

NATIONAL BANK OF THE REPUBLIC OF MACEDONIA



**Report on Banking System of the Republic of Macedonia
in the third quarter of 2012**

October, 2012

CONTENTS

SUMMARY6

I. Banking system structure8

1. Number of banks and ownership structure of the banking system8

2. Concentration and market share of banks.....8

II. Bank activities10

1. Assets of the banking system10

2. Loans to non-financial entities15

3. Deposits of non-financial entities22

III. Bank risks.....26

1. Credit risk26

 1.1. Banking system's loan portfolio quality26

 1.2. Stress-test simulation of the sensitivity of the banking system to increased credit risk33

2. Liquidity risk34

3. Currency risk43

4. Interest rate risk in the banking book46

 4.1. Structure of the interest sensitive assets and liabilities46

 4.2. Weighted value of the banking book48

5. Insolvency risk49

 5.1. Indicators for solvency and capitalization of the banking system49

 5.2. Movements and quality of the own funds of the banking system50

 5.3. Developments and structure of the capital requirements and the free capital of the banking system51

 5.4. Stress test simulations of the resilience of the banking system to hypothetical shocks56

6. Profitability58

 6.1. Movement and structure of income and expenditures of the banking system.....58

 6.2. Movement of the interest rates and the interest rate spread of the banking system62

 6.3. Indicators for profitability and efficiency of the banks.....63

ANNEX.....65



FIGURES

Figure 1 Structure of relevant items in banks' on-balance sheet, by dominant ownership of banks	8
Figure 2 Foreign bank branches, number and share in total assets.....	8
Figure 3 Herfindahl Index.....	9
Figure 4 Share of each bank in the total assets of the banking system	9
Figure 5 Market share (assets) of banks by country of origin of the dominant shareholder	9
Figure 6 Quarterly change of total assets, in millions of Denars	10
Figure 7 Change of total assets, in %	10
Figure 8 Quarterly (up) and annual (down) change of securities portfolio, in %	12
Figure 9 Structure of the securities portfolio.....	12
Figure 10 Placements with banks and other financial institutions, quarterly change in %	13
Figure 11 Banks' borrowings, quarterly change in %.....	13
Figure 12 Liabilities (up) to and claims (down) on non-residents.....	14
Figure 13 Loans to non-financial entities.....	15
Figure 14 Quarterly (up) and annual (down) growth rate of loans to non-financial entities.....	15
Figure 15 Quarterly (up) annual (down) dynamics.....	16
Figure 16 Loan structure, by sector	17
Figure 17 Quarterly (up) annual (down) dynamics.....	17
Figure 18 Currency structure of total loans (up) and loans by sectors (down)	18
Figure 19 Quarterly (up) annual (down) dynamics of loans, by maturity	18
Figure 20 Past due loans, by days of delay in settlement of obligations	19
Figure 21 Loan structure, by maturity.....	19
Figure 22 Non-performing loan ratio, by sector	20
Figure 23 Non-performing loan ratio, by currency.....	20
Figure 24 Average weighted interest rate and maturity of newly approved loans to enterprises (up) and households (down)	21
Figure 25 Deposits of non-financial entities.....	22
Figure 26 Quarterly (up) and annual (down) dynamics of deposits of non-financial entities	22
Figure 27 Quarterly (up) and annual (down) dynamics of deposits by sector.....	23
Figure 28 Sector structure of deposits	23
Figure 29 Quarterly (up) and annual (down) dynamics of deposits by currency.....	24
Figure 30 Currency structure of deposits.....	24
Figure 31 Quarterly (up) and annual (down) dynamics of deposits by maturity	25
Figure 32 Maturity structure of deposits.....	25
Figure 33 Total credit exposure.....	26
Figure 34 Balance, quarterly and annual growth rate of nonperforming loans	27
Figure 35 NPL ratio.....	28
Figure 36 Credit risk indicators.....	29
Figure 37 Coverage of nonperforming credit exposure with calculated impairment and special reserve	30
Figure 38 Credit exposure by category of risk (left) and transition of credit exposure from regular to nonperforming status during the quarters (right)	30
Figure 39 Restructured, prolonged and net written off exposure during the quarters	31
Figure 40 Credit exposure structure to nonfinancial entities according to the due date.....	32
Figure 41 Share of uncollateralized exposure in total credit exposure to nonfinancial entities ...	32
Figure 42 Credit exposure, by monthly income of borrowers (natural persons).....	33

Figure 43 Banks' liquid assets35

Figure 44 Absolute change of banks' liquid assets according to the constituent financial instruments - quarterly (up) and annual (down).....35

Figure 45 Annual growth rate of liquid assets, by currency36

Figure 46 Absolute growth of liquid assets by currency - quarterly (up) and annual (down)36

Figure 47 Growth of liquid assets/ growth of overall sources of funding on annual basis37

Figure 48 Liquidity indicators of the banking system37

Figure 49 Liquidity indicators of the banking system, by currency - Denar (up) and foreign currency (down).....38

Figure 50 Structure of cash inflows and outflows of the banking system.....39

Figure 51 Selected liquidity ratios, by bank40

Figure 52 Absolute size of banks' assets and liabilities, by contractual residual maturity.....41

Figure 53 Contractual residual maturity (mis)match between assets and liabilities, by maturity segment41

Figure 54 Cumulative gap between assets and liabilities with contractual residual maturity of up to 30 days and up to one year42

Figure 55 Results from the simulation for withdrawal of 20% of household deposits (up) and withdrawal of deposits of the twenty largest depositors (down).....42

Figure 56 Quarterly absolute (left) and percentage (middle) growth and annual (right) growth of assets and liabilities with currency component43

Figure 57 Share of gap between assets and liabilities with currency component, in the banks' own funds.....44

Figure 58 Structure of gap between assets and liabilities with currency component.....45

Figure 59 Dynamics of the gap between assets and liabilities with currency component, by currency45

Figure 60 Ratio between the aggregate foreign currency position and own funds, by bank45

Figure 61 Structure of the interest sensitive assets and liabilities by interest rate type.....46

Figure 62 Gap between the interest sensitive assets and liabilities, by the interest rate type47

Figure 63 Interest sensitive assets (up) and liabilities (down), by the interest rate type47

Figure 64 Interest sensitive assets and liabilities, by maturity and interest rate type.....48

Figure 65 Net weighted value and ratio of total weighted value of the banking book and own funds, by the interest rate type.....48

Figure 66 Ratio between total weighted value of the banking book and own funds, by the interest rate type, the currency and the maturity segment48

Figure 67 Indicators for the solvency and contribution of the individual components in the quarterly change in the indicators49

Figure 68 Capital adequacy, by bank.....50

Figure 69 Annual changes of individual items of own funds50

Figure 70 Share of the credit risk weighted assets in the net credit exposure.....54

Figure 71 Structure of the own funds according to the use for covering individual risks56

Figure 72 Absolute increase in the main58

Figure 73 Structure of the total income59

Figure 74 Sector structure of the interest income60

Figure 75 Sector structure of the interest.....60

Figure 76 Use of total income60

Figure 77 Impairment of the financial.....61

Figure 78 Influence of the impairment.....61

Figure 79 Structure of the operating costs62



Figure 80 Movement of the lending	62
Figure 81 Interest rate spread	63
Figure 82 Net interest rate spread.....	64
Figure 83 Net interest rate spread, by	64

TABLES

Table 1 Structure of assets and liabilities of the banking system	11
Table 2 Capital adequacy ratio, after simulations.....	33
Table 3 Credit risk indicators, after simulations	34
Table 4 Banks' sources of funding	38
Table 5 Currency structure of assets and liabilities with currency component.....	44
Table 6 Currency structure of assets and liabilities with currency component.....	45
Table 7 Open currency position by currency relative to banks' own funds.....	46
Table 8 Comparison of the capital adequacy determined pursuant to the old and the new methodology for determining the capital adequacy- as of September 30,2012	52
Table 9 Capital requirements for credit risk, distributed by categories of exposure and risk-weights.....	53
Table 10 Results of the stress-test simulations for the resilience of the banking system and individual banks to hypothetical shocks, as of September 30,2012	57
Table 11 Results of the stress test simulations for the resilience of the banking system to hypothetical shocks, as of September 30,2012	58
Table 12 Indicators for the profitability and the efficiency in the operations of the	63

SUMMARY

The continuation of the weak economic activity, as well as the lower production activity in the third quarter of 2012 contributed to the continued slowdown of the banks' activities, and even their stagnation in the third quarter of the year. Changes were evident also in the structure of the assets of the banking sector, due to the growth of the banks' assets on accounts in foreign banks and reduction of their investments in securities. Main driver of the volume of total assets are deposits of non-financial entities, whose growth in the third quarter was mostly directed towards repayment of loans used by banks, so they did not contribute sufficiently to the increase in the assets.

The difficulties that the real sector was facing also affected the movements in the deposit base. On a quarterly basis deposits have increased, but this growth is mainly based on the lower amount of deposits at the end of the previous quarter (due to individual large payments of funds by the corporate sector, the payment of dividends), so that the annual growth rate of deposits slowed significantly, and in the corporate sector it even got a negative value. Thus, deposits of households, primarily long-term, continue to be the main driver of growth of the banks' deposit base.

Banks' lending activity continued to grow both on quarterly and on annual basis, however at a slower pace compared with the previous quarters. Uncertainty of the economic environment and the banks' perceptions of increased risks in the real sector, followed by conservative strategies of some of the parent entities of Macedonian banks are the main causes for such trends in lending. Contrary to current trends, when the driver of the credit growth was the corporate sector, in the third quarter this role was assumed by the households sector.

As a consequence of these conditions, both the quarterly and the annual growth rates of non-performing loans accelerated, which given the slower credit growth, caused an increase in the rate of non-performing loans to 10.9% as of September 30, 2012. The growth of non-performing loans is almost entirely derived from the corporate sector. The level of non-performing loans should be carefully monitored, but it is not a cause for serious concern, given its complete coverage with the calculated impairment.

Banking sector liquidity is stable and high. Still one third of the total assets of the banking sector are liquid assets, which cover nearly 60% of total household deposits and 42% of total deposits.

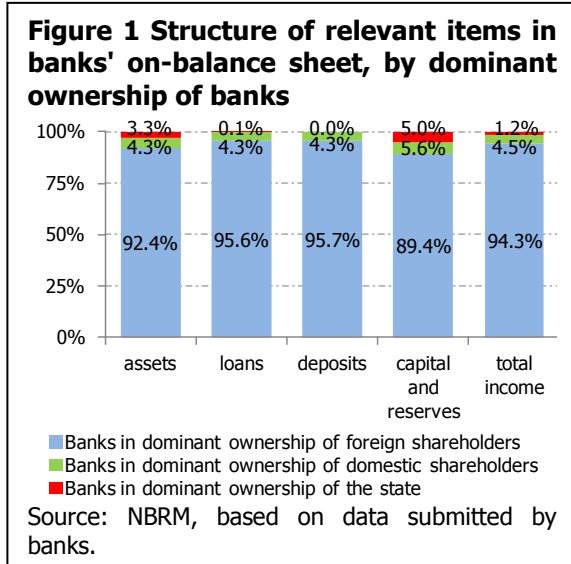
Along with the stable liquidity, high solvency is the second pillar of the banking system and its resilience to risks. As of September 30, 2012, the capital adequacy ratio is 17.1% and it is twice the statutory minimum of 8%. At the beginning of the third quarter of 2012, a new methodology for determining capital adequacy began to be applied, which is completely based on the standardized approaches for determining the capital requirement for credit, market and operational risks, as defined in the first pillar of the Basel Capital Accord (Basel 2). Besides improving the connection of the banks' risk profile with the required amount of own funds, the new regulation provides regulatory easing in some of the items included in the calculation of capital to cover credit and currency risks. Thus, the new methodology, despite the introduced obligation for banks to set aside capital to cover the operational risk, did not cause significant effects on the capital adequacy ratio.



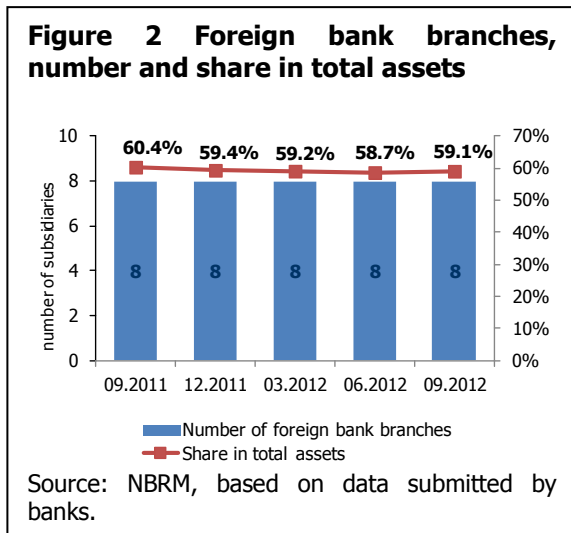
Profitability of the banking system, as one of the "supporters" of the banks' solvency and stability, is still strengthening, which is a result of the increased revenues from the core business, i.e. the net interest income. Rates of return on assets and equity increased substantially and as of September 30, 2012 they amounted to 0.3% and 2.3%, respectively. At the same time, the operational efficiency of the banks has also improved.

I. Banking system structure

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



As of September 30, 2012, the banking system in the Republic of Macedonia was composed of seventeen banks (Annex 33). In October 2012, with the acquisition of "Ziraat Banka" AD Skopje by "Halk Banka" AD, the number of banks in the Central Registry decreased by one.



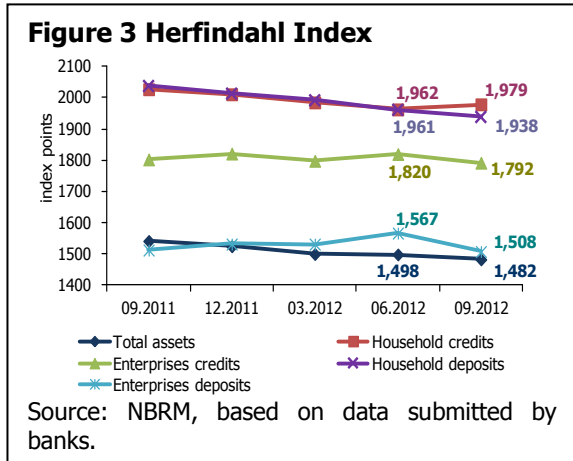
This status change, contributed to reduce appropriately the number of banks that are predominantly foreign-owned (to twelve), and the number of branches of foreign banks (to seven).

2. Concentration and market share of banks

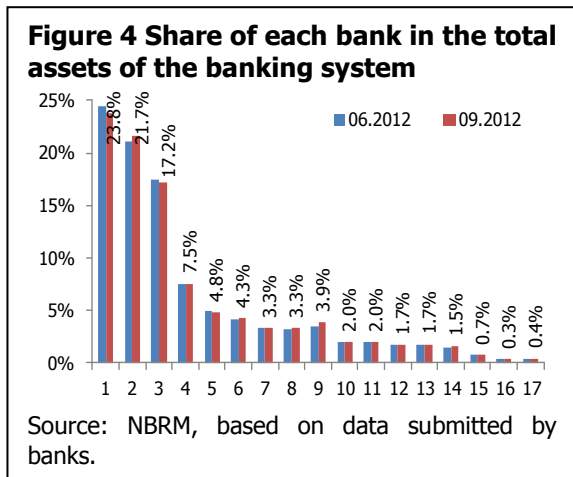
Concentration in the banking system as measured by the Herfindahl index¹ is

¹ The Herfindahl index is calculated according to the equation $HI = \sum_{j=1}^n (S_j)^2$ where S denotes each bank's share in

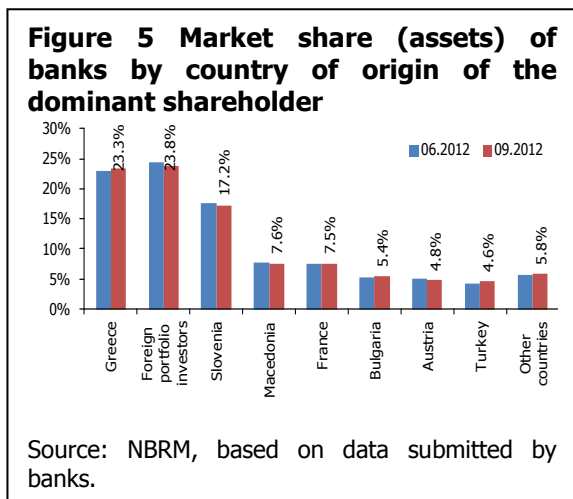
the total amount of the category analyzed (for example: total assets, total deposits etc.), while n denotes the total number of banks in the system. When the index ranges between 1,000 and 1,800 units, the level of concentration in the banking system is regarded as acceptable.



high, but with a tendency to decrease. In the household loans concentration is above the acceptable limits and as of September 30, 2012 it was the only segment of the banks' activities where an increased concentration was registered.



The high level of concentration in the banking system is confirmed by the market share of individual banks in the total assets of the banking system. Two-thirds of the total assets of the banking system are concentrated in the three largest banks, while eleven banks constitute a share of less than 4%. These eleven banks together occupy 30.8% of the total assets of the banking system.



Banks which are predominantly owned by the shareholders from Greece and Slovenia (23.3% and 17.2%, respectively) have the largest market share in the total assets. Similar is the share (23.8%) of banks predominantly owned by foreign portfolio investors². Market share of the banks predominantly owned by domestic shareholders is 7.6%.

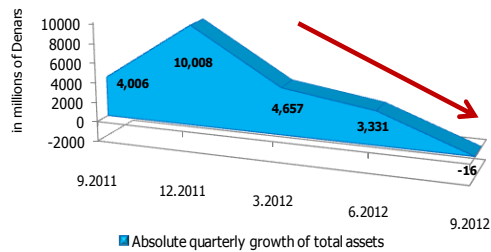
² Banks which are predominantly foreign-owned, but which lack a strategic investor.

II. Bank activities

1. Assets of the banking system

After the slowdown of growth in the previous two quarters, in the third quarter of 2012, the total activities of the banking system stagnated. The reason for such a situation were the changes in the sources of funds of the banking system, where deposit growth was mainly directed towards repayment of banks' liabilities based on loans and did not contribute sufficiently to the growth of assets. These developments are in line with the slowdown in the domestic economic activity affected by the prolonged European debt and economic crisis. Along with the slowing of the growth of banks' lending activity, lower banks' investments in securities, amid simultaneously increased placement of the funds on accounts in foreign banks, caused changes in the structure of liquid assets.

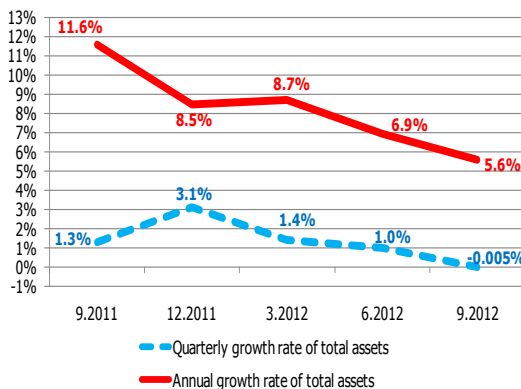
Figure 6 Quarterly change of total assets, in millions of Denars



Source: NBRM, based on data submitted by banks.

As of September 30, 2012, the total assets of the banking system amounted to Denar 339,148 million (Annex 1).

Figure 7 Change of total assets, in %



Source: NBRM, based on data submitted by banks.

In the third quarter of 2012, the total activities of the banking system stagnated (they registered minimum quarterly decline of 0.005% or Denar 16 million).

The annual rate of asset growth has been slowing down for several quarters in a row, and as of September 30, 2012, this rate is the lowest in comparison with the last ten quarters.



In the structure of assets, loans to non-financial entities slightly increased their share. However, they grew at a slower quarterly pace, while in October 2012 they declined due to the loans to the corporate sector.

Table 1 Structure of assets and liabilities of the banking system

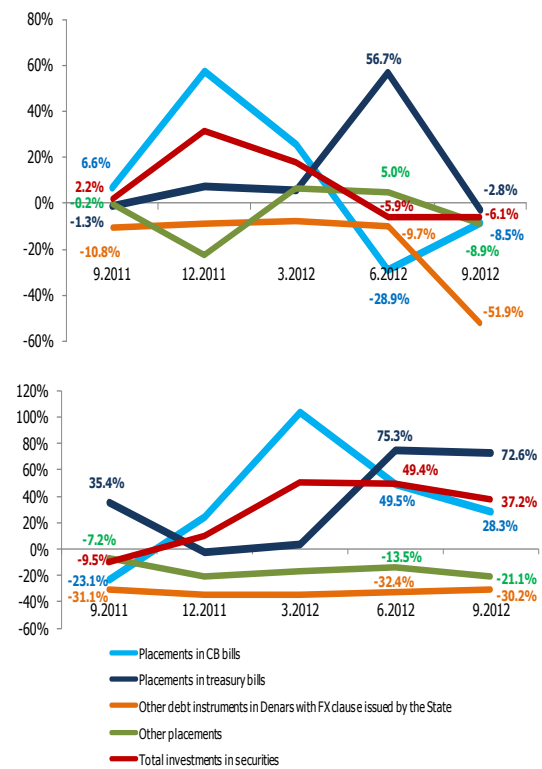
Balance sheet	Amount in millions of Denars			Structure			Change 30.9.2012/31.6.2012		Change 30.9.2012/30.9.2011	
	30.9.2011	30.6.2012	30.9.2012	30.9.2011	30.6.2012	30.9.2012	Absolute change	In percent	Absolute change	In percent
Cash and balances with NBRM	43,010	36,971	36,936	13.4%	10.9%	10.9%	-35	-0.1%	-6,074	-14.1%
Securities portfolio	37,804	55,235	52,009	11.8%	16.3%	15.3%	-3,225	-5.8%	14,206	37.6%
Placements with banks and other financial institutions	44,142	38,804	41,010	13.7%	11.4%	12.1%	2,205	5.7%	-3,132	-7.1%
Loans of nonfinancial entities (net)	178,516	188,909	188,896	55.6%	55.7%	55.7%	-13	-0.01%	10,380	5.8%
Gross loans of nonfinancial entities	199,301	212,084	213,381	62.1%	62.5%	62.9%	1,297	0.6%	14,080	7.1%
<i>Accumulated amortization of loans to nonfinancial entities</i>	-808	-905	-911	-	-	-	-6	0.7%	-104	12.8%
<i>Impairment (provisions) of loans to nonfinancial entities</i>	-19,977	-22,269	-23,573	-	-	-	-1,304	5.9%	-3,596	18.0%
Accrued interest and other assets	9,539	11,389	11,067	3.0%	3.4%	3.3%	-321	-2.8%	1,528	16.0%
Fixed assets	8,288	7,901	9,354	2.6%	2.3%	2.8%	1,453	18.4%	1,066	12.9%
Unallocated loan loss provisions	-130	-44	-124	0.0%	0.0%	0.0%	-80	-	6	-
Total assets	321,168	339,165	339,148	100.0%	100.0%	100.0%	-16	-0.005%	17,980	5.6%
Deposits from banks and other financial institutions	15,773	15,006	15,128	4.9%	4.4%	4.5%	122	0.8%	-645	-4.1%
Deposits of nonfinancial entities	225,895	237,156	238,677	70.3%	69.9%	70.4%	1,521	0.6%	12,783	5.7%
Borrowings (short-term and long-term)	28,180	32,364	31,265	8.8%	9.5%	9.2%	-1,099	-3.4%	3,086	11.0%
Liability component of hybrid and subordinated instruments	7,725	7,803	7,722	2.4%	2.3%	2.3%	-81	-1.0%	-3	0.0%
Other liabilities	7,104	6,775	6,504	2.2%	2.0%	1.9%	-270	-4.0%	-600	-8.4%
Provisions for off-balance sheet items	809	834	851	0.3%	0.2%	0.3%	17	2.1%	42	5.2%
Capital and reserves	35,683	39,228	39,001	11.1%	11.6%	11.5%	-226	-0.6%	3,318	9.3%
Total liabilities	321,168	339,165	339,148	100.0%	100.0%	100.0%	-16	-0.005%	17,980	5.6%

Source: NBRM, based on data submitted by banks.

Note: The category Placements with the Central bank from Annex 1, is included in the category Cash and balances with the NBRM, in this table.

In the third quarter, **banks' investments in securities registered a quarterly decline, contrary to the increase in placements with banks and other financial institutions**, which is the opposite of the annual trend of these two positions.

Figure 8 Quarterly (up) and annual (down) change of securities portfolio, in %

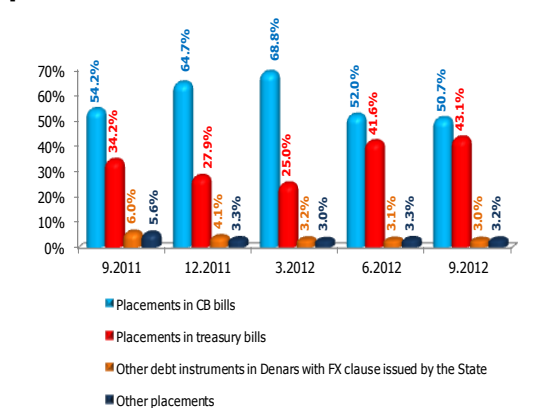


Source: NBRM, based on data submitted by banks.

In the third quarter of 2012, banks showed less interest in investing in securities, which decreased by Denar 3,225 million. In addition, banks' investments in CB bills decreased by Denar 2,430 million (8.5%), and investments in treasury bills by Denar 637 million (2.8%). These quantitative changes in the securities portfolio are in accordance with the reduced frequency of auctions and the limited supply of CB bills.

However, compared to the third quarter of 2011, banks' investments in these low-risk instruments continue to be higher (on an annual basis their increase was Denar 14,206 million). In addition, CB bills increased by Denar 5,801 million, while the growth of treasury bills amounted to Denar 9,393 million.

Figure 9 Structure of the securities portfolio

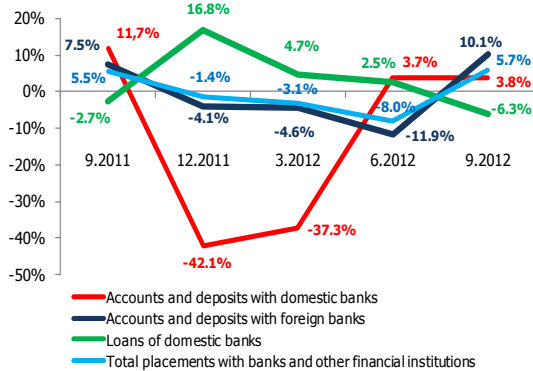


Source: NBRM, based on data submitted by banks.

As a result of the larger quarterly decrease in the investments in treasury bills, their share in the structure of banks' securities portfolio reduced, while the share of the investments in treasury bills increased.



Figure 10 Placements with banks and other financial institutions, quarterly change in %

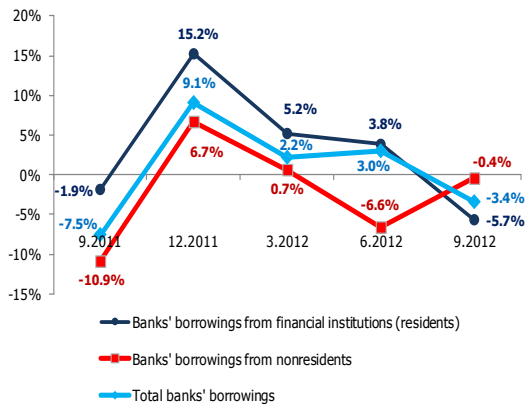


Source: NBRM, based on data submitted by banks.

Banks shifted part of the investments in securities to investments in another form of liquid assets, i.e. **on accounts in foreign banks**. In the third quarter of 2012, placements with banks and other financial institutions had the largest absolute quarterly growth of Denar 2,205 million or 5.7%. This growth is entirely due to the increased placements on current accounts with foreign banks by Denar 8,085 million, while deposits in foreign banks reduced by Denar 5,341 million³.

As for liabilities, banks' borrowings reduced by Denar 1,099 million. In the third quarter of 2012, the reduction of borrowings was determined by the repayment of loans to financial companies (contribution of 62.7%), and to a smaller proportion (contribution of 27.3%) by the reduced short-term liabilities on the basis of repo transactions with the National Bank⁴. The largest part (or 55.2%) of banks' borrowings from financial companies arises from the repayment of long-term foreign currency loans to domestic banks (Annex 2).

Figure 11 Banks' borrowings, quarterly change in %



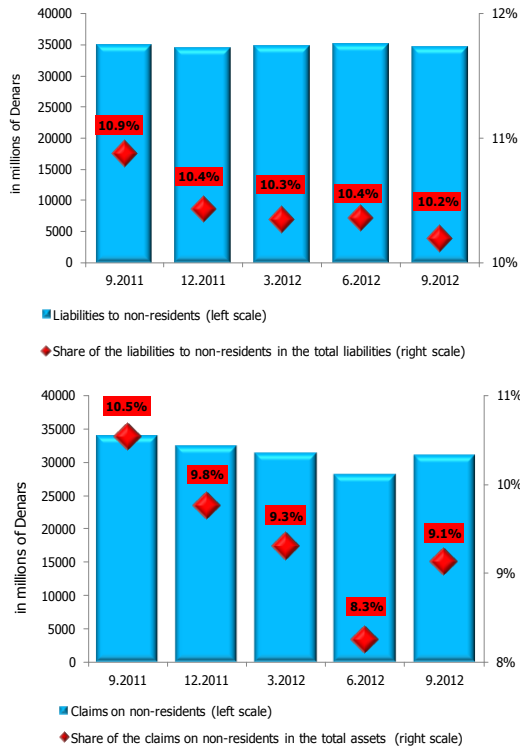
Source: NBRM, based on data submitted by banks.

In the third quarter of 2012, **deposits of non-financial entities** had a slightly upward trend, unlike the decrease in the previous quarter (Annex 2 and Annex 4).

³ This change may be related to the reduction of interest rates by the European Central Bank at the beginning of July and the corresponding reaction of the money markets.

⁴ National Bank's instrument for providing liquidity which is available to banks on a regular basis (weekly) and which is aimed at improving the efficiency in bank's liquidity management and enabling investment in longer-term instruments.

Figure 12 Liabilities (up) to and claims (down) on non-residents



Source: NBRM, based on data submitted by banks.

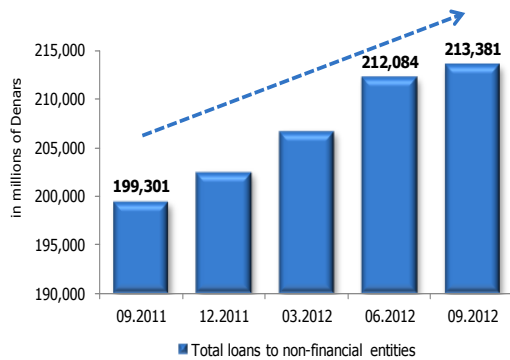
The share of the banks' liabilities to non-residents in total assets remained at the level of about ten percent. Liabilities to non-residents on a quarterly basis declined by Denar 552 million, or 1.6%, largely as a consequence of the reduction of long-term deposits of financial companies - non-residents (Denar 309 million, or 45.6%), and to a lesser part of the lower deposits of non-residents - non-financial companies and reduced liabilities based on loans from non-residents.

Diverting part of the investments in securities into placements in foreign banks contributed to the **quarterly growth of claims on non-residents** by Denar 2,956 million, or 10.6% (placements with foreign banks increased by Denar 2,718 million, or 10.1%).



2. Loans to non-financial entities

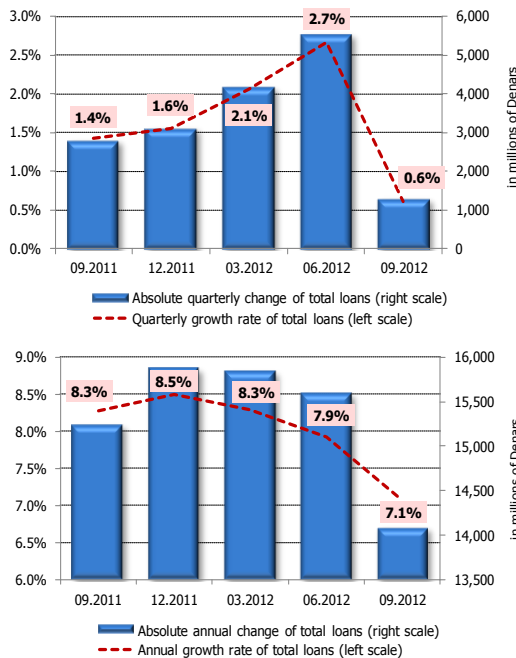
Figure 13 Loans to non-financial entities



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

Banks' lending activity continued to grow in the third quarter of 2012, but at a slower pace⁵, reflecting the banks' perceptions of the risks arising from the real sector and changes in the domestic and global economy. After the date of this report, i.e. in October 2012, loans registered a negative monthly growth rate (0.2%) due to repayment of loans by a few enterprises from the activities "wholesale and retail trade" and "other manufacturing".

Figure 14 Quarterly (up) and annual (down) growth rate of loans to non-financial entities



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

The quarterly rate of growth slowed significantly and for the first time after 2009⁶ it was below 1%.

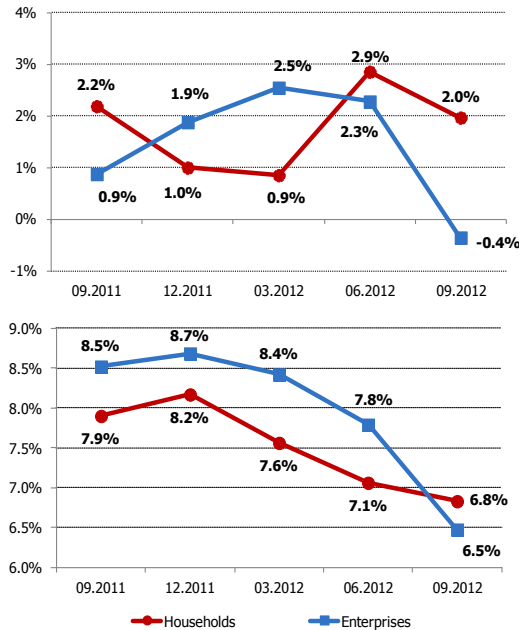
The annual growth rate of lending also slowed significantly (a decrease of 0.8 percentage points compared with the previous quarter), and the slowdown continued also in October 2012, when this rate decreased to 6.5%.

⁵ Analyzed by individual bank, in seven banks loans decreased on a quarterly basis (the reduction ranged in the interval from -0.04% to -13.2% for individual bank), while in the other banks the credit growth rate ranged from 0.1% to 61.0%. With most of the banks the growth was up to 8%. Slower lending is partly a consequence of the change in the terms of using a revolving credit by one legal entity.

⁶ As of June 30, 2009 and September 30, 2009, loans to non-financial entities registered a negative growth rate (-0.6% and -0.05%, respectively).

... loans by sector

Figure 15 Quarterly (up) annual (down) dynamics



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

Despite the unchanged credit demand by the corporate sector (according to the results of the National Bank Lending Survey), in the third quarter of 2012, the credit support for this segment of the non-financial entities reduced. The uncertainty of the economic environment and the banks' perceptions of increased risks in the real sector, as well as the more conservative business strategies of some of the parent entities of Macedonian banks, for the most part explain this trend in corporate lending.

However, on annual basis, loans to enterprises caused 56.1% of the total credit growth.

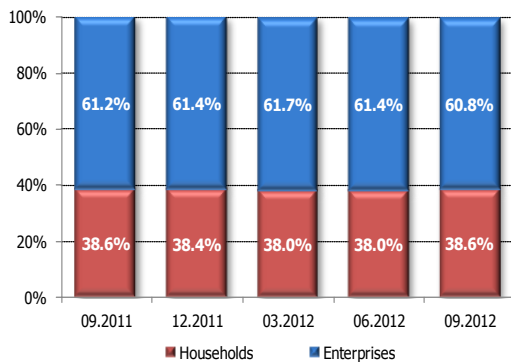
"Construction" and "activities related to real estate" registered the largest contribution to the quarterly growth of lending to enterprises and other customers. By contrast, the activity "wholesale and retail trade" limited the growth with its negative contribution. However, the annual increase is again conditioned by "traditionally" the most important activities, "industry", "wholesale and retail trade" and to a lesser extent by the activity "construction" (Annex 8).

In conditions of unchanged household credit demand and less pronounced slowdown in lending to this sector, in the third quarter of 2012, the contributions of loans to households and enterprises in the annual growth of loans continued to come closer to one another. In the third quarter of 2012, growth was even entirely conditional on household loans and the reduced lending activity in October 2012, resulted from corporate loans.

Consumer loans continued to occupy most of the lending to households and conditioned both the annual and the quarterly growth of lending to this sector. Particularly important for the quarterly growth are the credit cards. Other credit products registered negative or insignificant change, with the exception of car



Figure 16 Loan structure, by sector



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

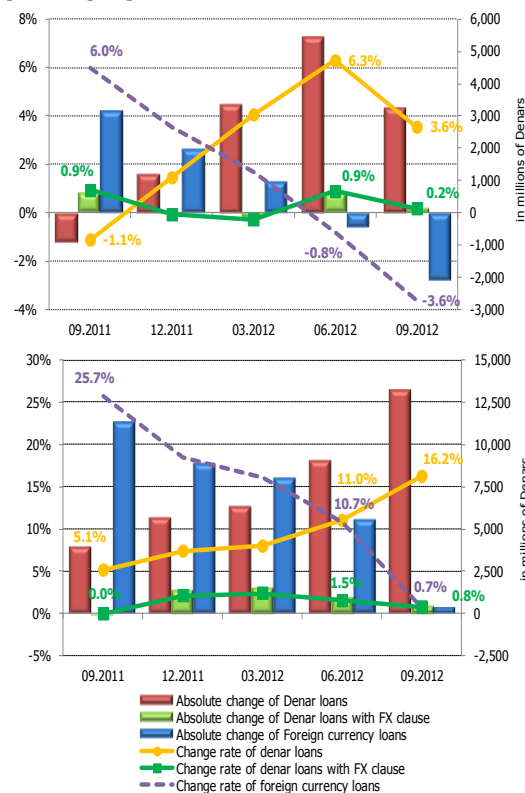
Note: The figure does not include loans to other clients due to their minimum share.

loans that registered a significantly negative growth rate (Annex 8).

Quarterly downward movement of loans to enterprises contributed to the reduction of their share in the structure of loans by sector, by 0.6 percentage points, although they continue to dominate in the structure of total loans (Annex 5).

... loans by currency

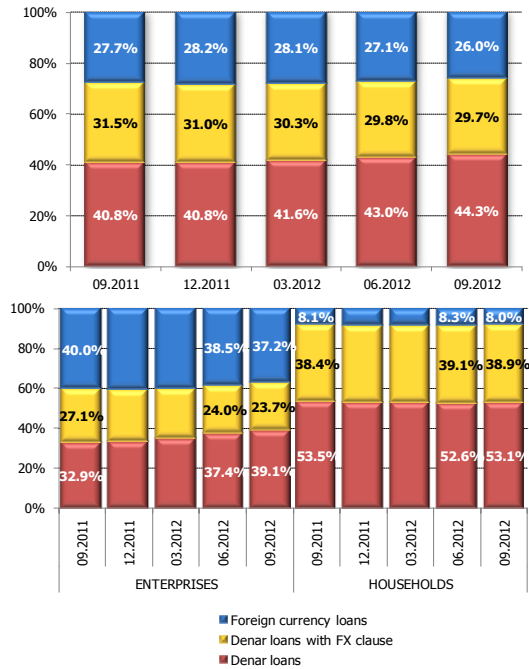
Figure 17 Quarterly (up) annual (down) dynamics



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

Slower quarterly growth of Denar loans did not reflect on their annual dynamics. They continued to grow fast on an annual basis, as opposed to the downward movement of foreign currency loans which continued in the third quarter of 2012 with a large negative quarterly growth rate and significantly slower annual growth. In October 2012, growth of Denar credits slowed down, but there was also a slowdown in the reduction of foreign currency loans. **Unlike the previous quarters of 2012, when the contribution of the Denar loans to the credit growth gradually approached to the contribution of loans with a currency component, as of September 30, 2012 Denar credits almost entirely (93.8%) caused the total annual credit growth.**

Figure 18 Currency structure of total loans (up) and loans by sectors (down)



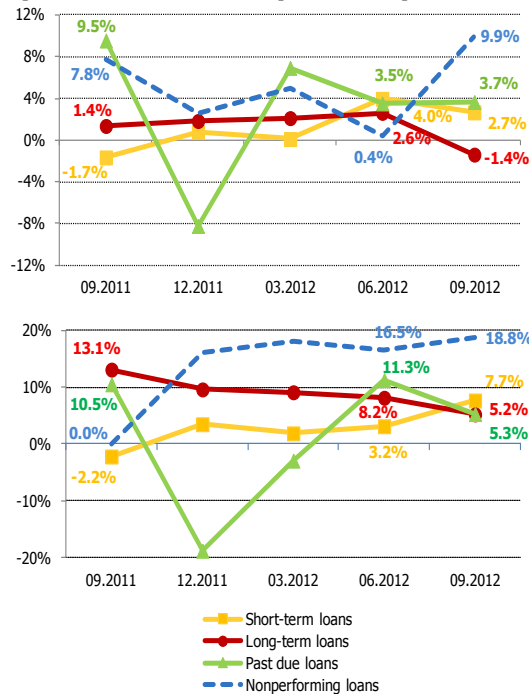
Source: National Bank, based on data submitted by banks.

The accelerated growth in Denar loans contributed to their increased share in the currency structure of loans (44.3%). However, loans with a currency component occupy 55.7%, whereby they continue to dominate in the structure of total loans (Annex 5).

By sector, in both enterprises and households the importance of Denar lending increased, with this increase being more pronounced among enterprises (Annex 5).

... loans by maturity

Figure 19 Quarterly (up) annual (down) dynamics of loans, by maturity

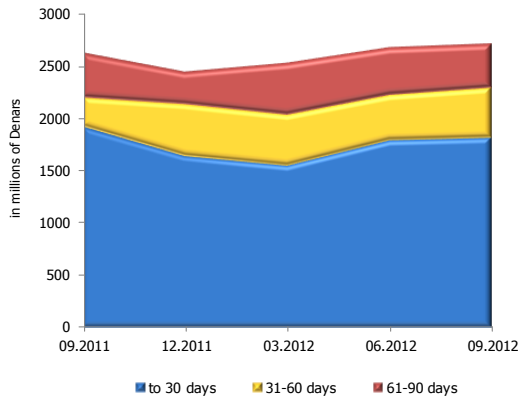


Source: National Bank, based on data submitted by banks.

Annual, and in particular the quarterly growth rate of non-performing loans accelerated in the third quarter of 2012. The rise in non-performing loans both on annual and on quarterly basis was almost entirely determined by the loans to enterprises, with the largest contribution of the activities "supply of electricity, gas, steam and air conditioning" and "construction".



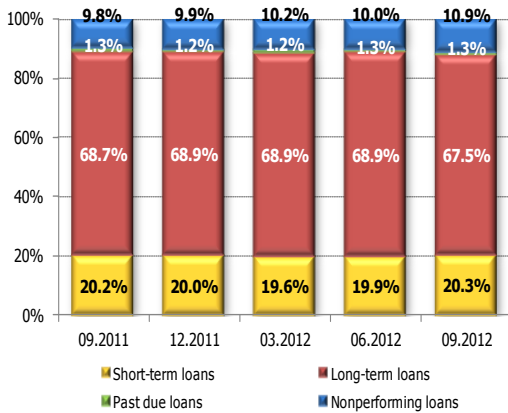
Figure 20 Past due loans, by days of delay in settlement of obligations



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

Past due loans grew on a quarterly basis, which is mostly derived from loans where the delay in the settlement of liabilities is 31 to 60 days. Despite the total growth of past due loans, the fact that in their structure prevail loans in which the delay in settlement of obligations is up to 30 days should be considered a positive feature.

Figure 21 Loan structure, by maturity

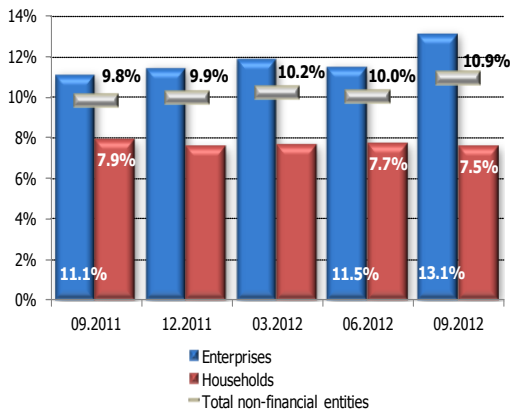


Source: National Bank, based on data submitted by banks.

In terms of maturity, long-term loans are the most common, but show a negative contribution to the quarterly growth of loans to non-financial entities, and thus reduced share in the loans structure (Annex 5).

... non-performing loans

Figure 22 Non-performing loan ratio, by sector

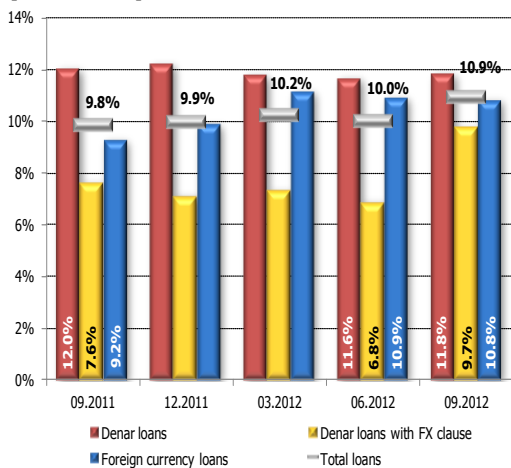


Source: National Bank, based on data submitted by banks.

Influenced by the faster growth of non-performing loans as opposed to the slowing lending activity of the banks in the third quarter of this year, the rate of non-performing loans⁷ (for non-financial entities) increased. As of September 30, 2012 it reached a level of 10.9%. Its movement was determined by the upward movement of the non-performing loans to enterprises, with a simultaneous downward movement of these loans to households.

In October 2012, non-performing loans to enterprises continued to grow, with the rate of non-performing loans (of 11.2%) as of October 31, 2012 reaching the highest level in the crisis period. The accelerated growth of non-performing loans may further reflect in the rate of credit growth.

Figure 23 Non-performing loan ratio, by currency



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

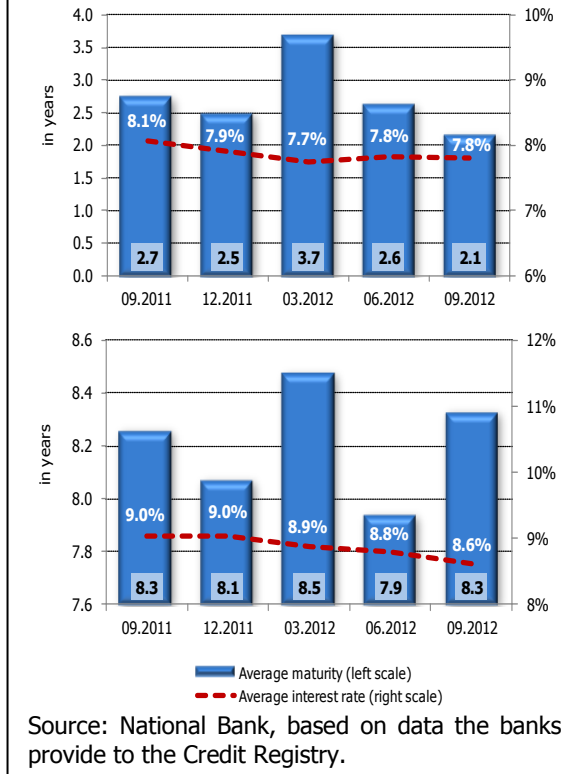
The rate of non-performing loans is still the highest with Denar loans, but as of September 30, 2012, the highest growth rate was recorded in the non-performing Denar loans with FX clause to enterprises.

⁷ Non-performing loan ratio is the share of non-performing loans in total loans.



... interest rate and maturity of newly approved loans

Figure 24 Average weighted interest rate and maturity of newly approved loans to enterprises (up) and households (down)



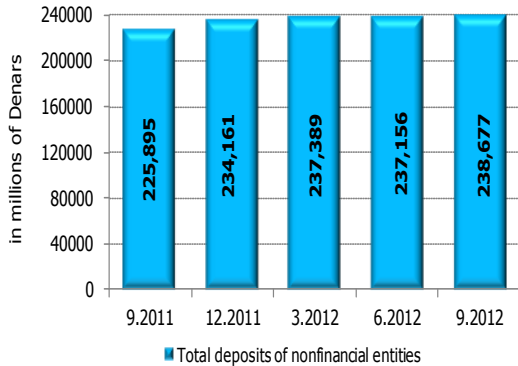
In the third quarter of 2012, the weighted average interest rates on newly approved loans registered a negligible change compared to the previous quarter (a decrease of 0.2 percentage points in new loans to households and unchanged weighted average interest rate on new loans to enterprises). The average maturity of new loans increased with the households, but continued to decline with the enterprises.

The results of the Bank Lending Survey of the National Bank conducted in October 2012, showed a moderate net tightening of some conditions for lending to the corporate sector, due to the deteriorating expectations for the overall economic activity, for the perspective of the branch the company belongs to and the company itself and the collateral risks, but not in the interest rate, the maturity of the loans or fees.

Reduced interest rate contributes to a moderate net easing of credit conditions for households. However, the banks' expectations for the overall economic activity, consumer creditworthiness and collateral risk are identified as factors that contribute to banks' expectations for partial tightening of credit conditions for the households in the forthcoming period.

3. Deposits of non-financial entities

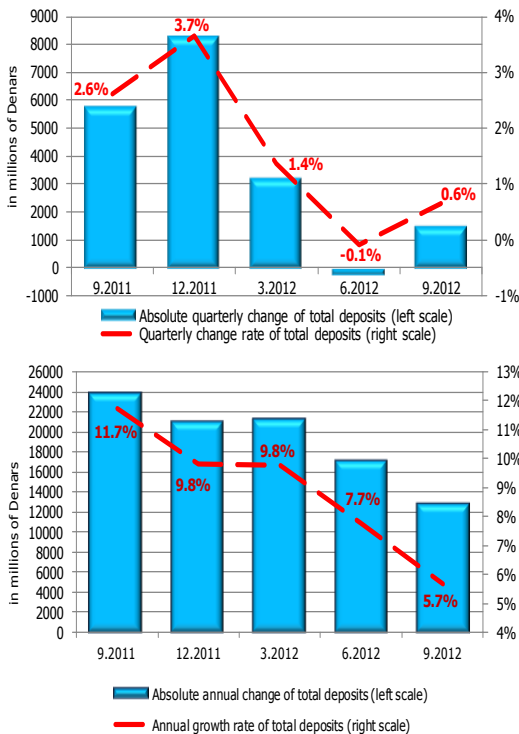
Figure 25 Deposits of non-financial entities



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

As of September 30, 2012, the total deposits of non-financial entities amounted to Denar 238,677 million (Annex 2 and Annex 9). **Unlike the minimal decrease in the previous quarter, as of September 30, 2012, deposits registered a quarterly increase of Denar 1,521 million (0.6%), which continued in October 2012.**

Figure 26 Quarterly (up) and annual (down) dynamics of deposits of non-financial entities



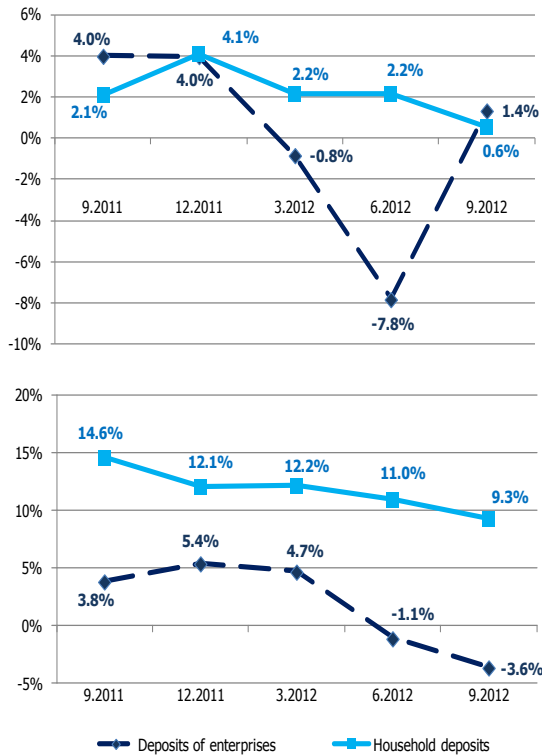
Source: NBRM, based on data submitted by the banks.

The weak performances of the real sector affected the annual growth of deposits of non-financial entities. For a period of one year (September 2012, compared to September 2011), the annual growth rate of the deposits of non-financial entities declined by 6 percentage points (Annex 9).



... deposits by sector

Figure 27 Quarterly (up) and annual (down) dynamics of deposits by sector

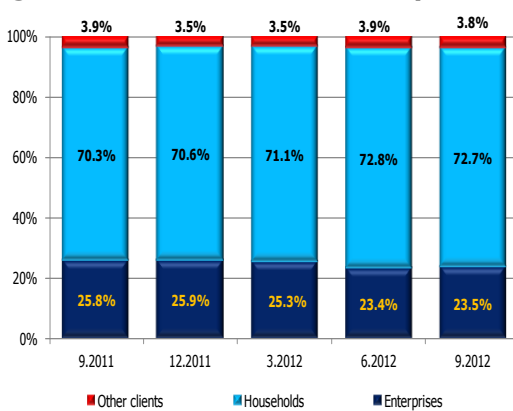


Source: NBRM, based on data submitted by the banks.

The main driver of the growth of banks' deposit base are the household deposits, although their growth significantly slowed down both on quarterly and on annual basis. The increase in household deposits on a quarterly basis is Denar 1,000 million (this movement was retained in October 2012), and their contribution to the growth of total deposits was 65.7%. The growth of household deposits was solely due to the increased long-term savings of households, which on a quarterly basis increased by almost 7% (Annex 9).

In contrast to the decrease in the second quarter of 2012, in the third quarter, **corporate deposits increased by Denar 750 million (1.4%), which continued in October 2012.** However, the annual growth rate of these deposits continued the downward movement, which began in the first quarter of 2012. Corporate Denar deposits were the main driver of both the quarterly and the annual growth of total corporate deposits (Annex 9).

Figure 28 Sector structure of deposits



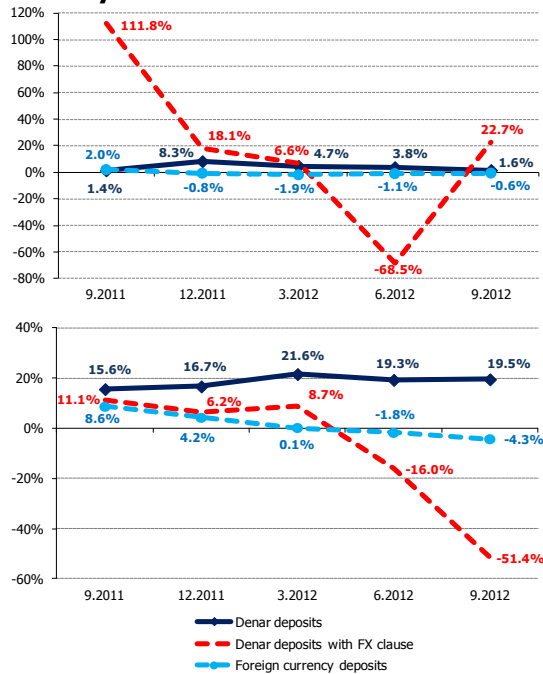
Source: NBRM, based on data submitted by the banks.

Unlike the Denar deposits, foreign currency deposits of enterprises registered quarterly decrease of Denar 1,216 million (6.1%). Moreover, 53.7% of the decline was due to the sight foreign currency deposits, while 43.5% was due to the short-term foreign currency deposits of enterprises (Annex 9).

These quarterly and annual changes caused almost no change in the sector structure of the banks' deposit base as of September 30, 2012.

... deposits by currency

Figure 29 Quarterly (up) and annual (down) dynamics of deposits by currency

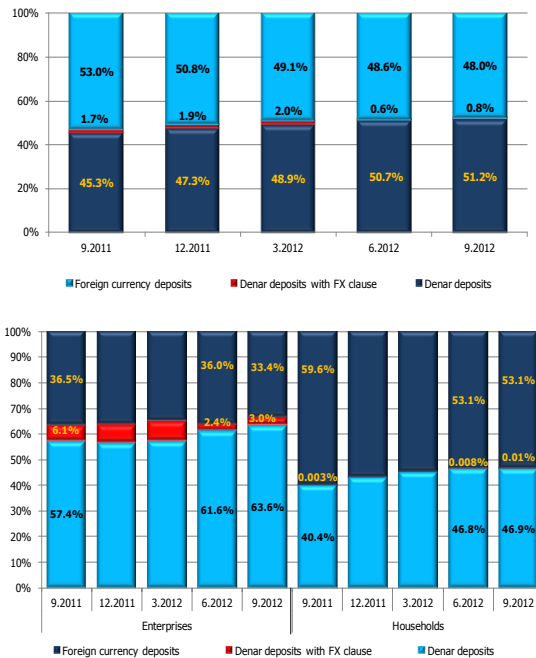


Source: NBRM, based on data submitted by the banks.

In the third quarter of 2012, although at a slower pace, domestic currency deposits continued to grow, thus being the generator of the growth of banks' deposit activity. Denar deposits increased by Denar 1,918 million, while foreign currency deposits declined by Denar 744 million, with both the growth and decline being mostly a result of movements in corporate deposits. Denar savings growth was solely due to the increase in the Denar sight deposits of enterprises, while the decline in the foreign currency deposits in this quarter was conditional on foreign currency sight deposits and short-term foreign currency deposits of enterprises (Annex 9). In October 2012, both Denar and foreign currency deposits increased (compared to September 2012).

On an annual basis, both Denar deposits with FX clause and foreign currency deposits continued to narrow. Denar deposits registered the highest annual growth.

Figure 30 Currency structure of deposits



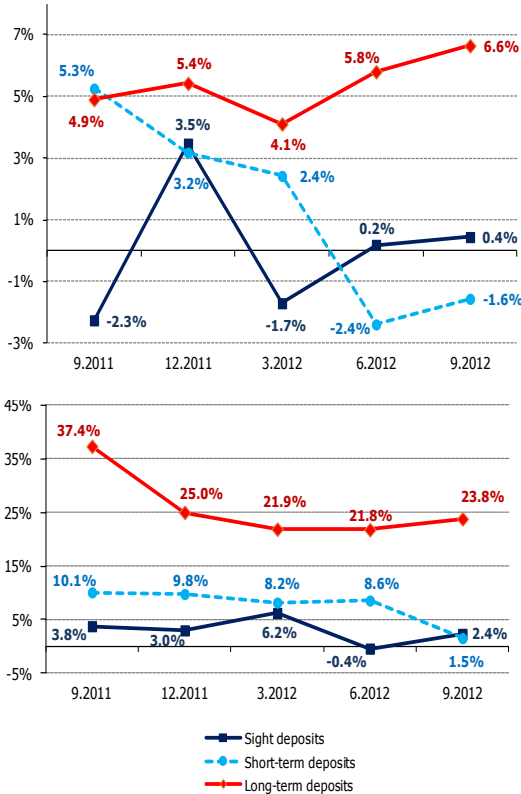
Source: NBRM, based on data submitted by the banks.

With the increased share of the Denar deposits in total deposits from 50.7% to 51.2% in the third quarter of 2012, they consolidated their position in the currency structure of the deposits of non-financial entities. The size of Denar deposits increased among both enterprises and households.



... deposits by maturity

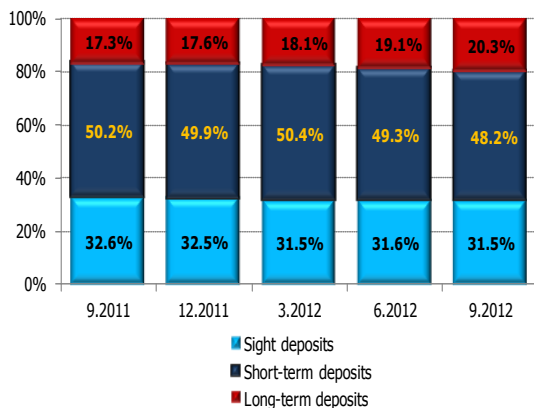
Figure 31 Quarterly (up) and annual (down) dynamics of deposits by maturity



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

The increased interest in long-term savings continued in the third quarter of 2012. Long-term deposits registered a quarterly growth of Denar 3,011 million (which continued in October 2012) that was the cause for the increase in the banks' deposit base. In contrast, short-term deposits registered a significant quarterly decrease of Denar 1,821 million (in October 2012 these deposits increased also). The growth in long-term savings is most pronounced in the long-term Denar savings of households. The reduction in short-term deposits is the result of lower short-term Denar savings (households' share is 53.5%, while the share of enterprises is 50.4%) and lower foreign currency short-term savings (households' share is 41.3%, while the share of enterprises is 70.1%).

Figure 32 Maturity structure of deposits



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

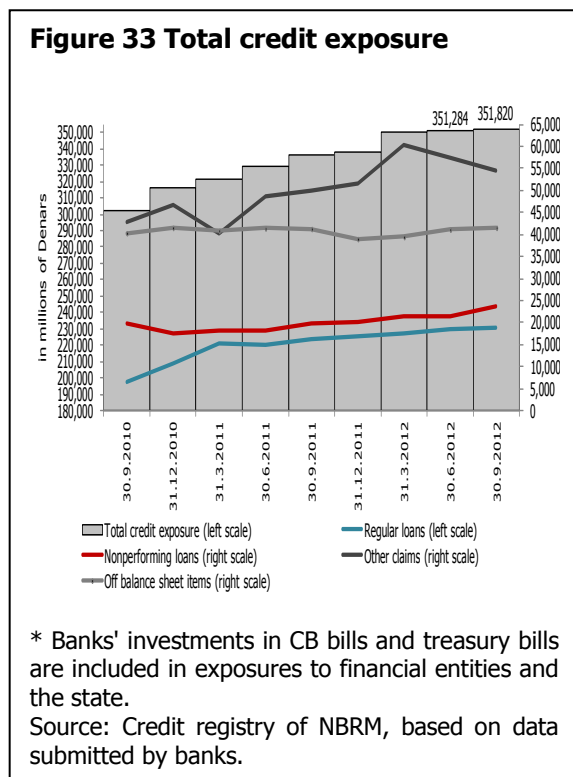
The movements of long-term deposits in the third quarter of 2012, caused a quarterly increase of their share in the maturity structure of total deposits from 19.1% to 20.3%.

III. Bank risks

1. Credit risk

The third quarter of 2012 was marked by the slow pace of growth of credit exposure and the increased level of credit risk with banks. The growth of credit exposure was based on the growth of household lending, while corporate lending registered a significant slowdown. On the other hand, the corporate sector is the driver of the growth of non-performing loans, which caused an increased rate of non-performing loans at the level of the banking system. Also, there was a reduced coverage of non-performing credit exposure with calculated impairment and special reserve, but it is still higher than 100%.

1.1. Banking system's loan portfolio quality



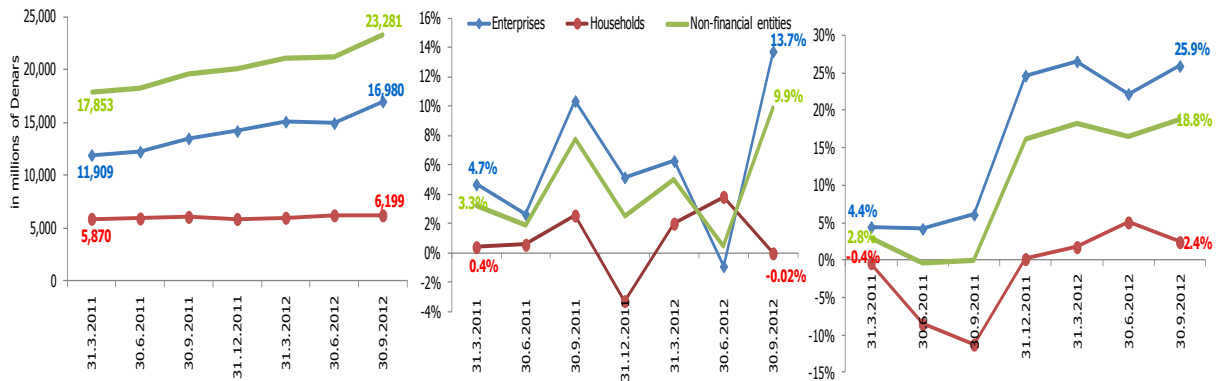
Banks' credit exposure in the third quarter of 2012 continued to rise slowly. Growth was concentrated in non-financial entities, while the reduction was most pronounced in the banks' exposure to entities engaged in financial activities. The total credit exposure in this quarter increased by Denar 536 million (only 0.2%), and if the reduction of credit exposure to financial activities and public administration⁸ is excluded, credit exposure would rise to Denar 2,653 million (1%).

Most of the growth of the exposure to non-financial entities in the third quarter of 2012, was due to the growth of the credit exposure to households (Denar 2,001 million or 2.1%). This growth was a result of the growth of consumer loans and credit cards, which are the main positions in the total exposure to household and they also registered the highest quarterly growth of Denar 1,171 million (or 3.3%) and Denar 721 million (or 3.4%), respectively. Credit exposure to enterprises and other clients (hereinafter: enterprises) grew only by Denar 652 million (0.4%) in this quarter (Annex 16).

⁸ The credit exposure to financial entities decreased by Denar 1,496 million (2.1%) due to the lower banks' investments in CB bills, while the exposure to the state (public administration) decreased by Denar 621 million or by 2.4% (for more details see the section on liquidity risk).



Figure 34 Balance, quarterly and annual growth rate of nonperforming loans



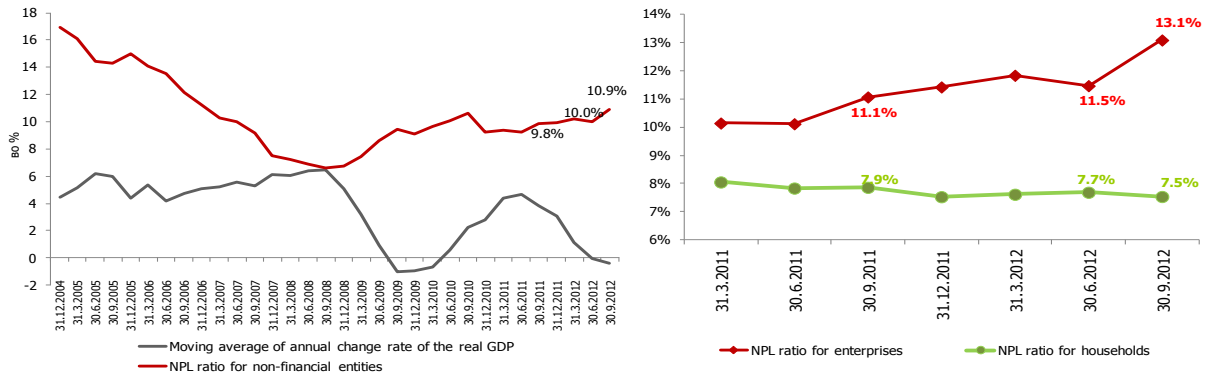
Source: NBRM, based on data submitted by banks.

Affected by the adverse economic developments, non-performing loans of enterprises registered a quarterly increase of Denar 2,049 million (13.7%)⁹, which is the highest quarterly growth achieved in the last three years. Most of this increase is concentrated in the activities "supply of electricity, steam and air conditioning" and "construction". On the other hand, the rate of non-performing loans of households is reduced, as a result of the decline in the non-performing loans on the basis of credit cards. However, the reduction of non-performing loans to households was not sufficient to offset the growth of non-performing loans to enterprises, due to which in the third quarter of 2012, total non-performing loans registered the highest quarterly growth rate in the last ten quarters.

The growth of non-performing loans, amid simultaneous slower growth in total loans, contributed to the quarterly growth rate of non-performing loans of 0.9 percentage points.

⁹ The relation between the movements in non-performing loans and the real economy could be confirmed through the inversely proportional relation of the annual real GDP growth rate and the rate of non-performing loans shown in Figure 35.

Figure 35 NPL ratio

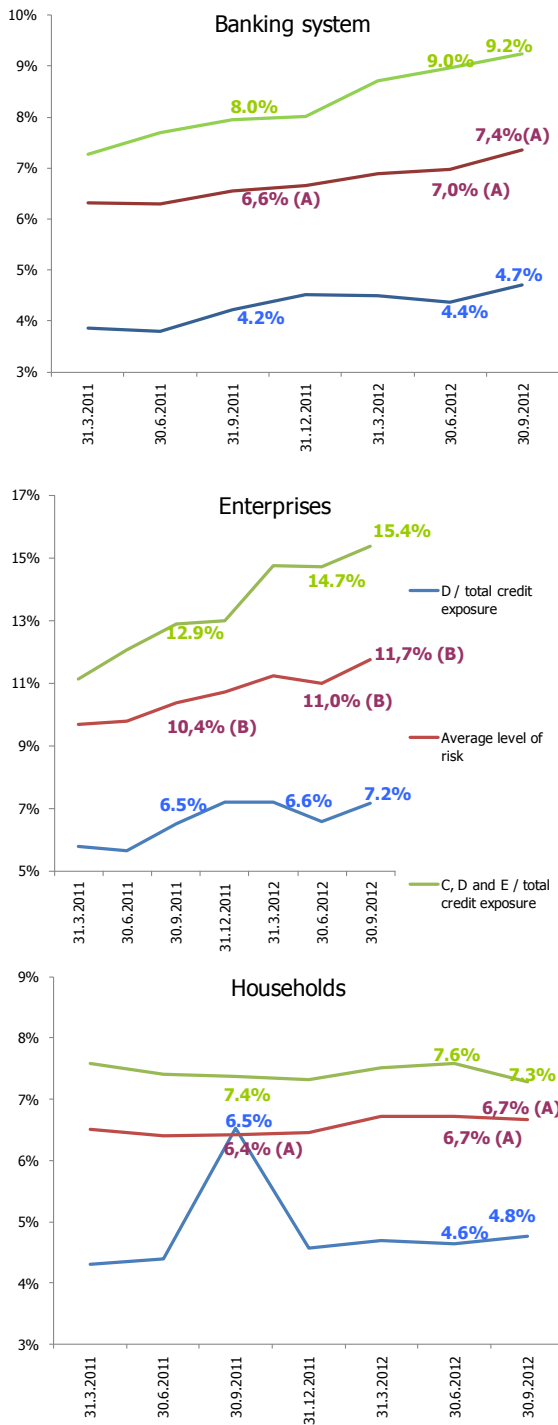


Source: NBRM, based on data submitted by banks.

Other indicators for measuring the level of credit risk indicate deterioration. Compared to the previous quarter, the average risk level and the share of credit exposure in the risk categories "C", "D" and "E" in the total credit exposure increased by 0.4 and 0.2 percentage points, respectively (Annex 18). Increased participation of the exposure in categories "C", "D" and "E" comes from the activities "construction", "power supply" and "wholesale and retail" (Annex 14 and Annex 20).



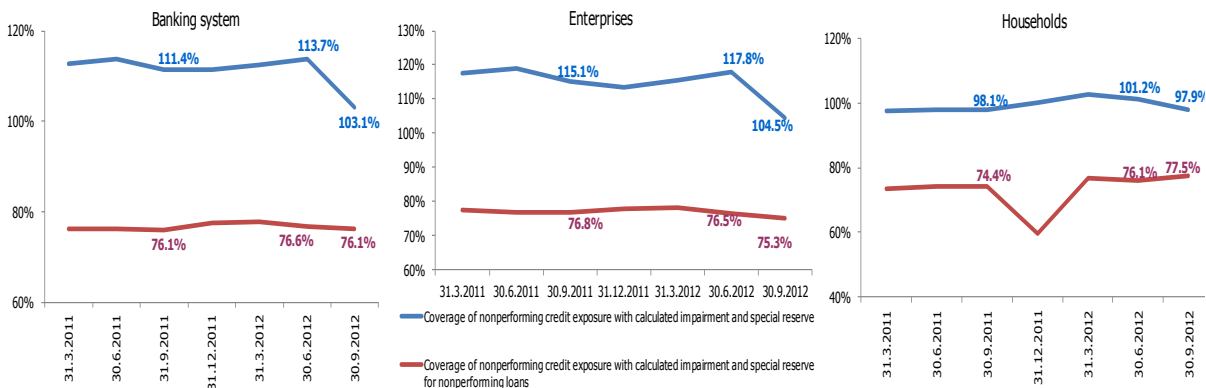
Figure 36 Credit risk indicators



Source: Credit registry of NBRM, based on data submitted by banks.

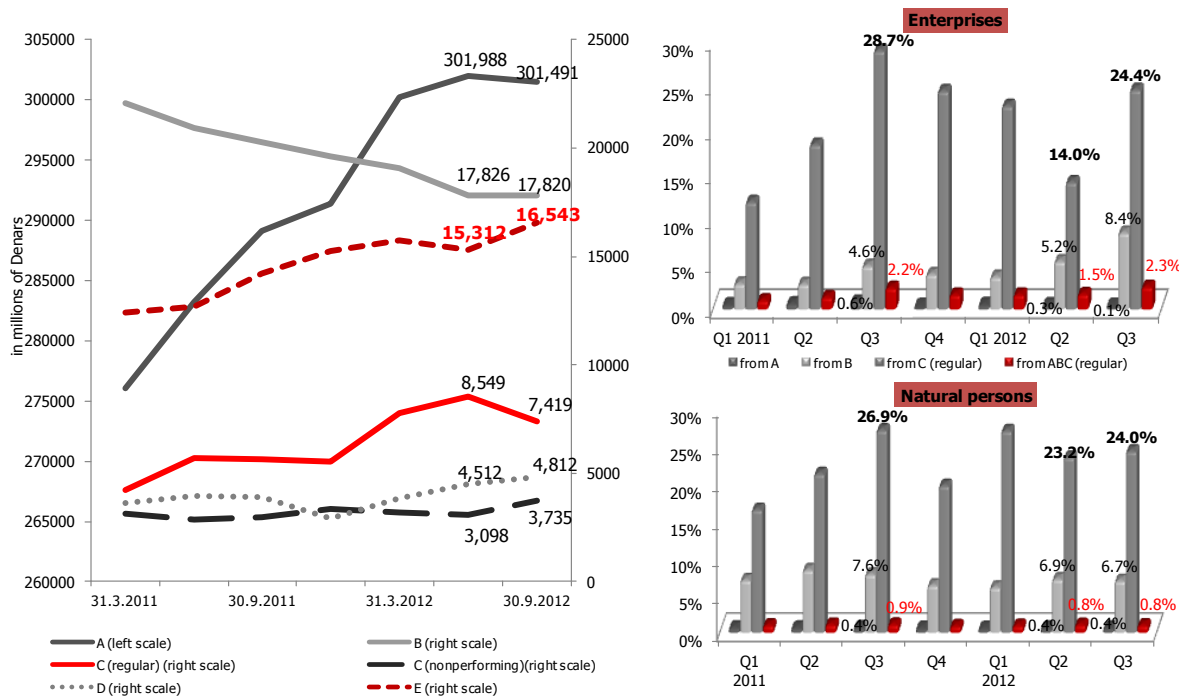
The highest credit risk in the "enterprises" sector is still present in the activity "accommodation and food service activities". As of September 30, 2012, however, this activity accounts for only 0.9% of the total credit exposure. In the activity "supply of electricity, steam and air conditioning" a significant increase in the credit risk was noted. With the "households" sector, the highest credit risk was registered with the consumer loans (Annex 21), while regarding the currency, the most risky is the credit exposure in Denars with FX clause (Annex 13 and Annex 19).

Figure 37 Coverage of nonperforming credit exposure with calculated impairment and special reserve



Source: Credit registry of NBRM, based on data submitted by banks.

Figure 38 Credit exposure by category of risk (left) and transition of credit exposure from regular to nonperforming status during the quarters (right)



Source: Credit registry of NBRM, based on data submitted by banks.

*The percentages in the right figure are the ratio between credit exposure that became nonfunctional during the quarter and credit exposure at the beginning of the period under observation. Credit exposure approved during the quarter is not included.

Along with the growth of non-performing loans, an increase was



registered in the calculated impairment of banks in the amount of Denar 1,409 million (5.8%), with 90.6% of this increase being related to the "enterprises" sector. However, this increase was not with the same intensity as the growth of non-performing loans, due to which in the third quarter of 2012, the "coverage" of the non-performing credit exposure with total calculated impairment and special reserve reduced. However, this coverage is still as high as 103.1% (Annex 15).

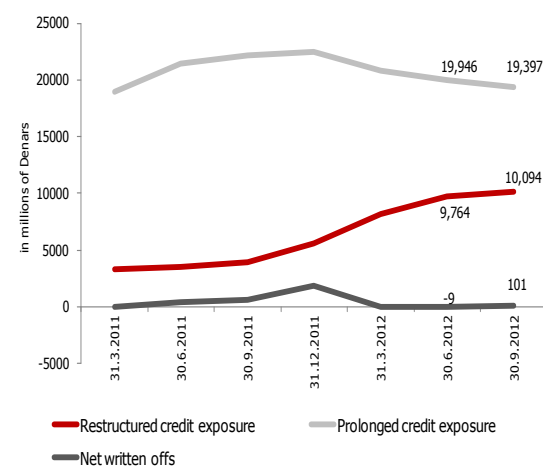
The analysis of the changes in the risk categories that were incurred during the third quarter, also shows an increased percentage of shifting of the credit exposure with "regular" status into an exposure with a "non-performing" status (Annex 17).

Companies are the generator also of the upward movements of the restructured claims¹⁰. Total restructured exposure increased by 3.4% on a quarterly basis and remained in the average risk category "C", but its average risk increased from 34.3% (as of June 30, 2012) to 39.3%. Prolonged credit exposure continued to decline, while the average risk level with this exposure continued the upward trend and at the end of the third quarter it was 14.9% (as of June 30, 2012, it was 13.1%), which is within the prescribed interval for the risk category "B".

According to the analysis of the moving average of the quarterly growth rate of restructured and prolonged credit exposures in the last four quarters, as of December 31, 2012 these exposures would have changed by 28% and -3.2%, respectively, on a quarterly basis.

Unlike the first two quarters of 2012, when banks did not make write-offs, in the third quarter, claims in the amount of Denar 149 million were written-off. The "households" sector has the highest share in the written-off claims

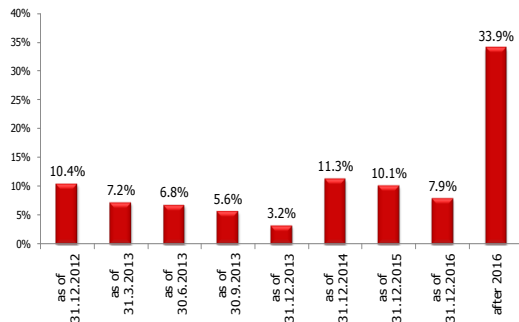
Figure 39 Restructured, prolonged and net written off exposure during the quarters



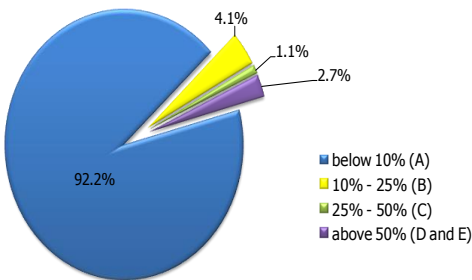
Source: Credit registry of NBRM, based on data submitted by banks.

¹⁰ Claim restructuring means establishment of a new credit exposure by the bank as a replacement of the already existing one, thus making significant changes in the contractual terms and conditions as a result of the deteriorated financial condition of the borrower.

Figure 40 Credit exposure structure to nonfinancial entities according to the due date

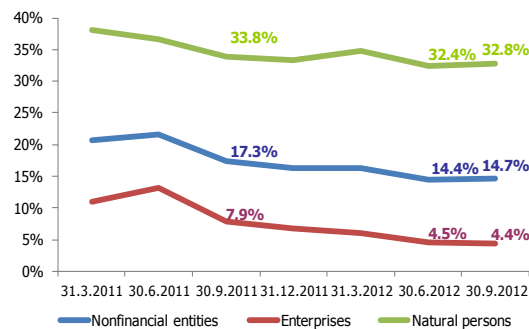


Credit exposure structure which will past due as of 31.12.2012, according the average level of risk



Source: Credit registry of NBRM, based on data submitted by banks.

Figure 41 Share of uncollateralized exposure in total credit exposure to nonfinancial entities



Source: Credit registry of NBRM, based on data submitted by banks.

(61%), and in the total collection of already written off claims (92.5%).

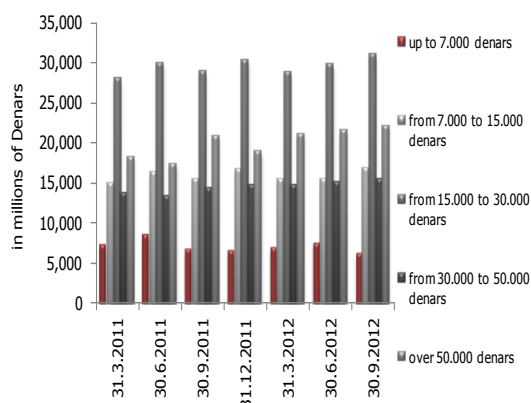
The structure of the credit exposure to non-financial entities according to the due date of the principal, could shed an additional light on banks' exposure to credit risk. Of the total amount of exposure to non-financial entities which was not past due as of September 30, 2012, 10.4% fall due by end 2012, and most of the exposure falls due after 2016. In addition, 4.2% of the total credit exposure to non-financial entities which is not past due as of September 30, 2012, accounts for exposures with an average risk level of over 50% (risk exposures classified in categories "D" and "E").

The exposure with an average risk level of up to 25% (risk categories "A" and "B") accounts for 96.3%, and the exposure with the greatest risk (risk categories "D" and "E") accounts for 2.7% of the credit exposure due for payment by the end of the year.

Regarding the collateralized credit exposure in the third quarter of 2012, lower share of the collateralized credit exposure in the total credit exposure, both at the level of the banking system, and in the individual sectors, was registered. Highest share of the uncollateralized credit exposure in the total credit exposure was registered with natural persons. If the exposures on the basis of overdrafts on current accounts and credit cards¹¹ are subtracted from the total credit exposure, the share of the uncollateralized part would be 13% (12.5% as of June 30, 2012).

Despite the quarterly increase in the credit support of the households, a positive indication is the reduced indebtedness by an individual natural person with banks. Thus, as of September 30, 2012, the average debt per person is Denar 108 thousand (Denar 109 thousand as of June 30, 2012). Most

¹¹ Most of the collection of this credit exposure is covered by the monthly income of borrowers.


Figure 42 Credit exposure, by monthly income of borrowers (natural persons)


Source: NBRM, based on data submitted by banks.

indebted are individuals with monthly income of up to Denar 30.000, which hold two-thirds of the total exposure to natural persons or nearly 59% of the total exposure intended for consumption (Annex 22). Analyzed by individual persons, most indebted are natural persons with monthly income of over Denar 100,000 (an average of Denar 778 thousand per person, which is twice more compared to the previous quarter).

1.2. Stress-test simulation of the sensitivity of the banking system to increased credit risk

In order to examine the sensitivity of the banking system to the deterioration of the quality of certain segments of the loan portfolio, stress tests are carried out on a regular basis. They consist of simulations of hypothetical migration of 10% (first simulation) and 30% (second simulation) of credit exposure to the corporate and household sectors separately, and to the two sectors together, to the two following higher risk categories.

The results of the simulations show further resilience of the banking system to simulated shocks. However, compared with the previous quarter, there is some deterioration of the results for individual banks. A more detailed overview of the results of the simulations is given in Annex 23.

Table 2 Capital adequacy ratio, after simulations

Description	CAR at the level of banking system		Bank with lowest CAR, after simulation		Number of banks with CAR after simulation below the CAR of the overall banking system after simulation (number of banks with CAR after simulation below 8%)		
	30.6.2012	30.9.2012	30.6.2012	30.9.2012	30.6.2012	30.9.2012	
Base line	17.4%	17.1%					
Enterprises and households	I simulation	15.3%	15.0%	11.1%	8.5%	7(0)	8(0)
	II simulation	10.6%	10.3%	5.1%	3.0%	7(4)	7(6)
Enterprises	I simulation	16.0%	15.7%	11.3%	9.7%	8(0)	8(0)
	II simulation	13.1%	12.9%	7.9%	6.1%	7(1)	8(2)
Households	I simulation	16.7%	16.4%	12.7%	9.8%	8(0)	8(0)
	II simulation	15.3%	14.9%	11.5%	6.7%	9(0)	8(1)

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

**Table 3 Credit risk indicators, after simulations**

Description	Share of "C, D and E" in total credit exposure		Average level of risk		
	30.6.2012	30.9.2012	30.6.2012	30.09.2012	
Base line	9.0%	9.2%	7.0%	7.4%	
Enterprises and households	I simulation	12.4%	12.7%	8.5%	8.9%
	II simulation	19.2%	19.6%	11.4%	12.0%
Enterprises	I simulation	11.1%	11.4%	7.9%	8.3%
	II simulation	15.4%	15.6%	9.9%	10.3%
Households	I simulation	10.2%	10.5%	7.5%	7.9%
	II simulation	12.8%	13.2%	8.5%	9.0%

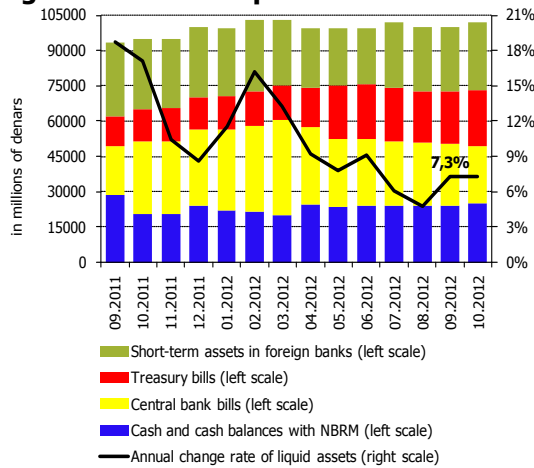
Source: NBRM calculations, based on data submitted by banks.

2. Liquidity risk

In the third quarter of 2012, banks in the Republic of Macedonia maintained stable liquidity position and reported 7.3% growth of liquid assets on an annual basis. However, there are certain changes in preferences for investing in financial instruments that constitute liquid assets. Namely, in the third quarter of 2012, banks increased their funds on accounts in foreign banks, and hence foreign currency liquid assets, which is a different behavior of the banks compared to the first two quarters of 2012. However, analyzed on an annual basis, placements in Denar liquid instruments still drive the growth of liquid assets. Liquidity indicators of the banking system remained stable in the third quarter of 2012, with some improvement of the foreign currency liquidity indicators and reduction of liquidity indicators in Denars. On a quarterly basis, the structure of sources of funding shows increase of long-term funding sources, with simultaneous decrease of short-term sources. In addition, the share of funding sources that originate from loans, subordinated liabilities and repo transactions reduced, with the deposits being a generator of the quarterly growth of banks' funding sources. Maturity mismatch between assets and liabilities narrowed, both in the maturity segments and on a cumulative basis. Stress test simulations generally show that the banking system is resilient to liquidity shocks. According to the latest available data, at the end of October 2012, the liquid assets increased by 7.3% on an annual basis, and liquidity indicators improved compared to September 2012.



Figure 43 Banks' liquid assets

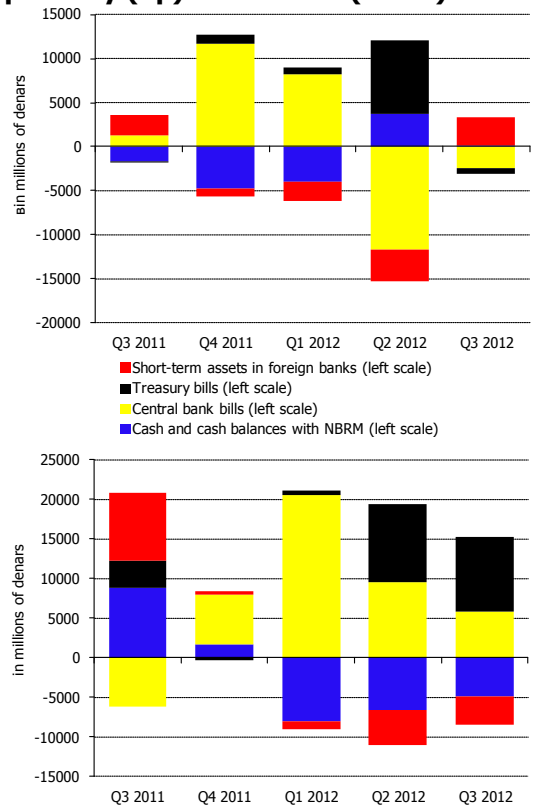


Source: National Bank, based on data submitted by banks.

At the end of the third quarter of 2012, liquid assets of the banking system¹²

amounted to Denar 99,925 million, registering a modest increase on a quarterly basis, of Denar 204 million, or 0.2%. On an annual basis, liquid assets increased by Denar 6,778 million, or 7.3%. Drivers in the annual growth of liquid assets were the banks' investments in treasury bills (annual growth of 72.6%, i.e. Denar 9,393 million) and in treasury bills (annual growth of 28.3% or Denar 5,801 million). In contrast, cash and cash equivalents on accounts in the National Bank, as well as short-term deposits placed with foreign banks declined on an annual basis by 19.0% and 11.4%, respectively. However, in the third quarter of 2012, growth of liquid assets primarily resulted from increased asset on correspondent accounts and short-term deposits of domestic banks with foreign banks by Denar 3,217 million, or by 13.3%. Their share in the structure of liquid assets increased by 3.2 percentage points on a quarterly basis. On the other hand, in the third quarter of 2012, the treasury bills decreased by Denar 2,430 million, or 8.5%, with their share in the structure of liquid assets decreasing to 26.3% (from 28.8% as of June 30, 2012). Quarterly reductions were also reported in banks' investments in treasury bills, though at significantly modest pace compared with CB bills. The treasury bills experienced a quarterly decline of Denar 637 million (2.8%), accounting for 22.4% in the structure of liquid assets as of September 30, 2012, which is a decrease of 0.7 percentage points compared with June 30, 2012.

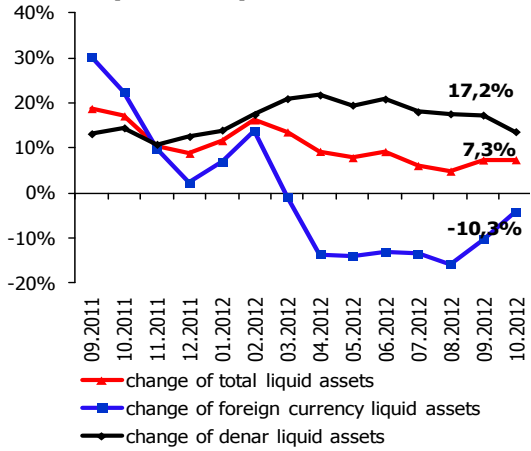
Figure 44 Absolute change of banks' liquid assets according to the constituent financial instruments - quarterly (up) and annual (down)



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

¹² Liquid assets include cash and cash equivalents on accounts in the National Bank, CB bills, correspondent accounts and short-term deposits with foreign banks and investments in short-term securities issued by the government. For liquidity analyzing purposes, Denars assets and liabilities with FX clause are regarded as Denar assets and liabilities.

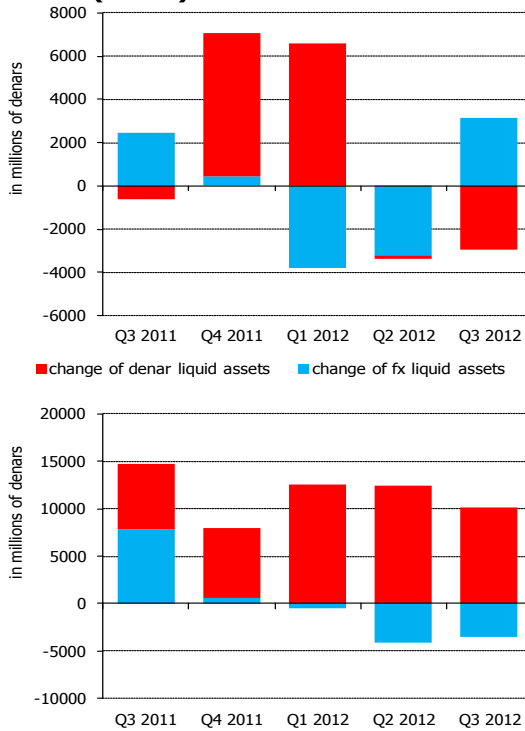
Figure 45 Annual growth rate of liquid assets, by currency



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

Growth of short-term assets placed in foreign banks has caused some changes in the currency structure of banks' liquid assets. At the end of the third quarter of 2012, the liquid assets in foreign currency accounted for 30.2% in the structure of liquid assets, which is by 3.1 percentage point more compared with the end of the second quarter of 2012. Increasing share stems from the quarterly growth of foreign liquid assets of Denar 3,133 million (11.6%), compared to the Denar liquid assets that registered a quarterly fall of Denar 2,889 million (4.0%). However, observed on an annual basis, foreign liquid assets decreased by 10.3%, or by Denar 3,467 million. Despite the rapid growth of short-term deposits of domestic banks with foreign banks in the third quarter of 2012, these funds have still been decreasing (11.4%) on an annual basis.

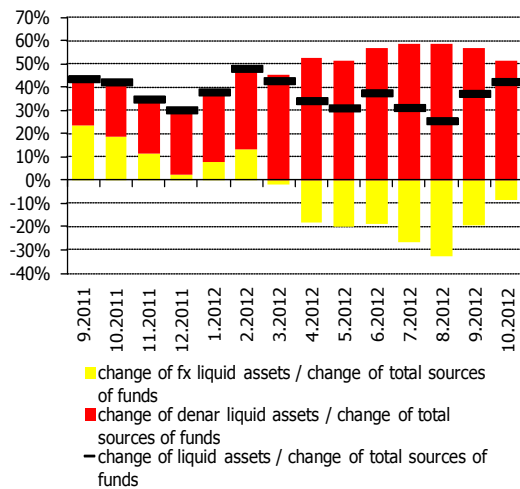
Figure 46 Absolute growth of liquid assets by currency - quarterly (up) and annual (down)



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



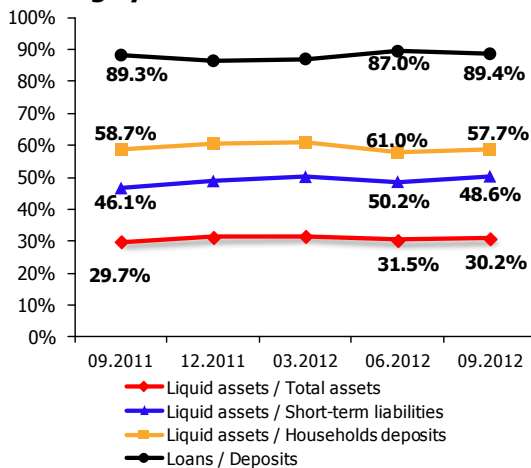
Figure 47 Growth of liquid assets/ growth of overall sources of funding on annual basis



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

Despite the growth of foreign currency liquid assets on quarterly basis, the ratio between annual changes in foreign liquid assets and total sources of funds remains negative. This is due to the conversion of foreign currency liquid assets in Denar financial instruments in the last quarter of 2011 and first quarter of 2012, primarily due to the higher expected yield of Denar instruments, but also because of the uncertainty in international financial markets and concerns about the situation in the financial institutions in the euro area.

Figure 48 Liquidity indicators of the banking system



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

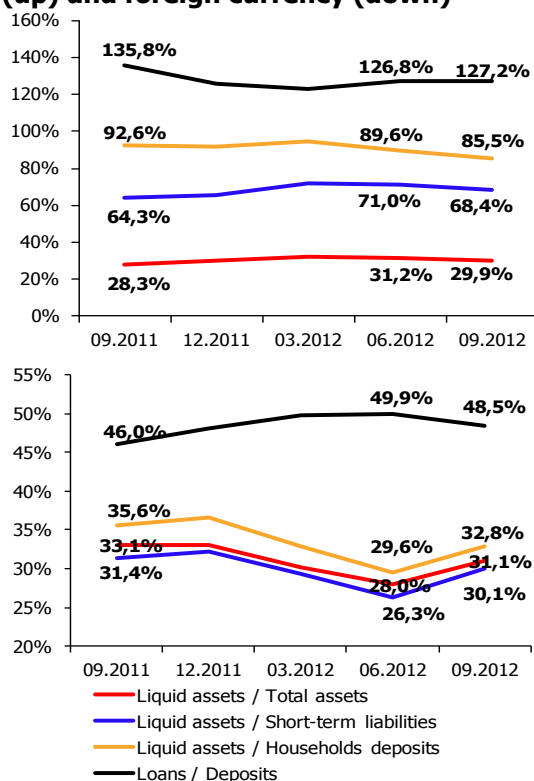
In the third quarter of 2012, banks' liquidity indicators¹³ registered high stability, which is due to the equal change in the sources of funds and liquid assets of banks. Thus, the share of liquid assets in total assets and the coverage of deposits of households with liquid assets remained almost unchanged compared to the previous quarter. Also, in the third quarter of 2012, the loan/deposit ratio registered no changes, indicating acceptable limits of liquidity risk and stable liquidity management by banks. On the other hand, banks' short-term liabilities decreased in the third quarter of 2012¹⁴, increasing also the indicator of their coverage with liquid assets.

¹³ Calculations of the liquidity indicators of the banking system do not take into account resident interbank assets and liabilities.

¹⁴ As a result of the reduction of liabilities based on repo transactions.



Figure 49 Liquidity indicators of the banking system, by currency - Denar (up) and foreign currency (down)



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

In terms of currency structure, foreign liquidity indicators improved in the third quarter of 2012, unlike the reduction of the liquidity indicators in Denars. This dynamics corresponds with the quarterly drop of Denar liquid assets and the growth of liquid assets in foreign currency. At the end of the third quarter of 2012, loan/deposit ratio in Denars went up, and in foreign currency decreased. Denar lending accelerates given the decline in foreign loans on the one hand, and due to the greater preference of nonfinancial entities to Denar savings, amid fall of foreign currency deposits, on the other hand.

In the third quarter of 2012, the funding sources originating from foreign parent banks increased by Denar 501 million, or 3.4%. This quarterly increase was due to the use of long-term funding sources, mainly in the form of long-term loans from parent entities. On an annual basis, the funding sources originating from parent entities increased by 1.1%, i.e. by Denar 175 million. In the third quarter of 2012, three banks reported significant growth of the funding sources originating from parent entities, with three banks also reporting a decline of the used funding sources originating from their parent entities.

Table 4 Banks' sources of funding

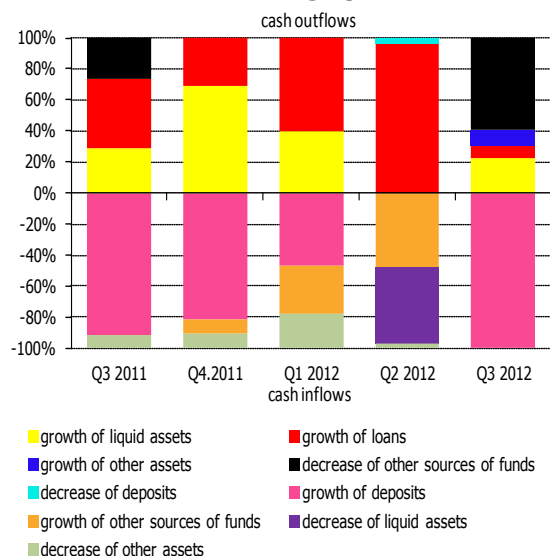
Type of sources of funding	30.06.2012		30.09.2012		Quarterly change	
	Amount (in millions of denars)	Share in structure	Amount (in millions of denars)	Share in structure	Absolute	Relative
Deposits of nonfinancial entities	238,663	70.7%	239,521	70.8%	858	0.4%
-o.w. by parent entities	51	0.0%	401	0.1%	350	688.3%
Deposits of financial institutions	14,183	4.2%	14,823	4.4%	641	4.5%
-o.w. by parent entities	5,117	1.5%	5,424	1.6%	308	6.0%
Borrowings, issued securities, subordinated debt and hybrid capital instruments	40,294	11.9%	39,040	11.5%	-1,254	-3.1%
-o.w. by parent entities	9,614	2.8%	9,512	2.8%	-102	-1.1%
Equity and reserves	40,545	12.0%	40,840	12.1%	295	0.7%
Other sources of funding	3,975	1.2%	4,066	1.2%	91	2.3%
-o.w. by parent entities	112	0.0%	57	0.0%	-55	-48.8%
Total sources of funding	337,660	100.0%	338,290	100.0%	630	0.2%
Long-term sources of funding	115,523	34.2%	117,643	34.8%	2,120	1.8%
-o.w. by parent entities	9,244	2.7%	9,799	2.9%	555	6.0%
Short-term sources of funding	177,616	52.6%	175,741	51.9%	-1,876	-1.1%
-o.w. by parent entities	5,538	1.6%	5,538	1.6%	0	0.0%
Equity and reserves	40,545	12.0%	40,840	12.1%	295	0.7%
Other sources of funding	3,975	1.2%	4,066	1.2%	91	2.3%
-o.w. by parent entities	112	0.0%	57	0.0%	-55	-48.8%
Total sources of funding	337,660	100.0%	338,290	100.0%	630	0.2%

Source: Data have been submitted by banks based on a specific request of the National Bank, and therefore, differences might occur in the balance sheet data that banks communicate on a regular basis in accordance with the Decision on submission of data on the stock and flow in the banks' chart of accounts and in the financial reports.



Despite the growth of long-term sources of funding, short-term sources in the third quarter of 2012 dropped by 1.1%. These movements, on a quarterly basis, caused an increase in the share of long-term funding sources in total sources of funding by 0.6 percentage points. In addition, the third quarter also witnessed a decline in liabilities based on credits and loans of 3.1%, due to the service of long-term loans, the decrease in the amount of repo transactions concluded with the National Bank¹⁵ and the reduction of subordinated instruments.

Figure 50 Structure of cash inflows and outflows of the banking system



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

*The category of other assets includes assets other than credits to nonfinancial entities not included in the category of liquid assets (long-term placements in foreign and domestic banks, foreign currency reserve requirement, foreclosed assets, fixed assets, etc.).

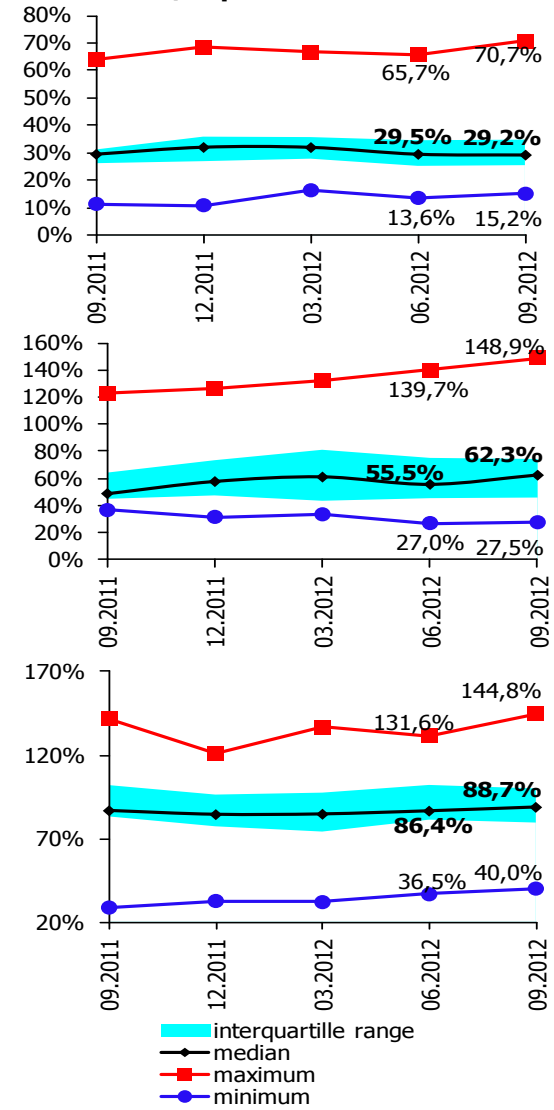
**The category of other sources of funding includes funding sources other than nonfinancial entities' deposits (equity and reserves, financial institutions' deposits, borrowings, subordinated instruments, etc.).

The changes in the sources of funding affected the structure of banks' cash outflows and inflows¹⁶ in the third quarter of 2012. Thus, observing the banks' cash outflows, outflows based on reduction of other nondeposit sources of funds were the highest, which primarily arises from the reduction of the banks' loan liabilities, repo transactions with the National Bank and subordinated instruments. These cash outflows were greater than the sum of all outflows on the asset side, i.e. the increase in loans, liquid assets and other assets of the banks. In contrast, in the third quarter of 2012, cash flows of banks resulted solely from the growth of deposits of non-financial entities.

¹⁵ In the third quarter, banks borrowed liquidity through this instrument in the amount of Euro 1,400 million, which is by Denar 300 million less compared to the second quarter.

¹⁶ In the third quarter of 2012, the banks' cash inflows and outflows were obtained in an indirect way, i.e. through the quarterly change in the balances of individual accounts of the banks' balance sheet. The effect on the banks' cash flows, which is due to expenses and revenues which do not represent cash outflow or inflow (e.g.: write-offs of loans, revaluation of securities that are held for sale or held for trading, depreciation of fixed assets, net foreign exchange differentials etc.) is an integral part of the change of the corresponding balance sheet items the relevant income or expense refer to.)

Figure 51 Selected liquidity ratios, by bank
up: liquid assets/total assets
middle: liquid assets/short-term liabilities
down: loans/deposits

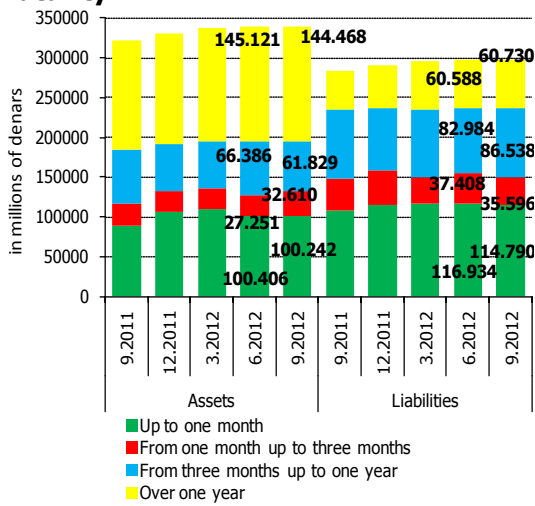


Source: National Bank, based on data submitted by banks.

In the third quarter of 2012, seven banks reported a quarterly decrease in liquid assets ranging from 0.5% to 11.5%. As of September 30, 2012, the share of these banks in the total assets of the banking system stood at 53.1%. On the other hand, the liquid assets of ten banks registered a quarterly growth, ranging from 1.8% to 31.7% by individual bank.

Liquidity indicators at individual banks in the third quarter of 2012 mainly noted positive changes, which caused further expansion of the interquartile range.

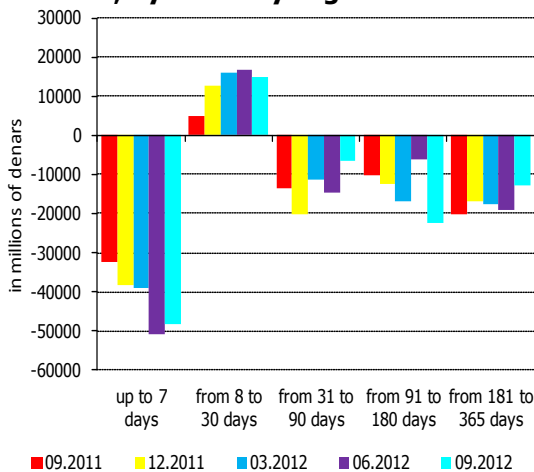
Figure 52 Absolute size of banks' assets and liabilities, by contractual residual maturity



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

At the end of the third quarter of 2012, banks' liabilities retained greater contractual residual maturity compared to the assets of the banking system (Annex 25). Moreover, the structure of banks' liabilities by residual contractual maturity registered a certain increase of liabilities with residual maturity of three months to one year, vis-à-vis the reduction of liabilities in other maturity segments. Observing the assets, in the third quarter of 2012, assets with residual maturity of over one year and from one to three months went up.

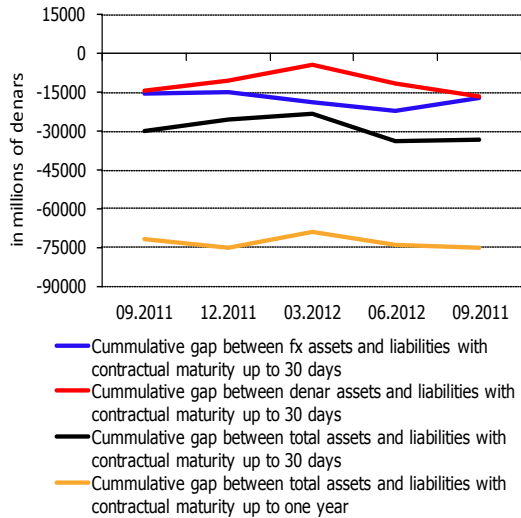
Figure 53 Contractual residual maturity (mis)match between assets and liabilities, by maturity segment



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

In the third quarter of 2012, the contractual residual maturity mismatch between assets and liabilities in most maturity segments reduced. Only in the segment of residual maturity of three to six months, the maturity mismatch between assets and liabilities has been deepening.

Figure 54 Cumulative gap between assets and liabilities with contractual residual maturity of up to 30 days and up to one year

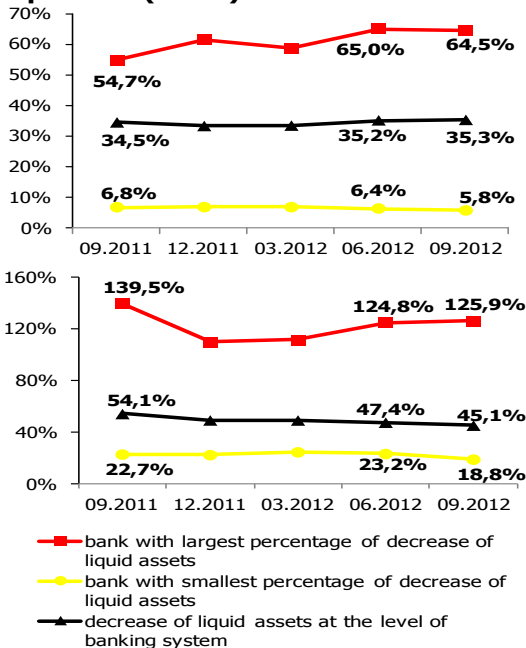


Source: National Bank, based on data submitted by banks.

During the third quarter of 2012, the cumulative negative gap between assets and liabilities with a residual maturity of up to one month experienced different trends depending on the currency characteristics of assets and liabilities. Analyzing the assets and liabilities in Denar, aggregate difference between assets and liabilities with contractual residual maturity of up to 30 days increased, while this difference in the foreign currency assets and liabilities reduced. In the third quarter of 2012, the gap between assets and liabilities with a residual maturity of up to one year is still stable.

According to the expectations of the banks, the cumulative gap between assets and liabilities in all maturity segments is positive, which leads to the conclusion that banks expect further stability of deposits as the main source of funding of their activities (Annex 26). Banks expect 82.0% of deposits with a residual maturity of up to three months to show stability, remaining in the banks in the next three months. The expected stability in term deposits accounted for 81.3%, while sight deposits made up 86.4%.

Figure 55 Results from the simulation for withdrawal of 20% of household deposits (up) and withdrawal of deposits of the twenty largest depositors (down)



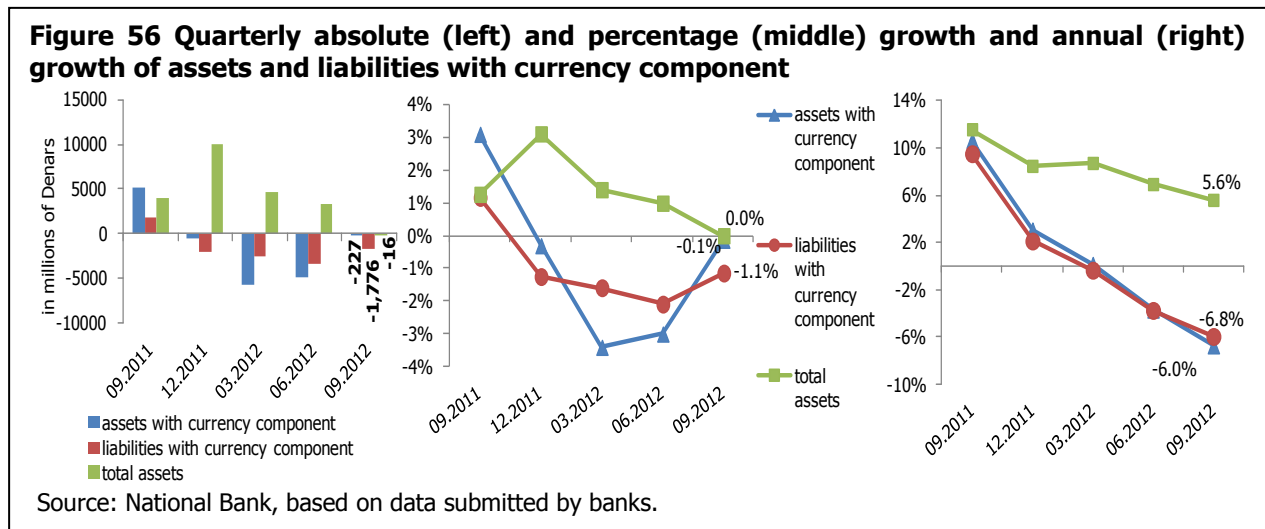
Source: calculations of the National Bank, based on data submitted by banks.

The resilience of the Macedonian banking system to possible liquidity shocks remains relatively high. The banking system has sufficient liquidity to face the shocks associated with the possible outflow of deposits as the most important source of funding. Yet, the third quarter of 2012 experienced a greater dispersion in the results, visible through the enlarged difference between the bank with the lowest and the bank with the highest result. Furthermore, greater vulnerability was registered in the possible withdrawal of deposits of twenty largest depositors outside the banking system, compared to the simulation for the withdrawal of 20% of household deposits, primarily due to the relatively high concentration of deposits in some of the banks. The share of liquid assets in total assets in these simulations reduced from 30.2% to 25.5% (in case of withdrawal of household deposits) and 19.0% (in case of withdrawal of

deposits of twenty largest depositors). The coverage of short-term liabilities¹⁷ in these simulations reduced by 11.4 and 15.2 percentage points, respectively, while the coverage of deposits with liquid assets decreased by 10.7 and 14.1 percentage points, respectively. Macedonian banks show stability in the simulation which covers outflow of funding sources used by their parent party (other than subordinated and hybrid capital instruments whose payment is specifically regulated by the National Bank). The reduction in liquid assets by individual bank, in this case, would range from 0.02% to 31.8%, while in the overall banking system it would be 9.9%. The share of liquid assets in total assets during this simulation would be reduced by 2.8 percentage points.

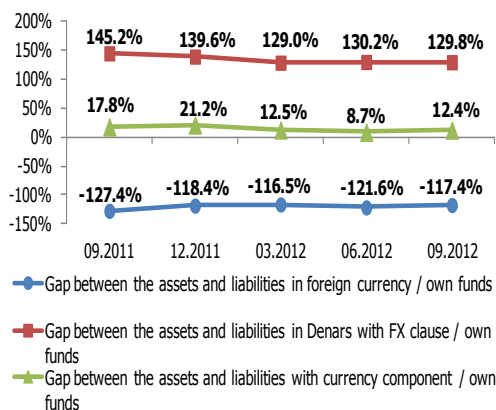
3. Currency risk

In the third quarter of 2012, the gap between assets and liabilities with a currency component increased, but the exposure to currency risk is low. As of September 30, 2012, all banks, except one, are within the prescribed limit of 30% of own funds.



¹⁷ The simulations assume that deposits that are flowing out of the banks are short-term deposits according to their maturity profile and become a part of the short-term liabilities.

Figure 57 Share of gap between assets and liabilities with currency component, in the banks' own funds



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

In the third quarter of 2012, the gap¹⁸ between assets and liabilities with foreign currency component of the banking system increased by Denar 1,549 million, or 41.7%. The increase is the result of a significantly higher reduction of liabilities with currency component (Denar 1,776 million) compared to assets with a currency component (Denar 227 million). The reduction of liabilities with currency component mainly results from the reduction of foreign currency deposits (Denar 780 million)¹⁹ and changes in the suspense accounts for the remaining liabilities (Denar 626 million)²⁰. On the other hand, despite the fact that the third quarter witnessed significant changes in the structure of assets with currency component²¹, its reduction was far slower compared to the reduction of liabilities with currency component.

Table 5 Currency structure of assets and liabilities with currency component

Currency	30.06.2012		30.09.2012	
	Assets	Liabilities	Assets	Liabilities
Euro	88.3%	87.9%	88.9%	88.4%
US dollar	7.3%	7.8%	6.6%	7.2%
Swiss franc	2.0%	2.0%	2.0%	2.0%
Other	2.4%	2.3%	2.5%	2.3%
Total	100.0%	100.0%	100.0%	100.0%

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

¹⁸ The gap between assets and liabilities with a currency component is the difference between assets and liabilities with currency component determined in accordance with currency risk management methodology, where funds with currency component are shown on a net basis, or are reduced for the identified impairment for assets with currency component classified in risk categories "C", "D" and "E".

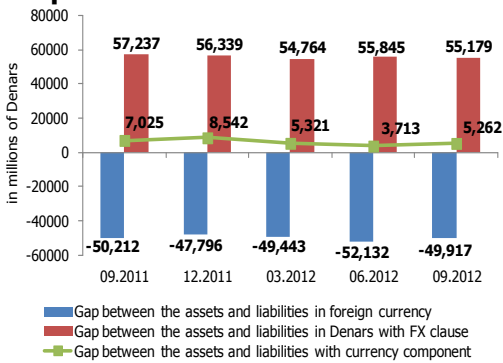
¹⁹ The deposits of non-financial institutions reported the fastest decrease (Denar 514 million) followed by foreign currency deposits of non-residents (Denar 286 million).

²⁰ The most significant reductions relate to the liabilities for uncommitted payments based on collections from abroad (Denar 306 million) and liabilities in the calculations on other grounds (Denar 246 million).

²¹ In the third quarter, credits and deposits with currency component reduced (by Denar 7,700 million) but current accounts in foreign banks increased (by Denar 7,189 million).

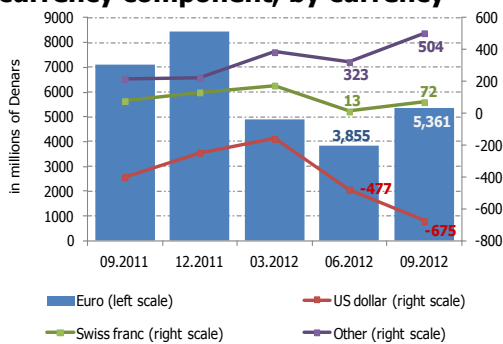


Figure 58 Structure of gap between assets and liabilities with currency component



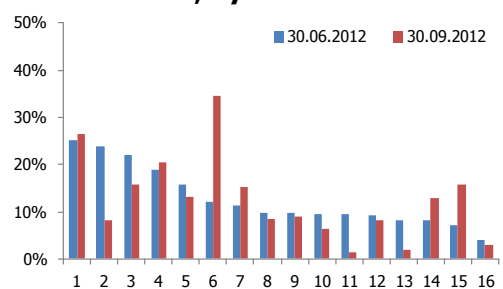
Source: National Bank, based on data submitted by banks.

Figure 59 Dynamics of the gap between assets and liabilities with currency component, by currency



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

Figure 60 Ratio between the aggregate foreign currency position and own funds, by bank



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

The third quarter of 2012 witnessed reduction of the negative gap between assets and liabilities in foreign currency (by Denar 2.216 million²²) and the positive gap between assets and liabilities in Denars with FX clause (Denar 667 million²³).

Table 6 Currency structure of assets and liabilities with currency component

Item	30.09.2011	30.06.2012	30.09.2012
Assets in Denars with FX clause	20.3%	17.8%	17.7%
Assets in foreign currency	32.5%	28.9%	29.0%
Assets with currency component	52.8%	46.7%	46.6%
Liabilities in Denars with FX clause	2.5%	1.3%	1.4%
Liabilities in foreign currency	48.2%	44.3%	43.7%
Liabilities with currency component	50.6%	45.6%	45.1%

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

Shares of positions with a currency component in the total assets continued the downward trend that began in December 2011, but compared to the previous quarter, this reduction is insignificant.

The gap between assets and liabilities with foreign currency component of the entire banking system increased mostly due to the positions in euro, although the gap in all other currencies in the banks' balance sheets widened as well.

As of September 30, 2012, a medium-size bank exceeded the prescribed aggregate foreign exchange position limit (which equaled 34.6% vis-à-vis the prescribed 30% of the own funds), but on October 31, 2012, this ratio decreased to 25.5%. All other banks are within the prescribed limit and remained in this range as of October 31, 2012.

²² The negative gap between foreign currency assets and liabilities arises from the decrease of foreign currency liabilities by Denar 2,048 million.

²³ The positive gap between Denar assets and liabilities with currency clause narrowed almost equally due to the Denar assets and liabilities with currency clause. Denar assets with currency clause reduced by Denar 395 million, whereas Denar liabilities with currency clause increased by Denar 271 million.

Table 7 Open currency position by currency relative to banks' own funds

Open currency position by currency / own funds	Number of banks							
	Euro		US Dollar		Swiss franc		Other	
	Long	Short	Long	Short	Long	Short	Long	Short
under 5%	1	3	8	7	12	2	14	
from 5% to 10%	5						1	
from 10% to 20%	4	1						
from 20% to 30%	1							
over 30%	1							

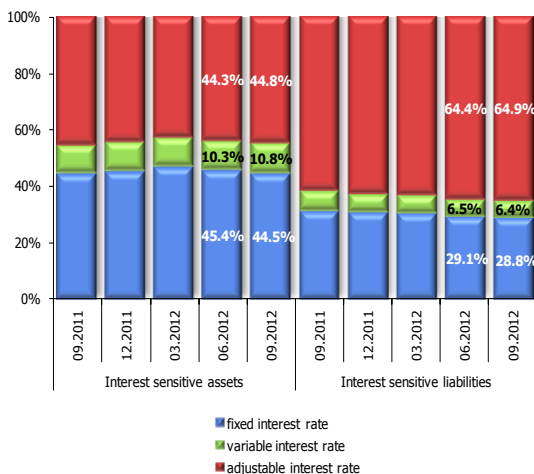
Source: National Bank, based on data submitted by banks.

4. Interest rate risk in the banking book

In the third quarter of 2012, banks' exposure to interest rate risk in the banking book remained low, compared with the exposure to other risks. This is due to the large presence of the adjustable interest rates²⁴ that gives opportunity to banks to avoid the consequences of any unfavorable changes in interest rates. In this way, banks transfer the interest rate risk to the users of banking products (loans), which emphasizes the importance of indirect credit risk.

4.1. Structure of the interest sensitive assets and liabilities

Figure 61 Structure of the interest sensitive assets and liabilities by interest rate type



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

As of September 30, 2012, the positions with fixed interest rates (44.5%) and the positions with adjustable interest rates (44.8%) are almost equally represented in the structure of the interest sensitive assets, primarily due to increased share of the positions with adjustable interest rates for loans and decreased presence of the positions with fixed interest rates for sight placements and investments in time deposits.

Analyzing interest sensitive liabilities, the role of the positions with adjustable interest rates continues to strengthen.

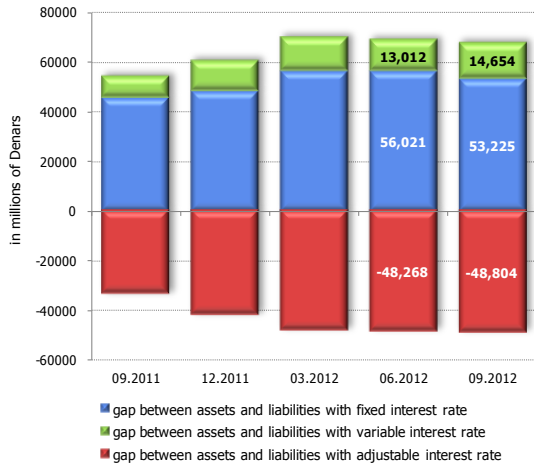
The gaps between the assets and liabilities with fixed interest rate and variable interest rate are positive²⁵, but show opposite trends, unlike the previous quarter

²⁴ Interest rates are adjusted unilaterally because of the changes in the banks' interest rate policy, rather than on the basis of a particular interest rate. The use of the adjustable interest rates enables more efficient management, avoidance or transfer of the taken risks, and they may serve as an instrument for managing liquidity and profitability.

²⁵ The positive gap in the positions with fixed interest rates is due to the fact that this type of interest rate prevails in most items of interest sensitive assets, particularly in the allocated reserve requirement (100%), securities (97.4%) and banks' investments in deposits (92.5%). The positive gap in the positions with variable interest rates is due to sight placements (primarily with foreign banks), most of which (68.5%) are with variable interest rates.



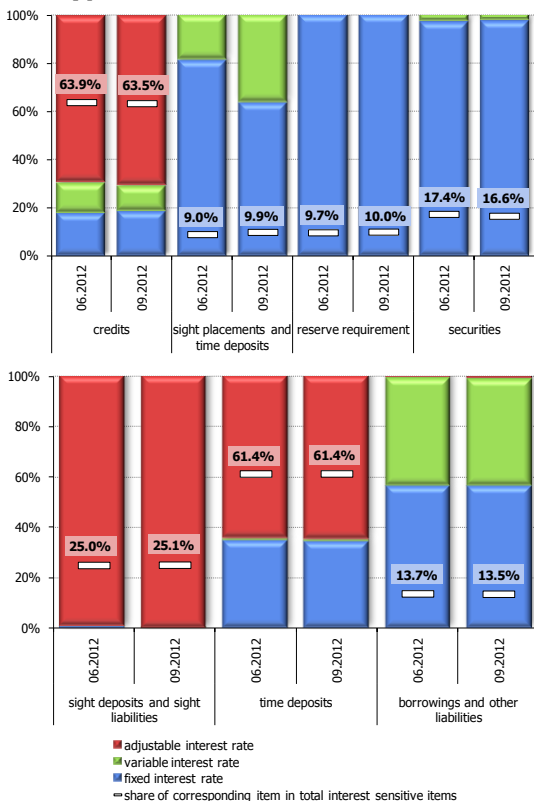
Figure 62 Gap between the interest sensitive assets and liabilities, by the interest rate type



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

when both gaps were narrowing. The gap narrowing in the positions with fixed interest rates is a result of the larger reduction in the short-term deposits in foreign banks and CB bills on the asset side, compared to the lower decrease of corporate and household short-term deposits in Denars and in foreign currency, on the liabilities side. The gap widening in the positions with variable interest rates is a result of the significant increase in the assets on current accounts in foreign banks. On the other hand, the negative gap between the positions with adjustable interest rates²⁶ is slightly increased, but it does not indicate a greater exposure of the banking system to interest rate risk, due to the possibility that banks have to change interest rates in accordance with their needs.

Figure 63 Interest sensitive assets (up) and liabilities (down), by the interest rate type

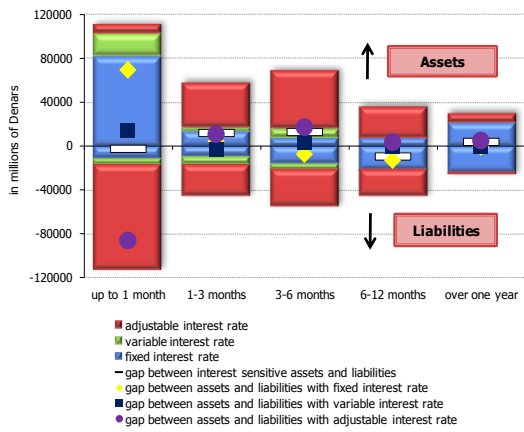


Source: National Bank, based on data submitted by banks.

The extensive use of the adjustable interest rates is confirmed by their predominant share in loans (70.5%) and time deposits (64.7%), as the most common financial instruments in the structure of interest sensitive assets and liabilities of banks.

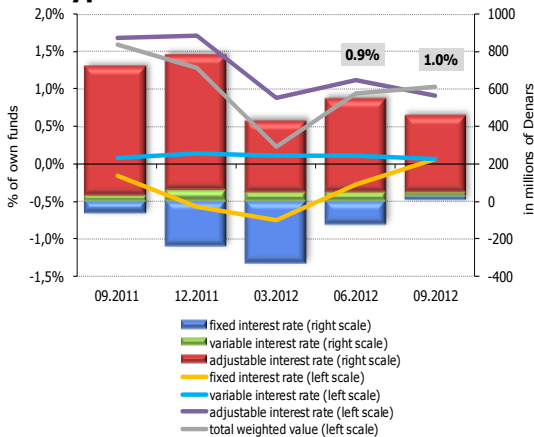
²⁶ The negative gap in the positions with adjustable interest rates arises from the fact that a significant portion of the time deposits and almost all sight liabilities are with adjustable interest rates.

Figure 64 Interest sensitive assets and liabilities, by maturity and interest rate type



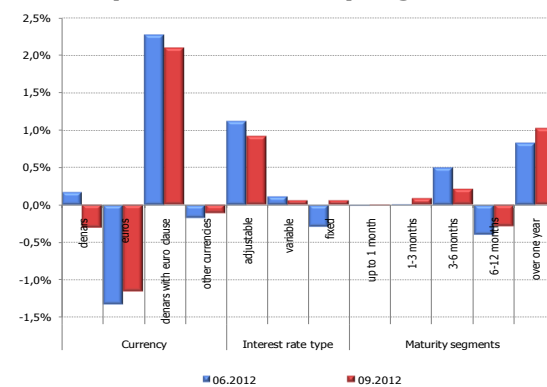
Source: National Bank, based on data submitted by banks.

Figure 65 Net weighted value and ratio of total weighted value of the banking book and own funds, by the interest rate type



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

Figure 66 Ratio between total weighted value of the banking book and own funds, by the interest rate type, the currency and the maturity segment



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

The gap (positive) between total interest sensitive assets and liabilities is the largest in the three to six months maturity segment, which indicates risk to the banks of the increase in interest rates. However, the use of adjustable interest rates in most of the asset and liability positions gives banks the opportunity to avoid the negative impact of any unfavorable changes in interest rates.

The maturity structure of the positions with adjustable interest rates represents the banks' expectations for the period until the next "adjustment" of the level of interest rates, which is expected in three to six months for the assets with adjustable interest rates, and in one month for the liabilities with adjustable interest rates. Regardless of the size of gap between the positions with adjustable interest rates, they are not a relevant indicator of exposure to interest rate risk due to the built-in ability to change at the bank's discretion.

4.2. Weighted value of the banking book

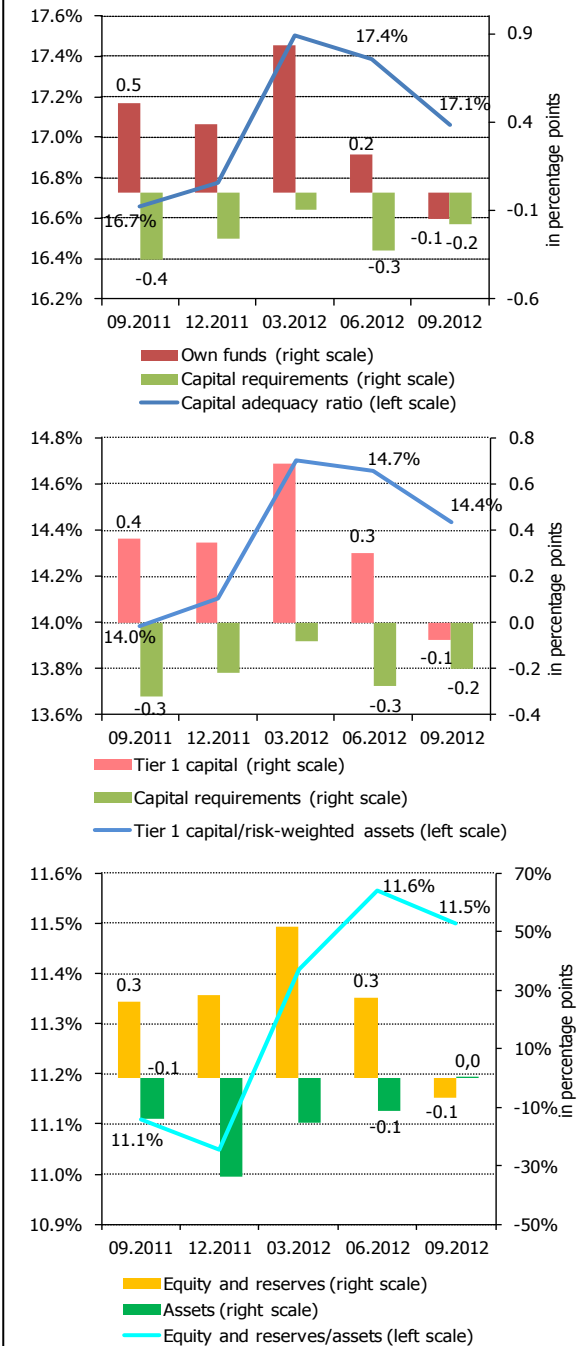
The frequent use of adjustable interest rates in credit and deposit banking products is the main reason that the **interest rate risk in the banking book has modest significance for banks**. As of September 30, 2012, the total weighted value of the banking book increased slightly (Denar 37 million) on a quarterly basis.

The total weighted value of the banking book takes only 1% of the own funds of the banking system (Annex 29). Observing by bank, the ratio between the total weighted value and own funds ranges from 0.1% to 5.5%, with a median of 1% and a third quartile of 1.1%. Most of the exposure to interest rate risk is determined by the positive weighted value for the positions with adjustable interest rates and the Denar positions with Euro clause, particularly in the maturity segments of over a year.



5. Insolvency risk

Figure 67 Indicators for the solvency and contribution of the individual components in the quarterly change in the indicators



Source: National Bank on the basis of data submitted by banks.

The solvency and the capitalization of the banking system register certain deterioration in the third quarter of 2012. The own assets registered quarterly decrease, mostly as a result of the higher current loss amount and non-allocation of impairment and special reserve as result of the accounting lag. The movements in the capital requirements for risk coverage (or capital requirements), were largely conditioned by the new regulatory requirements stipulated in the Decision on the methodology for determining capital adequacy, which became effective on July 1, 2012. The capital requirements for covering credit and currency risk registered quarterly drop, at the expense of the newly introduced requirement for the banks to determine capital for operational risk coverage.

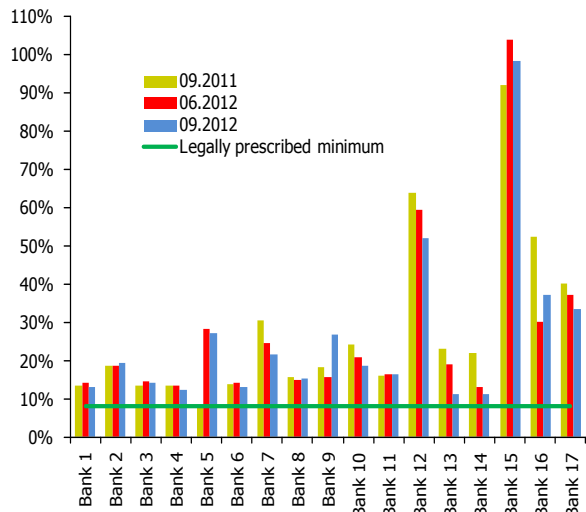
5.1. Indicators for solvency and capitalization of the banking system

In the third quarter of 2012, the capital adequacy ratio and the indicator for core capital²⁷ and risk weighted assets ratio reduced by 0.3 percentage points, while the capitalization of the banking system (measured through the capital and reserves/assets ratio) registered minimal decrease of 0.1 percentage point. Such developments arise from the negative quarterly growth rates of the capital positions of the banking system (own funds and capital and reserves), given the simultaneous growth, although slowed down, of the capital requirements and the unchangeability of the total assets.

The bank by bank analysis indicates quarterly decrease in the capital adequacy ratio with most of the banks. However, the banks in the Republic of Macedonia register

²⁷ It is the core capital after the deductible items from the sum of the core and the additional capital.

Figure 68 Capital adequacy, by bank



Source: National Bank on the basis of data submitted by banks.

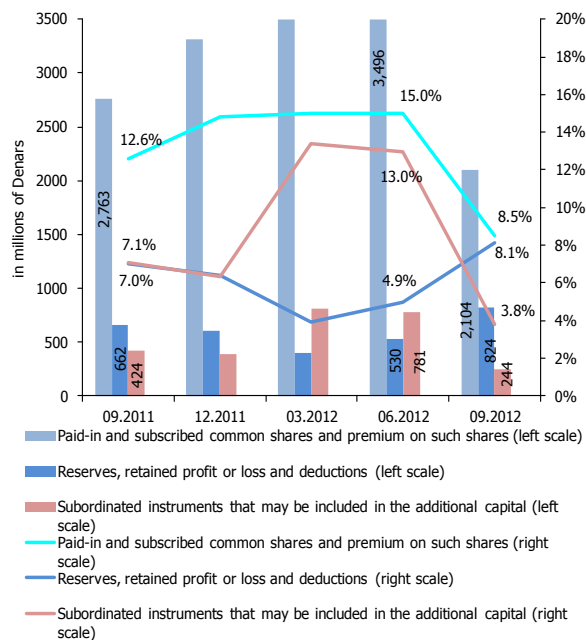
capital adequacy ratio that is higher by at least 41%, compared to the legally prescribed minimum of 8%. Analyzed by bank, the lowest capital adequacy equals 11.3%.

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

After relatively longer period, the own funds of the banking system registered quarterly decrease of Denar 379 million, or of 0.8%²⁸. On annual basis, the own funds went up by Denar 3,194 million, or 7.8%, which is by Denar 1,604 million, or by 4.3 percentage points, less compared to the increase realized in the June 30,2011 - June 30,2012 period. The quarterly drop in the own funds was almost equally conditioned by the decrease in both the core and the additional capital.

In the core capital structure, the quarterly increase in the current loss, including also the non-allocated impairment and special reserve, as a result of the accounting lag²⁹ (in the total amount of Denar 415 million, or 68.8%), is the main cause for the certain decrease in the most quality component of the own funds. As a contrast, in the third quarter of 2012, one bank released new shares (for a known buyer - parent entity) in the total amount of Denar 74 million and simultaneously adopted a decision on covering part of the accumulated losses from previous years, in the amount of Denar 108 million (the coverage of part of the accumulated losses was performed through the shareholder's cancellation of the claims based on the concluded subordinated loans agreements). Quarterly decrease in the subordinated instruments of Denar 153 million was registered, which fully contributed towards decrease in the additional capital.

Figure 69 Annual changes of individual items of own funds



Source: National Bank on the basis of data submitted by banks.

²⁸ The last negative quarterly growth rate with the own funds was registered in the fourth quarter of 2007. Meanwhile (since the first quarter of 2008), the own funds register constant quarterly growth, except in the second quarter of 2009, when it remained almost on the same level.

²⁹ The non-allocated impairment as a result of the accounting lag, determined in September 2012, is completely concentrated with one bank and it is a result of the client reclassification from one risk category to another, performed with the on-site control of the National Bank. In October 2012, the amount of the non-allocated impairment is recoded adequately in the bank's financial statements.



The core capital of the banking system (after deductible items of core and additional capital) participate with 84.6% in the total own funds (increase of 0.3 percentage points compared to June 30,2012), which shows the **higher quality of the banking system's own funds** (by bank, this share ranges from 66.7% to 100%). The new decision on the methodology for determining the capital adequacy has no larger impact on the own funds quality level and caused only reallocation of certain smaller amounts from one position of own funds to another.

The future increase in the own funds of the banking system is largely determined, as so far, by the capability and the readiness of the banks' shareholders (primarily by their parent entities) to implement capitalization, as well as by the banks capacity to generate the capital internally (by improving the profitability), which is on a slightly lower level in the current worsened economic conditions.

More details on the level of own funds of individual groups of banks are presented in Annex 30.

5.3. Developments and structure of the capital requirements and the free capital of the banking system

In the third quarter of 2012, the capital requirements increased by Denar 211 million (or by 1%), which is certain slowdown compared to the increase registered in the second quarter of the year (when the capital requirements augmented by Denar 387 million, or by 1.9%). On annual basis, the capital requirements went up by Denar 1,029 million (or by 5.2%).



Table 8 Comparison of the capital adequacy determined pursuant to the old and the new methodology for determining the capital adequacy- as of September 30,2012

Description	According to old Decision	According to new Decision
Own funds	44,311	44,311
Credit risk - weighted assets	243,896	224,662
Capital requirements for credit risk	19,512	17,973
Currency risk - weighted assets	16,328	7,586
Capital requirements for currency risk	1,306	607
Operational risk - weighted assets	/	27,462
Capital requirements for operational risk	/	2,197
Capital adequacy ratio	17.0%	17.1%
Capital adequacy ratio (1)*	15.4%	17.1%
Capital adequacy ratio (2)**	17.0%	19.1%

Source: National Bank on the basis of data submitted by banks.

Note: *Capital adequacy ratio (1): in the "old decision" column, the capital adequacy ratio is calculated by adding the operating risk weighted assets set forth according to the new decision; **Capital adequacy ratio (2): in the "new decision" column, the capital adequacy ratio is calculated without taking into consideration the operating risk weighted assets.

The capital requirements for credit risk coverage went down quarterly by Denar 1,436 million, or 7.4%. In conditions of certain increase in the total on-balance sheet and off-balance sheet exposure of the banking system (of Denar 990 million, or 0.3%), which is a basis for calculation of the capital requirements for credit risk coverage, the release of part of the capital requirements for covering this risk arises from the relaxed regulatory requirements that are prescribed in the Decision on methodology for determining the capital adequacy, which is based on Basel 2.

About 90% of the released capital requirements for credit risk coverage refer to the small credits portfolio. According to the new methodology for determining the capital adequacy, the share of the small credits portfolio is mostly included in the calculation of the capital requirements with a weight of 75%, which was not the case previously, when the share of this portfolio equaled 100% or 125%. The smaller capital requirements for credit risk coverage arising from this portfolio, which is by rule diversified, expand the banks possibilities for

**Table 9 Capital requirements for credit risk, distributed by categories of exposure and risk-weights**

in millions of Denars

Categories of exposure	Total net credit exposure	Credit risk - weighted assets, distributed by risk weights									Capital requirements for credit risk	Capital requirements for credit risk/total net credit exposure
		10%	20%	35%	50%	70%	75%	100%	150%	Total		
Claims on central banks and central governments	61,922	0	0	0	0	0	0	3.7	0	4	0	0.0%
Claims on local self-government and regional government	890	0	0	0	0	0	0	464	0	464	37	4.2%
Claims on public institutions	3,688	0	0	0	0	0	0	1,484	0	1,484	119	3.2%
Claims on multilateral development banks and international organizations	0	0	0	0	0	0	0	0	0	0	0	/
Claims on banks	41,229	0	5,450	0	5,879	0	0	427	1,492	13,247	1,060	2.6%
Claims on other companies	114,524	0	0	0	163	0	0	94,793	0	94,956	7,596	6.6%
Retail credit portfolio	93,384	0	7	0	14	0	48,316	16,315	0	64,652	5,172	5.5%
Claims secured by residential property	9,086	0	0	2,069	0	0	0	3,021	0	5,091	407	4.5%
Claims secured by commercial real estate	25,466	0	0	0	0	0	0	24,446	19	24,465	1,957	7.7%
Holdings in investment funds	12	0	0	0	0	0	0	12	0	12	1	8.0%
Other positions	46,198	0	141	0	0	0	0	20,122	24	20,287	1,623	3.5%
Total	396,401	0	5,598	2,069	6,055	0	48,316	161,089	1,534	224,662	17,973	4.5%

Source: National Bank on the basis of data submitted by banks.

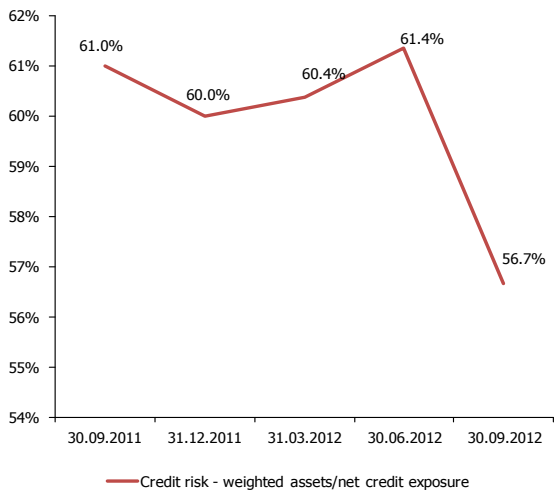
enlargement of their activities scope, but on the other hand, emphasize even more the significance of the statistical models (and the risks arising from their design and application), which are used in the determining of the impairment for the small credits portfolios³⁰, because of the timely identification of the impairments with those portfolios. The release of the capital requirements for credit risk coverage partially stems from the relaxation of the regulatory conditions for determining capital requirements for credit risk coverage, which originates from the claims covered with the residential properties³¹ and claims on banks³². The fall in the capital requirements for credit risk coverage arising from the residential property collateralized claims is expected to stimulate the housing crediting in the country, although the credit risk of these claims should not be underestimated, having in mind that the individual amount is relatively higher and with longer maturity, and collateralized with housing

³⁰ Pursuant to the Decision on credit risk management.

³¹ Solid portion of these claims, previously included in the calculation of the capital requirements with a weight of 50%, are now being included with a weight of 35%.

³² Part of these claims, previously included in the calculation of the capital requirements with a weight of 100%, are now being included with a weight of 50%.

Figure 70 Share of the credit risk weighted assets in the net credit exposure



Source: National Bank on the basis of data submitted by banks.

facilities, on which the banks apply estimated values that can significantly differ from their market values.

The release of part of the capital requirements for credit risk coverage is verified also through the analysis of the credit risk weighted assets in the net credit exposure³³ at the level of the banking system. Thus after longer period of relatively stable ratio, in the third quarter of 2012, the share of the credit risk weighted assets in the net credit exposure decreased by 4.7 percentage points.

The capital requirements for currency risk coverage register a decrease for three consecutive quarters. However, this time, the quarterly decrease in the capital requirements for currency risk coverage arises from the changes in the manner of determining of the aggregate foreign currency position, which (together with the net position in gold) acts as a basis for calculation of the capital requirements for currency risk coverage. Thus in the third quarter of 2012, the capital requirements for the currency risk coverage almost halved, registering a decrease of Denar 550 million, or 47.6%. The quarterly decrease of the capital requirements for currency risk coverage arises from the narrowing of the net foreign currency position (by Denar 7,321 million), which is most evident with the Euro positions, as a result of taking into consideration of the impairment/special reserve of the asset positions with FX component classified in the risk categories C, D and E, in the determining of the foreign currency assets³⁴, and consequently, in the calculation of the aggregate foreign currency position, which is in line with the new requirements stipulated in the Decision on the methodology for determining capital adequacy. Namely, the inclusion of the impairment for these positions effectuated in a decrease in the foreign

³³ Determined pursuant to the Decision on the methodology for determining capital adequacy.

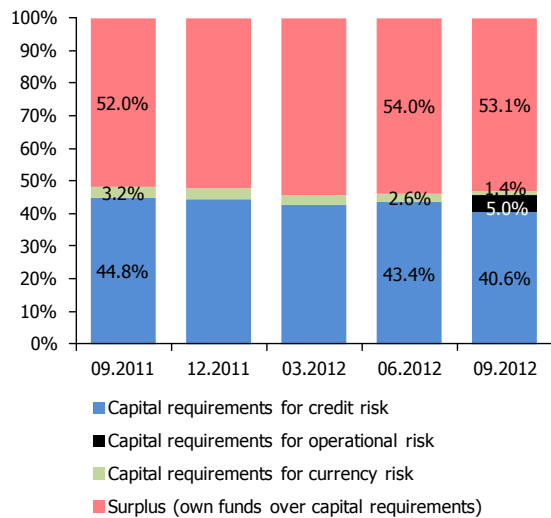
³⁴ The term "foreign assets" includes also the Denar assets with FX clause.



currency assets of Denar 9,286 million, which fully conditioned the quarterly drop of the capital requirements for currency risk coverage. The changes in the regulatory requirements of this domain enable harmonization with the provisions of the Decision on currency risk management, which primarily facilitates the designing of the banks' information systems, simplifies the analysis made in these area. On the other hand, smaller capital requirements for currency risk coverage is provided, which arises from the foreign currency asset positions that are already impaired (for which impairment is already allocated, and with slightly smaller net accounting value).

The new Decision on the methodology for determining the capital adequacy stipulates new requirement for determining capital requirements for operational risk coverage. Practically, the regulatory requirements in the new Decision caused reallocation of the capital requirements for risk coverage from one risk to another. Also, on September 30, 2012, the level of capital requirements for operational risk coverage was determined at Denar 2,197 million, which is by Denar 211 million more compared to the released capital requirements for credit and currency risk coverage. About 66% of the capital requirements for operational risk coverage (or Denar 1,452 million) are determined by using the standardized approach, applied by the three largest banks. The largest portion of the capital determined by using the standardized approach is intended for covering the operational risks, stemming from the business lines: "commercial banking" and "payment operations and settlement", which generate the largest share of the net interest income and net income from commissions and fees with the group of large banks. The remaining 14 banks determine the capital requirements for operational risk coverage by applying the basic indicator approach, which is generally more conservative and means higher amounts of capital requirements. Although the standardized approach determines slightly smaller amounts of capital requirements for operational

Figure 71 Structure of the own funds according to the use for covering individual risks



Source: National Bank on the basis of data submitted by banks.

risk coverage compared to the basic indicator approach, however, the need for distribution of the banks' financial activities in adequate business lines is imposed, which has positive effects, primarily in the risk management domain and in the total bank management.

The free capital over the minimum requirements for risk coverage registered quarterly decrease of Denar 590 million (or by 2.4%), which is due to the decrease in the own funds given simultaneous increase in the total capital requirements. On annual basis, the free capital augmented by Denar 2,165 million (or by 10.1%).

More details on the level of the capital requirements for risk coverage and the capital adequacy ratio are presented in Annex 31.

5.4. Stress test simulations of the resilience of the banking system to hypothetical shocks

The implemented simulations for testing the resilience of the banking system and the individual banks in the Republic of Macedonia to simulated shocks indicate smaller results compared to the end of the second quarter of 2012.



Table 10 Results of the stress-test simulations for the resilience of the banking system and individual banks to hypothetical shocks, as of September 30, 2012

No. of simulation	CAR at the level of banking system, before simulation	Number of banks with CAR before simulation below the CAR of the overall banking system before simulation	CAR at the level of banking system, after simulation	Bank with lowest CAR, after simulation	Number of banks with CAR after simulation below the CAR of the overall banking system after simulation (number of banks with CAR after simulation below 8%)
1	17.1%	8	14.5%	1.3%	9 (1)
2	17.1%	8	12.7%	-3.5%	8 (2)
3	17.1%	8	9.7%	-10.2%	7 (7)
4	17.1%	8	8.8%	3.1%	7 (7)
5	17.1%	8	12.7%	-3.9%	8 (2)
6	17.1%	8	9.6%	-10.7%	7 (7)
7	17.1%	8	8.8%	2.2%	7 (7)
8	17.1%	8	9.7%	-9.9%	7 (7)
9	17.1%	8	12.7%	-3.5%	8 (2)
10	17.1%	8	9.7%	-10.4%	7 (7)
11	17.1%	8	14.1%	7.7%	7 (1)

Source: National Bank on the basis of data submitted by banks.

This stress test analysis is based on the implementation of 11 hypothetical simulations, of which:

- four simulations for isolated credit shock (three simulations of larger increase in the credit risk exposure classified in the risk categories C, D and E by 30%, 50% and 80% and one simulation of transfer by 10% of the credit exposure classified in the risk categories A and B to the risk categories C, D and E, where the transferred credit exposure is distributed equally),
- fifth simulation as a combination of the credit and foreign exchange shock (increase in the credit risk exposure in the risk categories C, D and E of 50% and depreciation of the foreign exchange rate of the Denar relative to the Euro of 20%),
- sixth simulation as a combination of shocks on the side of credit risk and foreign exchange risk (larger credit exposure in the risk categories C, D and E by 80% and depreciation of the Denar exchange rate compared to the Euro of 30%),
- seventh simulation as a combination of credit risk and foreign exchange risk (transfer of 10% of the credit exposure classified in the risk categories A and B to the risk categories C, D and E, where the transferred credit exposure is distributed equally and depreciation of the Denar exchange rate relative to the Euro of 30%),
- eighth simulation, as a combination of the shocks on the credit risk and interest rate risk side (larger credit exposure in the risk categories C, D and E by 80% and increase in the interest rates of individual asset and liabilities, on-balance sheet and off-balance sheet positions of 1 - 5 percentage points),
- ninth simulation as a combination of the shocks on the credit risk, foreign exchange risk and interest rate risk side (larger credit exposure in the risk categories C, D and E by 50%, Denar exchange rate depreciation relative to the Euro of 20% and increase in the interest rates on individual asset and liabilities, on-balance sheet and off-balance sheet positions of 1 - 5 percentage points),
- tenth simulation as a combination of shocks on the credit risk, foreign exchange risk and interest rate risk side (larger credit exposure in the risk categories C, D and E of 80%, Denar exchange rate depreciation relative to the Euro of 30% and increase in the interest rates on individual asset and liabilities, on-balance sheet and off-balance sheet positions of 1 - 5 percentage points),
- eleventh simulation, simultaneous reclassification in the risk category C of the five largest credit exposures to nonfinancial entities (including the connected persons).

In the third quarter of 2012, credit risk shocks simulations were performed, in order to examine some of the possible channels of transferring the negative effects of the problems **the Slovenian economy faces with on the domestic banking system**. The implemented simulations show resilience of the banking system, having in mind that the capital adequacy ratio after the two shocks is still over

the legally prescribed minimum and at the level of the banking system and by individual bank.

Table 11 Results of the stress test simulations for the resilience of the banking system to hypothetical shocks, as of September 30, 2012

No. of simulation	CAR at the level of banking system, before simulation	Number of banks with CAR before simulation below the CAR of the overall banking system before simulation	CAR at the level of banking system, after simulation	Bank with lowest CAR, after simulation	Number of banks with CAR after simulation below the CAR of the overall banking system after simulation (number of banks with CAR after simulation below 8%)
1	17.1%	8	15.8%	10.7%	7 (0)
2	17.1%	8	15.0%	8.9%	6 (0)

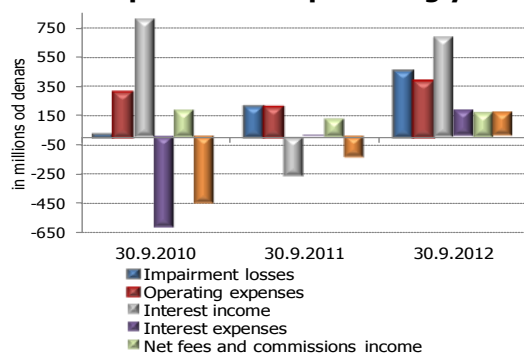
Source: National Bank on the basis of data submitted by banks.

This stress test analysis is based on the implementation of two simulations for assume uncollectability (of 30% and 50%) of the credit exposure of the domestic banks to: 1) Slovenian non-residents; 2) the hundred largest net exporters to Slovenia (determining of the largest net exporters is made on the basis of the registered net export within September 30, 2011 - September 30, 2012 period); 3) domestic persons with liabilities based on credit operations to Slovenia, in the period from September 30, 2012 to September 30, 2013; and 4) domestic persons with claims based on credit operations to Slovenia for the period from September 30, 2012 to September 30, 2013.

6. Profitability

In the first three quarters of 2012, the banking system of the Republic of Macedonia has realized profit of Denar 644.3 million, which is higher by Denar 387.3 million, or by 1.5 times on annual basis. The number of banks registering profit elevated to 10 and their share in the total assets reached 91.6%, compared to 84.5% in September last year. The higher profitability in the banking system is mostly due to the increase in the net interest income of the banks, thus increasing its share in the total regular income in the banks' total assets. The increased net interest income enabled full coverage of the increased impairment of the banks because of the further deterioration of their credit portfolio, which is one of the largest risks for successful operations of the banks in future. The upward trend of the gain of the banking system continued also in October.

Figure 72 Absolute increase in the main income and expenditures, compared to the same period of the preceding year



Source: National Bank on the basis of data submitted by banks.

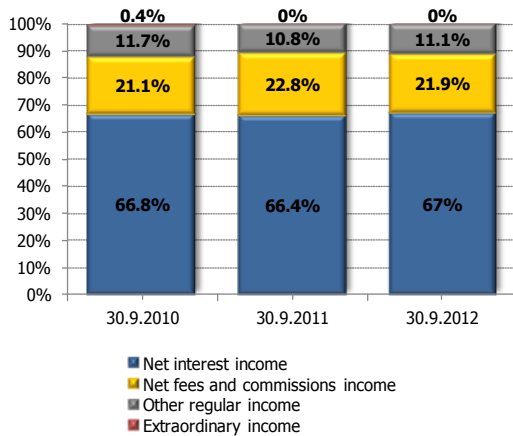
6.1. Movement and structure of income and expenditures of the banking system

The net interest income had the largest contribution to the improvement in the profitability of the banking system at the end of September³⁵. This segment of the income from the regular operations increased by Denar 870 million, in conditions of almost equal rise in the other segments of the regular income and the net income from commissions (of Denar

³⁵ Annual increase in the net interest income was registered with 12 out of total 17 banks in the country, with the largest contribution of 80.6% to the annual increase in the net interest income accounting for the three largest banks in the country.



Figure 73 Structure of the total income



Source: National Bank on the basis of data submitted by banks.

166 million, respectively). The increase in the net interest income continued also in October.

At the end of September 2012, banks' total income (total regular income³⁶ and extraordinary income) increased by Denar 1,205 million, i.e. by 10.5% relative to the previous year, as a result of the increase in all income components.

The largest share in the total income structure accounts for the net interest income, the annual rise of which is due to the increase in the interest income, as well as to the moderate decrease in the interest expenditures, a trend that is characteristic from the beginning of 2012. The total interest income of the banks augmented by Denar 690 million, or by 4.8%, which is mostly due to the growth in the banks lending to the non-financial sector³⁷ and the income based on investments in CB bills³⁸ and securities issued by the Central Government³⁹.

³⁶ The total regular income includes: the net interest income, net income from commissions and fees and other regular income (net income from trading, net income from financial instruments recorded at fair value, net income from exchange rate differentials, income based on dividends and capital investments, profit based on sale of financial assets available for sale, capital gains realized on the basis of sale of assets, releasing provisions for off-balance sheet assets, releasing other provisions, income on other basis, income based on unpaid previously written-off claims and losses due to sale of financial assets available for sale).

³⁷ The interest income from nonfinancial companies increased by Denar 194 million, i.e. by 2.9%, while the interest income from the "household" sector grew by Denar 169 million, or 3.2%. Accordingly, the contribution of the interest income from the nonfinancial sector to the increase in the total interest income of the banks equaled 52.4%.

³⁸ The banks' interest income from investment in CB bills increased by Denar 325 million, or by 56.5% on annual basis, with their share in the increase in the total interest income of the banks reaching 47.1%.

³⁹ The interest income from buying Treasury bills is included in the "interest income from other entities" category, which at the end of September 2012 augmented by Denar 125 million, or 16.3%, contributing to the increase in the banks' total interest income with 18.1%.

Figure 74 Sector structure of the interest income

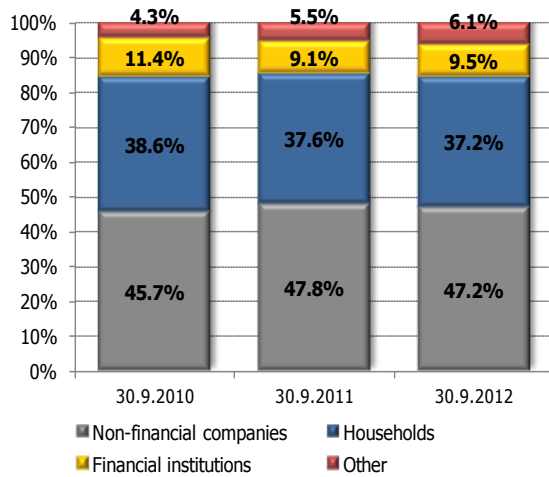
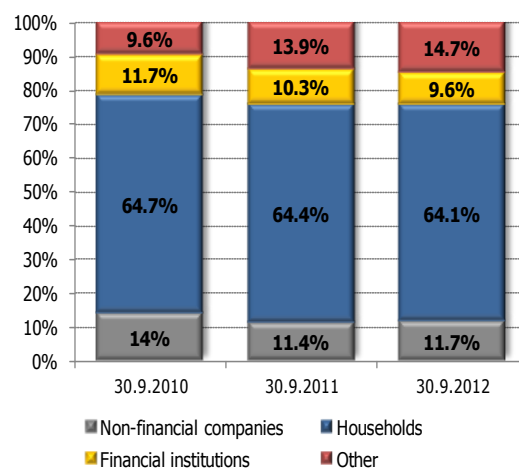
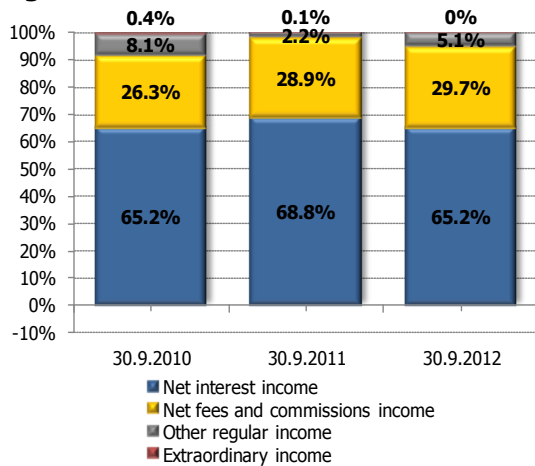


Figure 75 Sector structure of the interest



Source: National Bank on the basis of data submitted by banks.

Figure 76 Use of total income



Source: National Bank on the basis of data submitted by banks.

The moderate decrease in the interest expenditures (of Denar 180 million, or 2.6%) contributed marginally towards the increase in the net interest income, mainly resulting from the lower deposit interest rates, compared to September 2011, despite the growth in the non-financial entities' deposits. The severest drop in the deposit interest rates was registered with the time deposits of the "household" sector⁴⁰, because of which the decrease in these interest expenditures had the largest contribution in decrease of the total interest expenditures. Additional contribution to the decline in the banks interest expenditures had the interest expenditures to the financial entities (pension funds based on time deposits), as well as the non-financial companies. Increase in the interest expenditures of Denar 28 million, or 2.9%, was registered only with the sector "other" (mainly with the expenditures for the "Government" sector).

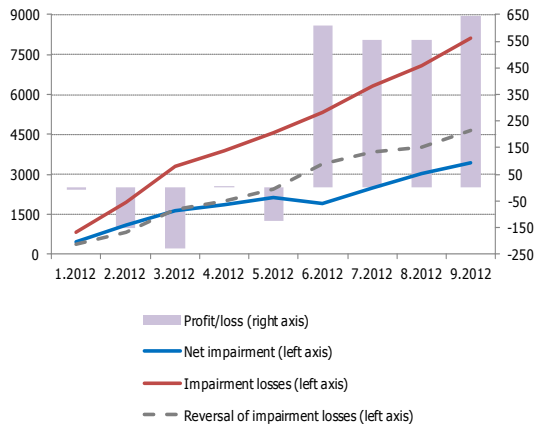
The largest part of the banks total income is used for both, operating costs coverage⁴¹ and the impairment. The trend of decrease in the

⁴⁰ The interest rates on the short-term and the long-term time deposits went down by 1.5 and 1.4 percentage points, respectively.

⁴¹ The operating costs include: employee expenses, depreciation, general and administrative costs, deposit insurance costs, deposits and other expenditures, except extraordinary expenditures.



Figure 77 Impairment of the financial assets (in millions of denars)



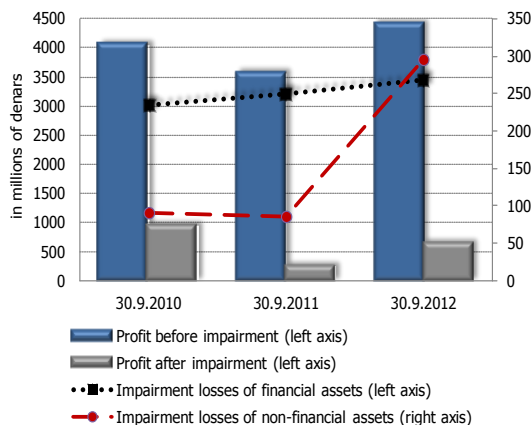
Source: National Bank on the basis of data submitted by banks.

share of the operating costs in the total income, which began in the beginning of 2012, continued also in the third quarter of the year, at the expense of the increase in the share of the impairment and the realized gain.

At the end of September 2012, **the net value impairment (for financial and nonfinancial assets) reached Denar 238 million, which is an increase of 7.4% annually, and this trend continued also in October.** This growth is a result of the deterioration of the banks' credit portfolio. During the third quarter of the year, substantial rise in the impairment of the non-financial assets value of Denar 209.9 million, or by 3.4 times annually was registered. The increase in this type of impairment is mainly a result of the adopted Decision on amending the Decision on the accounting and regulatory treatment of the foreclosed claims in June 2012⁴², with the banks already being engaged in making adjustments in their income statement, thus contributing to a diminishing of the realized financial result.

If we analyze the amount of the gain before allocation of the impairment for financial and non-financial assets, then it will equal Denar 4,398 million, i.e. it will be higher by Denar 836 million, or 23.4%, annually.

Figure 78 Influence of the impairment and the special reserve on the profit amount



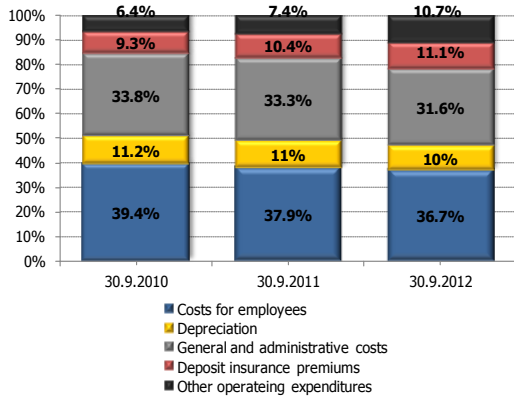
Source: National Bank on the basis of data submitted by banks.

The operating costs of the banks increased by Denar 376 million (4.8%). The largest annual increase of Denar 303 million, or 52.3% has been registered with the group of other operating costs⁴³, which mostly arises from

⁴² The adopted Decision on amending the Decision on the accounting and regulatory treatment of the foreclosed assets ("Official Gazette of the Republic of Macedonia" no. 74/2012) commits the banks to recognize impairment loss of the foreclosed assets in the income statement registered on the date of enforcement of the Decision (June 20, 2012), which is at least equal to the larger amount of: a) the difference between the estimated value of the foreclosed asset reduced by the expenses for sale and initial accounting value of the credit exposure, which is closed with the foreclosed asset, reduced by the total amount of impairment loss; and b) 20% of the initial accounting value reduced by the total amount of the impairment loss. The banks are obliged to make the first recording in the income statement no later than January, 1, 2013 for the foreclosed assets until January 1, 2010, while the assets foreclosed after January 1, 2010 will be recorded for the first time no later than January, 1, 2015.

⁴³ Other operating costs include special reserve for the off-balance sheet exposure, other provisioning and expenditures on other basis (costs from previous years, taxes and contributions for fines, taxes and court decisions and other expenses). If correct this type of expenses with the specific bank, which actually refer to the capital loss from sale of assets, then the group of other operating costs would be reduced by Denar 39 million, or by 6.6% on annual basis.

Figure 79 Structure of the operating costs

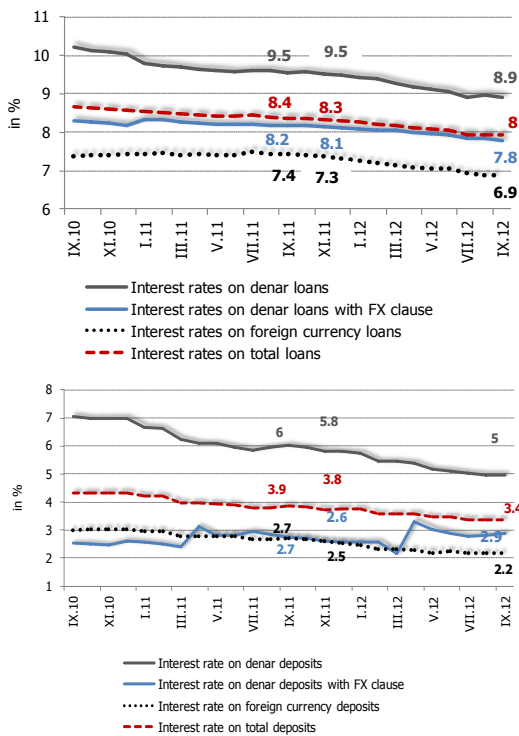


Source: National Bank on the basis of data submitted by banks.

the one bank in the country. More evident annual increase of Denar 93 million (11.3%) was registered also with the deposit insurance premiums, which corresponds to the annual increase in the bank deposits. In line with such changes within the operating costs, the share of the employee costs and the general administration costs, comprising over two thirds of the structure of the total operating costs of the banks, also decreased.

6.2. Movement of the interest rates and the interest rate spread of the banking system

Figure 80 Movement of the lending (above) and deposit (below) interest rates



Source: National Bank on the basis of data submitted by banks.

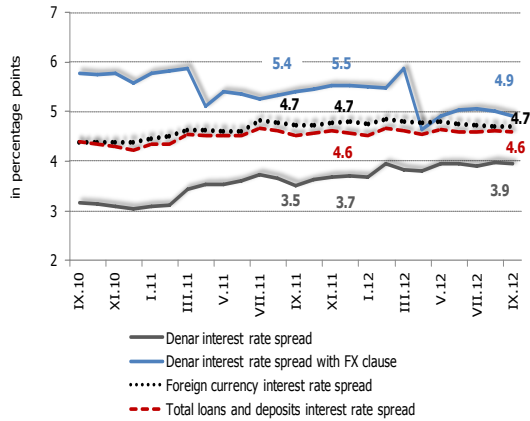
The trend of gradual decrease in the lending and the deposit interest rates continued also in the third quarter of the year, in conditions of unchanged key interest rate of the National Bank, as well as in conditions of further decrease in Euribor. The largest fall in the interest rates was registered with the Denar and foreign currency credits and deposits, with the decrease in the interest rates on the deposits being more evident. Exception from these movements are the interest rate on the Denar deposits with currency clause, which registered a moderate rise.

The more intensive decrease in the deposit relative to the lending Denar interest rates resulted in an enlargement of the interest rate spreads between the interest rates on the Denar credits and deposits. Also, the difference in the interest rates spreads narrowed, which was most obvious for those in Denar and in Denar with FX clause.



6.3. Indicators for profitability and efficiency of the banks

Figure 81 Interest rate spread



Source: National Bank on the basis of data submitted by banks.

The improved profitability of the banking system at the end of September 2012 contributed towards improvement in the **basic indicators for the banks profitability**.

At the end of the third quarter of the year, **the rates of return on assets (ROAA) and equity (ROAE) and the banks profitability margin⁴⁴ improved**. The improvement of these three indicators at the level of the banking system fully arises, as in the preceding quarter, from the enhanced profitability of the medium-size banks, as opposed to other groups, where these indicators deteriorated (Annex 32).

Table 12 Indicators for the profitability and the efficiency in the operations of the banking system

Indicators	Banking system	
	30.9.2011	30.9.2012
Rate of return of average assets (ROAA)	0.1%	0.3%
Rate of return of average equity (ROAE)	1.0%	2.3%
Cost-to-income ratio	68.8%	65.2%
Non-interest expenses/Total regular income	75.2%	71.5%
Labour costs /Total regular income	26.1%	24.0%
Labour costs /Operating expenses	37.9%	36.7%
Impairment losses of financial and non-financial assets /Net interest income	43.4%	44.3%
Net interest income /Average assets	3.2%	3.4%
Net interest income /Total regular income	66.5%	67.0%
Net interest income /Non-interest expenses	88.4%	93.7%
Non-interest income/Total regular income	39.9%	33.0%
Financial result/Total regular income	2.0%	5.1%

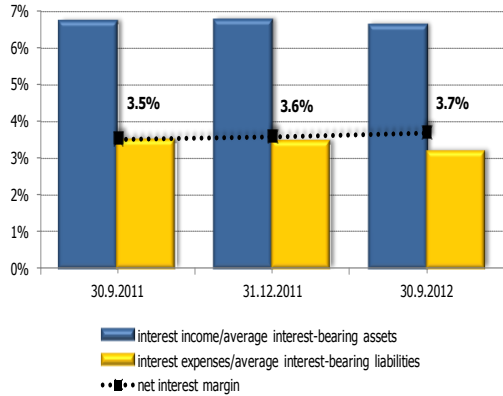
Source: National Bank on the basis of data submitted by banks.

The improved profitability of the group of medium-size banks is mainly due to the higher net interest income, from which a smaller proportion is spent for covering the impairment of the banks despite the deterioration of the quality of their credit portfolio.

The trend of improvement of banks' operational efficiency, except with the group of small banks, continued also in the third quarter of

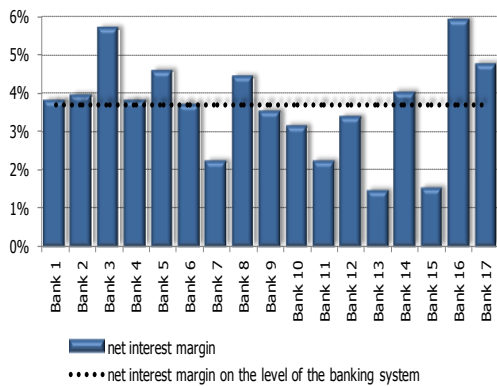
⁴⁴ The profit margin is a ratio of the gain (loss) of the operations and the total regular income.

Figure 82 Net interest rate spread



Source: National Bank on the basis of data submitted by banks.

Figure 83 Net interest rate spread, by bank



Source: National Bank on the basis of data submitted by banks.

the year. It can be perceived from the lower total regular income spent for operational risks coverage⁴⁵, as well as from the other indicators for the correlation between the individual types of costs and the total regular income. The operational efficiency with the group of small-size banks worsened, as a result of the increase in the operating costs.

The net interest margin⁴⁶, relative to September 2011 incremented by 0.2 percentage points, as a result of the proportionally higher increase in the net interest income compared to the increase in the average interest-bearing assets.

Eight out of seventeen banks realized lower net interest margin than the one at the level of the banking system.

⁴⁵ The cost-to-income ratio is calculated according to the common methodology and includes the group of other operating costs. This group of costs covers also larger amount of capital loss from sale of assets. If this expenditure is exempted from the accounting, this operational efficiency indicator would be lower, i.e. instead of 65.2% as stated in the table, it will equal 62.5%. This indicates additional increase in the operational efficiency of the banks.

⁴⁶ The net interest margin is calculated as a ratio between the net interest income and the average interest bearing assets. For comparison purposes, the interest expenditures between the net interest income and expenditures for the first quarter are reduced on annual basis. The average interest bearing assets is calculated as arithmetical mean of the amounts of the interest bearing assets at the end of the respective quarter of the current year and at the end of the preceding year.



ANNEX