

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



***Report on Risks in the Banking System of
the Republic of Macedonia in the Second Quarter of 2013***

October, 2013

CONTENTS

SUMMARY6

I. Structure of the banking system.....8

1.1 Number of banks and ownership structure of the banking system.....8

1.2 Concentration and market share of banks10

II. Banks' activities.....12

2.1 Balance sheet of the banking system.....12

 2.1.1 Loans to non-financial entities.....16

 2.1.2 Deposits of non-financial entities.....18

III. Bank risks.....23

3.1 Credit risk.....23

 3.1.1 Quality of the loan portfolio of the banking system23

 3.1.2 Stress-test simulation of the sensitivity of the banking system to increased credit risk31

3.2 Liquidity risk.....34

3.3 Currency risk43

3.4 Interest rate risk in the banking book.....45

3.5 Insolvency risk48

 3.5.1 Solvency and capitalization ratios of the banking system.....48

 3.5.2 Movements and quality of the own funds of the banking system.....49

 3.5.3 Movements and structure of capital requirements and available capital of the banking system50

 3.5.4 Stress testing of the resilience of the banking system to hypothetical shocks53

3.6 Profitability58

 3.6.1 Movement and structure of income and expenses of the banking system and profitability and efficiency indicators.....58

 3.6.2 Movements in interest rates and interest rate spread64

ANNEX.....65



FIGURES

Figure 1 Ownership structure of common (up) and preference (down) shares of the banking system	8
Figure 2 Structure of major banks' balance sheet positions, by banks' majority ownership..	9
Figure 3 Dynamics of foreign bank subsidiaries' share of assets in total assets	9
Figure 4 Market share (assets) of banks, by domicile country of the major shareholder	9
Figure 5 Banks' capital and reserves, by country	10
Figure 6 Herfindahl index (up) and CR5 (down)	10
Figure 7 Market share of individual banks (asset).....	11
Figure 8 Quarterly and annual growth of the assets of the banking system	13
Figure 9 Quarterly (up) and annual (down) change of the securities portfolio, in %	13
Figure 10 Structure of the securities portfolio	14
Figure 11 Placements with banks and other financial institutions, quarterly growth in % ...	14
Figure 12 Liabilities based on loans, quarterly growth in %	14
Figure 13 Liabilities based on deposits of financial institutions, quarterly growth in %	15
Figure 14 Liabilities (up) to and claims (down) on nonresidents.....	15
Figure 15 Loans	16
Figure 16 Quarterly (up) and annual (down) growth of loans to nonfinancial entities	16
Figure 17 Quarterly (up) and annual (down) change of loans by sector, currency and maturity	17
Figure 18 Loan structure, by sector, currency and maturity.....	18
Figure 19 Deposits	18
Figure 20 Quarterly (up) and annual (down) growth of deposits of nonfinancial entities	19
Figure 21 Quarterly (up) and annual (down) change of deposits by sector, currency and maturity	19
Figure 22 Deposit structure by sector, currency and maturity.....	20
Figure 23 Level of financial intermediation in the Republic of Macedonia, selected EU member states and countries of the region.....	21
Figure 24 Annual growth rate of loans (left) and share of the annual growth of loans in GDP (right) in the Republic of Macedonia, selected EU member states and countries of the region	22
Figure 25 Credit exposure, structure (up) and growth (down)	23
Figure 26 Quarterly (up) and annual (down) growth rate of non-performing loans.....	24
Figure 27 Share of non-performing loans in total loans of non-financial entities and of individual sectors	25
Figure 28 Coverage of non-performing loans and share of net non-performing loans in banks' own funds	25
Figure 29 Average risk level of the overall credit exposure, and of regular loans	26
Figure 30 Average risk level of past due loans with delay in repayment of 61 to 90 days ...	26
Figure 31 Structure of credit exposure by days of delay in repayment of loans	27
Figure 32 Restructured, prolonged and written off exposure during quarters	27
Figure 33 Credit exposure amount (up) and structure (down) by risk category	28
Figure 34 Structure of credit exposure to non-financial entities, by maturity of principal....	28
Figure 35 Herfindal index for credit exposure by individual activities	29
Figure 36 Share of large exposures in banks' own funds	29
Figure 37 Share of uncollateralized exposure in total credit exposure of non-financial entities and of sectors.....	29

Figure 38 Credit exposure structure of individual credit product, by monthly income of borrowers (natural persons).....	30
Figure 39 Share of non-performing loans in total loans.....	32
Figure 40 Annual growth rate of non-performing loans.....	33
Figure 41 Share of net non-performing loans in total own funds.....	33
Figure 42 Structure of banks liquid assets according to constituent financial instruments...34	
Figure 43 Quarterly absolute changes of liquid assets according to constituent financial instruments.....	35
Figure 44 Annual absolute and relative changes of liquid assets' constituent financial instruments.....	35
Figure 45 Change of liquid assets /change of total sources of funds.....	36
Figure 46 Liquidity indicators of the banking system.....	36
Figure 47 Movement of the loans to deposits ratio.....	37
Figure 48 Liquidity indicators of the banking system by currency - denar (up and foreign currency (down).....	37
Figure 49 Change of used sources of funding by parent entities.....	38
Figure 50 Structure of cash inflows and cash outflows of the banking system.....	38
Figure 51 Structure of banks' assets and liabilities, by contractual residual maturity.....	39
Figure 52 Contractual residual maturity (mis)match between assets and liabilities, by maturity segment.....	39
Figure 53 Cumulative gap between assets and liabilities with contractual residual maturity of up to 30 days and up to one year.....	40
Figure 54 Cumulative gap between assets and liabilities with contractual residual maturity of up to 30 days as percent of cumulative assets with same contractual residual maturity, by currency as of 30.06.2013.....	40
Figure 55 Results for the simulations for withdrawal of:.....	41
Figure 56 Liquidity ratios for certain countries: liquid assets/total assets (up) liquid assets/short-term liabilities (down).....	42
Figure 57 Quarterly absolute (left) and percentage (middle) growth and annual (right) growth of assets and liabilities with currency component.....	43
Figure 58 Structure of the gap between assets and liabilities with currency component.....	43
Figure 59 Share of the gap between assets and liabilities with currency component in banks' own funds.....	44
Figure 60 Quarterly absolute (left) and percentage (middle) growth and annual (right) growth of assets and liabilities with currency component.....	44
Figure 61 Aggregate currency position to own funds ratio, by bank.....	45
Figure 62 Structure of interest-sensitive assets and liabilities, by type of interest rates.....	46
Figure 63 Structure of interest-sensitive assets and liabilities, by type of interest rates.....	46
Figure 64 Structure of interest-sensitive assets and liabilities, by type of interest rates.....	47
Figure 65 Structure of interest-sensitive assets and liabilities, by type of interest rates.....	47
Figure 66 Solvency ratios.....	48
Figure 67 Quarterly growth rates of solvency ratio components.....	48
Figure 68 Capital adequacy ratio, by bank.....	49
Figure 69 Structure of quarterly changes of own funds.....	49
Figure 70 Interest expenses rate* for separate sources of funds.....	50
Figure 71 Structure of total on- and off-balance sheet exposure to credit risk, according to risk weights.....	51
Figure 72 Structure of own funds, by their use for covering risks.....	52



Figure 73 Capital adequacy ratio, by separate countries	57
Figure 74 Absolute growth of main income and expenses, compared to the same period last year	58
Figure 75 Structure of total income.....	59
Figure 76 Sector-by-sector structure of interest income	59
Figure 77 Sector-by-sector structure of total expenses	60
Figure 78 Utilization of total income.....	60
Figure 79 Structure of operating costs.....	61
Figure 80 Effect of the impairment on income.....	62
Figure 81 Lending (up) and deposit (down) interest rates.....	64
Figure 82 Interest spread, by currency.....	64

TABLES

Table 1 Figure 1 Structure of the assets and liabilities of the overall banking system.....	12
Table 2 Capital adequacy ratio, after simulations	31
Table 3 Currency structure of assets and liabilities with currency component.....	44
Table 4 Open currency position, by currency, to banks' own funds	45
Table 5 Capital requirements for credit risk, by category of exposure.....	51
Table 6 Capital requirements for covering currency risk, by net currency positions by currency	52
Table 7 Results of the stress-test simulations of the resilience of the banking system and individual banks to credit shocks, as at 30 June, 2013	53
Table 8 Results of the stress-test simulations of the resilience of the banking system and individual banks to credit shocks, as at 30 June, 2013	56
Table 9 Profitability and performance indicators for the banking system.....	61

SUMMARY

In the second quarter of 2013, the banking system retained the high and stable liquidity and solvency position. In the field of banking activities, in circumstances of one-off effects on the structure of the sources of funds, credit growth moderately accelerated on a quarterly basis, although a generally conservative approach to lending is still present, which is confirmed by the slowdown in the annual credit growth.

The slower growth of bank assets was mainly influenced by the lower deposit base of banks in the second quarter of the year, resulting from the usual payment of dividends to foreign investors at this time of the year. This outflow of deposits ceased in the next two months, so that at the end of August 2013 corporate deposits returned to the March level.

In contrast, in the second quarter of the year, credit growth accelerated, mainly due to the household and Denar loans. Against the background of a slow economic recovery, primarily on the global level, and the still present uncertainty about the second-round effects on the domestic economy, the banks' perceptions of higher risk from the corporate sector, and the conservative strategies of some banking groups, may act toward slowing the pace of lending in the next period (as registered in July and August 2013). Recent changes in the reserve requirement (from July 2013), are aimed at stimulating the Denar savings and inflows of foreign capital into the domestic economy, and thus at expanding the opportunities for greater credit support to non-financial entities.

Credit risk is still the most common and the most important risk in the banking system of the Republic of Macedonia, although the second quarter of 2013 was marked by a slowdown in the quarterly growth of non-performing loans. This trend continued in the following months of the year, so that as of August the share of non-performing loans in total loans returned to the level of March 2013, and equaled 11.9%, versus 12.3% at the end of June 2013. The slower growth of non-performing loans resulted from the corporate sector, and it could be explained by the positive developments in the domestic economy in the previous four quarters, especially the stronger growth of economic activity in the first and second quarters of this year. Expectations for keeping the economy in the zone of solid annual growth, provide the basis for the expectation that further acceleration of the growth of non-performing loans in the corporate sector is significantly exhausted, considering the support that the banks gave to some borrowers in this sector, in order to alleviate their credit load, in accordance with their temporary financial difficulties. Incurred and expected credit risk losses are the main determinant of the weaker profitability of the banking system.

Amid still difficult economic conditions in the country and beyond, regarding the permanent trade-off between profitability and liquidity, Macedonian banks applied a more prudent approach, and increased conservatism in lending and achieving higher yields and greater propensity for low-risk placement of the collected funds from the public in liquid instruments with lower yields. Thus, at the end of the second quarter, banks maintain high liquidity, observed primarily through the volume of liquid assets, which cover a large part of household deposits and short-term liabilities of banks. Stress tests indicate that the banking system is resistant to simulated liquidity shocks.



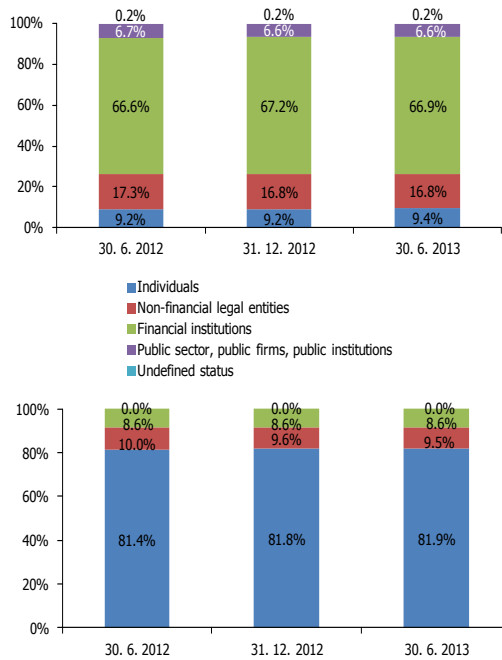
The solvency of the banking system is high and stable. Recently adopted changes in the regulation on foreclosures and on credit risk management will further strengthen the capitalization of banks. Released impairment of loans "collected" by foreclosures and the possibly released impairment for credit risk due to regulatory changes, will not be recognised as income (which can be paid as dividends), but will be used to increase the capital of banks which in turn will create more space for lending, and will act toward further strenghtening of the banking system resilience, which is already at a satisfactory level, as confirmed by the stress testing of the banking system.

I. Structure of the banking system

1.1 Number of banks and ownership structure of the banking system

As of June 30, 2013, the banking system in the Republic of Macedonia consists of sixteen banks. The number of banks has not changed in the last eight months (last change was in October 2012, when Ziraat Banka AD Skopje joined Halk Banka AD Skopje).

Figure 1 Ownership structure of common (up) and preference (down) shares of the banking system



Source: NBRM, based on data submitted by banks.

Note: The term "undefined status" includes shares held by entities that cannot be identified, which are in bankruptcy or liquidation procedure or where the bankruptcy / liquidation procedure is closed.

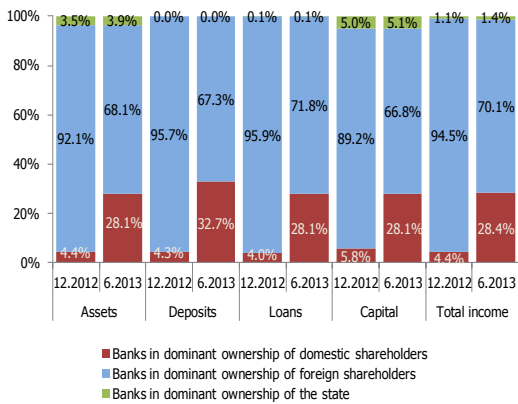
In the first half of the year¹, minimal changes occurred in the ownership structure of the banking system.

According to the type of shares issued by banks, dominant owners are financial institutions (common shares) and natural persons (preference shares). In the ownership structure by type of shares, the value of the common shares occupies 99.5% of the value of all shares.

¹ The ownership structure of banks is analyzed on the basis of semiannual data submitted by banks.



Figure 2 Structure of major banks' balance sheet positions, by banks' majority ownership

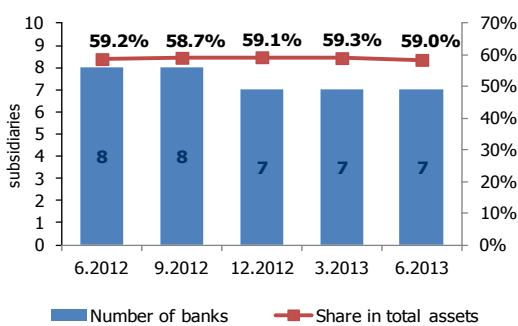


Source: NBRM, based on data submitted by banks.

Note: loans and deposits refer to nonfinancial entities.

According to the origin of the shareholder, foreign capital dominates the ownership structure of the banking system, accounting for 73.8% of the total equity capital. With a share of over 80%, the banks in dominant foreign ownership are predominant in all major positions of banks' balance sheets.

Figure 3 Dynamics of foreign bank subsidiaries' share of assets in total assets

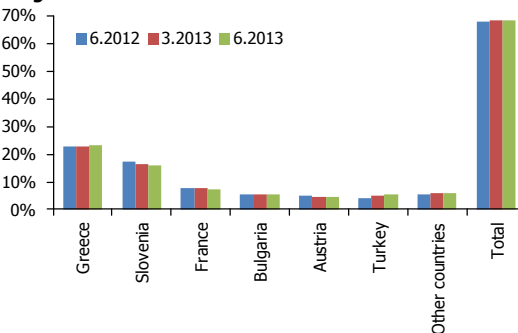


Source: NBRM, based on data submitted by banks.

The number of foreign bank subsidiaries remained unchanged, and from the total of eleven banks that are predominantly foreign-owned, seven are subsidiaries of foreign banks. The market share of subsidiaries decreased relative to the previous quarter, but remained at around 60%.

Banks in predominantly domestic ownership occupy 28.1% of total assets, which is a quarterly increase of 23.7 percentage points.

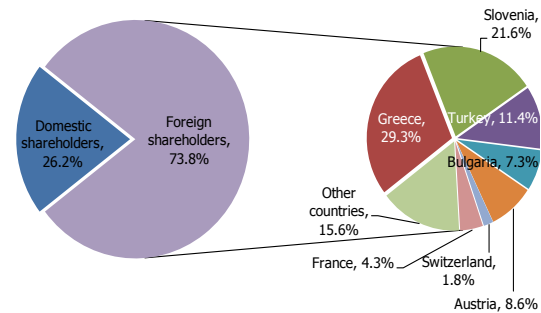
Figure 4 Market share (assets) of banks, by domicile country of the major shareholder



Source: NBRM, based on data submitted by banks.

The individual market share of banks (by asset size) with dominant foreign ownership ranges in the interval from 0.5% to 21.4%.

Figure 5 Banks' capital and reserves, by country

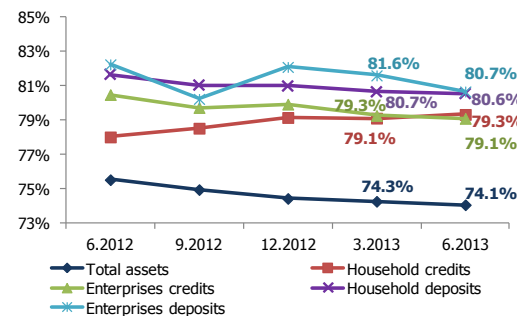
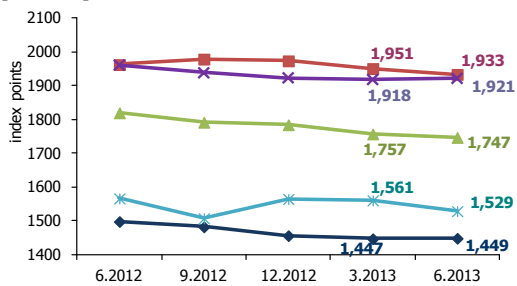


Source: NBRM, based on data submitted by banks.

Banks whose shareholders come from the European Union Member States dominate in the total foreign capital² of the Macedonian banking sector, with a share of 80.1%.

1.2 Concentration and market share of banks

Figure 6 Herfindahl index (up) and CR5 (down)



Source: NBRM, based on data submitted by banks.

Concentration in the banking system, as measured by the Herfindahl index³, is mainly within acceptable limits, with the exception of household loans and deposits for which the index exceeds the acceptable upper limit.

The simpler indicator of concentration (CR5 ratio⁴) points to a significant concentration in almost all major banking activities, because nearly 80% of them are conducted by five banks.

However, the concentration indicates a tendency of decline in almost all categories, except for household activities.

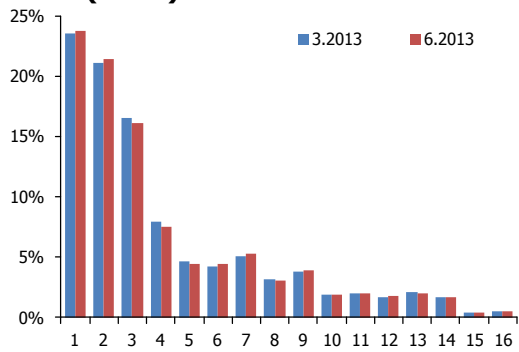
² Calculation pertains to "capital and reserves".

³ 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.

⁴ CR5 indicator denotes the share of the category analyzed (for example, corporate loans) of the five banks with the largest amount of this category, in the total amount of the category analyzed (for example total corporate loans).



Figure 7 Market share of individual banks (asset)



Source: NBRM, based on data submitted by banks.

The high concentration of activities in several banks is perceived also through their individual market share in the banking system.



II. Banks' activities

In the second quarter of 2013, the total assets of the banking system continued to grow at a slower pace, primarily affected by the lower deposit base of banks from the corporate sector, due to the usual payment of dividends to foreign investors at this time of the year. Already in August, corporate deposits returned to the same level as that of the first quarter of the year. In contrast, in the second quarter, growth of lending accelerated, mainly as a result of increased household and Denar loans. Observed annually, banks are credit risk averse, which is evident from the lower annual growth rate of loans relative to the liquid assets. Against the background of a slow economic recovery, primarily on the global level and the present uncertainty about the second-round effects on the domestic economy, as well as the banks' perceptions of higher risks from the corporate sector, banks' perceptions of the risks from the real sector and the conservative strategies of some banking groups may contribute towards slowing the pace of lending and deposit activity in the next period (as already registered in July and August 2013). On the other hand, recent changes in the reserve requirement (from July 2013), are aimed at stimulating the Denar savings and inflows of foreign capital into the domestic economy, and thus at expanding the opportunities for greater credit support to non-financial entities.

2.1 Balance sheet of the banking system

Table 1 Figure 1 Structure of the assets and liabilities of the overall banking system

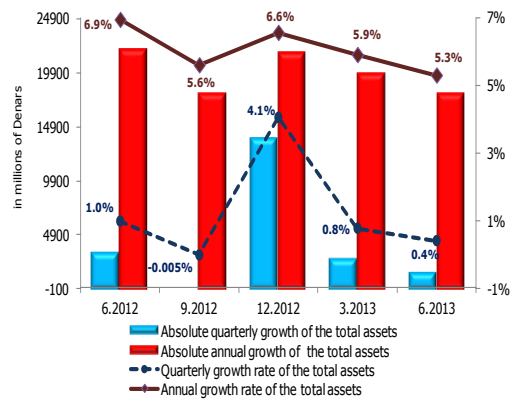
Balance sheet	Amount in millions of Denars			Structure			Change 30.6.2013/31.3.2013		Change 30.6.2013/30.6.2012	
	30.6.2012	31.3.2013	30.6.2013	30.6.2012	31.3.2013	30.6.2013	Absolute change	In percent	Absolute change	In percent
Cash and balances with NBRM	36,971	44,104	40,902	10.9%	12.4%	11.5%	-3,202	-7.3%	3,931	10.6%
Securities portfolio	55,135	57,899	58,236	16.3%	16.3%	16.3%	337	0.6%	3,101	5.6%
Placements with banks and other financial institutions	38,804	43,473	43,629	11.4%	12.2%	12.2%	155	0.4%	4,825	12.4%
Loans of nonfinancial entities (net)	188,909	190,533	193,684	55.7%	53.6%	54.2%	3,151	1.65%	4,775	2.5%
Gross loans of nonfinancial entities	212,084	217,407	221,741	62.5%	61.1%	62.1%	4,334	2.0%	9,657	4.6%
<i>Accumulated amortization of loans of nonfinancial entities</i>	-905	-957	-939	-	-	-	18	-1.9%	-34	3.8%
<i>Impairment (provisions) of loans of nonfinancial entities</i>	-22,269	-25,917	-27,117	-	-	-	-1,201	4.6%	-4,848	21.8%
Accrued interest and other assets	11,489	9,802	9,700	3.4%	2.8%	2.7%	-102	-1.0%	-1,789	-15.6%
Fixed assets	7,901	9,841	10,982	2.3%	2.8%	3.1%	1,141	11.6%	3,081	39.0%
Unallocated loan loss provisions	-44	0	0	0.0%	0.0%	0.0%	0	-	44	-
Total assets	339,165	355,652	357,132	100.0%	100.0%	100.0%	1,481	0.4%	17,967	5.3%
Deposits from banks and other financial institutions	15,006	17,669	18,848	4.4%	5.0%	5.3%	1,178	6.7%	3,841	25.6%
Deposits of nonfinancial entities	237,156	248,328	245,680	69.9%	69.8%	68.8%	-2,648	-1.1%	8,524	3.6%
Borrowings (short-term and long-term)	32,364	34,812	36,411	9.5%	9.8%	10.2%	1,599	4.6%	4,047	12.5%
Liability component of hybrid and subordinated instruments	7,803	7,739	7,862	2.3%	2.2%	2.2%	123	1.6%	59	0.8%
Other liabilities	6,775	6,582	7,449	2.0%	1.9%	2.1%	867	13.2%	674	9.9%
Provisions for off-balance sheet items	834	924	848	0.2%	0.3%	0.2%	-76	-8.3%	14	1.7%
Capital and reserves	39,228	39,598	40,036	11.6%	11.1%	11.2%	438	1.1%	808	2.1%
Total liabilities	339,165	355,652	357,132	100.0%	100.0%	100.0%	1,481	0.4%	17,967	5.3%

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

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



Figure 8 Quarterly and annual growth of the assets of the banking system

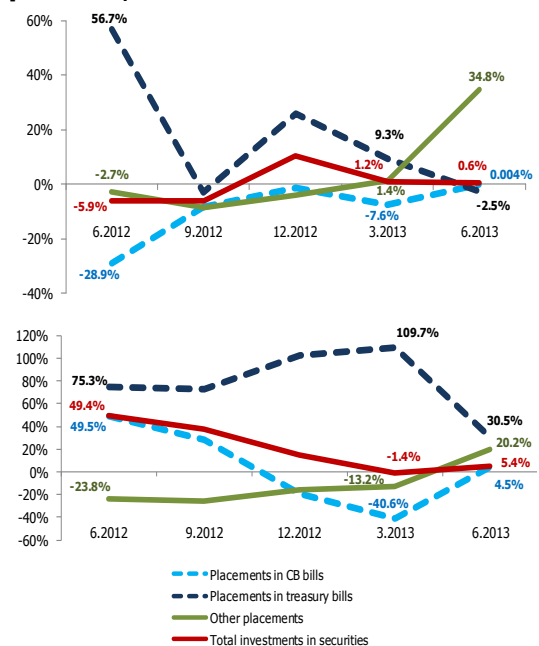


Source: the NBRM, based on data submitted by banks.

As of June 30, 2013, the total assets of the banking system stood at Denar 357,132 million (Annex 1). They continued to grow but at a slower pace.

Significant changes in assets in the second quarter of 2013, are related to the accelerated growth in lending⁵, and some growth is noticed in fixed assets and investments in securities, resulting from banks' investments in government securities. In circumstances of an unchanged supply of CB bills by the National Bank for maintenance of funds for lending, banks' placements in CB bills⁶ remained almost unchanged compared to the first quarter of 2013. The growth of the securities portfolio on an annual basis is mainly due to the investments in (short-term) Treasury bills, while their quarterly growth is mainly a result of banks' increased investments in three-year government bonds in Denars and in Denars with FX clause, which in parallel with reduced investments in Treasury bills, contributed to the increased maturity of the banks' portfolio of government securities.

Figure 9 Quarterly (up) and annual (down) change of the securities portfolio, in %

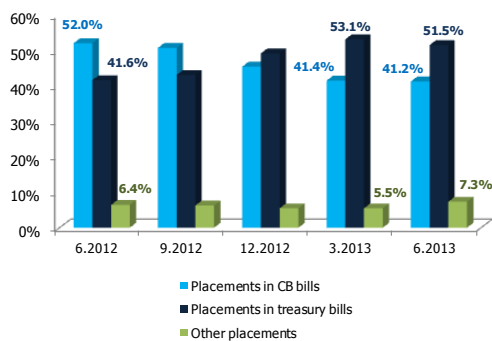


Source: the NBRM, based on data submitted by banks.

⁵ For more details see 1.1. Loans to nonfinancial entities.

⁶ In July 2013, the interest rate on CB bills was reduced from 3.5% to 3.25%, with a simultaneous change of the tender from a tender with a maximum interest rate to a tender with limited amount and fixed interest rate.

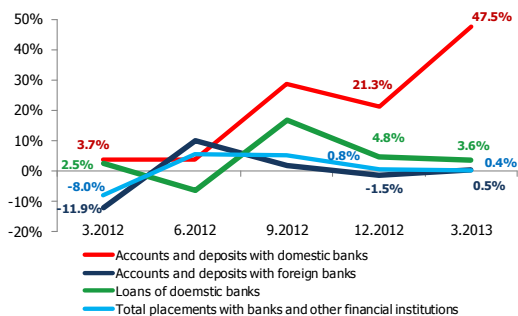
Figure 10 Structure of the securities portfolio



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

Changes in the securities portfolio in the second quarter of 2013, caused a reduction in the structural share of investments in CB bills and Treasury bills, at the expense of the growth in the share of investments in government bonds.

Figure 11 Placements with banks and other financial institutions, quarterly growth in %

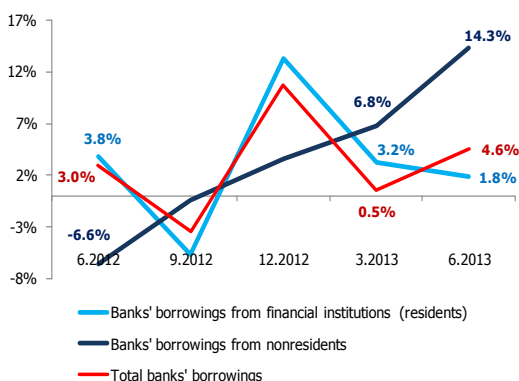


Source: the NBRM, based on data submitted by banks.

In the second quarter of 2013, there were no significant changes in the interbank activities.

Regarding the placements with foreign banks, the funds on current accounts reduced (by Denar 29 million), while time deposits increased (by Denar 103 million).

Figure 12 Liabilities based on loans, quarterly growth in %



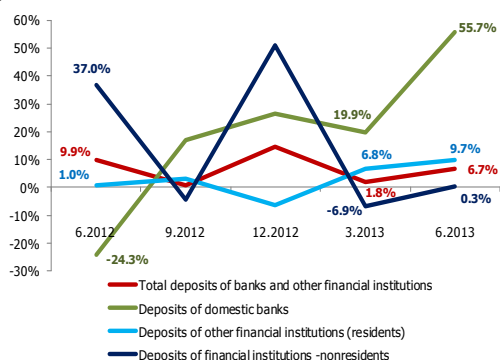
Source: the NBRM, based on data submitted by banks.

Placements with domestic banks increased due to the growth in time deposits with domestic banks (by Denar 372 million), as well as in the loans to domestic banks (by Denar 415 million), mainly as a result of the growth of long-term loans in foreign currency from the credit line of the European Investment Bank, which has been launched by the MBPR AD through domestic banks. This credit line is also reflected in the liabilities of the banking system, through the growth of the liabilities (of the MBRR) on the basis of loans to non-residents⁷ and the growth of long-term liabilities on the basis of foreign currency long-term loans to domestic banks.

⁷ Increase of Denar 1,158 million in long-term foreign currency loans used by non-residents - financial companies.

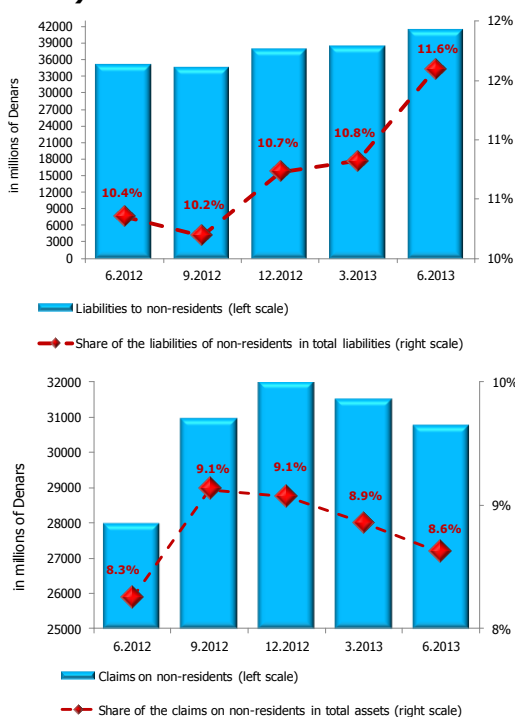


Figure 13 Liabilities based on deposits of financial institutions, quarterly growth in %



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

Figure 14 Liabilities (up) to and claims (down) on nonresidents



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

Amid downward movement of deposits of legal entities and slower increase in household deposits⁸ in the second quarter of 2013, the increased banks' funding sources resulted from the increased liabilities on the basis of loans⁹ and deposits¹⁰ of banks and other financial institutions. Sources based on subordinated instruments increased minimally.

Macedonian banks perform their activities mainly in the domestic market, therefore their claims on and liabilities to non-residents remained low. However, in the second quarter of 2013, liabilities to non-residents experienced significant growth and their share in total liabilities exceeded 11%, which has been the largest share in the last 8 quarters. Growth in liabilities to non-residents of Denar 2,927 million is a result of the mentioned use of short-term loans in foreign currency (by Denar 1,439 million) and the increased liabilities on the basis of long-term loans in foreign currency to non-residents - financial companies (by Denar 1,158 million).

Claims on non-residents registered a quarterly decline of Denar 730 million (or 2.3%) due to lower repo transactions with non-resident financial companies in foreign currency.

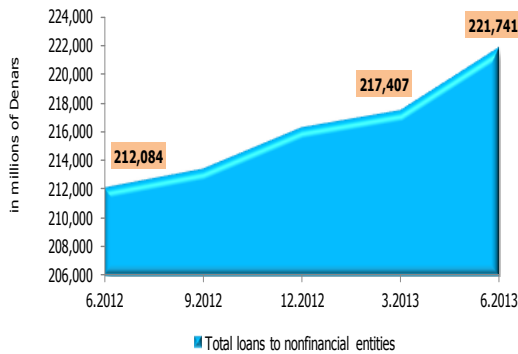
⁸ For more details see 1.2. Deposits of non-financial entities.

⁹ The increase in these liabilities of the banks is mostly associated with the already pointed out dividend payment which caused an increase in used short-term foreign currency loans (by Denar 1,439 million). This was followed by quarterly reduction in the liabilities based on repo transactions with the National Bank of Denar 1,300 million. The used short-term loan has been repaid as of August 2013.

¹⁰ The quarterly growth in deposits from banks and other financial institutions is largely determined by the increase in the short-term deposits of domestic banks, deposits of pension funds and other financial companies.

2.1.1 Loans to non-financial entities

Figure 15 Loans

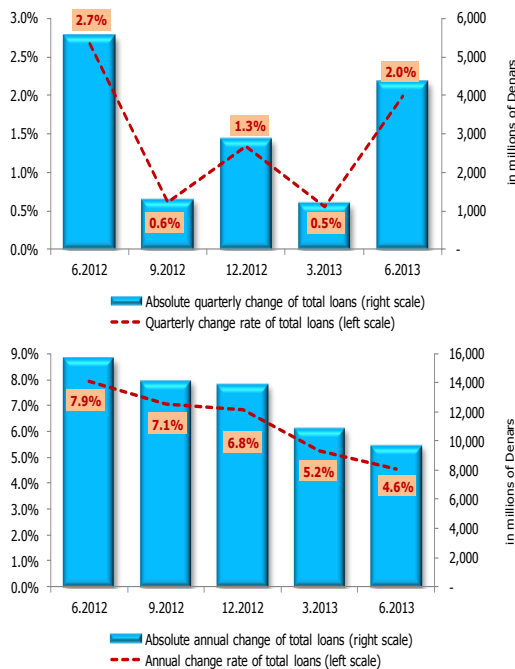


Source: the NBRM, based on data submitted by banks.

In the second quarter of 2013, lending to the non-financial sector¹¹ grew at an accelerated pace¹². Loans to non-financial entities increased by Denar 4,334 million, while the quarterly growth rate of loans accelerated by 1.5 percentage points. In contrast, the annual rate of credit growth slowed by 0.6 percentage points, but remained at almost the same level (4.6%) also in August 2013.

Observed by individual sectors, accelerated quarterly growth was registered in the lending to both households and the corporate sector. However, the generator of the credit growth in the second quarter of 2013 were the loans to households, contributing to the growth with 69.3%. Households are drivers of the credit growth also as of August 2013. Lending to households increased by Denar 3,002 million (3.6%), while consumer loans are still the most widely used credit product in this segment (Annex 15).

Figure 16 Quarterly (up) and annual (down) growth of loans to nonfinancial entities



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

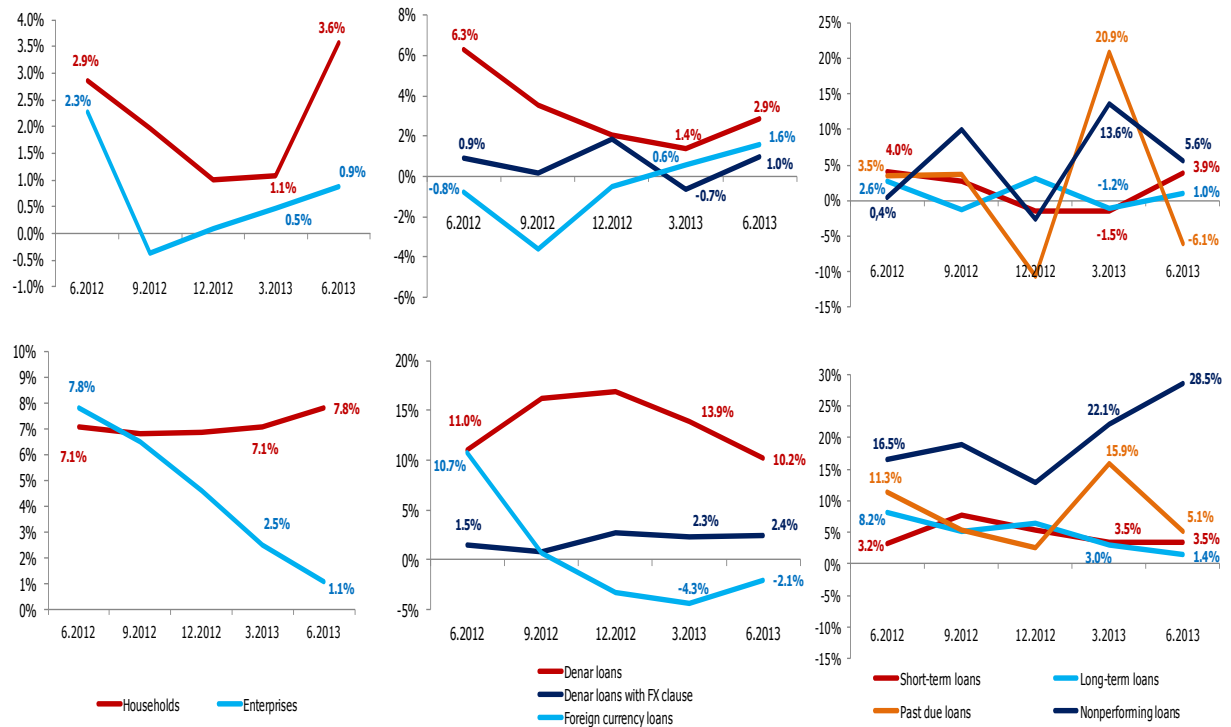
Corporate lending rose quarterly by Denar 1,153 million or 0.6%, making these loans determine 26.6% of the growth in total lending activity. The activity "wholesale and retail trade" has the largest contribution to the growth of corporate loans (Annex 15).

¹¹ Loans to non-financial entities include the loans to non-financial entities - residents and non-residents, as follows: private and public non-financial companies (corporate loans), central government, local government, non-profit institutions serving households (loans to other clients), sole proprietors and natural persons (household loans).

¹² Analyzing by individual bank, thirteen banks reported a quarterly increase of loans (the increasing interval ranged from 0.3% to 14.7%, by bank), whereas other banks reported a quarterly reduction of loans (the reduction ranged from 0.5% to 7.8%, by bank).



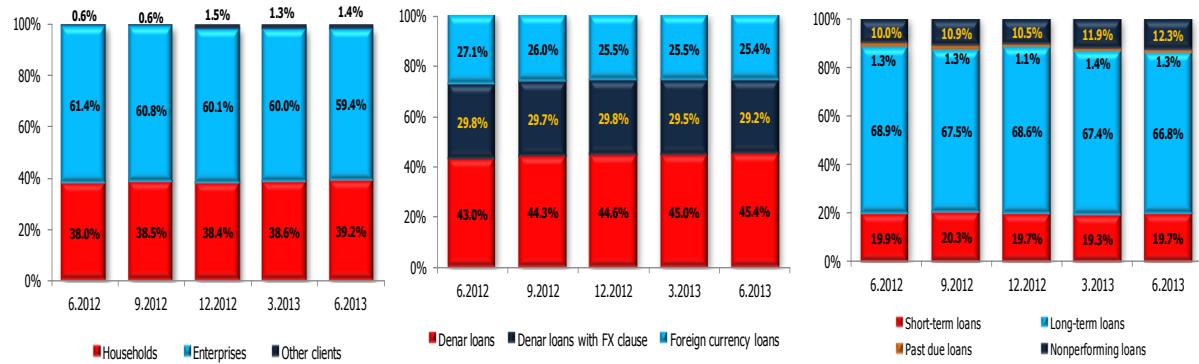
Figure 17 Quarterly (up) and annual (down) change of loans by sector, currency and maturity



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

In the second quarter of 2013, Denar loans are the driver of credit growth. Denarization in the lending activity is closely related to the same process in deposits as the main source of funding of banks' activities. Households contributed with 52.2% and companies with 47.0% to the growth of Denar loans (which amounted to Denar 2,818 million, or 2.9%). Foreign currency loans grew by Denar 872 million, which is almost entirely (97.7%) due to the corporate sector. The household sector in turn, determined the quarterly growth of Denar loans with FX clause (Annex 16).

Figure 18 Loan structure, by sector, currency and maturity



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

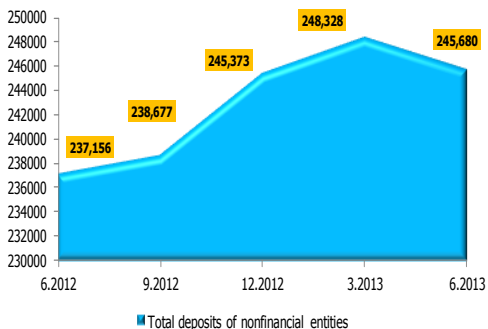
Long-term lending still prevails in the structure of loans to non-financial entities, although its share is somewhat reduced. The quarterly growth of long-term loans of Denar 1,415 million is fully derived from the household sector.

In the second quarter of 2013, **non-performing loans** grew at a slower pace, and their growth rate was 5.6% (a decline of 7.9 percentage points compared to the previous quarter). The growth of non-performing loans was for the most part (83.5%) due to the corporate loans. In the subsequent two months (as of August 2013), the amount of non-performing loans of the corporate sector decreased¹³.

2.1.2 Deposits of non-financial entities

At the end of the second quarter of 2013, total deposits of non-financial entities amounted to Denar 245,680 million, which was a decline of Denar 2,648 million compared to the previous quarter (Annex 10). Generator of the negative change were corporate foreign currency sight deposits, which on a quarterly basis decreased by Denar 4,572 million. Nearly 90% of this reduction is due to the payment of dividends by a local company with foreign capital. On the other hand, household deposits registered a quarterly

Figure 19 Deposits

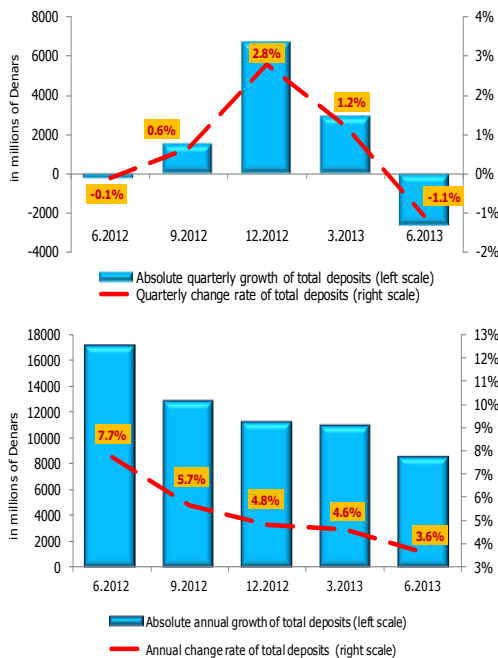


Source: the NBRM, based on data submitted by banks.

¹³ For more details see Section III.1 Credit risk.



Figure 20 Quarterly (up) and annual (down) growth of deposits of nonfinancial entities

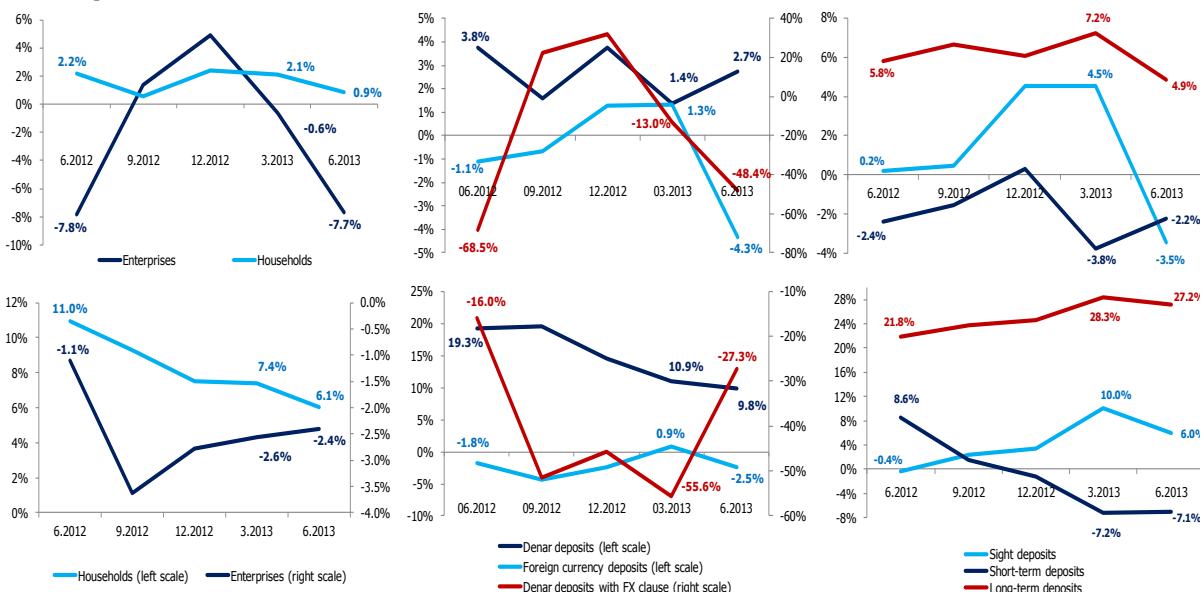


Source: the NBRM, based on data submitted by banks.

increase of Denar 1,580 million, which is almost entirely (97.1%) due to the growth of long-term Denar savings (Annex 12). The rates of reserve requirement also had their influence on the increased savings in domestic currency and long-term savings¹⁴.

The propensity of clients to keep deposits in banks in local currency continued in the second quarter of 2013. Denar deposits grew by Denar 3,510 million (or 2.7%), in contrast to the downward movement of foreign currency deposits and Denar deposits with FX clause (Annex 12).

Figure 21 Quarterly (up) and annual (down) change of deposits by sector, currency and maturity

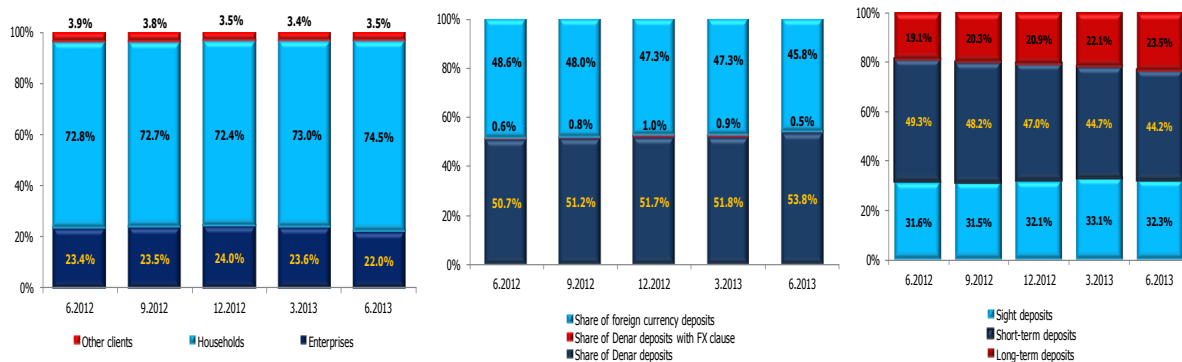


Source: the NBRM, based on data submitted by banks.

¹⁴ The reserve requirement rate is 0% for deposits of natural persons in local currency with contractual maturity over two years, provided that the prescribed conditions relating to premature withdrawal and the level of the interest rate are fulfilled.

In the second quarter of 2013, households showed an increased interest in saving in the long run. The total long-term deposits increased by Denar 2,671 million (4.9%), where the contribution of household deposits was 76.0%. On the other hand, **short-term deposits** decreased by Denar 2,473 million, of which 49.8% was due to the corporate Denar deposits with FX clause and 44.5% to the foreign currency deposits of households. The reduction in **sight deposits** was Denar 2,846 million and is associated with the already pointed out dividend payment.

Figure 22 Deposit structure by sector, currency and maturity

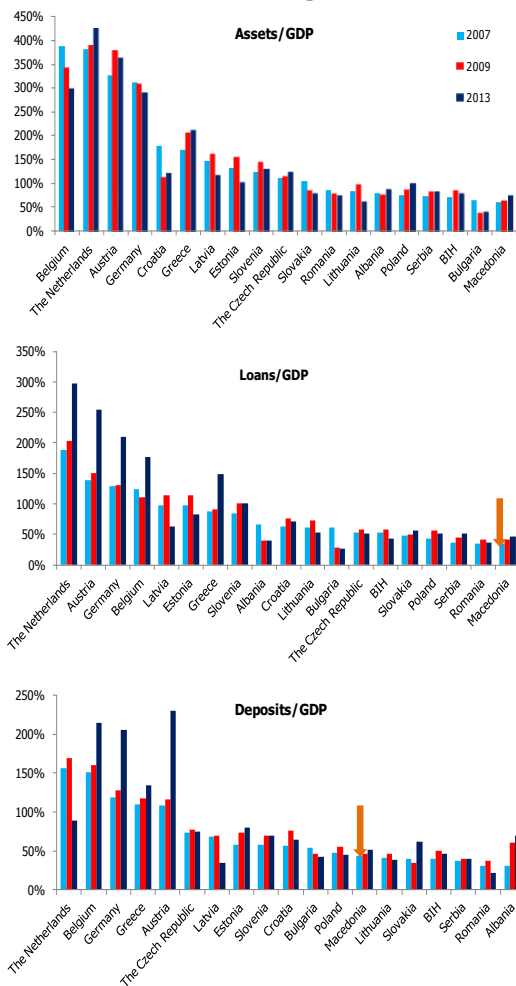


Source: NBRM, based on data submitted by banks.



Level of financial intermediation in the Macedonian banking system and the banking systems of selected EU Member States and the countries of the region

Figure 23 Level of financial intermediation in the Republic of Macedonia, selected EU member states and countries of the region



Source: The NBRM, based on data submitted by banks, web pages of the IMF and the central banks.

Notes: For four of the total number of countries included in the analysis, the data for 2013 refers to the first quarter of 2013 (Belgium, Romania, Croatia and Greece). For the rest of the fifteen countries included in the analysis, the data for 2013 refers to the second quarter of 2013.

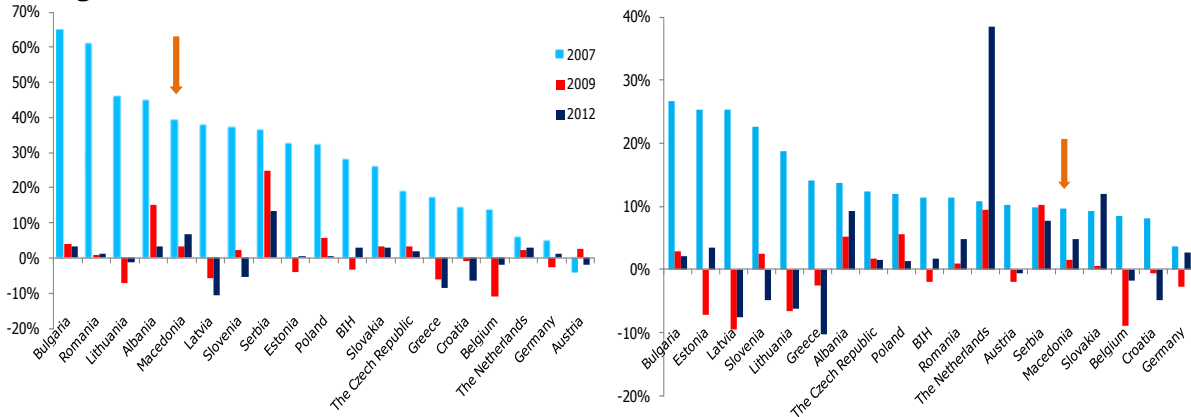
Financial intermediation in the banking system of the Republic of Macedonia, despite its lower level, registers a steady upward trend in comparison with most of the analyzed countries (countries of the region and selected EU Member States).

Analyzed in the period 2007-2013, the banking systems of most EU Member States register a decline in the level of financial intermediation, i.e. they go through a so-called financial disintermediation. In the period 2007-2013, the average reduction of the assets to GDP ratio in these countries ranged in the interval from 5.2 to 44.9 percentage points. In the same period, the banking systems of the countries of the region (which are not EU members) registered an increase in the assets to GDP ratio (which ranged in the interval from 5.0 to 7.1 percentage points annually, on average). The growth of financial intermediation in the Republic of Macedonia is far above this average of the countries in the region, because in the analyzed period, the ratio of the assets of the banking system to GDP increased by 14.2 percentage points. In addition, growth was registered also in the period from 2009 until the second quarter of 2013, when the effects of the global financial crisis on the domestic economy became most prominent. In this period, the ratios of assets, loans and deposits to GDP in the country increased by 10.1 percentage points, 4.6 percentage points and 9.3 percentage points respectively.

The global financial and economic crisis and its effects on the banking systems of the EU Member States is one of the main factors for the reduced level of financial intermediation in these countries. This is particularly evident in the

analysis of the movement of credit activity and its importance to the economic activity of the EU Member States, where most of the banks were faced with inadequate capital and liquidity capacity to continue lending.

Figure 24 Annual growth rate of loans (left) and share of the annual growth of loans in GDP (right) in the Republic of Macedonia, selected EU member states and countries of the region



Source: NBRM, based on data submitted by banks.

In contrast, the banking systems of the countries of the region (with the exception of Greece and Croatia), analyzed by the lending activity, continued to increase their importance for the economic activity. In 2012, of the total nineteen countries included in the analysis, Macedonia holds the sixth place according to the credit growth to GDP ratio.

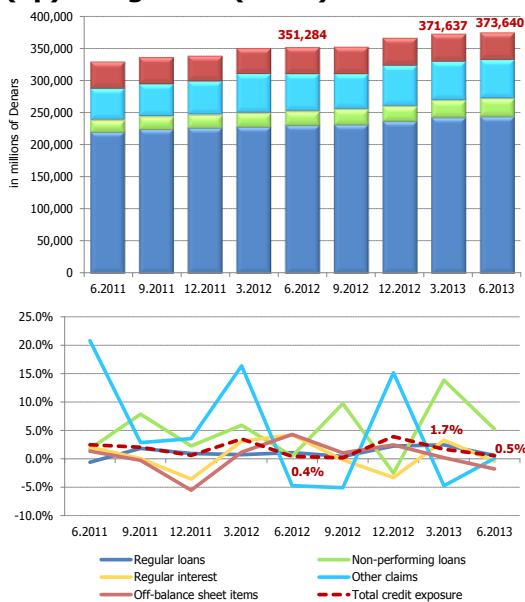


III. Bank risks

3.1 Credit risk

The positive developments in the domestic economy in the previous four quarters, especially the faster growth of economic activity in the first and second quarters of the year, had a respective impact on slowing the deterioration of the banks' loan portfolio quality in the second quarter of 2013. Despite the slower growth of non-performing loans, which continued in July and August 2013, credit risk is still the most important for the banking system of the Republic of Macedonia. At the end of the second quarter, the share of non-performing loans in the total loans to non-financial entities increased by 0.4 percentage points and reached 12.3%. The amount and growth of non-performing loans are primarily due to the greater credit risk with several exposures of banks to the corporate sector, which is the generator of the growth of non-performing loans. The coverage of non-performing loans with total impairment is high, although it decreased slightly below 100%.

Figure 25 Credit exposure, structure (up) and growth (down)



Source: National Bank's Credit Registry, based on data submitted by banks. Other claims, besides fees, commissions etc., also include banks' investments in CB and treasury bills.

3.1.1 Quality of the loan portfolio of the banking system

The total credit exposure¹⁵ in the second quarter of 2013 grew by Denar 2,003 million (0.5%), which is a slowdown of 1.2 percentage points compared to the previous quarter (as of March 31, 2013, the quarterly growth totaled Denar 6,077 million or 1.7%). This slowdown stems primarily from the reduced credit exposure to financial institutions¹⁶ (by Denar 1,661 million or 2.2%) and corporations and other clients¹⁷ (by Denar 135 million or 0.1%), but also from the slower growth in the exposure to the government (quarterly increase of Denar 412 million or 1.2%, compared to Denar 2,486 million or 7.7% in the first quarter of 2013). Credit exposure to non-financial entities (without the exposure to financial institutions and government) registered a quarterly growth of Denar 3,253 million, or 1.2% (1.0% as of March 31, 2013). This growth is entirely (104.2%) arising from the growth of credit exposure to households (by Denar 3,388

¹⁵ The total credit exposure includes balance sheet claims (loans, interest, fees, financial leasing, investments in securities available for sale or held to maturity, etc.) and off-balance sheet claims (unused lines of credit, unused loans for overdrafts on current account and for credit cards, letters of credit, guarantees and other similar potential liabilities for the bank) that expose the bank to credit risk.

¹⁶ The reduction in credit exposure to financial institutions is primarily due to the decline in short-term deposits placed with the National Bank by Denar 1,968 million or 27.2%.

¹⁷ Hereinafter: enterprises.

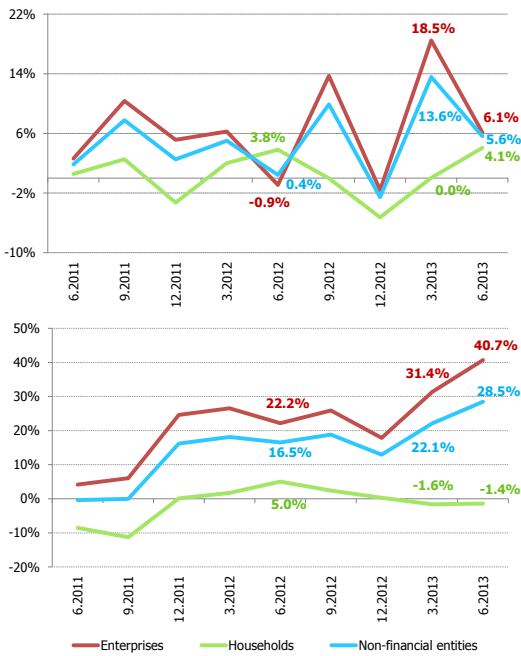
million or 3.5%). According to the purpose, the highest growth was registered in consumer loans, followed by residential and commercial real estate loans and credit cards.

In the second quarter of 2013, the deterioration of banks' loan portfolio quality slowed down, which was evident from the lower quarterly growth rate of non-performing loans by 7.9 percentage points compared with the growth rate registered in the first quarter of 2013. Thus, in this quarter the growth rate of non-performing loans is single-digit and equals 5.6%. The growth of non-performing loans for the most part (83.5%) comes from enterprises, reflecting the deteriorating performances of several clients from the activities "wholesale and retail trade", "construction" and "electricity, gas, steam and air conditioning supply". Non-performing loans of households registered a quarterly growth that is due to the increase in the non-performing residential and consumer loans.

Although the quarterly growth rate of non-performing loans slowed down, its annual growth rate is the highest in the last three years. However, the movements after the cutoff date of this Report indicate signs of a slowing growth of "bad" loans¹⁸.

The trend of increasing the share of non-performing loans in the total loans to non-financial entities also slowed down, and in the second quarter this rate increased by 0.4 percentage points and reached 12.3%. However, this is the highest share after the second quarter of 2006 (13.5%). The slower growth of non-performing loans which continued at the beginning of the second half of the year, made the rate of non-performing loans in August return to the level registered in March 2013 (11.9%). This positive movement in the non-performing loans in August is a result of the activities of some banks toward restructuring the claims on

Figure 26 Quarterly (up) and annual (down) growth rate of non-performing loans

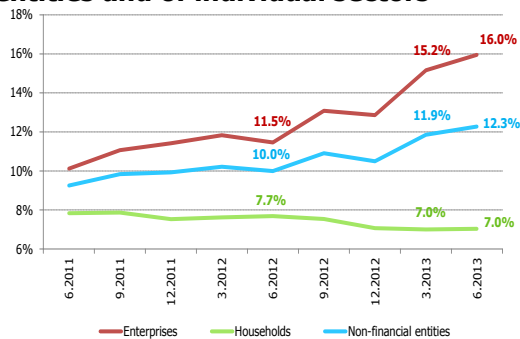


Source: National Bank, based on data submitted by banks.

¹⁸ In August 2013, the annual growth rate of non-performing loans was almost twice lower than that registered in June 2013 and equaled 14.8%.



Figure 27 Share of non-performing loans in total loans of non-financial entities and of individual sectors



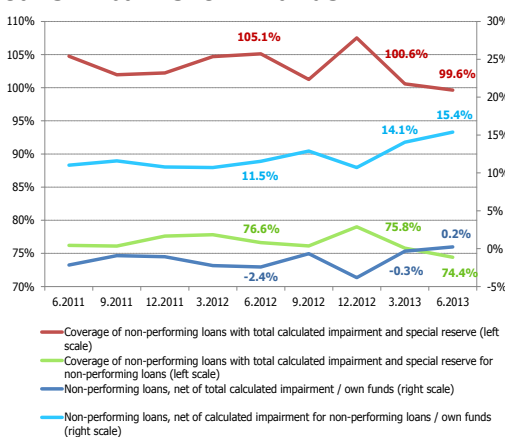
Source: National Bank, based on data submitted by banks.

certain customers and adjusting the conditions for the return to their current capabilities.

The share of corporate non-performing loans in the total loans reached 16.0% (15.2% as of March 31, 2013). This increase stems from the faster growth of non-performing loans relative to the total corporate loans. For households, this rate is unchanged due to the fast growth of total loans, which offset the growth of non-performing loans. In August 2013, the rate of non-performing loans to households remained unchanged compared to July 2013, while with enterprises this rate reduced and reached 15.4%. This positive movement with enterprises results from the reduction of non-performing loans.

The growth of non-performing loans was followed by a quarterly increase in total impairment of banks by Denar 1,068 million or 3.8%, which is entirely a result of the impairment for the credit exposure to the corporate sector. However, this growth is slower, which corresponds with the slowing pace of growth in non-performing loans. The same activities¹⁹ that registered the largest increase in the non-performing loans have the largest contribution to the impairment and special reserve growth.

Figure 28 Coverage of non-performing loans and share of net non-performing loans in banks' own funds



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

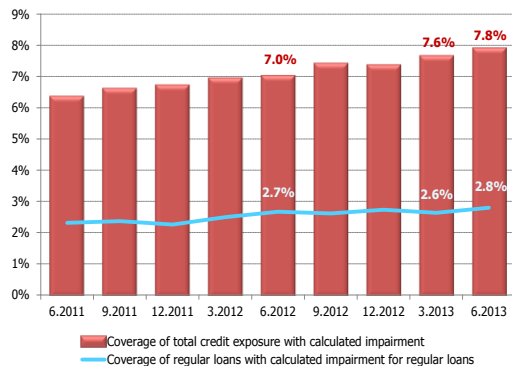
The increase in impairment was of lesser intensity than the growth of non-performing loans, which resulted in reducing the coverage of non-performing loans with total impairment slightly below 100%²⁰. As of June 30, 2013 the coverage of non-performing loans with impairment determined for them also decreased to 74.4% (75.8% as of March 31, 2013). Thus, assuming hypothetically full default of non-performing loans, at the end of this quarter, own funds would have decreased by 15.4% (compared with 14.1% as was the assumed reduction at the end of the first quarter of 2013). The increased participation of non-provisioned non-performing loans in the own funds would not cause significant deterioration in the capital

¹⁹ "Wholesale and retail trade", "construction" and "electricity, gas, steam and air conditioning supply".

²⁰ After the third quarter of 2010, this is the first time that non-performing loans are not fully covered by the total calculated impairment.

adequacy of the banking system (it would decrease from 17.3% to 14.7%). Observed by individual banks, in such an extreme event, capital adequacy would fall below 8% in two banks.

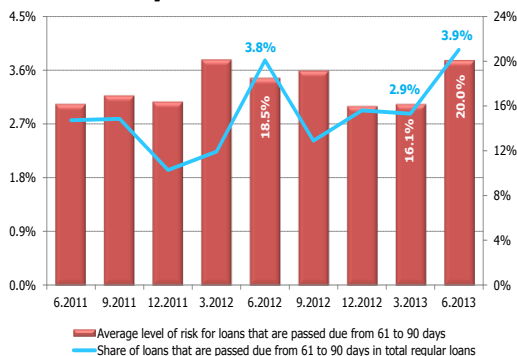
Figure 29 Average risk level of the overall credit exposure, and of regular loans



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

In the second quarter of 2013, as a result of the faster growth of impairment relative to the growth of total credit exposure, the average risk level of the loan portfolio of the banking system increased as well. However, the average classification of total credit exposure remains in the risk category "A". Upward trend is observed also in the average level of risk of regular loans due to the quarterly growth of the impairment determined for them (by Denar 432 million or 6.8%).

Figure 30 Average risk level of past due loans with delay in repayment of 61 to 90 days



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

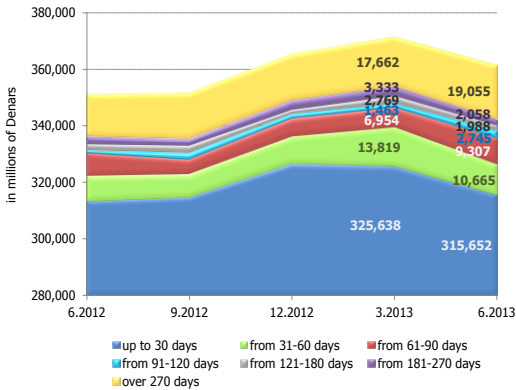
Past due loans with period of delay in repayment of 61 to 90 days represent potential non-performing loans for the next quarter. Thus, 3.9% of the total regular loans as at June 30, 2013 would turn into non-performing, if for none of these loans the past due debt is not repaid over the next month. The average risk level of loans with part that is past due from 61 to 90 days is within the risk category "B" and is 20.0%, which is by 8.5 percentage points lower than the average risk level of the credit exposure classified in risk category "C non-performing" (28.5%). Assuming that all loans with past due part of 61 to 90 days will become non-performing in the next quarter, the share of non-performing in total loans would increase and would reach 15.7%, without taking into account the effect of the new lending and the changes in the total loan portfolio that would occur in the third quarter. The coverage of non-performing loans with total impairment and only with impairment for the non-performing loans would be reduced and would equal 78.8% and 63.6%²¹, respectively.

According to the number of days of delay in the agreed repayment of loans, the largest part

²¹ Impairment for loans with past due part of 61 to 90 days, which presumably will become non-performing is calculated as 25.1% (minimal impairment for exposures in risk category "C") of the amount of these loans. Thus, the total impairment and impairment only for non-performing loans would rise by 1.4% and 9.5%, respectively, while non-performing loans would rise by 28.2%.

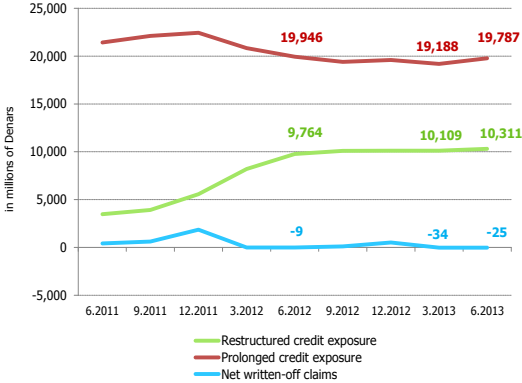


Figure 31 Structure of credit exposure by days of delay in repayment of loans



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

Figure 32 Restructured, prolonged and written off exposure during quarters



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

accounts for the credit exposure with delays up to 30 days (88%). Credit exposure with delay over 90 days represents 6.9% of the total credit exposure as of June 30, 2013. Relative to the first quarter of 2013, this exposure has increased by Denar 620 million (or 2.5%). Most of the increase stems from the credit exposure with a period of delay in repayment of 91 to 120 days and over 271 days, which registered quarterly growth of Denar 1,282 and Denar 1,393 million (87.6% and 7.9%) respectively.

Restructured²² and prolonged²³ claims registered upward movements due to the growth of these claims with enterprises. Namely, as of June 30, 2013, 6.0% and 12.0% of the total credit exposure to companies was restructured and prolonged, respectively. Upward trend in restructured and prolonged exposure is due to the growth of non-performing restructured and prolonged exposures, in conditions of a declining exposure of this type with regular status. The average risk level of restructured credit exposure increased and reached 41.7% (40.3% as of March 31, 2013). In contrast, the average risk level of prolonged credit exposure decreased to 18.7% (18.9% as of March 31, 2013).

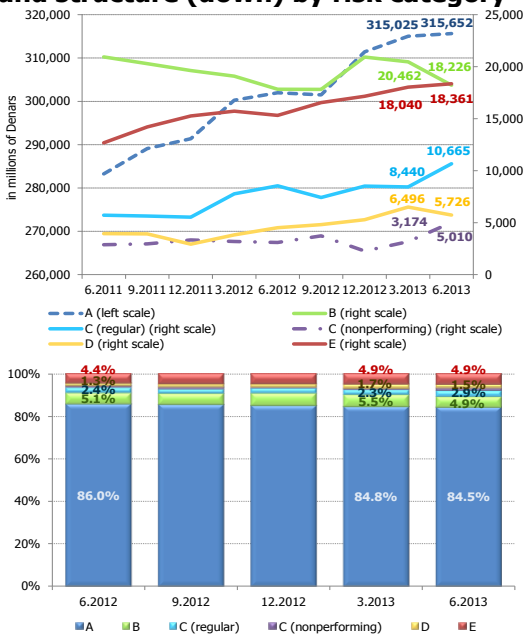
Write-offs made by banks in the second quarter of 2013²⁴ are lower relative to the same quarter last year. In the first half of the year, on a net basis, banks collected written off claims more than they made write-offs. Sole proprietors have the largest share in the total written off claims (52.3%), while most common in the total collection of already written off claims are natural persons (80.5%).

²² Claim restructuring implies establishing new credit exposure by the bank to replace the existing one, inducing significant changes in the contractual terms as a result of the deteriorating financial condition of the borrower.

²³ Claim prolongation is an extension of its maturity, which is not a result of the client's worsening financial position.

²⁴ Claims written off during the second quarter of 2013, are in the amount of Denar 18 million, versus the second quarter of the last year when they amounted to Denar 26 million.

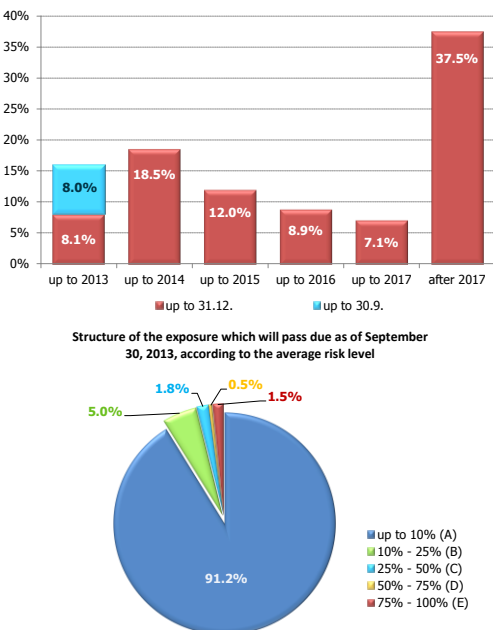
Figure 33 Credit exposure amount (up) and structure (down) by risk category



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

In terms of credit risk indicators and the importance of individual activities/products in the total credit exposure, credit risk is the highest in "construction" and "industry" (of the corporate sector) and consumer loans and credit cards (of the household sector) (Annexes 22 and 23). According to the currency structure, Denar credit exposure is the riskiest (Annex 21).

Figure 34 Structure of credit exposure to non-financial entities, by maturity of principal



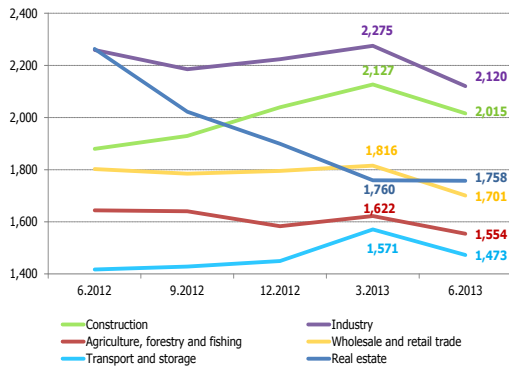
Source: National Bank's Credit Registry, based on data submitted by banks.

Note: The analysis does not include exposures classified on a group basis.

The structure of credit exposures to non-financial entities according to the maturity of the principal may give additional picture of banks' exposure to credit risk. Thus, as of June 30, 2013, 8% of the total credit exposure falls due by the end of the third quarter, while more than half of the exposure falls due after 2015. The exposure with average risk level of up to 25% ("A" and "B" risk category) accounts for 96.2% of the total credit exposure that falls due by the end of the third quarter.



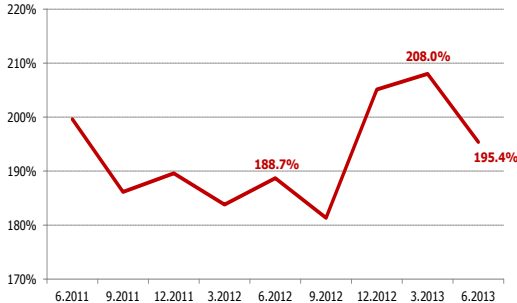
Figure 35 Herfindal index for credit exposure by individual activities



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

Concentration of credit exposure of the banking system by individual sectors measured by the Herfindahl index, is generally within acceptable limits²⁵. The value of the index points to higher concentration, i.e. it exceeds the acceptable upper limit of the index for the credit exposure to "construction" and "industry". However, in the second quarter of 2013, concentration decreases in almost all industries.

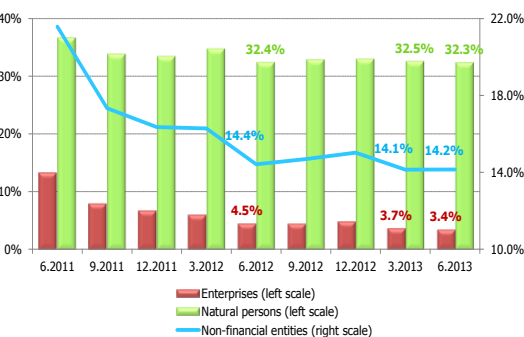
Figure 36 Share of large exposures in banks' own funds



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

In the second quarter of 2013, the share of large exposures²⁶ in the banks' own funds decreased by 12.7 percentage points, which means reduced concentration of credit risk. Analyzed by banks, the share of large exposures in the own funds ranges in the interval from 22.2% to 807.2%. Excluding the banks' exposures to financial institutions and investments in CB bills and government securities, the share of large exposures to non-financial entities in banks' own funds amounts to 89.5%²⁷. Analyzing by bank, the share of large exposures to non-financial entities in the own funds ranges from 22.2% to 425.8%.

Figure 37 Share of uncollateralized exposure in total credit exposure of non-financial entities and of sectors



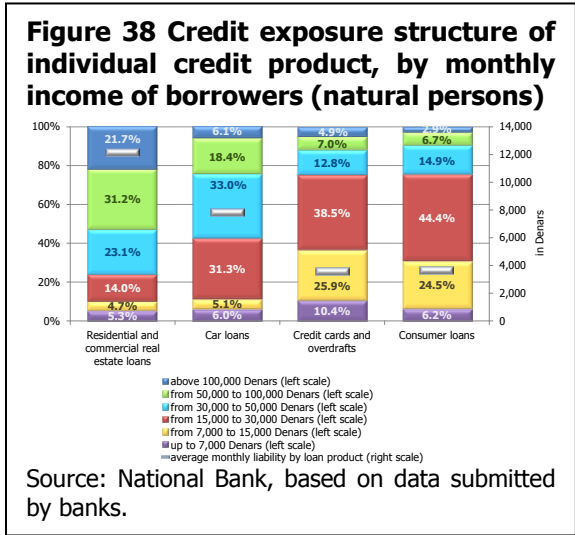
Source: National Bank's Credit Registry, based on data submitted by banks.

The share of uncollateralized credit exposure in the total credit exposure to non-financial entities in the second quarter of 2013 remained almost unchanged, while in the individual sectors a decline in the share of the

²⁵ When the index ranges between 1,000 and 1,800 units, the level of concentration is regarded as acceptable.

²⁶ According to the regulations, large exposure to a person or persons connected thereto is an exposure equal to or higher than 10% of the bank's own funds. The total amount of large exposures must not exceed eight times the bank's own funds.

²⁷ The analysis excludes the own funds of six banks that do not have large exposures to non-financial entities.



uncollateralized portion was registered²⁸. The highest share of uncollateralized credit exposure is registered in the credit exposure to natural persons (32.3%), but excluding the exposure based on overdrafts on current accounts and credit cards²⁹, this ratio is much lower and amounts to 13.6%.

In the structure of credit exposure to natural persons, most indebted are those with monthly income of up to Denar 30,000, constituting more than two thirds of the total exposure of banks to this sector and 73.5% of the total exposure intended for consumption (Annex 24). As of June 30, 2013, the average debt per person (only debtors) reached Denar 100 thousand, while the average monthly liability, depending on the loan product ranges between Denar 3.6 thousand and Denar 12 thousand. Observed by individual persons, most indebted are individuals with monthly income exceeding Denar 100,000 (average debt of Denar 583 thousand per person), which is a result of the adjustments made by banks for the amount of debt to the amount of the monthly income of natural persons. According to the type of credit product, persons with monthly income of up to Denar 30.000 occupy most of the credit exposure based on consumer loans and credit cards and overdrafts on current accounts (75.1% and 74.8%, respectively), while the credit exposure based on housing loans is mostly constituted by persons with monthly income above Denar 30.000 (76.0%).

²⁸ The decline in the enterprises' share of the uncollateralized in the total credit exposure is a result of the more substantial reduction in the amount of uncollateralized exposure, while the downward movement of this ratio with households is due to the faster growth of total credit exposure. Such movements cause almost identical growth of uncollateralized and total credit exposure to non-financial entities, with the share of uncollateralized in total credit exposure remaining almost unchanged.

²⁹ Most collections of this type of credit exposure are covered by the monthly income of borrowers.



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

The sensitivity of the banking system to the deteriorated quality of certain segments of the loan portfolio is examined with stress tests, which are conducted on a regular quarterly basis. They consist of simulations of hypothetical migration of 10% (first simulation) and 30% (second simulation) of the credit exposure to companies and households, separately, and to both sectors together, to the following two higher risk categories.

Table 2 Capital adequacy ratio, after simulations

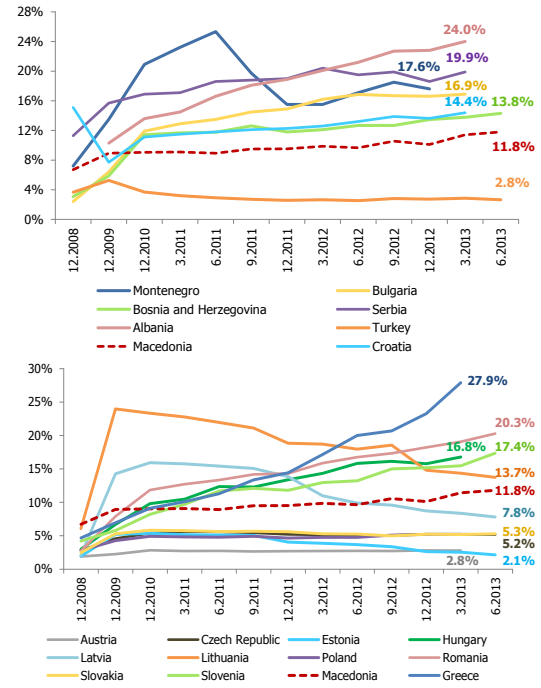
Description	CAR of the banking system		Number of banks with CAR after simulation below the CAR of the banking system after simulation (below 8%)		Share of "C", "D" and "E" in total credit exposure		Average level of risk for total credit exposure		
	31.3.2013	30.6.2013	31.3.2013	30.6.2013	31.3.2013	30.6.2013	31.3.2013	30.6.2013	
Baseline	17.3%	17.3%			9.7%	10.6%	7.6%	7.8%	
Enterprises and households	I simulation	15.2%	15.2%	7 (1)	8 (1)	13.0%	13.9%	9.1%	9.4%
	II simulation	10.5%	10.4%	6 (5)	7 (4)	19.7%	20.4%	12.0%	12.4%
Enterprises	I simulation	16.0%	15.9%	7 (0)	7 (1)	11.8%	12.6%	8.5%	8.8%
	II simulation	13.1%	13.0%	7 (2)	7 (2)	15.9%	16.5%	10.4%	10.8%
Households	I simulation	16.6%	16.6%	6 (0)	8 (0)	11.0%	11.9%	8.1%	8.4%
	II simulation	15.2%	15.1%	7 (0)	7 (0)	13.6%	14.5%	9.2%	9.5%

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

The results of the simulations show that the resilience of the banking system to simulated shocks is maintained. A more detailed review of the results of the simulations is given in Annex 25.

Non-performing loans³⁰ in the Macedonian banking system, in the region and in selected EU Member States

Figure 39 Share of non-performing loans in total loans



Source: IMF Financial soundness indicators.

According to the non-performing loans ratio (share of non-performing loans in total loans)³¹, the loan portfolio quality of the banking system of the Republic of Macedonia is at a higher level compared to most countries in our neighborhood, but still lags behind the banking systems of some EU countries (for example, Czech Republic, Slovakia, Estonia, the Netherlands, Latvia and Poland)³². Turkey is the only country in the region with a single-digit rate of non-performing loans at the end of the first quarter of 2013. At the end of 2009, when most EU Member States and countries in the region were faced with deteriorating quality of the loan portfolio due to the spillover effects of the global financial crisis, this rate in the Macedonian banking system experienced moderate annual growth of 2.2 percentage points. The negative effects of the global financial crisis on the banking systems of countries in the region were more moderate and in some of them they came with a time lag. The main features of the banking systems of these countries, including the

strong role of external financing and foreign trade with the developed countries, as well as expansionary credit growth in the years before the crisis, were the channels for spillover effects of the disruptions in the global economic environment in the countries of the region. The increase in the non-performing loans ratio in the last five years is typical for the banking systems of Albania, Greece, Romania, Hungary and Slovenia. Thus, as of March 31, 2013, the largest share of non-performing loans to total loans was registered in the banking system of Albania, with 24.0% (among the countries in the region) and in the banking system of Greece with 27.9% (among the EU Member States).

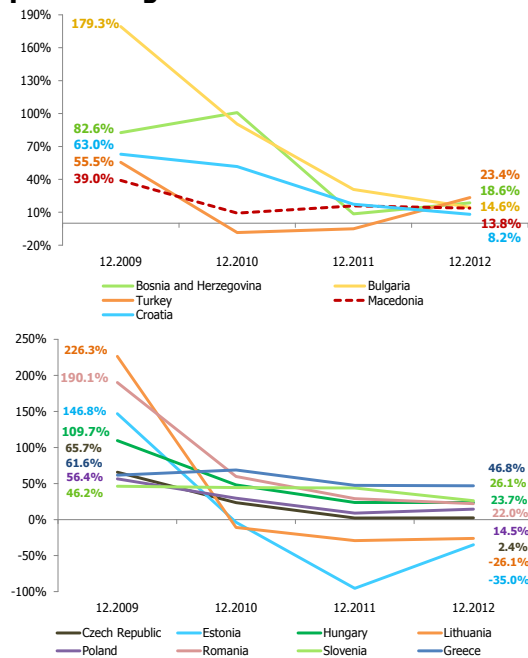
³⁰ Different countries may use different definitions of non-performing loans.

³¹ All indicators refer to total non-performing loans to financial and non-financial entities.

³² The latest data available for the banking systems of Albania, Serbia, Bulgaria, Croatia, Greece, Hungary and Austria is as of March 31, 2013, while for the banking systems of Bosnia and Herzegovina, Turkey, Romania, Slovenia, Lithuania, Latvia, Slovakia, Czech Republic and Estonia it is as of June 30, 2013.



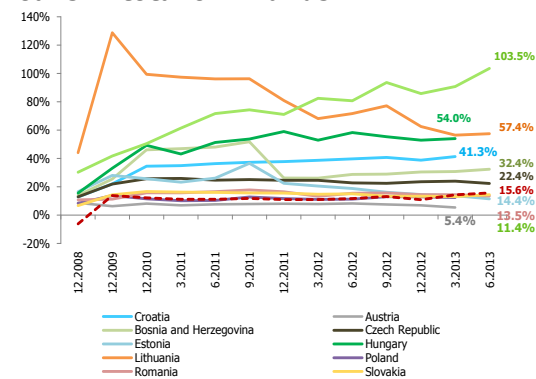
Figure 40 Annual growth rate of non-performing loans



Source: IMF financial soundness indicators.

In the early years of the crisis (end of 2009), non-performing loans registered a record annual growth rate, which reached 179.3% in the banking system of Bulgaria (among the countries in the region) and 226.3% in the banking system of Lithuania (among the EU Member States). At the end of 2012, the growth rate of total non-performing loans in the selected countries of the region is moderate and ranges from 8.2% in the banking system of Croatia to 23.4% in the banking system of Turkey. Although the banking system of the Republic of Macedonia has a low annual growth rate of non-performing loans compared to the countries in the region, it lags behind the EU Member States, including the Czech Republic which registered an increase of 2.4%, and Estonia and Lithuania, which experienced significant downward movement (35.0% and 26.1%, respectively). The highest growth rate of non-performing loans of 46.8% was registered in the banking system of Greece.

Figure 41 Share of net non-performing loans in total own funds



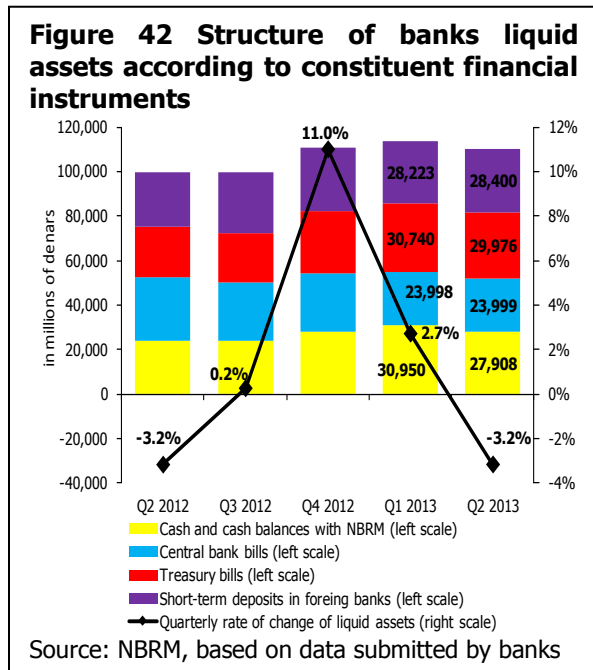
Source: IMF financial soundness indicators.

Compared with some countries in our neighborhood and beyond, the share of net non-performing loans (non-performing loans reduced by the amount of impairment) in the total own funds of the banking system of the Republic of Macedonia is significantly lower. At the end of the first quarter of 2013, the lowest level of this indicator is registered in Turkey, where the coverage of non-performing loans requires only 5.4% of the own funds of the banking system. In the Macedonian banking system the non-provisioned part of the non-performing loans accounts for 15.6% of the own funds as of June 30, 2013, which indicates a slight decrease in the own funds in a hypothetical full default of non-

performing loans. According to the value of this indicator for the banking system of Slovenia as of June 30, 2013 (103.5%) and Greece as of March 31, 2013 (156.0%), their own funds are insufficient to cover the losses incurred in the hypothetical full default of non-performing loans.

3.2 Liquidity risk

During the second quarter of 2013, banks in the Republic of Macedonia maintained the high liquidity and stable liquidity position, although the amount of liquid assets decreased. The main determinant of the quarterly decline in liquid assets were outflows of funds from the banking system, due to the payment of a dividend from one domestic company to foreign shareholders. In circumstances of reduced deposits of non-financial entities, generator of the growth of the sources of funding for banks in the second quarter of 2013 were the loans used and deposits collected from financial institutions, including the parent entities from abroad. According to the latest available data, as of August 2013, liquid assets are rising again, and on an annual basis they increased by 13.7%. Liquidity at the level of the banking system remained stable. Stress test simulations show that the banking system is resistant to liquidity shocks.

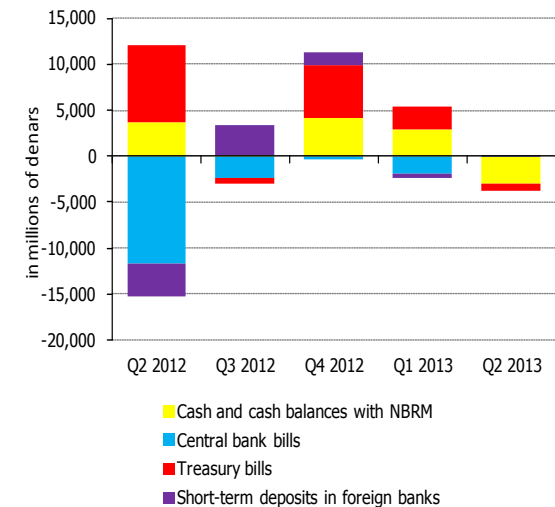


At the end of the second quarter of 2013, liquid assets³³ of the banking system amounted to Denar 110,283 million, and on a quarterly basis they decreased by Denar 3,627 million, or 3.2%. However, on annual basis, liquid assets went up by Denar 10,603 million, or 10.6%. Quarterly decline in liquid assets primarily arises from the payment of a dividend by one domestic company to the parent entities, which usually occurs at this time of the year, and consequently, the outflow of deposits outside the domestic banking system (abroad). Additionally, in some of the banks, liquid assets reduced in the second quarter of 2013 as a result of servicing their liabilities on the basis of repo transactions, as well as due to the accelerated lending activity. Analyzed by banks, nine banks reported quarterly growth in liquid assets, in the range between 2.0% and 35.3%, while seven banks reported a decline in the range between 1.4% and 19.7% (whose share in the total assets of the banking system as of June 30, 2013 equaled 39.0%).

³³ Liquid assets include cash and balances on accounts with 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 the purposes of liquidity analysis, Denar assets and liabilities with FX clause are regarded as Denar.



Figure 43 Quarterly absolute changes of liquid assets according to constituent financial instruments

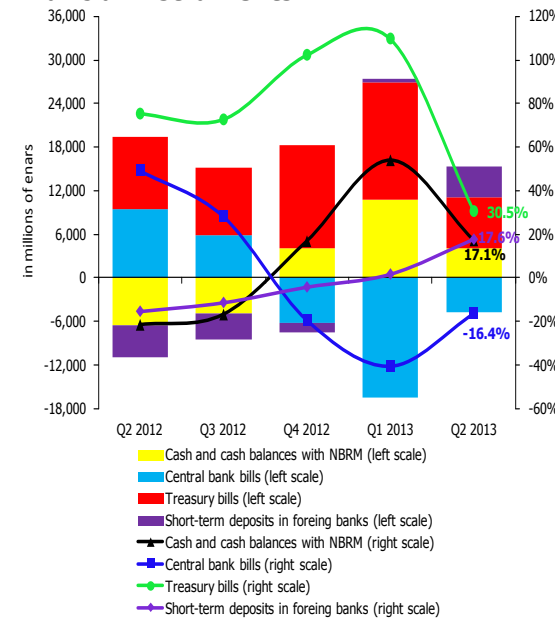


Source: NBRM, based on data submitted by banks

Analyzed by different financial instruments comprising liquid assets, in the second quarter of 2013 the decline was mainly determined by cash and deposits with the National Bank, which on a quarterly basis decreased by Denar 3,042 million, i.e. 9.8%. After their fast growth in the previous two quarters, in the second quarter of 2013, Treasury bills also reduced, by Denar 763 million, i.e. 2.5%. Symbolic quarterly growth of 0.6% was recorded only in banks' funds on their correspondent accounts and in the short-term deposits placed with foreign banks.

On annual basis, banks' investments in Treasury bills still register the fastest growth of 30.5% or Denar 7,007 million, but at a significantly slower pace compared to the previous quarter. It is notable that there is gradual acceleration in the growth of short-term deposits placed with foreign banks, which in 2012 declined, and at the end of the second quarter of 2013 rose by Denar 4,250 million or 17.6%. Due to the effects of the changes in the operational framework for the monetary policy conduct made in the first half of 2012, CB bills still show negative annual change, which is still lower compared to the first quarter of 2013³⁴.

Figure 44 Annual absolute and relative changes of liquid assets' constituent financial instruments

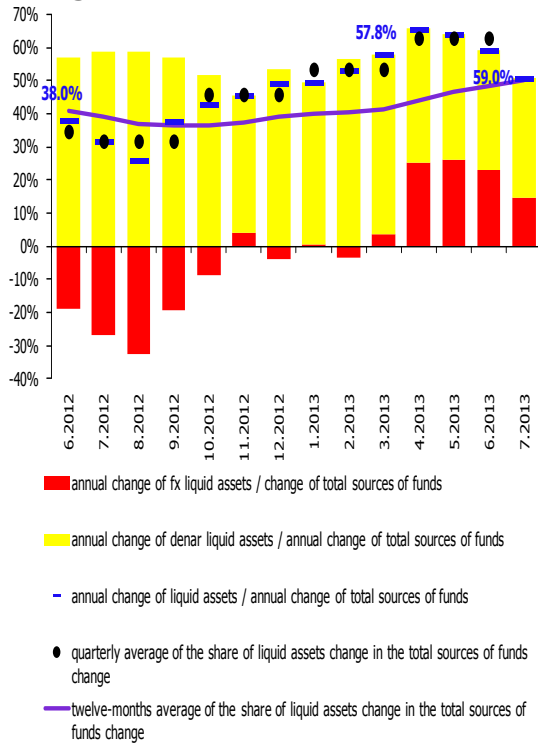


Source: NBRM, based on data submitted by banks

These changes caused a decline in the share of cash and balances with the National Bank in the structure of liquid assets compared to the previous quarter by 1.9 percentage points. Observing the currency structure, given the quarterly growth of short-term deposits in foreign banks, an increase in the share of foreign currency liquid assets was registered, which as at June 30, 2013 equaled 28.3% (quarterly increase of one percentage point).

³⁴ During the first half of 2013, the National Bank maintained the supply of CB bills unchanged.

Figure 45 Change of liquid assets /change of total sources of funds

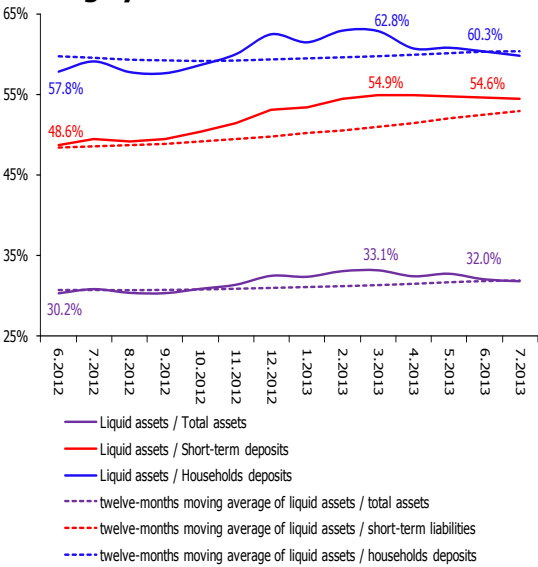


Source: NBRM, based on data submitted by banks

In the second quarter of 2013, banks invested most of the new funding sources in liquid financial instruments. The average share of the annual change in the liquid assets in the change of the total funding sources in the second quarter of 2013 was 62.8%, which is the highest level registered in the last three years. This confirms that domestic banks are still credit risk averse, as illustrated by both the continued increase in the twelve-month moving average of this indicator, and the higher annual growth rate of the liquid assets compared to the annual credit growth rate (as of June 30, 2013 they amounted to 10.6% and 4.5%, respectively). The gradual strengthening of the banks' propensity to place funds in foreign banks is reflected in the upward trend of the annual change of the share of foreign currency liquid assets in the change of the total funding sources in the second quarter of 2013.

In the second quarter of 2013, the liquidity of the banking system³⁵ remained high. The relatively high share of liquid assets in the total assets, prevented the major changes in liquidity indicators from the quarterly decrease in liquid assets. At the same time, the coverage of short-term liabilities and the various categories of deposits with liquid assets remained at a satisfactory level. By individual banks, the coverage of short-term liabilities with liquid assets increased quarterly in seven banks (from 0.7 to 14.4 percentage points), while the share of liquid assets in total assets increased in nine banks (from 0.1 to 5.4 percentage points).

Figure 46 Liquidity indicators of the banking system

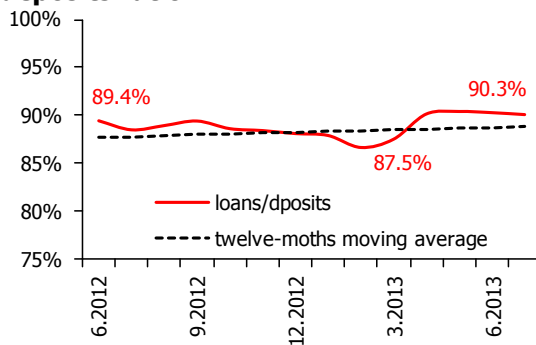


Source: NBRM, based on data submitted by banks

³⁵ The calculation of liquidity ratios of the banking system does not include resident interbank assets and liabilities.

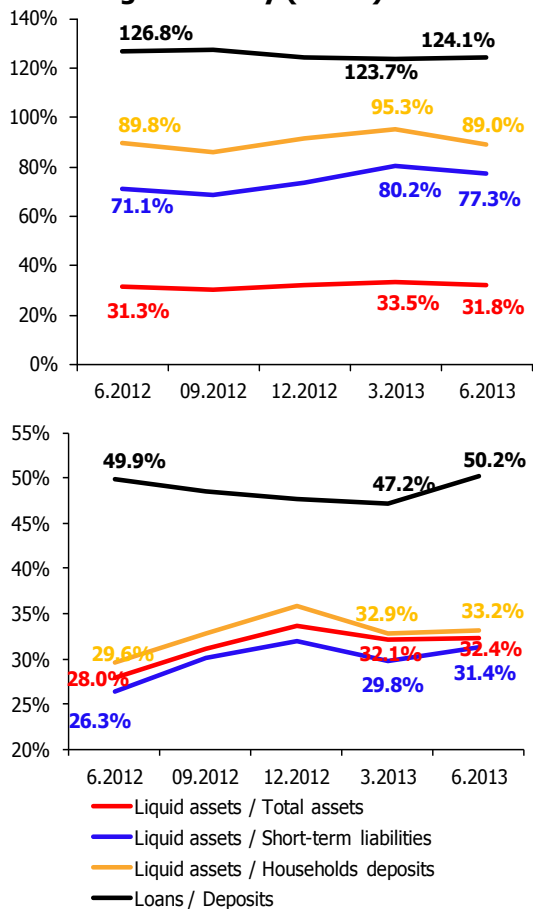


Figure 47 Movement of the loans to deposits ratio



Source: NBRM, based on data submitted by banks

Figure 48 Liquidity indicators of the banking system by currency - denar (up and foreign currency (down))



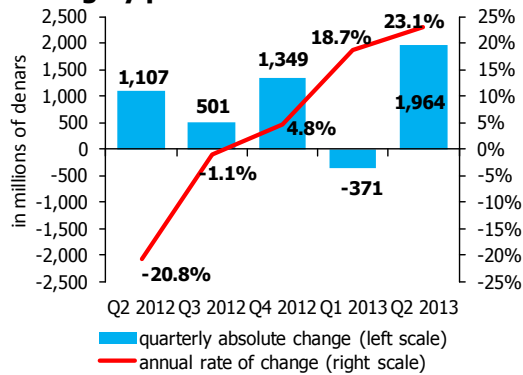
Source: NBRM, based on data submitted by banks

During the second quarter of 2013, loan to deposit ratio increased as a result of the quarterly credit growth (by 2.0%), and of the quarterly decrease in deposits (by 1.1%). The increase in this indicator on a quarterly basis is observed in eleven banks in the interval from 0.02 to 24.1 percentage points. As of June 30, 2013, this indicator is above 100% in five banks whose share in the total assets of the banking system is 22.0%.

The growth of the foreign exchange component of liquid assets in the second quarter of 2013, with simultaneous transformation of different categories of banks' liabilities in foreign currency into Denar liabilities, caused a slight increase in the foreign currency liquidity indicators. In contrast, the quarterly reduction of Denar liquid instruments caused the indicators of liquidity in Denars to decline to some extent. The evident rise in the loan to deposit ratio in foreign currency is a result of the decline of foreign currency deposits amid growth of foreign currency loans.

The quarterly growth of the banks' sources of funding is mostly caused by the growth of loans used, subordinated instruments and equity positions that offset the effect of the quarterly decline in deposits of non-financial entities. In terms of maturity, currency transformation of the sources of funding is still registered. Namely, the increase in long-term funding sources continued, amid simultaneous reduction of the short-term sources of funding. This is a consequence of both the increase in long-term deposits, and the use of long-term loans and borrowings by banks. The decline of the short-term sources of funding in the second quarter of 2013, was primarily due to the decline in short-term deposits of non-financial entities, due to the outflows toward foreign shareholders of domestic companies, while short-term loans and deposits of financial institutions registered quarterly growth.

Figure 49 Change of used sources of funding by parent entities

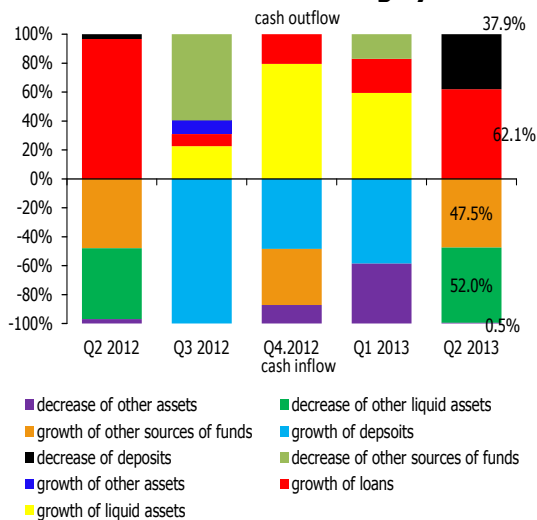


Source: NBRM, based on data submitted by banks

In the second quarter of 2013, the used sources of funding that come from banks' foreign parent entities significantly increased by Denar 1.964 million, i.e. 12.0%. This increase in the sources of funding of parent entities in the second quarter is primarily due to using short-term loans, which determine three quarters of the quarterly growth of these funding sources.

The decline in deposits and in liquid assets influenced the change in the structure of cash inflows³⁶ in the second quarter of 2013, compared to previous quarters. Thus, if in the past three quarters, deposit growth had the largest share in the formation of the cash flows of the banking system, in the second quarter of 2013 this role was played by the reduced liquid assets and the growth of other non-deposit sources of funds, primarily borrowings from the parent entities and liabilities to financial institutions, and partly capital instruments. On the part of banks' cash outflows, in the second quarter of 2013, most significant was the share of the increased loans to non-financial entities, which shows that despite the still present credit risk aversion, some of the banks are oriented toward increasing their loan portfolio. Decline in deposits, mainly caused by the payment of a dividend by a domestic company to foreign shareholders, had a relatively noticeable share in the cash outflows of the banking system.

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



Source: NBRM, based on data submitted by banks

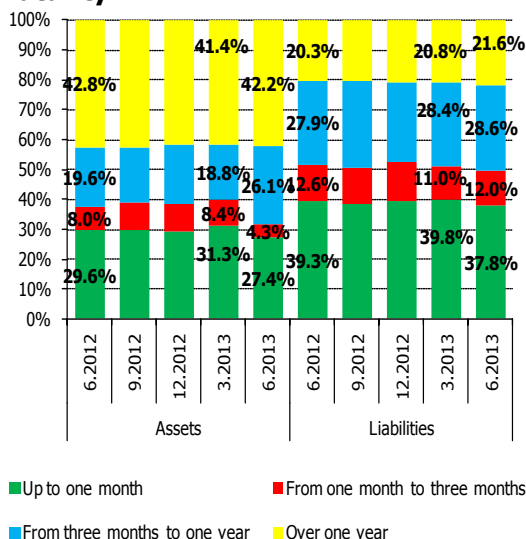
*The category of other assets includes assets other than credits to nonfinancial entities not included in the category of liquid assets (long-term placements in foreign and domestic banks, foreign currency reserve requirement, foreclosed assets, fixed assets, etc.).

**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.).

³⁶ Cash inflows and outflows of banks were obtained indirectly, i.e. by changing the balances of some accounts of the banks' balance sheets. The effect on the banks' cash flows arising from the expenses and income that do not represent cash outflow or inflow (e.g., loan write-off, revaluation of securities available for sale or held for trading, depreciation of fixed assets, net exchange differences etc.) is an integral part of the change in the corresponding balance sheet items the corresponding inflow or outflow refer to.



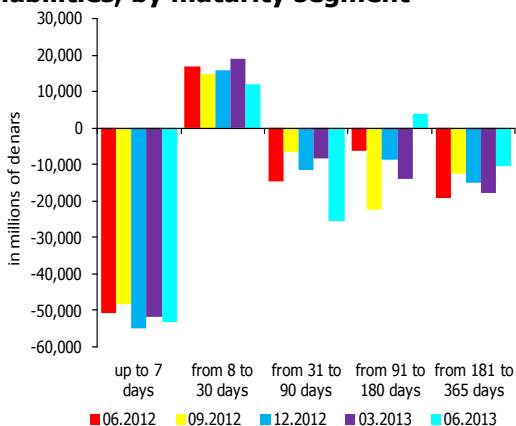
Figure 51 Structure of banks' assets and liabilities, by contractual residual maturity



Source: NBRM, based on data submitted by banks

In the second quarter of 2013, the structure of assets according to the contractual residual maturity registered an increased share of assets with remaining maturity of three months to one year, at the expense of the decline in the share of assets with shorter maturities, which is mainly due to the decrease of liquid assets. The contractual residual maturity of banks' liabilities further increased, as confirmed by the quarterly decline in the liabilities with residual maturity of up to one month and increase in the liabilities with residual maturity of over one year, reflecting the increase in long-term deposits (Annex 29).

Figure 52 Contractual residual maturity (mis)match between assets and liabilities, by maturity segment



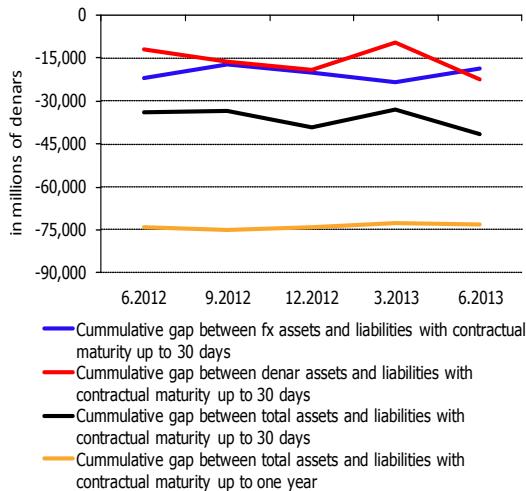
Source: NBRM, based on data submitted by banks

The contractual maturity mismatch between banks' assets and liabilities, beside in the maturity bucket of 8 to 30 days, for the first time noticed a positive gap in the maturity bucket of three to six months. On the other hand, in the second quarter of 2013, the maturity bucket of one to three months registered a significant deepening of the negative maturity mismatch between assets and liabilities. The main driver of these changes are the changes in the contractual maturity structure of assets, i.e. the growth of funds with residual maturity of three to six months, followed by the decline in the assets in the maturity bucket of one to three months.

The dynamics of assets and liabilities according to their contractual maturity, in the second quarter of 2013, acted toward increasing the cumulative negative gap between assets and liabilities with residual maturity up to 30 days, and modest reduction of the gap up to one year. Deeper cumulative gap between assets and liabilities of banks with contractual residual maturity up to 30 days, results from the cumulative gap in Denars, while the cumulative gap in foreign currency contracted during the second quarter of 2013.

Observing the currency features, the relative importance of the cumulative contractual difference between assets and liabilities up to 30 days, expressed as a percentage of assets with the same contractual residual maturity, is more pronounced in foreign currency assets and liabilities. With foreign assets and liabilities,

Figure 53 Cumulative gap between assets and liabilities with contractual residual maturity of up to 30 days and up to one year

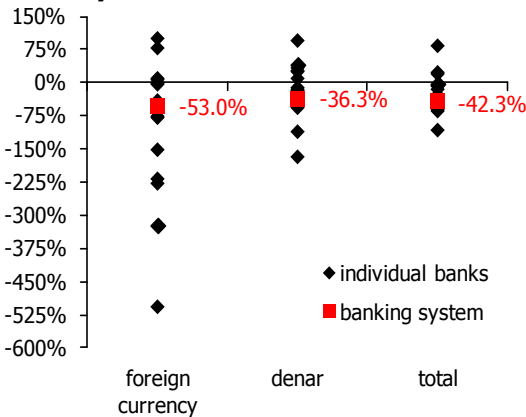


Source: NBRM, based on data submitted by banks

greater dispersion of this indicator among individual banks is registered, which is a direct consequence of the currency conversion of assets present in some of the banks during the period of intensive lending.

Despite the negative difference between assets and liabilities according to the contractual maturity, in the expected maturity the cumulative gap between assets and liabilities in all maturity buckets is positive, which leads to the conclusion that banks retain their expectations for stability of deposits as the main source of funding for their activities (Annex 30). Namely, according to the banks' expectations, 80.3% of the deposits with residual maturity up to three months should be stable and remain in the banks in the next three months. The expected stability of time deposits is 78.5%, while that of sight deposits is 91.4%.

Figure 54 Cumulative gap between assets and liabilities with contractual residual maturity of up to 30 days as percent of cumulative assets with same contractual residual maturity, by currency as of 30.06.2013



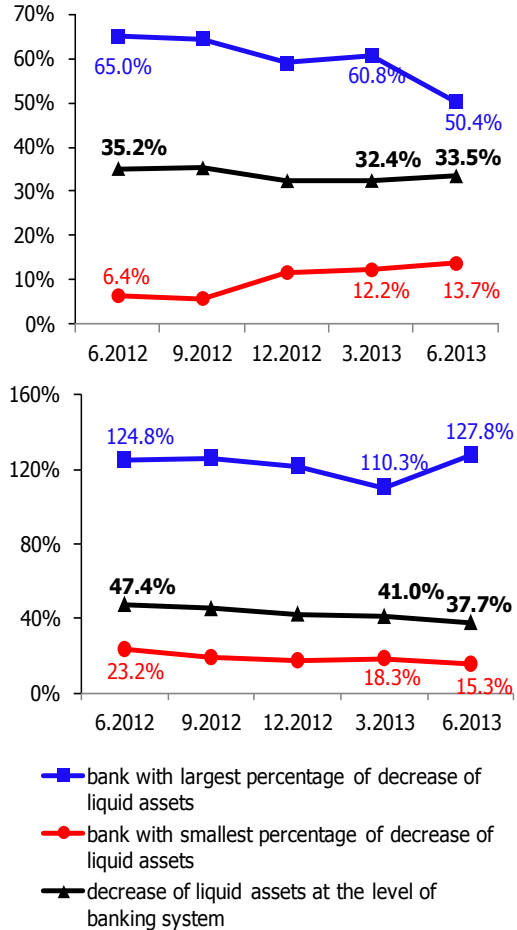
Source: NBRM, based on data submitted by banks

The Macedonian banking system remains satisfactorily resilient to simulated liquidity shocks. Stress testing showed that the liquid assets of the banking system are sufficient to withstand potential shocks of outflow of funding sources. Greater vulnerability of the banking system is registered in the simulated withdrawal of the deposits of the twenty largest depositors, compared to the simulation of withdrawal of 20% of household deposits, although the trend of the results shows a gradual reduction of the difference due to the gradual reduction of deposits concentration. Stress testing showed that the share of liquid assets in the total assets during the simulated withdrawal of the deposits of the twenty largest depositors is reduced from 32.0% to 22.2%, while in the simulation of withdrawal of 20% of household deposits, the share of liquid assets in the total assets would be 23.3%. The coverage of short-term liabilities³⁷ in these simulations was reduced by 13.0 and 11.4 percentage points, respectively, while the coverage of the total deposits with liquid assets decreased by 12.2 and 10.7 percentage points, respectively. The results of

³⁷ The simulations assume that deposits withdrawn from banks are of short-term maturity profile and are considered short-term liabilities.



Figure 55 Results for the simulations for withdrawal of: -20% of households deposits (up) and - deposits of the twenty largest depositors (down)



Source: NBRM calculations, based on data submitted by banks

the simulation that includes outflow of domestic banks' sources of funding from foreign parent entities³⁸ also confirm the satisfactory liquidity position of domestic banks. The liquid assets of the banking system would decrease by 10.9%, while the share of liquid assets in total assets would drop by 3.2 percentage points.

³⁸ Other than subordinated and hybrid capital instruments whose payment is specifically regulated by the National Bank.

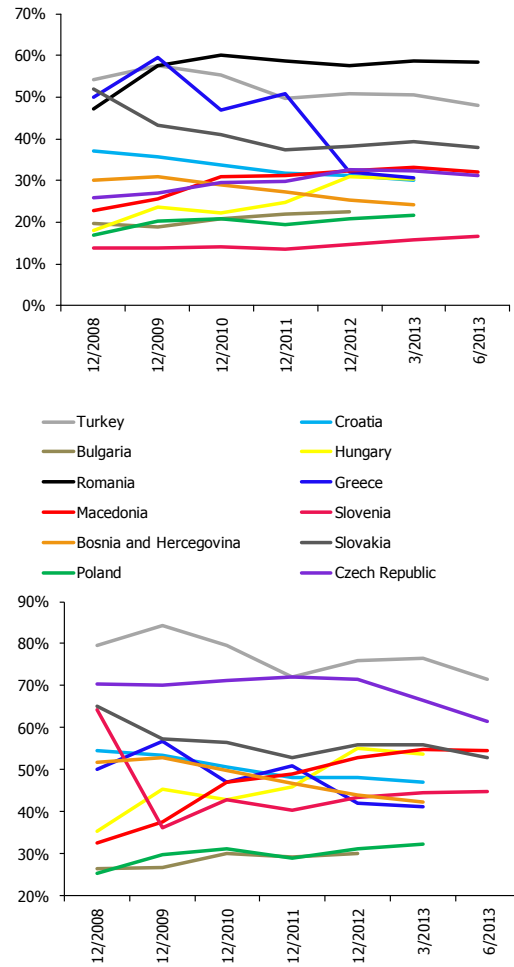
Selected indicators of liquidity for the banking system of the Republic of Macedonia and banking systems of countries in the region and the EU

In the past five years, banks from different countries kept stable and high preference for liquid assets, regardless of the fact that the period was accompanied by the global financial crisis and lower economic activity. Significant exception to this is the banking system of our southern neighbor, where the share of liquid assets in total assets experienced a continuous decline due to the debt and economic crisis. Such movements are, on the one hand, due to the deteriorating performance of the real economy in most countries as a result of the recession movements and dealing with the debt crisis in the Euro area and its consequences, and on the other, they could be due to the possible effects of the announced introduction of the standard liquidity indicators as part of the amendments to the Basel Accord, i.e. the so-called Basel 3.

The coverage of short-term liabilities with liquid assets is more dispersed among the analyzed countries, due primarily to the maturity profile of banks' sources of funding, i.e. the share of short-term versus long-term sources of funding for individual banking systems. Also, the direction of movement of this indicator over the past few years is different in different countries. In some countries this indicator decreased over the past few years, while in others (including the Republic of Macedonia) the indicator increased, showing a trend of rising relative importance of the long-term component of banks' sources of funding.

The banking system of the Republic of Macedonia, with a share of just over 30% of liquid assets in the total assets is in the middle, compared to the banking systems of other countries, and the same applies for the coverage of short-term liabilities with liquid assets. By individual country, the highest share of liquid assets in total assets is recorded in the banking systems of Romania and Turkey, while the coverage of short-term liabilities with liquid assets is highest in Turkey and in the Czech Republic.

Figure 56 Liquidity ratios for certain countries: liquid assets/total assets (up) liquid assets/short-term liabilities (down)

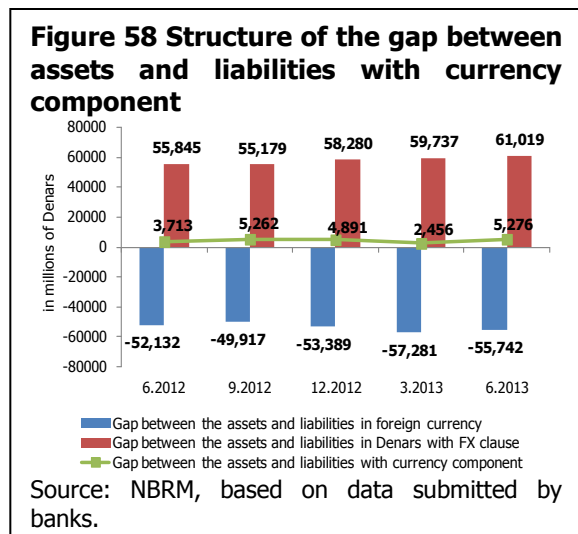
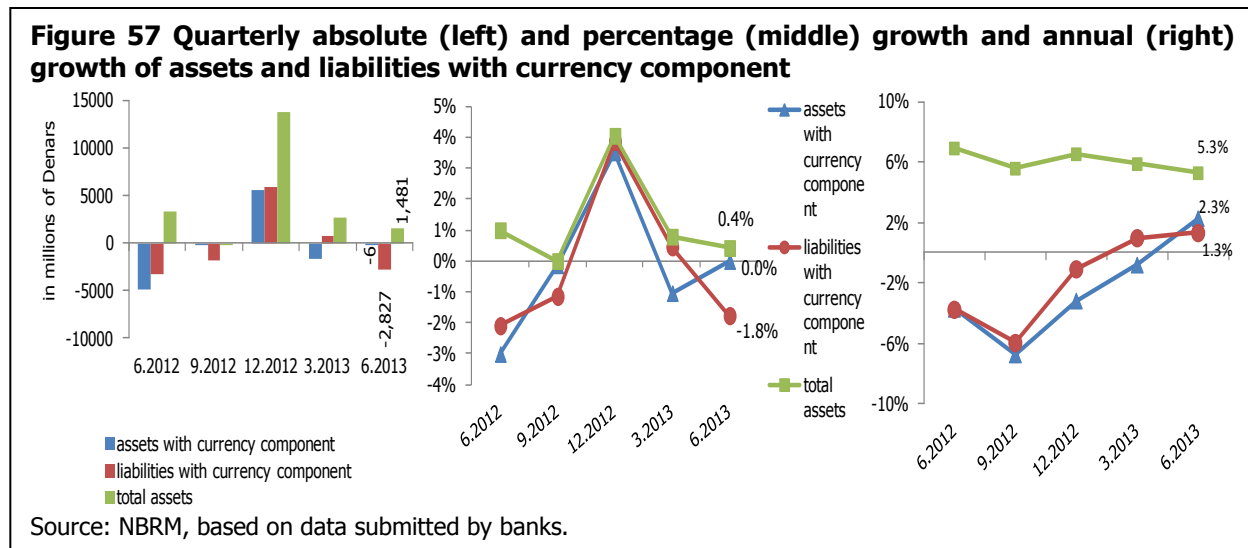


Source: FSI database, IMF web page.



3.3 Currency risk

The low exposure to currency risk in the Macedonian banking system is underpinned by the applied strategy of fixed exchange rate of the Denar against the Euro, as Euro is the most common currency in the banks' assets and liabilities with foreign currency component. In the second quarter of 2013, the positive gap between assets and liabilities with currency component increased (the growth continued in the third quarter of the year), but currency risk to which banks are exposed remained low. All banks respect the prescribed limit for the aggregate foreign exchange position.

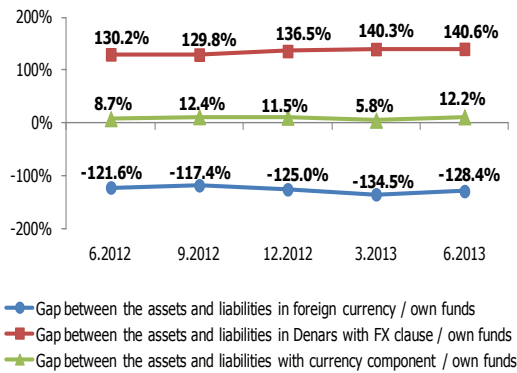


At the end of the second quarter of 2013, the positive gap between assets and liabilities with currency component³⁹ registered almost more than double growth compared to the previous quarter and amounted to Denar 5,276 million. The expansion of this gap is entirely due to the reduction of liabilities with currency component by Denar 2,827 million⁴⁰. Reduction of liabilities with currency component caused an expansion of the positive gap between assets and liabilities in Denars with FX clause by Denar 1,282 million and narrowing of the negative gap between assets

³⁹ The gap between assets and liabilities with currency component is the difference between assets and liabilities with currency component as determined by the methodology for managing currency risk, where the assets with currency component are presented on a net basis, i.e. less the impairment for the assets with currency component classified in C, D and E risk categories.

⁴⁰ Reduction of liabilities with currency component is due to the reduction of: current accounts of private non-financial companies in foreign currency, short-term deposits of non-financial companies in Denars with FX clause and deposits of natural persons and non-residents in foreign currency. For more details see Sections II. Activities of banks and III.2 Liquidity risk.

Figure 59 Share of the gap between assets and liabilities with currency component in banks' own funds

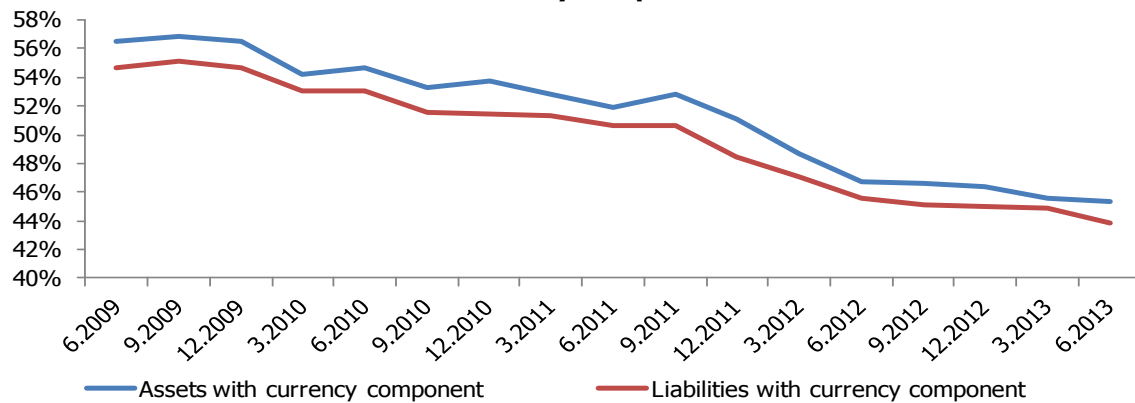


Source: NBRM, based on data submitted by banks.

and liabilities in foreign currency by Denar 1,539 million.

The increasing gap between assets and liabilities with a currency component led to an increase in its share in the banks' own funds by 6.4 percentage points. This trend continued in the following months, so at the beginning of October 2013 the gap reached a share of 16% in the own funds. However, despite this increase, banks still maintain low exposure to currency risk, as this ratio is more than twice lower than the prescribed limit of 30% of the own funds.

Figure 60 Quarterly absolute (left) and percentage (middle) growth and annual (right) growth of assets and liabilities with currency component



Source: NBRM, based on data submitted by banks.

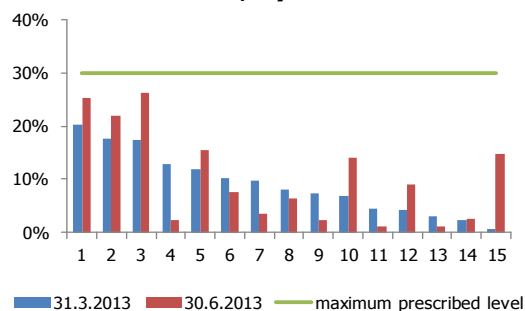
Table 3 Currency structure of assets and liabilities with currency component

Currency	30.6.2012		31.3.2013		30.6.2013	
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
Euro	88.3%	87.9%	88.6%	88.1%	89.1%	88.4%
US dollar	7.3%	7.8%	6.9%	7.6%	6.6%	7.3%
Swiss franc	2.0%	2.0%	2.0%	2.0%	1.9%	2.0%
Other	2.4%	2.3%	2.4%	2.3%	2.3%	2.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: NBRM, based on data submitted by banks.

In the analysis of the currency component of the banking system's balance sheets, most apparent is the process of de-euroization, i.e. denarization of banks' activities, which reflects the currency preferences of banks' customers. The share of assets and liabilities with currency component in the total assets of the banking system, generally has a downward trend. In the last quarter, there was a more significant decline in the share of liabilities with currency component, which fell by 1.0 percentage point in just one quarter.

Euro is the dominant foreign currency in the structure of assets and liabilities with currency component.


Figure 61 Aggregate currency position to own funds ratio, by bank


Source: NBRM, based on data submitted by banks.

In the second quarter of 2013, banks maintained the prescribed limit for the aggregate foreign exchange position (30% of the own funds). Of the fifteen banks that report on the aggregate currency position, only three banks reported short aggregate currency position, while the remaining twelve banks reported long aggregate currency position⁴¹. Moreover, at the beginning of the third quarter of 2013, the aggregate currency position of all banks remained within the prescribed limit for the aggregate currency position.

Table 4 Open currency position, by currency, 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%	4	1	6	5	11	2	11	2
from 5% to 10%	3			2				
from 10% to 20%	4			1				
from 20% to 30%	2							
over 30%	1							

Source: NBRM, based on data submitted by banks.

3.4 Interest rate risk in the banking book

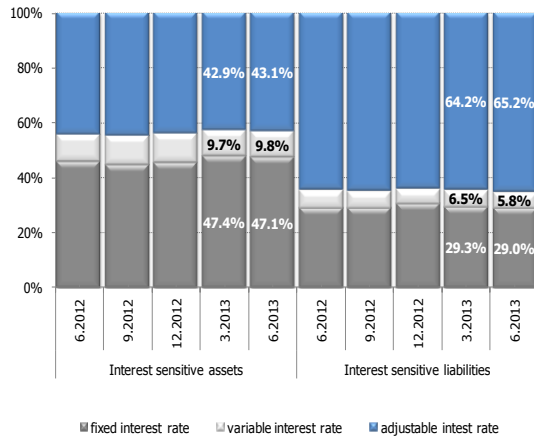
The use of adjustable interest rates⁴² in the major part of banks' key activities - loans and deposits, contributed the exposure of banks in the Republic of Macedonia to the interest rate risk in the banking book to remain low. In the absence of limitation or regulation⁴³ of the unilateral adjustment of interest rates, banks transfer the direct effects of the interest rate risk to their customers. Furthermore, the use of adjustable interest rates reduces the efficiency of transmission of the effects of monetary measures.

⁴¹ If we consider the average monthly aggregate currency position of banks in the second quarter of 2013, eleven banks have sustained aggregate long currency position and only one bank has a sustained aggregate short currency position.

⁴² Banks make adjustments to interest rates unilaterally, because of the changes in their interest rate policy, rather than due to a particular key interest rate. The use of adjustable interest rates ensures better management, avoidance or risk transfer and could serve as an instrument for managing liquidity and profitability.

⁴³ In the current legislation in this area there is an ambiguity regarding the use of clauses for unilateral adjustment of interest rates, i.e. it does not contain provisions on the manner of determining and changing the interest rates, nor it provides a definition of what is meant by adjustable interest rates.

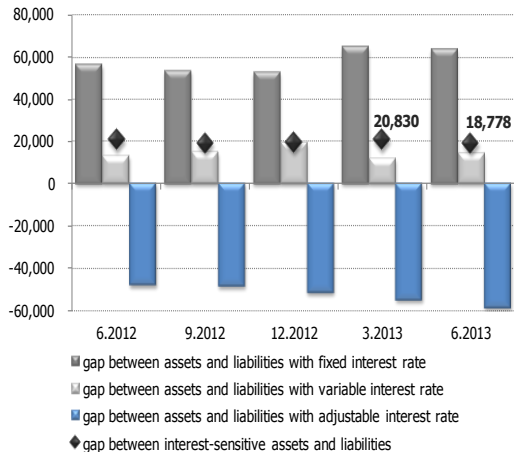
Figure 62 Structure of interest-sensitive assets and liabilities, by type of interest rates



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

According to the type of interest rate, positions with adjustable interest rates prevail in the interest sensitive assets and liabilities. In the interest sensitive assets, these interest rates are most evident in loans (62.3% of the loans are with adjustable interest rates), which account for 99.9% of the total assets with adjustable interest rates. In this way, if interest rates on loans are adjusted upwardly, the interest rate risk can be transformed into credit risk. However, in the case of determined upper level of the interest rate (in accordance with the Law on Obligations) and relaxed monetary policy of the National Bank, a significant increase in interest rates should not be expected. On the part of the interest sensitive liabilities, adjustable interest rates are completely applied to sight deposits (100%), while with time deposits they account for 66.9%⁴⁴. With other financial instruments, which form the rest of the interest sensitive assets and liabilities, fixed interest rates prevail.

Figure 63 Structure of interest-sensitive assets and liabilities, by type of interest rates



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

Gaps between interest sensitive assets and liabilities with fixed interest rate and with variable interest rate are positive⁴⁵, while the gap in the positions with adjustable interest rate⁴⁶ remains negative.

Items with adjustable interest rates are present in all maturity buckets of the interest sensitive assets and liabilities, with the most pronounced participation in the interest sensitive liabilities with shorter maturity, due to the sight deposits. The maturity structure of positions with adjustable interest rates indirectly represents banks' expectations for the period until the next "adjustment" of the interest rates, which is expected in three to six months for the assets

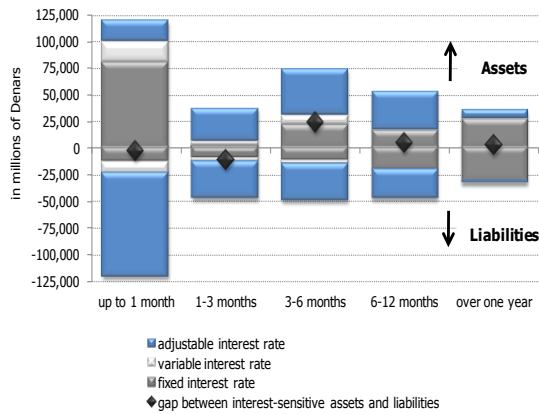
⁴⁴ Sight deposits and time deposits in total interest sensitive liabilities that have adjustable interest rates account for 5.3% and 61.8%, respectively.

⁴⁵ The positive gap in fixed interest rate positions arises from the fact that this type of interest rate prevails in most items of interest-sensitive assets, namely in allocated reserve requirement (100%), placements in securities (98.4%) and deposits (94.5%). The positive gap in the positions with variable interest rates results from the fact that a large portion (65.8%) of sight assets have variable interest rates.

⁴⁶ The negative gap in the positions with adjustable interest rates stems from the fact that a significant portion of time deposits (66.9%) and almost all sight liabilities (98.9%) have adjustable interest rates.



Figure 64 Structure of interest-sensitive assets and liabilities, by type of interest rates

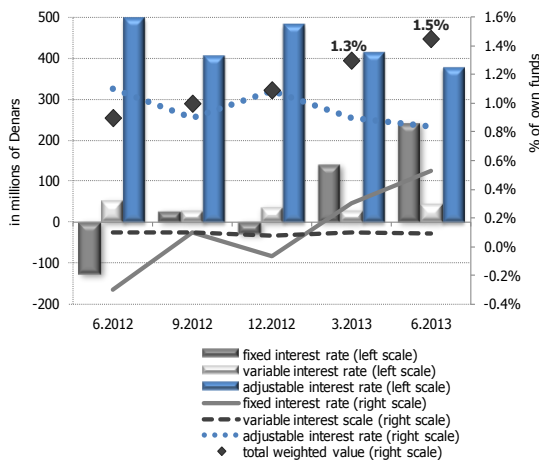


Source: the NBRM, based on data submitted by banks.

with adjustable interest rates (primarily loans), and in one month for the liabilities with adjustable interest rates (sight deposits and transaction accounts).

Another indicator of the low level of banks' exposure to interest rate risk in the banking book is the ratio between the total weighted value of the banking book⁴⁷ and own funds, which in the second quarter of 2013 increased, but is insignificant 1.5%. By bank, this ratio ranges between 0.1% and 10.1% with a median of 1.8% and third quartile of 3.8%. The share of the weighted value in the own funds will continue to be low, in the absence of regulation that restricts or regulates the use of adjustable interest rates on credit and deposit products.

Figure 65 Structure of interest-sensitive assets and liabilities, by type of interest rates



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

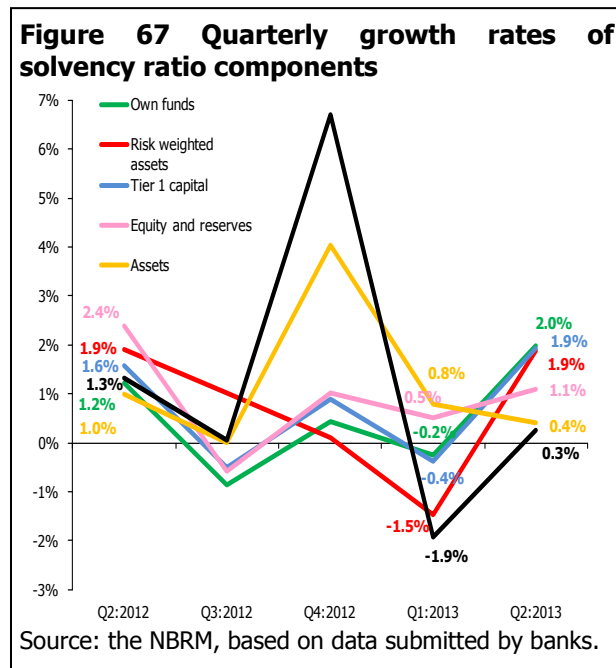
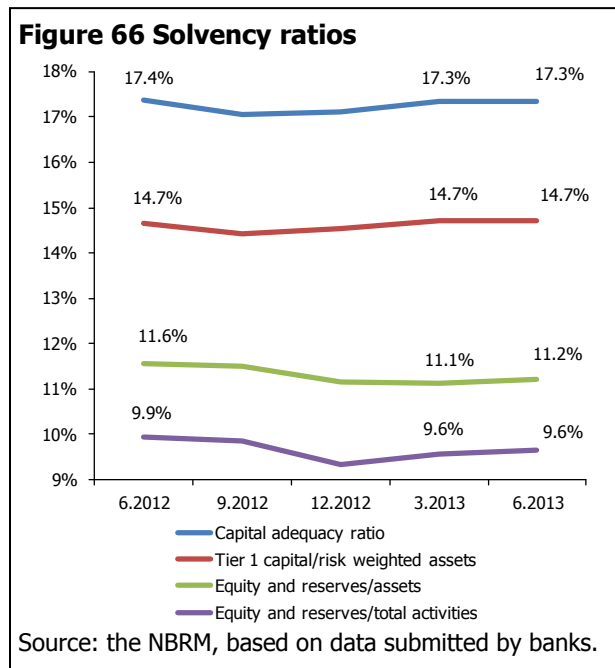
⁴⁷ The total weighted value of the banking book is obtained by aggregating the weighted value of each bank. Analyzing by bank, the net-weighted value of the banking book to bank's own funds ratio may equal up to 20%.

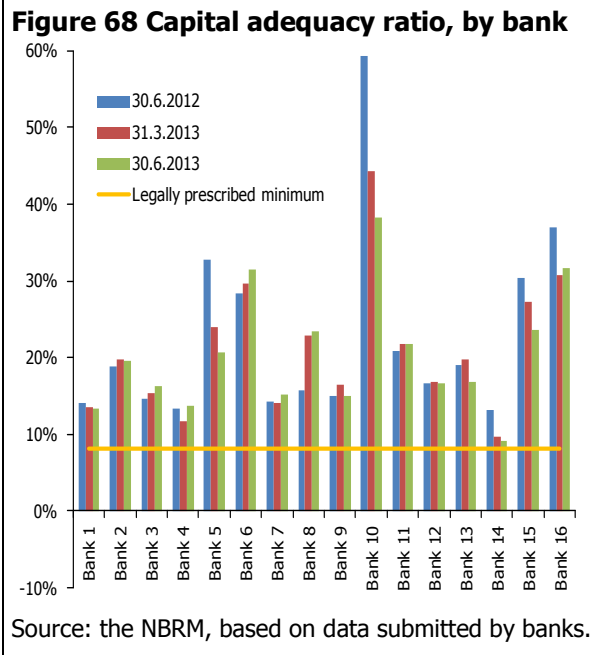
3.5 Insolvency risk

The solvency of the banking system remained at the same level as at March 31, 2013, with the capital adequacy ratio equaling 17.3%. Banks' own funds increased during the second quarter of 2013, as a result of reinvesting part of the profits realized in 2012 and issuing two new subordinated instruments. Quarterly growth was recorded also in the capital requirements for covering credit risk, mainly as a result of the increasing claims from the retail credit portfolio, and the currency risk due to the expansion of the net long position in Euros. The resilience of the banking system was maintained, as indicated by the similar results of the stress test simulations for the end of the first and second quarters of 2013.

3.5.1 Solvency and capitalization ratios of the banking system

Solvency ratios of the banking system remained at the same level as at March 31, 2013. The exception is the capital and reserves to total assets ratio, which increased by minimal 0.1 percentage point.



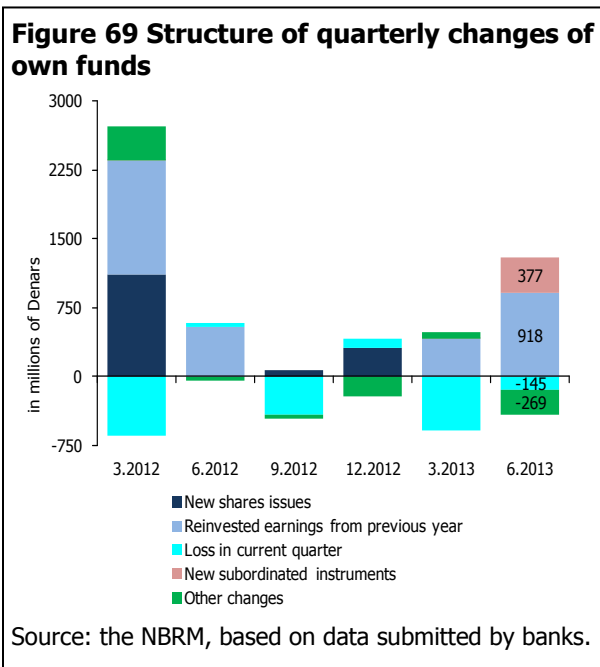


The solvency ratio components registered higher quarterly growth rates, compared with the first quarter of 2013. Exception are total assets, whose quarterly growth has slowed, largely due to lower Denar liquid assets in banks, which are included in the calculation of capital requirements with a weight of 0%.

In the second quarter of 2013, the capital adequacy ratio increased with six banks, which account for 36.7% of the total assets of the banking system.

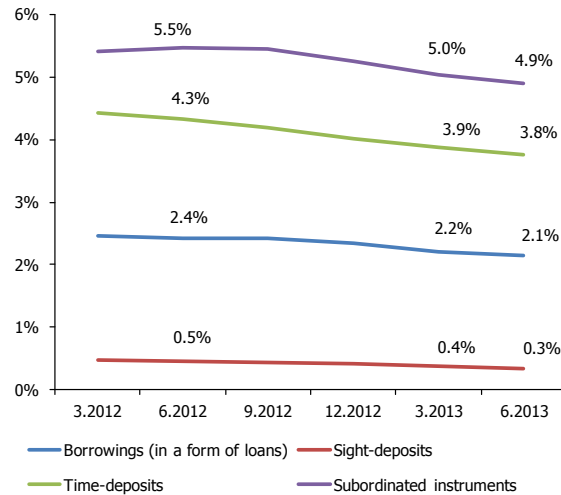
3.5.2 Movements and quality of the own funds of the banking system

In the second quarter of 2013, quarterly and annual growth of own funds of the banking system accelerated, largely as a result of the reinvestment of part of the profits earned in 2012. Namely, after the realized quarterly decline in the first quarter of 2013, in the second quarter, banking system's own funds increased by Denar 881 million, or by 2%. On annual basis (June 30, 2012 - June 30, 2013), own funds increased by Denar 587 million, or 1.3%, which is by Denar 342 million, or 0.7 percentage points higher than the annual growth made between March 31, 2012 and March 31, 2013. Quarterly growth of own funds results from the reinvestment of part of the profits earned in 2012, which caused an increase in the position "reserves and retained profit or loss" by Denar 767 million. An additional reason for the growth in own funds is the issuing of two new subordinated instruments in the second quarter of 2013, totaling Denar 377 million (one instrument is in the amount of Denar 371 million and is invested by the parent entity of one bank from the group of large banks, and the remaining Denar 6 million were invested by the parent entity of one bank from the group of small banks)⁴⁸. Despite the gradual reduction in the



⁴⁸ With some of the banks, permitted amount of subordinated instruments registered a quarterly decline (due to early repayment of one instrument, and inclusion of part of the subordinated instruments in the calculation of own funds at a discounted value, as they entered the last five years to maturity). Hence, in the second quarter of 2013, the

Figure 70 Interest expenses rate* for separate sources of funds



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

*Note: The interest expenses rate is calculated as a ratio between the amount of interest expenses realized in the last four quarters (the cumulative flow of interest expenses realized in the last four quarters) and the average amount of sources of funds, calculated as an average of the their stock in the last five quarters.

rate of interest expenses for subordinated instruments, they are still more expensive sources of funding compared with other sources, due to their characteristics⁴⁹.

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

3.5.3 Movements and structure of capital requirements and available capital of the banking system

In the second quarter of 2013, regulatory capital requirements for covering risks (hereinafter capital requirements)⁵⁰ of the banking system registered similar dynamics of movement as own funds. Thus, after the realized quarterly decline in the first three months of 2013, capital requirements of banks increased in the second quarter of the year, in the amount of Denar 388 million, or by 1.9%. On annual basis (June 30, 2012 – June 30, 2013), they increased by Denar 316 million, or by 1.5%, which is almost identical to the annual growth achieved between March 31, 2012 and March 31, 2013 (when capital requirements increased by Denar 314 million, or by 1.6%). The quarterly growth of total capital requirements arises from the increase in the capital requirements for credit risk (by Denar 313 million or by 1.8%) and currency risk (by Denar 75 million, or by 15.8%), while capital requirements for operational risk remained unchanged⁵¹.

permitted amount of subordinated instruments included in the calculation of banks' own funds increased by only Denar 75 million.

⁴⁹ The required rate of return (interest rate) of subordinated instruments is usually higher than other financial liabilities of the bank, as investing in them means taking more risk by investors. Subordinated instruments contain a subordination clause, i.e. a clause stating that in the event of bankruptcy or liquidation of the issuer of the instrument, the liabilities on the basis of the subordinated instrument will be paid, but only after the settlement of liabilities to other creditors and before the settlement of liabilities to shareholders. Additionally, they cannot be paid or redeemed by the bank before the maturity date (the maturity date must be longer than five years and one day), except in case of their conversion into common or non-cumulative preferred shares of the bank or into hybrid instruments in the bank (payment/return of the hybrid instrument requires the consent of the National Bank).

⁵⁰ Capital requirements are determined at the level of 8% of risk weighted assets.

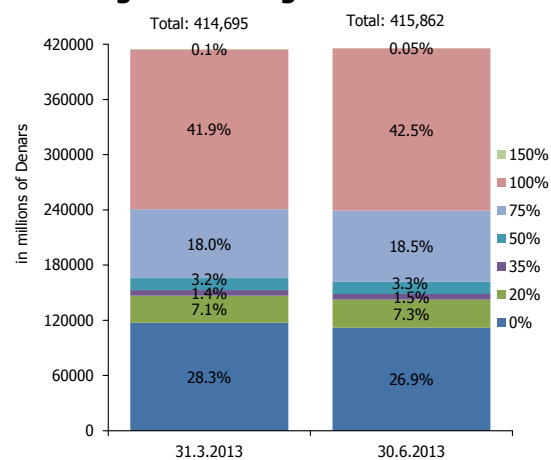
⁵¹ According to regulations, changes in the level of capital requirements for operational risk at this time of year are possible only in the event of possible review of the annual financial statements of banks.


Table 5 Capital requirements for credit risk, by category of exposure

Categories of exposure	Quarterly change of the total balance and off balance sheet exposure (net of impairment losses)				Capital requirements for credit risk							
	I quarter of 2013		II quarter of 2013		31.12.2012	31.3.2013	30.6.2013	Quarterly change				
	In millions of Denars	In %	In millions of Denars	In %				I quarter of 2013		II quarter of 2013		
					In millions of Denars	In %	In millions of Denars	In %				
Claims on central banks and central governments	4,240	5.7%	-2,086	-2.6%	0	0	0	0	0.0%	0	0.0%	
Claims on local self-government and regional government	114	12.8%	-9	-0.9%	36	37	40	1	2.8%	3	9.1%	
Claims on public institutions	848	26.5%	49	1.2%	97	105	116	8	8.2%	12	11.0%	
Claims on multilateral development banks and international organizations	0	/	0	/	0	0	0	0	/	0	/	
Claims on banks	-109	-0.3%	377	0.9%	1,063	1,011	1,040	-51	-4.8%	28	2.8%	
Claims on other companies	-1,357	-1.2%	-1,707	-1.5%	7,571	7,404	7,259	-167	-2.2%	-144	-1.9%	
Retail credit portfolio	-16	0.0%	6,349	6.9%	5,079	5,103	5,543	24	0.5%	441	8.6%	
Claims secured by residential property	552	6.4%	172	1.9%	386	420	424	34	8.8%	4	1.0%	
Claims secured by commercial real estate	1,381	5.0%	-707	-2.4%	2,029	2,090	2,042	61	3.0%	-48	-2.3%	
Holdings in investment funds	0	0.0%	0	0.0%	1	1	1	0	0.0%	0	0.0%	
Other positions	-1,354	-3.0%	-1,271	-2.9%	1,622	1,540	1,557	-81	-5.0%	17	1.1%	
Total	4,299	1.0%	1,167	0.3%	17,883	17,710	18,023	-173	-1.0%	313	1.8%	

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

The quarterly growth of capital requirements for credit risk arises mostly from the increase in the retail credit portfolio. At the same time, claims on other companies registered quarterly decline. In both changes, there is a significant participation of one bank from the group of medium banks⁵².

Figure 71 Structure of total on- and off-balance sheet exposure to credit risk, according to risk weights


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

Claims on central governments and central banks experienced a quarterly decline, as a result mostly of the reduction in banks' cash (small decline was registered also in the placements in domestic Treasury bills). This change has no impact on the amount of capital requirements for credit risk, given the fact that these assets are included in the calculation of capital requirements with the risk weight of 0%. On the other hand, this reduction has caused changes in the structure of the overall balance sheet and off-balance sheet exposure to credit risk, according to the risk weights, towards reducing the share of items with risk weights of 0% at the expense of increasing the share of items with higher risk weights.

⁵² Such movements in the bank result mostly from the conducted reclassification of part of the claims on other companies in the retail credit portfolio. If we exclude the effects of the reclassification of the claims in this bank, the retail credit portfolio continues to have the largest contribution to the increase in capital requirements for credit risk, but the claims on other companies would not notice a quarterly decline, but probably some stagnant movement or even a slight increase.

Table 6 Capital requirements for covering currency risk, by net currency positions by currency

in millions of Denars

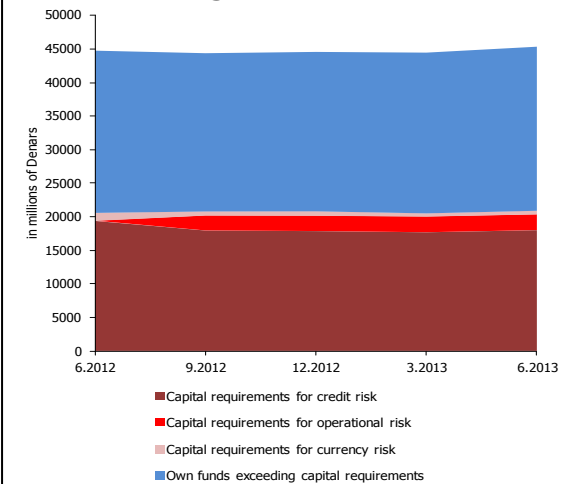
Capital requirements for currency risk arising from the following net-positions:	31.12.2012	31.3.2013	30.6.2013	Quarterly change			
				I quarter of 2013		II quarter of 2013	
				In millions of Denars	In %	In millions of Denars	In %
Net positions in foreign currency	658	472	547	-186	-28.2%	75	15.8%
- EUR	621	417	505	-204	-32.9%	88	21.2%
- USD	1	23	12	22	1504.1%	-12	-49.9%
- CHF	5	11	7	6	134.3%	-4	-36.7%
- Other	31	22	24	-9	-29.5%	2	9.2%
Net positions in gold	0.003	0.003	0.003	0	0.0%	0	0.0%
Total amount of capital requirements for currency risk	658	472	547	-186	-28.2%	75	15.8%

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

The quarterly increase in capital requirements for currency risk arises from the expansion of the net long currency position in Euros, which is mostly due to the faster decline of the liabilities in Euros (Denar 24,473 million), compared with the decline of assets in Euros (by Denar 21,929 million)⁵³ which are used for calculating the capital requirement for currency risk. The relatively fast quarterly decline in these assets and liabilities in Euros stems from the fact that, according to the regulations, one bank from the group of large banks fulfilled the requirement and is released from the obligation to determine and dispose of a capital requirement for currency risk as of June 30, 2013⁵⁴ (on the other hand, as of March 31, 2013 this bank was obliged to determine capital requirements for currency risk).

Higher quarterly growth of own funds in comparison with the increase in the capital requirements contributed to the **quarterly growth of available capital above the minimum level required to cover the risks** (of Denar 493 million or 2.1%), which caused minimal increment in its share in the total own funds from 53.8% to 53.9%.

Figure 72 Structure of own funds, by their use for covering risks



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

⁵³ Determined in accordance with the Decision on the methodology for determining capital adequacy.

⁵⁴ The Bank is not obliged to determine and dispose of capital requirement for currency risk, if the amount of the net position in gold and of the aggregate currency position, as determined according to the Decision on the methodology for determining capital adequacy, is not more than 2% of bank's own funds.



Capital requirements for covering risks and the capital adequacy ratio, by groups of banks are presented in Annex 35.

3.5.4 Stress testing of the resilience of the banking system to hypothetical shocks

Conducted testing of the resilience of the banking system and of individual banks in the Republic of Macedonia to simulated shocks indicate similar results as at March 31, 2013, but they are somewhat worse compared to December 31, 2012. The capital adequacy ratio of the banking system does not fall below 8% in any of the simulations.

Table 7 Results of the stress-test simulations of the resilience of the banking system and individual banks to credit shocks, as at 30 June, 2013

Simulations	Capital adequacy ratio (CAR) at the banking system level, after simulation			Number of banks with CAR after simulation below the CAR of the overall banking system after simulation		
	31.12.2012	31.3.2013	30.6.2013	31.12.2012	31.3.2013	30.6.2013
Increase in the credit risk exposure classified in the risk categories C, D and E by 30%	14.5%	14.4%	14.3%	9	8	9
Increase in the credit risk exposure classified in the risk categories C, D and E by 50%	12.6%	12.4%	12.3%	8	7	7
Increase in the credit risk exposure classified in the risk categories C, D and E by 80%	9.6%	9.1%	8.8%	7	7	7
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	8.6%	8.6%	8.8%	6	7	7
Simultaneous reclassification in the risk category C of the five largest credit exposures to nonfinancial entities (including the connected persons)	14.2%	14.4%	14.4%	6	6	6

Capital adequacy ratio (CAR), before simulation: 17.3%

Number of banks with CAR before simulation below the CAR of the overall banking system before simulation: 8

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

Hypothetical shocks on the side of credit risk (isolated or combined with shocks in other risks) would affect most



severely the stability of the banking system. Thus, assuming an increase of 30% of the credit exposure classified in risk categories "C", "D" and "E" (credit exposure with higher risk levels), the capital adequacy ratio of the banking system is reduced by few percentage points, down to 14.3%. In case of an assumption for an extreme growth of credit exposure with higher risk levels, of high 80%, the capital adequacy ratio of the banking system is reduced to a level of 8.8%, which is still above the statutory minimum of 8%. A similar decline in capital adequacy is observed amid assumed migration of 10% of the credit exposure classified in risk categories "A" and "B" (credit exposure with lower risk levels) to categories with higher risk levels, which implies the presence of a relatively high amount of "quality" credit exposure, which bears a low degree of risk and for which banks determined a low percentage of impairment. The simulations show that in case of an increase of 87% of the credit exposure to a higher level of risk, i.e. migration of 10.8% of the credit exposure classified in each of the risk categories "A" and "B" to categories with higher risk level, the capital adequacy ratio of the banking system would fall below the statutory minimum level of 8%. These simulations would lead to almost doubling the current share of non-performing into total loans (it would rise from current 12.3% to 21.7%). The analysis by individual bank indicates reduced capacity of certain banks to absorb hypothetical shocks on the side of credit risk, which points to their need for recapitalization and/or reduction of the scope of activities (deleverage).

The negative effects of possible shocks on the side of credit risk would be even more intense, given the relatively high level of concentration of banks' credit exposure. Thus, in case of hypothetical migration of the five largest credit exposures to non-financial entities (including related entities), from the existing risk category to the "transitional" risk category "C" , the capital adequacy ratio of the banking system is reduced by almost 3 percentage points (i.e. close to



17%). Relatively high concentration of credit exposure is observed also when analyzing the structure of exposure by type of borrower. Thus, in the structure of credit exposure to the sector "companies and other customers" more than 60% of the total credit exposure account for customers from the activities "industry" and "wholesale and retail trade". Similar level of concentration is present in the credit exposure to households where more than 60% of the total credit exposure account for two loan products - consumer loans and credit cards. The results of the simulations of the deteriorating quality of credit exposure in certain sectors and credit products are shown in the section of this Report which analyzes the exposure of the banking system to credit risk.

Isolated shocks on the side of currency risk and interest rate risk had no significant effect on the capital adequacy ratio. Given the positive gap between assets and liabilities with currency component, as well as between interest sensitive assets and liabilities of banks, simulated changes in the exchange rate of the Denar against the Euro and in the interest rates have no significant direct impact on the financial result of the banking system and consequently on the level of capital adequacy. However, the possible materialization of these market risks would adversely affect the creditworthiness of banks' customers and would cause shocks also on the side of credit risk. Within the supervisory assessment and banks' internal processes for determining capital requirements, in the near future individual banks may develop a need for maintaining a certain amount of capital for this type of credit risk, which is not covered by the necessary regulatory determination of the capital requirement.


Table 8 Results of the stress-test simulations of the resilience of the banking system and individual banks to credit shocks, as at 30 June, 2013

Simulations	Capital adequacy ratio (CAR) at the banking system level, 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%)		
	31.12.2012	31.3.2013	30.6.2013	31.12.2012	31.3.2013	30.6.2013
Combination of credit and foreign exchange shock						
Increase in the credit risk exposure in the risk categories C, D and E by 50% and depreciation of the foreign exchange rate of the Denar relative to the Euro by 20%	12.5%	12.4%	12.3%	8	7	7
Increase in the credit risk exposure in the risk categories C, D and E by 80% and depreciation of the foreign exchange rate of the Denar relative to the Euro by 30%	9.5%	9.1%	8.9%	7	7	7
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 foreign exchange rate of the Denar relative to the Euro by 30%	8.5%	8.7%	8.9%	6	6	7
Appreciation of the Denar exchange rate relative to the Euro and the US Dollar by 20%	17.1%	17.3%	17.2%	7	7	8
Combination of credit and interest rate shock						
Increase in the credit risk 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 by 1 - 5 percentage points	9.6%	9.2%	8.9%	7	7	7
Combination of credit, foreign exchange and interest rate shock						
Increase in the credit risk exposure in the risk categories C, D and E by 50%, depreciation of the foreign exchange rate of the Denar relative to the Euro by 20% and increase in the interest rates of individual asset and liabilities, on-balance sheet and off-balance sheet positions by 1 - 5 percentage points	12.6%	12.5%	12.4%	8	7	7
Increase in the credit risk exposure in the risk categories C, D and E by 80%, depreciation of the foreign exchange rate of the Denar relative to the Euro by 30% and increase in the interest rates of individual asset and liabilities, on-balance sheet and off-balance sheet positions by 1 - 5 percentage points	9.6%	9.2%	9.0%	7	7	7

Capital adequacy ratio (CAR), before simulation: 17.3%

Number of banks with CAR before simulation below the CAR of the overall banking system before simulation: 8

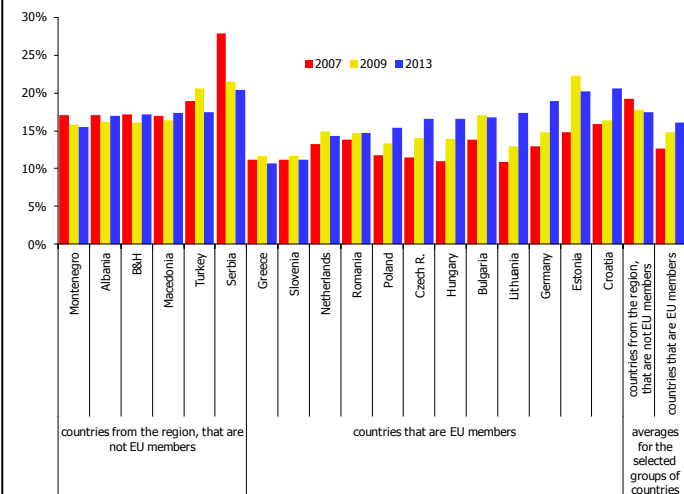
Source: the NBRM, based on data submitted by banks.

Comparative analysis of capital adequacy ratios of the Macedonian banking system and banking systems of the EU Member States and the countries of the region

According to the capital adequacy ratio, the banking system of the Republic of Macedonia is in the upper half of the list of eighteen analyzed countries (countries of the region that are not EU members and selected EU Member States).

In the period 2007-2013, the banking systems of the EU Member States mainly registered an increase in the capital adequacy ratio, while the banking systems of the countries of the region, which are not EU members, registered general reduction of capital adequacy (excluding the Macedonian banking system whose capital adequacy ratio rose by 0.3 percentage points compared with the end of 2007). Thus, in the period 2007-2013, the capital adequacy ratio of the banking systems of the EU Member States increased by 3.4 percentage points, on average, while the average capital adequacy ratio in the banking systems of the countries in the region that are not members of the EU fell by 1.7 percentage points. These developments have contributed to the reduction of the difference in the capital adequacy ratios between the banking systems of the analyzed two groups of countries, present in 2007 (and earlier), when banking systems of the EU Member States were

Figure 73 Capital adequacy ratio, by separate countries



Source: the NBRM, based on data submitted by banks.
 Notes: In eight of the countries analyzed, the data for 2013 are as of 31.3.2013 (B&H, Serbia, Turkey, Greece, Bulgaria, Poland, Croatia and Hungary). In the remaining ten countries analyzed, the data for 2013 are as of 30.06.2013.

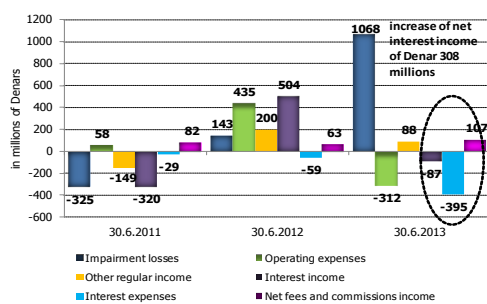
characterized by somewhat lower solvency. During the global financial crisis, the banks from the EU Member States registered lower indicators of capital adequacy, which was followed by a period of their recapitalization (with massive financial support of their countries of origin) and shrinking volume of activity (deleverage). In contrast, banks originating from the countries of the region, faced the global financial crisis with relatively strong indicators of solvency, but that was followed by a period of reduction of their capital mostly as a result of the increased impairment of loan portfolios, amid simultaneously limited opportunities for new recapitalizations.

3.6 Profitability

In the first half of 2013, the banking system registered a positive financial result in the amount of Denar 351.4 million. Basic factors for the profit were the growth of total regular income, primarily of net interest income and lower operating costs. Deteriorated loan portfolio quality caused a significant growth in impairment that contributed to the achievement of lower profits. Compared with the same period last year, profits are lower by Denar 257.7 million. The downward movement of the profit of the banking system led to worsening of the underlying indicators of profitability of banks. However, one should keep in mind that the profit realized last year is largely due to the release of impairment due to foreclosures. If this effect is isolated, the banks' profit shown as of June 30, 2012 would be fully offset. The number of banks which reported profit decreased from eleven to nine, with their share in total assets decreasing from 92.4% as of June 30, 2012 to 67.9% as of June 30, 2013.

The operational efficiency of the banking system of the Republic of Macedonia in the first six months of 2013 improved. Already in August 2013, the banking system in the Republic of Macedonia reported overall positive financial result of Denar 932.6 million⁵⁵, arising from the growth of regular income, but also from the slower growth of impairment and operating costs. The number of banks operating at loss was reduced from seven (as of June 30, 2013) to six (as of August 31, 2013).

Figure 74 Absolute growth of main income and expenses, compared to the same period last year



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

3.6.1 Movement and structure of income and expenses of the banking system and profitability and efficiency indicators

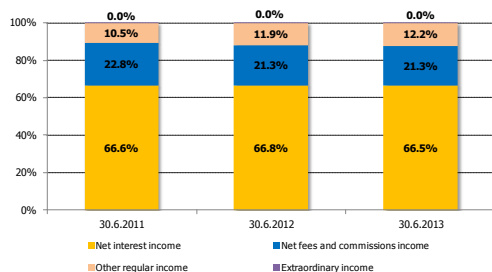
In the first half of 2013, **total income of banks** (total regular income⁵⁶ and extraordinary income), rose by Denar 502.9 million, or 6.0%, compared with the same period of 2012. The increase in total income of banks is based on the increase in almost all income components, with the exception of reduced extraordinary income that has negligible share in the total income (Annex 3). Net interest income increased by Denar 308.0 million or 5.5% due to the reduction in interest expenses which is larger than the decrease in interest income, on an annual basis. Net interest income had the most significant

⁵⁵ Compared with August 31, 2012, the profit is higher by Denar 377.1 million or 67.9%.

⁵⁶ Total regular income includes: net interest income, net fee income and other regular income (net trading income, net income from financial instruments carried at fair value, net income from exchange rate differentials, income based on dividends and capital investments, net gains from sale of financial assets available for sale, capital gains from asset sales, release of provisions for off-balance sheet items, release of the remaining provisions, income from other sources and income based on collected receivables previously written off).



Figure 75 Structure of total income

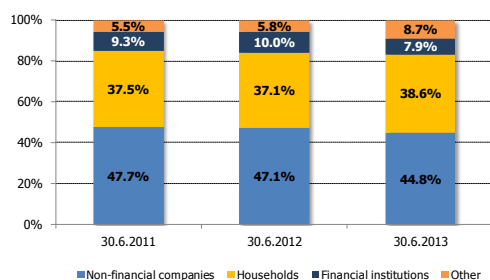


Source: the NBRM, based on data submitted by banks.

contribution (61.2%) in the growth of banks' total income. Net income from fees and commissions and other regular income, each contributed with approximately 20% to the growth of total revenues⁵⁷. The increase in other regular income primarily resulted from the increase in the income from the release of the special reserve for off-balance sheet exposure.

The **structure of total income** registered no significant changes during the first six months of the year. The share of the net interest income of 66.5% is still the largest.

Figure 76 Sector-by-sector structure of interest income



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

In the first half of the year, **interest income** decreased by Denar 87.3 million, or 0.4%, primarily due to the more intensive decline in the interest income from non-financial and financial companies. Interest income from **non-financial companies** fell by Denar 302.2 million or 6.6% due to the slower growth of bank credits to the corporate sector, along with the increase in non-performing loans on which no interest income is recognized, as well as because of the downward trend in lending rates. Interest income from **financial companies** dropped by Denar 216.6 million (or 22.2%), which is primarily due to the lower banks' investment in CB bills and reduced interest rate on this instrument⁵⁸.

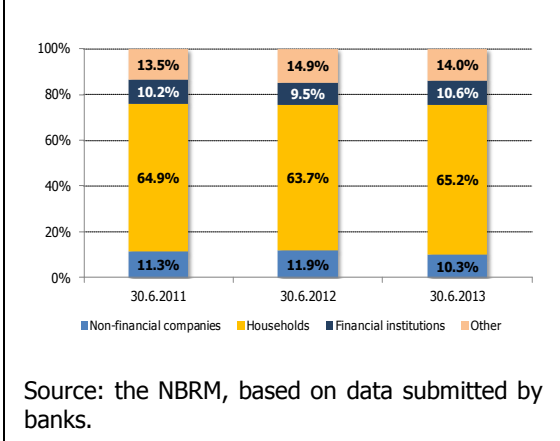
In contrast, interest income from **households** increased by Denar 91.3 million, or 2.5%, which corresponds with the moderately increased credit activity with this sector. However, the most significant contribution to the growth of interest income was that of the **interest income from other entities**, which mostly comes from investments in Treasury bills. This income registered an annual growth of Denar 270.1 million, i.e. 48.1%, due to increased

⁵⁷ Net income from fees and commissions grew by 6.0% (or by Denar 107.0 million), while other regular income increased by Denar 88.0 million or 8.8%.

⁵⁸ In the first half of 2013, the average amount of banks' investments in CB bills was by Denar 9,612 million lower than the amount invested in the first half of 2012. Also, the weighted interest rate had a downward trend, from 4.0% (January 2012) to 3.73% (June 2012). The downward trend continued in the first half of 2013, from 3.49% (January 2013) to 3.21% (June 2013).

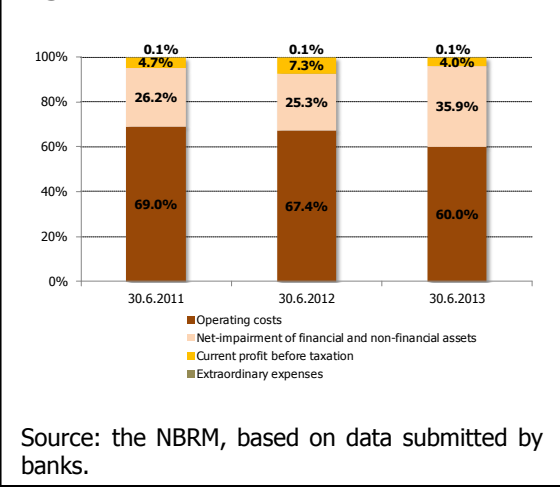
interest in subscribing Treasury bills⁵⁹. These movements increased the share of interest income from other entities and households in the sector structure of interest income.

Figure 77 Sector-by-sector structure of total expenses



Reduced **interest expenses** by Denar 395.3 million, or 8.9%, due to the reduction in the interest expenses from all sectors, excluding the interest expenses to financial companies, also had a significant contribution to the increase in the net interest income. The largest contribution (48.8%) to the decline was that of the interest expenses of the household sector, which decreased by Denar 193.0 million, or 6.8%, on annual basis, as a result of the reduction in the interest rates on time Denar and foreign currency deposits of households. Interest expenses of non-financial companies, which declined by Denar 112.3 million (or 21.1%), had an additional contribution of 28.4% to the reduction in banks' interest expenses. The decrease in interest expenses from non-financial companies is a result of the reduced corporate deposits and lower interest rates. Interest expenses to other entities decreased by Denar 96.4 million (or 14.5%)⁶⁰.

Figure 78 Utilization of total income



In contrast, interest expenses to financial institutions increased by Denar 6.3 million or 1.5%, which is mainly related to the increased borrowings of banks.

Most of the banks' total income is spent to cover their operating costs⁶¹. Compared with the first six months of 2012, their share in the total income of banks is reduced by 7.4 percentage points, indicating improved operational efficiency⁶² of the banking system. A significant percentage (35.9%) of the total income is spent to cover the impairment.

⁵⁹ Interest income from investments in Treasury bills is included in the category "interest income from other entities" which increased by Denar 223.2 million, i.e. 56.9% in the first half of 2013. In the first half of 2013, the average amount of banks' investments in Treasury bills was by Denar 12,736 million higher relative to the amount invested in the first half of 2012.

⁶⁰ Largely attributable to the decrease of interest expense to nonresidents, primarily non-residents - financial companies.

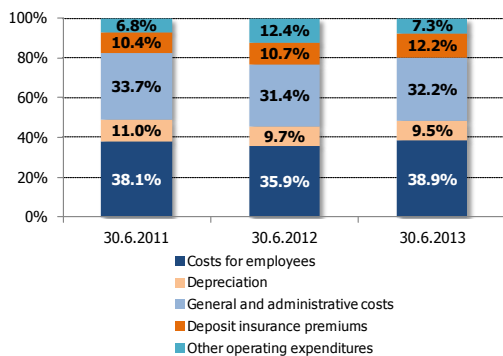
⁶¹ Operating costs include: staff costs, depreciation, general and administrative expenses, deposit insurance premiums and other expenses, except extraordinary expenses.

⁶² However, it should be noted that operational efficiency would improve by 3.2 percentage points instead of 7.3 percentage points, if accidental increase in the operating costs in one bank as of June 30, 2012, are excluded.



Compared annually, its share in total revenues increased by 10.6 percentage points.

Figure 79 Structure of operating costs



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

Banks' operating costs decreased by Denar 311.7 million (5.5%), almost entirely due to the fall in the group other operating costs⁶³ (by Denar 307.1 million or 44.1%), primarily due to the high base effect⁶⁴. More pronounced annual decline of Denar 55.3 million (3.1%) was registered in the general and administrative expenses as well as in depreciation (by Denar 40.1 million or 7.4%). In contrast, staff costs registered an annual growth of Denar 45.7 million (2.3%). Also, larger annual increase of Denar 45.0 million (7.5%) was registered also in deposit insurance premiums, which corresponds to the annual growth of deposits with banks. Despite such developments, staff costs and general and administrative expenses still have the largest share (71.0%).

Besides in the operating costs, improved operational efficiency is reflected also in the improvement in other indicators of correlation between different types of expenses and total regular income (primarily due to the increased total regular income).

Table 9 Profitability and performance indicators for the banking system

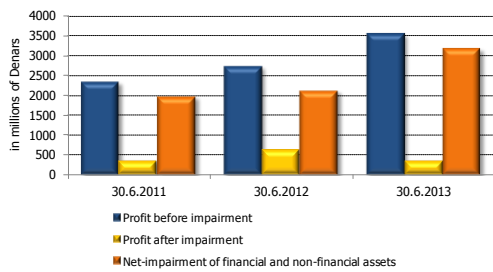
Indicators	Banking system	
	30.6.2012	30.6.2013
Rate of return of average assets (ROAA)	0.4%	0.2%
Rate of return of average equity (ROAE)	3.2%	1.8%
Cost-to-income ratio	67.4%	60.1%
Non-interest expenses/Total regular income	73.6%	65.8%
Labour costs /Total regular income	24.2%	23.3%
Labour costs /Operating expenses	35.9%	38.9%
Impairment losses of financial and non-financial assets /Net interest income	37.9%	54.0%
Net interest income /Average assets	3.3%	3.3%
Net interest income /Total regular income	66.8%	66.5%
Net interest income /Non-interest expenses	90.7%	101.0%
Non-interest income/Total regular income	33.2%	39.3%
Financial result/Total regular income	7.3%	4.0%

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

⁶³ Other operating costs include: special reserve for off-balance sheet exposure, other provisioning and expenses on other grounds (expenses from previous years, income taxes and contributions, expenses for fines, fees and court decisions and other costs).

⁶⁴ As of June 30, 2012, other costs in one bank incidentally grew by Denar 339.2 million and as of June 30, 2013, these costs in the same bank decreased by Denar 337.8 million (or by 98.3%), i.e. they were reduced down roughly to the level of June 30, 2011.

Figure 80 Effect of the impairment on income



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

Impairment significantly affects the amount of banks' profit. Profit before allocating the impairment for financial and non-financial assets, amounted to Denar 3,537 million, which is Denar 810.0 million (29.7%) more than the profit before impairment in the same period last year. Deteriorated credit portfolio quality caused an annual increase in the net impairment for financial assets of Denar 976.9 million (50.8%), which led to an increase in the part of the net interest income spent on impairment. This is most pronounced in the groups of large and small banks, as opposed to the group of medium banks, which noted an improvement in this indicator (Annex 36). For comparison, in the same period last year, net impairment for financial assets decreased by Denar 9.5 million (or by 0.5%)⁶⁵. As of June 30, 2013, the impairment for non-financial assets⁶⁶ amounted to Denar 285.6 million, which is by Denar 90.8 million (or by 46.6%) more than the impairment as of June 30, 2012.

The downward movement of the profit of the banking system caused **worsening of the underlying indicators of profitability of banks.** Rates of return on assets (ROAA) and equity (ROAE), and the profit margin⁶⁷ of banks halved, compared to the same period last year. The interest margin⁶⁸ remains unchanged.

⁶⁵ This decrease was a result of the released impairment made in June 2012 in one bank, due to collection of claims on legal entities by foreclosure. Released impairment experienced high growth of 50.2% compared with June 30, 2011, which significantly contributed to the profitability of the banks at the end of the first half of 2012. So, if this effect is isolated, the annual growth in impairment would have been substantially larger and would have fully offset the profit shown by the banks as of June 30, 2012. Unlike last year, as of June 30, 2013, the released impairment decreased by Denar 177.9 million or 5.2%.

⁶⁶ The increase in this type of impairment is mainly due to the adopted Decision amending the Decision on accounting and regulatory treatment of foreclosed assets ("Official Gazette" no. 74/2012) from June 2012, according to which banks are obliged to recognize in their income statement a loss based on impairment for assets foreclosed by January 01, 2010 in the amount of at least 20% of their value (according to precise rules in the already mentioned Decision) by January 01, 2013 at the latest.

⁶⁷ Profit margin is the operational profit (loss) to total regular income ratio.

⁶⁸ Net interest margin is calculated as the ratio between the net interest income and average interest-bearing assets.



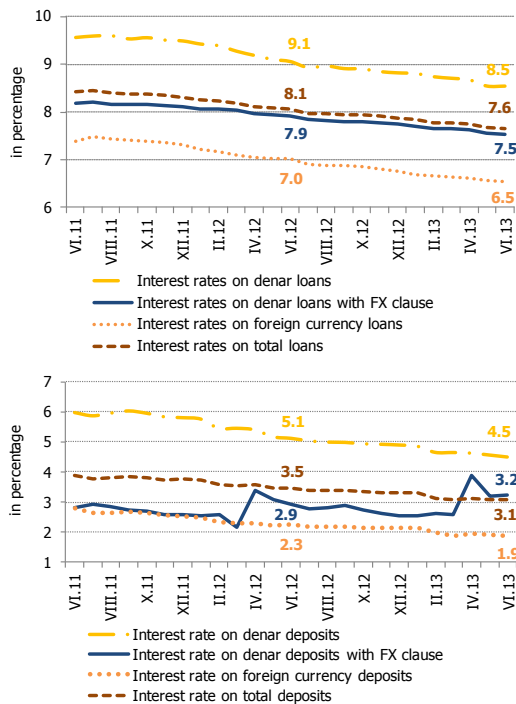
Changes in the regulation on foreclosures for collection of claims

Banking practice showed that foreclosed assets are often kept in banks' balance sheets for a long period of time before the bank can sell them and make a real collection. In fact, the foreclosure itself often does not lead to achieving inflows and real income for the bank, while accounting rules allowed for displaying income at the time of foreclosure. Foreclosure does not mean actual collection of the claim in money form and the risk remains in the balance sheets of banks, as credit risk turns into risks associated with the foreclosed asset (possibilities for its sale, development of the market for that asset, changes in market price and so on).

The amount of foreclosed assets in the banking system of the Republic of Macedonia is still small (as of June 30, 2013, foreclosed assets net are somewhat under 2% of total assets), but the speed at which they increase (the amount is doubled in three years) was the reason for regulating this matter. These balance sheet positions were for the first time prudently regulated in 2006 by the Decision on the methodology for allocating special reserve for potential losses from foreclosed assets. The penultimate amendments to the Decision in June 2012, introduced a requirement for mandatory annual impairment in the value of foreclosed property of at least 20% of its accounting value and reduction of its accounting value to zero if the asset is not sold by the end of the fifth year after acquisition. Recent amendments to this regulation (Decision on accounting and regulatory treatment of foreclosed assets, from March 2013), beside defining the initial impairment for the foreclosed asset for recovery of the claim (of at least 20%), do not allow the bank to present income from the release of impairment as a result of "collection" of the claim. The release of the impairment for credit exposure increases the bank's revaluation reserve (for the difference between the amount of derecognized impairment/special reserve for uncollected claim and initial impairment of at least 20% of the initial accounting value of the foreclosed asset). This revaluation reserve is part of the supplementary capital of the bank and can be excluded from the amount of supplementary capital if the foreclosed asset is sold or if the bank obtains capital with higher quality than the quality of the revaluation reserve.

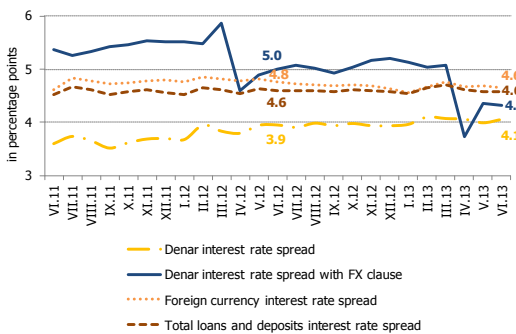
These changes enable banks to more realistically evaluate foreclosures on their balance sheets (to show them at a reduced price if they fail to sell them at the price at which they are recorded), which in turn should motivate them to "dispose of" or to sell the foreclosed property more quickly. Also, this regulation allows for avoiding cyclical changes in the income statement due to presentation of income (which is essentially not real) at the time of releasing the impairment for the foreclosed asset, which may then be paid as dividends. Additionally, recent changes in the regulations further strengthen the capital position and solvency of banks, which beside creating more room for lending, also acts toward strengthening the stability and resilience of the banking system.

Figure 81 Lending (up) and deposit (down) interest rates



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

Figure 82 Interest spread, by currency



Calculations do not include loans on overdrafts and credit cards.

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

3.6.2 Movements in interest rates and interest rate spread

With the exception of the increase in the interest rate on Denar deposits with FX clause, interest rates on all other types of loans and deposits are reduced. The largest cut in lending interest rates compared to June 2012 is recorded in the interest rates on Denar and foreign currency loans. Larger reduction in deposit interest rates is observed in Denar deposits. Such a downward trend in lending and deposit interest rates, which continued during the first eight months of 2013, is in line with the trend of reducing the policy rate of the National Bank.

In conditions of relatively even downward movements in interest rates on Denar, foreign currency and total loans and deposits, interest rate spreads among interest rates on these types of loans and deposits remained almost unchanged. More significant reduction in the interest rate spread is observed only between lending and deposit interest rates on Denar loans and deposits with FX clause, due to opposite movement in the interest rates on Denar loans with FX clause (reduced by 0.4 percentage points) and Denar deposits with FX clause (increased by 0.3 percentage points).

These changes have caused convergence of interest rate spreads, especially of those in Denars and in Denars with FX clause.



ANNEX