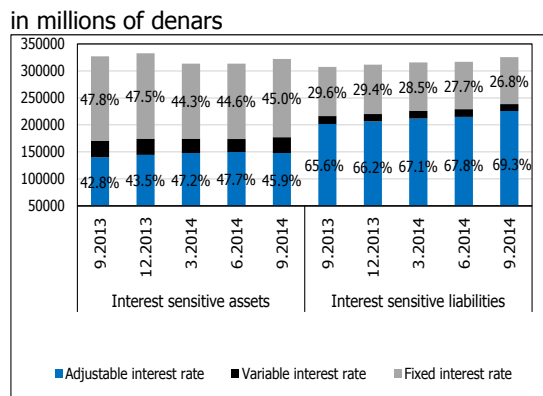
Source: National Bank, based on data submitted by banks

<sup>18</sup> The increase is due to the expansion of the gap between assets and liabilities with currency component with a simultaneous reduction of the banks' own funds.

#### 4. Interest rate risk in the banking book

The exposure of the banks operating in the Republic of Macedonia to interest rate risk in the banking book went up in the third quarter of 2014, but is still insignificant compared with the exposure to other bank risks. Namely, loans with adjustable interest rate decreased, while loans with fixed and variable interest rate increased on a quarterly basis. This also affected the weighted value of the banking book, which recorded a negative deviation from the current trend of the weighted value of the portfolio with adjustable interest rates, as an indicator for the reduction of banks' activities with this kind of interest rates.

Chart 34  
Structure and amount of interest sensitive assets and liabilities, by type of interest rates



Source: National Bank, based on data submitted by banks

**Interest-sensitive assets and liabilities of banks increased by 2.7% in the third quarter of 2014** (by 0.03% and 0.4%, respectively as of 30 June 2014). The quarterly growth of the assets is due to the growth of the positions with fixed<sup>19</sup> and variable<sup>20</sup> interest rates (3.7% and 21.2%, respectively), compared with the decrease of assets with adjustable<sup>21</sup> interest rates. Specifically, placements on correspondent accounts abroad and loans with fixed and variable interest rates increased, whereas loans with an adjustable interest rate reduced.

The quarterly increase of interest-sensitive liabilities results from the growth in time deposits (2.8%) and transaction accounts (9.2%) with an adjustable interest rate. Within liabilities, there was a decrease in the positions with fixed interest rate (of 0.8%) and variable interest rate (of 11.7%, due to the reduction in loan liabilities).

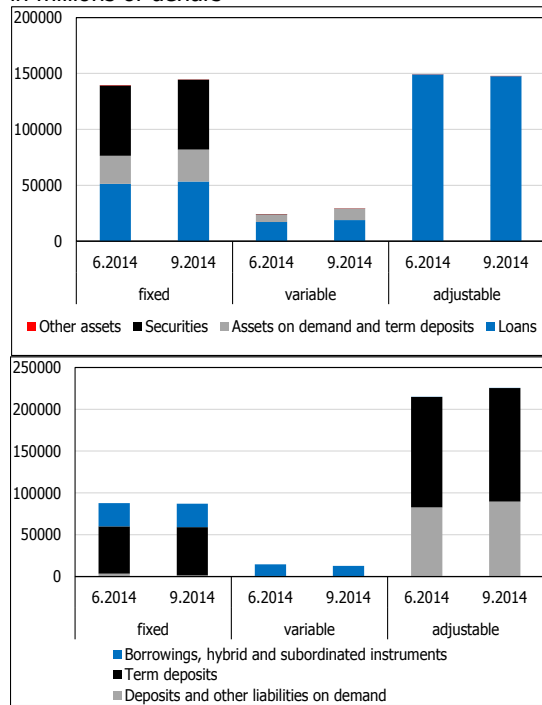
<sup>19</sup> Fixed interest rate - interest rate that remains unchanged for the entire period of the contract with the client and the bank has no right to change the interest rate, which is nominally set in the contract.

<sup>20</sup> Variable (floating) interest rate - interest rate that directly depends on a reference interest rate (EURIBOR, SKIBOR, LIBOR, etc.) increased by a certain interest margin, as regulated by the bank. The change in the interest rate depends on the change in the reference interest rate and the change in the determined margin (mainly by unilateral decision of the bank).

<sup>21</sup> Adjustable rate - interest rate that changes based on a decision of a competent authority of the bank, rather than on the basis of a reference rate or index. With unilaterally adjustable interest rates, banks transfer their own interest rate risk to their clients, and they can serve as a tool for banks' management of liquidity and profitability.

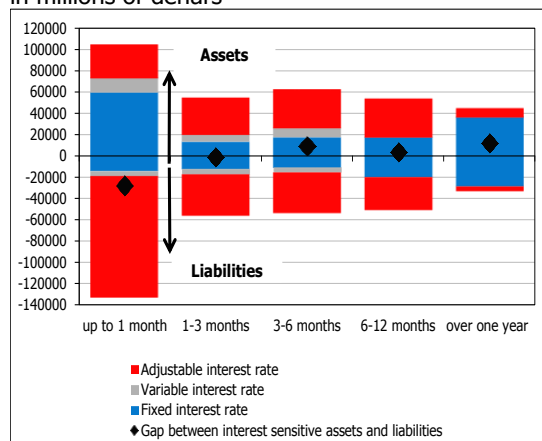


**Chart 35**  
Interest sensitive assets (up) and liabilities (down), by positions and type of interest rates  
in millions of denars



Source: National Bank, based on data submitted by banks

**Chart 36**  
Interest sensitive assets and liabilities, by maturity and type of interest rate  
in millions of denars



Source: National Bank, based on data submitted by banks

These changes did not affect the structure of interest-sensitive assets and liabilities, which remained unchanged in the previous quarters.

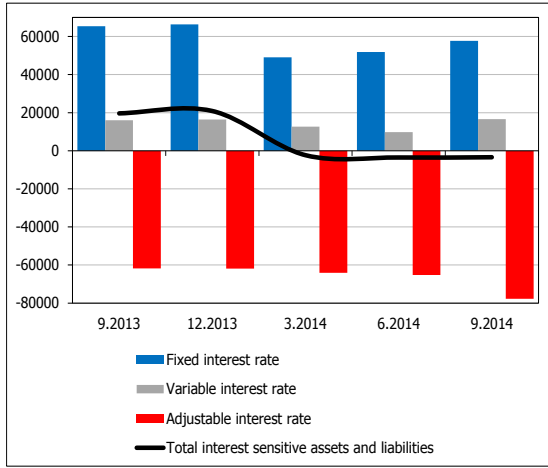
**Interest-sensitive assets with variable interest rate almost entirely consist of loans.** These assets registered a quarterly decrease of -1.1%. On the other hand, in the third quarter, loans with variable and fixed interest rate increased<sup>22</sup> (by 9.8% and 3.9%, respectively). The structure of interest-sensitive assets with fixed interest rate is dominated by investments in securities (43.2%) and loans (36.8%).

**The high share of positions with adjustable interest rates in the interest-sensitive liabilities results from time deposits and demand deposits.** Thus, 70.1% of the time deposits have adjustable interest rate.

**Analyzed by maturity, adjustable interest rates are crucial in most maturity bucket of interest-sensitive assets and liabilities up to a year.** Interest-sensitive assets with maturity bucket of up to a month are an exception, which are dominated by positions with fixed interest rates as a result of the banks' investments in securities. In the same maturity bucket, on the liabilities side, transaction accounts or sight liabilities with adjustable interest rate account for the largest portion. The maturity structure of positions with adjustable interest rates represents expectations of banks for the period of the possible adjustment of the interest rates.

<sup>22</sup> Positions with fixed interest rate include loans with fixed interest rate only in the first few years of the approval, which, after that initial period, is no longer fixed. These types of loans are especially present over the last few years in housing loans.

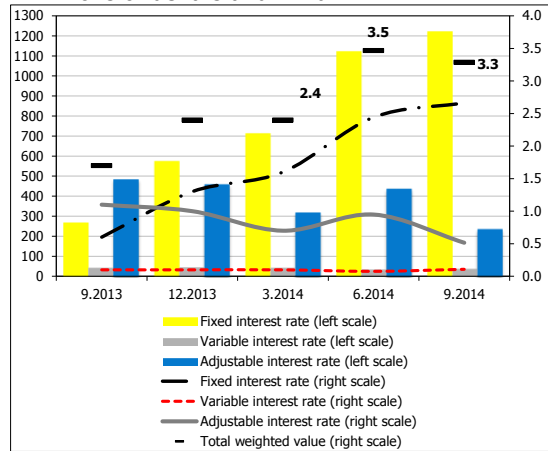
**Chart 37**  
Gap between interest sensitive assets and liabilities, by type of interest rate in millions of denars



Source: National Bank, based on data submitted by banks

**In the third quarter, the gap between interest-sensitive assets and liabilities was positive in position with fixed and variable interest rate, and the negative gap in the positions with adjustable interest rate enhanced.** The negative gap in positions with adjustable interest rate increased by Denar 3.4 million as a result of the growth of deposits compared to the decrease of loans with adjustable interest rate. On the other hand, the growth of correspondent accounts and loans is the reason for the extended positive gap in positions with fixed and variable interest rate.

**Chart 38**  
Weighted value (left scale) to total weighted value of banking book and own assets ratio (right scale), by type of interest rate in millions of denars and in %



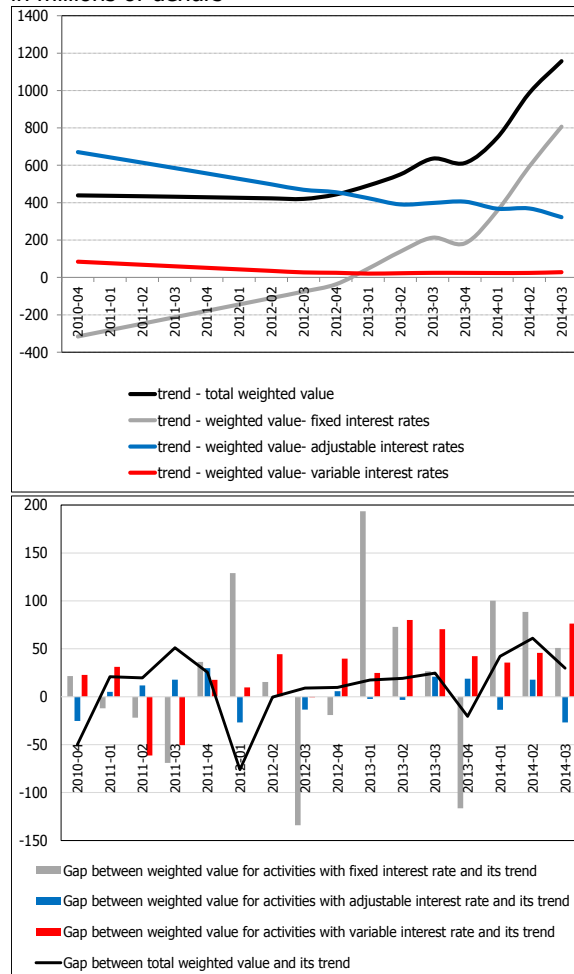
Source: National Bank, based on data submitted by banks

**The risk of change in interest rates in the banking book remained low in the third quarter of 2014.** This confirms the low share of total weighted value of the banking book<sup>23</sup> in own funds, which also declined in this quarter. Analyzing by banks, the ratio between total weighted value of the banking book and own assets ranged between 0.04% to 13.6%, with a median of 4.6% and third quartile of 5.6%. This risk will remain insignificant for the banks as long as adjustable interest rates on both assets and liabilities apply.

<sup>23</sup> 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 change in interest rates using a standard interest rate shock (a parallel positive or negative change in interest rates by 200 basis points). 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. According to the regulation, if the ratio between the weighted value of the banking book and the bank's own funds equals to or exceeds 20%, the bank is required to draft measures for its reduction.



Chart 39  
Trend of weighted value (up) and gap between the weighted value of the banking book and its trend (down) in millions of denars



Source: National Bank, based on data submitted by banks

**The trend analysis<sup>24</sup> of the weighted value of the banking book for the last four years** shows that although most banks primarily use adjustable interest rates, weighted value of activities with fixed interest rates also move upwards. The growth of weighted value of the portfolio of banks with fixed interest rates is mostly affected by loans with residual maturity between 10 and 15 years, because of their growth, but also because of the higher weight of long-term positions when determining the weighted value. On the other hand, the downward trend of weighted value of the activities with adjustable interest rate is mostly a result of the reduction of loans with adjustable interest rate with shorter residual maturity. This indicates that banks gradually reduce the use of adjustable interest rates under the influence of the competition on the market and the competition for a better market position, but also take the risk of future changes in interest rates.

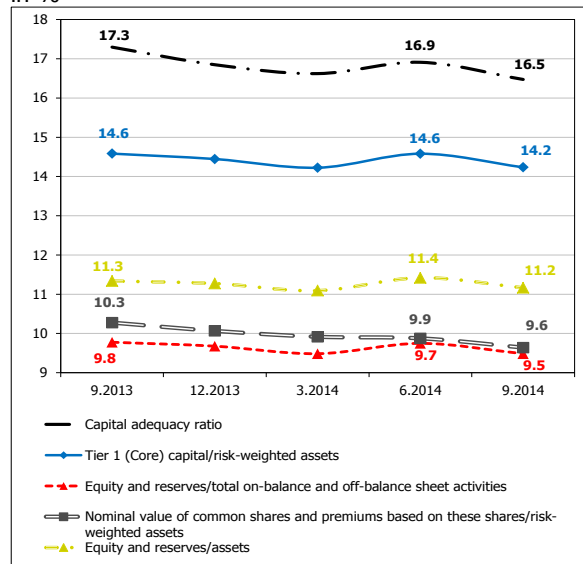
The gap (difference) between the weighted value of the banking book and its trend in the last quarter declined, came closer to the trend for the whole period and remained positive. The weighted value of activities with adjustable interest rate in this quarter registered a negative deviation from the trend, which is yet another indication of the decline in the banks' activities with adjustable interest rates.

<sup>24</sup> The trend of weighted value has been calculated using the Hodrick-Prescott filter with lambda 1600 (recommended value for quarterly data).

## 5. Insolvency risk

The solvency and capitalization indicators of the banking system were dwindling in the third quarter of 2014, arising from the accelerating growth of the activities of the bank, amid almost the same level of capital positions. Capital requirements for credit risk and currency risk increased quarterly. The results of the stress test conducted on 30 September 2014 were somewhat lower compared to 30 June 2014, but the banking system remains resilient to hypothetical shocks.

Chart 40  
Solvency ratios  
in %



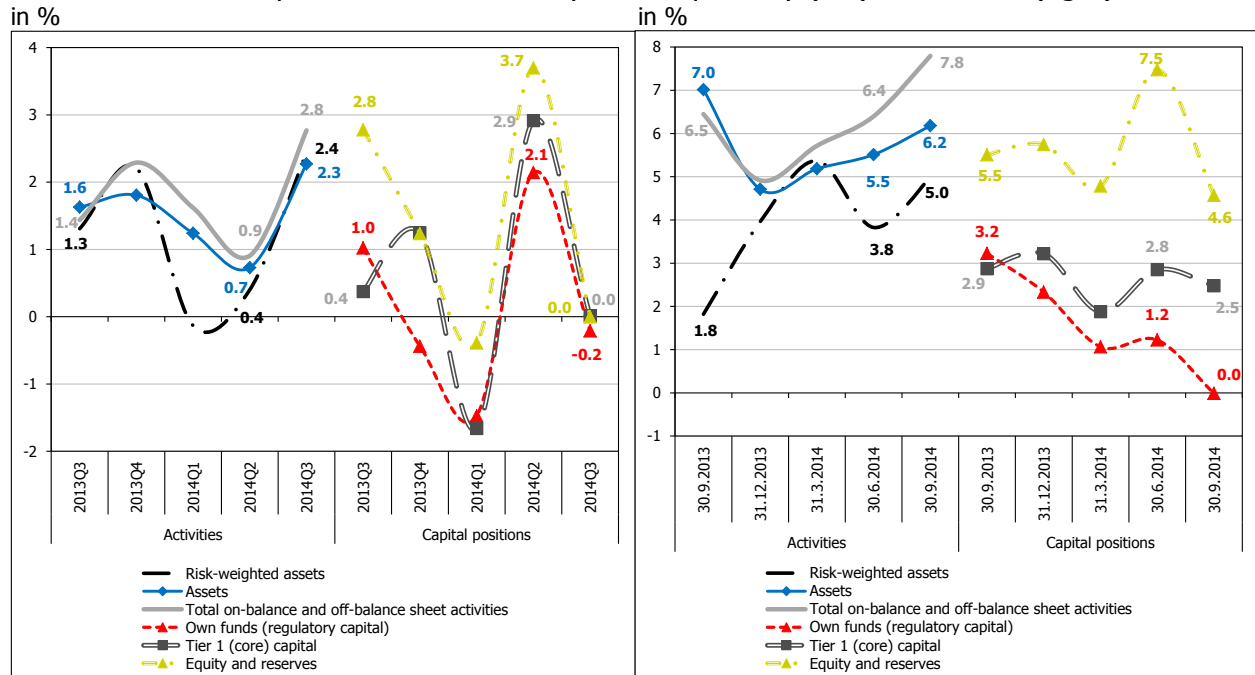
Source: National Bank, based on data submitted by banks

### 5.1. Indicators for the solvency and capitalization of the banking system

The solvency and capitalization indicators of the banking system were dwindling in the third quarter of 2014. The capital positions of the banking system remained almost unchanged in the third quarter of 2014, which given the significant acceleration of the growth of activities, reduced the solvency indicators by 0.2 percentage points (in the capitalization rates) to 0.4 percentage points (in capital adequacy ratio and core capital to risk-weighted assets ratio).

Chart 41

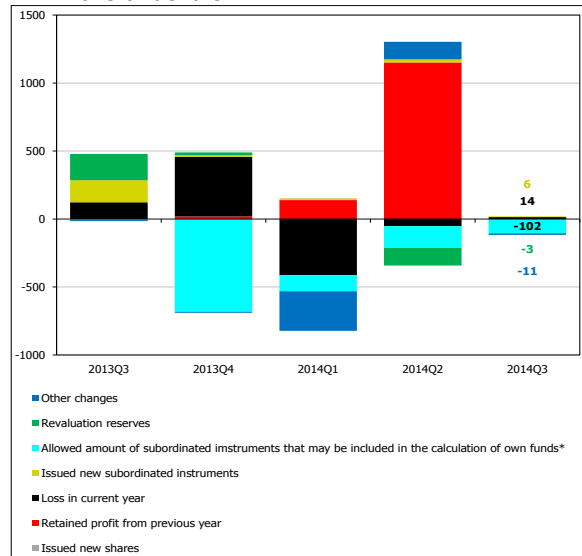
Growth rates of components of the solvency ratios, quarterly (left) and annual (right)



Source: National Bank, based on data submitted by banks

Chart 42

Structure of quarterly growth of own funds in millions of denars



Source: National Bank, based on data submitted by banks

Note: \*Refers to the changes in the amount of already issued subordinated instruments arising from meeting/non-meeting of the regulatory rules for inclusion of these instruments in the calculation of own funds.

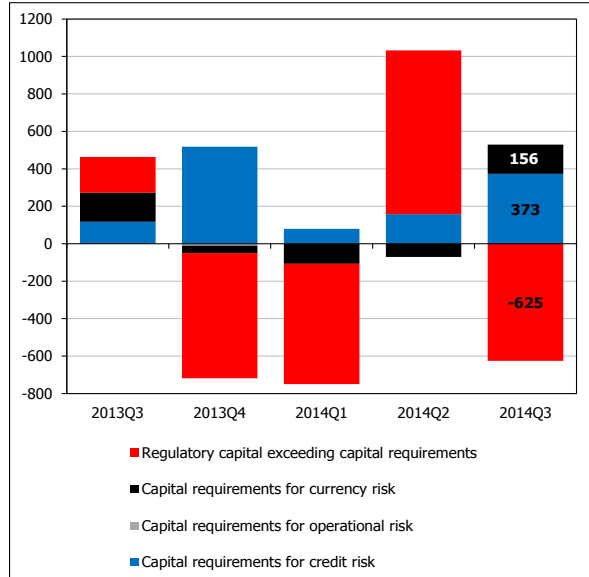
## 5.2. Movements and quality of own funds of the banking system

Own funds of the banking system recorded a minimum quarterly decline of Denar 96 million, or 0.2%, which is almost entirely caused by the reduction in the allowable amount of subordinated instruments included in the calculation of additional capital in two banks<sup>25</sup>. In contrast, a small-size bank issued a new subordinated instrument, but in a modest amount of only Denar 6 million. On an annual basis, the own funds decreased by only Denar 6 million. The quality of own funds is still high with the share of core capital in total own funds of over 86%.

More details about the level of own funds of individual groups of banks are shown in Annex 33.

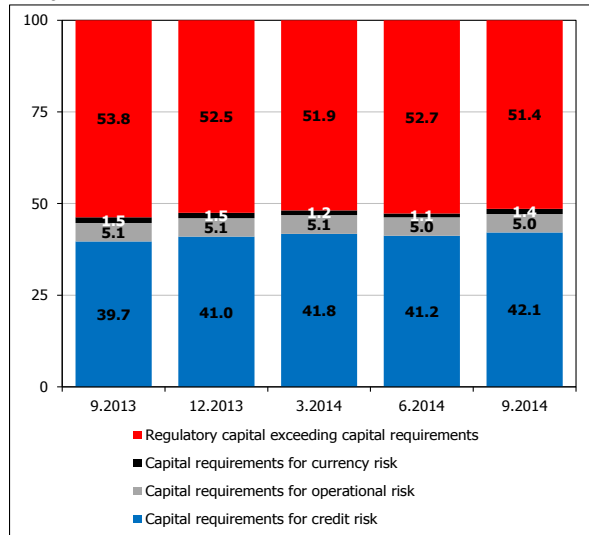
<sup>25</sup> These are subordinated instruments, which entered the last five years to maturity, which, under the regulations, are included at discounted value in the calculation of own funds.

**Chart 43**  
Structure of quarterly growth of own funds, by the purpose for covering risks in millions of denars



Source: National Bank, based on data submitted by banks

**Chart 44**  
Structure of own funds, by the purpose for covering risks in %



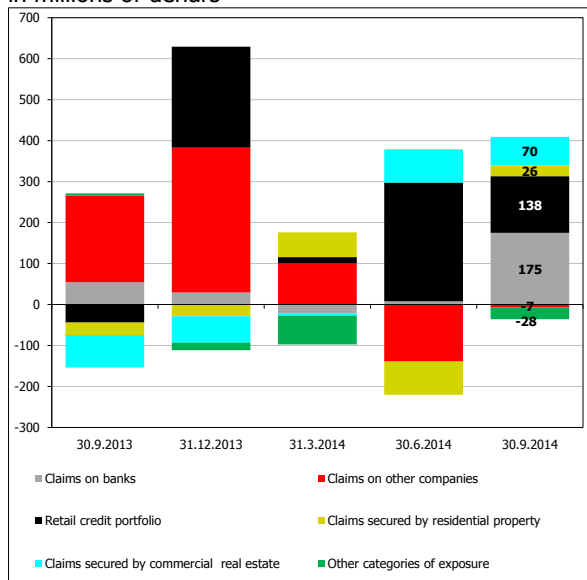
Source: National Bank, based on data submitted by banks

### 5.3. Movements and structure of capital requirements and available capital of the banking system

Regulatory capital required for covering risks (or capital requirements)<sup>26</sup> registered a quarterly growth of Denar 529 million, or 2.4%. The new capital requirements were covered by the "free" capital of the banking system, and its amount reduced because of the quarterly decrease in total own funds of the banks. Thus, in the third quarter of 2014, the own funds above the capital requirement for covering risks declined by Denar 625 million, or 2.6%. About 70% of the increase in capital requirements for covering risks results from the higher capital requirement for credit risk (by Denar 373 million, or 2%), which mostly derives from the major investments in foreign banks and the growth in retail loan portfolio. Capital requirements for currency risk went up quarterly by Denar 156 million or 32.1%. On an annual basis (30 September 2013 - 30 September 2014), the capital requirements for credit risk increased by Denar 1,128 million (or 6.2%), mostly resulting from rising claims based on retail loan portfolio and claims on other companies. At the same time, the "free" capital of the banking system declined by Denar 1,060 million (or 4.3%), and annual decline was also registered in the capital requirements for currency risk (of Denar 62 million or 8.9%), and capital requirements for operational risk (of Denar 11 million or 0.5%). Despite the use of a portion of the "free" capital of the banking system for covering the new capital requirements for credit risk, the own funds above the capital requirement for covering risks are still at a relatively high level and constitute more than half of total own funds.

<sup>26</sup> Capital requirements are set at 8% of risk-weighted assets.

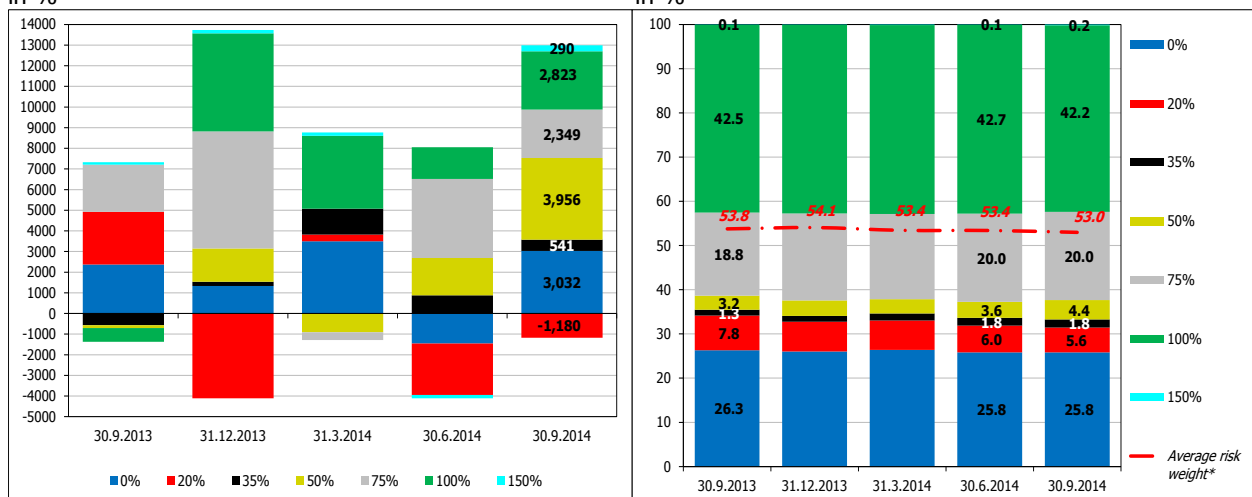
**Chart 45**  
Quarterly changes in capital requirements for credit risk, by exposure category in millions of denars



Source: National Bank, based on data submitted by banks

Larger investments in foreign banks, increased funding of household consumption and increased lending to corporate sector caused a quarterly enhancement of banks' activities that are included in the calculation of the credit risk weighted assets with higher risk weights (50%, 75% and 100%) (Denar 9,129 million, or 3.1%). At the same time, the exposure of banks with lower risk weights (0%, 20% and 35%) increased by Denar 2,393 million (1.6%) arising from the larger banks' deposits with the NBRM and the increased housing loans.

**Chart 46**  
Quarterly shifts (left) and structure of total on-balance and off-balance sheet exposure (right), by risk weight in %



Source: National Bank, based on data submitted by banks

Note: \*The average risk weight of the total on-balance and off-balance sheet exposure is calculated as a ratio between credit risk weighted assets and net on-balance and off-balance sheet exposure of banks.

On the other hand, in the third quarter of 2014, the average risk weight of the total on-balance and off-balance sheet exposure of the

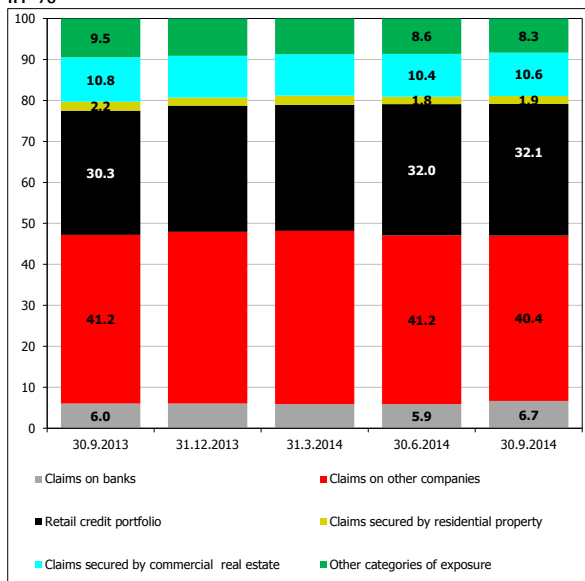
banking system<sup>27</sup> declined by 0.4 percentage points to 53%.

For more details of the capital requirements for covering risk and the capital adequacy ratio, by group of banks, see Annex 34.

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

The stress testing of the resilience of the banking system and individual banks in the Republic of Macedonia to simulated shocks indicates slightly weaker results compared with 30 June 2014. They mostly result from the lower capital adequacy of the banking system before the simulations, and during some of the simulations, and from the slightly higher sensitivity of some banks to assumed shocks, compared with 30 June 2014. However, the capital adequacy of the banking system does not reduce below 8% in any of the simulations, although individual banks show hypothetical need for recapitalization in simulated extreme shocks. The hypothetical shocks on the side 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 89%, i.e. in case of migration of 13.8% from regular to non-performing credit exposure. These simulations would lead to almost double share of non-performing credit exposure in the total credit exposure to non-financial entities (from the current 10.7% to 20.1%). However, these are rather extreme and less likely simulations, especially in the short term.

Chart 47  
Structure of capital requirements for credit risk, by categories of exposure in %



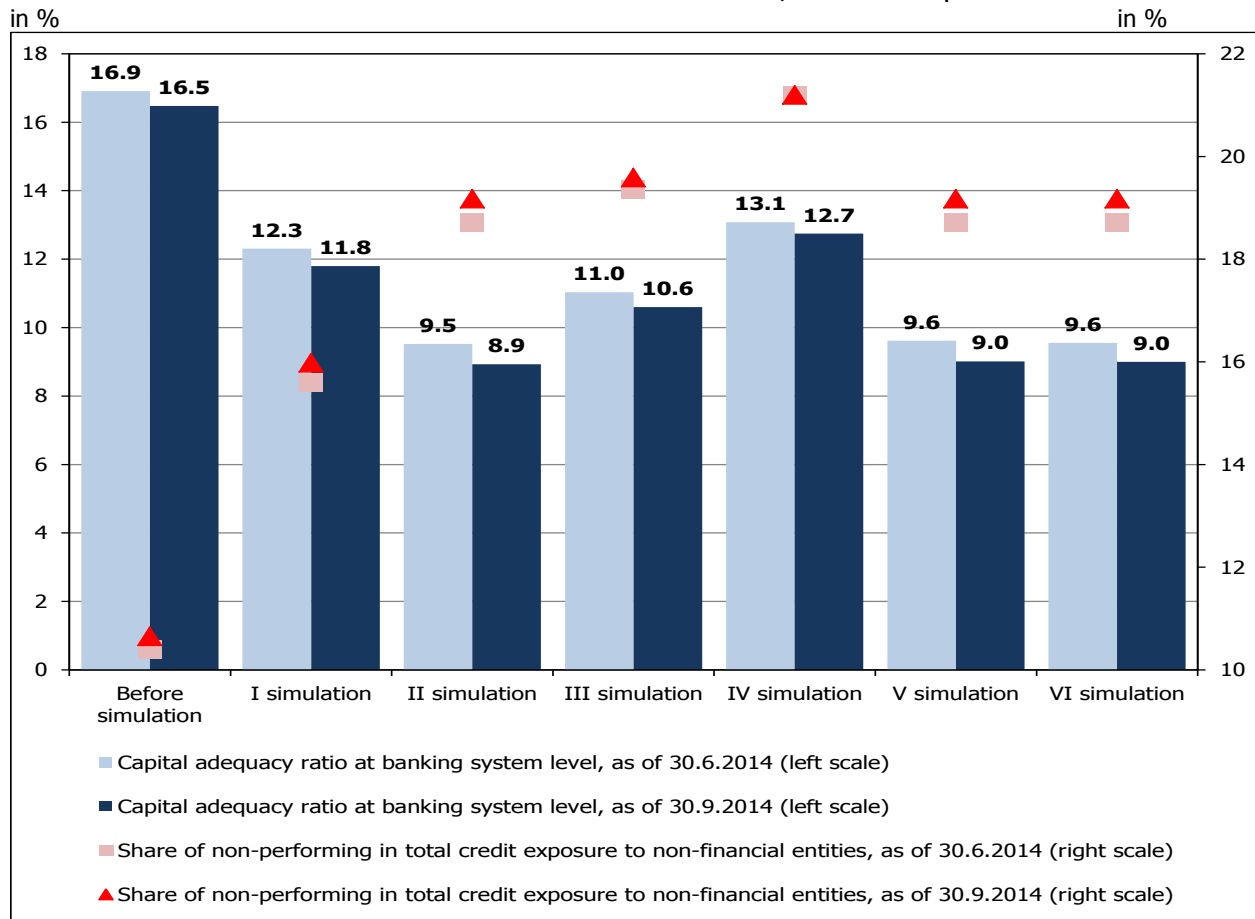
Source: National Bank, based on data submitted by banks

<sup>27</sup> Calculated as the ratio between credit risk-weighted assets and total on-balance and off-balance sheet exposure.



Chart 48

Results from the simulations of credit and combined shocks, as of 30 September 2014



Source: National Bank, based on data submitted by banks

\*Stress-testing includes the following simulations:

I simulation: Increase of 50% in non-performing credit exposure to non-financial entities;

Simulation II: Increase of 80% in non-performing credit exposure to non-financial entities;

Simulation III: Migration of 10% from regular to non-performing credit exposure to non-financial entities;

Simulation IV: Reclassification in C-non-performing of the five largest credit exposures to non-financial entities (including associated entities);

Simulation V: Increase of 80% in non-performing credit exposure to non-financial entities and increase in interest rates of 1 to 5 pp;

Simulation VI: Increase of 80% in non-performing credit exposure to non-financial entities, depreciation of Denar exchange rate of 30% and increase in interest rates of 1 to 5 pp.

\*\*Note: The credit exposure to non-financial entities includes total credit exposure reduced by the exposure of banks to financial institutions and government, i.e. to clients from financial and insurance business and public administration and defense and mandatory social insurance.

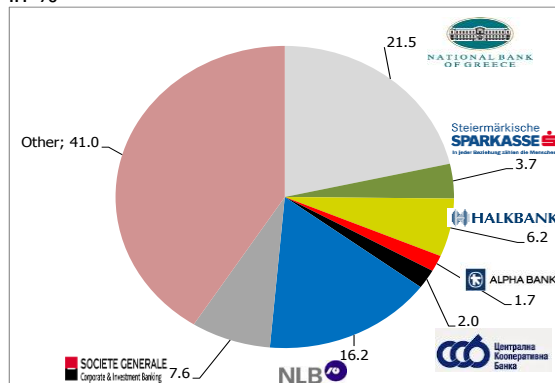


### **III. Structural Features, Significant Balance Sheet Changes and Profitability of the Banking System**

## 1. Structure of the banking system

In the third quarter of 2014, the number of banks that make up the banking system in the Republic of Macedonia decreased by one and not it consists of **fifteen banks**. The reduction resulting from the completion of the procedure for acquisition of Postal Bank AD Skopje by Eurostandard Bank AD Skopje<sup>28</sup>.

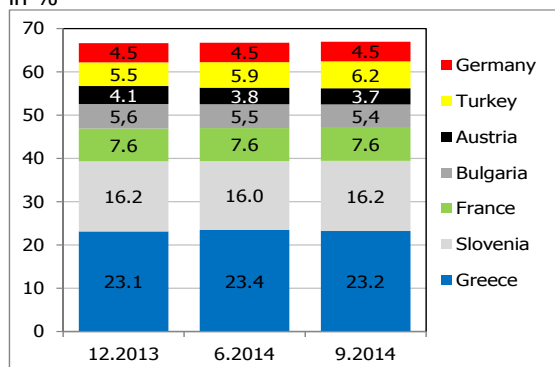
Chart 49  
Market share of foreign banks subsidiaries (assets)  
in %



Source: National Bank, based on data submitted by banks

**The Macedonian banking system is dominated by foreign capital. Of fifteen banks, eleven are in dominant foreign ownership. Seven of them are foreign bank subsidiaries whose market share increased marginally to 59.0% as of 30 September 2014 compared to the previous quarter (by 0.1 percentage point).**

Chart 50  
Market share (assets) of banks by country of origin of the dominant foreign shareholder\*  
in %



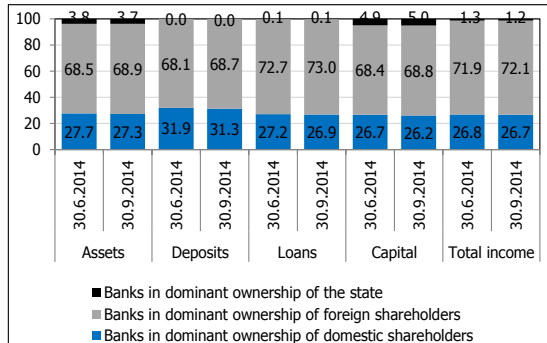
Source: National Bank, based on data submitted by banks

\*Banks in domestic ownership, as well as banks that do not have a dominant foreign owner are not included in the chart.

A minimal increase (of 0.2 percentage points) was registered in the market share (by assets) of banks that have dominant foreign shareholder. Their share equals 66.9%.

<sup>28</sup> The decision of the Central Registry of the Republic of Macedonia on a status change - acquisition of Postal Bank AD Skopje by Eurostandard Bank AD Skopje was issued on 1 July 2014, when Postal Bank AD Skopje ceased to exist as a legal entity.

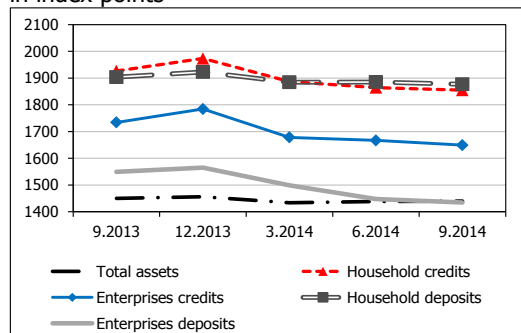
**Chart 51**  
Structure of major positions in banks' balance sheets, by banks' dominant ownership in %



Source: National Bank, based on data submitted by banks

Banks in dominant foreign ownership occupy most of the relevant positions of the banks' balance sheets, accounting for about 70%.

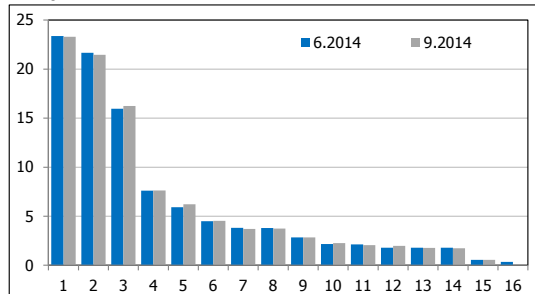
**Chart 52**  
Herfindahl index in index points



Source: National Bank, based on data submitted by banks

Concentration indices (Herfindahl index<sup>29</sup> and CR5) show relatively high concentration in the banking system, especially in the household banking activities.

**Chart 53**  
Share of individual banks in the total assets of the banking system in %



Source: National Bank, based on data submitted by banks  
Note: In the third quarter, the number of banks decreased by one.

The high concentration is also confirmed by the share of individual banks in the total assets of the banking system. Most of the banking activities have been concentrated in the three largest banks. Of the total number of banks, nine banks have a market share of less than 4%, with a joint share in total assets of 20.6%.



## 2. Banks' activities

The recovery of the domestic economy had a positive impact on the growth of the activities of domestic banks, especially on the growth of the deposit base. This was also evident in the third quarter of 2014, when the assets of the banking system grew at an accelerated pace, which was mainly driven by the rapid growth of deposits, particularly of the corporate sector. In contrast, in the third quarter of the year, the credit growth of both the household sector and the corporate sector slowed down. Yet, the annual changes point to accelerating credit growth. Already in October 2014, lending activity accelerated again, especially to the corporate sector (both quarterly and annually). The trend of positive changes in the currency structure of funding sources and banks' placements continued.

Table 4 Structure of the assets and liabilities of the banking system

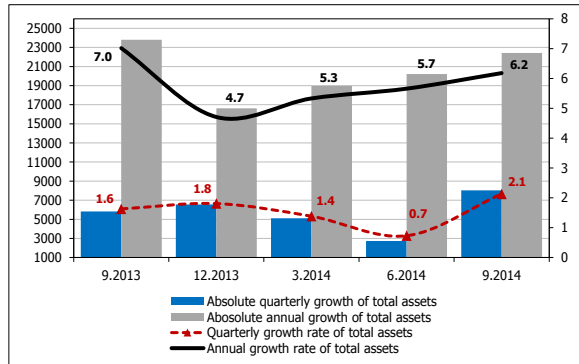
Balance sheet	Amount in millions of Denars			Structure (in percent)			Change 9.2014/6.2014		Change 9.2014/9.2013	
	30.9.2013	30.6.2014	30.9.2014	30.9.2013	30.6.2014	30.9.2014	In millions of Denars	In percent	In millions of Denars	In percent
Cash and balances with MBRM	40,437	39,783	43,809	10.7	10.5	11.4	4,026	10.1	3,372	8.3
Securities portfolio	60,799	64,848	63,859	16.8	17.2	16.6	-989	-1.5	3,060	5.0
Placements with banks and other financial institutions (net)	46,264	42,702	45,758	12.7	11.3	11.9	3,056	7.2	-506	-1.1
<i>Gross placements with banks and other financial institutions</i>	46,435	42,854	45,848	12.8	11.4	11.9	2,994	7.0	-587	-1.3
<i>Accumulated amortization of placements with banks and other financial institutions</i>	-3	-2	-3	0.0	0.0	0.0	-1	29.1	-1	23.0
<i>Impairment (provisions) of placements with banks and other financial institutions</i>	-168	-149	-86	0.0	0.0	0.0	63	-42.1	82	-48.7
Loans of nonfinancial entities (net)	194,781	210,787	213,247	53.7	55.9	55.3	2,461	1.2	18,466	9.5
<i>Gross loans to nonfinancial entities</i>	223,288	240,738	244,150	61.5	63.8	63.4	3,412	1.4	20,862	9.3
<i>Accumulated amortization of loans to nonfinancial entities</i>	928	-878	-831	0.0	0.0	0.0	48	-5.4	-1,759	-189.5
<i>Impairment (provisions) of loans to nonfinancial entities</i>	27,578	-29,074	-30,072	0.0	0.0	0.0	999	-3.4	57,650	209.0
Accrued interest and other assets	9,460	7,662	7,142	2.6	2.0	1.9	-520	-6.8	-2,318	-24.5
Fixed assets	11,207	11,559	11,564	3.1	3.1	3.0	4	0.0	357	3.2
Unallocated loan loss provisions	0	0	0	0.0	0.0	0.0	0	0.0	0	0.0
<b>Total assets</b>	<b>362,948</b>	<b>377,341</b>	<b>385,380</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>8,039</b>	<b>2.1</b>	<b>22,432</b>	<b>6.2</b>
Deposits of banks and other financial institutions	18,978	16,235	16,211	5.2	4.3	4.2	-23	-0.1	-2,767	-14.6
Deposits of nonfinancial entities	252,963	267,455	276,158	69.7	70.9	71.7	8,703	3.3	23,195	9.2
Borrowings (short-term and long-term)	34,573	34,269	32,808	9.5	9.1	8.5	-1,462	-4.3	-1,765	-5.1
Liability component of hybrid and subordinated instruments	8,009	7,993	8,004	2.2	2.1	2.1	10	0.1	-5	-0.1
Other liabilities	6,439	6,880	8,252	1.8	1.8	2.1	1,372	19.9	1,813	28.2
Provisions for off-balance sheet items	838	961	919	0.2	0.3	0.2	-42	-4.4	81	9.6
Capital and reserves	41,148	43,547	43,028	11.3	11.5	11.2	-519	-1.2	1,880	4.6
<b>Total liabilities</b>	<b>362,948</b>	<b>377,341</b>	<b>385,380</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>8,039</b>	<b>2.1</b>	<b>22,432</b>	<b>6.2</b>

Source: National Bank, based on data submitted by banks

Note: In this table, the position "placements with the central bank" of Annex 1, is included in the position "Cash and balances with the NBRM" in this table.

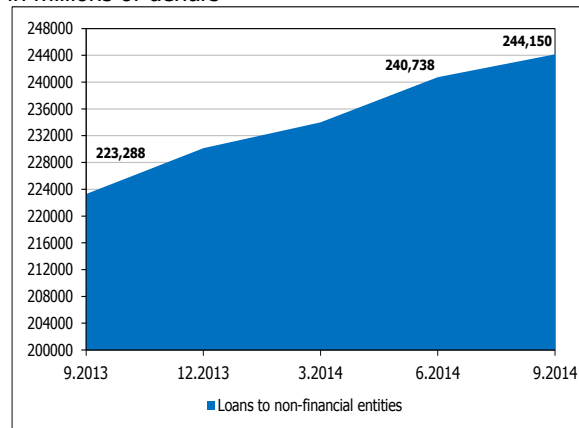
As of 30 September 2014, the total assets of the banking system were valued at Denar 385,380 million and registered an accelerated quarterly and annual growth. The main driver of these movements was the growth of deposits of non-financial entities in the third quarter of 2014. Despite the growth of

**Chart 54**  
Quarterly and annual growth of assets of the banking system  
in millions of denars and in %



Source: National Bank, based on data submitted by banks

**Chart 55**  
Stock of loans  
in millions of denars



Source: National Bank, based on data submitted by banks

deposits, banks' loan liabilities decreased. Significant changes in assets in this quarter include the slower growth of loans to non-financial entities, reduced banks' investments in securities, and the growth of deposits with the central bank and placements with other banks.

## 2.1. Loans to non-financial entities

**In the third quarter of 2014, credit activity to the non-financial sector<sup>30</sup> grew at a slower pace, and within its framework, the quarterly growth of loans to both households<sup>31</sup> and corporate sector slowed down<sup>32</sup>. Loans to households were generators of the growth of lending, whose quarterly growth rate is seven times higher than the quarterly growth rate of loans to the corporate sector<sup>33</sup>. **Despite the quarterly slowdown, the growth of lending to non-financial entities accelerated annually<sup>34</sup>.****

In the last two years, the quarterly credit market developments have been quite volatile, especially in loans to the corporate sector. These developments indicate a gradual improvement of the banks' expectations for the risk profile of the credit demand and the knock-on effects of the monetary loosening. However, given the still uncertain environment and the presence of risks in the real sector, it takes time to assess the reliability of the positive developments in the credit market.

<sup>30</sup> Loans to non-financial entities include loans to resident and non-resident non-financial entities and 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).

<sup>31</sup> Quarterly growth of loans to households slowed down to Denar 2,928 million (or 3.0%), contributing 85.8% to the growth of total loans. 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).

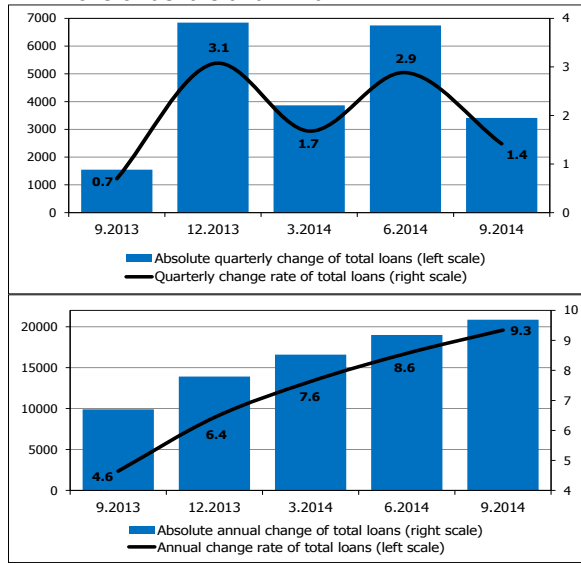
<sup>32</sup> Lending to the corporate sector quarterly increased by Denar 548 million or 0.4%. The largest contribution to the growth of loans to corporate sector was made by wholesale and retail trade businesses and industry.

<sup>33</sup> The quarterly growth of loans to household and corporate sector equals 3% or Denar 2,928 million and 0.4% or Denar 548 million, respectively.

<sup>34</sup> The annual growth rates of loans to household and corporate sectors accelerated by 0.3 and 1.1 percentage points, respectively.



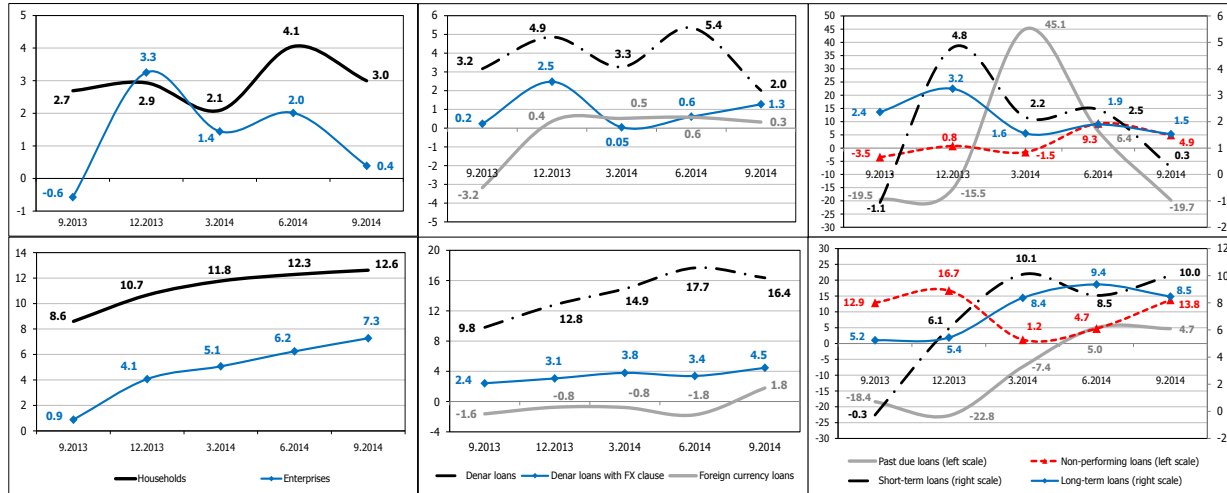
**Chart 56**  
Change in loans to non-financial entities  
in millions of denars and in %



Source: National Bank, based on data submitted by banks

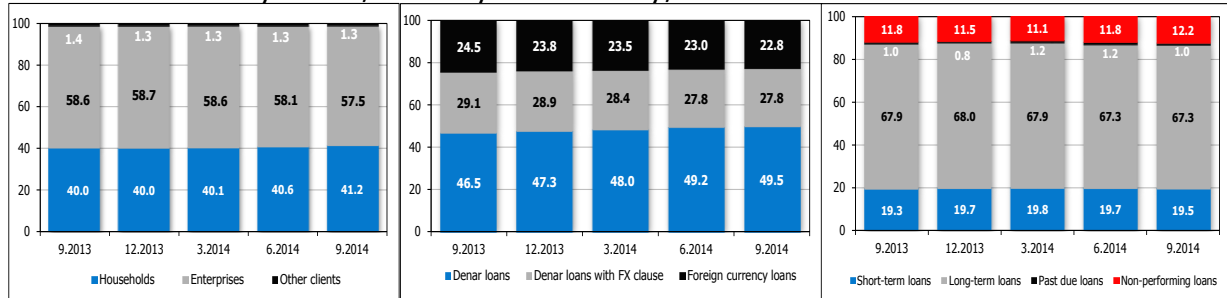
**Loan denarization continued** in the third quarter of 2014 and is associated with the same process at the deposits' side as the main source of funding of the activities of banks. Thus, denar loans are generators of the credit growth in the third quarter of 2014, whose growth was valued at Denar 2,379 million (or 2.0%).

**Chart 57**  
Quarterly (up) and annual (down) growth of loans by sector, currency and maturity  
in %



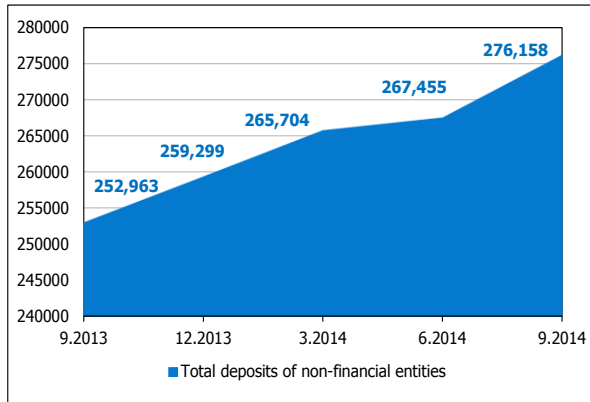
Source: National Bank, based on data submitted by banks

**Chart 58**  
Structure of loans by sector, currency and maturity, in %



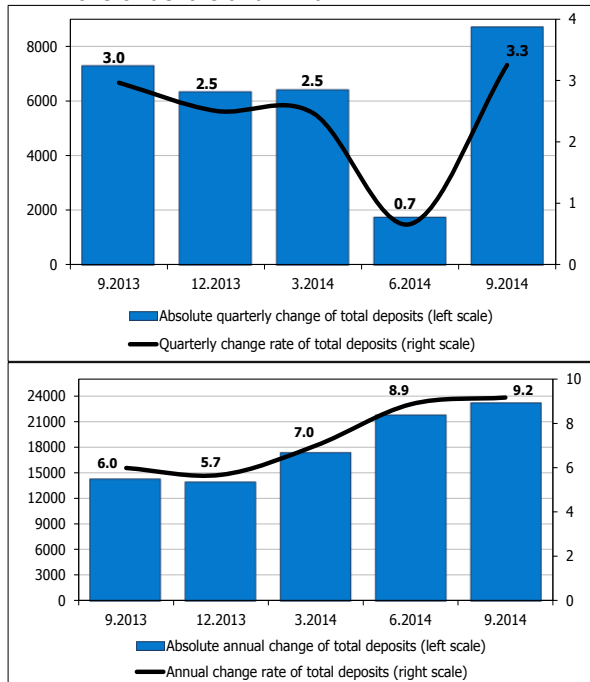
Source: National Bank, based on data submitted by banks

Chart 59  
Stock of deposits  
in millions of denars



Source: National Bank, based on data submitted by banks

Chart 60  
Change in deposits of non-financial entities  
in millions of denars and in %



Source: National Bank, based on data submitted by banks

## 2.2. Deposits of non-financial entities

**In the third quarter of 2014, deposits of non-financial entities** registered a significant quarterly growth of Denar 8,703 million. The quarterly growth rate of deposits equaled 3.3% and accelerated by 2.6 percentage points (the accelerated growth of deposits continued in October 2014). **On an annual basis, the growth in deposits accelerated.**

**Corporate sector** was the largest contributor (56.1%) to the growth of the deposit base in the third quarter of 2014. This significant quarterly growth of corporate deposits is partly due to the low base effect of the previous quarter (due to the payment of dividends by a domestic company with foreign capital). Deposits of **households** accounted for 41.0% of the growth in the total deposit base.

**Denar savings** still have the largest share in the deposit base of the banking system. Denar deposits made the largest contribution of 57.7% to the quarterly growth of total deposits. The enhanced process of **denarization** of deposits in the third quarter of 2014 was most evident in the corporate sector<sup>35</sup>, whose deposits made up 61.9% of the growth of Denar deposits. The contribution of households<sup>36</sup> to the growth in the Denar deposits is lower (37.5%). The quarterly growth of foreign currency deposits to a greater extent was influenced by households<sup>37</sup> (53.2%) compared with the contribution of the companies<sup>38</sup> (39.3%).

<sup>35</sup> Denar corporate deposits registered a quarterly growth of Denar 3,112 million, most of which (60.0%) resulting from sight deposits.

<sup>36</sup> Denar household deposits registered a quarterly growth of Denar 1,886 million, almost entirely (94.8%) resulting from long-term deposits.

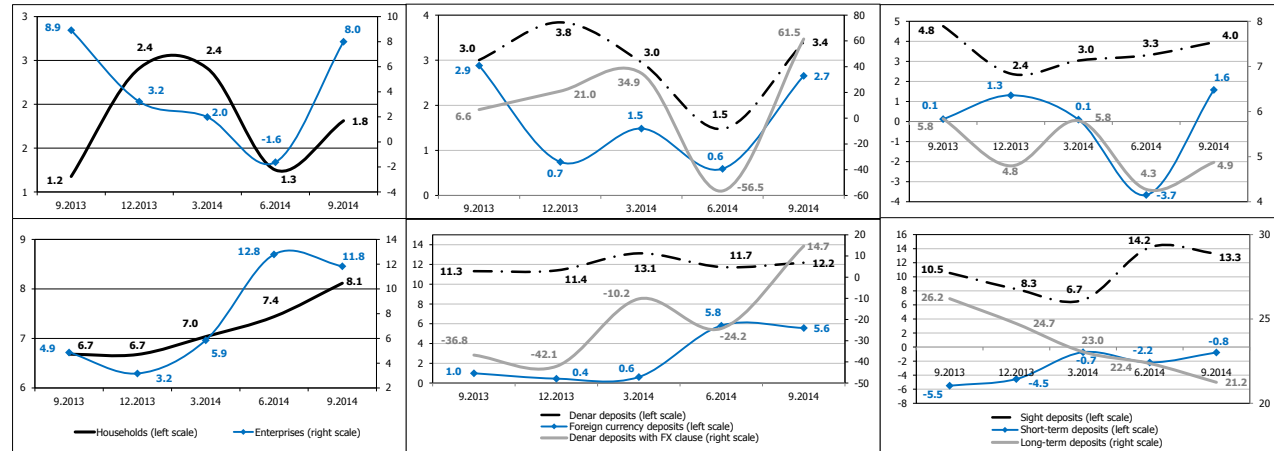
<sup>37</sup> Foreign currency deposits of households increased by Denar 1,680 million, mostly (60.3%) resulting from the growth of long-term deposits.

<sup>38</sup> Corporate foreign currency deposits registered a quarterly increase of Denar 1,242 million, most of which (80.5%) due to the growth of short-term deposits.



Chart 61

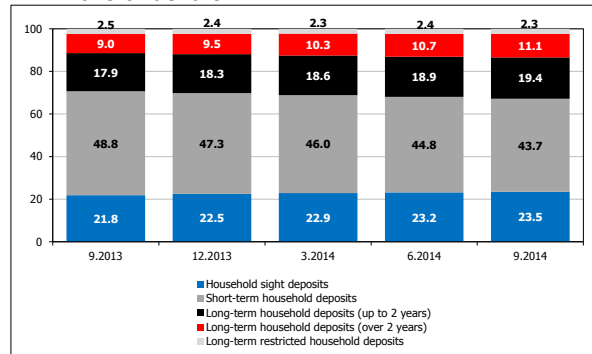
Quarterly (up) and annual (down) growth of deposits by sector, currency and maturity in %



Source: National Bank, based on data submitted by banks

Chart 62

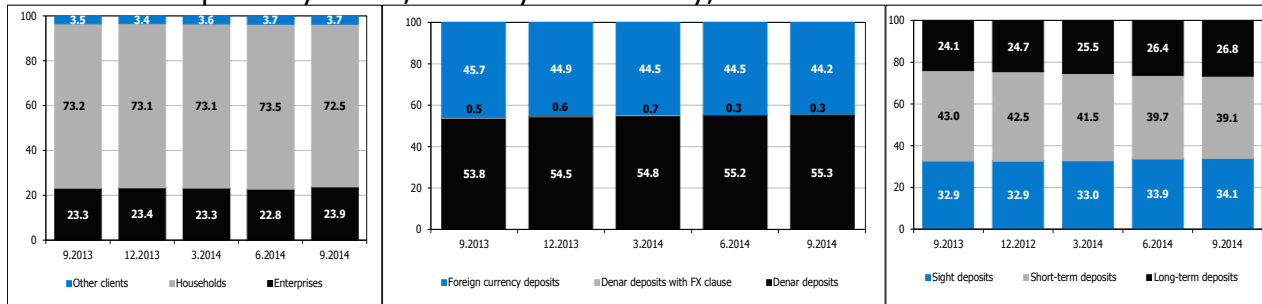
Maturity structure of household deposits in millions of denars



Source: National Bank, based on data submitted by banks

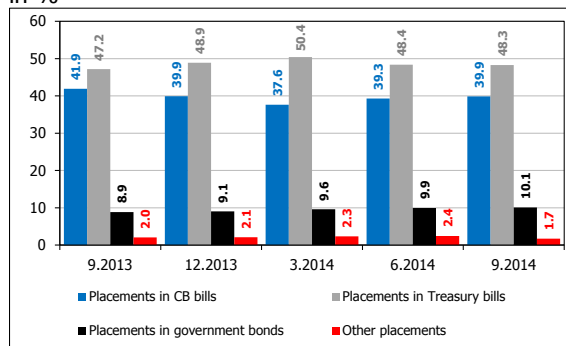
In the third quarter of 2014, **sight deposits** grew at almost the same pace as the long-term deposits. Their contribution to the growth of the total deposit base is the highest (41.2%). Corporate and households sight deposits constituted 60.3% and 38.2%, respectively, of the total growth of these deposits. **Long-term** deposits recorded a quarterly growth of 4.9%, and their contribution to the growth of total deposits equaled 39.5%. The majority (81.5%) of the growth of long-term deposits resulted from the household sector. In the recent quarters, the share of long-term household deposits (with maturity of up to 2 years and over) in the total deposit base of non-financial entities has been constantly increasing. Higher interest rates significantly contribute to run and in local currency. These positive changes in the maturity structure of household deposits reflect the setup of reserve requirement rates for household deposits in national currency with contractual maturity of over two years.

Chart 63  
Structure of deposits by sector, currency and maturity, in %



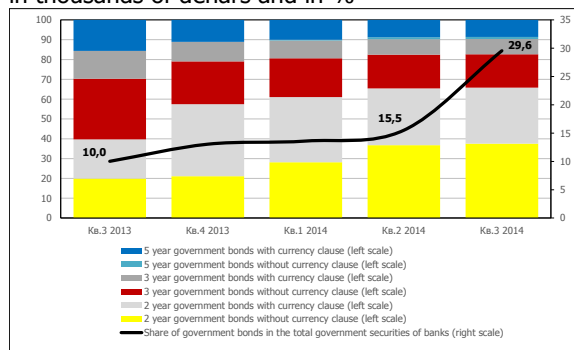
Source: National Bank, based on data submitted by banks

Chart 64  
Structure of securities portfolio in %



Source: National Bank, based on data submitted by banks

Chart 65  
Structure of banks' investments in government bonds, by currency and maturity in thousands of denars and in %



Source: National Bank, based on data submitted by banks

Quarterly growth of **short-term** deposits (1.6%) is due to the Denar deposits (40.8%) and foreign currency deposits (59.7%) of companies. On an annual basis, short-term deposits have been decreasing.

### 2.3. Other activities

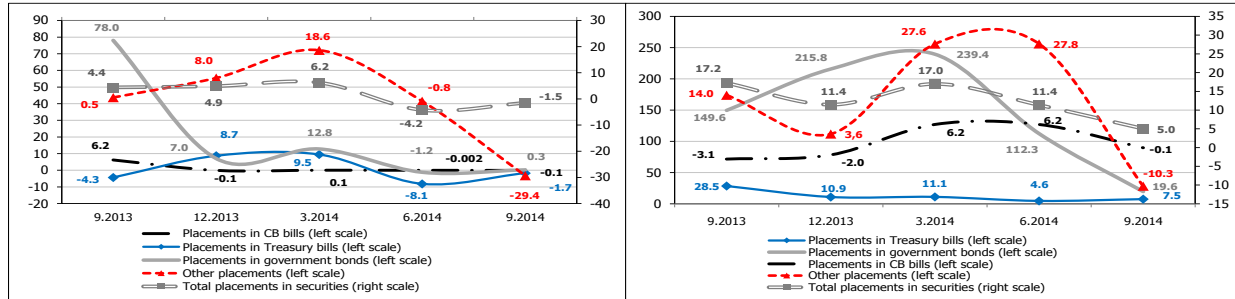
In the third quarter of 2014, the banks' securities portfolio decreased by Denar 989 million, or 1.5%, given the reduced investments in treasury bills (by Denar 531 million or 1.8%) and the reduced investments in subsidiaries (Denar 522 million)<sup>39</sup>. Banks' investments in government bonds<sup>40</sup> recorded a minimum quarterly growth of Denar 16 million and accounted for 29.6% of the portfolio government securities of banks. Amid unchanged interest rate and supply of CB bills by the National Bank, the banks' investments in CB bills remained almost unchanged.

<sup>39</sup> The decrease in investments in subsidiaries is a result of the acquisition of Postal Bank AD Skopje by Eurostandard Bank AD Skopje.

<sup>40</sup> The two-year government bonds in denars with FX clause dominate (65.8%) the total investments of banks in government bonds.

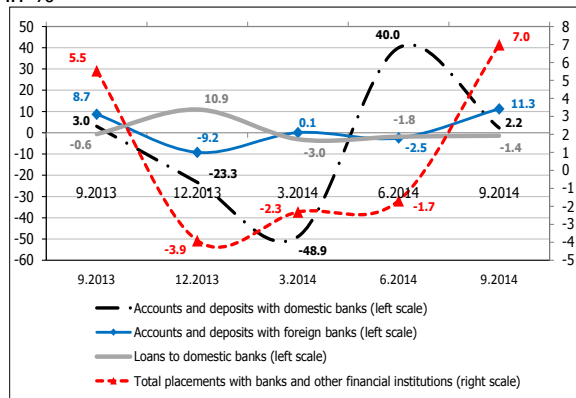


Chart 66  
Quarterly (left) and annual (right) growth of securities portfolio  
in %



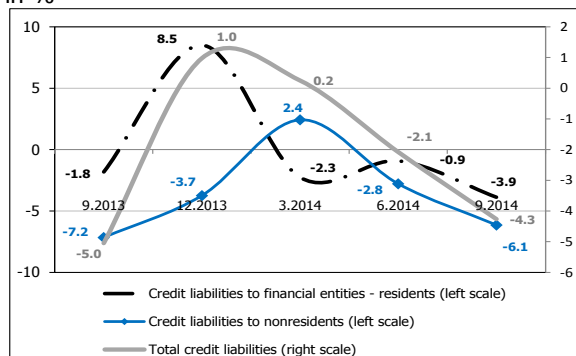
Source: National Bank, based on data submitted by banks

Chart 67  
Placements with banks and other financial institutions (quarterly growth)  
in %



Source: National Bank, based on data submitted by banks

Chart 68  
Loan liabilities (quarterly growth)  
in %



Source: National Bank, based on data submitted by banks

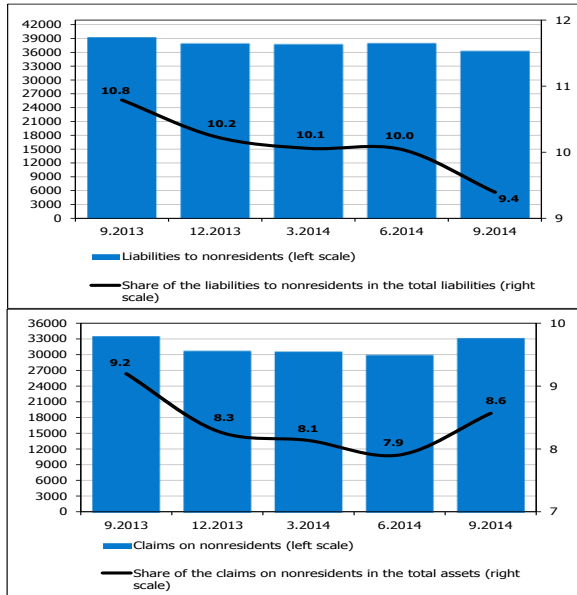
In the third quarter of 2014, **the placements with banks and other financial institutions** made up 11.9% of total assets. Their significant quarterly growth is entirely due to the growth of the assets on the regular current accounts in foreign currency in foreign banks.

As in the previous quarter, the decrease in **loan liabilities** almost entirely (94.9%) resulted from the reduction in loan liabilities to non-residents in one bank<sup>41</sup>.

**Deposits of banks and other financial institutions** registered a minor quarterly decrease.

<sup>41</sup> Repayment of loan to a parent entity by a bank.

**Chart 69**  
**Liabilities (up) to and claims (down) on non-residents**  
 in millions of denars and in %



Source: National Bank, based on data submitted by banks

The banking system has continuously been a debtor rather than a creditor to non-residents. The share<sup>42</sup> of their **liabilities to and claims on non-residents** in the total assets is low. In the third quarter of 2014, there is an upward trend of claims on non-residents compared with the reduction in liabilities to non-residents.

<sup>42</sup> Analyzed by individual bank, the share of banks' claims on non-residents in total assets ranges from 2.0% to 19.9%, while the share of banks' liabilities to non-residents in total liabilities ranges between 0.3% and 28.7% (with the exception of MBDP AD Skopje).



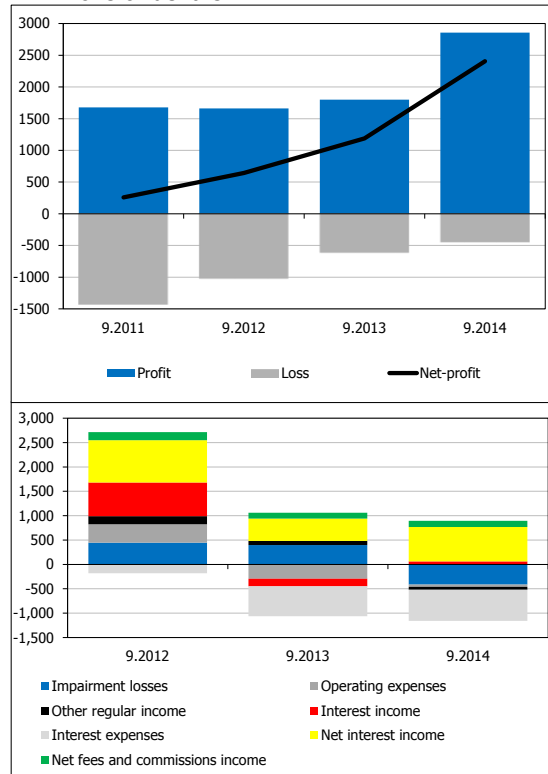
### 3. Profitability

The profits of the banking system of the Republic of Macedonia for the first nine months of 2014 (totaling Denar 2,407 million) is more than double compared to the profits in the same period last year. Reduced interest expenses and lower impairment of the banks' financial assets (loans and other similar claims) were the most pronounced generators of the increasing profits. Impairment of non-financial assets (foreclosures) has increased further, and the banks' operating costs are lower compared with last September. The main banks' profitability indicators, namely, return on assets and equity, doubled and the operational ability of banks to create revenues that cover their operating costs has remarkably improved.

Chart 70

Net after tax profit (up) and change in major income and expense categories, compared with the same period last year (down)

in millions of denars



Source: National Bank, based on data submitted by banks

#### 3.1. Movement and structure of incomes and expenses of the banking system, and profitability and efficiency indicators

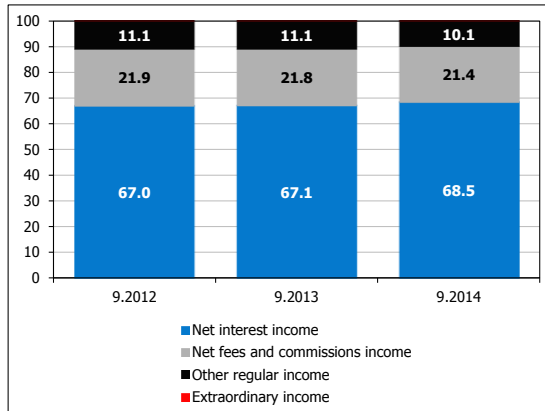
In the first nine months of 2014, **total income of banks** (total regular income<sup>43</sup> and extraordinary income) increased by Denar 770.9 million, or 5.8%, compared with the same period last year and reached Denar 14,091 million. Their growth is almost entirely due to the higher net interest income (by Denar 703.5 million, or 7.9%), which on the other hand, is due to the stronger annual reduction of interest expenses compared with the rising interest income. Net fee income went up (by Denar 128.3 million, or 4.4%), and only other regular income<sup>44</sup> and extraordinary income went down.

**The structure of total income during the first nine months of the year is almost unchanged, so that the net interest income still has the largest share (68.5%).**

<sup>43</sup> 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).

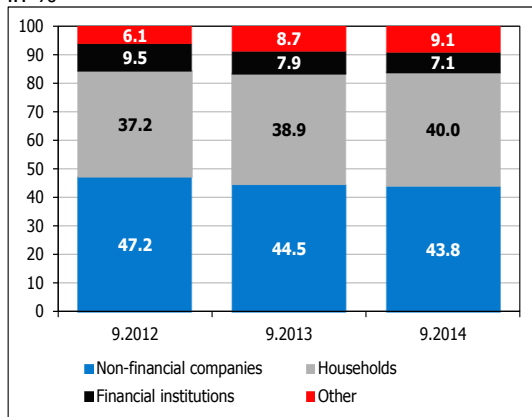
<sup>44</sup> The reduction of other regular income by Denar 60.6 million, or 4.1%, primarily results from the reduction in net unrealized gains from assets and liabilities held for trading in two banks in the country.

Chart 71  
Structure of total income  
in %



Source: National Bank, based on data submitted by banks

Chart 72  
Sector structure of interest income  
in %



Source: National Bank, based on data submitted by banks

In the first nine months of the year, **the increase in interest income** is due to the stronger increase in interest income from households and other entities. **The growth of interest income from households** of Denar 160.3 million, or 2.9% corresponds to the accelerated annual credit growth to this sector, even though interest rates on loans to households drop. On the other hand, in the first nine months of the year, the increased interest income from other entities (by Denar 58 million, or 4.7%) is due to the increased banks' investments in government securities<sup>45</sup>.

In contrast, in the first nine months of 2014, interest income from financial and non-financial companies went down. **Interest income from financial companies are lower by Denar 113.4 million, or 9.9%, on an annual basis**, which is solely due to the lower interest income from reserve requirement<sup>46</sup>, while **the reduction in interest income from non-financial companies** (of Denar 78.3 million, or 1.2%), is mainly due to the downward trend in lending interest rates.

An important contribution to the increase in net interest income was made by the **declining income costs** (by Denar 639.5 million, or 10.6%) of all sectors, which is a result of lower deposit interest rates, compared to September 2013, despite the rapid annual growth of deposits of non-financial entities. Interest rates on time deposits of the households sector registered the greatest fall<sup>47</sup>, due to which the drop of interest expenses in this sector<sup>48</sup> made the greatest contribution to the reduction in total interest

<sup>45</sup> Interest income from investments in government securities, which is included in the category of interest income from other entities increased by Denar 76.8 million, or 8.3% in the first nine months of 2014.

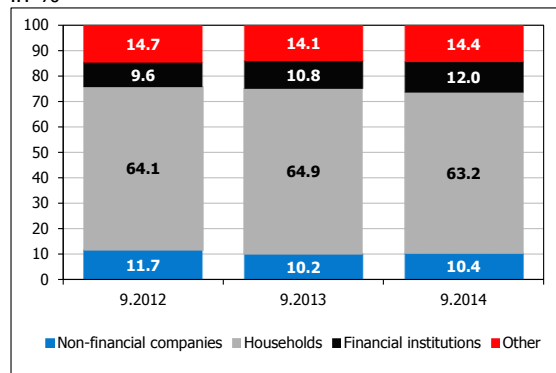
<sup>46</sup> According to the Decision amending the Decision on reserve requirement ("Official Gazette of R. Macedonia" no. 166/2013), the NBRM is exempted from paying reserve requirement remuneration (previously, this remuneration rate equaled 1% for the Denar reserve requirement and 0.1% for the Euro reserve requirement). This decision came into effect on 01 January 2014.

<sup>47</sup> Interest rates on long-term denar deposits of the household sector decreased by 1.1 percentage points, and on short-term and long-term foreign currency deposits, by 0.6 and 0.7 percentage points, respectively. The largest decline was registered by interest rates on short-term denar deposits with FX clause (2.3 percentage points), but the amount of these deposits is minor.

<sup>48</sup> Interest expenses from the household sector decreased by Denar 506.7 million, or 13.0%, annually.

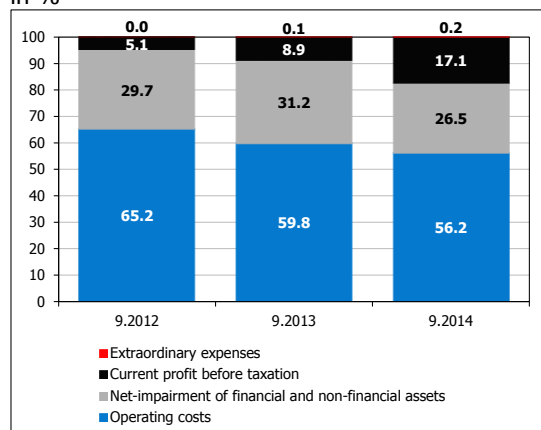


**Chart 73**  
Sector structure of interest expenses  
in %



Source: National Bank, based on data submitted by banks

**Chart 74**  
Use of total income  
in %



Source: National Bank, based on data submitted by banks

expenses (79.2%). An additional contribution to the reduction of interest expenses of banks was also made by the reduction in interest expenses from non-financial companies (private non-financial companies based on time deposits)<sup>49</sup>, and interest expenses from other entities (mainly expenses based on non-resident financial companies' interests on loan liabilities). Nevertheless, interest expenses from household sector still have the largest share in the interest expense (63.2%).

**Most of the banks' total incomes are used to cover operating costs and impairment.**

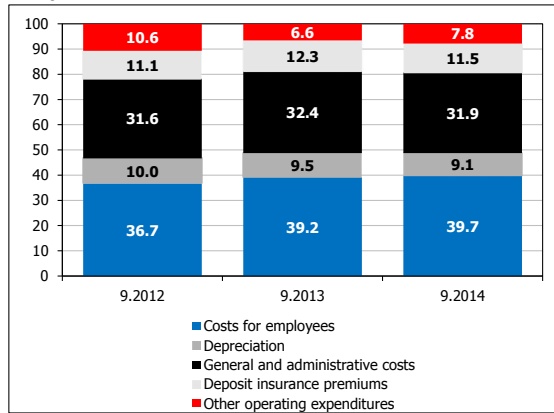
In the first nine months of 2014, operating costs<sup>50</sup> of banks declined by Denar 46 million, or 0.6%. **Deposits insurance premiums registered the largest absolute decrease<sup>51</sup>** (Denar 66.9 million, or 6.8%), with significant annual decrease being recorded in general and administrative costs of Denar 55.5 million (or 2.1%), and depreciation (Denar 42.9 million or 5.6%). In contrast, staff costs rose (by Denar 24.1 million, or 0.8%), and the growth of special reserve for off-balance sheet exposure contributed the most to the growth of the category of other operating costs.

<sup>49</sup> Given the fall of interest rates on time denar and foreign currency deposits of non-financial companies by 0.7 percentage points, compared to September 2013.

<sup>50</sup> Operating costs of banks include staff costs, depreciation, general and administrative expenses, deposits insurance premiums and other operating expenses, excluding extraordinary expenses.

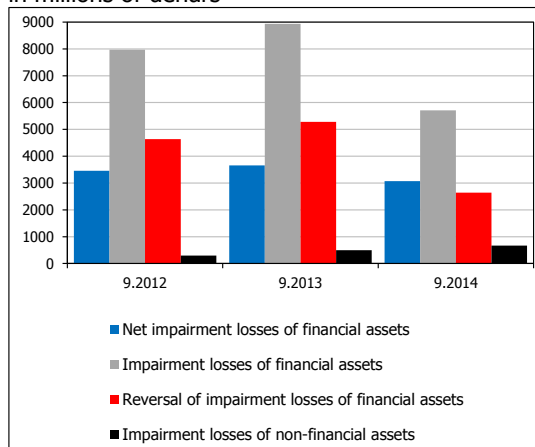
<sup>51</sup> The Board of Directors of the Deposit Insurance Fund, at its 74th meeting held on 28 March 2014, decided to reduce the rate of premium applied by the Deposit Insurance Fund in the calculation of the monthly premium by 0.2 percentage points. Thus, the rate of premium reduced to 0.5% annually, starting from 1 June 2014.

Chart 75  
Structure of operating costs  
in %



Source: National Bank, based on data submitted by banks

Chart 76  
Impairment of financial and nonfinancial assets  
in millions of denars



Source: National Bank, based on data submitted by banks

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 (71.6%).

Besides interest expenses, impairment of claims is the next most important component affecting the increased profits of banks. At the end of September 2014, **net impairment recognized by banks for impairment of financial assets (loans and other similar claims) reached Denar 3,068 million, which is a decrease of Denar 587 million, or 16.1% on an annual basis**<sup>52</sup>. This is due to the slower growth of non-performing loans in the first nine months of 2014 (12.9%) compared with the growth of these loans in the same period of 2013 (15.8%). Accordingly, the share of net interest income that is used to cover the impairment of financial assets reduced from 40.9% (as of 30 September 2013) to 31.8% (as of 30 September 2014).

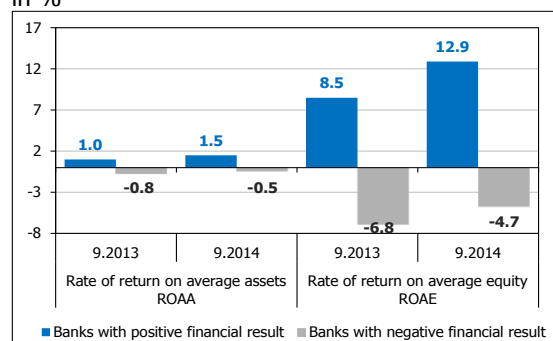
In contrast, **impairment of non-financial assets (foreclosures) continues to grow** and at the end of September 2014 amounted to Denar 670 million (Denar 174 million or 35% more compared to the same period last year).

<sup>52</sup> For purposes of comparison, in the same period last year, net impairment of financial assets (loans and other similar claims) increased by Denar 197 million, or 5.7%, annually.



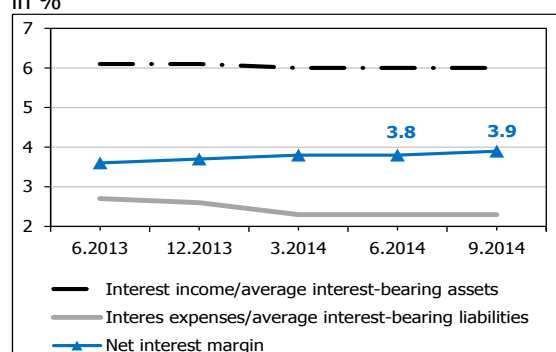


Chart 77  
Profitability indicators, by banks'  
(positive/negative) financial result  
in %



Source: National Bank, based on data submitted by banks

Chart 78  
Net interest margin  
in %



Source: National Bank, based on data submitted by banks

**The upward movement of banks' profits improved the basic profitability indicators of the banks.** Rates of return on assets and equity, as well as the profit margin<sup>53</sup> are doubled compared to September 2013.

The lower amount of total regular income used to cover operating costs suggests an **improved operational efficiency of the banking system**, which is also confirmed by all other indicators of the ratio between various types of costs and total regular income, which are decreasing annually.

As of 30 September 2014, eight of fifteen banks earned higher net interest margin<sup>54</sup> than the **net interest margin of the banking system, which equaled 3.9%.**

Table 5 Profitability and efficiency indicators of the banking system  
in %

	9.2013	9.2014
Rate of return on average assets (ROAA)	0,4	0,9
Rate of return on average equity (ROAE)	3,9	7,6
Cost-to-income ratio	59,8	56,2
Non-interest expenses/Total regular income	65,8	62,3
Labor costs /Total regular income	23,4	22,3
Labor costs /Operating expenses	39,2	39,7
Impairment losses of financial and non-financial assets /Net interest income	46,4	38,8
Net interest income /Total regular income	67,1	68,5
Net interest income /Non-interest expenses	102,1	109,9
Non-interest income/Total regular income	38,8	37,6
Financial result/Total regular income	8,9	17,1

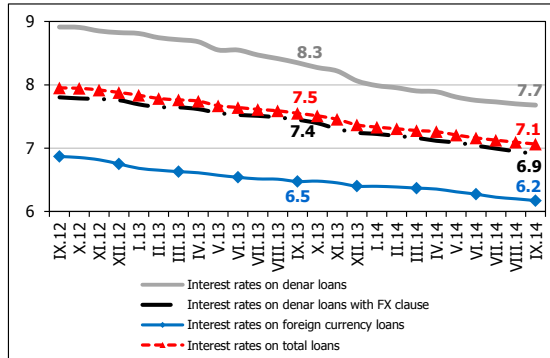
Source: National Bank, based on data submitted by banks

The indicators calculated by group of banks have been presented in Annex 35.

<sup>53</sup> Profit margin = operating profit (loss) to total regular income ratio.

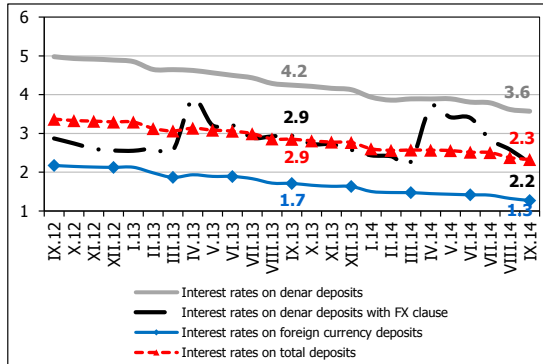
<sup>54</sup> Net interest margin is calculated as a ratio between net interest income and average interest-bearing assets. The average interest-bearing assets is calculated as the arithmetic average of the amounts of interest-bearing assets at the end of the relevant quarter of the current year and at the end of the previous year.

Chart 79  
Lending interest rates  
in %



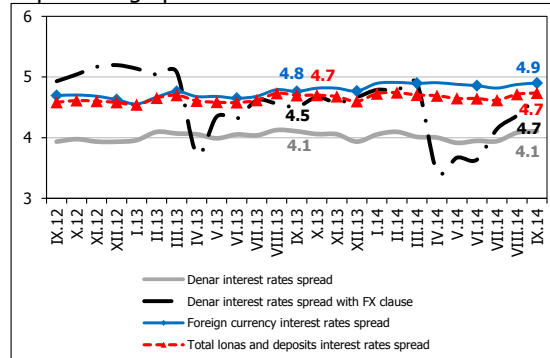
Source: National Bank, based on data submitted by banks

Chart 80  
Deposit interest rates  
in %



Source: National Bank, based on data submitted by banks

Chart 81  
Interest spread, by currency  
in percentage points



Source: National Bank, based on data submitted by banks

The calculations do not include loans on overdrafts and credit cards.

### 3.2. Movements in interest rates and interest rate spread

Lending and deposit interest rates of banks continued falling in 2014, although the National Bank's policy rate remained unchanged<sup>55</sup>. Compared to September last year, the decline was mostly pronounced in the interest rates on denar loans and deposits and denar deposits with FX clause (0.7 percentage points), while the slowest decline was registered by interest rates on foreign currency loans (0.3 percentage points).

In relatively steady downward movements of lending and deposit interest rates, interest rate spreads in almost all currencies are stable and register no major changes compared to the level of September 2013. The only significant increase in the interest rate spread is observed between the interest rates on Denar loans and deposits with foreign currency clause, due to the stronger decrease in interest rates on Denar deposits with FX clause (0.7 percentage points), compared to the decrease in interest rates on Denar loans with FX clause (0.5 percentage points).

<sup>55</sup> The interest rate on CB bills during the first nine months of 2014 is at the same level since the last change in July 2013 (when it was cut to 3.25%).



## **IV. ANNEXES**