NATIONAL BANK OF THE REPUBLIC OF MACEDONIA

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



Report on Banking System of the Republic of Macedonia in the second quarter of 2011



Executive summary

In the second quarter of 2011, the banking system maintained its stability and reliability. The number of banks remained unchanged (seventeen banks), there were no significant changes in the ownership structure, which remains dominated by foreign financial institutions. At the end of June 2011, assets of one bank exceeded the limit of Denar 22.5 billion, thus shifting from the group of medium-size banks to the group of large banks.

In the second quarter of 2011, the activities of banks continued to grow. Compared with March 2011 and June 2010, assets and deposits showed rapid quarterly growth, but analyzed on an annual basis their growth is slower. The growth of credit activity accelerated, both in terms of quarterly, and annual growth rates, with the pace of the annual growth being slower compared with the first quarter.

While we still cannot claim that the quality of credit portfolio of the banking system improved, it is certain that the process of its deterioration halted. Thus, non-performing loans continued to grow, but with a slower pace compared to the previous quarter, suggesting that risks are not yet fully exhausted, which in the future could reflect also on the credit growth. On the other hand, the high growth in the exposure to risk category "C" accelerated the growth in the exposure classified in risk categories "C", "D" and "E". This exacerbated the credit risk indicators which include this exposure in the calculation. The coverage of nonperforming loans with allocated impairment remains high and further increased, but the coverage of the exposure in risk categories "C", "D" and "E" dropped. Analyzed by sector, the highest credit risk arises from exposure to companies, while according to the currency structure, the exposure in Denars bears the highest risk (although most pronounced is the deterioration of the indicators of exposure in Denars with FX clause). Credit risk is extremely important in the overall risk profile of banking operations. This is supported by the results of the carried out simulations, whereby the deterioration of the quality of the loan portfolio (shifting 30% of the exposures of each risk category to the next worse category) leads to a reduction in the capital adequacy ratio of the banking system by 6.4 percentage points and deterioration of the average risk of the exposure to non-financial entities of 6 percentage points. However, the capital adequacy ratio of the banking system is not reduced below 8%.

The *liquidity* of the banking system is stable and relatively high. Carrier of such a liquidity position of banks is the high stability of the banks' deposit base, as well as the permanent uptrend of liquid assets. Liquid assets provide a high degree of coverage of household deposits and of total short-term liabilities. There is a high concentration of the deposit base (measured by share of the twenty largest depositors in total deposits), which in individual banks reaches up to 70%. Due to the high concentration, simulations for assessing the banking system's resilience to shocks on the liquidity side show that banks are more sensitive to the outflow of deposits of the twenty largest depositors (in five banks thre is lack of liquid assets) rather than the withdrawal of 20% of household deposits (all banks have sufficient liquid assets).

At the end of June 2011, almost all banks met the prescribed liquidity ratios in Denars and in foreign currency. In September 2011, the National Bank adopted a new Decision on liquidity risk management of banks ("Official Gazette of the Republic of Macedonia" no. 126/2011), which envisages integrated monitoring of the liquidity ratios in terms of currency, and the dynamics for achieving the level of 1 is abolished. This regulation enters into force on October



01, 2011, and it is expected to facilitate liquidity management by banks, without affecting the quality of their liquidity position.

Currency and iterest rate risks in the banking book are less significant in the overall risk profile of banks. Banks' exposure to currency risk has declined for a second consecutive quarter, which is based on narrowing the gap between assets and liabilities with currency component, and its ratio to banks' own funds. Only 2.5% of banks' own funds are used for covering the currency risk. Still the main reason for the positive gap are the positions in Denars with FX clause. The lower importance of the interest rate risk in the portfolio of banking activities comes as a result of using adjustable interest rates in most of banks' credit and deposit products. Possible changes in the regulations (eg. in the field of obligations, consumer protection, etc.), which would have established a framework for the use of unilateral interest rates adjustment clauses, could resize the interest rate risk for the banks. Using protective clauses in the contracts for banking activities allows banks to minimize the importance of currency and interest rate risks in their overall risk profile. At the same time, they pass these two risks on their customers, which increases the credit risk for the banks.

In the second quarter of 2011, the growth of own funds of 1.1%, was entirely due to the retention of part of the profits for 2010 in the banks' capital. The lower growth rate of own funds as opposed to higher growth in other components (primarily the risk weighted assets) led to a slight decrease in the *capital adequacy* ratio, which at the end of June was 16.5%. Despite the reduction, capital adequacy of the banking system is high. It is also supplemented by the relatively high quality of own funds, which for the most part (84.4%) consist of items that are part of the core capital. The results of stress tests show satisfactory resilience of the banking system and individual banks to different shocks, which is supported by the fact that in none of the banks capital adequacy is not reduced below 8%. In the near future banks in the Republic of Macedonia will be obliged to determine the capital required to cover operational risk. According to preliminary estimates, the banks will need to allocate capital in the amount of about Denar 2.2 billion to cover operational risk and capital adequacy of all banks will be over 10%.

Although at the end of June 2011 the banking system registered profit, *profitability* is still showing adverse trends and structural changes. The profit shown in the previous eight quarterly dates is by two-digit rates lower relative to the profits registered on the corresponding dates of the previous year. Such movement of profits affects accordingly the indicators of return on assets and equity. Starting from late 2010 there has been a trend of reduction in income from banks' operations, primarily income from regular operations (net interest income and other regular income). Amendments to the regulation concerning the method of calculating the minimum liquidity ratios are expected to have positive effect on the banks' profitability, since they provide additional funds available to the banks to be invested in higher-yield placements, particularly in the private sector.

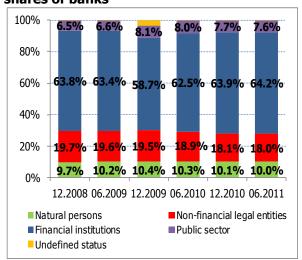


I. Structure of the banking system

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

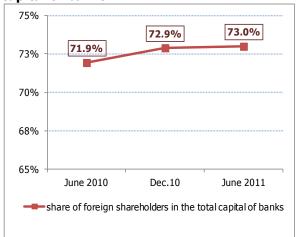
As of June 30, 2011, the banking system in the Republic of Macedonia consisted of seventeen banks and eight savings houses, which is unchanged compared to March 31, 2011.

Figure 1 Ownership structure of common shares of banks



Source: NBRM, on the basis of data submitted by banks.

Figure 2 Share of foreign capital in total capital of banks



Source: NBRM, on the basis of data submitted by banks.

In the second quarter of 2011 there was a shift in the composition of the individual groups of banks. The assets of one bank¹ exceeded Denar 22.5 billion, whereby this bank moved from the group of medium-size to the group large banks.

Given the insignificant share of the savings houses² in all segments of the banking system operations, the analyses in this report focus exclusively on the banks.

the second quarter of 2011 no significant changes occurred the ownership structure of the banking system. Financial institutions, accounting for 64.2% in the common shares and 63.3% in the total equity (common and preference shares) remained the dominant owners of banks (Figure 1). The participation of preference shares in the total shares issued by the banking system remained marginal (0.6%), with the natural persons being their major owners (share of 81.6%).

The share of foreign capital in total banks' capital increased slightly and as of June 30, 2011 it equaled 73% (Figure 2).

The share of foreign capital in total equity is highest among the group of small-size banks (87.3%), while in the groups of large and medium-size banks this share is 79.3% and 54.7%, respectively.

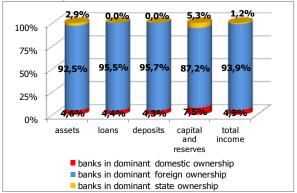
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¹ Ohridska Banka ad Ohrid

² The share of the savings houses in the total activities of deposit institutions (banks and savings houses) remained insignificant (1% in total assets, 1.5% in total loans, and 0.3% in total deposits on non-financial entities).

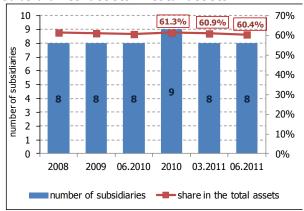


Figure 3 Structure of the major balance ownership of banks



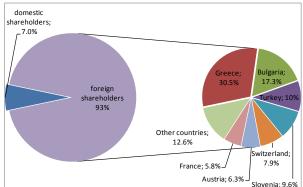
Source: NBRM, on the basis of data submitted by banks.

Figure 4 Number and share of foreign bank subsidiaries' assets in total assets



Source: NBRM, on the basis of data submitted by banks.

Figure 5 Structure of banks' capital by countries



Source: NBRM, on the basis of data submitted by banks.

Most numerous are the banks in dominant sheet items, according to the dominant ownership of foreign shareholders, who have the biggest share in the structure of all major balance sheet categories (Figure 3). The number of banks in dominant foreign ownership (thirteen), and within those frames the number of banks that are subsidiaries of foreign banks (eight), is unchanged compared to March 31, 2011. Since the end of 2008, market share of foreign banks' subsidiaries in the total assets of the banking system has been continuously maintained at around 60% (Figure 4).

> The largest portion (76.6%) of foreign capital in the banking system of the Republic of Macedonia comes from the **European Union Member States (Figure 5).** According to the country of origin, shareholders from seven countries have an individual share in the total foreign capital of more than 5%, with five of them coming from the European Union. Shareholders from other countries have an individual share of less than 3.9%.

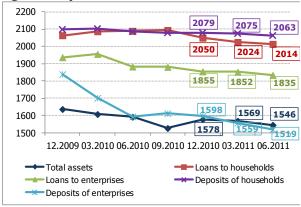
> In terms of individual sectors, dominant owners of banks' foreign capital are financial institutions, owning 82.6% of this capital. Of this, 81.8% is owned by foreign banks, 14.5% by other foreign financial institutions, and 3.7% by international financial institutions.



2. Concentration and market share of banks

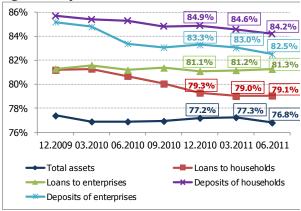
As of June 30, 2011, the level of concentration of the banking system decreased relative to March 31, 2011, but it is still high.

Figure 6 Dynamics of the Herfindahl-index



Source: NBRM, on the basis of data submitted by banks.

Figure 7 Dynamics of the CR5 ratio



Source: NBRM, on the basis of data submitted by banks.

Concentration measured by the Herfindahl index³ is lowest, and also within the acceptable interval, in the total assets and deposits of enterprises (Figure 6). The level of concentration in corporate loans is still slightly above the acceptable ceiling, despite the continuing decline in recent few quarters. The levels of concentration in household loans and deposits, is still way above the acceptable ceiling, despite the continuing decline.

Concentration according to the CR5⁴ ratio also remained high in all segments of banking activities, being highest in household deposits, and lowest in total assets (Figure 7). The five largest banks still occupy over 75% of all segments of banks' operations. However, with the exception of loans (where concentration increased insignificantly), in all other segments analyzed, concentration decreased on a quarterly basis.

Market share of individual banks in the total assets of the banking system, does not register significant changes relative to March 31, 2011 (Figure 8). Even now in thirteen out of seventeen banks the individual share in the total assets of the banking system is less than 5%, whereas in eleven of them it is below 3%. In contrast, only in three banks the individual share in the total assets of the banking system is greater than 19%. Compared with March 31, 2011, the share of the assets of four out of the seventeen banks in the total assets

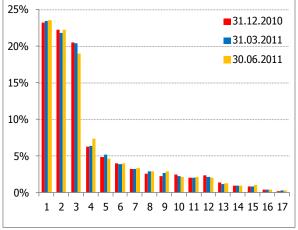
³ The Herfindahl index is calculated according to the equation $HI = \sum_{j=1}^{n} (S_j)^2$ where S denotes each bank's

share in the total amount of analyzed category (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 generally considered acceptable.

⁴ CR5 index denotes assets share (i.e. analyzed category, for example, corporate loans, etc.) of the five banks with largest assets (i.e. analyzed category) in the total assets (i.e. analyzed category) of the banking system.



the total assets of the banking system



Source: NBRM, on the basis of data submitted by banks.

Figure 8 Market share of individual banks in reduced. The largest quarterly decrease of the market share was experienced by one of the major banks (1.4 percentage points). On the other hand, the highest quarterly growth in the market share (1 percentage point) was registered by the bank which in the second quarter moved from the group of medium-size to the group of large banks. According to the market share, this large bank significantly lags behind the three major banks, which again points to the high concentration of the banking system.

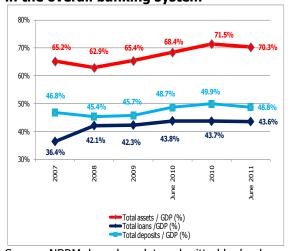


II. Bank activities

In the second quarter of 2011, the bank activities kept on increasing. Compared to March 2011 and June 2010, assets and deposits registered faster quarterly growth, but analyzed annually, their growth decelerated. Both quarterly and annual lending growth rates accelerated, with the annual growth registering slower growth pace compared to the first quarter.

The growth of total assets was mostly triggered by the higher deposit potential of banks, and the increased borrowings. The banks used most of the growth of their sources of funding to credit the nonfinancial sector. Such developments made positive contribution to sustain the level of financial intermediation. In this quarter, the banks proceeded readdressing some of their demand for CB bills to bills of six-month deposits with the Central Bank, a process that started in the previous quarter. Amendments to the regulation concerning the method used to determine a minimum liquidity (adopted by the NBRM Council in September 2011) made the bank demand for bills of six-month deposit with the Central Bank reduce.

Figure 9 Level of financial intermediation in the overall banking system



Source: NBRM, based on data submitted by banks. Note: Financial intermediation indicators for June 2010 have been calculated with GDP for the last four quarters.

1. Level of financial intermediation

The level of financial intermediation of the banking system of the Republic of Macedonia decreased inconsiderably compared to the end of 2010 (Figure 9). Total assets, credit and deposit -to- GDP ratio reduced by 1.2 percentage points, 0.1 percentage points and 1.1 percentage points, respectively. Taking into account the growth of bank activities, such changes mainly demonstrate positive trends in the economy, particularly in the first half of 2011, when GDP went up by 5.2% (in real terms). Compared to the surrounding countries, the banking system of the Republic of Macedonia still ranks among banking systems with lower level of financial intermediation.⁵

⁵ Financial intermediation, measured through the total assets to GDP ratio is relatively higher in some countries of the region (81.0% for Albania, 85.2% for Bosnia and Herzegovina, 117.0% for Croatia and 145.0% for Slovenia). The data on Albania, Bosnia and Herzegovina and Slovenia is as of 31.12.2010, and the Croatia data is as of 31.03. 2011.



Figure 10 Quarterly growth of assets, credits and deposits of nonfinancial entities

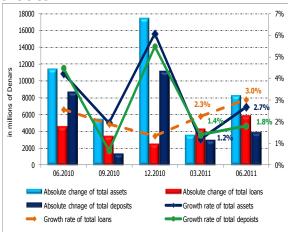
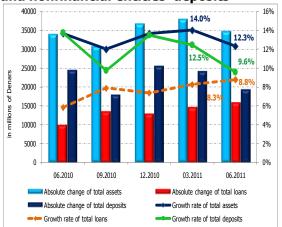
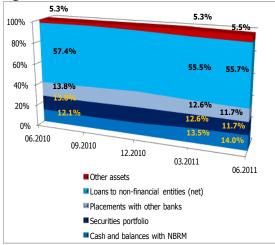


Figure 11 Annual growth of assets, loans and nonfinancial entities' deposits



Source: NBRM, based on data submitted by banks.

Figure 12 Structure of bank assets



Source: NBRM, based on data submitted by banks.

2. Balance sheet

In the second quarter of 2011, the growth of total assets of the banking system exceeded the growth of the preceding quarter (Figure 10). As of June 30, 2011, the total assets were valued at Denar 317,162 million, which is almost twice as high growth on quarterly basis, in both absolute and relative terms, compared to the growth reported in the first quarter of 2011. Yet, the annual growth rate of the total assets was by 1.7 percentage points lower at the end of the second quarter of 2011 compared to March 31, 2011, where the annual deposit growth decelerated and the credit growth moderately accelerated (Figure 11).

In the second quarter of 2011, the growth of total assets was primarily triggered by the gross credits the banks made to the non-financial sector, by using most of the increase of their sources of funding (69.6%). Bank credits in this quarter increased rapidly on both quarterly and annual basis. They reported the highest absolute quarterly growth in the total assets and generated most of their quarterly growth. As a result, the share of credits to nonfinancial entities in the bank asset structure increased.

Analyzing the bank assets, securities investments registered the fastest decrease, following the trend of the preceding quarter. Thus, 80.1% of the securities portfolio reduction results from the fall of CB bills and treasury bills in the amount of Denar 655 million (3.3%) and Denar 1,035 million (7.3%), respectively. The amount of CB bills banks withdrew was readdressed to bills of six-month deposits that increased by Denar 2.190 million, or by 25.5%, quarterly. Such an increase determined 84.3% of the quarterly growth of the item of cash and balances on account with the National Bank (Table 1).

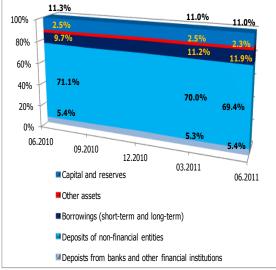


Table 1 Structure of the assets and liabilities of the banking system

		millions of nars	Stru	cture	С	hange 30.06	.2011/31.03.2	011
Balance sheet	31.03.2011	30.06.2011	31.03.2011	30.06.2011	Absolute change	In percent	In the structure (in percentage points)	Share in the change
Cash and balances with NBRM	41,751	44,348	13.5%	14.0%	2,597	6.2%	0.5	31.4%
Securities portfolio	39,012	36,975	12.6%	11.7%	-2,037	-5.2%	-1.0	-24.6%
Placements to banks and other financial institutions	40,333	41,836	13.1%	13.2%	1,503	3.7%	0.1	18.2%
Loans to non-financial entities (net)	171,481	176,679	55.5%	55.7%	5,199	3.0%	0.2	62.8%
Gross loans to non-financial entities	190,743	196,504	61.8%	62.0%	5,761	3.0%	0.2	69.6%
Accumulated amortization of loans to non- financial entities	(752)	(775)	-	-	-23	3.1%	-	-
Impairment (provisions) of loans to non- financial entities	(18,511)	(19,050)	-	-	-539	2.9%	-	-
Accured interest and other assets	8,121	9,247	2.6%	2.9%	1,126	13.9%	0.3	13.6%
Fixed assets	8,184	8,076	2.6%	2.5%	-109	-1.3%	-0.1	-1.3%
Unallocated loan loss provisions	-1	-0.01	0.0%	0.0%	1	0.0%	0.0	0.0%
Total assets	308,881	317,162	100.0%	100.0%	8,281	2.7%	0.0	100.0%
Deposits from banks and other financial institutions	16,501	17,204	5.3%	5.4%	703	4.3%	0.1	8.5%
Deposits of non-financial entities	216,227	220,114	70.0%	69.4%	3,887	1.8%	-0.6	46.9%
Borrowings (short-term and long-term)	34,467	37,706	11.2%	11.9%	3,239	9.4%	0.7	39.1%
Other liabilities	7,007	6,576	2.3%	2.1%	-432	-6.2%	-0.2	-5.2%
Provisions for off-balance sheet items	704	706	0.2%	0.2%	2	0.3%	0.0	0.0%
Capital and reserves	33,974	34,856	11.0%	11.0%	883	2.6%	0.0	10.7%
Total liabilities	308,881	317,162	100.0%	100.0%	8,281	2.7%	0.0	100.0%

Source: NBRM, based on data submitted by banks.

Figure 13 Structure of bank liabilities

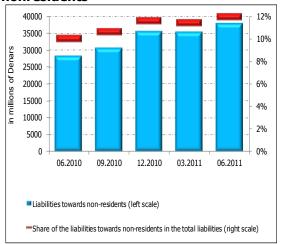


Source: NBRM, based on data submitted by banks.

Most of the expansion of bank activities (46.9%) was supported by the further growth of nonfinancial entities' deposits. In the second quarter of 2011, the liability structure registered the fastest absolute quarterly increase of nonfinancial entities' deposits that helped them remain dominant (Figure 13). In this quarter their increase was faster compared to the previous quarter. The annual growth rate, however, somewhat slowed down compared to March 31, 2011 (for more details, see section 4. Bank Deposits).

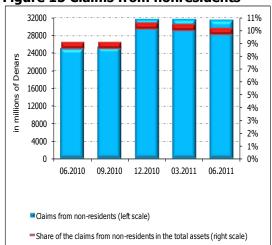


Figure 14 Liabilities towards nonresidents



Source: NBRM, based on data submitted by banks.

Figure 15 Claims from nonresidents



Source: NBRM, based on data submitted by banks.

Bank borrowings kept on increasing in this quarter, as well. The total borrowings⁶ registered the most dramatic relative quarterly growth on the liabilities side, making up most (almost 40%) of their quarterly growth⁷, 97.2% of which generated by the Denar 3.147 million, or 11.5% increase of bank's credit liabilities. Credit liabilities to nonresidents registered quarterly growth of Denar 1,874 million, or 10.9%, constituting nearly 60% of the growth of total credit liabilities of the banks. Almost 70.0% of the growth of credit liabilities to nonresidents results from the higher short-term borrowing of one bank from its parent entity.

Given the increase of borrowings from nonresidents, the share of total liabilities to nonresidents in the total liabilities climbed (from 11.4% on March 31, 2011 to 11.9% as of June 30, 2011) – (Figure 14). Compared to the preceding quarter, the liabilities to nonresidents rose by Denar 2.619 million, or by 7.4%. Such growth results from the abovementioned increased borrowing from nonresidents, and the increase of deposits of nonresidents – financial institutions by Denar 587 million, or by 22.4%.

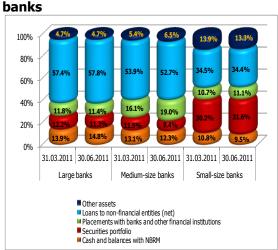
On the other hand, claims on nonresidents reduced, by Denar 96 million or by 0.3%, compared to the previous quarter. Such decrease results from the quarterly fall of short-term credits to financial entities-nonresidents, by Denar 116 million, or by 23.1%, accounting for only 1.6% of the total claims on nonresidents. Foreign bank accounts that dominate the claims on nonresidents (above 98.0%) increased quarterly by Denar 54 million, or by 0.2%. Consequently, and amid faster growth of assets, the share of claims on nonresidents in the total asset structure went down from 10.2% on March 31, 2011 to 9.9% as of June 30, 2011 (Figure 15).

⁶ Total banks' borrowings include credit liabilities, hybrid and subordinated instrument liabilities.

⁷ Note that total borrowings include MBPR AD Skopje borrowings from EIB, which are then placed through other domestic banks. Other domestic banks' borrowings on the same basis are also included in the total borrowings.



Figure 16 Asset structure by groups of



Source: NBRM, based on data submitted by banks.

2.1. Balance sheet by group of banks

At the end of June 2011, one bank moved from the group of medium-size banks to the group of large banks, causing most of the changes in the balance sheets of these two groups of banks⁸. Otherwise, the total assets of the group of medium-size banks would have increased quarterly by Denar 4,788 million or by 5.1% (instead of the fall presented in Table 2), constituting most (57.8%) of the increase of total assets of the banking system. The assets of the group of large banks would increase quarterly and would equal Denar 2,499 million or 1.2%, contributing with 30.2% to the growth of total assets (Annex 4).

Analyzing by group of banks, credits to nonfinancial entities dominated the structure of assets in this quarter, as well (Figure 16). The structural share of net-credits to nonfinancial entities in the total assets of the

Table 2 Structure of assets and liabilities by groups of banks

		Large banks		N	1edium-size banl	cs		Small-size banks	1
items	Amount on 30.06.2011 in millions of Denars	Change June 2011/March 2011	Percentage change June 2011/March 2011	Amount on 30.06.2011 in millions of Denars	Change June 2011/March 2011	Percentage change June 2011/March 2011	Amount on 30.06.2011 in millions of Denars	Change June 2011/March 2011	Percentage change June 2011/March 2011
Cash and balances with NBRM	33.785	5.623	20,0%	9.402	-2.979	-24,1%	1.162	-47	-3,9%
Securities portfolio	25.951	1.217	4,9%	7.164	-3.730	-34,2%	3.860	477	14,1%
Placements with banks and other financial institutions	25.995	2.152	9,0%	14.480	-806	-5,3%	1.362	157	13,0%
Loans to non-financial entities (net)	132.321	15.778	13,5%	40.153	-10.917	-21,4%	4.204	337	8,7%
Other assets	10.746	1.128	11,7%	4.953	-179	-3,5%	1.624	70	4,5%
Total assets	228.798	25.898	12,8%	76.151	-18.611	-19,6%	12.212	994	8,9%
Deposits from banks and other financial institutions and borrowings	27.656	6.797	32,6%	26.295	-3.015	-10,3%	959	159	19,8%
Deposits of non-financial entities	172.618	16.456	10,5%	40.324	-13.387	-24,9%	7.172	818	12,9%
Other liabilities	5.742	154	2,8%	1.212	-634	-34,3%	328	50	18,1%
Capital and reserves	22.783	2.491	12,3%	8.320	-1.575	-15,9%	3.753	-33	-0,9%
Total liabilities	228.798	25.898	12,8%	76.151	-18.611	-19,6%	12.212	994	8,9%

Source: NBRM, based on data submitted by banks.

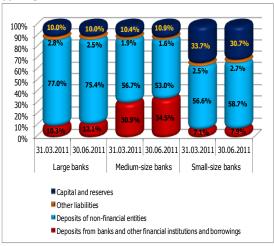
⁸ The group of large banks includes banks that hold assets in the amount that exceeds Denar 22.5 billion, the group of medium-size banks includes banks that hold assets from Denar 5.6 billion to Denar 22.5 billion, and the group of small-size banks includes banks that hold assets below Denar 5.6 billion.



group of large banks increased, making the share of the group of medium-size banks lower⁹.

The above motion in the composition of the groups of large and medium-size banks caused quarterly decrease of the securities portfolio only in the group of medium-size banks which, in turn, almost solely decreased the securities portfolio in the overall banking system (Table 2)¹⁰. In this quarter, the group of large banks was the sole generator of the quarterly growth of cash and balances with the National Bank, and was the only one to increase the structural share of this item in their total assets¹¹.

Figure 17 Liability structure by group of banks



Source: NBRM, based on data submitted by banks.

The liability structure by group of dominated by deposits nonfinancial entities (Figure 17). The group of large banks reported the fastest quarterly growth of deposits of nonfinancial entities relative to their quarterly fall reported by the group of medium-size banks (Table 2)12. Observing the previous quarter, the groups of large and smallsize banks reported an increase of the deposits and borrowings from banks. Therefore, the structural share of deposits and borrowings from banks in the total liabilities of these groups of banks also increased, and the structural share of the group of medium-size banks decreased. Only the group of small-size banks reported lower share of capital and reserve in the structure of total liabilities, caused by the operating loss of this group of banks. Yet, the group of small-size banks still uses its capital and reserve to finance most of its activities.

¹⁰ Had the composition of the group of large and medium-size banks not changed, the securities portfolio of the group of medium-size banks would have increased by Denar 775 million, or by 7.1% quarterly. As a result, the structural share of securities portfolio in the total assets of the group of medium-size banks would have equaled 11.7%.

⁹ Provided that the composition of the group of large and medium-size banks remained the same, net credits of the group of medium-size banks to nonfinancial entities would have increased by Denar 1,416 million, or 2.8%, quarterly, and accordingly, their share in the total assets of the group of medium-size banks would also remain unchanged.

¹¹ Had the composition of the group of large and medium-size banks not changed, the cash and balances with the National Bank of the group of medium-size banks would have increased by Denar 1,396 million, or by 11.3% quarterly, and accordingly, their share in the structure of total assets of the group of medium-size banks would have increased by 1.5 percentage points.

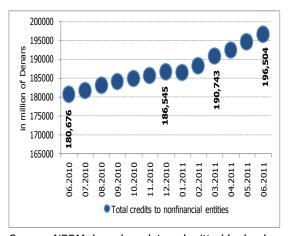
¹² Had Ohridska Banka AD Ohrid not scaled up to the group of large banks, the group of medium-size banks would have reported by Denar 1,585 million or by 3.0% higher deposits of nonfinancial entities. The structural share of deposits of nonfinancial entities in the total assets of the group of medium-size banks would have equaled 55.5%.



3. Bank lending activity

Bank lending activity kept on increasing (Figure 18), illustrated through the quarterly and annual credit growth rates (Figure 20). While the annual growth rates of assets and deposits slowed down, the annual credit growth accelerated, but in a slower pace compared to the first quarter (from 7.4% in December 2010 to 8.3% in March and to 8.8% in June 2011). The most recent Lending Activity Survey shows that the banks could be expected to hold back from lending in the third quarter. Although the Lending Activity Survey conducted in April indicated that almost all banks expected the corporate lending terms to remain unchanged, in July, however, the banks showed that they expect the lending terms to tighten or to remain the same. On the other hand, they expected the household lending terms to remain unchanged.

Figure 18 Movement of total credits to nonfinancial entities



Source: NBRM, based on data submitted by banks.

As of June 30, 2011, the annual credit growth rate reached 8.8%, which is by 3 percentage points more compared to the same period of the last year. The credit growth was concentrated in the group of large banks because of the insignificant contribution of the group of small-size banks and the negative contribution of the group of medium-size banks¹³.

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¹³ Apart from the abovementioned switch, the contribution of the group of large banks to the growth of total credits is also due to the significant quarterly growth of lending of two banks of the group of large banks. Had the composition of banks remained the same in this quarter, the group of large banks would have still had the greatest contribution to the growth of total credits (65.6%), but the contribution of the group of medium-size banks would have been positive (28.8%). The negative contribution of the group of medium-size banks also comes from the reduced lending by three banks of the group of medium-size banks, set aside the already mentioned switch. The lending of the group of small-size banks accelerated by 7.2% and contributed with 5.6% to the growth of total credits.



Figure 19 Total credit / deposit growth and ratio

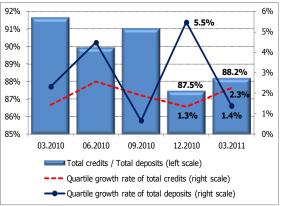
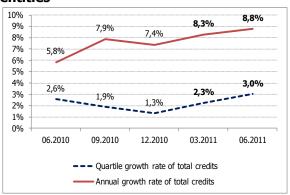
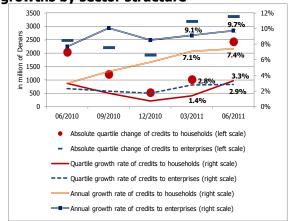


Figure 20 Quarterly and annual growth rates of total credits to nonfinancial entities



Source: NBRM, based on data submitted by banks.

Figure 21 Quarterly and annual credit growths by sector structure



Source: NBRM, based on data submitted by banks.

With the growth of credits exceeding that of the deposits, the credit – deposit ratio increased by 1.1 percentage point in the second quarter of 2011 (Figure 19).

The lending to both sectors kept on increasing in the second guarter of 2011, with the household lending surpassing the corporate lending (Figure 21). On quarterly basis, both household and corporate lending increased by 3.3% and 2.9%, respectively. The faster household lending growth can attributed to the relaxed lending terms in this sector, as specified in the Lending Activity Survey¹⁴, that triggered the growth of credit supply and consequently, of the credit demand. Observing the corporate lending terms (compared to the survey of the previous quarter), the percentage of banks that pointed to partial relaxation of the lending terms decreased, whereas the number of banks that pointed to unchanged lending terms increased.

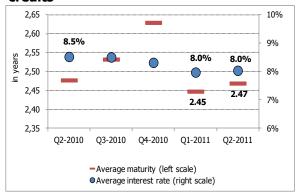
However, the corporate lending made the greatest contribution (58.7%) to the total quarterly growth of lending. The annual growth rates of lending to both sectors increased at the end of the second quarter of 2011. On annual basis, contrary to the quarterly basis, the corporate lending registered a faster increase.

The sector structure of credits registered no significant movements. As of June 30, 2011, corporate credits (61.5%) still dominate the structure of total credits (Annex 5).

¹⁴ For more details of the corporate and household lending terms, please visit the National Bank website - www.nbrm.mk, and see the Lending Activity Survey for the second quarter of 2011.

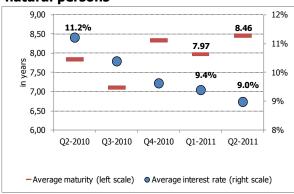


Figure 22 Average interest rate and maturity of newly approved corporate credits



Source: NBRM, based on data indicated by the banks in the Credit Registry.

Figure 23 Average interest rate and maturity of newly approved credits to natural persons



Source: NBRM, based on data indicated by the banks in the Credit Registry.

In the second quarter of 2011, the average interest rates on newly approved credits remained almost unchanged. The average interest rate on newly approved corporate credits (Figure 22) in the second quarter remained the same, thus underpinning the general ascertainment that the corporate lending terms remained the same, as indicated in the Lending Activity Survey. The average interest rate on newly approved credits to natural persons (Figure 23) registered mild downtrend¹⁵. **The** average maturity of newly approved credits to nonfinancial entities increased in the second quarter of 2011. The maturity of newly approved credits to natural persons extended more notably.

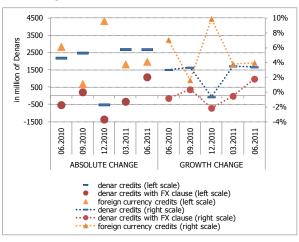
As of June 30, 2011, clients from the industrial, and wholesale and retail trade sectors account for the most of banks credits to nonfinancial entities. These credits registered the highest absolute quarterly growth, making the utmost contribution to the total growth of credit exposure to enterprises and other clients. In the same period, the highest quarterly growth in relative terms was registered by credits approved to real estate and construction businesses. Such credit distribution by activity corresponds to the GDP structure, where the industry, construction and trade played the most important role for the growth in the second quarter.

¹⁵ The Survey results show that most banks (around 68%) consider the interest rate on housing credits to remain unchanged, while one third considers it to be reduced. Observing the specific consumer lending terms, most of the banks still indicate that the interest rate has been reduced.



Consumer credits remain the most attractive credit product for the natural persons. They registered the fastest quarterly growth, in both absolute and relative terms, making the greatest contribution to the total growth of credit exposure to natural persons. Such dynamics of these credits is attributed to the increased consumption of durables, and the enhanced current spending, which corresponds with the 5.9% real quarterly growth of private consumption registered in the second quarter of the year¹⁶. **Car credits** still register negative quarterly growth. Housing credits considered to be the second most favored product, according to the quarterly absolute and relative growth and the contribution to the total growth of credit exposure to natural persons.

Figure 24 Quarterly credit growth by currency



Source: NBRM, based on data submitted by banks.

Credits with FX clause (foreign currency credits and Denar credits with FX clause) make up roughly 60%, and further dominate the structure of total credits (Annex 5). Denar credits surged quarterly, in absolute terms, by Denar 2,688 million (by 3.4%), thus making the largest contribution (46.7%) to the total credit growth (Figure 24). Foreign currency credits reported the fastest quarterly growth rate of 4% (Denar 1,987 million)¹⁷. The accelerated growth of foreign currency credits could be attributed to the liquidity rate calculation method and to the lower interest rates on these credits. Denar credits with FX clause went up in this quarter, compared to the previous two quarters when whey dropped.

¹⁶ Source: Quarterly Report, July 2011, National Bank website: www.nbrm.mk. Private consumption data is taken from the SSO and on the basis of calculations and seasonal adjustment by the NBRM.

¹⁷ Half of this growth is attributable to foreign currency credits for domestic payments.

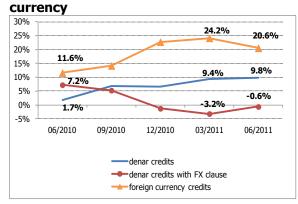


Table 3 Credit exposure in the second quarter of 2011, by activity / credit products

Sector	Credit products / individual sectors	Credit risk exposure in million of Denars as of June 30, 2011	Absolute quartile growth of credit risk exposure in million of Denars	Quartile growth rate	Share in the total growth of the credit risk exposure	Average interest rate on regular loans as of June 30, 2011	Average interest rate on regular loans as of March 31, 2011
	Residential and commercial real estate credits	18,296	825	4.7%	35.9%	7.5%	7.5%
	Consumer credits	30,938	1,628	5.6%	70.9%	10.1%	10.3%
NATURAL PERSONS	Overdrafts	9,541	107	1.1%	4.7%	11.6%	11.6%
	Credit cards	21,862	-133	-0.6%	-5.8%	11.5%	11.3%
	Car credits	3,786	-186	-4.7%	-8.1%	8.2%	8.2%
	Other credits	1,035	55	5.6%	2.4%	8.6%	8.7%
TOTAL NATURAL PERS	TOTAL NATURAL PERSONS		2,297	2.8%	29.0%		
	Agriculture, forestry and fishing	4,390	33	0.8%	0.8%	7.8%	7.8%
	Industry	52,103	1,461	2.9%	36.8%	7.8%	7.9%
	Construction	17,192	562	3.4%	14.1%	8.4%	8.4%
	Wholesale and retail trade	47,071	1,413	3.1%	35.6%	8.1%	8.2%
ENTERPRISES AND OTHER CLIENTS	Transport and storage	8,693	237	2.8%	6.0%	8.9%	8.9%
	Accomodation facilities and catering services	3,759	-85	-2.2%	-2.1%	8.8%	8.6%
	Real estate	4,205	202	5.0%	5.1%	8.2%	8.1%
	Other sectors	11,892	151	1.3%	3.8%	7.2%	8.5%
TOTAL ENTERPRISES A	TOTAL ENTERPRISES AND OTHER CLIENTS		3,973	2.7%	50.2%		
TOTAL CREDIT EXPOSURE		329,421	7,916	2.5%	100.0%		

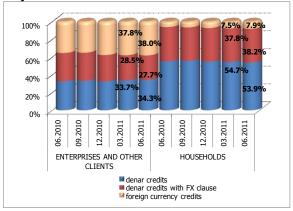
Note: Changes in any activity and credit product are presented, in more details, in Annex 15 – Credit exposure and impairment for the overall banking system, by risk and sector.

Figure 25 Annual credit growth rates, by



Source: NBRM, based on data submitted by banks.

Figure 26 Currency structure of credits, by sector



Source: NBRM, based on data submitted by banks.

Analyzing annually, foreign currency credits registered the fastest absolute and relative growth, thus taking the role of driver (56%) of the annual growth of total credits (Figure 25). Denar credits increased at a slower pace compared to the foreign currency credits, but again, making a contribution of 46.5% to the total credit growth. In spite of the increase of Denar credits with FX clause in this quarter, they still report negative annual growth.

Lending with FX component remains higher in the corporate credit structure, while the households were being credited mostly in Denars (Figure 26). However, Denar credits made substantial contribution to the quarterly growth of credits to corporations and other clients (58.1%), and the household credit growth was mostly generated by Denar credits with FX clause (49.2%).



Figure 28 Quarterly growth of credits by maturity and of total credits

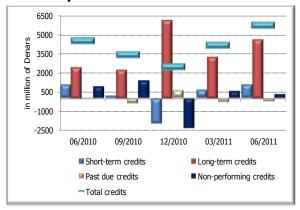
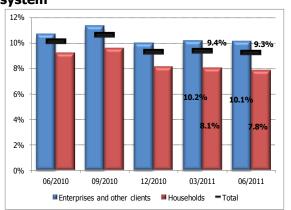
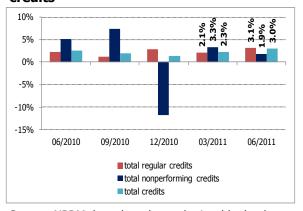


Figure 27 Ratio of nonperforming credits to total credits by sectors and across banking system



Source: NBRM, based on data submitted by banks.

Figure 29 Quarterly growth rates of credits



Source: NBRM, based on data submitted by banks.

Observing the maturity of total credits, long-term credits still dominate, making up about 69% (Annex 5). They made the most robust absolute growth of Denar 4,616 million (3.5%), contributing with 80.1% to the growth of total credits (Figure 28). This growth was mostly determined by the increase in long-term credits corporations and other clients (52.7%). Short-term credits kept on increasing at a faster pace. As of June 30, 2011, their quarterly growth rate reached 2.7% (1.7% on March 31, 2011). Past-due, but not collected credits kept on registering negative quarterly growth, but at a slower pace. The quarterly growth rate of these credits decelerated by 0.9 percentage points.

In the second quarter of 2011, the **nonperforming credits** kept on increasing but at a slower pace. As of June 30, 2011, their quarterly growth rate equaled 1.9% (Denar 331 million), compared to 3.3% (Denar 564 million) in the preceding quarter. Roughly 95% of the total growth of nonperforming credits emanates from the increase of these credits to corporations. The quarterly growth rate of nonperforming credits to enterprises and other clients, and to households equaled 2.5% and 0.6%, respectively. Foreign currency credits made roughly 63% contribution to the growth of nonperforming corporate loans. On annual basis, nonperforming credits went down by 0.4% or by Denar 67 million. The annual fall of these credits corresponds to the positive real sector developments. On the other hand, the ongoing quarterly growth of nonperforming loans, although slower, indicates that the risks are still high, that could eventually affect the credit growth rate.

The slower quarterly growth of nonperforming loans in the second quarter of 2011, tended to slightly decrease their share in total credits and by sector (Figure 28). The share of nonperforming loans of nonfinancial entities in the total credits equaled 9.3%¹⁸ as of June 30, 2011, i.e. 9.4% in the preceding quarter (Figure 29).

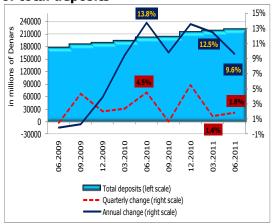
¹⁸ If nonperforming loans of financial entities are included, this indicator would be 8.9%.



4. Bank deposits

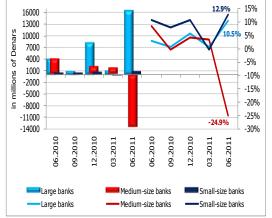
On annual basis, the bank deposit base continued increasing, but at a slower pace. The slowdown is due to a one-time effect — dividend paid by a large corporation. The quarterly growth, however, illustrates a slightly faster pace of growth compared to the preceding quarter. Deposit growth encouraged banks to increase their lending to the private sector. Denar deposit growth exceeded the growth of deposits with FX component, being a major generator of the growth of the bank deposit base.

Figure 30 Quarterly and annual growth of total deposits



Source: NBRM, based on data submitted by banks.

Figure 31 Absolute and relative quarterly change of total deposits by groups of banks



Source: NBRM, based on data submitted by banks.

As of June 30, 2011, total deposits of nonfinancial entities were valued at Denar 220,114 million, which is by Denar 3,887 million or 1.8% more compared to the first quarter of 2011 (Figure 30). The 9.6% annual growth rate indicates slower deposit growth compared to June 2010 and March 2011. Yet, the quarterly growth rate exceeded the quarterly growth rate reported for the first quarter of 2011 by 0.4 percentage points. On the other hand, as of June 30, 2011, the annual growth rate of total deposits decreased by 2.9 percentage points compared to the annual growth rate in March 2011.

In the second quarter of 2011, the deposit growth of the group of large banks was the most significant (Denar 16,456 million) (Figure 31). The group of small-size banks also reported a deposit growth of Denar 818 million. The deposits of the group of medium-size banks went down substantially (by Denar 13,387 million on quarterly basis)¹⁹ primarily due to the switch of one bank from the group of medium-size banks to the group of large banks. (See Annex 11 for the deposit structure by sector, maturity and currency).

¹⁹ If the effect of such switch is ignored, the quarterly fall of total deposits of the group of medium-size banks would be considerably more moderate, and would be Denar 681 million, or 1.3%. Also, the nonfinancial entities' total deposits with the group of large banks would increase quarterly by Denar 3,750 million (or by 2.4%).



Figure 32 Currency structure of deposits of nonfinancial entities

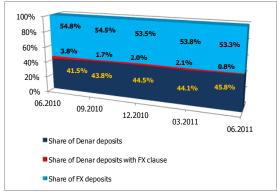
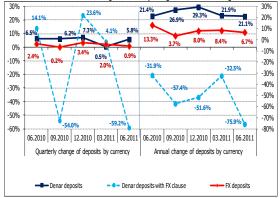
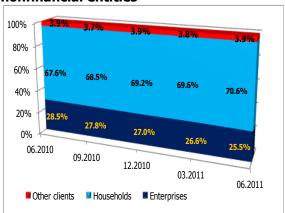


Figure 33 Quarterly and annual growth rates of total deposits, by currency



Source: NBRM, based on data submitted by banks.

Figure 34 Sector structure of deposits of nonfinancial entities



Source: NBRM, based on data submitted by banks.

In the second quarter of 2011, Denar deposits were the major drivers of the bank deposit growth, thus increasing their share in the structure of total deposits (Figure 32). Denar deposits reported the fastest absolute quarterly and annual growth of Denar 5,503 million and Denar 17,560 million, respectively. These deposits almost solely (91.2%) generated the annual total deposit growth, as well.

The last six quarters, except for the first quarter of 2011, reported higher propensity to hold Denar deposits, which was not the case during the crisis. On the other hand, Denar deposits with FX clause went down by Denar 2,649 million or by 59.2% in this quarter (by Denar 5,733 million or 75.9%, on annual basis) (Figure 33), mainly due to the dividend paid by one large corporation to its shareholders in April (prior to its payment, the dividend funds were held as Denar short-term deposits with FX clause).

Nevertheless, the deposits with FX clause continued dominating the total bank deposit structure. The quarterly and annual foreign currency deposit growth stood at Denar 1,032 million and Denar 7,423 million, respectively. These deposits made up 26.6% and 38.6% of the quarterly and annual growth, respectively, of the total deposit base (Annex 8).

Household deposits remained dominant in the sector structure of total deposits (Figure 34) in the second quarter of 2011, and showed accelerated growth compared to the preceding quarter.



Figure 35 Quarterly dynamics of deposits of nonfinancial entities, by sector

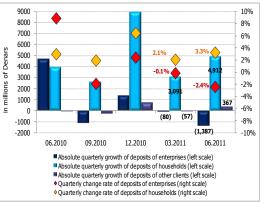
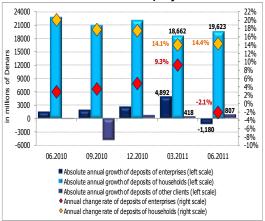


Figure 36 Annual dynamics of deposits of nonfinancial entities, by sector



Source: NBRM, based on data submitted by banks.

Household deposits²⁰ determined solely quarterly growth total deposits the of (contribution of 126.3%). Annually observed, these deposits went up by Denar 19.623 million, making 101.9% contribution to the annual growth of total deposits. Corporate deposits continued the downtrend from the first quarter of 2011 (Figure 35), almost solely due to the abovementioned dividend payment. The annual decrease of these deposits equaled Denar 1,180 million, triggering further decrease of their annual growth rate of 11.4 percentage Accordingly, the share of corporate deposits in the sector structure of total deposits also decreased²¹.

²⁰ The total quarterly increase of household deposits resulted from the increase of household Denar deposits (48.2%) and the increase of household foreign currency deposits (51.7%).

²¹ If the effect of abovementioned dividend payment is ignored, the share of corporate deposits in the sector structure of total deposits would equal 25.8%.



Figure 37 Maturity structure of deposits of nonfinancial entities

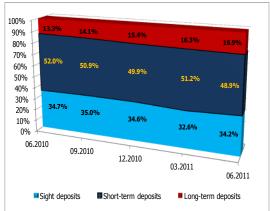
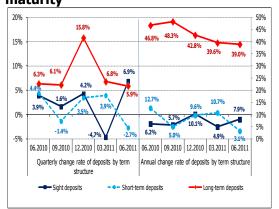


Figure 38 Total deposit growth, by maturity



Source: NBRM, based on data submitted by banks.

In the second quarter of 2011, shortterm deposits went down quarterly by Denar 3,016 million, mostly (87.2%) due to the quarterly fall of corporate short-term Denar deposits with FX clause²², thus decreasing their share structural in the total deposits. Nonetheless, short-term deposits remained dominant in the structure of the total deposit base (Figure 37).

Sight deposits²³ registered the steepest absolute quarterly growth of Denar 4,834 million, generating most (124.4%) of the total deposit growth. Long-term deposits continued increasing (by Denar 2,069 million) quarterly and in terms of their share in total deposits. Almost 58.0% of the long-term deposit growth²⁴ is owed to the quarterly increase of long-term Denar deposits, with the contribution of both household and corporate deposits being 72.1% and 27.1%, respectively.

²² As a result of the abovementioned dividend payment made by one large corporation.

²³ Denar sight deposits produced the most (74.9%) of the total sight deposits growth, with the contribution of the Denar deposits of both corporations and households being 48.0% and 42.1%, respectively.

²⁴ Foreign currency deposits made 44.2% contribution to the total long-term deposit growth, with the foreign currency household deposits almost solely (91.5%) determining this growth.

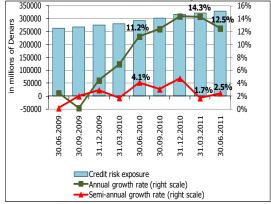


III. Bank risks

1. Credit risk

In the second quarter of 2011, credit portfolio quality indicators illustrated varying developments. Nonperforming loans (of both financial and nonfinancial entities) kept on increasing, but at a slower pace compared to the preceding quarter, contributing to the improvement of some credit risk indicators. Compared to the annual growth rates which were markedly lower, the quarterly growth of exposure classified in C, D and E risk categories, accelerated, thus worsening the credit risk indicators that include, in their calculation, the exposure to these three riskier categories. However, this growth mostly results from the growth of the "regular" exposure in the C risk category. The average risk level remained unchanged compared to the previous quarter, and relative to June 2010, it went down by 0.5 percentage points, which indicates lower annual growth of identified potential loan losses, compared to the credit portfolio growth. Coverage of nonperforming loans with impairment kept on increasing, while the C, D and E risk category exposure coverage reduced. Corporations and other clients sector reported higher credit risk level. Although the process of deterioration of the credit portfolio quality of the banking system ceased and the share of nonperforming loans reduced, it still cannot be considered that the credit portfolio quality improved.

Figure 39 Development and growth rates of the banks' credit exposure



Source: NBRM, based on data submitted by banks.

1.1 Bank credit portfolio quality

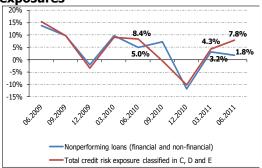
As of June 30, 2011, the total bank credit exposure was valued at Denar 329,421 million, which is by Denar 7,916 million or 2.5% more compared to the **preceding quarter.** On quarterly basis, banks almost proportionally increased the amount of credit exposure to corporations and other clients (by Denar 3,973 million) and to financial institutions (Denar 3,746 million). On the other hand, the quarterly growth rate of credit exposure to financial institutions is almost twice as higher (5.2%) compared to the growth rate of exposure to corporations and other clients (2.7%). The exposure to financial institutions increased primarily due to the increased bank investments in bills of six-month deposit with the National Bank²⁵ and to the higher exposure to domestic banks²⁶. Exposure to the government reduced by Denar 2,075 million, particularly as a

²⁵ Bills of six-month deposit increased by Denar 2,190 million or by 25.5%, quarterly.

²⁶ Exposure to domestic banks increased by Denar 1,511 million, primarily due to the growth of long-term credits of domestic banks arising from placing funds from the European Investment Bank's line of credit through MBPR AD Skopje.

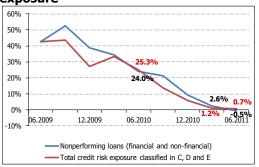


Figure 40 Quarterly growth rates of nonperforming loans and C, D and E exposures



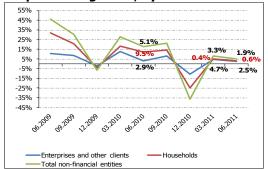
Source: NBRM, based on data submitted by banks.

Figure 41 Annual growth rates of nonperforming loans and of C, D and E exposure



Source: NBRM, based on data submitted by banks.

Figure 42 Quarterly growth rates of nonperforming loans, by sector



Source: NBRM, based on data submitted by banks.

result of the lower banks' demand for treasury bills (by Denar 1,035 million or by 7.3%).

Exposure to households increased by Denar 2,272 million or by 2.6%, constituting 28.7% of the total credit exposure. For comparison purposes, at the end of the preceding quarter, the credit exposure to this sector decreased by Denar 187 million, or by 0.2%.

The slower growth of nonperforming loans in the second quarter of 2011, contributed to the improvement of some credit risk indicators. Relative to March 31, 2011, nonperforming loans increased by Denar 318 million or by 1.8% and reached Denar 18,396 as of June 30, 2011. The quarterly growth rate of these credits fell by 1.4 percentage points compared to the quarterly growth rate in the first quarter of 2011 (Figure 40). Compared to June 2010, nonperforming loans went down by 0.5%.

Analyzing by sector, the growth of nonperforming loans was almost solely (90%) concentrated in corporations and other clients (Figure 42). The slower growth of nonperforming loans decreased their share in the total gross credits (to financial and nonfinancial entities) by 0.1 percentage point compared to the previous quarter. At the same time, the coverage of nonperforming loans with impairment increased additionally, and reached 113.9%.



Figure 43 Annual growth rates of nonperforming loans, by sector

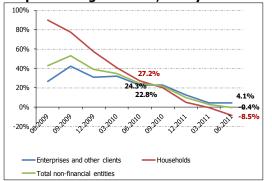
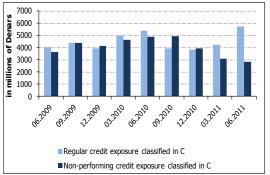


Figure 44 Regular an nonperforming credit exposure in the category of risk "C"



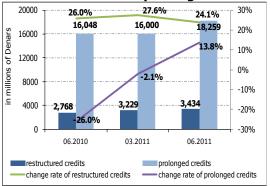
Source: NBRM, based on data submitted by banks.

The accelerated growth of exposure, classified in C, D and E risk category, however, deteriorated the credit risk indicators that include, in their calculation, exposure to these three categories (Annex 13). Exposure classified in C. D and E risk categories registered quarterly growth of Denar 1,830 million, and equaled Denar 25,215 million as of June 30, 2011. The quarterly growth rate of this exposure is 7.8%, and is higher by 3.5 percentage points compared to the previous quarter. The quarterly growth of regular exposure in the C risk category determined 83.2% of the total growth of C, D and E risk category exposure. The growth of C, D and E risk category exposure increased its share in the total credit exposure and in the own funds by 0.4% and 3.9 percentage points, respectively, relative to the preceding quarter. The most notable percentage increase of the exposure in C²⁷ risk category decreased the coverage of C, D and E risk category exposure with impairment and special reserve by 3.9 percentage points (Table 4). However, the exposure in the two riskiest categories (D and E) was fully covered by impairment and special reserve (125.7%).

²⁷ The quarterly growth of C risk category exposure and impairment for this exposure amounted to Denar 1,266 million and Denar 281 million, respectively. Its average risk level went down from 28.5% to 27.6% which is close to the statutory threshold.



Figure 45 Balance and annual growth of restuctured and prolonged credits



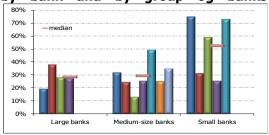
As of June 30, 2011, the share of restructured and prolonged credits increased for a period of one quarter, by 0.9 percentage points, and equaled 11.0%, (on annual basis, their share went up by **3.7 percentage points).** The coverage of these credits with impairment increased by 0.3 percentage points and 3.5 percentage points on and annual basis, respectively. Considering the steady uptrend of these credits, they need to be monitored more prudently, in particular the restructured credits, since their further growth could be a signal for future deterioration of credit portfolio quality, in event the restructurings fail.

Table 4 Quality indicators for the credit portfolio of the banking system

Indicator	30.06.2010	31.03.2011	30.06.2011
Average level of risk	6,8%	6,3%	6,3%
% of "C", "D" and "E" in total credit risk exposure	8,6%	7,3%	7,7%
% of "C", "D" and "E" in total credit risk exposure (not including the credit exposure to financial institutions and to the state)	11,1%	9,9%	10,4%
% of "E" in total credit risk exposure	3,9%	3,9%	3,8%
Coverage of "C", "D" and "E" with calculated impairment and special reserves	79,6%	86,8%	82,9%
Coverage of nonperforming credits with calculated impairment and special reserves	108,2%	112,7%	113,9%
Coverage of the nonperforming credits with calculated impairment and special reserves for nonperforming credits	70,0%	76,2%	76,2%
% of "C", "D" and "E" in own funds	68,2%	59,3%	63,2%
% of "E" in own funds	31,2%	31,5%	31,8%
Calculated impairment and special reserves/Own funds	54,3%	51,5%	52,4%
% of nonperforming credits, net of calculated impairment for nonperforming credits in own funds	15,0%	10,9%	10,9%
% of "C", "D" and "E", net of calculated impairment for nonperforming credits in own funds	25,5%	18,7%	21,6%
Nonperforming credits / Total credits	10,1%	9,4%	9,3%
% of bullet credits in total gross-credits to nonfinancial entities	15,8%	н.п.	15,1%
Restructured and prolonged credits / Total credits	7,3%	10,1%	11,0%
Coverage of restructured and prolonged credits with calculated impairment and special reserves for these credits	14,9%	18,1%	18,4%

Source: NBRM, based on data submitted by banks.

Figure 46 Share of the ten largest borrowers in the total credit exposure, by bank and by group og banks



Source: NBRM, based on data submitted by banks. The group of medium-size banks does not include MBPR AD Skopje, since most of its clients are other domestic banks, and consequently, in the case of this bank, this indicator is extremely high (above 90%).

Credit exposure concentration, measured through the share of the ten most exposed clients in the total credit exposure, remained almost unchanged compared to the first quarter of this year. The sector analysis shows that the concentration with natural persons is marginal (0.7%). The share of ten largest borrowers in the total credit exposure to the corporations and other clients sector equaled 12.7%, which is by merely 0.5 percentage points higher compared to March 31, 2011. The concentration was the most notable in the group of small banks (Figure 46).



The total amount of written off claims in the first two quarters of 2011 was by 42.8% lower compared to the same period the last year, which is in accordace with the generally improved economic developments. Most of these claims were written off during the second quarter of 2011. Analyzing by sector, most of the claims written off in the second quarter of the year are on nonfinancial legal entities, and in terms of currency, most of them are foreign currency claims (Table 5).

Table 5 Amount and structure of net written-off claims

		off claims non n millions of de		Sector structure written-off		Currency structure of written-off claims			
Period	Written-off claims	Collected previously written-off claims	Net written- off claims	Non-financial legal entities persons		Denar	Denar with FX clause	FX	
First half of 2010	836	59	777	101.9%	-1.9%	96.3%	3.2%	0.5%	
First half of 2011	478	90	387	98.1%	1.9%	34.9%	56.6%	8.4%	
First quarter of 2011	25	50	-25	-50.9%	150.9%	96.0%	1.2%	2.8%	
Second quarter of 2011	453	40	412	89.1%	10.9%	38.4%	8.1%	53.5%	

Source: NBRM, based on data submitted by banks.

As of June 30, 2011, 35.8% of the credit portfolio total bank uncollateralized, which is almost the same previous compared to the (decrease of only 0.1 percentage point). However, the sectors report certain divergences. Corporations and other clients reported 2.1 percentage points increase of uncollateralized credits, making up 13.2% of the total credit exposure to this sector at the end of the second quarter. On the other hand, the share of uncollateralized household credits fell by 1.5 percentage points, and as of June 30, 2011, it reduced to 36.6% of the total household credit exposure. The outstanding percentage of uncollateralized credit exposure to natural persons is mostly (75%) due to the exposure based on credit cards and overdrafts, which constitutes 77.4% and 69.5%, respectively.



1.2 Credit risk exposure by group of banks

In the second quarter of 2011, the group of medium-size banks reported the most significant deterioration and deterioration of almost all credit risk indicators (Table 6).

Table 6 Credit portfolio quality indicators, by group of banks

		Large banks	3	Me	dium-size ba	nks	Small banks		
Indicator	30.06.2010	31.03.2011	30.06.2011	30.06.2010	31.03.2011	30.06.2011	30.06.2010	31.03.2011	30.06.2011
Share of total credit exposure	69.7%	68.7%	74.4%	25.7%	28.3%	22.5%	4.6%	3.0%	3.2%
Average level of risk	7.2%	6.6%	6.4%	5.8%	5.6%	6.1%	6.2%	6.8%	6.0%
% of "C", "D" and "E" in total credit risk exposure	8.1%	7.0%	7.3%	10.0%	7.8%	8.8%	7.1%	8.2%	7.6%
% of "E" in total credit risk exposure	4.1%	4.0%	3.9%	3.2%	3.4%	3.6%	5.3%	4.5%	4.0%
Coverage of "C", "D" and "E" with calculated impairment and special reserves	88.8%	94.3%	88.0%	58.1%	71.1%	69.4%	88.3%	82.8%	78.4%
Coverage of nonperforming credits with calculated impairment and special reserves	122.7%	129.2%	128.2%	78.3%	84.3%	85.0%	99.2%	90.3%	85.2%
% of "C", "D" and "E" in own funds	75.7%	63.0%	67.0%	52.4%	63.3%	67.9%	18.9%	21.6%	22.3%
% of "E" in own funds	38.2%	36.2%	35.9%	24.3%	27.7%	27.8%	14.1%	11.7%	11.8%
Calculated impairment and special reserves/Own funds	67.3%	59.4%	58.9%	44.5%	45.0%	47.1%	16.7%	17.9%	17.5%
% of nonperforming credits, net of calculated impairment for nonperforming credits in own funds	12.7%	8.0%	8.2%	26.8%	19.0%	20.6%	2.3%	5.2%	5.7%
% of "C", "D" and "E", net of calculated impairment for nonperforming credits in own funds	24.9%	18.4%	21.6%	38.2%	23.6%	27.0%	2.9%	5.9%	6.4%
Nonperforming credits / Total credits	9.5%	8.6%	8.3%	10.8%	10.5%	11.8%	20.0%	15.5%	15.2%
% of bullet credits in total gross-credits to nonfinancial entities	14.5%	н.п.	15.2%	19.4%	н.п.	14.5%	9.3%	н.п.	16.0%

Source: NBRM, based on data submitted by banks.

In this group of banks, the share of nonperforming loans in the total loans registered the fastest quarterly growth (by 1.3 percentage points). The share of C, D and E exposure in the total credit exposure also recorded a marked growth (of 1 percentage point), making this share the highest, relative to the other two groups of banks (Annex 15).

On the other hand, the group of medium-size banks reported the lowest level of coverage of the higher risk exposure with impairment and special reserve. The average risk level of the credit portfolio of this group of banks went up quarterly, by 0.5 percentage points. Had one bank not switched from the group of medium-size to the group of large banks in the second quarter of 2011, almost all credit risk indicators for the group of medium-size banks would have deteriorated but to a smaller extent. The average credit portfolio risk of the groups of large and



small-size banks reduced by 0.2 and 0.8 percentage points, respectively. In spite of the decrease, the average credit portfolio risk level of the group of large banks was the highest. On the other hand, the group of large banks reported the lowest share of exposure to higher risk categories (C, D and E and only E) in the total credit exposure and of the nonperforming loans in the total loans. However, in spite of the fall relative to the preceding quarter, this group of banks also reported the highest coverage of C, D and E risk categories and of nonperforming loans with impairment and special reserve (88.8% and 128.2%, respectively).

1.3 Indicators for credit risk exposure to corporations and other clients and to natural persons

Some total credit portfolio quality indicators deteriorated largely due to the higher credit risk of the corporations and other clients sector which has the highest share of liabilities to banks (45.3%) in the sector structure of the banking system's credit portfolio²⁸.

-

²⁸ Natural persons and financial institutions, including the government, make up 26.9% and 27,8%, respectively, of the credit portfolio of the overall banking system.



Table 7 Indicators for the level of credit risk exposure to the corporations and other clients sector

Indicator	Date	Industry	Agriculture, hunting and forestry	Construction	Wholesale and retail trade	Transport, storage and communicati on	Hotels and restaurant s	Real estate activities	Total credit risk exposure to enterprises and other clients
	30.06.2010	38.1%	2.9%	10.8%	30.4%	6.3%	2.8%	5.6%	100.0%
Share of total credit risk exposure to the sector "enterprises and other clients"	31.03.2011	34.8%	3.0%	11.4%	31.4%	5.8%	2.6%	2.8%	100.0%
sector enterprises and other clients	30.06.2011	34.9%	2.9%	11.5%	31.5%	5.8%	2.5%	2.8%	100.0%
	30.06.2010	25.7%	13.0%	5.7%	7.9%	6.8%	12.8%	9.4%	9.8%
Average level of risk	31.03.2011	13.0%	13.1%	6.5%	6.8%	6.6%	17.1%	16.0%	9.7%
	30.06.2011	12.6%	13.8%	6.7%	7.2%	7.0%	19.1%	15.8%	9.8%
	30.06.2010	16.9%	14.4%	5.8%	8.1%	10.2%	27.1%	18.3%	12.6%
% of "C", "D" and "E" in total credit risk	31.03.2011	17.0%	15.2%	5.2%	6.3%	8.2%	27.1%	13.6%	11.1%
exposure	30.06.2011	17.3%	15.9%	7.4%	7.6%	9.3%	28.3%	13.9%	12.1%
	30.06.2010	8.5%	8.6%	3.8%	4.8%	4.0%	2.6%	1.8%	5.9%
% of "E" in total credit risk exposure	31.03.2011	9.2%	9.6%	3.5%	4.0%	4.1%	4.4%	1.9%	5.8%
	30.06.2011	8.7%	9.8%	3.6%	4.0%	4.1%	4.4%	1.8%	5.6%
	30.06.2010	152.5%	90.1%	97.5%	97.3%	67.3%	47.2%	51.4%	77.6%
Coverage of "C", "D" and "E" with calculated impairment and special reserves	31.03.2011	76.6%	86.2%	125.2%	108.7%	80.5%	63.1%	117.5%	87.0%
impairment and special reserves	30.06.2011	73.0%	86.6%	90.3%	94.5%	75.1%	67.6%	113.6%	81.1%
Coverage of nonperforming credits with	30.06.2010	73.9%	82.3%	77.5%	79.6%	61.5%	44.8%	50.6%	72.1%
calculated impairment and special reserves for nonperforming credits	31.03.2011	76.5%	80.4%	86.4%	81.2%	80.0%	71.6%	76.7%	77.6%
	30.06.2011	78.2%	81.0%	79.1%	80.5%	71.2%	65.0%	72.2%	77.0%
Comment of the commen	30.06.2010	109.2%	148.5%	110.6%	129.5%	90.2%	62.1%	188.2%	113.5%
Coverage of nonperforming credits with calculated impairment and special reserves	31.03.2011	102.0%	188.7%	149.9%	129.6%	129.8%	104.2%	151.8%	117.7%
calculated impairment and special reserves	30.06.2011	109.5%	195.1%	126.0%	134.1%	113.9%	76.3%	143.9%	119.0%

In addition, credit risk indicators for the corporations and other clients sector still indicate higher credit risk of this sector, compared to the natural person indicators that registered marginal changes in the second quarter of 2011 (improvement of some indicators and deterioration of others). Deterioration of credit risk indicators for corporations and other clients sector is mostly due to the growth of C risk category exposure (for which the banks allocate lower impairment and special reserve²⁹). Accordingly, the share of riskier exposure (C, D and E risk categories) in the total credit exposure increased by 1 percentage point, while the coverage of this exposure with impairment and special reserve decreased by 5.9 percentage points. The total C, D and E risk category exposure to this sector went up quarterly by Denar 1,813 million or by 11.2%, primarily (75.4%) due to the quarterly growth of C risk category exposure of Denar 1,367 million or 25.5%. On the other hand, the

²⁹ The regulation requires the banks to allocate impairment i.e. special reserve from 25% to 50% of the exposure for the C risk category exposure, from 50% to 75% for D risk category exposure and from 75% to 100% for E risk category exposure. Banks primarily allocate impairment closer to the threshold of this range (the average amounts of impairment for exposures classified in C and D risk categories equal 27.6% and 57%), and for the D risk category, the average impairment equals 94.6%.



impairment increased by only Denar 514 million or 3.6%, quarterly. The coverage of nonperforming loans with impairment for the corporations and other clients sector increased by 1.3 percentage points, quarterly. The average credit portfolio risk level and nonperforming loans ratio (10.2% as of March 31, 2011, and 10.1% as of June 30, 2011) of this sector remained almost the same.

The most substantial negative growth (drop of 34.9 percentage points) was registered by the coverage of C, D and E risk category exposure with the total impairment and special reserve of the construction industry (Table 7). This indicator deteriorated particularly due to the growth of C, D and E risk category exposure to corporations of this activity, by Denar 415 million, compared to the total impairment and special reserve for this activity that increased by Denar 73 million. Exposure classified in C risk category that rose by Denar 325 million, contributed the most to the increase of the exposure to this activity, classified in C, D and E risk categories, constituting 78.4% of this exposure. Risk exposure to hotels and restaurants industry remains the highest.

Table 8 Indicators for credit risk exposure to natural persons

Indicator	Date	Residential and commercial real estate credits	Consumer credits	Overdrafts	Credit cards	Car credits	Other credits	Total exposure to household
Chave of total avadit vials assessments the agentus	30.06.2010	19.7%	33.1%	10.8%	29.3%	5.6%	1.5%	100.0%
Share of total credit risk exposure to the sector "household"	31.03.2011	21.0%	35.2%	11.3%	26.4%	4.8%	1.3%	100.0%
nouschold	30.06.2011	21.4%	36.2%	11.2%	25.6%	4.4%	1.2%	100.0%
	30.06.2010	3.4%	9.6%	6.1%	7.4%	5.0%	20.0%	7.3%
Average level of risk	31.03.2011	3.7%	8.7%	4.4%	6.2%	6.1%	19.9%	6.5%
	30.06.2011	3.6%	7.9%	4.4%	6.7%	6.4%	19.9%	6.4%
	30.06.2010	4.7%	12.8%	4.2%	7.8%	6.2%	25.5%	8.6%
% of "C", "D" and "E" in total credit risk exposure	31.03.2011	4.3%	10.7%	4.0%	7.0%	7.2%	24.5%	7.6%
	30.06.2011	4.3%	9.8%	4.0%	7.3%	7.7%	25.3%	7.4%
	30.06.2010	1.3%	4.9%	3.5%	3.9%	2.6%	15.7%	3.8%
% of "E" in total credit risk exposure	31.03.2011	1.8%	6.1%	3.0%	4.0%	3.8%	15.2%	4.3%
	30.06.2011	1.9%	5.9%	3.1%	4.6%	4.3%	14.2%	4.4%
	30.06.2010	73.4%	75.5%	144.7%	95.0%	81.3%	79.3%	84.5%
Coverage of "C", "D" and "E" with calculated impairment and special reserves	31.03.2011	85.5%	81.4%	110.6%	89.5%	85.3%	81.3%	85.7%
and special reserves	30.06.2011	83.2%	81.3%	109.7%	91.9%	83.1%	78.4%	85.5%
	30.06.2010	80.4%	82.4%	151.2%	110.8%	90.7%	122.9%	91.1%
Coverage of nonperforming credits with calculated impairment and special reserves	31.03.2011	100.6%	89.2%	120.9%	104.5%	93.1%	143.1%	97.6%
impairment and special reserves	30.06.2011	95.5%	88.9%	118.3%	107.2%	91.6%	161.1%	97.9%

Source: NBRM, based on data submitted by banks.



Most indicators for the level of risk exposure to natural persons improved marginally compared to the preceding quarter. Credit exposure in C, D and E risk categories to natural persons went up by minor 0.2%, solely due to the credit exposure in E³⁰ risk category. The slower growth of exposure in the three higher risk categories relative to the total exposure to natural persons (quarterly growth of Denar 2,297 million or 2.8%) decreased their ratio by 0.2 percentage points quarterly. In addition, the average risk level of the credit portfolio in this sector went down by 0.1 percentage points, and the nonperforming loans ratio decreased by 0.3 percentage points (from 8.1% on March 31, 2011 to 7.8% as of June 30, 2011). According to the credit risk indicators (if the category of other credits, that plays insignificant role in the credit portfolio of natural persons, is ignored), consumer credits are the riskiest (Table 8), with some decrease being registered compared to the preceding quarter.

Household creditworthiness largely depends on the amount of their regular income. Roughly one third (29.6%) of the total bank exposure to natural persons is to persons with income of up to Denar 15 thousand, which is slightly lower compared to the end of 2010 (31.1%). This percentage is the highest³¹ in the exposure based on overdrafts (40%), which is actually exposure with the lowest coverage with certain collateral. Analyzing the commercial and residential real estate loans, the exposure to these persons with relatively lower income is only 10% of the total exposure based on these two credit products (Annex 12).

 $^{^{30}}$ The credit exposure in E risk category of this sector went up by 5.0% (or by Denar 180 million), while the C and D risk category credit exposure went down.

³¹ This percentage is higher only in the category of other credit exposure that constitutes minor part of the total credit exposure to natural persons.



1.4 Currency structure of the credit risk exposure

As of June 30, 2011, the highest risk was registered in the Denar credit exposure, while the largest deterioration of the credit risk indicators was recorded in the exposure in Denars with FX clause (Annex 14).

Table 9 Indicators for risk degree of the credit exposure according to the currency structure

Indicator	D	enar exposur	e	Denar ex	posure with	FX clause	FX exposure			
	30.06.2010	31.03.2011	30.06.2011	30.06.2010	31.03.2011	30.06.2011	30.06.2010	31.03.2011	30.06.2011	
Share of total credit risk exposure	44,1%	45,6%	46,1%	27,5%	23,8%	22,5%	28,4%	30,6%	31,4%	
Average level of risk	8,3%	7,2%	7,0%	5,4%	6,3%	6,8%	5,9%	5,0%	5,0%	
% of "C", "D" and "E" in total credit risk exposure	10,1%	8,0%	8,1%	7,2%	7,3%	8,6%	7,4%	6,2%	6,3%	
% of "E" in total credit risk exposure	5,0%	4,8%	4,6%	3,0%	3,5%	3,8%	3,1%	2,8%	2,7%	
Coverage of "C", "D" and "E" with calculated impairment and special reserves	82,1%	89,7%	86,2%	74,2%	86,9%	79,2%	79,3%	81,2%	80,0%	
Coverage of nonperforming credits with calculated impairment and special reserves	109,3%	108,9%	109,7%	103,1%	111,2%	115,2%	110,3%	123,6%	122,2%	
Nonperforming credits / Total credits	13,0%	12,2%	11,6%	5,7%	7,1%	7,1%	11,5%	8,0%	8,2%	

Source: NBRM, based on data submitted by banks.

Table 10 Results of the stress test simulations

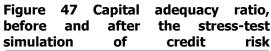
	Indicator	Total credit risk exposure to enterprises and other clients and natural persons	Credit exposure to t banking system			
ē	CAR of the banking system	16,	5%			
baseline	% of "C", "D" and "E" in total credit risk exposure	10,4%	7,7%			
	Average level of risk	erage level of risk 8,5%				
ario	CAR of the banking system	14,6%				
scenario	% of "C", "D" and "E" in total credit risk exposure	15,3%	11,2%			
н	Average level of risk	10,5%	7,8%			
ario	CAR of the banking system	10,	1%			
scenario	% of "C", "D" and "E" in total credit risk exposure	25,1%	18,1%			
Ħ	Average level of risk	14,5%	10,7%			

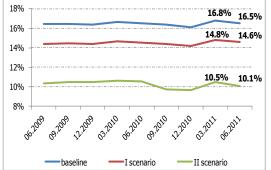
Source: NBRM, according to the data submitted by the banks.

1.5 Stress test simulation of the sensitivity of the banking system to the increase in the credit exposure riskiness

The stress-testing of the banking system sensitivity to the possible increase in the risk of the credit exposure to non-financial entities assumes migration of a certain exposure percentage from each risk category to the two consequent categories with higher risk degree, where they are distributed in equal amount. The objective of such a simulation is to determine the negative effect the migration may have on the capital adequacy and the exposure riskiness, not only for the total exposure, but for the exposure by individual sectors and activities, as well (Annex 16).







In a hypothetical situation where 10% (scenario I) and 30% (scenario II) of the credit risk exposure to the "enterprises would other clients" sector simultaneously distributed be from categories with lower to categories with higher risk, the largest quality worsening would be registered with the exposure to the activity - "real estate activities" (in the first scenario, it worsened by 6.8 percentage points, while in the second one, the deterioration equaled 20.4 percentage points)³². The average riskiness to this sector would register the highest rise with "real estate activities" (of 2.9 percentage points in the first scenario and 8.8 percentage points in the second scenario).

conditions In of the same hypothetical situation with the exposure to persons, the severest quality deterioration is registered with residential and commercial real estate loans (deterioration of 5.1 percentage points and 15.3 percentage points in the first and the second scenario, respectively). On the other hand, the average risk to the natural persons increases the most with the credit cards (in the first scenario, by 2.2 percentage points, while 6.7 percentage points according to the second scenario).³³

In all simulations, the capital adequacy does not fall below 8%.

³² Annex 16 Stress test simulation of credit exposure to individual activities of "enterprises and other clients" sector.

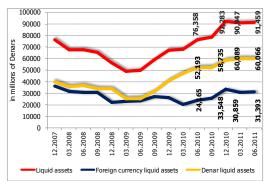
³³ Annex 16 Stress test simulation of the credit exposure to natural persons, by individual credit products.



2. Liquidity risk

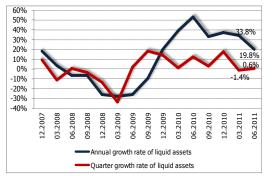
The liquidity of the banking system remained on a relatively high level. After the decrease in the preceding quarter, in the second quarter of 2011, the liquid assets registered annual growth of 19.8%. The generator of the banks' liquidity growth was the foreign exchange liquidity. The expectations and the experience of the banks so far point to high degree of deposit base stability. The amendments to the regulations pertaining to minimum liquidity from September 2011 (envisaging integrated monitoring of the liquidity ratios from the currency aspect), resulted in full redirecting of the placements in the bills of six-month deposit³⁴ with the National Bank to the other liquid assets' components. The implementation of these regulations commences on October 01, 2011, and it is expected to facilitate the liquidity management by banks, without influencing the quality of the banks' liquid position.

Figure 48 Movement of liquid assets of the banking system



Source: NBRM, according to the data submitted by the banks.

Figure 49 Growth rates of liquid assets



Source: NBRM, according to the data submitted by the banks.

1.1 Liquid assets and liquidity indicators of the banking system

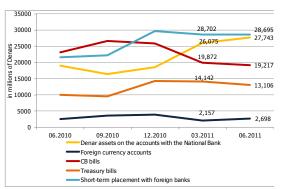
At the end of the second quarter of 2011, the liquid assets³⁵ of the banks registered quarterly growth of Denar 512 million, or 0.6%, as opposed to the decrease in the first quarter of the year. Observed on annual basis, the liquid assets grew by Denar 15,101 million. quarterly increase is fully due to the foreign currency liquid assets (Figure 48), which augmented by Denar 535 million, or by 1.7%, which is due to the increase in the cash foreign currency. As a comparison, in the second guarter of the year, the Denar liquid assets decreased by Denar 23 million, or by 0.04%. The Denar liquid assets notwithstanding retained their dominance in the currency structure of the banks' liquid assets (with a share of 65.7%). The annual growth rates of the liquid assets in both Denar and foreign currency pursued their downward trend registered in the previous quarter and as of June 30, 2011 they equaled 15.1% and 29.9%, respectively.

³⁴ According to the layout, this Denar instrument is mainly used for meeting the liquidity ratios in foreign exchange.

³⁵ The liquid assets encompass the cash and balances with the NBRM, the CB bills, the correspondent accounts and the short-term placements with foreign banks and placements in short-term securities issued by the Government.



Figure 50 Movement of the liquid assets' elements



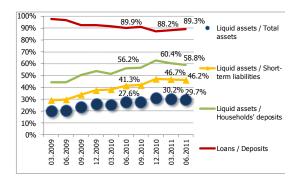
Source: NBRM, according to the data submitted by the banks.

Table 11 Indicators for the banking system liquidity for the positions in Denars and in foreign exchange

Indicator	Dei	nar	Foreign currency			
Indicator	03.2011	06.2011	03.2011	06.2011		
Liquid assets / Total assets	30.5%	30.1%	31.9%	30.3%		
Liquid assets / Short-term liabilities	65.5%	64.7%	28.6%	27.3%		
Liquid assets / Households' deposits	98.5%	95.1%	32.9%	31.2%		

Source: NBRM, according to the data submitted by the banks.

Figure 51 Indicators for the liquidity of the banking system



Source: NBRM, according to the data submitted by the banks.

The decrease in the CB bills and Treasury bills in the liquid assets' structure continued, together with the increase in the Denar assets on the accounts with the **National Bank.** Compared to March 31, 2011, the CB bills and the Treasury bills reduced by Denar 655 million and 1,035 million, respectively. Parallel to this decrease, the Denar assets on the accounts with the National Bank increased by Denar 1,667 million, primarily as a result of the investments in the bills of six-month deposit with the National Bank. At the end of the second quarter of 2011, the banks have placed Denar 10,780 million in bills of six-month deposit with the National Bank, or Denar 2,190 million more compared to March 31, 2011. The group of large banks had the highest share in the investments in bills of six-month deposit at the level of the banking system of 87.7%.

In the liquid assets' structure, the share of the Denar assets on the accounts with the National Bank and the short-term assets placed with foreign banks is almost identical, of 30.3% and 31.4%, respectively.

During the last three quarters, the liquidity³⁶ indicators for the banks' remained on the highest level comparison with the few previous years, although slight quarterly decline in the first two quarters of 2011 is evidenced. The faster growth in the assets, the short-term liabilities and households' deposits³⁷ compared to the increase in the liquid assets, is the main reason for the decrease in the liquidity indicators of the banking system in the second quarter of the year. Thus the share of the liquid assets in the total assets decreased by 0.5 percentage points. The coverage of the households' deposits and the short-term deposits with liquid assets fell by 1.6 and 0.5 percentage points, respectively.

³⁶ In the analysis of the liquidity indicators, the deposits with and the credits of the domestic banks (assets components), i.e. deposits and the borrowings from the domestic banks (liabilities' components) are not taken into consideration.

 $^{^{37}}$ More detailed analysis of the increase in these banks' on-balance sheet items is provided in part II.1 Bank activities.



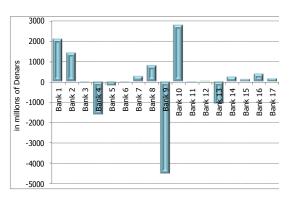
From a viewpoint of the currency structure, in the second quarter of 2011, downward movement of the liquidity indicators in both segments (Denars³⁸ and foreign currency) was registered. The most evident decrease was registered by the indicator for the coverage of the households' Denar deposits with Denar liquid assets, as a result of the decrease in the Denar liquid assets with simultaneous rise in the households' Denar deposits.

Measured by liquidity indicators, the banking system of the Republic of Macedonia is situated in the middle of the list of analyzed countries in the region. Thus, according to the share of liquid assets to total assets of the Macedonian banking system is in fifth place (in terms of the analyzed countries) immediately after Turkey (52.3%), Slovakia (41.6%), Greece (34.5%) and Czech Republic (31.4%). The order is the same for the indicator liquid assets / short-term liabilities.

1.2 Liquidity by individual group of banks and by bank

In the second quarter of 2011, the liquid assets increased with most of the **banks.** The liquid assets reduced with six banks³⁹, the share of which in the total assets of the banking system equals 33.6% as of June 30, 2011. The most evident decrease in the liquid assets in absolute terms has been registered with one large bank, because of the aforementioned payment of dividend by one large company. However, the group of large banks registered quarterly increase in the liquid assets of Denar 7,536 million, or 12.6%, as a result of the transfer of one bank from the group of mediumsize banks. If such transfer had not happened, the group of large banks would have registered quarterly decrease in the liquid assets of 1.7%.

Figure 52 Absolute quarterly change of the liquid assets of individual banks



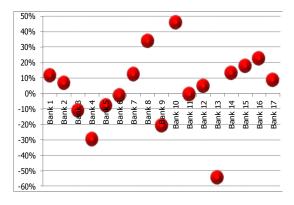
Source: NBRM, according to the data submitted by the banks.

³⁸ For the needs of the bank liquidity analysis, the assets and the liabilities in Denars with FX clause are included in the assets and liabilities in Denars.

³⁹ The calculation of the individual components for analyzing the liquid position of individual banks takes into consideration also the deposits with and the credits of the domestic banks (assets component), i.e. it takes into consideration, also the deposits with and the loans of the domestic banks on the side of the liabilities.



Figure 53 Relative quarterly change of the liquid assets of individual banks



Source: NBRM, according to the data submitted by the banks.

The group of medium-size banks registered quarterly drop in the liquid assets of Denar 7,475 million, or 28.6%. Without the aforementioned transfer, the group of medium-size banks would have registered higher liquid assets by 4.1%. The group of small-size banks registered quarterly growth of liquid assets of Denar 450 million, or 8.9%.

As regards the liquidity indicators, the share of the liquid assets in the total assets reduced only with the group of medium-size banks by 2.3 percentage points. This was a result of the reduced number of banks in the group of medium-size banks (Annex 17). The liquidity indicators for the group of large banks remained stable, while they reduced with the group of small-size banks, as a result of the more dynamic increase in the activities they perform relative to the liquid assets growth.

1.3 Fulfillment of the liquidity ratios

At the end of June 2011, all banks adhere to the minimal level (of 1) of the liquidity ratio up to 30 days in both Denars and foreign exchange. Simultaneously, with exception to one bank, all banks have already reached the minimal level of the liquidity ratio up to 180 days in Denars (the deadline for reaching the liquidity ratios up to 180 days is February 2014). In contrast, only half of the banks (eight banks) have already reached the liquidity ratios up to 180 days in foreign exchange, while only one bank registered lower liquidity ratio from the prescribed one for June 2011⁴⁰.

1.4 Sources of financing of the banking system

The short-term deposits of the nonfinancial entities remain to be the main source of financing of the banking system in the Republic of Macedonia.

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⁴⁰ After the cut-off date of this Report, i.e. in September 2011, the National Bank Council adopted a new Decision on managing banks' liquidity risk ("Official Gazette of the Republic of Macedonia" no. 126/2011), which envisages integrated monitoring of the liquidity ratios from the aspect of the currency and repeal of the dynamics for reaching the level of 1.

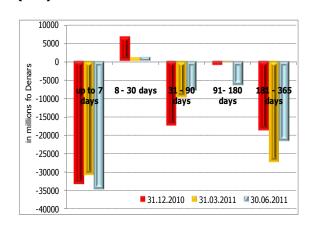


Table 12 Sources of funding of banks

	31.03.201	1	30.06.201	l	Quarterly change	
Sources of funding of banks	Amount (in millions of Denars)	Structure (in %)	Amount (in millions of Denars)	Structure (in %)	Absolute	In %
Deposits of nonfinancial entities	180,851	67.8%	184,304	67.2%	3,453	1.9%
-long-term	51,844	19.4%	53,301	19.4%	1,456	2.8%
-short-term	129,007	48.4%	131,003	47.7%	1,996	1.5%
-of which from parent entities	0	0.0%	99	0.0%	99	0.0%
Депозити на финансиски институции	15,143	5.7%	15,861	5.8%	718	4.7%
-long-term	5,927	2.2%	6,974	2.5%	1,047	17.7%
of which from parent entities	1,680	0.6%	2,041	0.7%	361	21.5%
-short-term	9,216	3.5%	8,887	3.2%	-329	-3.6%
of which from parent entities	3,408	1.3%	4,496	1.6%	1,088	31.9%
Borrowings, subordinated and hybrid capital instruments	35,051	13.1%	38,222	13.9%	3,171	9.0%
-long-term	31,530	11.8%	33,510	12.2%	1,980	6.3%
of which from parent entities	6,831	2.6%	7,124	2.6%	293	4.3%
-short-term	3,521	1.3%	4,711	1.7%	1,191	33.8%
of which from parent entities	3,291	1.2%	4,313	1.6%	1,022	31.1%
Capital, reserves and other sources	35,631	13.4%	36,047	13.1%	416	1.2%
Total source of funds	266,677	100.0%	274,434	100.0%	7,757	2.9%

Source: Data submitted by banks, upon special request of NBRM.

Figure 54 Contractual residual maturity (mis)match of the assets and liabilities



Source: NBRM, according to the data submitted by the banks.

However, despite the quarterly growth, their share in the total sources of funds reduced from 48.4% as of March 31,2011, to 47.7% as of June 30,2011. The funds used from the parent entities registered the largest quarterly growth of Denar 2,863 million, or 18.8%, which enlarged their share in the structure of the sources of financing from 5.7% as of March 31,2011, to 6.6% as of June 30,2011. The group of large banks, is the generator for the quarterly growth of the sources of financing, with an increase of Denar 22,058 million. The deposits are expected to be the main source of funding of the banks' activities in the following period, as well, with the possibility for using external lines of credits (from EIB) being also certain.

1.5 Maturity (mis)match of the banks' assets and liabilities

The cumulative negative gap between the banks' assets and liabilities deepened in the second quarter, primarily as a result of the widened negative gap in the contractual maturity within 91 - 180-day segment by Denar 6,455 million. The negative gap with this maturity segment enlarged as a result of the increase in the short-term deposits in this maturity segment, in the Denar deposits of Denar 3,507 million and in foreign exchange deposits of Denar 3,906 million. Within the maturity block of 181 - 365 days, the negative cumulative gap

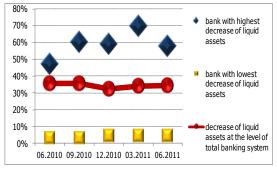


decreased (by Denar 1,286 million), primarily as a result of the quarterly drop in the foreign currency deposits (Annex 18). On the other hand, only the segment with the contractual maturity from 8 to 30 days registered positive assets and liabilities gap in the amount of Denar 1,196 million.

In line with the banks' expectations, the gap between the assets and liabilities, according to the assessments of the stable deposit core, is positive in all maturity segments (Annex 19). Namely, in the second quarter the banks presented relatively high degree of deposits stability of 83.2%, which decreased only by 0.9 percentage points compared to the first quarter of 2011.

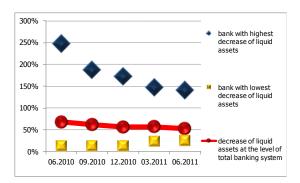
simulation of withdrawing 20% of the households' deposits from the banking system

Figure 55 Results of the stress test



Source: NBRM, according to the data submitted by the banks.

Figure 56 Results of stress-test simulation of withdrawal of deposits of the twenty largest depositors



Source: NBRM, according to the data submitted by the banks.

1.6 Stress-test simulations for the resilience of the banking system to liquidity shocks

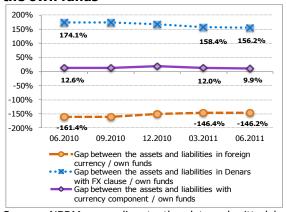
The simulations for the assessment of the resilience of the banking system to shocks on the side of the liquidity show that the banks are less sensitive to withdrawal of 20% of the households' deposits (all banks have enough liquid assets), than to outflow of deposits of the twenty largest depositors of each bank individually (five banks register lack of liquid assets for covering liabilities in case of outflow of the deposits of the twenty largest depositors, which is unchanged compared to March 31,2011). This points to the high concentration of the banks' deposit base. By individual bank, the share of the twenty largest depositors in the total deposits ranges from 8.7% to 69.2%. Compared to the preceding quarter, these end values lowered, thus reducing also the average at the level of the banking system. In addition, as for the results of the hypothetical withdrawal of the deposits of the twenty largest depositors, the resilience of the banking system improved.



3. Currency risk

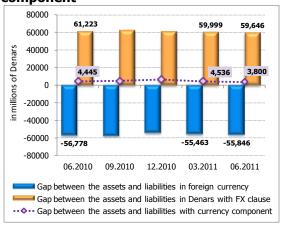
In the second quarter of 2011, the narrowing of the gap between assets and liabilities with currency component continued. Such a trend, which began in the preceding quarter, means reduction of the banks exposure to currency risk. This statement is supported also by the lower ratio of the gap between assets and liabilities with currency component to the banks' own funds. The currency risk reduction is also reflected in the downward movements of the assets and liabilities gap in the three dominant currencies in the banks' currency structure. All banks were managing currency risk within the prescribed limits for the aggregate foreign currency position.

Figure 57 Ratio of the gap between assets and liabilities with currency component to the own funds



Source: NBRM, according to the data submitted by the banks.

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



Source: NBRM, according to the data submitted by the banks.

At the end of the second quarter of 2011, the gap between the assets and liabilities with currency component at the level of the banking system registered a quarterly decrease of 16.2% (or Denar 736 million). The larger balance of the assets and liabilities with currency component, actually, points to smaller currency risk the banks are exposed to. The narrowing of this gap arises from the higher quarterly growth of the liabilities with currency component, compared to the less evident growth in the assets with currency component. Such a movement, parallel to the minor increase in the banks' own funds resulted in further decrease in the gap to own funds ratio (from 12.0% as of March 31,2011, to 9.9% as of June 30,2011) (Figure 57). The annual decrease of this ratio of 2.7 percentage points is another indicator for the reduced currency risk.

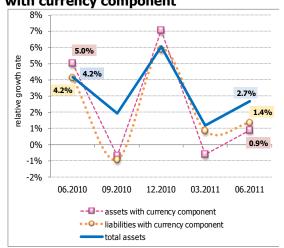
In the second quarter of 2011, the positive gap between assets and liabilities in Denars with FX clause registered minor narrowing, whereas the nagative gap between assets and liabilities in foreign currency registered marginal widening. (Figure 58). The positive gap of the positions in Denars with FX clause fell by 0.6% (or Denar 354 million)⁴¹. On the other hand, the negative gap between the items in foreign currency increased by 0.7% (or Denar 383 million)⁴². Compared to June 30, 2011, the gap between the assets and

⁴¹ This gap narrowing results from the larger decrease of the assets in Denars with FX clause (of Denar 2,339 million), compared to the liabilities in Denars with FX clause (of Denar 1,985 million).

⁴² The deepening of this negative gap is a result of the higher growth of the foreign currency liabilities (of Denar 4,147 million), compared to the increase in the foreign currency assets (of Denar 3,764 million).

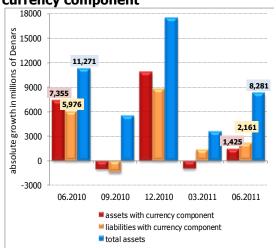


Figure 59 Quarterly change of the total assets and of the assets and liabilities with currency component



Source: NBRM, according to the data submitted by the banks.

Figure 60 Quarterly change of the total assets and assets and liabilities with currency component



Source: NBRM, according to the data submitted by the banks.

liabilities in Denars with FX clause decreased by 3% (or Denar 1,577 million), while the gap between the assets and liabilities in foreign currency also decreased by 2% (or Denar 932 million).

The increase in the assets with currency component (on a quarterly basis of 0.9%, or Denar 1,425 million) is primarily due to the larger lending in foreign currency (by Denar 1,987 million)⁴³ and in Denars with FX clause (by Denar 1.086 million) (Annex 20). Slightly smaller individual contribution to the increase had the current accounts in foreign currency with foreign banks (of Denar 726 million), the securities held for trading in Denars with FX clause (Denar 671 million), the cash foreign currency (Denar 552 million) and reserve requirement in foreign exchange with the National Bank (Denar 388 million), as opposed to the evident decrease in the Treasury bills in Denars with FX clause (by Denar 3,654 million)⁴⁴.

On the other hand, the quarterly growth of the liabilities with currency component (of 1.4%, or Denar 2,161 million) is a result of the increase in the liabilities based on foreign currency credits (of Denar 2,961 million)⁴⁵, foreign currency deposits of the natural persons⁴⁶ (of Denar 1,989 million), current accounts in foreign currency of all types of clients (of Denar 1,457 million) and foreign currency deposits of nonresidents (financial and nonfinancial of Denar 351 million), as opposed to the decrease in the enterprises' deposits in Denars with FX clause (of Denar 2,655 million)

43

⁴³ The increase in the foreign currency crediting is a result of the higher amount of foreign currency lending to enterprises, which conditioned 79.0% of the increase in the foreign currency credits. More than a half of the corporate credits and credits to other clients in foreign currency (57.7% on June 30,2011) are intended for inland payments, while the rest are intended for payments abroad. Pursuant to the Decision on the terms and the manner of extending foreign currency credits and credits in Denars with FX clause among residents ("Official Gazette of the Republic of Macedonia" no. 41/2006), the credits used for inland payment are extended and collected in Denar counter value. The legal entities may repay the foreign currency credits in foreign exchange, only if it arises from the collections from nonresidents.

⁴⁴ The drop in the Treasury bills in Denars with FX clause is almost fully concentrated with one bank of the group of large banks.

⁴⁵ The increase in the liabilities based on foreign currency credits in the second quarter of 2011, arises from the short-term borrowing of one large bank from its parent entity and the increase in the used long-term line of credit of one bank from an international financial institution (EIB - European Investment Bank).

⁴⁶ The deposits of all client types do not include the current accounts in foreign currency.



and foreign currency deposits of the enterprises (of Denar 1,384 million) (Annex 21).

The currency structure of the assets and liabilities with currency component and their gap registered no considerable movements in the second quarter of 2011. The Euro remains to be the dominant currency in the banks' balance sheets, although its share in the gap between the assets and liabilities with currency component registered a decrease, at the expense of the higher share of the other currencies, primarily Australian Dollar⁴⁷ and Swiss Franc. The gap between the assets and liabilities with currency component at the level of the banking system is positive for all currencies, except for the US Dollar.

Table 13 Currency structure of the assets and liabilities with currency component and their

		31.03.2011		30.06.2011					
Currency		Currency structure of the liabilities with currency component	Currency structure of the gap between assets and liabilities with currency component	Currency structure	Currency structure of the liabilities with currency component	Currency structure of the gap between assets and liabilities with currency component			
Euro	90.3%	90.0%	101.5%	89.6%	89.4%	95.8%			
US dollar	6.7%	7.1%	-7.0%	7.1%	7.4%	-5.5%			
Swiss franc	1.5%	1.4%	2.5%	1.6%	1.6%	3.0%			
Australian dollar	0.3%	0.3%	0.4%	0.4%	0.3%	1.5%			
Other	1.2%	1.2%	2.6%	1.4%	1.3%	5.3%			
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			

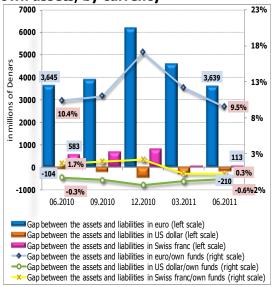
Source: NBRM, according to the data submitted by the banks.

The gap between the assets and liabilities with currency component, analyzed individually by currency, shows tendency for quarterly decrease, parallel to the decrease in the ratio of the gap by currency to banks' own funds. The gap between the assets and liabilities of the dominant currency, the Euro, was reduced by 21.0% (or Denar 966 million) as a result of the evident quarterly growth of the liabilities in Euros (primarily liabilities based on credits in Euro), compared to the more moderate growth of the

⁴⁷ The higher share of the gap in Australian Dollars is almost fully due to its widening with two banks from the group of large banks, and one bank from the group of medium-size banks.



Figure 61 Structure of the gap between assets and liabilities and ratio of the gap between assets and liabilities with the own assets, by currency



Source: NBRM, according to the data submitted by the banks.

assets in this currency. In the case of the US Dollar, the negative gap between the assets and liabilities fell by 33.3%, as a result of the higher assets growth compared to the liabilities growth in US Dollars. As for the Swiss Franc, the gap was reduced by minimal 0.4 percentage points. This indicates that **there** is larger between the assets and liabilities also by individual currencies (Figure decrease in the ratio of the gap to the own funds for these currencies is additional indicator for the reduced currency risk. Similar downward trend was registered also on annual basis, with exception to the gap between the assets and liabilities in US Dollars and the ratio of the gap to banks' own funds for this currency, which widened.

Table 14 Open currency position by currencies relative to the own funds

Open currency position by currency / own funds	Number of banks										
	Eu	ıro	US D	Oollar	Swiss	franc	Ot	her			
	Long	Short	Long	Short	Long	Short	Long	Short			
under 5%	2		8	6	14	2	15	1			
from 5% to 10%	4	1	1	1							
from 10% to 20%	4	1									
from 20% to 30%	3	1									
over 30%											

Source: NBRM, according to the data submitted by the banks.

The ratio between the open currency position in Euro and the own funds in most of the banks ranges within 5% - 20% interval, while the ratio for all other currencies is up to 5% (except the open currency position for the US Dollar for two banks).



Table 15 List of banks according to the share of the aggregate foreign currency position in the own funds, on June 30, 2011

Aggregate currency	Number	of banks		
position / own funds	Aggregate long position	Aggregate short position		
under 5%	1	1		
from 5% to 15%	7	1		
from 15% to 30%	5	1		
over 30%				

Source: NBRM, according to the data submitted by the banks.

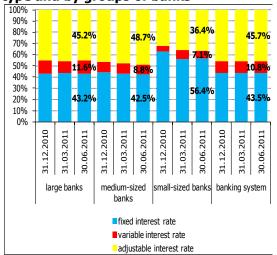
In the second quarter of 2011, the banks maintained the exposure to currency risk within the prescribed limit for the aggregate foreign currency position (maximum 30% of the own funds).



4. Interest rate risk in the banking book

In the second quarter of 2011, the banks' exposure to the interest rate risk in the banking book remained lower compared to the exposure to other risks. The reason for the limited significance of this risk arises from the banks' practice to use adjustable interest rates⁴⁸ in most of the credit and deposit agreements. However, by avoiding this risk, the banks transfer it to the clients, transforming it into indirect credit risk. In case of possible changes in the regulations (for example, in the area of obligations, consumer protection, etc.), which will establish framework for using clauses for unilateral adjustability of the interest rates, the interest rate risk for the banks could be resized.

Figure 62 Structure of the interest sensitive assets by the interest rate type and by groups of banks



Source: NBRM, according to the data submitted by the banks.

4.1 Structure of the interest sensitive assets and liabilities

In the second quarter of 2011, the structure of the interest sensitive assets registered no larger changes, while the significance of the positions adjustable interest rates was higher with the interest sensitive liabilities (Figure 62 and Figure 63). At the end of the first half of 2011, the positions with adjustable interest rates continue to dominate in the structure of the interest sensitive assets with a share of 45.7% (quarterly rise of 0.3 percentage points), as well as in the structure of the interest sensitive liabilities, where their share equaled 60.9% (quarterly increase of 7.2 percentage points). The possibility for unilateral change of the interest rates when using adjustable interest rates on credit and deposit products creates more room for the banks for meeting the set objectives especially regarding the planned profit level. Additionally, the use of the adjustable interest facilitates dealing rates the with competitiveness pressure, especially on the side of the sources of funds. Namely, the unilateral change in the interest rates enables the banks, according to their needs and perceptions, to change the yield on the financial instruments (primarily credits) and the amount of their expenses, i.e. the yield of the depositors. At the end of the first half of 2011, the positions with fixed interest rates take 43.5% and 30.6% of the

⁴⁸ The adjustment of the amount of the interest rates is usually performed unilaterally by referring to the changes in the banks' interest rate policy or the current movements on the financial markets.



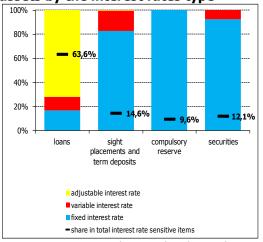
Figure 63 Structure of the interest sensitive liabilities by the interest rate type and by groups of banks

90% 80% 70% 6<mark>0.9</mark>% 6<mark>5.5</mark>% 60% 82 50% 40% 30% 20% 10% 31.12.2010 31.03.2011 2011 31.03.2011 2011 31.03.2011 2011 30.06.2011 30.06.2011 31.12. 31.03. .96 90 large banks medium-sized small-sized banking system banks banks fixed interest rate variable interest rate adjustable interest rate

Source: NBRM, according to the data submitted by the banks.

interest sensitive assets and liabilities, respectively, while the positions with adjustable interest rates register the smallest share both with the interest sensitive assets (10.8%) and the interest sensitive liabilities (8.4%). In comparison with March 31, 2011, the share of the liabilities with fixed interest rate fell by 7.2 percentage points (Annex 22) at the expense of the larger share of the liabilities with adjustable interest rate.

Figure 64 Structure of the interest rate assets by the interest rates type

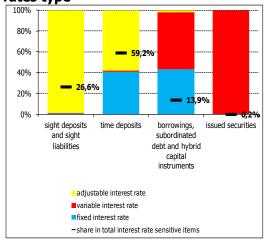


Source: NBRM, according to the data submitted by the banks.

On June 30, 2011, the structure of individual categories of sensitive assets and liabilities according to the interest rate type is almost identical to that registered at the end of the first quarter of 2011. From the aspect of the individual types of assets comprising the interest sensitive assets (Figure 64), the adjustable interest rates are present only with the credits, which are also the most financial instrument common in interest sensitive assets of the banks (63.6%). The credits with adjustable interest rate comprise 71.8% of the total credits and in comparison with March 31, 2011, their share is higher by 1.2 percentage points. Among the other financial instruments (sight deposits, time requirement, deposits, reserve government securities, CB bills), creating smaller portion of the interest sensitive assets (36.4%), the most apparent is the share of the positions with fixed interest rates. Certain types of interest sensitive liabilities characterized with wider variety according to the representation of the individual types of interest rates, also at the end of the first **quarter of 2011** (Figure 65). Almost all of the sight deposits are with adjustable interest rates. The adjustable interest rates have the largest

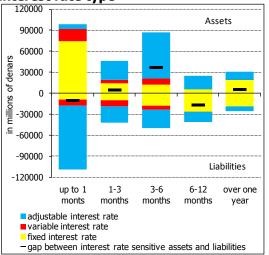


Figure 65 Structure of the interest sensitive liabilities by the interest rates type



Source: NBRM, according to the data submitted by the banks.

Figure 66 Absolute amount of the interest sensitive assets and liabilities by the maturity structure and the interest rate type



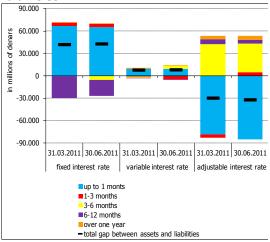
Source: NBRM, according to the data submitted by the banks.

share also with the most common financial instrument in the interest sensitive liabilities - the time deposits. The positions with variable interest rate register the most evident share (54.5%) in the liabilities based on credits and subordinated instruments, followed by the positions with fixed interest rate with a share of 43.4%. All of the issued securities have variable interest rate, although these positions have marginal share in the total interest sensitive liabilities.

According to the maturity structure of the interest sensitive assets liabilities, the banks' exposure to interest rate risk is the highest in the three to six months maturity segment (Figure 66). Namely, this maturity segment registers the largest gap between the interest sensitive assets and liabilities. The adjustable interest rates are present both on the side of assets and liabilities in almost all maturity segments. Exception are the interest sensitive assets in the maturity seament of one month, where dominant is the share of the positions with fixed interest rates, primarily as a result of the maturity features of the basic monetary policy instruments (the reserve requirement and CB bills have contractual maturity of one month) and the instruments on the domestic money market, but also because of the clearly shown preferences of the banks to invest their foreign exchange liquid assets in a short run, as deposits in foreign banks. When analyzing the maturity structure of the positions with adjustable interest rate, the fact that their distribution to adequate maturity segments indirectly mirrors the banks' expectations for the period until the following "adjustment" of the amount of the interest rates, should be taken into consideration.

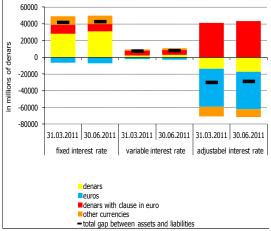


Figure 67 Gap between the interest sensitive assets and liabilities, by the type of the interest rates and the maturity structure of the assets and liabilities



Source: NBRM, according to the data submitted by the banks.

Figure 68 Gap between the interest sensitive assets and liabilities, by the interest rate type and the currency



Source: NBRM, according to the data submitted by the banks.

The dominant position in the maturity structure of the liabilities with adjustable interest rate accounts for the liabilities with a period of change of interest rates up to one month, primarily because the largest portion of the sight deposits is classified in this maturity segment. In the maturity structure of the assets with adjustable interest rate, the largest share accounts for the assets with period of change of interest rate over three months.

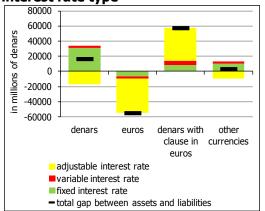
In comparison with March 31, 2011 (Error! Reference source not found.), the maturity structure of the gap between the interest sensitive assets and liabilities by the interest rate type remained almost unchanged. The equilibrium between the interest sensitive assets and liabilities is the largest with the positions with variable interest rates. In contrast, extremely positive gap was registered with the positions with fixed interest rates, while the positions with adjustable interest rates evidenced substantial negative gap. In both cases, this mismatch between the interest sensitive assets and liabilities is due to the positions in the maturity segment of up to one month. As a result, it may be concluded that the banks use the adjustable interest rates for providing equilibrium between the interest sensitive assets and liabilities primarily in the maturity segments on short-term basis (up to six

Omonths) , thus proving their risk aversion arising from the movement of the market interest rates.

The gap between the individual interest sensitive positions, in the second quarter of 2011 according to the currency features of the assets and liabilities remained on similar level as in the end of the first quarter of 2011 (Figure 67). As of June 30, 2011, the largest portion of the positive gap with the fixed interest rates arises from the Denar positions. Compared to the end of the first quarter of 2011, the Denar positions contributed more to the creation of the positive gap between assets and liabilities with fixed interest rates. The negative gap with the adjustable interest rates is due to the positions in Euros, owing to the fact



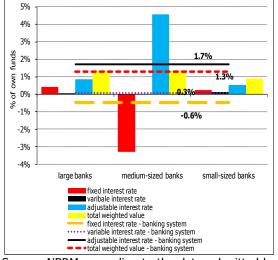
Figure 69 Gap between the interest sensitive assets and liabilities and the interest rate type



Source: NBRM, according to the data submitted by the banks.

that large number of time deposits in Euros are with adjustable interest rates. Also the gap between the interest sensitive assets and liabilities according to their currency structure is positive with the positions in Denars and in Denars with FX clause (Figure 69). But the gap in Denars is due to the positions with fixed interest rates (primarily because of the CB bills), while the gap in Denars with a clause, to the positions with adjustable interest rates (mainly because of the credits). In contrast, the gap between the interest sensitive assets and liabilities with the positions in Euros is negative and it mainly originates from the positions with adjustable interest rates (primarily because of the time deposits).

Figure 70 Ratio between the total weighted value of the bank activities and own funds, by the interest rate type



Source: NBRM, according to the data submitted by the banks.

4.2 Weighted value of the banking book

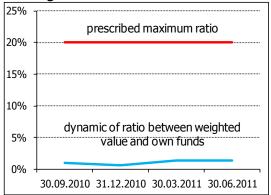
The adjustable interest rates in the credit and deposit banking products create conditions for moderate significance of the interest rate risk in the banking book for the banks. The total weighted value of the banking book at the level of the banking system, as of June 30, 2011 equaled Denar 520 million and compared to March 31, 2011 it is smaller by Denar 8 million. The ratio of the total weighted value of the banking book⁴⁹ to the amount of the own funds remained unchanged as of June 30, 2011 compared to March 31,2011⁵⁰ (Figure 70 and Figure 71) and it equaled 1.3%. Observed by bank, the ratio of the total weighted value of

aggregating the weighted values of the banking book activities of individual banks, is presented in the absolute amount and shows the change of the economic value of this portfolio as a result of the assessment of the change in the interest rates by using the standard interest rate shock (parallel positive or negative change of the interest rates by 200 basic points). The weighted value of the banking book of individual bank is a sum of the weighted net long or short positions by individual significant currencies (each currency with a share in the total on-balance sheet and off-balance sheet assets, i.e. liabilities equaling at least 5%), or cumulatively for all other currencies.

⁵⁰ Pursuant to the Decision on managing interest rate risk in the banking book ("Official Gazette of the Republic of Macedonia" no. 163/2008 and 144/2009), the ratio of the total weighted value of the banking book to the banks' own funds can equal maximum 20%. As of June 30, 2011, this ratio exceeds the prescribed limit with one bank.

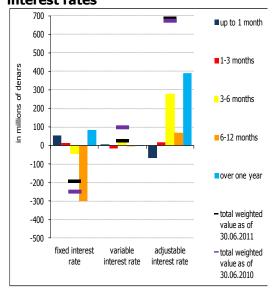


Figure 71 Movement of the ratio between the total weighted value of the banking book and own funds



Source: NBRM, according to the data submitted by the banks.

Figure 72 Absolute amount of the total weighted value of the banking book, by the maturity structure of the assets and liabilities and the type of the interest rates



Source: NBRM, according to the data submitted by the banks.

the banking book to own funds ranges within 0.13% - 20.8%⁵¹ interval, with median of 1.7%. Analyzed by groups of banks, at the end of the first half of 2011, the largest differences in the ratio of the weighted value of the banking book to the own funds was registered with the group of medium-size banks⁵².

It should be taken into account that these ratios are obtained amidst the established practice for unilateral adjustment of the amounts of the interest rates by the banks and hence, the manner and the method the banks have chosen for determining the probability and the frequency of interest rates changes with the positions with adjustable interest rates and consequently their distribution to adequate maturity segments, has a key role in determining the size of the exposure to credit risk in the banking book.

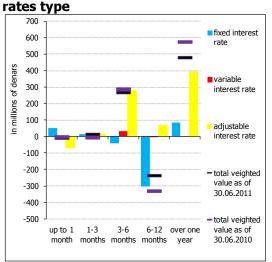
Although in the second quarter of 2011 certain decrease was registered, the positive gap between the interest sensitive assets and liabilities is still the most apparent in the segments with longer maturity, as a result of which the total weighted value of the banking book mostly arises from the longer-term positions (Figure 72 and Figure 73). Accordingly, the main sources of the interest rate risk in the banking book are within the segments with longer maturity, where the positions with adjustable interest rates are the generator for the positive weighted value of the banking book. Having in mind that the adjustable interest rate dominate in both credits and deposits, while the other banks' assets and liabilities (securities, placements in foreign banks, borrowings from foreign banks, subordinated instruments and hybrid capital instruments) are dominated by the fixed and variable interest rates, the positive weighted value of the banking book with adjustable

⁵¹ As of June 30, 2011, the ratio of weighted value of the banking book to own funds with one bank exceeded the set limit of 20%, because of the decrease in the own funds as a result of the registered loss, but after the recapitalization performed in the third quarter of 2011, this ratio is within the set limit of 20% also with this bank.

 $^{^{52}}$ As of June 30, 2011, the ratio of the weighted value of the banking book to the own funds with the group of large banks ranges within 0.4% - 3.3% interval, with median of 1.5%, with the group of medium-size bank it ranges from 0.13% to 20.8% with median 2.2%, while with the group of small-size banks, within an interval of 0.6% - 2.9% and median of 2.1%.

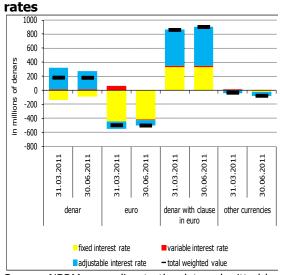


Figure 73 Absolute amount of the total weighted value of the banking book, according to the maturity structure of the assets and liabilities and interest



Source: NBRM, according to the data submitted by the banks.

Figure 74 Absolute amount of the total weighted value of the banking book, by the currency and the type of interest



Source: NBRM, according to the data submitted by the banks.

interest rates, is almost fully due to the difference between the respective credits and deposits. The positions with fixed interest rates generate negative weighted value of the banking book (mainly because of the maturity segment from 6 12 months), while the positions adjustable (variable) interest rates have moderate influence on the total weighted value of the banking book. In the second quarter of 2011, slight increase in the positive weighted value of the banking book with adjustable interest rate was registered, given the simultaneous decrease in the negative weighted value with fixed interest rates.

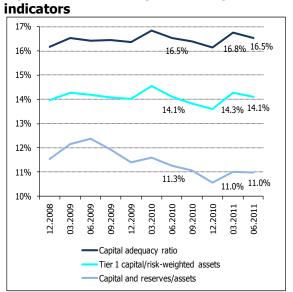
At the end of the first half of 2011, the substantial differences in the total weighted value of the banking book by individual currencies remained (Figure 74). Namely, as of June 30, 2011, the Denar positions and the positions in Denars with FX clause registered positive weighted value, whereas the positions in Euros, registered negative weighted value. These differences in the weighted value of the banking book according to the currency structure are a result of the currency structure of the assets and liabilities, and especially of the presence of the credits with FX clause in Euros, amid relatively apparent propensity for saving in foreign currency. The negative weighted value of the banking book in Euro, mainly arises from the positions with fixed interest rates, while the positions with adjustable interest rate are most important for the creation of the positive weighted value for the banking book in both Denars and Denars with FX clause in Euros.



5. Insolvency risk

The banking system's own funds are characterized with relatively high quality. In the second quarter of 2011 they registered quarterly growth, which was solely due to the retaining of part of the gain for 2010 in the banks' capital. The solvency and capitalization indicators of the banking system register certain drop which was present with the groups of medium-size and small-size banks, whereas the large banks registered minimal solvency improvement. The conducted stress test simulations show satisfactory resilience of the banking system and of certain banks to various shocks, so none of the banks registered capital adequacy below 8%. In the near future, the banks in the Republic of Macedonia will be obliged to determine capital requirement for covering the operational risk. In accordance with the initial assessments of the amount of the capital requirement for covering the operational risk, the banks shall allocate approximately Denar 2.2 billion of capital requirement for covering such risk. Despite this additional amount of capital requirement, the assessments show that all banks in the country would have capital adequacy ratio above 10%.

Figure 75 Solvency and capitalization



Source: NBRM, on the basis of data submitted by banks.

3.1. Indicators for the solvency and capitalization of the banking system

In the second quarter of 2011, the banks' own funds registered the lowest growth rate relative to the growth rates of the other components of the solvency and capitalization indicators for the banking system, which caused certain fall of these indicators (Figure 75). The twice higher quarterly growth rate of the risk weighted assets compared to the growth rates of the own funds and the core capital (Figure 77), resulted in a small decrease in the capital adequacy by 0.3 percentage points⁵³ and fall in the core capital⁵⁴to-risk weighted asset ratio by 0.2 percentage points. On the other hand, the ratio of capital and reserves to total banks' assets remained unchanged, which resulted from the almost identical quarterly growth rates with these two components (Figure 77).

⁵³ The legally prescribed minimum for the capital adequacy ratio amounts to 8%.

⁵⁴ It pertains to the core capital before deductible items of the sum of the core and supplementary capital.

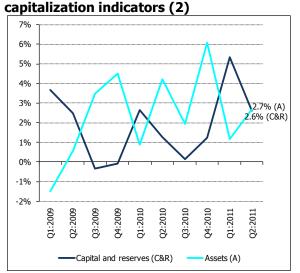


Figure 77 Quarterly change rates of some components of the solvency and capitalization indicators (1)

5% 4% 3% 2.5% (RWA) 2% 1.4% (T1) 1% 1::1% (OF) 0% -1% Q1:2010 Q4:2010 Q1:2011 2011 62: Own funds (OF) Risk-weighted assets (RWA) Tier 1 capital (T1)

Source: NBRM, on the basis of data submitted by banks.

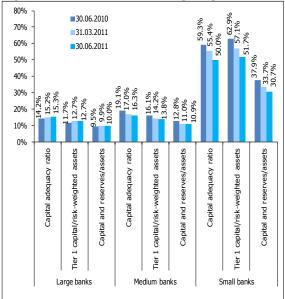
Figure 76 Quarterly change rates of some components of the solvency and



Source: NBRM, on the basis of data submitted by banks.

Analyzed by individual groups of **banks**, the solvency and capitalization indicators register minimal improvement with the group of large banks, and decrease in the groups of medium-size and small-size banks (Figure 78). The group of large banks contributed the most to the rise in the components of solvency and capitalization indicators of the banking system, especially in the strengthening of the capital positions. The increase in the banking system's own funds in the second quarter of 2011, was fully concentrated with the large banks (the own funds of the group of large banks rose by Denar 519 million or by 2%), which also contributed with more than 90% to the increment of the core capital and capital and reserves. Opposite to this, the contribution of this group of banks to the rise in the risk weighted assets of the total banking system was far lower and it amounted to approximately 48% (risk weighted assets with the large banks registered quarterly rise of Denar 2,835 million, or by 1.6%). The medium-size and small-size banks registered quarterly decrease in the own funds (by Denar 36 and 43 million respectively) and simultaneous increase in the risk weighted assets (by Denar 2,377 and 619 million, respectively), which contributed to a decline in the solvency indicators with these groups of banks (Annex 23 and Annex 24).

capitalization of individual groups of banks



Note: For all dates, the structure of individual groups of banks id the same as on June 30, 2011.

Figure 78 Indicators on the solvency and 3.2. Own funds and capital requirement for covering the risks

The retaining of part of the profit for 2010 in the banks' capital was the only factor which contributed to the increase in the own funds in the second quarter of **2011 (Figure 79).** They registered quarterly rise of Denar 440 million (or by 1.1%), which is four times less, compared to the growth registered in the previous quarter. The increase in the own funds is solely due to the quarterly growth in the reserves and the retained gain, which resulted from the retaining of part of the gain for 2010 in the banks' capital⁵⁵. However, besides the increase in the reserves and retained gain, within the structure of the banks' core capital, current loss registered more significant growth as well, and as a deduction from the core capital, it gave negative contribution to the funds⁵⁶. quarterly growth the own in Furthermore, the additional capital (before deductible items) registered quarterly decrease of Denar 24 million, which resulted mostly from the the decline in amount of subordinated instruments which can be part of the Tier 1, with one medium-size bank⁵⁷. As of June 30, 2011, the core capital (after deductible items) represents 84.4% of the total own funds (0.3 percentage points more compared to the end of the first quarter of 2011), which indicates to **relatively** high quality of the banking system's own funds.

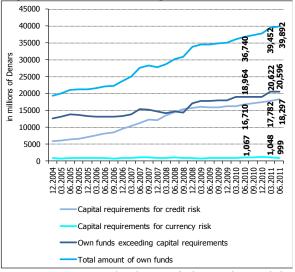
⁵⁵ The quarterly increase in this item of the core capital of banks (reserves and retained gain or loss) equaled Denar 683 million. Denar 394 million of them belong to the large banks, Denar 281 million to the group of medium-size banks, and Denar 8 million to the small-size banks.

⁵⁶ In the second quarter of 2011, the current loss as a deductible item of the core capital of banks increased by Denar 258 million. Denar 216 million belong to the medium-size banks, and Denar 42 million to the group of small-size banks.

⁵⁷ In the second quarter of 2011, the core capital of this bank reduced, so the maximum allowed amount of the subordinated instruments which can be part of the Tier 1 reduced as well. Namely, in accordance with item 9 indent 3 of the Decision on the methodology for determining the capital adequacy ("Official Gazette of the Republic of Macedonia" No. 159/2007, 32/2008, 31/2009, 96/2009, 157/2009 and 91/2011), "the amount of the subordinated instruments which are part of the Tier 1 can not exceed 50% of the amount of the core capital".

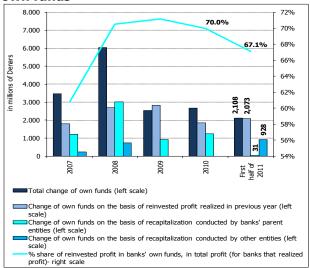


Figure 79 Own funds and capital requirement for covering the risks



Source: NBRM, on the basis of data submitted by banks.

Figure 80 The key sources of increase in the own funds



Source: Revised financial reports of banks and NBRM calculations.

Note: 1) The term "parent entity" means a shareholder (and its connected entities), who exercises control over the operations of the bank. 2) The recapitalization also includes investments on the basis of subordinated and hybrid capital instruments.

So far, the reinvested gain and the recapitalization of the parent entities of banks were the two most used sources for increase in the banking system's own funds (Figure 80). Therefore, the profitable operating of banks, the financial power of shareholders, as well as their ability and will to "inject" capital in the bank when ever it is required, were the key factors of growth in the banking system's own funds. In the past few years, the banks in the Republic of Macedonia reinvested approximately 60-70% of the realized gain, in the own funds.



Table 16 Structure of banks by the ownership structure

						30.06.2011
	2007	2008	2009	2010	Number of banks	Market share in total assets (in %)
Number of domestic banks, dominantly owned by one shareholder (including connected entities)	12	15	15	15	14	72.2%
- Domestic banks, subsidiaries of foreign banks					8	60.4%
- Domestic banks, dominantly owned by foreign non-bank financial institutions					1	0.3%
- Domestic banks, subsidiaries of other domestic banks					1	0.4%
- Domestic banks, dominantly owned by foreign natural persons					1	3.4%
- Domestic banks, dominantly owned by foreign non-financial legal entities					2	5.0%
- Domestic banks, dominantly owned by the Republic of					1	2.9%
Macedonia					1	2.970
Number of domestic banks where no single shareholder has dominant share in ownership structure	6	3	3	3	3	27.8%

Source: NBRM, on the basis of data submitted by banks.

Note: (1) Banks in dominant ownership of one shareholder are banks in which one shareholder (and the related persons) owns more than 50% of the voting shares in the ownership structure of bank (2) One of the banks on December 31, 2009 has undefined status regarding the ownership structure. Considering the fact that this bank is in dominant ownership of one shareholder for all other dates, it is considered that in 2009 as well it belongs to the same category of banks (banks in dominant ownership of one shareholder).

In the Republic of Macedonia, 14 banks (the market participation of which in the total assets amounted to 72.2% as of June 30, 2011) are in dominant ownership of a single (one) shareholder, on whose financial power, ability and will for recapitalization, the future growth in the own funds of these banks largely depends⁵⁸ (Table 16). With respect to the capability for insolvency risk management, the foreign banks and financial institutions, which are considered as shareholders in the domestic banks with relatively good quality, are given priority. Generally, with their subsidiaries and branches, they operate worldwide, and they have possibility and sound reputation for easier and cheaper access to the international financial markets and therefore they provide the required liquidity and solvency more easily. However, the global financial crisis and the still present debt crisis in the Euro area emphasized the vulnerability of these institutions, in conditions of high degree of globalization in the international financial markets and the present contagion risk. In the following period, as

⁵⁸ More details on the financial standing of some of the dominant shareholders in domestic banks can be found in the Financial Stability Report of the Republic of Macedonia in 2010, in the text box "Debt and economic crisis in Greece and the possible effects on the Macedonian banking system", pp. 104-107, published in June 2011.



it has been the case so far, the profitability of the domestic banks will be of great significance for retaining the capital value.

As of June 30, 2011, only 3 banks in the Republic of Macedonia (with market share of 27.8%) have no dominant shareholder (which owns more than 50% of the voting shares) in their ownership structure. The presence of more non-dominant shareholders in the bank indicates possible lower level of stability of its ownership structure and certain passiveness of the shareholders, in a situation when the bank would require a capital infusion.

3.2.1. Capital requirement for covering the risks and own funds above the minimal level required for covering the risks

The capital requirement for covering the credit risk registers quarterly growth, at the expense of the decrease in the requirement for covering capital currency risk and the "free" capital above the minimal level required for covering of the risks. Such movements resulted from the larger volume of activities in the second quarter of 2011, which represent growth in the assumed credit risk, with simultaneous fall in the currency risk exposure. On the other hand, the growth in the total own funds in the second quarter of 2011, was not sufficient for maintaining the amount of "free" capital (own funds above the minimum requirement for risk coverage) at the level of March 31, 2011 (Figure 79). The capital requirement for covering the credit risk increased by 515 million Denar (or by 2.9%)⁵⁹, which is almost twice larger growth compared to that registered in the first guarter of 2011. Simultaneously, the capital requirement for covering the currency risk registers a decline of

⁵⁹ In the second quarter of 2011, the capital requirements for covering the credit risk rose by Denar 329 million with the group of large banks, by Denar 145 million with the medium-size banks and by Denar 41 million with the group of small-size banks.



Denar 49 million (or by 4.6%)⁶⁰, which is almost three times less compared to the drop in the previous quarter. The second quarter of 2011 reports exploitation (reduction) of the "free" capital above the minimum requirement for risk coverage, in the amount of Denar 26 million (decrease by 0.1%), as opposed to the increase in the first quarter of 2011. Despite such developments, the own funds are far larger than the minimum requirement for risk coverage and this excess participates with 51.6% (quarterly fall of only 0.7 percentage points), in the total banking system's own funds.

Table 17 Movement of the capital requirement for covering the credit risk which arises from certain activities of banks, by the type of client and the risk weight of the activity in the

calculation of the risk weighted assets

	- %	.0	,0	0 S	S.	Absolute changes				Changes in %			
Capital requirements for credit risk, arising from the following activities:	30.06.2009	30,06,2010	31.122010	31.03.2011	30,06,2011	30.06.2009 30.06.2010	30.06.2010 30.06.2011	Q1:2011	Q2:2011	30.06.2009- 30.06.2010		Q1:2011	Q2:2011
Activities with government, government funds and state agencies	0.77	0.03	0.08	0.06	0.07	-0.74	0.05	-0.02	0.02	-96.5%	179.5%	-21.1%	25.3%
- risk weight 50%	0.77	0.03	0.08	0.06	0.07	-0.74	0.05	-0.02	0.02	-96.5%	179.5%	-21.1%	25.3%
Activities with financial institutions	732	834	1,007	1,082	1,169	102	335	74	88	13.9%	40.2%	7.4%	8.1%
- risk weight 20%	415	423	533	518	526	7	103	-15	8	1.8%	24.3%	-2.8%	1.5%
- risk weight 100%	317	411	475	564	644	94	232	89	80	29.7%	56.5%	18.7%	14.2%
Activities with enterprises	8,512	9,178	9,496	9,733	9,975	666	<i>797</i>	238	242	7.8%	8.7%	2.5%	2.5%
- risk weight 20%	0.4	0.4	2	0.6	2	0.0	1.2	-1	1	-2.3%	309.3%	-67.4%	175.8%
- risk weight 100%	8,511	9,177	9,494	9,733	9,973	666	796	239	241	7.8%	8.7%	2.5%	2.5%
Activities with households	5,523	5,513	5,522	5,460	5,571	-10	59	-61	111	-0.2%	1.1%	-1.1%	2.0%
- risk weight 50%	436	516	544	562	592	80	76	18	30	18.3%	14.8%	3.3%	5.4%
- risk weight 100%	2,794	2,687	2,663	2,642	2,722	-107	35	-21	80	-3.8%	1.3%	-0.8%	3.0%
- risk weight 125%	2,293	2,310	2,315	2,257	2,258	17	-52	-58	1	0.7%	-2.3%	-2.5%	0.1%
Other activities	1,162	1,185	1,502	1,507	1,581	23	396	5	74	2.0%	33.4%	0.3%	4.9%
- risk weight 20%	0.3	1	1	1	1	0.2	0	0	0	82.4%	58.2%	-16.4%	29.1%
- risk weight 100%	1,161	1,184	1,502	1,506	1,580	23	396	5	74	2.0%	33.4%	0.3%	4.9%
Total amount of capital requirements for credit risk	15,930	16,710	17,527	17,782	18,297	780	1,587	255	515	4.9%	9.5%	1.5%	2.9%

Source: NBRM, on the basis of data submitted by banks.

The quarterly rise in the credit activities of banks imposed a need for additional engagement of capital requirement for covering the credit risk (Table 17). Almost half of the additionally engaged capital requirement for covering the credit risk in the second quarter of 2011 is capital requirement for covering the credit risk arising from the larger corporate crediting⁶¹. Besides

⁶⁰ Analyzed by groups of banks, the capital requirements for covering the currency risk registered a decline of Denar 102 million with the large banks, whereas with the groups of medium-size banks and small-size banks it rose by Denar 45 million and Denar 8 million, respectively.

⁶¹ The corporate credits registered quarterly growth of about Denar 3.4 billion, or by 2.9%.



that, the household credits registered a substantial rise of Denar 2.4 billion, or by 3.3%, which was also one of the main reasons for additional engagement of capital requirement for covering the credit risk. In the structure of the capital requirement for covering the credit risk, rise in the part required for covering the credit risk arising from larger crediting to financial institutions was registered, which is almost solely due to the larger long-term placements of the MBDP with the domestic banks intended for providing financial support to the domestic corporate sector, from funds under the EIB credit line⁶².

Table 18 Development of the capital requirement for covering the currency risk, by the net foreign currency positions by certain currency

												in million:	s of Denars	
Capital requirements for currency	Capital requirements for currency					Absolute changes					Changes in %			
risk arising from the following net-	30.06.2009	30.06.2010	31.12.2010	31.03.2011	30.06.2011			01:2011	02:2011		30.06.2010-	01:2011	02:2011	
positions:						30.06.2010	30.06.2011	Q1.2011	Q2.2011	30.06.2010	30.06.2011	Q1.2011	Q2.2011	
Net positions in foreign currency	912	1,067	1,203	1,048	999	154	-67	-155	-49	16.9%	-6.3%	-12.9%	-4.6%	
- EUR	822	987	1,112	990	908	165	-79	-123	-81	20.0%	-8.0%	-11.0%	-8.2%	
- USD	17	32	32	32	53	15	21	0	21	91.3%	64.4%	0.5%	66.3%	
- CHF	47	26	28	11	15	-21	-11	-17	4	-44.8%	-42.6%	-60.0%	35.5%	
- Other	26	21	31	15	22	-5	1	-16	7	-17.9%	6.9%	-51.4%	48.9%	
Net positions in gold	0.003	0.003	0.003	0.003	0.003	0.0	0.0	0.0	0.0	0.0%	0.0%	0.0%	0.0%	
Total amount of capital requirements for currency risk	912	1,067	1,203	1,048	999	154	-67	-155	-49	16.9%	-6.3%	-12.9%	-4.6%	

Source: NBRM, on the basis of data submitted by banks.

The fall in the capital requirement for covering the currency risk was solely due to the lower net foreign currency position of banks in Euros⁶³ (Table 18). In the second quarter of 2011, the decrease in the net position in Euros resulted from the narrowing of the gap between the assets and liabilities in Euros⁶⁴, by Denar 314 million. The narrowing of the positive gap between the assets and liabilities in Euros resulted from the larger quarterly increase in the liabilities in Euros (by Denar 22.3 billion), compared to the growth in the assets in Euros (by Denar 21.9 billion).

⁶² The long-term credits to the domestic banks from this institution registered quarterly growth of approximately Denar 1.3 billion, or by 19.1%.

⁶³ The net foreign currency position of banks in certain currency is calculated in accordance with item 52 of the Decision on the methodology for determining the capital adequacy ("Official Gazette of RM" No. 159/2007, 32/2008, 31/2009, 96/2009, 157/2009 and 91/2011).

⁶⁴ Determined in accordance with the Decision and the Instructions on the methodology for determining the capital adequacy.



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

As of June 30, 2011, the conducted stress test simulations for the resistance of the banking system and certain banks in the Republic of Macedonia to possible shocks, showed that the banking system and certain banks are relatively resistant to the influence of these shocks (Table 19). When performing the simulations, none of the banks registered a decrease in the capital adequacy below 8%.

Table 19 Results from the stress test simulations for the resistance of the banking system and individual banks to hypothetical shocks as of June 30, 2011

No. of simulation	CAR at the level of banking system, before simulation	Number of banks with CAR before simulation below the CAR of the overall banking system before simulation	CAR at the level of banking system, after simulation	Bank with lowest CAR, after simulation	Number of banks with CAR after simulation below the CAR of the overall banking system after simulation (number of banks with CAR after simulation below 8%)		
1	16.5%	7	15.9%	11.0%	7 (0)		
2	16.5%	7	14.5%	9.9%	7 (0)		
3	16.5%	7	13.1%	8.9%	8 (0)		
4	16.5%	7	14.5%	9.9%	7 (0)		
5	16.5%	7	13.0%	8.8%	8 (0)		
6	16.5%	7	13.0%	8.8%	8 (0)		
7	16.5%	7	16.5%	11.2%	7 (0)		
8	16.5%	7	14.0%	8.7%	7 (0)		

Source: NBRM, on the basis of data submitted by banks.

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

- three simulations for isolated credit shock (increase in the credit risk exposure classified in the risk categories C, D and E of 10%, 30% and 50%),
- fourth simulation as a combination of the credit and interest rate shock (increase in the credit exposure in the risk categories C, D and E of 30% and increase in the domestic interest rates of 5 percentage points),
- fifth simulation as a combination of credit and foreign exchange shock (increase in the credit exposure in the risk categories C, D and E of 50% and depreciation in the Denar exchange rate compared to the Euro and the US Dollar of 20%),
- sixth simulation as a combination of shocks on the side of the credit risk, the foreign exchange risk and the interest rate risk (increase in the credit exposure in the risk categories C, D and E of 50%, depreciation of the Denar exchange rate against the Euro and the US Dollar of 20% and increase in the domestic interest rates of 5 percentage points),
- seventh simulation, appreciation of the Denar exchange rate relative to the Euro and the US Dollar in the amount of 20%,
- eighth simulation, simultaneous reclassification in the risk category C of the five largest credit exposures to non-financial entities (including also the connected entities).



Operational risk in the banks operating and assessment of the level of capital requirement for its coverage

The operational risk includes large number of various and unexpected events, which could potentially cause bankruptcy of an individual bank, and even disruption of the stability of the overall financial system. The term "operational risk" has become increasingly important since 1995, when the unprincipled and unscrupulous operating of a derivatives broker, employed in Barings Bank, created loss of USA Dollar 1.3 billion, which resulted in bankruptcy of one of the oldest financial institutions in Great Britain. The example of materialization of operational risk in Societe Generale is recent, when the speculative trade of its employee (concluding fictive financial transactions in a period of several years) damaged the bank for USA Dollar 7.2 billion (the speculative trade of the broker was discovered at the beginning of 2008). The events in USA on September 11, 2001 only confirmed the large variety of (potential) risk situations which are actually in the scope of the operational risk, which complicates the measuring of the banks' exposure to this risk, i.e. the determination of the amount of the capital requirement for its coverage. The complicated nature and features of the operational risk were supplemented by several more facts:

- usually the operational risk is specific to each individual institution, i.e. it is of non-systemic nature;
 - it is not subjected to the "risk-return trade-off" principle;
- the losses it provokes are often fatal for the bank (they are not limited to certain portfolio, as in the case of the exposure to credit risk and market risks);
 - the decrease/mitigation of the operational risk is usually considerably difficult.

The operational risk became more significant in conditions of growing globalization of the financial world, the increased complexity of the interbank and generally the financial markets (their more intensive use of modern information systems and technology), the high degree of aggressiveness of the banking business models, introduction and development of the e-banking etc. The efficient and effective management with this risk, at the level of a single bank, is especially important for prudent reasons (maintaining of the stability of the overall financial system), but also for timely and full meeting of the clients' needs and ensuring high degree of trust of the market (market participants) in the bank.

For these reasons, this risk is part of the first pillar of the New Capital Accord (Basel 2). Within the activities of the National Bank for implementation of this international capital standard, at the beginning of 2009 a Decision on amending the Decision on the methodology for determining the capital adequacy ("Official Gazette of the Republic of Macedonia" No. 31/2009) was adopted. This Decision prescribed the obligation for banks for determining the capital requirement for covering the operational risk which shall become effective on December 31, 2011. Pursuant to the Decision, the banks will be able to determine the capital requirement for covering the operational risk by using one of the two offered approaches: basic indicator approach⁶⁵ or standardized approach⁶⁶. In accordance with the requirements

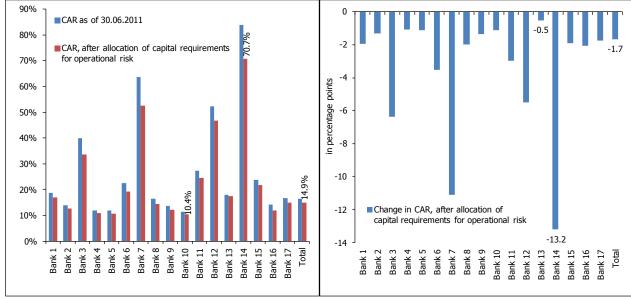
⁶⁵ Pursuant to this approach the banks are obliged to allocate capital requirements for covering the operational risk in the amount of 15% of the average amount of the positive gross income realized in the last three years of the bank's operating.

⁶⁶ This approach is a sort of supplement to the basic indicator approach, as it requires from the banks to determine the gross income at the level of eight business lines in which the banks are obliged to distribute their financial activities. For each business line an adequate weight is determined, i.e. beta factor (in the basic indicator approach, this weight is equal to 15%), and the total capital requirement for covering the operational risk is calculated as an average of the simple sum of the capital requirement for covering the operational risk coming from each business line, in each of the last three years.



of this Decision, three banks informed the National Bank on the intention for using the standardized approach for determining the capital requirement for covering the operational risk.

Figure 81 Capital adequacy ratio, before and after allocation of capital requirements for covering the operational risk (left) and change in the capital adequacy, after the allocation of capital requirements for covering the operational risk (right)



Source: NBRM, on the basis of data submitted by banks and NBRM calculations.

In order to perceive the possible effects from the implementation of the new regulations on the total banking system, a simulation is performed for the amount of the capital requirement for covering the operational risk⁶⁷. The simulation uses the assumption that all banks⁶⁸ use the basic indicator approach in the determination of the capital requirement for covering the operational risk, as a starting point. The simulation shows that at the end of 2011, the banks will have to allocate approximately Denar 2.2 billion of capital for covering this risk⁶⁹, so the operational risk would be second by significance in the risk profile of banks, right after the credit risk. Ceteris paribus, the allocation of the level of capital requirement for covering the operational risk would result in a decrease in the capital adequacy ratio in the overall banking system by 1.7 percentage points, but still remaining considerably above the legally prescribed minimum. Analyzed by individual banks, the fall in the capital adequacy would be ranging between 0.5 and 13.2 percentage points. Hence, in three banks the capital adequacy ratio would be under 11%, and the lowest level of the capital adequacy ratio would amount to 10.4% (Figure 81).

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 $^{^{67}}$ The simulation does not include assessment of the costs related to the implementation of certain approach for determining the capital requirement for covering the operational risk.

⁶⁸ It should be considered that 3 out of 17 banks notified the NBRM that they intend to use the standardized approach for determining the capital requirement for covering the operational risk. The amount of the capital requirement for covering the operational risk, determined in accordance with the standardized approach should be usually lower compared to the amount of the capital requirement for covering this risk determined with the basic indicator approach.

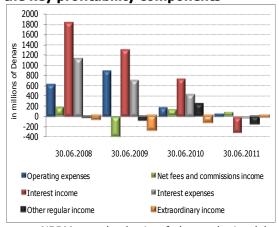
⁶⁹ The gross income for 2009, 2010 and the projected amount of the gross income for 2011, which is calculated by assuming that the gross income in the second half of 2011 is same as the one realized in the first half of the year, are taken into consideration.



6. Profitability

After realizing loss in the first quarter of 2011, at the end of June 2011, the banking system of the Republic of Macedonia showed profit in the amount of Denar 357 million. However, it is lower by 140 million Denar, i.e. by 28.2% compared to the gain realized in the first six months of 2010, which resulted in a decrease in the indicators for return on assets and equity. In the first half of 2011 the negative downward trend in the income from operating continued (mainly the net interest income and other regular incomes), which started at the end of 2010. The amendments to the regulations on the method of determining the minimal liquidity (adopted by the NBRM Council in September 2011) are expected to have positive effect on the banks profitability, considering the fact that they provide additional funds available to banks to be invested in high-yield placements, especially with the private sector.

Figure 82 Absolute increase/decrease in the key profitability components



Source: NBRM, on the basis of data submitted by banks.

In the first six months of 2011, the total number of banks which operate with loss reduced to seven (from eight banks in the first six months of 2010). The share of the assets of these banks in the total assets of the banking system rose by 3.3 percentage points and at the end of June 2011 it amounted to 13.6%, which resulted from the change in the structure of banks which showed loss.

The lower profitability of the banking system in the first six months of 2011, was mainly due to the considerably lower interest income and other regular income, as well as to the larger operating costs⁷⁰ (Figure 82), despite the fact that the interest expenditures and the impairment registered decrease (Figure 84).

⁷⁰ Operating costs encompass: costs for employees, depreciation, general and administrative costs, deposits insurance premiums and other expenditures of the activity, except extraordinary expenditures.



Figure 83 Structure of total income

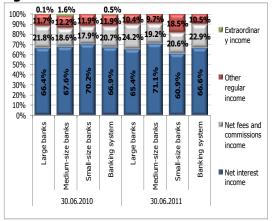
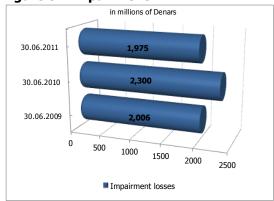


Figure 84 Impairment



Source: NBRM, on the basis of data submitted by banks.

6.1 Income and expenditure structure of the banking system

In the first six months of 2011, the total income (total regular income⁷¹ and extraordinary income) of the banking system reduced by Denar 400 million or by 5.0% compared to the first six months of 2010. At the end of June 2011 they amounted to Denar 7.549 million. The fall in the net interest income (Denar by 291 million or by 5.5%) and the more considerable decline in the other regular income (by Denar 149 million or by 15.8%) were only partially neutralized by the growth in the net income from fees and commissions. The extraordinary income, although with the lowest structural share, also contributed to the fall in the total income.

Compared to June 2010, the extraordinary income reduced by Denar 43 million, i.e. by 98.8%. The largest part of the decrease in the net interest income, other regular income, as well as in the extraordinary income resulted from their decline with the group of medium-size banks⁷², as opposed to the increase in the net income from fees and commissions which was solely due to the group of large banks⁷³. In the first six months of 2011, the net income from fees and commissions and compensations registered growth by Denar 82 million, or by 5.0% relative to the first six months of 2010.

⁷¹ The total regular income includes: net interest income, net income from commissions and other regular income (net income from trading, net income from financial instruments recorded at fair value, net income from exchange rate differentials, income based on dividends and capital investments, gain from sale of financial instruments available for sale, capital gain realized from sale of assets, release of provisioning for off-balance sheet items, release of other provisioning, income on other basis, income on the basis of collected previously written-off claims and the losses from sale of financial assets available for sale).

⁷² The contribution of the group of medium-size banks to the fall in the net interest income and to the other regular income resulted from the transfer of "Ohridska Banka" AD Ohrid from the group of medium-size banks, to the group of large banks. Otherwise in the first six months of 2011, the decrease in these two components of the total income would be mostly determined by the group of large banks.

⁷³ Even without the transfer of "Ohridska Banka" AD Ohrid from the group of medium-size banks to the group of large banks, the group of large banks is the generator of growth in the net income from fees and commissions.





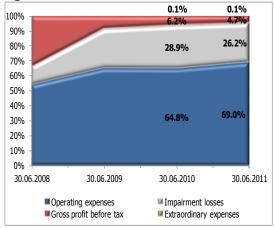
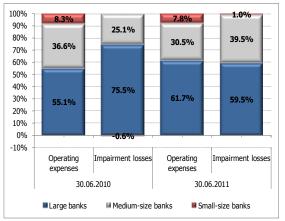


Figure 86 Distribution of the operating costs and the impairment by groups of banks



Source: NBRM, on the basis of data submitted by banks.

The structure of the total income of banks remained almost unchanged. The largest share is that of the regular income, mainly the net interest income (Figure 83).

In the first six months of 2011, most of the total income of banks was used for covering the operating costs (Figure 85). At the end of June 2011, the operating costs amounted to Denar 5.207 million. Their moderate increase (by Denar 58 million, or by 1.1%) relative to the same period of the previous year, came solely from the group of large banks⁷⁴. Such growth, parallel with the fall in the total regular income, resulted in a reduced coverage of the operating costs by the total income from 154.4% (in June 2010), to 145.0% (in June 2011). The costs for employees and general and administrative costs remained the dominant positions in the structure of the operating costs participating with 38.1% and 33.7%, respectively.

In the first six months of 2011, **the impairment of the claims**, as one of the more significant components which influence profitability, reduced by 325 million Denar or by 14.1%, which caused a decline in the part of the total income used for its coverage from 28.9% (in June 2010) to 26.2% (in June 2011). The fall in the impairment at the level of the banking system was determined by its decline in the group of large banks.

In the first six months of 2011, the income from non-financial companies is still dominant in the sector structure of the interest income, and relative to the same period of the previous year, it registered an increase (by Denar 134 million, or by 3,1%) (Figure 87). Opposite to this growth, the interest income of the household sector and the income from the financial companies reduced. The fall in the interest income from households (by Denar 258 million, or by 6.9%) occurred in conditions of

⁷⁴ Without the change in the structure of the groups of banks, the increase in the operating costs would have been almost equally determined by the group of large and the group of medium-size banks.



Figure 87 Sector structure of the interest income and expenditures

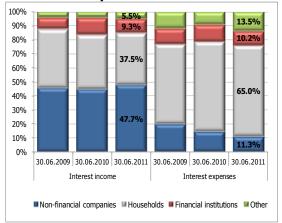
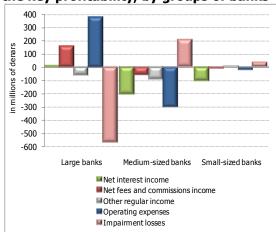


Figure 88 Absolute increase/decrease in the key profitability, by groups of banks



Source: NBRM, on the basis of data submitted by banks.

more intensive downward trend in the lending Denar interest rates of this sector, despite the larger credit support to this sector. The interest income from financial companies reduced by Denar 283 million, or by 24.7.

The expenditures interest households still dominate in the structure of interest expenditures, which in the first six months of 2011 registered minimal increase by 0.3%, relative to the same period of the previous year. Such movement was mainly due to the annual growth in the household deposits, despite the fall in the deposit interest rates of this sector. On the other hand, the interest expenditures of the enterprises declined, which contributed to their lower participation in the structure of the total interest expenditures as well. Such drop emerged in conditions of a decrease in the deposits of this sector and their interest rates. Also, the participation of the interest expenditures of the financial companies in the total interest expenditures registered moderate fall.

The decline in the gain at the level of the banking system was solely due to the considerably higher loss of the group of medium-size and group of small-size banks, despite the larger gain of the group of large banks. In the first six months of 2011, the medium-size banks, operated with loss which is twice higher than the loss realized in the same period of the previous year⁷⁵. The larger loss with this group of banks was determined by the fall in all income components, as well as by the larger impairment, despite the lower operating costs (Figure 88). The decrease in the net interest income (by 37.7%) and the net income from fees and commissions (by 17.4%), as well as the larger impairment with the group of small-size banks in the first six months of 2011, resulted in four times higher loss⁷⁶ with this group of banks compared to June 2010.

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⁷⁵ At the end of June 2011, the group of medium-size banks realized loss in the amount of Denar 520 million, while the loss which this group of banks realized in the same period of the previous year amounted to Denar 223 million. ⁷⁶ In the first six months of 2011, the group of small-size banks operated with loss in the amount of Denar 154 million.



Figure 89 Structure of the key profitability components, by groups of banks

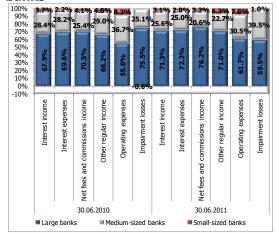
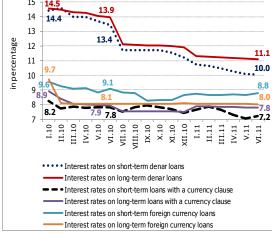


Figure 90 Development of the lending interest rates of households



Source: NBRM, on the basis of data submitted by banks.

In the first six months of 2011, the group of large banks continued to operate with profit, which relative to June 2010 was higher by Denar 275 million, or by 36.5%. The main generator of the growth in the profit with this group of banks was the lower impairment by 32.3%.

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

In the first six months of 2011, the lending and the deposit interest rates of banks continued to fall, excluding the interest rates on the long-term foreign currency credits which for the enterprises registered moderate growth, and for the households remained unchanged.

Compared to June 2010, with **the lending interest rates**, the interest rates on the short-term and the long-term Denar credits to households registered the most considerable drop of 3.4 percentage points and 2.8 percentage points, respectively (Figure 90). The interest rates on the short-term and the long-term Denar credits to the enterprises reduce by 0.5 percentage points (Figure 91), whereas the interest rates on the short-term credits with FX clause to the households and the enterprises reduce by 0.6 and 0.3 percentage points, respectively. The interest rates on the foreign currency credits to the households and to the enterprises registered minimal changes.

As for **the deposit interest rates**, the largest fall (by 3.3 percentage points) was registered with the interest rates on the household Denar deposits with FX clause. But, despite such fall, the participation of the household Denar deposits with FX clause in the total deposits is still marginal. The interest rates on the Denar deposits of the households and the enterprises register considerable decline of 1.8 and 1 percentage point, respectively (Figure 92 Development of the deposit interest rates of the enterprises and the householdsFigure 92). The



Figure 91 Development of the lending interest rates of enterprises

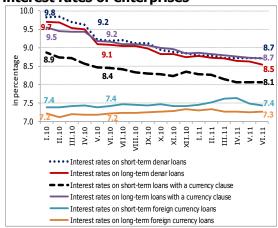
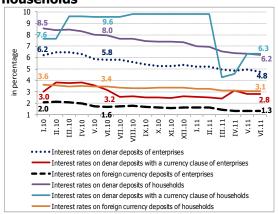
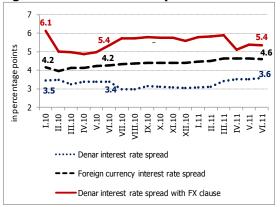


Figure 92 Development of the deposit interest rates of the enterprises and the households



Source: NBRM, on the basis of data submitted by banks.

Figure 93 Interest rate spread



Source: NBRM, on the basis of data submitted by banks.

interest rates on the foreign currency deposits of the enterprises and the households were moving in the same direction, but with slightly lower dynamics, and in the analyzed period they registered fall of 0.3 percentage points.

At the end of June 2011, **the interest rate spread** in denars and in foreign currency registers growth. On the other hand, the interest rate spread in denars with FX clause, which is still higher relative to the spread in denars and in foreign currency, is unchanged relative to June 2010 (Figure 93).

6.3 Profitability and efficiency indicators of banks

The fall in the profit realized in the first six months of 2011, along with the growth in the assets of banks, contributed to a decline in the rate of return on assets (ROAA). At the end of the first six months of 2011, this indicator was halved relative to the same period of the previous year and it amounted to 0.2%. The rate of return on equity (ROAE) registered a considerable decline of 1.1 percentage point, and at the end of June 2011 it amounted to 2.1%.



Table 20 Indicators on the profitability and efficiency of bank operating

Tudinatore	Banking	system	Large banks		Medium-size banks		Small-size banks	
Indicators	30.06.2010	30.06.2011	30.06.2010	30.06.2011	30.06.2010	30.06.2011	30.06.2010	30.06.2011
Rate of return of average assets (ROAA)	0.4%	0.2%	0.8%	0.9%	-0.6%	-1.4%	-0.5%	-2.6%
Rate of return of average equity (ROAE)	3.2%	2.1%	8.7%	9.7%	-5.3%	-12.2%	-1.3%	-8.0%
Cost-to-income ratio	65.1%	69.0%	53.3%	59.2%	85.5%	85.8%	113.0%	149.6%
Non-interest expenses/Total regular income	70.5%	75.4%	57.0%	64.1%	92.2%	94.9%	134.1%	168.4%
Labour costs /Total regular income	25.5%	26.3%	20.3%	21.7%	34.1%	34.7%	48.3%	60.5%
Labour costs /Operating expenses	39.1%	38.1%	38.1%	36.6%	39.9%	40.5%	42.8%	40.4%
Impairment losses of financial and non-financial assets /Net interest income	43.2%	39.3%	49.1%	33.1%	38.0%	59.2%	-5.2%	11.7%
Net interest income /Average assets	3.9%	3.2%	3.8%	3.2%	3.9%	3.5%	3.8%	2.8%
Net interest income /Total regular income	67.3%	66.6%	66.5%	65.4%	68.7%	71.1%	70.2%	60.9%
Net interest income /Non-interest expenses	95.5%	88.4%	116.7%	102.1%	74.6%	74.9%	52.4%	36.2%
Non-interest income/Total regular income	38.0%	39.6%	37.2%	39.3%	37.9%	37.9%	50.9%	57.8%
Financial result/Total regular income	6.3%	4.7%	14.2%	19.0%	-10.1%	-28.1%	-9.3%	-56.8%

Source: NBRM, on the basis of data submitted by banks.

In the first six months of 2011, the operating efficiency of banks registered deterioration. In conditions of annual growth in the operating costs by 1.1% and the non-interest expenditures by 2.1%, as opposed to the fall in the total regular income by 4.5%, considerable part of the income from regular activities was used for covering the expenditures of banks. All indicators of the ratio between the individual costs and the total regular income registered deterioration relative to the first half of 2010. Thus, the cost-to-income ratio rose from 65.1% (in the first half of 2011).

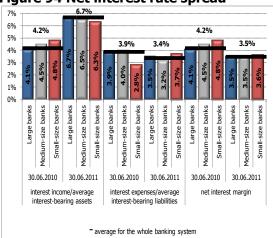
The worsening of the operating efficiency is confirmed through the lower coverage margin of the non-interest expenditures by the net interest income of 95.5% at the end of June 2010, to the level of 88.4% at the end of June 2011, as well as through the drop in the profit margin indicator⁷⁷ (by 1.6 percentage points). Opposite to this, the more considerable fall in the impairment (by 14.1%), as opposed to the decline in the net interest income (by 5.5%), contributed to the decrease in the part of this regular income required for absorbing the determined losses in the credit portfolio of banks. Namely, at the end of June 2011, 39.3% of the realized net interest income is used for covering

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⁷⁷ The profit margin represents the ratio of the operating gain (loss) to the total regular income.



Figure 94 Net interest rate spread



Source: NBRM, on the basis of data submitted by banks.

the determined impairment for potential loan losses.

At the end of June 2011, the net interest rate spread⁷⁸ at the level of the banking system registered a decline by 0.7 percentage points, in conditions of growth in the average interest bearing assets⁷⁹ (by 14.1%) and simultaneous fall in the net interest income (by 5.5%) (Figure 94). Relative to the first six months of 2010, the interest bearing assets rose by 12.9%, whereas the interest bearing liabilities by 13.0%. However, despite such equal increment in the interest bearing assets and liabilities, still the interest bearing assets are by Denar 26.022 million higher than the interest bearing liabilities, which enables creating of an adequate amount of interest rate spread for covering the non-interest expenditures of banks. The fall in the lending and the deposit interest rates contributed to a decline in the income and expenditures based on interest by interest bearing asset and liability unit, so at the level of the banking system, the decrease in the interest income by interest bearing asset unit is more evident relative to the fall in the interest expenditures by interest bearing liability unit.

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⁷⁸ The net interest rate spread is calculated as a ratio of the net interest income to the average interest bearing assets.

⁷⁹ The average interest bearing assets are calculated as an arithmetical mean of the amounts of the interest bearing assets at the end of the first half of the current year and at the end of the previous year.