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 first quarter of 2011

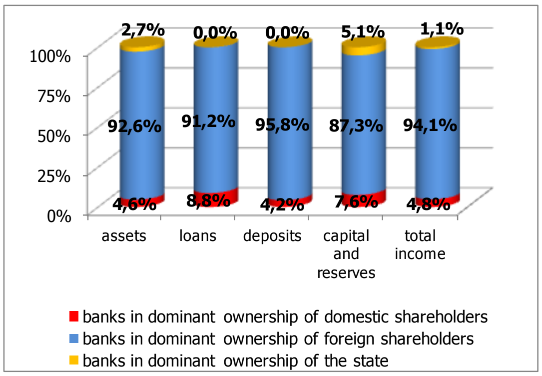
August, 2011

I. Structure of the banking system

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

As of March 31, 2011, the banking system of the Republic of Macedonia comprised of seventeen banks and eight savings houses.

Figure 1: Structure of the most significant positions of banks' balances according to dominant ownership of banks



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

Relative to the end of 2010 the number of banks decreased by one[1], while the number of savings houses remained unchanged. Considering the insignificant share of the savings houses[2] in all segments of the banking system activities, **the further analysis in this report focuses solely on banks' operations.**

In the first quarter of 2011, there were no significant shifts in the ownership structure of the banking system. Most prevailing on the market were still the banks in dominant ownership of foreign shareholders that have the highest share in the structure of all basic balance categories (Figure 1). The number of banks in dominant foreign ownership reduced by one (from fourteen to thirteen)[3], while out of that total, the number of banks that are subsidiaries of foreign banks (eight) remained unchanged compared to the end of 2010.

2. Concentration and market share of the banking system

At the end of the first quarter of 2011, the concentration level of the banking system was still high, despite the decline relative to the end of 2010.

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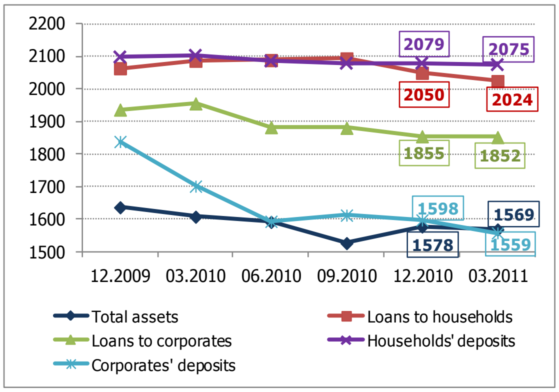
[1] Based on the Decision of the Governor of the National Bank of the Republic of Macedonia no. 5082 of December 7, 2010, permission was issued for a status change – Stater Banka AD Kumanovo acquisition by Centralna Kooperativna Banka AD Skopje. On March 1, 2011 the acquisition was registered in the Central Registry of the Republic of Macedonia, and Stater Banka AD Kumanovo was deleted from the registry.

[2] The share of savings houses in the total activities of the deposit institutions (banks and savings houses) remained insignificant (share of only 1% in the total assets of the banking system, 1,5% in the total credits and 0,3% in the total deposits of nonfinancial entities).

[3] As a result of the above mentioned status change – the acquisition of Stater Banka AD Kumanovo (which was also in dominant ownership of foreign shareholders) by Centralna Kooperativna Banka AD Skopje (which is also in dominant ownership of a foreign shareholder – bank).

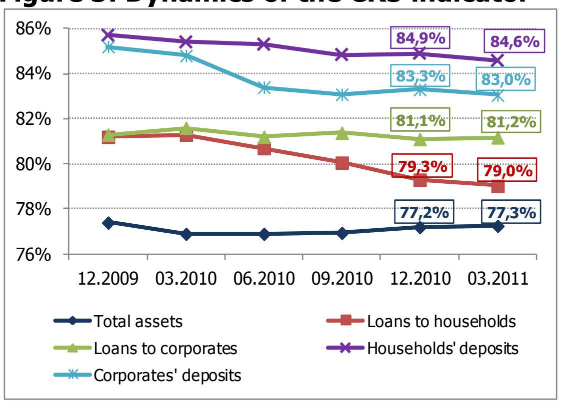
Figure 2: Dynamics of the Herfindahl index



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

The concentration measured according to the Herfindahl index[4] is the highest and above the acceptable limits both for credits and for households' deposits (Figure 2). The level of concentration in corporate loans is still somewhat above the acceptable limit, despite its continuous decline in the last several successive quarters. The total assets and corporate deposits are the only analyzed segments whose concentration level is within the framework of the acceptable interval. In addition, at the end of the first quarter of 2011, the lowest concentration level is registered in corporate deposits, while in the previous quarter that was characteristic for the total assets.

Figure 3: Dynamics of the CR5 indicator



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

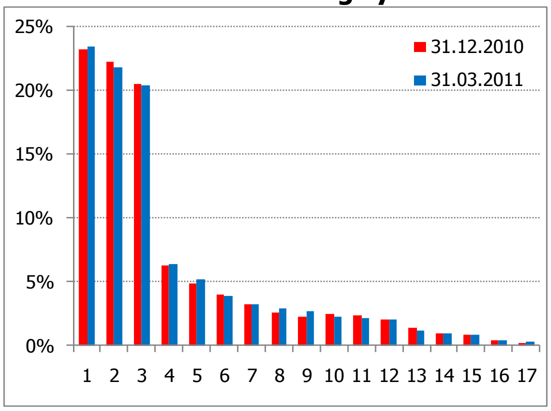
The concentration according to the CR5[5] **indicator** is also still at a high level in all banking activities segments, being the highest in household deposits, and the lowest in total assets (Figure 3). In addition, excluding the total assets and the corporate loans (where the concentration slightly increased), in all the other analyzed segments the concentration registered a quarterly decline.

The market share of individual banks in the total assets of the banking system has also not registered any significant changes relative to December 31, 2010 (Figure 4)**.** In thirteen of the total of seventeen banks, the individual share in the total banking system assets was less than 5%, and in eleven of those it was less than 3%. In addition, in nine of

[4] The Herfindahl index is calculated according to the equation $HI = \sum_{j=1}^{n}(S_j)^2$, where *S* denotes each bank's share in the total amount of the 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.

[5] The CR5 indicator represents the share of assets (i.e. the analyzed category, for example, corporate credits etc.) of the five banks with largest assets (i.e. the analyzed category) in the total assets (i.e. the analyzed category) of the banking system.

Figure 4: Share of individual banks in the total assets of the banking system



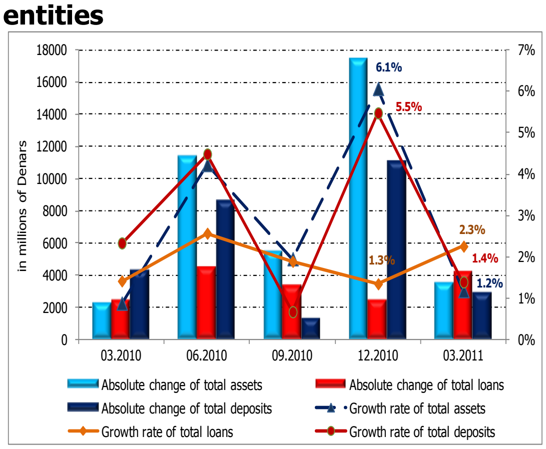
Source: NBRM, on the basis of data provided by banks.

the total of seventeen banks, their share in the total assets slightly decreased relative to December 31, 2010. The greatest quarterly decrease of the market share was registered by one of the big banks (0.4 percentage points), which was mostly due to the reduced assets of this banks compared with the assets growth of the banking system.

II. Banks' activities

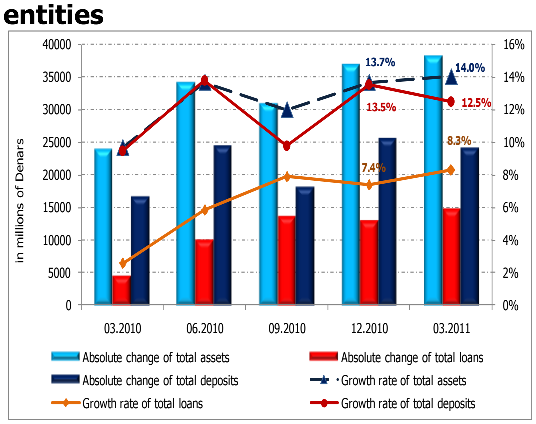
In the first quarter of 2011, the total activities of the banking system continued to increase, although with a slower dynamics than in the previous quarter. The decelerated pace of the total assets is mainly a result of the slowed down deposit increase. On the other hand, the total credit growth registered a minor acceleration on quarterly basis. In this quarter, the banks redirected a portion of the investments in CB bills towards the new instrument of the National Bank – six-month deposit bill with the central bank.

Figure 5: Quarterly growth of assets, credits and deposits of nonfinancial entities



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

Figure 6: Annual growth of assets, credits and deposits of nonfinancial entities



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

1. Balance sheet of banks

At the end of the first quarter of 2011, the banking system total assets continued to grow, but at a slower pace relative to the previous quarter (Figure 5). On March 31, 2011, the total assets equaled Denar 308,881 million and registered almost five times smaller absolute and relative quarterly growth compared to the last quarter of 2010. On the other hand, on March 31, 2011 (compared to March 31, 2010), the annual growth rate of the total assets was higher by 0.3 percentage points relative to the annual growth rate registered on December 31, 2010 (compared to December 31, 2009) (Figure 6). The highest absolute and relative growth within the assets structure was registered by the category "Cash and balances with NBRM". Its considerable quarterly growth resulted from the banks' placements in the new National Bank's instrument – six-month deposit bill (in the amount of Denar 8,590 million) [6]. In contrast, investments in securities in this quarter registered the highest decreasing rate, which was mostly due to the reduction of CB bills by Denar 6,070 million, i.e. by 30.4% (annual reduction equaled Denar 3,066 million or 13.4%). This redirection from investments in CB bills into the six-month deposit bills resulted from the amendments to the Decision on Managing the Liquidity Risk of Banks[7].

[6] In February 2011, the National Bank Council adopted the Decision on the bill of six-month deposit with the National Bank of the Republic of Macedonia ("Official Gazette of RM" No. 158/2010). According to that Decision, the bill represents an instrument for placing term deposits with the National Bank.

[7] According to the amendments to the Decision on managing banks' liquidity risk ("Official Gazette of RM" No. 14/2011), from March 2011, only the six-month deposit bills with the National bank can be used by banks to maintain the liquidity levels in denars or liquidity levels in foreign currency, in accordance with the banks' needs. By

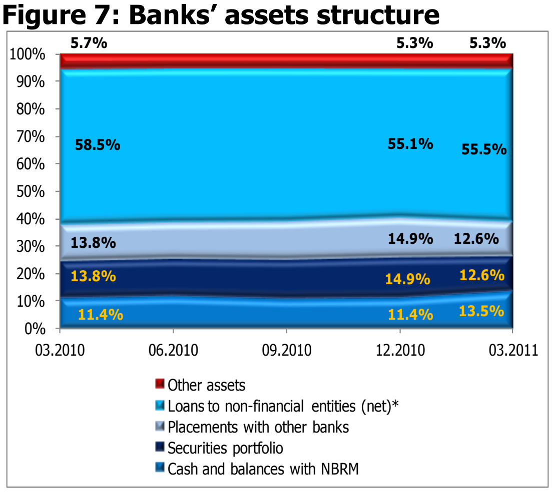
Table 1: Structure of the assets and liabilities on banking system level

Balance Sheet	Amounts in millions of Denars		Structure		Change 31.03.2011/31.12.2010			
	31.12.2010	31.03.2011	31.12.2010	31.03.2011	Absolute chnage	In percentage	In the structure (in percentage points)	Share in the change
Cash and balances with NBRM	34,674	41,751	11.4%	13.5%	7,078	20.4%	2.2	197.1%
Securities portfolio	45,439	39,012	14.9%	12.6%	-6,428	-14.1%	-2.3	-179.0%
Placements to banks and other financial institutions	40,609	40,333	13.3%	13.1%	-276	-0.7%	-0.2	-7.7%
Loans to non-financial entities (net)*	168,346	171,481	55.1%	55.5%	3,134	1.9%	0.4	87.3%
Accured interest and other assets	7,887	8,121	2.6%	2.6%	234	3.0%	0.0	6.5%
Fixed assets	8,334	8,184	2.7%	2.6%	-150	-1.8%	-0.1	-4.2%
Unallocated loan loss provisions	0	-1	0.0%	0.0%	1	0.0%	0.0	0.0%
Total assets	**305,290**	**308,881**	**100.0%**	**100.0%**	**3,591**	**1.2%**	**0.0**	**100.0%**
Deposits from banks and other financial institutions	18,372	16,501	6.0%	5.3%	-1,871	-10.2%	-0.7	-52.1%
Deposits of non-financial entities	213,270	216,227	69.9%	70.0%	2,958	1.4%	0.1	82.4%
Borrowings (short-term and long -term)	32,729	34,467	10.7%	11.2%	1,739	5.3%	0.4	48.4%
Other liabilities	8,002	7,007	2.6%	2.3%	-995	-12.4%	-0.4	-27.7%
Provisions for off-balance sheet items	661	704	0.2%	0.2%	42	6.4%	0.0	1.2%
Capital and reserves	32,256	33,974	10.6%	11.0%	1,718	5.3%	0.4	47.8%
Total liabilities	**305,290**	**308,881**	**100.0%**	**100.0%**	**3,591**	**1.2%**	**0.0**	**100.0%**

* Loans to non-financial entites are no net base and they are decreased for the impairmenet of the loans.

Source: NBRM, on the basis of data provided by banks.
Note: The category "Placements with the central bank" of Annex 1 here is included in the category "Cash and balances with NBRM".

Figure 7: Banks' assets structure



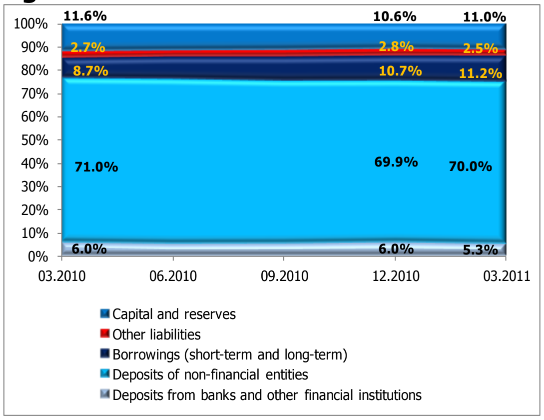
Source: NBRM, on the basis of data provided by banks.

The credits approved by banks continued to increase and considerably determined the growth of their total assets. As a result, increased share of the credits was registered in the structure of the banks' total assets. The cash and balances with the central bank also fortified their share in the structure, while the participation of the securities' portfolio decreased (Figure 7).

The nonfinancial entities' deposits, despite their decelerated quarterly growth, remained the most important source of banking activities financing at the end of the first quarter of 2011, as well. In addition, a minimal increase of their share in the liabilities structure was registered (Figure 8).

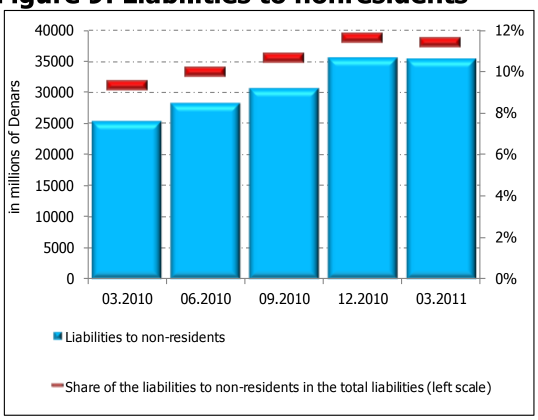
March 2011, such a possibility for choice what to include in the calculation of the liquidity levels (in denars or in foreign currency) referred to all funds with the National Bank.

Figure 8: Banks' liabilities structure



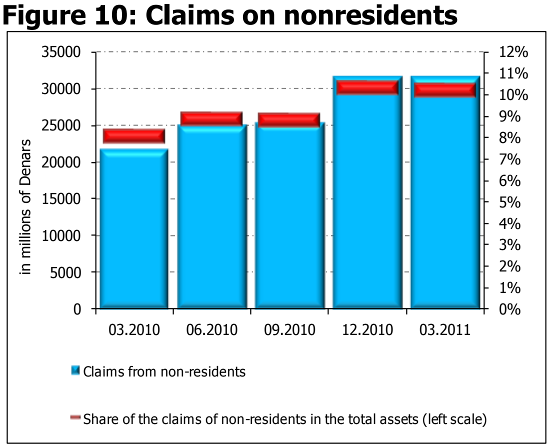
Source: NBRM, on the basis of data provided by banks.

Figure 9: Liabilities to nonresidents



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

Figure 10: Claims on nonresidents



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

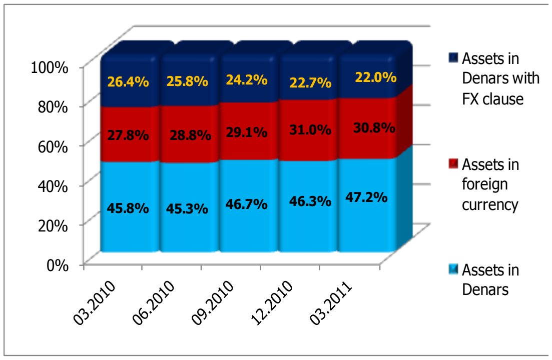
Like in the previous quarter, the use of loans by banks continued to increase. The increase of banks' liabilities on the basis of credits, which on quarterly basis equaled Denar 1,748 million, fully determined the loan increase. The largest contribution (71.0%) to the loan increase was made by liabilities on the basis of nonresidents' credits, which increased quarterly by Denar 1,242 million, i.e. by 7.8%.

Despite the increase of credits used by nonresidents, the share of total liabilities to nonresidents in the total liabilities structure registered insignificant changes (11.4%). The amount of liabilities to nonresidents reduced by Denar 243 million compared to the previous quarter (Figure 9), as a result of the decline of deposits of nonresidents – financial institutions by Denar 1,806 million, i.e. by 22.4%, while simultaneously an increase was registered of loans from foreign banks by Denar 1,471 million, i.e. by 9.5%.

The share of claims on nonresidents in the total assets of banks (10.2%) also registered insignificant changes in the first quarter of 2011 (Figure 10). Total claims on nonresidents registered a quarterly increase by Denar 28 million, i.e. 0.1%.

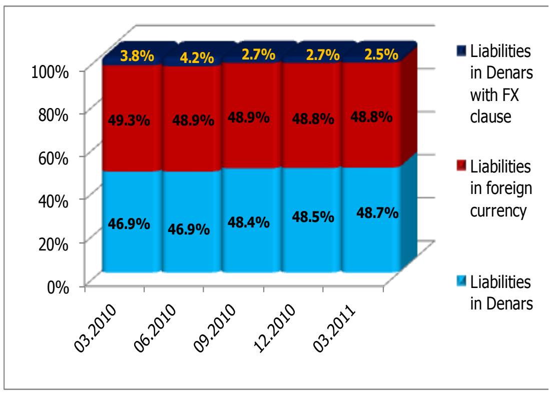
The denar component in the structure of banks' total assets and liabilities continued to increase, same like in the previous quarter. (Figure 11 and Figure 12). Nevertheless, the share of assets and liabilities with currency component in the structure of banks' assets and liabilities was still the largest and equaled 52.8% and 51.3%, respectively. In the assets category, reduced share was registered both of the foreign currency assets and of denar assets with foreign currency clause, while the decreased participation of liabilities with currency component was fully due to the decreased participation of the liabilities in denars with foreign currency clause.

Figure 11: Currency structure of banks' assets



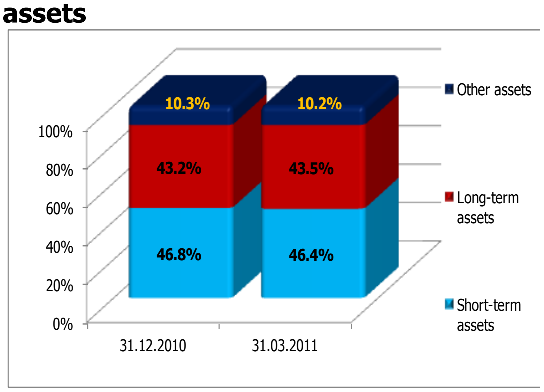
Source: NBRM, on the basis of data provided by banks.

Figure 12: Currency structure of banks' liabilities



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

Figure 13: Maturity structure of banks' assets

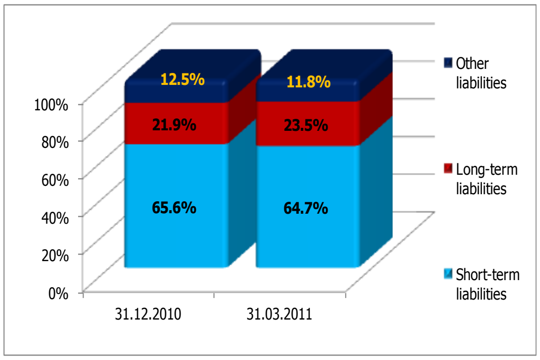


Source: NBRM, on the basis of data provided by banks.

The maturity structure of assets and liabilities registered no significant movements in the first quarter of 2011 (Figure 13 and Figure 14). In the assets category, most represented were the short-term assets that registered a quarterly increase by Denar 1,009 million, i.e. by 0.7%. The long-term assets of banks in that quarter increased at a faster pace (rise by Denar 3,243 million i.e. 2.3%) compared to the short-term assets growth, which contributed for an intensification of their structural share in total assets. The banks' short-term assets growth resulted from the quarterly increase of cash and balances with the NBRM, compared to the decrease of the category "money market instruments" (net-effect of Denar 853 million), as well as the increase of the short-term placements of nonfinancial entities (Denar 352 million, i.e. by 0.8%). The long-term placements of nonfinancial entities (which registered a quarterly growth of Denar 3,282 million, i.e. of 2.6%) almost completely determined the assets' quarterly growth.

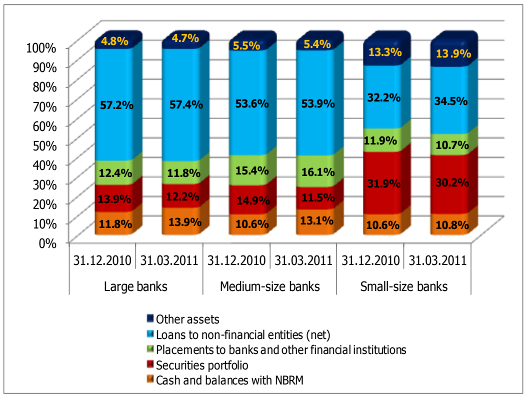
In the first quarter of 2011, most prevalent in the liabilities category were the short-term liabilities, whose share in total liabilities registered a slight decrease, due to their quarterly fall by Denar 491 million, or by 0.2%. The short-term liabilities decreased due to the reduction of the short-term deposits of financial companies (by Denar 2,533 million, or by 19.0%) and the reduction of the short-term liabilities based on credits (by Denar 394 million, or by 11.0%). Deposits of nonfinancial entities, which were most represented in the short-term liabilities structure, registered an increase of Denar 724 million, or by 0.4%. The long-term liabilities increased their structural share in the total liabilities and registered a quarterly growth of Denar 5,645 million, or by 8.4%. The increase was primarily a result of the enlargement of nonfinancial entities' long-term deposits (by Denar 2,234 million, or by 6.8%) and of the increase of long-term liabilities based on credits (Denar 2,142 million, or by 9.7%). The long-term deposits of the nonfinancial entities and the long-

Figure 14: Maturity structure of banks' liabilities



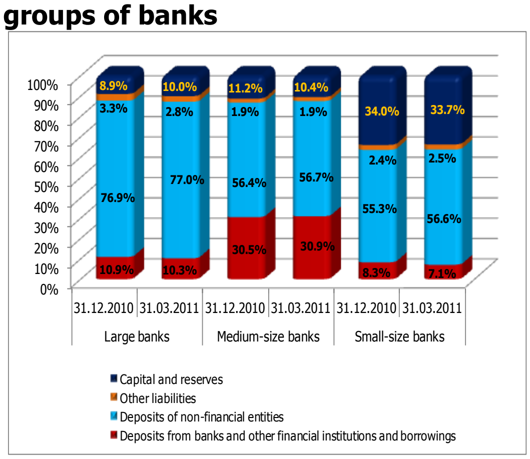
Source: NBRM, on the basis of data provided by banks.

Figure 15: Structure of assets by groups of banks



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

Figure 16: Structure of liabilities by groups of banks



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

term liabilities based on credits determined 39.6% and 38.0% of the long-term liabilities' total growth, respectively.

2. Balance sheet of the individual groups of banks

In the first quarter of 2011, the largest quarterly growth of the total assets was registered by the group of medium-size banks, in accordance with the highest increase also of the deposits of nonfinancial entities in this group of banks.

On March 31, 2011, structural shifts were registered in the assets of the individual groups of banks, and in particular in the group of medium-size banks (Figure 15). Common for all groups of banks in this quarter was that they registered an increased participation of nonfinancial entities' credits, and of the cash and balances with the National Bank, at the expense of the decreased participation of the securities' portfolio (Table 2). The largest absolute growth of nonfinancial entities' net credits was registered in the group of medium-size banks, which also made the greatest contribution (52.9%) in the quarterly growth of the banking system loans. The more considerable decrease of the securities' portfolio in the groups of large and medium-size banks was mainly due to the reduced investments in treasury bills of these two groups of banks (by Denar 2,748 million and Denar 3,114 million, respectively). Hence, the group of large banks contributed with 51.1% and the group of medium-size banks with 44.3% to the quarterly decrease of the securities portfolio.

The liabilities segment of the individual group of banks also registered some changes in the first quarter of 2011. Banks' deposits and loans increased only in the group of medium-size banks. Capital and reserves grew in the group of large banks, while the change in the groups of medium-size and small-size banks was negative and a consequence of the loss registered by these groups of banks. In the group of medium-size banks the highest quarterly increase was registered with the nonfinancial entities' deposits, which remained the primary source of financing of activities in all groups of banks (Figure 16).

Table 2: Assets and liabilities by individual groups of banks

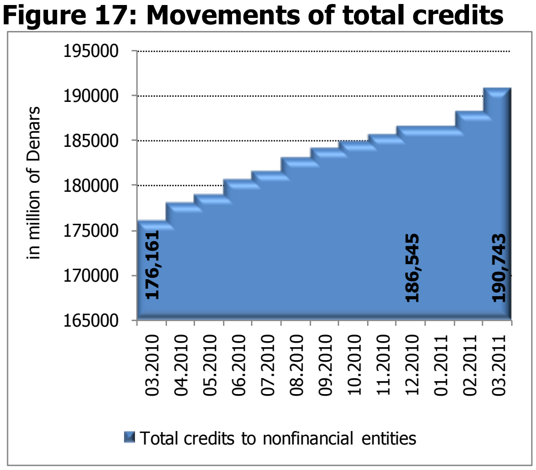
Items	Large banks			Medium-size banks			Small-size banks		
	Balance on 31.03.2011 in millions of Denars	Change March 2011/December 2010	Percentage change March 2011/December 2010	Balance on 31.03.2011 in millions of Denars	Change March 2011/December 2010	Percentage change March 2011/December 2010	Balance on 31.03.2011 in millions of Denars	Change March 2011/December 2010	Percentage change March 2011/December 2010
Cash and balances with NBRM	28,162	4,441	18.7%	12,381	2,654	27.3%	1,209	-17	-1.4%
Securities portfolio	24,734	-3,287	-11.7%	10,894	-2,846	-20.7%	3,383	-295	-8.0%
Placements with banks and other financial institutions	23,843	-1,218	-4.9%	15,285	1,113	7.8%	1,205	-171	-12.4%
Loans to non-financial entities (net)*	116,544	1,321	1.1%	51,070	1,659	3.4%	3,867	155	4.2%
Other assets	9,618	35	0.4%	5,132	28	0.5%	1,554	20	1.3%
Total assets	**202,900**	**1,291**	**0.6%**	**94,763**	**2,607**	**2.8%**	**11,218**	**-307**	**-2.7%**
Deposits from banks and other financial institutions and borrowings	20,858	-1,161	-5.3%	29,310	1,186	4.2%	800	-156	-16.4%
Deposits of non-financial entities	156,162	1,196	0.8%	53,711	1,781	3.4%	6,354	-20	-0.3%
Other liabilities	5,588	-1,028	-15.5%	1,846	77	4.4%	278	-2	-0.7%
Capital and reserves	20,292	2,284	12.7%	9,895	-437	-4.2%	3,786	-129	-3.3%
Total liabilities	**202,900**	**1,291**	**0.6%**	**94,763**	**2,607**	**2.8%**	**11,218**	**-307**	**-2.7%**

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

3. Credit activities of banks

In the first quarter of 2011, the credit activities of banks continued to grow, even more quickly than in the previous quarter.

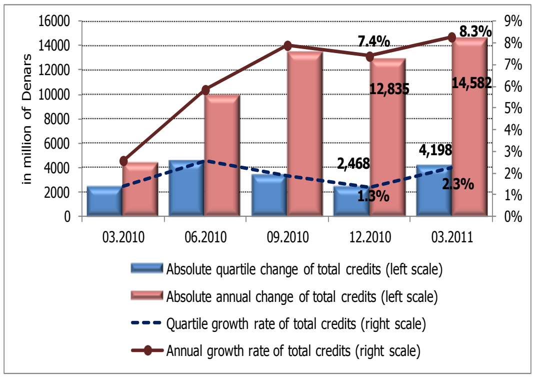
Figure 17: Movements of total credits



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

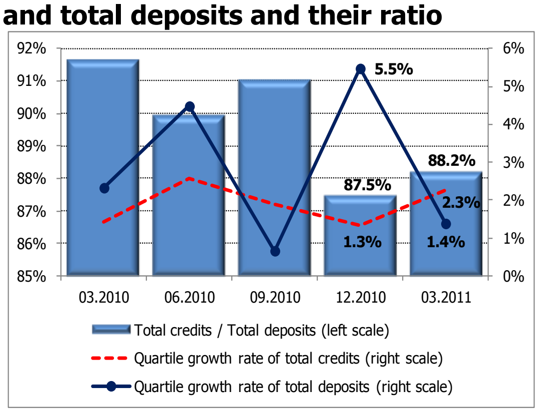
The absolute quarterly growth of credits was almost twice larger than the growth in the last quarter of 2010 (Figure 17). At the same time, the credit growth rate of banks increased by one percentage point on quarterly basis (Figure 18). These movements were in accordance with the expectations of the banking and private sector about the economic activity growth and further deposit base expansion. Although the inflation stabilized in the second quarter and is not expected to have any considerable influence on the credit policies of domestic banks, a possible higher than expected increase of the general price level might negatively impact the dynamics of the deposit potential and deteriorate the domestic banks' expectations, as well as the risk profile of their current and potential clients. **In such**

Figure 18: Quarterly and annual change of credits to nonfinancial entities



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

Figure 19: Movements of total credits and total deposits and their ratio



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

circumstances and given such risks, it can be expected for the forthcoming period that banks will continue their more active credit support to the private sector, but will still remain more prudent than in "normal times", by primarily satisfying the high quality credit demand.[8]

The credit activity recovery is also noticeable from the annual rates of credit growth. The already mentioned reduced investments of banks in non-risk securities are in accordance with the increased credit activity. The credits/deposits indicator moved in the same direction, which in the first quarter of 2011, given the somewhat quicker growth of credits than of deposits, registered a moderate increase (Figure 19).

Despite the credit growth, banks retained their relatively prudent and selective approach to loan approvals, which can partly be explained with the still uncertain future development of the credit portfolio quality. In addition, it should not be neglected that the decelerated growth of non-performing credits in the last quarter of 2010 primarily resulted from written-off non-performing credits and from foreclosures. An additional proof that supports this conclusion is that non-performing credits increased again in this quarter, contrary to their decline in the previous quarter.

In the first quarter of 2011, all three groups of banks were characterized by credit growth, with the medium-size banks making the greatest contribution to the growth, and the group of large banks making a slightly smaller contribution.

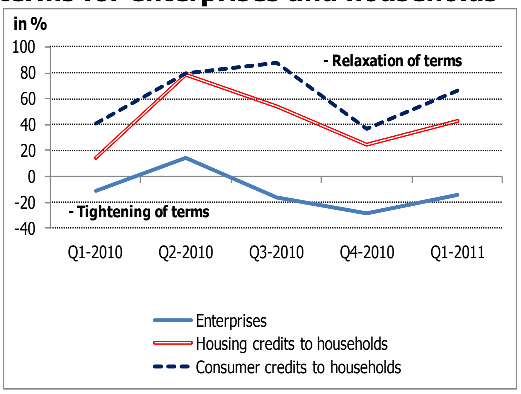
[8] Source: Quarterly Report, April, 2011, www.nbrm.mk.

Table 3: Credits of nonfinancial entities by individual groups of banks

	Annual change in million of Denars					Quartile change in percenatge					Share in the quarterly change of total loans				
Group of banks	31.03.2010	30.06.2010	30.09.2010	31.12.2010	31.03.2011	31.03.2010	30.06.2010	30.09.2010	31.12.2010	31.03.2011	31.03.2010	30.06.2010	30.09.2010	31.12.2010	31.03.2011
Large banks	2,111	1,955	2,088	541	1,873	1.7%	1.6%	1.7%	0.4%	1.5%	86.1%	43.3%	61.4%	21.9%	44.6%
Medium -size banks	469	2,251	1,212	1,557	2,132	1.0%	4.6%	2.4%	3.0%	4.0%	19.1%	49.9%	35.6%	63.1%	50.8%
Small-size banks	-129	309	101	370	192	-3.5%	8.8%	2.6%	9.4%	4.5%	-5.3%	6.8%	3.0%	15.0%	4.6%

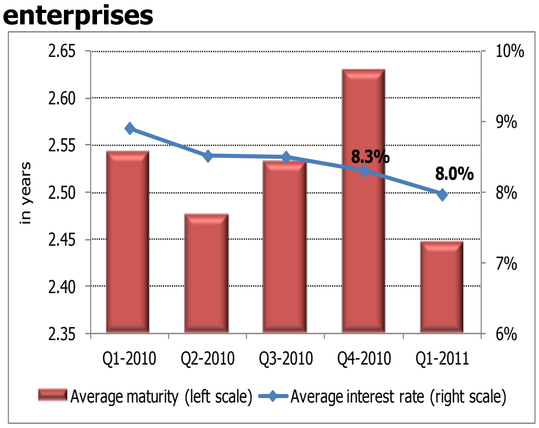
Source: NBRM, on the basis of data provided by banks.

Figure 20: Changes in loan approval terms for enterprises and households



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

Figure 21: Average interest rate and maturity of newly approved loans to enterprises



Source: NBRM, on the basis of data supplied by

In the first quarter of 2011, the relaxation of loan approval terms by the banks[9] positively influenced the banks' credit activity and consequently resulted in an increased loan demand. The relaxation of loan approval terms was registered both in corporate and household credits, and it was more significant in consumer and housing loans, which was expected by most of the banks for the first quarter of 2011 (Figure 20[10]). Simultaneously, the percentage of banks that did not change the loan approval terms to enterprises and households[11] decreased in this quarter. In the second quarter of 2011, most of the banks do not expect any significant changes in the loan approval terms for corporate or household credits. Also, compared to the previous survey, the number of banks expecting a partial loosening of the lending terms in both sectors decreased.

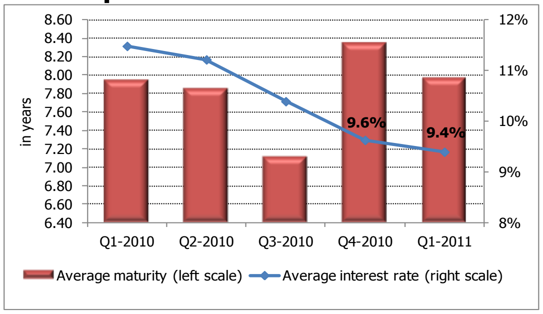
The average interest rates on the newly approved loans registered a downward movement and reached the lowest level in the first quarter of 2011 compared to the previous four successive quarters. The average interest rate decrease was slightly greater in newly approved loans to enterprises than in newly approved loans to natural persons (Figure 21 and Figure 22). **The average maturity of the newly approved credits to nonfinancial entities in the first quarter of 2011 decreased.** The maturity

[9] A more detailed review of lending terms for enterprises and households is given in the surveys on credit activity published on the National Bank's website www.nbrm.mk

[10] **The changes in the lending terms** are determined as a difference between the percentage of banks that have loosened the loan approval terms in the last three months and the percentage of banks that have tightened the loan approval terms in the last three months. The positive difference indicates lending terms relaxation on the banking system level, while a negative difference points to tightening of the lending terms by the banking system.

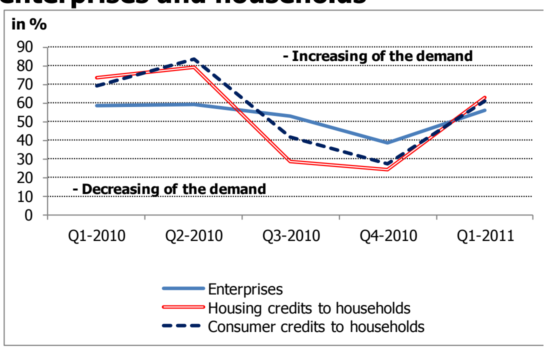
[11] A more detailed review of unchanged lending terms for enterprises and households is given in the Survey on Credit Activity of May 2011, published on the National Bank's website www.nbrm.mk

Figure 22: Average interest rate and maturity of newly approved loans to natural persons



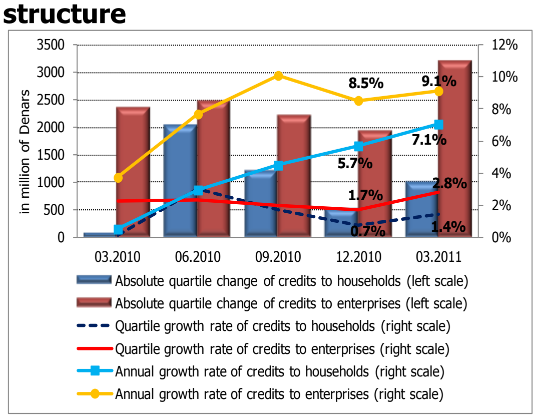
Source: NBRM, on the basis of data supplied by banks to the Credit Registry.

Figure 23: Changes in credit demand by enterprises and households



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

Figure 24: Quarterly and annual changes in credits according to sector structure



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

decline was more prominent in newly approved loans to natural persons than to enterprises. Analyzed by individual sectors, the average maturity of the newly approved credits to enterprises and natural persons ranged between two and a half and eight years, respectively.

According to the credit activity surveys[12], the credit demand registered growth in the first quarter of 2011 (Figure 23[13]). The growth of the demand for housing and consumer loans by households was considerably higher than the growth of the demand for corporate loans, which was expected by majority of banks for the first quarter of 2011. In the second quarter of 2011, the survey results indicate that most of the banks expect an increased demand for corporate credits (about 80% of banks), as well as for the housing and consumer loans (over 83% of banks) in the next three months.

In the first quarter of 2011, a recovery of the credit activity was registered toward both sectors, where the corporate loans continued to grow more intensely than household credits (Figure 24). The corporate loans were higher by 2.8% on a quarterly basis, while household credits grew by 1.4%. Given these developments, the corporate credits contributed with about 76% to the total quarterly credit growth. **The annual credit growth rates at the end of the first quarter of 2011 registered an increase in both sectors.** Unlike the quarterly developments, the annual credit activity acceleration is more prominent in households.

[12] A more detailed review of the credit demand is given in the surveys on credit activity published on the National Bank's website www.nbrm.mk

[13] **The changes in the credit demand** are determined as a difference between the percentage of banks that have registered an increased credit demand in the last three months and the percentage of banks that have registered a decreased credit demand in the last three months. The positive difference indicates an increased loan demand on the banking system level, while a negative difference points to a reduced loan demand on the level of the banking system.

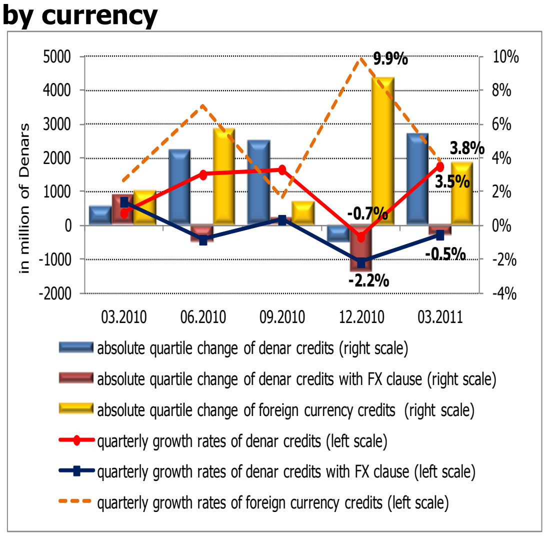
Table 4: Credit exposure in the first quarter of 2011 by individual sectors/credit products

Sector	Credit products / individual sectors	Credit risk exposure in million of Denars as of March 31, 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 March 31, 2011	Average interest rate on regular loans as of December 31, 2011
NATURAL PERSONS	Residential and commercial real estate credits	17,472	405	2.4%	-378.0%	7.5%	7.5%
	Consumer credits	29,309	848	3.0%	-791.6%	10.3%	10.6%
	Overdrafts	9,434	183	2.0%	-170.6%	11.6%	11.2%
	Credit cards	21,995	-1,152	-5.0%	1075.4%	11.3%	12.1%
	Car credits	3,972	-247	-5.9%	230.7%	8.2%	8.2%
	Other credits	980	-144	-12.8%	134.3%	8.7%	8.9%
TOTAL NATURAL PERSONS		**83,162**	**-107**	**-0.1%**	**-2.0%**		
ENTERPRISES AND OTHER CLIENTS	Agriculture, forestry and fishing	4,357	29	0.7%	0.7%	7.8%	7.8%
	Industry	50,643	695	1.4%	17.1%	7.9%	7.9%
	Construction	16,630	1,207	7.8%	29.7%	8.4%	8.5%
	Wholesale and retail trade	45,658	907	2.0%	22.3%	8.2%	8.4%
	Transport and storage	8,456	70	0.8%	1.7%	8.9%	9.0%
	Accomodation facilities and catering services	3,844	146	3.9%	3.6%	8.6%	8.8%
	Real estate	4,003	442	12.4%	10.9%	8.1%	8.2%
	Other sectors	11,741	564	5.0%	13.9%	8.5%	8.4%
TOTAL ENTERPRISES AND OTHER CLIENTS		**145,333**	**4,059**	**2.9%**	**75.4%**		
TOTAL CREDIT EXPOSURE		**321,505**	**5,382**	**1.7%**	**100.0%**		

Source: NBRM, on the basis of data provided by banks.
Note: More detailed developments of all activities and credit products are presented in Annex No.13 – Credit exposure and calculated value impairment, on the banking system level, by risk and sector categories.

The credit activity revival did not cause any considerable shifts in the credits' sector structure. Corporate credits remained the most represented ones in the total credits structure. Of the total loans as of March 31, 2011, 61.6% were credits approved to enterprises, 38.2% to households, and 0.2% to other clients (Annex 4 – Structure of credits to nonfinancial entities).

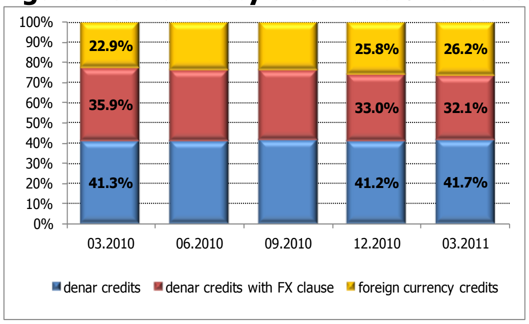
Figure 25: Quarterly change of credits by currency



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

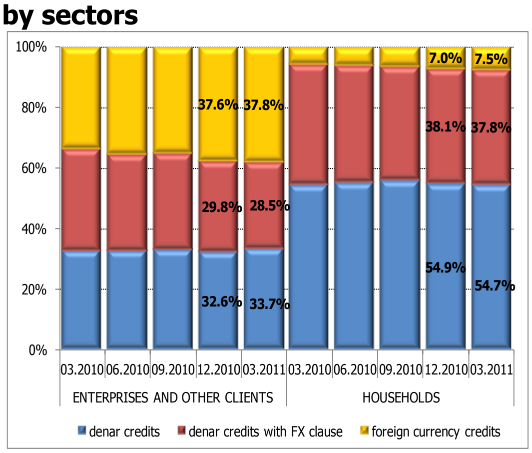
On March 31, 2011, the greatest share of the banks' credit support was given to clients in "industry", and the greatest contribution for the total growth of the credit exposure toward nonfinancial entities was made by the loans approved to clients engaged in the construction sector. In the same period, the highest relative quarterly growth was registered in the credits approved to clients dealing with real estate related activities. **Consumer credits remained the most attractive credit product for households.** On quarterly basis they registered the highest absolute and relative increase. Housing loans are the second highest credit product according to the absolute and relative growth. On the other hand, the credit cards, car credits and other loans registered a negative quarterly change.

Figure 26: Currency structure of credits



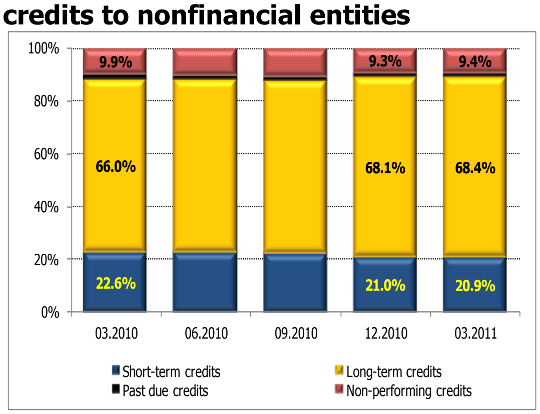
Source: NBRM, on the basis of data provided by banks.

Figure 27: Currency structure of credits by sectors



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

Figure 28: Maturity structure of total credits to nonfinancial entities



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

The average interest rate reduced in the majority of activities and in several credit products, which was linked to the relaxed loan approval terms[14] by the banks.

Credits with currency component (foreign currency credits and Denar credits with currency clause) remain the most represented in the total credits (Figure 26). The highest quarterly growth of Denar 2,694 million (or by 3.5%) was registered in Denar credits, which made them the generator (with 64.2%) of the total credit growth (Figure 25). Foreign currency credits registered a somewhat smaller growth than the Denar credits (of Denar 1,837 million or by 3.8%). Contrary to that, the Denar credits with foreign currency clause registered a decrease also in this quarter.

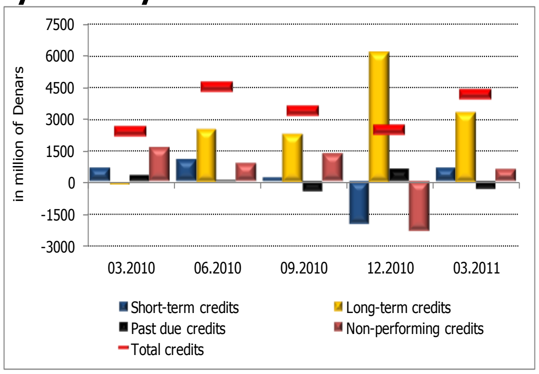
Crediting with currency component was still more represented in the structure of corporate credits, while Denar loans were more represented in the household credits segment (Figure 27). Nevertheless, for the total quarterly growth of corporate and credits for other clients, the Denar loans had a more considerable contribution (with 72.1%), while the foreign currency loans contributed more for the household credits increase (with 42.9%).

Regarding the maturity structure of banks' credit activity (Figure 28), the long-term loans had the highest absolute quarterly growth of Denar 3,282 million (or by 2.6%), thus contributing to the total credit growth with 78.2%. This growth was primarily determined by the increased long-term crediting of the enterprises and other clients (75.6%).

Non-performing loans registered the highest relative quarterly growth of 3.3% (or by Denar 564 million). This was mostly due to the rise of the non-performing loans of the enterprises by 4.7% (or by Denar 531 million),

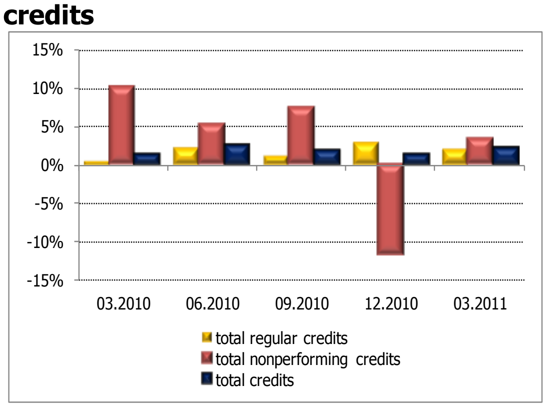
[14] According to surveys on banks' credit activity.

Figure 29: Quarterly change of credits by maturity and of total credits



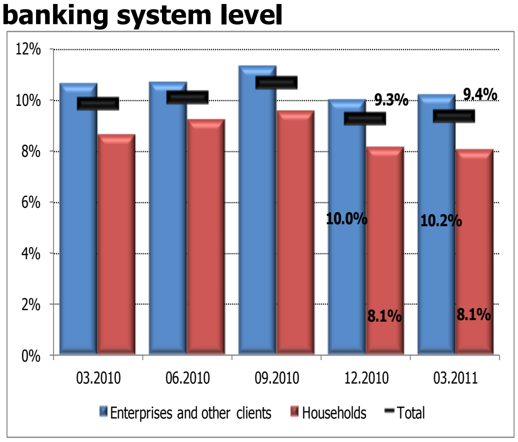
Source: NBRM, on the basis of data provided by banks.

Figure 30: Quarterly growth rates of credits



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

Figure 31: Non-performing credits in total credits by sectors and on the banking system level



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

which contributed for the total growth of non-performing credits with 94.1%. In addition, the foreign currency loans and denar loans with foreign currency clause contributed almost equally to the growth of the non-performing corporate credits with about 45%. **Compared to March 2010, the non-performing loans grew by 2.8%. Due and short-term credits** registered more moderate quarterly changes (Annex 4 – Structure of credits of nonfinancial entities).

Contrary to the downward trend in the preceding quarter, in the first quarter of 2011, the non-performing credits had a higher growth rate than the regular loans (Figure 30). Thus, the quarterly growth rate of the regular loans was 2.1%, and of the non-performing credits 3.3%. **Despite such growth of the non-performing loans, the regular loans registered a significant absolute increase (of Denar 3,633 million) and contributed with 86.6% to the total credit growth.**

With respect to individual sectors, in this quarter the non-performing loans to enterprises and other clients increased more considerably than the non-performing household credits. The quarterly growth rate of the non-performing credits to enterprises and other clients was 4.7%, and to the households 0.4%. These movements caused **insignificant changes in the share of non-performing loans in total credits and respectively by sectors (Figure 31).**

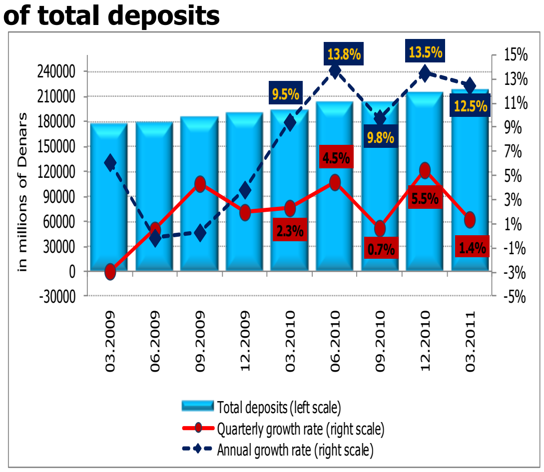
The group of large banks registered the biggest share in all credit categories on the level of the banking system. On quarterly basis, however, regarding the sector structure, smaller participation of the group of large banks in the loans to enterprises and other clients was registered, at the expense of the increased share of the group of medium-size banks. Regarding the maturity structure, participation of the group of medium-size banks in the short-term loans and non-performing credits intensified. On the other hand, the participation of the group of large banks in the abovementioned credit categories decreased in the same period. According to currency structure, significant quarterly fall was registered in the share of the group of large banks at the expense of the increased share of the medium-size banks in the foreign currency loans (Annex 5 – Distribution of credits by individual groups of banks).

The largest incidence of corporate credits according to the sector structure and of the long-term loans according to the maturity structure was common for all bank groups. The credits with foreign currency clause were more represented in the groups of large and medium-size banks, while denar loans prevailed in small-size banks (Annex 6 – Structural characteristics of credits in individual groups of banks).

4. Deposit activity of banks

In the first quarter of 2011, the deposit core of the banks continued to grow, but at a slower pace than in the preceding quarter.

Figure 32: Quarterly and annual changes of total deposits

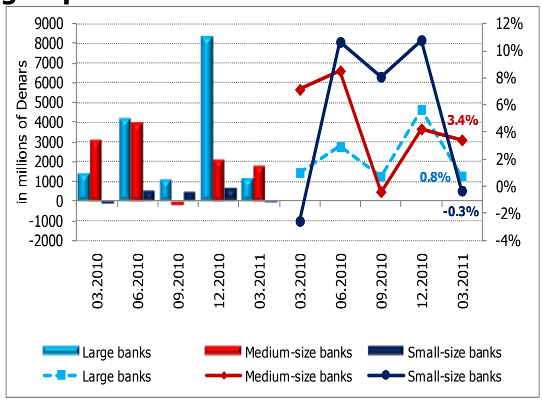


Source: NBRM, on the basis of data provided by banks.

On March 31, 2011, the total deposits of the nonfinancial entities equaled Denar 216,227 million and relative to the end of 2010 they registered an absolute growth of Denar 2,958 million (Figure 32). In addition, the quarterly growth rate of deposits (March 31, 2011 relative to December 31, 2010) was by about 4 p.p. lower than the growth rate registered in the last quarter of 2010. If compared with the first quarter of 2010, the deposits' quarterly growth deceleration was only 0.9 percentage points. Annually, the growth rate was higher by 3 p.p. relative to March 2010.

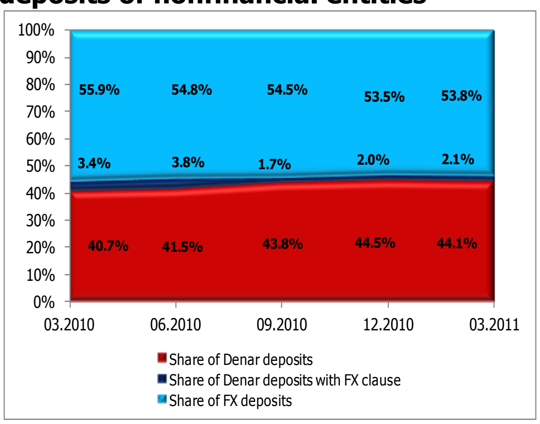
The slowdown of deposit activity growth was registered in all groups of banks (Figure 33). The groups of large and medium-size banks registered an increase of the collected deposits and almost completely determined the dynamics of the banking system deposit core (the group of

Figure 33: Absolute and relative quarterly change of total deposits by groups of banks



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

Figure 34: Currency structure of deposits of nonfinancial entities



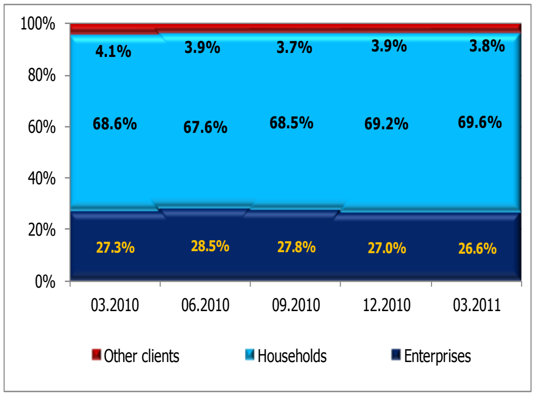
Source: NBRM, on the basis of data provided by banks.

large banks contributed with 40.4%, and the group of medium-size banks with 60.2% to the total quarterly growth of deposits of nonfinancial entities). The group of small-size banks registered a slight narrowing of the total deposits.

In the first quarter of 2011, the currency inclinations of depositors changed and deposits with currency component increased more intensely than the Denar deposits. The foreign currency deposits and the Denar deposits with foreign currency clause increased by Denar 2,328 million and Denar 176 million, respectively. As a result, their share in the total deposits structure increased again, after the downward trend registered in the preceding three successive quarters (Figure 34). Foreign currency deposits still constitute the greatest share of the total deposit base of banks and in this quarter determined 78.7% of the growth of total deposits of the nonfinancial entities, unlike in the previous year when Denar deposits were the generator of the banks' deposit base growth. Foreign currency deposits increased most considerably in the households segment (Annex 7 – Structure of deposits of nonfinancial entities). On the other hand, Denar deposits registered the highest annual growth rate of 21.9% (higher by 13.5 percentage points than the annual growth rate of the foreign currency deposits). Nevertheless, the greatest part of this share was realized in the last three quarters of 2010, while the Denar deposits increased only by 0.5% in the first quarter of 2011.

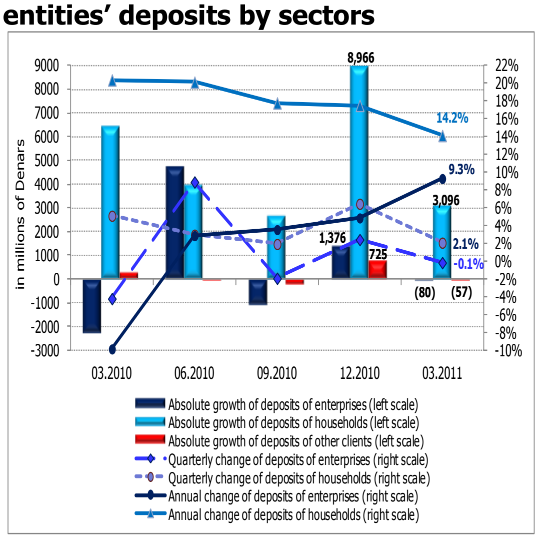
Analyzed by bank groups, foreign currency deposits still prevailed in the currency structure of deposits in large and medium-size banks, while denar deposits are most represented in the group of small-size banks. Relative to the preceding quarter, increased share is registered of the foreign currency deposits in the deposit structure of the groups of medium and small-size banks (Annex 8 – Structural characteristics of deposits of nonfinancial entities by groups of banks).

Figure 35: Sector structure of deposits of nonfinancial entities



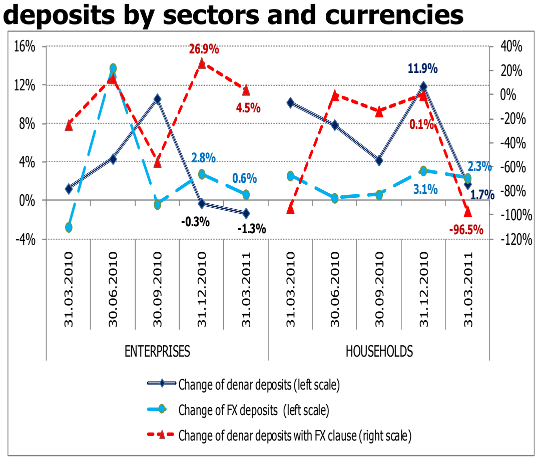
Source: NBRM, on the basis of data provided by banks.

Figure 36: Dynamics of nonfinancial entities' deposits by sectors



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

Figure 37: Quarterly relative change of deposits by sectors and currencies



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

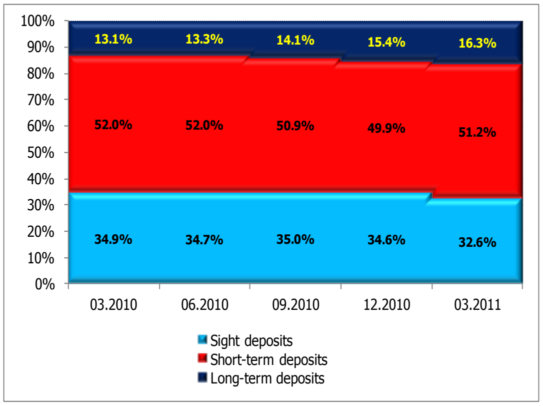
Despite the slower quarterly growth, the household deposits in the first quarter of 2011 remained the driving force of the dynamics of nonfinancial entities' deposits. In this quarter, the household deposits fully determined the total deposits growth (contribution of 104.7%). Corporate deposits, on the other hand, narrowed in the first quarter of 2011 by Denar 80 million.

On annual level, both household and corporate deposits increased (Figure 36). Despite the decelerated growth, the annual growth rate of household deposits was higher by 4.9 p.p. compared to the annual growth rate of corporate deposits. As a result, the share of household deposits in the structure of banks' total deposit core continued to rise, while that of corporate deposits decreased (Figure 35). Household deposits are structurally the most represented in all groups of banks, and their share is especially prominent in the group of large banks (Annex 8 - Structural characteristics of deposits of nonfinancial entities by groups of banks).

In the first quarter of 2011, Denar and foreign currency deposits of households increased with a slower dynamics and registered growth of Denar 1,028 million and Denar 2,072 million, respectively (Figure 37). These two deposit groups determined the total household deposits growth, considering the negative growth rate of Denar deposits with a foreign exchange clause. The total quarterly decline of corporate deposits was due to the decrease of Denar deposits (by Denar 408 million).

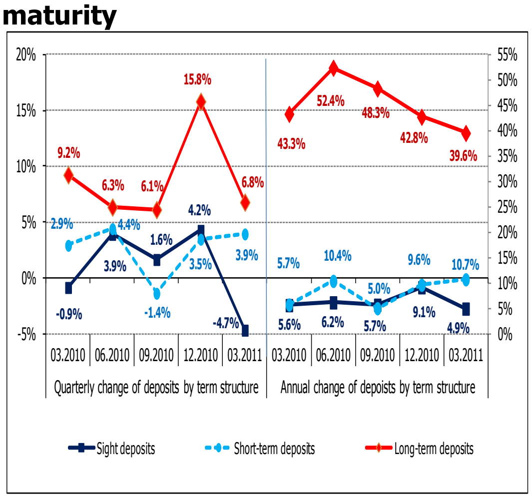
In the first quarter of 2011, the short-term deposits were still the most represented in the maturity structure of total deposits (Figure 38) and grew at a faster pace than in the preceding quarter (Figure 39). On the other hand, the long-term deposits' quarterly growth slowed down, despite the bigger drop of interest rates on short-term deposits against the smaller fall of interest rates

Figure 38: Maturity structure of deposits of nonfinancial entities



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

Figure 39: Total deposits movement by maturity



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

on long-term deposits. The short-term deposits[15] registered the highest absolute quarterly growth of Denar 4,189 million and determined the greatest share (141.6%) of the total deposits growth. Long-term deposits registered a quarterly growth of Denar 2,234 million and a moderate increase of their share in the maturity structure of deposits. The biggest part (60.4%) of the long-term deposits growth was due to the denar deposits increase, where household denar deposits contributed with 99.2% to the growth. On the other hand, the structural share of sight deposits[16] in the total deposits narrowed as a result of their negative quarterly growth rate. The short-term deposits prevail in the maturity structure of all groups of banks, while the greatest share of long-term deposits was registered in the group of medium-size banks (Annex 8 - Structural characteristics of deposits of nonfinancial entities by groups of banks).

The group of large banks is the most represented one in the currency, sector, and maturity structure of total deposits. More significant quarterly changes in the deposits structure by groups of banks were registered only in the deposits' currency structure. The narrowing of the structural share of the group of large banks in Denar deposits with a foreign exchange clause (by 12.4 p.p.) was followed by an almost identical increase of the share of the group of medium-size banks in these deposits' structure (Annex 9 – Distribution of deposits by individual groups of banks).

[15] The short-term deposits' increase was almost primarily (52.2%) due to Denar deposits' growth, where the corporate deposits contributed with 63.3% and household deposits with 38.6%. The contribution of foreign currency deposits in the short-term deposits total growth was 42.7% (where households' foreign currency deposits determined 78.5% of this growth).

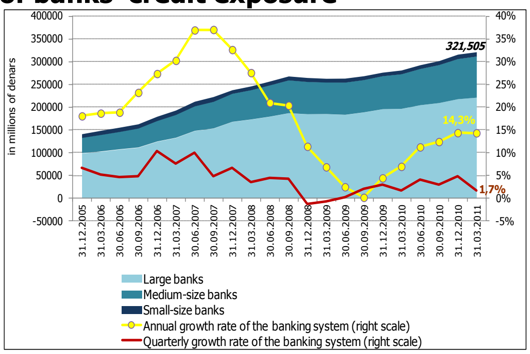
[16] The largest share (89.0%) of the sight deposits drop was due to the Denar deposits decrease, to which corporate Denar deposits contributed with 57.9%.

III. Risks in banks' operations

1. Credit risk

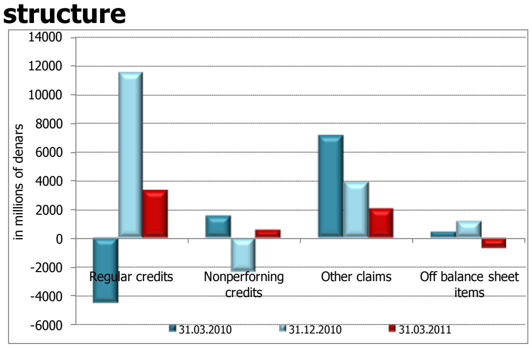
In the first quarter of 2011, a slower growth of credit exposure and a minor deterioration of some of the indicators of banks' credit portfolio quality, compared to the last quarter of 2010, were registered .

Figure 40: Movement and growth rates of banks' credit exposure



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

Figure 41: Quarterly changes of credit exposure by selected items in its structure



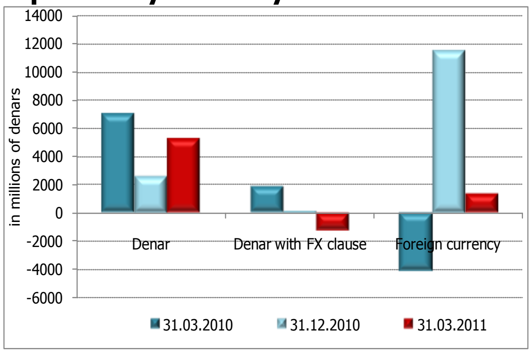
Source: NBRM, on the basis of data provided by banks.

On March 31, 2011, the total credit exposure of banks equaled Denar 321,505 million and registered an increase of Denar 5,382 million on quarterly (first quarter of 2011 relative to last quarter of 2010), i.e. Denar 40,302 million on annual basis (March 31, 2011 relative to March 31, 2010) (Figure 40). In addition, greater slowdown was registered in the quarterly growth rate of the credit exposure (from 4.7% to 1.7%) than of the annual growth rate (14.4% to 14.3%). The regular credits and the other claims (Figure 41), with 61.3% and 38.4%, respectively, contributed with largest share in the credit exposure's quarterly growth (Annex 10 – Structure of credit exposure by individual items, on the level of the banking system). The regular credits increased by Denar 3,298 million (1.6%) due to the increased credit exposure to the construction sector and wholesale and retail trade (with enterprises), as well as to consumer credits (with natural persons).

The quarterly increase of the item "other claims" (Denar 2,065 million or 4.4%) resulted from the shift of banks towards the new instrument – bill of six-month deposit with the National Bank. On March 31, eight banks[17] had assets placed in bills of six-month deposit with the National Bank equaling a total of Denar 8,590 million, which was 2.7% of the total credit exposure, or 9.6% of the credit exposure to the financial institutions and the state. Contrary to that, the CB bills and treasury bills (which are

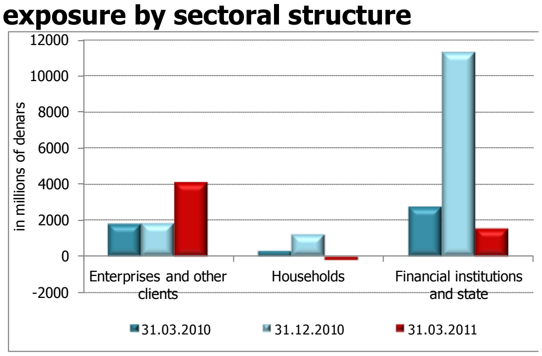
[17] On March 31, 2011, two banks of the group of large banks placed assets in six-month deposit bill (80.3% of the total amount on the level of the banking system), five banks of the medium-size banks group (19.5%), and only one of the small-size banks group (0.2%).

Figure 42: Quarterly change of credit exposure by currency structure



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

Figure 43: Quarterly change of credit exposure by sectoral structure

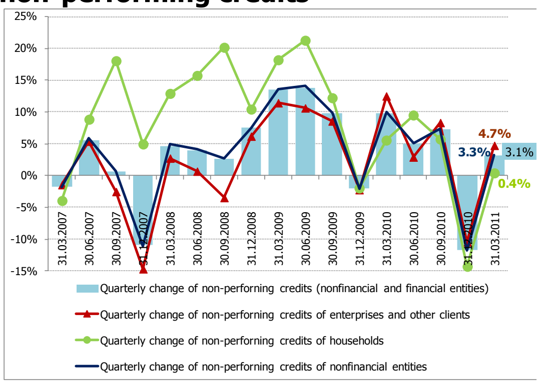


Source: NBRM, on the basis of data provided by banks.

included in the "other claims" item) registered a quarterly drop of Denar 6,070 million and 152 million, respectively.

The National Bank's new instrument significantly determined the growth of the Denar credit exposure, which increased by Denar 5,270 million or by 3.7% (**Error! Reference source not found.**), and determined 97.9% of the quarterly growth of the total credit exposure (Annex 11 – Currency structure of the credit exposure and calculated impairment and special reserves on the banking system). Regarding the sector structure, however (**Error! Reference source not found.**), the largest contribution (75.4%) to the quarterly growth of the credit exposure was made by the sector "enterprises and other clients" (quarterly increase of Denar 4,059 million or 2.9%). The credit exposure towards the "households" sector (natural persons and sole proprietors), on the other hand, after one year of continuous growth decreased in this quarter by Denar 187 million or by 0.2%. This reduction resulted from the activities of a large bank for settlement and closure of a large portion of claims on the basis of credit cards. As a result of these activities, decelerated growth was registered of the credit exposure in the group of large banks (quarterly growth of 1.6% on March 31, 2011 relative to 4.1% on December 31, 2010). Despite that, the group of large banks remained the generator of the increased credit exposure of the banking system (with 68.7% share in the quarterly growth). Decelerated credit exposure growth was also registered in the group of medium-size banks (quarterly growth of 2.6% on March 31, 2011 relative to 5.6% on December 31, 2010), but mainly due to decreased investments in CB bills by 30.4%. For the same reason, in the group of small-size banks the credit exposure narrowed by 3%.

Figure 44: Quarterly growth rates of non-performing credits

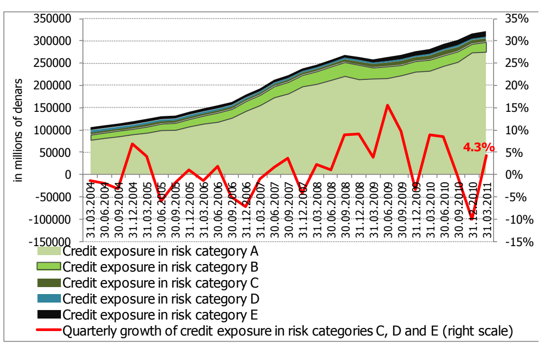


Source: NBRM, on the basis of data provided by banks.

In the first quarter of 2011, non-performing credits grew in all bank groups, particularly in the group of large banks (quarterly increase of Denar 442 million or 4.1%, which was 79.4% of the total growth of non-performing credits in the banking system). The quarterly growth of total non-performing loans (of nonfinancial and financial entities) equaled 3.1% (Figure 44). The generator of that increase (with 95.9% contribution) was the sector "enterprises and other clients". Households' non-performing credits registered a minimum increase of Denar 23 million, and in financial institutions these loans decreased by Denar 16 million (Annex 12 – Non-performing credits, credit exposure in "C", "D" and "E" and calculated impairment). The faster growth of the non-performing than of total credits resulted in their increased ratio compared to end 2010.

1.1. Credit portfolio quality of the banking system and of individual groups of banks

Figure 45: Movement and growth rate of the credit exposure by risk categories



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

After the initial improvement of quality indicators of the credit portfolio in end 2010, during the first quarter of 2011 they somewhat deteriorated. It should be taken into consideration that credit portfolio quality improvement at the end of 2010 was primarily due to the write-offs and settlements based on foreclosure. On March 31, 2011, the credit exposure in risk categories "C", "D" and "E" increased its share in the total credit exposure from 7.1% to 7.3%, relative to December 2010 (Figure 45).

On March 31, 2011, the credit exposure in risk categories "C", "D" and "E" quarterly increased by Denar 963 million, out of which 57.8% are in non-performing loans category (Annex 13 – Credit exposure and calculated impairment at banking system level by categories of risk and sector). The non-performing loans share in the total loans increased only slightly (to 9.4% from 9.3% on December 31, 2010).

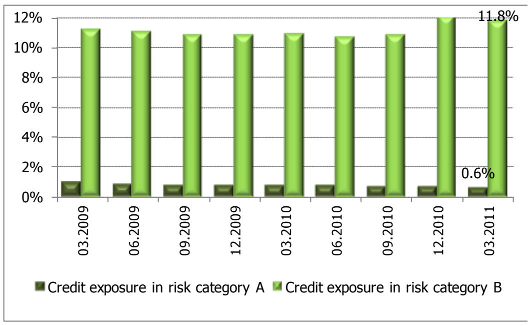
Table 5 Quality indicators of banking system credit portfolio

Indicator	31.03.2010	31.12.2010	31.03.2011
Average level of risk	6.8%	6.1%	6.3%
% of „C", „D" and „E" in total credit risk exposure	8.2%	7.1%	7.3%
% of „C", „D" and „E" in total credit risk exposure, without exposure to financial institutions and state	10.6%	9.6%	9.9%
% of „E" in total credit risk exposure	3.8%	3.6%	3.9%
Coverage of „C", „D" and „E" with calculated impairment and special reserves	82.5%	85.8%	86.8%
Coverage of nonperforming credits with calculated impairment and special reserves	109.4%	110.2%	112.7%
Coverage of nonperforming credits with calculated impairment and special reserves for nonperforming credtis	70.1%	74.2%	76.2%
% of „C", „D" and „E" in own funds	64.0%	59.3%	59.3%
% of „E" in own funds	29.6%	30.4%	31.5%
Calculated impairment and special reserves/own funds	53.2%	50.9%	51.5%
% of nonperforming credits, net of calculated impairment for nonperforming credits in own funds	14.6%	11.9%	10.9%
% of „C", „D" and „E", net of calculated impairment for nonperforming credits in own funds	23.0%	19.5%	18.7%
Nonperforming credits / Total credits	9.9%	9.3%	9.4%
Restructured and prolonged credits / Total credits	10.7%	10.9%	10.1%
10 biggest clients' credit exposure / total credit exposure	17.7%	19.5%	19.9%

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

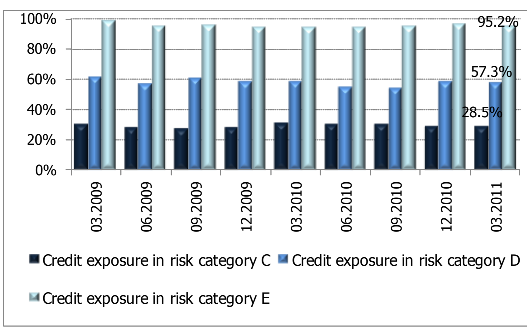
The calculated impairment and special reserves increased faster (5.5% quarterly growth) than the credit exposure, and because of that the average level of risk of the banking system credit portfolio increased. On the other hand, this increase improved the coverage of higher risk exposure with the allocated impairment. The generator of the total calculated impairment and special reserves was the calculated impairment and special reserves of credit exposure towards the sector "enterprises and

Figure 46: Credit exposure coverage in risk categories "A" and "B" with calculated impairment and special reserves



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

Figure 47: Credit exposure coverage in risk categories "C", "D" and "E" with calculated impairment and special reserve



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

other clients" (Denar 861 million or 6.5%), where the average risk level was the highest – 9.7% (9.4% on December 31, 2010; Annex 14 – Indicators of credit exposure towards the sector "enterprises and other clients"). The average risk level of the exposure towards natural persons and sole proprietors increased (from 6.3% on December 31, 2010 to 6.6% on March 31, 2011), as a result of the increment of the calculated impairment and special reserves of Denar 72 million (2.9%) in consumer credits (Annex 15 – Indicators of credit exposure towards natural persons). In addition, in all bank groups, the calculated impairment increased quarterly, and the group of large banks had the largest share in this rise (56.5%).

The coverage of the credit exposure classified in the risk categories "C", "D" and "E" with impairment and special reserve registered an increment from 67.2% in end 2010, to 68.4% at the end of the first quarter of 2011. This growth was due to the faster quarterly growth of the impairment (by 6.2%) compared to the credit exposure growth in the risk categories "C", "D" and "E" (by 4.3%). Thus, analyzed by individual risk categories (Figure 46 and Figure 47) the credit exposure coverage increased only in the risk category "C" (from 28.4% to 28.5%). The credit exposure coverage in the risk categories "C", "D" and "E" with the adequate impairment was the highest in the activity "textile industry and production of clothing apparel and shoes" (83%), while in households category the coverage was the greatest in credits on the basis of overdrafts on current accounts (85.5%).

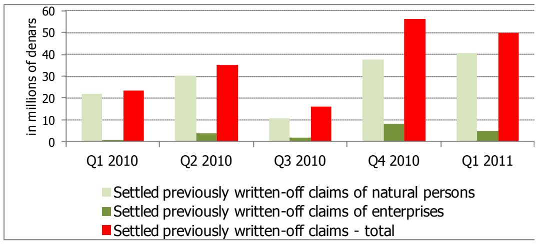
At the end of the first quarter of 2011, the share of the restructured and prolonged credit exposure in the total credit exposure dropped to 10.1% (from 10.9% at the end of 2010). More than a half (55%) of the restructured credit exposure were non-performing loans, of which 94% was in the sector "enterprises". The coverage of the restructured credit exposure with the calculated impairment (or the average riskiness) of this exposure equaled 42.6%, which was a 9.3 p.p. decline relative to end 2010. Contrary to that, the coverage of the prolonged credit exposure increased from 10.7% on December 31, 2010 to 11.3% on March 31, 2011 (Table 5).

The credit exposure concentration, analyzed as the share of the ten clients with the largest credit exposure in total credit exposure was almost unchanged compared to end 2010. In the "enterprises and other clients" sector, the share of the ten largest credit users in total exposure equaled 12.2% (0.1 p.p. increase from December 31, 2010), while no change was registered in the sector "natural persons" (0.7% on both dates). The highest participation of the ten largest clients in total credit exposure was registered in the group of small-size banks (over 60% in each individual bank), while the lowest share was registered in the group of medium-size banks, where this share equaled 29.4% on the average. In large banks, this share ranged in the interval between 18.6% and 30.7%.

In the first quarter of 2011, the amount of write-offs of the banking system was minimal and had no significant impact on the indicators of its credit portfolio quality. The write-offs conducted were in the amount of Denar 25 million (only 1.6% of the write-offs done in the preceding quarter, or 6.4% of those done in the first quarter of 2010) and participated with 0.5% in the total credit exposure as of December 31, 2010. The largest share of the total write-offs of credit exposures to non-financial entities (about 70%) were of the "enterprises" sector, and were credit write-offs (71.2%). Regarding the currency, 98.7% of the total written-off claims were in Denars. The highest share of 47.6% in the total written-off claims in the first quarter was by a medium-size bank, while the share of the three large banks together equaled 28.1%.

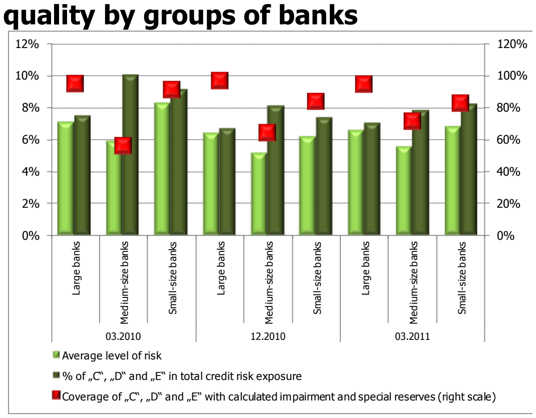
In the first quarter of 2011, banks collected Denar 50 million of the claims that were written-off in the preceding quarters (Figure 48).

Figure 48: Movement of settled, previously written-off claims



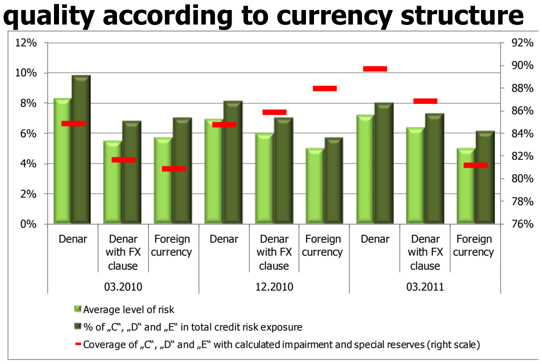
Source: NBRM, on the basis of data provided by banks.

Figure 49: Indicators of credit portfolio quality by groups of banks



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

Figure 50: Indicators of credit portfolio quality according to currency structure



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

The collected previously written-off debts were mostly from natural persons (81.3%) and completely in Denars. Also, 98.5% of the total collected claims, previously written off, were concentrated in three banks (one large and two medium-size banks).

As of March 31, 2011, the indicators of the group of small-size banks showed the highest level of credit risk and the greatest deterioration during the first quarter of the year (Figure 49). Hence, as of March 31, 2011, the average level of credit portfolio risk of this group of banks was at 6.8% (6.2% as of December 31, 2010), while the share of "C", "D" and "E" in the total credit exposure equaled 8.2% (7.4% on December 31, 2010). The highest coverage of "C", "D" and "E" with the calculated impairment and special reserve was registered in the group of large banks (94.2%), which was an unchanged situation compared to the preceding quarters. The credit exposure of the group of large banks was at an almost unchanged average risk level compared to end 2010, while the share of "C", "D" and "E" in the total credit exposure increased by 0.3 p.p. Minimal improvement of some indicators of the credit risk level was registered in the group of medium-size banks, where the share of "C", "D" and "E" in the total credit exposure narrowed by 0.3 p.p., and their coverage with the calculated impairment increased by 6.9 p.p. (Annex – Non-performing credits, credit exposure in "C", "D" and "E", and calculated).

According to the currency structure of the credit exposure, in the first quarter of 2011, the highest risk was registered in the credit exposure in Denars, while the worst deterioration was noted in the foreign currency credit exposure (Figure 50). Denar credit exposure registered the highest average risk level (7.2%) and share of "C", "D" and "E" in the total credit exposure (8%), but also the highest coverage of "C", "D" and "E" with the calculated impairment and special reserves (89.7%). The share of "C", "D" and "E" in the total credit exposure most significantly increased in the foreign currency credit exposure (by 0.5 p.p.), whose coverage with the calculated impairment and special reserves decreased by 6.8 p.p. As for the Denar exposure with foreign currency clause, the credit risk indicators did not show any significant changes compared to the preceding quarter.

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

Table 6: Results of the stress-test simulations

	Indicator	Enterprises, other clients and natural persons	Credit exposure of the banking system
Base line	Capital adequacy ratio	16.8%	
	% of „C", „D" and „E" in total credit risk exposure	9.8%	7.3%
	Average level of risk	8.5%	6.3%
I scenario	Capital adequacy ratio	14.8%	
	% of „C", „D" and „E" in total credit risk exposure	14.8%	10.8%
	Average level of risk	10.6%	7.8%
II scenario	Capital adequacy ratio	10.5%	
	% of „C", „D" and „E" in total credit risk exposure	24.8%	17.9%
	Average level of risk	14.6%	10.7%

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

The stress-test of the banking system sensitivity to a simulated deterioration of the credit exposure risk towards non-financial entities presumes a migration of a certain percentage of exposure from each category of risk to the next two categories with a higher risk level, where they are distributed into equal amounts. During the simulation, what is presumed is an identical level of average riskiness of each risk category to the level before the migration of the exposure (before the simulation). The simulation aim is to determine the negative effect on the adequacy of capital and the level of exposure risk from the migration of the credit exposure from the current to the higher risk categories (both for the total exposure and for the exposure by sectors and activities).

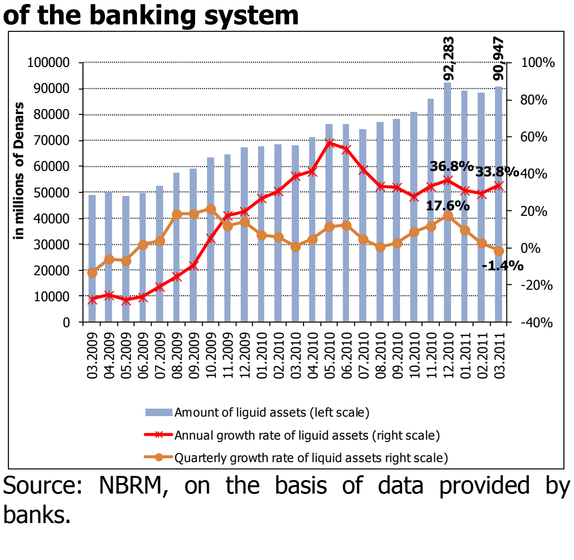
Under presumption of a simultaneous redistribution of 10% (I scenario) and of 30% (II scenario) of the credit exposure towards enterprises and other clients and towards natural persons, from the categories of lower to categories of higher risk, the worst deterioration of quality appears in the exposure towards "real estate related activities" and in loans for purchase and renovation of housing and office space (Annex 16 – Stress-test simulation on credit exposure towards certain activities of the sector "enterprises and other clients" and towards natural persons, by individual credit products). Thereto, the capital adequacy ratio of the banking system would register a decrease by 2.0 p.p. in the first scenario, i.e. by 6.3 p.p. in the second, more extreme scenario. The share of exposure classified in risk categories "C", "D" and

"E" in the total credit exposure on the banking system level would rise by 3.5 p.p. (in the first scenario), i.e. by 10.6 p.p. (in the second scenario). If considering only the exposure towards enterprises and households, i.e. if the exposure towards the financial institutions and the government is excluded from the simulations, the share of the exposure classified in risk categories "C", "D" and "E" would register an increment of 5.0 and 15.0 p.p., respectively, during an implementation of the respective scenarios for exposure migration.

2. Liquidity risk

Liquidity indicators were still on a satisfactory level, although in the first quarter of 2011 the liquid assets, and hence the indicators of the banking system liquidity, declined. Also, the downward trend of the liquid assets was temporary (in January and February) and in March 2011 already the banks' liquid assets began to increase again. According to expectations and banks' experiences to date, the deposit base showed a relatively high stability, which additionally increased by the end of this quarter.

Figure 51: Movement of the liquid assets of the banking system



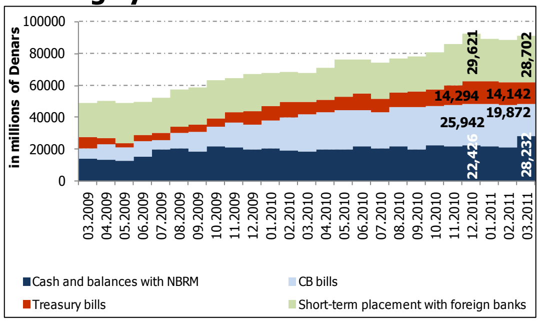
Source: NBRM, on the basis of data provided by banks.

2.1 Movement of liquid assets and of indicators of banking system liquidity

In the first quarter of 2011, the liquid assets narrowed by Denar 1,336 million, or by 1.4% relative to end 2010 (Figure 51). **Considering that at the end of 2010, the banking system in the Republic of Macedonia achieved a relatively high level of liquidity assets, the decline in the first quarter of 2011 does not disrupt the liquid position of the banks. After the liquid assets narrowing in the first two months of 2011, in March they increased again. As a result, the liquid assets are still at a satisfactory level.**

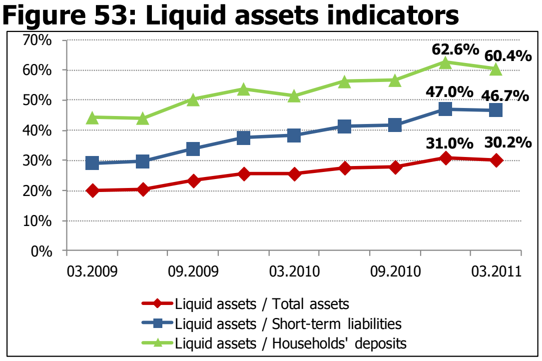
Within the liquid assets framework, the CB bills decreased by Denar 6,070 million, while accounts with the National Bank registered a Denar 5,806 million increase, as a result of the investments in the new National Bank instrument – bill of six-month deposit , which banks can use to comply with the ratios for Denar or foreign

Figure 52: Monthly balance of the components of liquid assets of the banking system



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

Figure 53: Liquid assets indicators



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

currency liquidity[18]. Hence, the banks redistributed a portion of the CB bills into bills of six-month deposit. In the first quarter of 2011, they placed Denar 8,590 million in bills of six-month deposit with the National Bank. This shift also caused changes in the liquid assets structure. For the account of the reduced share of CB bills by 6.3 percentage points, the assets on accounts with the National Bank increased their share by 6.7 percentage points p As a result of these changes, at the end of the first quarter of 2011, the assets on accounts with the National Bank and the short-term assets placed in banks abroad had an almost equal share in the liquid assets structure with 31.0% and 31.6%, respectively.

The liquid assets narrowing in the first quarter of 2011, caused a decrease of the banking system liquidity indicators on quarterly basis (Figure 53). The coverage of household deposits with liquid assets declined by 2.2 percentage points, while the liquid assets share in the total assets reduced by 0.8 percentage points. The decrease of the short-term liabilities coverage with the total assets was minimal and equaled 0.3 percentage points. Nevertheless, **despite the decrement in this quarter, the banks liquidity indicators were still at a relatively high level compared with the preceding years.**

The ratio between total credits and total deposits of non-financial entities increased insignificantly (by 0.7 percentage points), as a result of the larger credit growth than deposit growth. At the end of the first quarter of 2011, this ratio equaled 88.2%. Analyzed by bank, this indicator was above 100% in four of the medium-size and in one of the small-size banks.

2.2. Sources of financing of the banking system

In the first quarter of 2011, the short-term deposits of non-financial

[18] More details are presented in chapter II.1 Banks' Activities.

entities still were the primary source of financing of the banking system in the Republic of Macedonia. Their share in the total sources equaled 58.6%. Despite their growth, however, on March 31, 2011, their share in total sources declined due to the larger growth of long-term deposits of non-financial entities (more precisely, of Denar long-term deposits of natural persons by Denar 1,239 million) and of liabilities based on long-term credits in foreign currency towards nonresidents – financial companies (by Denar 1,471 million). The increase of the long-term credits of non-residents – financial companies was mostly due to one bank, in which these credits increased by Denar 1,390 million.

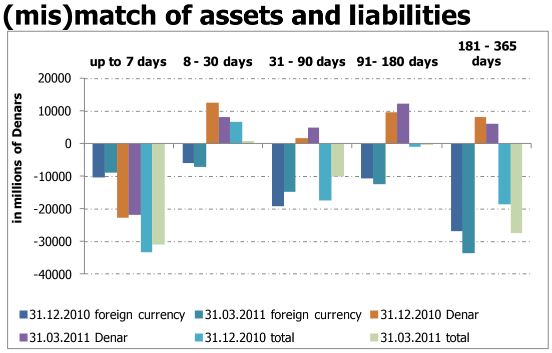
Table7: Structure and movement of sources of financing of the banking system

Source of funding	31.12.2010		31.03.2011		Quarterly change		
	Amount (in millions of Denars)	Structure (in %)	Amount (in millions of Denars)	Structure (in %)	Amount (in millions of Denars)	In %	% of change
Deposits of nonfinancial entities	**213.270**	**69,9%**	**216.227**	**70,0%**	**2.958**	**1,4%**	**82,3%**
-long-term	32.933	10,8%	35.167	11,4%	2.234	6,8%	62,2%
-short-term	180.336	59,1%	181.060	58,6%	724	0,4%	20,2%
Deposits of financial entities	**18.372**	**6,0%**	**16.501**	**5,3%**	**-1.871**	**-10,2%**	**-52,1%**
-long-term	5.073	1,7%	5.735	1,9%	663	13,1%	18,4%
-short-term	13.299	4,4%	10.766	3,5%	-2.533	-19,0%	-70,5%
Borrowings, subordinated and hybrid capital instruments	**33.341**	**10,9%**	**35.080**	**11,4%**	**1.739**	**5,2%**	**48,4%**
-long-term	29.745	9,7%	31.878	10,3%	2.133	7,2%	59,4%
-short-term	3.596	1,2%	3.202	1,0%	-394	-11,0%	-11,0%
Capital, reserves and current financial result	**35.344**	**11,6%**	**34.451**	**11,2%**	**-893**	**-2,5%**	**-24,9%**
Other sources (not included before)	**4.963**	**1,6%**	**6.623**	**2,1%**	**1.659**	**33,4%**	**46,2%**
Total source of funds	**305.290**	**100,0%**	**308.882**	**100,0%**	**3.592**	**1,2%**	**100,0%**

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

On the other hand, the short-term deposits of the financial institutions declined, simultaneously reducing the share in the structure of the total sources of financing (mostly as a result of the decrease in the short-term deposits of the parent entity of one of the domestic banks by Denar 1,845 million).

Figure 54: Contracted residual (mis)match of assets and liabilities

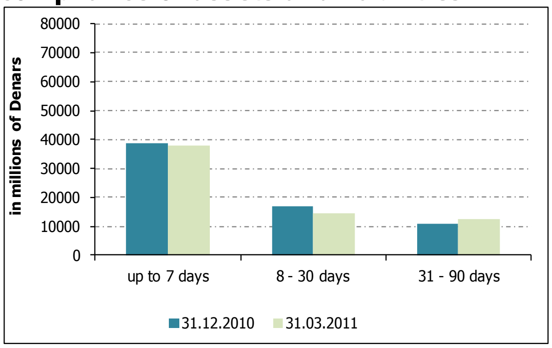


Source: NBRM, on the basis of data provided by banks.

2.3. Maturity (mis)match of assets and liabilities of banks

On quarterly basis, the banks deepened the cumulative negative gap between the assets and liabilities, mostly as a result of the deepened negative gap in the contractual maturity from 181 to 365 days (Figure 54). The negative gap in this maturity segment increased by Denar 8,765 million and results mostly from the growth of term deposits

Figure 55: Expected residual maturity compliance of assets and liabilities



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

(Denar 11,922 million), majority of which are in foreign currency (Denar 7,504 million). On the other hand, in the segment of contractual maturity from 8 to 30 days, decrease is registered in the positive gap between the assets and liabilities by Denar 5,668 million (the financial instruments on the money market that are available for sale reduced by Denar 3,522 million, while concerning the liabilities, the term deposits increased by Denar 2,485 million.

The banks continued to demonstrate a relatively high level of stable deposits which in the first quarter of 2011 increased by 2.2 percentage points. and equaled 84.1%. According to the banks' expectations, the gap between the assets and liabilities in all maturity segments was positive.

2.4. Compliance with the liquidity ratios

As of March 31, 2011, all banks (excluding one), complied with the required minimal level of liquidity ratio up 30 days in Denars.[19]

Table 8 List of complying with the liquidity ratio for up to 30 days and up to 180 days

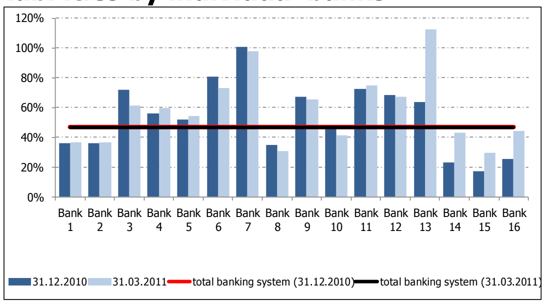
Description	Number of banks*											
	maturity band-up to 30 days						maturity band-up to 180 days					
	Denars			Foreign currency			Denars			Foreign currency		
	31.03.2010	31.12.2010	31.03.2011	31.03.2010	31.12.2010	31.03.2011	31.03.2010	31.12.2010	31.03.2011	31.03.2010	31.12.2010	31.03.2011
Liquidity ratio > 1	18	17	16	18	18	17	16	16	15	10	10	9
Liquidity ratio < 1	0	1(1)**	1	0	0	0	2	2(1)**	2(1)**	8(2)**	8 (1)**	8

Source: NBRM, on the basis of data provided by banks.
* In January 2011, the number of banks reduced by one.
** The number in the brackets denotes the number of banks that failed to register the required minimal level of liquidity ratio set for the specific date. The dynamics for meeting the required liquidity ratio for up to 30 days ended on February 28, 2011.

As for the liquidity ratio up to 180 days in denars, only one bank did not comply with the required dynamics for this liquidity ratio. All other banks remained in the framework of the required dynamics of liquidity ratios up to 180 days (both in Denars and in foreign currency).

[19] Pursuant to the Decision on Managing Banks' Liquidity Risk ("Official Gazette of RM" no. 163/08, 66/09, 144/09 and 14/2011), the banks are required, according to the prescribed dynamics (which started as of March 2009), to reach and to maintain the liquidity ratios minimum equal to 1 for Denar and foreign exchange assets and liabilities up to 30 days by February 28, 2011, and for Denar and foreign exchange assets and liabilities up to 180 days by February 28, 2014.

Figure 56: Liquid assets/short-term liabilities by individual banks

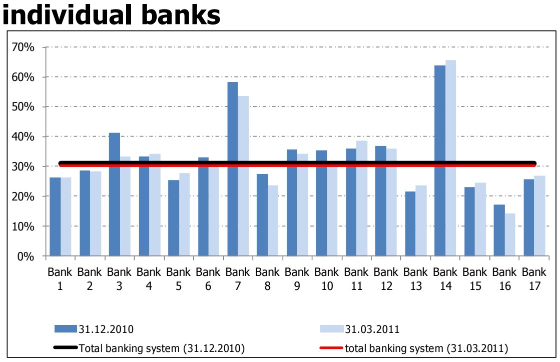


Source: NBRM, on the basis of data provided by banks.

Note: 1. The analysis of the liquidity by banks does not include the "Macedonian Bank for Development Promotion" AD Skopje, because its short-term liabilities equal zero (0).

2. In computing the individual components for analysis of the liquidity position of individual banks, deposits with and credits of the domestic banks (assets components), i.e. deposits of and loans from domestic banks (liabilities components) are included.

Figure 57: Liquid assets/total assets, by individual banks



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

Note: In computing the individual components for analysis of the liquidity position of individual banks, deposits with and credits of the domestic banks (assets components), i.e. deposits of and loans from domestic banks (liabilities components) are included.

2.5. Liquidity by groups of banks and by individual banks

As of March 31, 2011, the liquid assets declined in all bank groups. In absolute amounts, the decline is the biggest in the group of large banks (Denar 808 million), which contributed with 60.5% to the change on the level of the overall banking system. Medium-size and small-size banks participated with 21.5% and 18.0%, respectively. Nevertheless, **in the group of large banks the smallest deterioration of liquidity indicators was registered.** The reason was the small growth rate of the liquidity components in this group of banks. The largest decline of the liquid assets indicators was registered by the small banks. In this group, the greatest drop was registered in the indicator of household deposits coverage with liquid assets, which decreased by 22.4 percentage points. Nevertheless, this indicator in the group of small-size banks remained at an extremely high level. All three groups of banks registered an increased ratio between credits and deposits. In small banks, this indicator increased by 3.2 percentage points, while in large and medium banks it increased by 0.6 and 0.5 percentage points., respectively.

The liquid assets share in the total assets as of March 31, 2011 relative to December 31, 2010 (Figure 56) increased in seven banks (in interval from 1.0 to 2.6 percentage points), while in nine banks it decreased (in interval from 0.4 to 8.1. percentage points).

Table9: Liquidity indicators by groups of banks

Indicator	Large banks	Medium-size banks	Small-size banks	Banking system	Large banks	Medium-size banks	Small-size banks	Banking system
	31.12.2010				**31.03.2011**			
Liquid assets/total assets	30,1%	30,7%	47,6%	31,0%	29,5%	29,8%	45,8%	30,2%
Liquid assets/total liabilities	33,7%	35,1%	73,9%	35,2%	33,0%	33,6%	69,6%	34,2%
Liquid assets/short-term liabilities	43,6%	51,6%	84,0%	47,0%	43,6%	50,7%	82,2%	46,7%
Liquid assets/total deposits of non-financial entities	39,1%	50,9%	83,6%	43,3%	38,2%	48,7%	80,1%	42,1%
Liquid assets/deposits of households	53,5%	84,8%	165,8%	62,6%	51,8%	82,5%	143,4%	60,4%
Loan/deposits	82,9%	103,4%	67,4%	87,5%	83,5%	104,0%	70,6%	88,2%

Source: NBRM, on the basis of data provided by banks.
Note: In computing the individual components for analysis of the whole banking system and of the liquid position by groups of banks, deposits with and credits of the domestic banks (assets components), i.e. deposits of and loans from domestic banks (liabilities components) are not included.

In one bank, the liquid assets share in the total assets remained almost unchanged. The indicator of short-term liabilities coverage with the liquid assets registered an improvement in nine banks, where in one bank of the group of small-size banks this indicator improved as much as by 48.7 percentage points. Such positive change was due to the significantly higher absolute growth of the liquid assets compared to the far smaller increase of the short-term liabilities in this bank. On the other hand, seven banks registered negative changes in interval from 1.1 to 10.4 percentage points (Figure 56).

2.6. Stress-test simulations for the banking system's resilience to liquidity shocks

Considering the narrowing of the liquid assets, the stress-test analysis made on March 31, 2011, based on both hypothetical simulations[20] showed a deterioration of the results from the simulations, compared to those of December 31, 2010. **The stress-test analysis by individual bank continued to show an increased sensitivity of the banks to hypothetical withdrawal of the deposits of the twenty largest depositors.** Namely, in the first quarter of 2011, on the level of the banking system, larger drop was registered of the liquid assets on quarterly basis after the two simulations were performed.

Table10: Liquid assets share in total assets on the level of the banking system, before and after the simulations

Description	31.12.2010	31.03.2011
Before simulation	31,0%	30,2%
After first simulation	22,8%	21,7%
After second simulation	16,0%	15,3%

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

[20] **The first simulation** assumes withdrawal of 20% of the households' deposits outside the banking system, and **the second simulation** assumes withdrawal of the deposits of the twenty largest depositors of each bank individually.

Table11: Percentage decrease of liquid assets, on the level of the banking system and in individual banks, after the hypothetical simulations

Description	31.12.2010				31.03.2011			
	Decrease of liquid asset (in %)		Number of banks		Decrease of liquid asset (in %)		Number of banks	
	at the level of banking system	bank with highest decrease of liquid assets	whose decrease of liquid assets > decrease of liquid assets at the level of total banking system	whose decrease of liquid assets > 100%	at the level of banking system	bank with highest decrease of liquid assets	whose decrease of liquid assets > decrease of liquid assets at the level of total banking system	whose decrease of liquid assets > 100%
After first simulation	32,5%	59.1%(c)	2(г)3(с)	0	34,0%	69.9% (c)	2(г)3(с)	0
After second simulation	56,3%	171.3%(c)	1(г)6(с)5(м)	1(с)2(м)	57,0%	147.3% (c)	1(г)7(с)2(м)	3(с)2(м)

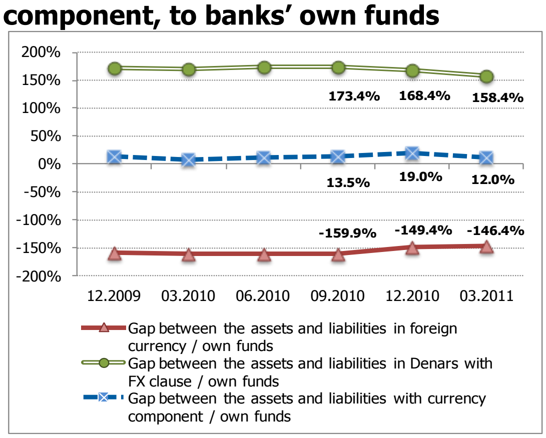
Source: NBRM, on the basis of data provided by banks.
Note: (l)- large bank, (m)- medium bank, (s)- small bank.

Also, the number of banks that in case of withdrawal of deposits of the twenty largest depositors would face a shortage of liquid assets increased (from three to five). This indicates an ongoing presence of high concentration of the deposit base of individual banks.

3. Currency risk

In the first quarter of 2011, the higher quarterly growth of the banks' liabilities with currency component, compared to the drop of assets with currency component, caused a narrowing of the gap between them, i.e. their increased correspondence and reduced currency risk. This narrowing, parallel to the rise of banks' own funds, caused a downward trend of the ratio between the gap and banks' own funds, which was an additional indicator of the decreased currency risk. The reduction of the currency component in the banks' assets resulted primarily from the decreased placements in foreign banks and reduced foreign currency cash, while the increase of liabilities with currency component was primarily caused by the collected foreign currency deposits of natural persons and increased foreign currency borrowings. All banks managed the currency risk within the framework of the required limits for aggregate foreign currency position.

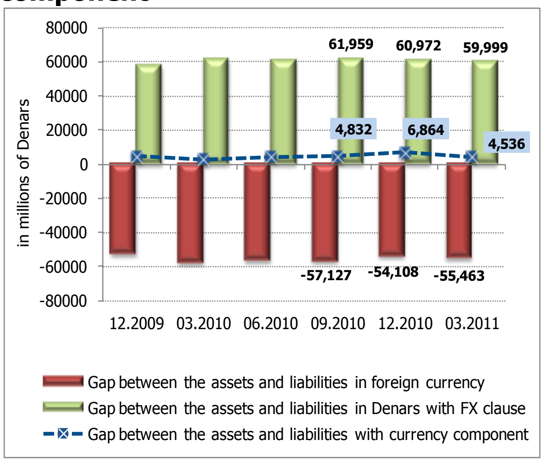
Figure 58: Ratio of the gap between assets and liabilities with currency component, to banks' own funds



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

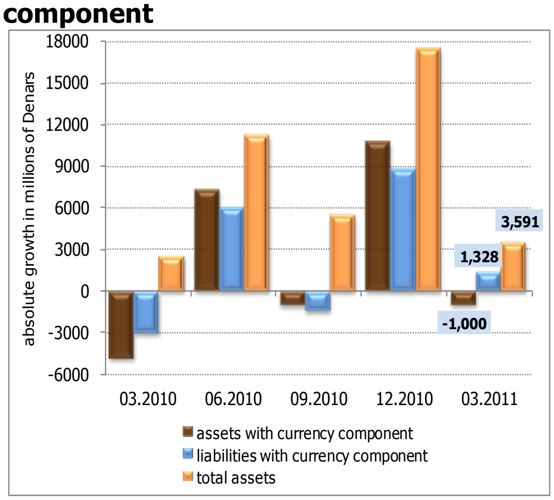
In the first quarter of 2011, the gap between the assets and liabilities with currency component compared to end 2010, decreased (by 33.9%, or by Denar 2,328 million), **which essentially indicates a lower exposure of banks to currency risk.** This decrease, parallel to banks' own funds increase, caused a downward trend of the ratio between the gap and banks' own funds from 19.0% (on December 31, 2010) to 12.0% (on March 31, 2011), which is an additional indicator of a decreased currency risk (Figure 58). The narrowing of the gap between the assets and liabilities with currency component happened in circumstances of a quarterly decline of the assets with currency component, against the growth of the liabilities with currency component.

Figure 59: Structure of the gap between assets and liabilities with currency component



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

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



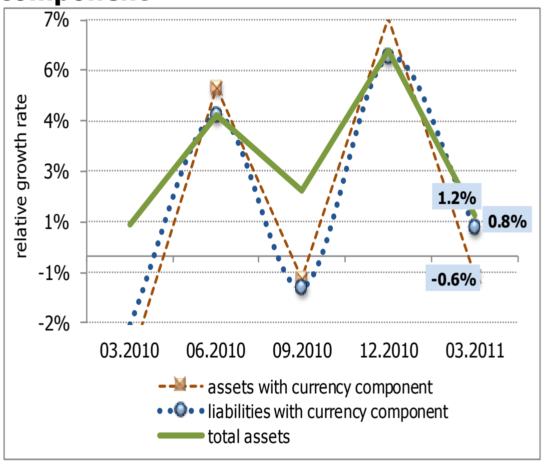
Source: NBRM, on the basis of data provided by banks.

In the first three months of 2011, the negative gap between the assets and liabilities in foreign currency deepened, and the positive gap between the assets and liabilities in denars with FX clause narrowed (Figure 59). The negative gap in foreign currency registered a 2.5% increase (or Denar 1,355 million). That was due mostly to the higher quarterly growth of the liabilities in foreign currency (by Denar 1,871 million, or by 1.3%), compared to the quarterly growth of the assets in foreign currency (which increased by Denar 515 million, or by 0.5%). On the other hand, the positive gap of positions in Denars with FX clause decreased by 1.6% (or Denar 973 million). This gap narrowing was a consequence of the greater absolute drop of the assets in Denars with FX clause (by Denar 1,515 million), compared to the more moderate absolute drop of the liabilities in Denars with FX clause (by Denar 542 million).

The narrowing of the assets with currency component (on quarterly basis by 0.6% or by Denar 1,000 million) was a result of: the decline of short-term assets placed in foreign banks (by Denar 919 million), the foreign currency cash (by Denar 865 million), the loans in Denars with FX clause (by Denar 333 million), the investments in Treasury bills in Denars with FX clause (by Denar 332 million), and the current accounts in domestic banks that are in foreign currency and in Denars with FX clause (by Denar 268 million), against the increase of the foreign currency crediting (by Denar 1,837 million)[21]. The reduction of the

[21] The foreign currency crediting growth resulted from the increased amount of credits in foreign currency approved to enterprises, which caused 76.1% of the foreign currency increment. Half of the foreign currency credits to enterprises and other clients (50.8% on March 31, 2011) were for payments of liabilities within the country, and the rest for payments abroad. Pursuant to the Decision on the terms and the manner of extending foreign exchange loans and foreign exchange indexed loans between residents ("Official Gazette of the Republic of Macedonia" no. 41/2006), the loans used for payments within the country are transferred by the banks to Denar accounts of the users. The legal entities can choose to repay the loans in foreign currency if it originates from settlements from nonresidents, or in Denars.

Figure 61: Quarterly relative change of the total assets and of the assets and liabilities of banks with currency component



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

banks' credit portfolio in Denars with FX clause was accompanied by a growth of the allocated impairment in Denars with currency clause classified in the risk categories "C", "D" and "E" (by Denar 827 million), which additionally contributed for a decrease of the assets with currency component[22]. **The quarterly growth of liabilities with currency component** (by 0.8% or Denar 1,328 million) was due to the increment of: foreign currency deposits of natural persons (by Denar 2,057 million), credit liabilities in foreign currency (by Denar 786 million)[23], and the financial entities' deposits in Denars with FX clause (by Denar 440 million), as opposed to the narrowing of the foreign currency deposits of nonresidents (financial and non-financial entities by Denar 1,475 million)[24], liabilities in Denars with FX clause (by Denar 255 million) and deposits of other clients in Denars with FX clause (by Denar 140 million).

In the first quarter of 2011, **no significant shifts were registered in the currency structure of assets and liabilities with currency component and of the gap between them.**

Table 12: Currency structure of assets and liabilities with currency component and of the gap between them

Currency	31.12.2010			31.03.2011		
	Currency structure of the assets with currency component	Currency structure of the liabilities with currency component	Currency structure of the gap between assets and liabilities with currency component	Currency structure of the assets with currency component	Currency structure of the liabilities with currency component	Currency structure of the gap between assets and liabilities with currency component
Euro	89.7%	89.7%	90.1%	90.3%	90.0%	101.5%
US Dollar	6.5%	7.1%	-6.9%	6.7%	7.1%	-7.0%
Swiss franc	2.0%	1.6%	11.9%	1.5%	1.4%	2.5%
Other	1.8%	1.6%	4.9%	1.6%	1.5%	2.9%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

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

[22] Pursuant to the Instructions for implementation of the Decision on managing the currency risk, in the calculation of the open currency position, the allocated impairment for the assets with currency component classified in the risk categories "C", "D" and "E" represents deductible item of the total assets with FX clause.
[23] The increase of credit liabilities in foreign currency in the first quarter of 2011 mostly arises from the increase of a credit line of one bank from an international financial institution (EIB – European Investment Bank).
[24] The decrease in the foreign currency deposits of nonresidents was mainly due to a deposit outflow of a parent entity in one bank of the group of large banks.

The Euro still has the greatest share in the banks' balances, with an additionally increasing share in the gap between the assets and liabilities with currency component, for the account of the reduced share of the Swiss franc, which was due to the large drop of assets[25] compared to the more moderate fall of liabilities in francs. **On the level of the banking system, the gap between the assets and liabilities with currency component was positive for all foreign currencies except for the US dollar.**

Table 13: Open foreign currency position per individual currency/own funds

Open currency position by currency / own funds	Number of banks							
	Euro		US Dollar		Swiss franc		Other	
	Long	Short	Long	Short	Long	Short	Long	Short
under 5%	4	1	11	3	14	2	15	1
from 5% to 10%	3	1		2				
from 10% to 20%	4	1						
from 20% to 30%	2							
over 30%								

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

Table 14: List of banks according to the share of the aggregate foreign currency position in the own funds, as of March 31, 2011

Aggregate currency position / own funds	Number of banks	
	Aggregate long position	Aggregate short position
under 5%	3	1
from 5% to 15%	7	2
from 15% to 30%	3	
over 30%		

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

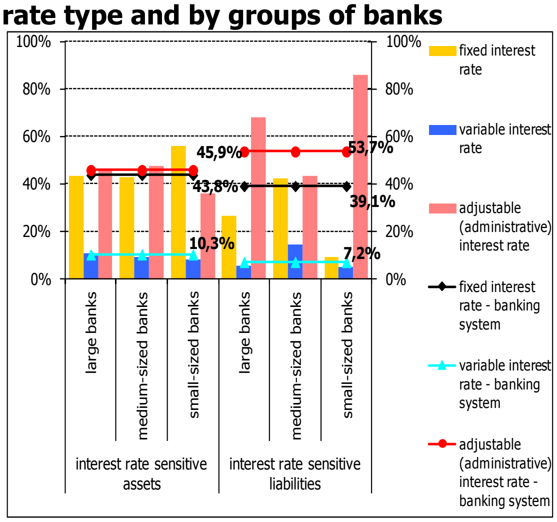
The ratio between the open FX position in Euros and own funds in most of the banks did not exceed 20%, while the ratio for all other currencies was up to 5% (excluding two banks for the US dollar). **In the first quarter of 2011, the banks maintained the exposure to currency risk within the framework of the prescribed limit for aggregate foreign currency position (up to 30% of banks' own funds).**

[25] The decrease of assets in Swiss francs was a consequence of a deposit withdrawal of a bank in the group of large banks, placed in a foreign bank.

4. Interest rate risk in the banking book

In the first quarter of 2011, the banks' exposure to the interest rate risk in the banking book, continued to be of a marginal significance compared to the exposure to the other risks. The reason for the modest role of the interest rate risk in the banking book is the banks' frequent practice to use the adjustable interest rates[26] in most of the crucial activities (positions) – credits and deposits, rather than the fact that the interest rate risk is avoided by netting, i.e. establishing a balance between the interest-sensitive positions of assets and liabilities, or that it is covered (hedged) by use of derivative instruments of the interest rates. In case of changes in the regulations (e.g. in the domain of collateral relations, consumer protection, financial services contracts, housing and mortgage crediting, etc.) which would establish a framework for use of clauses about unilateral adjustment of the interest rates, the interest rate risk would acquire a different volume and dimension for the banks.

Figure 62: Structure of interest-sensitive assets and liabilities according to interest rate type and by groups of banks

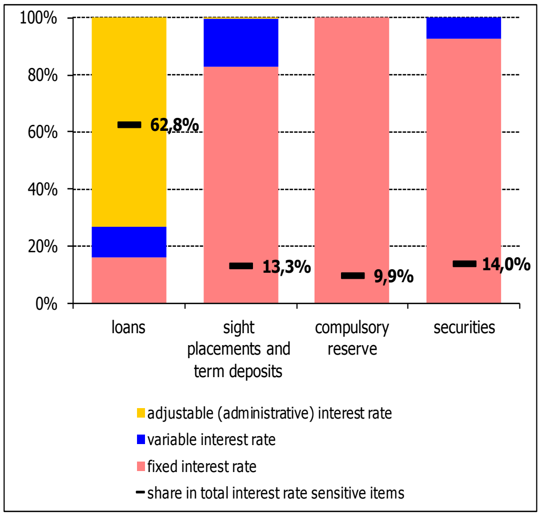


Source: NBRM, on the basis of data provided by banks.

In the structure of the interest-sensitive assets and liabilities, the positions with adjustable interest rates prevail (Figure 62). Namely, as of March 31, 2011, the positions with adjustable interest rates took the leading position both in the structure of interest-sensitive assets (45.9%), but also in the structure of interest-sensitive liabilities (53.7%). The reason for the adjustable interest rates to take the leading positions primarily was the ability to easily meet the banks' objectives regarding the planned profit level, which arises from the possibility for a unilateral change of the interest rates. Also, the use of the adjustable interest rates facilitates the coping with the pressure from the competition and facilitates the liquidity management. This is due to the fact that the unilateral change of the interest rates enables the banks, as per their needs and views, to change the return on financial instruments (primarily the credits and other claims), simultaneously changing their expenditure amount, i.e. return for depositors. The positions with fixed interest rates at the end of the first quarter of 2011 encompassed 43.8% and 39.1% of the interest-sensitive assets and liabilities, respectively, while the positions with variable interest rates have the smallest share both in interest-sensitive assets (10.3%) and in interest-sensitive liabilities (7.2%). The structure of the interest-sensitive assets according to the interest rate type was almost identical to that in

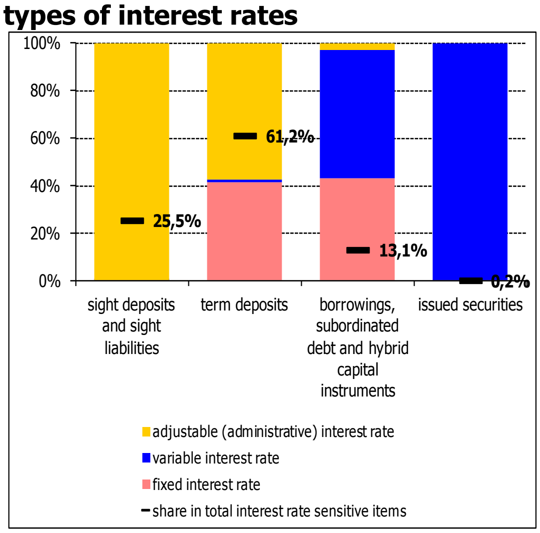
[26] The interest rates change is usually done unilaterally due to changes in the bank's interest rate policy.

Figure 63: Structure of interest-sensitive assets according to the types of interest rates



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

Figure 64: Structure of interest-sensitive liabilities according to the types of interest rates



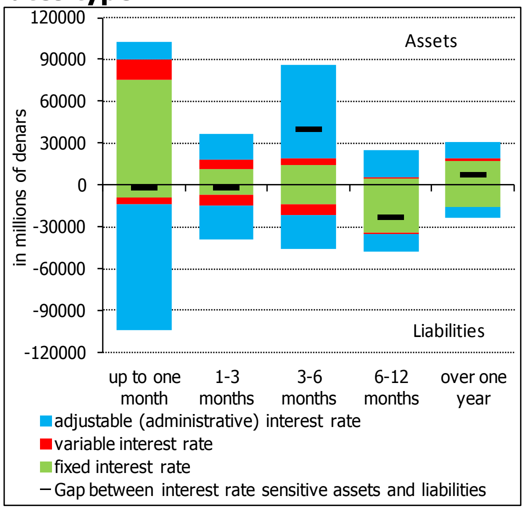
Source: NBRM, on the basis of data provided by banks.

end 2010. On the other hand, concerning the interest-sensitive liabilities, in the first quarter of 2011 the share of the positions with fixed interest rates increased (by 7.2 p.p.) for the account of the decreasing share of the positions with ad and variable interest rates by 6.7 and 0.5 p.p., respectively.

Regarding the individual types of assets that constitute the interest-sensitive assets (Figure 63), the dominant role of the adjustable interest rates is the most prominent in credits, which are simultaneously the most represented financial instrument in the structure of interest-sensitive assets of banks (62.8%). The loans with adjustable interest rates cover 73.0% of the total credits, which essentially represents almost the total assets with adjustable interest rates. In the other financial instruments (sight deposits, term deposits, compulsory reserve, government securities, treasury bills), which make a relatively smaller share of the interest-sensitive assets (37.2%), the most prominent is the share of the positions with fixed interest rates.

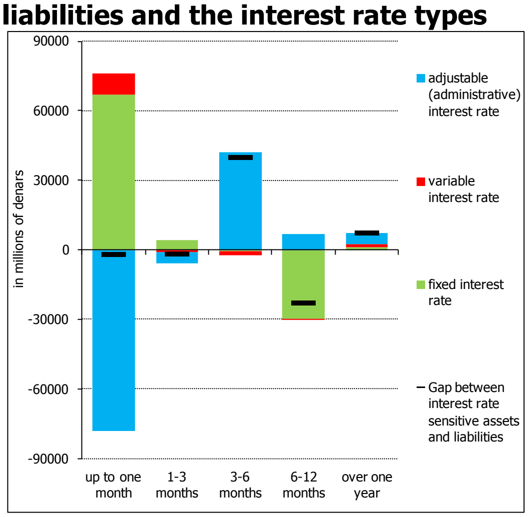
In interest-sensitive liabilities, a greater variety was registered according to the share of the individual types of interest rates (Figure 64). Hence, as of March 31, 2011, the sight deposits were almost completely with adjustable interest rates, which are most represented also in term deposits, regardless of the maturity term. Sight and term deposits together comprise 86.7% of the total interest-sensitive liabilities of banks and almost fully comprise the liabilities with administrative interest rates. In liabilities for credits and subordinate instruments, the largest is the share (53.8%) of the positions with adjustable interest rates, followed by the positions with fixed interest rates with 43.4% share. All issued securities have variable interest rates, but these positions have a marginal share in the total interest-sensitive liabilities.

Figure 65: Absolute amount of interest-sensitive assets and liabilities according to the maturity structure and interest rates type



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

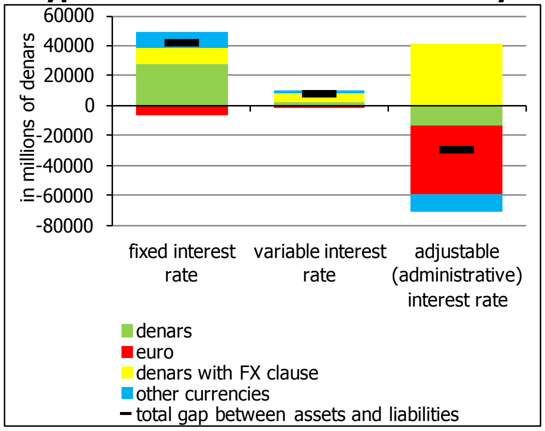
Figure 66: Gap between the interest-sensitive assets and liabilities according to maturity structure of assets and liabilities and the interest rate types



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

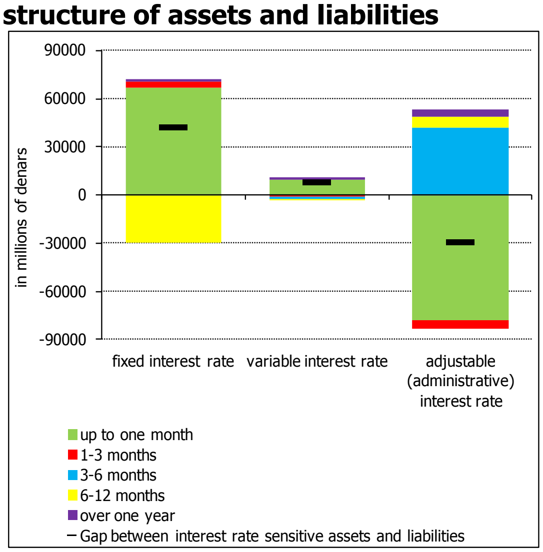
The maturity structure of interest-sensitive assets and liabilities, points to differences in the banks' exposure to risk from variations of interest rates for different maturities (Figure 65). Namely, the gap between the interest - sensitive assets and liabilities, and consequently the exposure to risk from interest rates variations, is larger between the positions with longer maturity, while in maturity segments with shorter maturity there is a better balance between the interest-sensitive assets and liabilities. Thus, the variations of the short-term and long-term interest rates should have a different impact on the economic value of the banks' assets and liabilities. The adjustable interest rates prevail in the structure of the interest-sensitive assets in most maturity segments, excluding the maturity segment by one month, where the most prevalent are the positions with fixed interest rate (73.8%). This arises from the maturity characteristics of the basic instruments of monetary policy and of the instruments on the domestic money market (the compulsory reserve and the treasury bills have a contractual maturity up to one month), but also because of the obvious inclination of banks to invest their foreign currency liquid assets on short terms as deposits in foreign banks. Concerning the interest-sensitive liabilities, the positions with adjustable interest rates prevail in maturity segments with shorter maturity (up to 6 months), while in segments with longer maturity prevail the positions with fixed interest rates, primarily because of the presence of term deposits with residual maturity longer than six months. **The banks in the Republic of Macedonia rarely use variable interest rates in their products, both in interest-sensitive assets and in interest-sensitive liabilities.** In cases where variable interest rates are present, the time that should pass by until the next repricing is usually up to six months long. Analyzing the term structure of the positions with an adjustable interest rate, it should be considered that their distribution into adequate maturity segments indirectly reflects the expectations of banks for the period until the next "adjustment" of interest rates is made. According to that, in assets with

Figure 67: Gap between interest-sensitive assets and liabilities according to types of interest rates and currency



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

Figure 68: Gap between interest-sensitive assets and liabilities according to types of interest rates and maturity structure of assets and liabilities

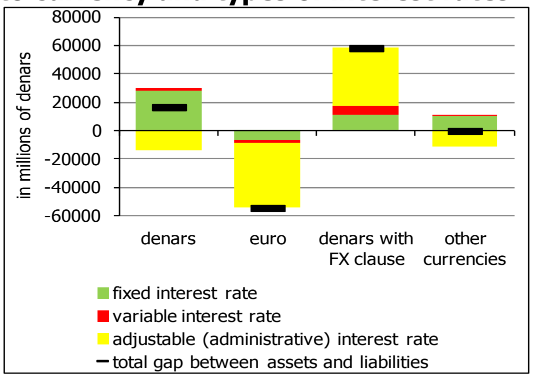


Source: NBRM, on the basis of data provided by banks.

an adjustable interest rate the most prevailing in the term structure are the assets for which the banks expect to undergo a change of the interest rate in the period from three to six months after March 31, 2011. In the term structure of liabilities with an adjustable interest rate, the liabilities with a period of interest rate variation up to one month predominate, primarily because most of the sight deposits are classified in this maturity segment.

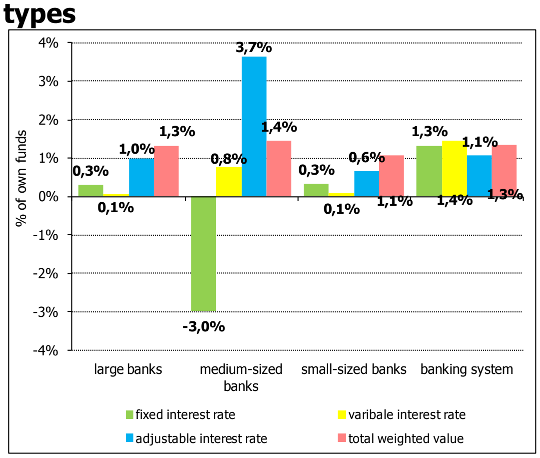
The arrangement of the gap between the interest-sensitive assets and liabilities in different maturity segments reaffirms the significance of the adjustable interest rates as a tool with which the banks harmonize the differences between the interest-sensitive assets and liabilities in different maturity segments (Figure 66). The banks use the positions with adjustable interest rates to establish a balance between the assets and liabilities, primarily in the short-term maturity segments. Thereto, as of March 31, 2011, the gap between the interest-sensitive assets and liabilities in positions with fixed interest rates was exceptionally positive; while in positions with adjustable interest rates that gap was remarkably negative (Figure 68). The driving forces of this occurrence were the short-term assets and liabilities with residual maturity up to one month. Regarding the currency, the prevailing share of the positive gap in fixed interest rates arises from positions in Denars, while the negative gap in adjustable interest rates is due to positions in Euros (Figure 67). Simultaneously, the gap between the interest-sensitive assets and liabilities according to their currency structure is positive in positions in Denars and in Denars with FX clause. However, the gap in Denars is due to positions with fixed interest rates, and the gap in Denars with FX clause to positions with adjustable interest rates. On the other hand, the gap between the interest-sensitive assets and liabilities in positions in Euros is negative and primarily arises from positions with adjustable interest rates.

Figure 69: Gap between interest-sensitive assets and liabilities, according to currency and types of interest rates



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

Figure 70: Ratio of the total weighted value of the banking activities' portfolio to own funds, according to interest rate types



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

The implementation of the adjustable interest rates in credit and deposit banking products is the key reason for which the risk from the variation of interest rates in the banking book is at a relatively low level for the banks in the Republic of Macedonia. Hence, the ratio between the total weighted value of the banking activities' portfolio[27] and the own funds amount on March 31, 2011 equaled 1.3% and, compared to December 31, 2010 increased by 0.7 percentage points[28].

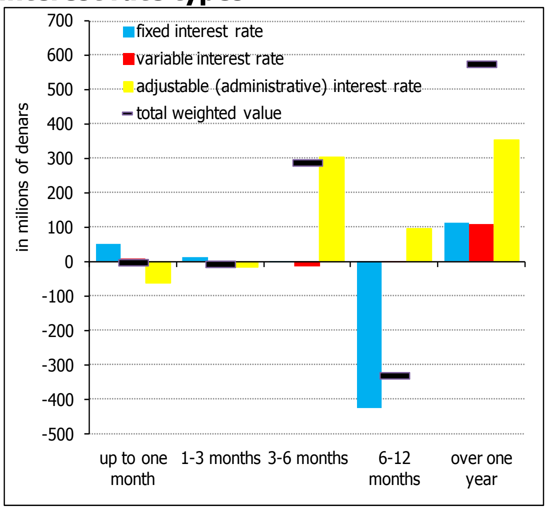
Analyzed by individual banks, the ratio of the total weighted value of the banking book to own funds ranges in the interval from 0.05% to 18.6% with a 1.6% median. Analyzed by groups of banks (Figure 70), at the end of the first quarter of 2011, this ratio was the highest in the group of medium-size banks (1.4%). Also, in this group there are larger differences between the individual banks than in the groups of large and small-sized banks[29]. Nevertheless, it should be taken into consideration that these ratios were derived with an established practice of unilateral adjustment of interest rates by the banks and hence the mode and method chosen by the banks to establish the probability and frequency from changes of interest rates in positions with adjustable interest rates, and consequently their distribution among adequate term segments, play a key role in determining the height of exposure to risk from interest rates variations in the banking book. The importance of the "assumed variation" of interest rates in positions with

[27] The total weighted value of the banking book on the level of the banking system, which is derived by aggregating the weighted values of the banking book of individual banks, is expressed in absolute amount and indicates the change of the economic value of this portfolio, as a result of the evaluation of the interest rates variation by using a standard interest shock (parallel positive or negative variation of the interest rates by 200 basis points). On March 31, 2011, the total weighted value of the banking book on the level of the banking system equaled Denar 528 million. The weighted value of the banking book of an individual bank is a sum of weighted net long or short positions by individual significant currencies (each currency whose share in the total balance or off-balance assets, i.e. liabilities, equals at least 5%) or cumulatively for all other currencies.

[28] Pursuant to the Decision on managing risk from interest rates variations in banking system activities ("Official Gazette of the RM" No. 163/2088 and 144/2009), the ratio between the total weighted value of the banking book and bank's own funds can equal at most 20%.

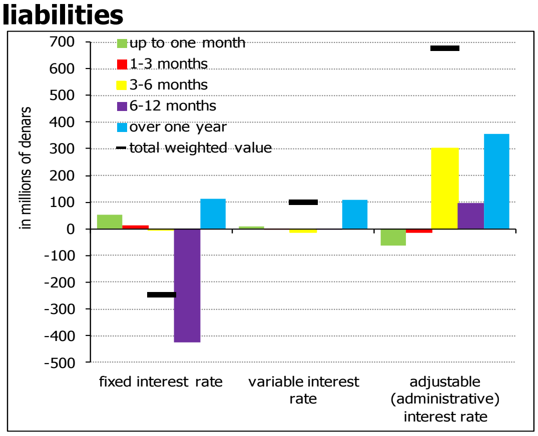
[29] The ratio between the weighted value of the banking book and own funds, as of March 31, 2011, for the group of medium-sized banks showed a greater dispersion – it moved in the interval from 0.05% to 18.6% with median 2.5%. Contrary to that, in the group of large banks it moved in the interval from 0.7% to 1.6% with median 1.5%, and in the group of small-sized banks in the interval from 0.7% to 2.7% with median 2.0%.

Figure 71: Absolute amount of the total weighted value of the banking activities' portfolio, according to maturity structure of assets and liabilities and interest rate types



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

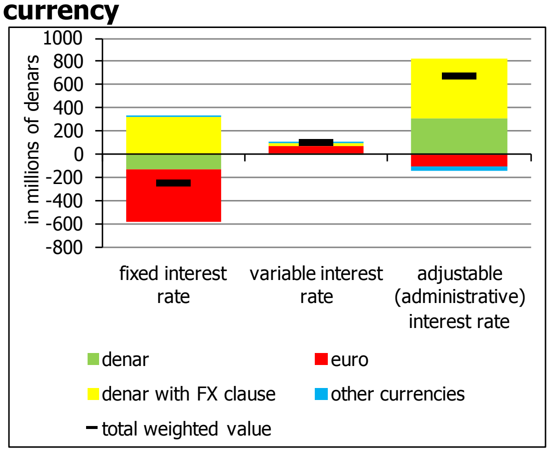
Figure 72: Absolute amount of the total weighted value of the banking book, according to types of interest rates and maturity structure of assets and liabilities



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

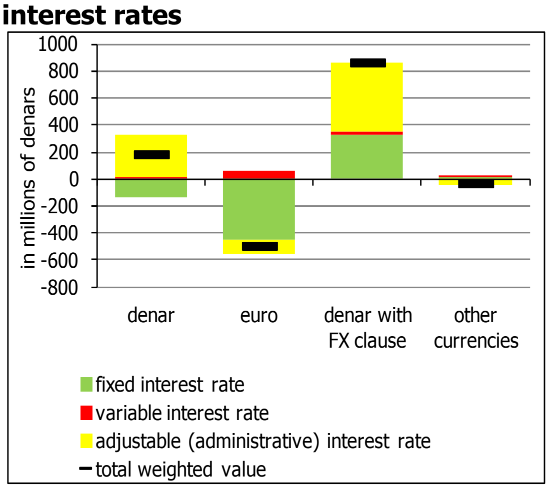
adjustable interest rates is even more emphasized if taken into account that adjustable interest rates are most dominant in credits which usually have an average residual maturity term longer than one year, but also in deposits which usually have an average residual maturity term shorter than one year (51.4% of term deposits mainly have a residual maturity term between 3 and 12 months). Thus, in term segments with longer maturity term there is a distinct positive gap between the interest-sensitive credits and deposits with adjustable interest rates, by which it is reaffirmed that precisely these term segments are the driving force of the exposure to risk from interest rates' variations (Figure 71). Considering that in other banks' assets and liabilities (securities, deposits in foreign banks, loans from other banks, subordinate instruments and hybrid capital instruments) the fixed and variable interest rates prevail, the positive weighted value of the banking book with adjustable interest rates almost fully results from the difference between the respective credits and deposits. The positions with fixed interest rates contribute to a negative weighted value of the banking activities' portfolio (primarily due to the term segment from 6 to 12 months), and positions with variable interest rates have a modest impact on the total weighted value of the banking activities' portfolio (Figure 72). In case of potential changes of the regulatory environment, which would set limitations to use of clauses for unilateral adjustment of interest rates in banking products, the volume, size and structure of the risk from alterations of interest rates in the banking activities' portfolio would change. In such circumstances, the treatment of the existing positions with adjustable interest rates would be of a determining importance, i.e. whether they would be pre-classified as positions with fixed interest rates or positions with variable interest rates. Because of all that, the insignificant ratio of the weighted position with own funds does not mean that there is no risk from the interest rates alteration for the Macedonian banking system, or that it is insignificant, but only reflects the existing practice of banks to "get rid" of this risk by transferring it to the banking products users,

Figure 73: Absolute amount of the total weighted value of the banking book, according to interest rate types and currency



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

Figure 74: Absolute amount of total weighted value of the banking book, according to currency and types of interest rates



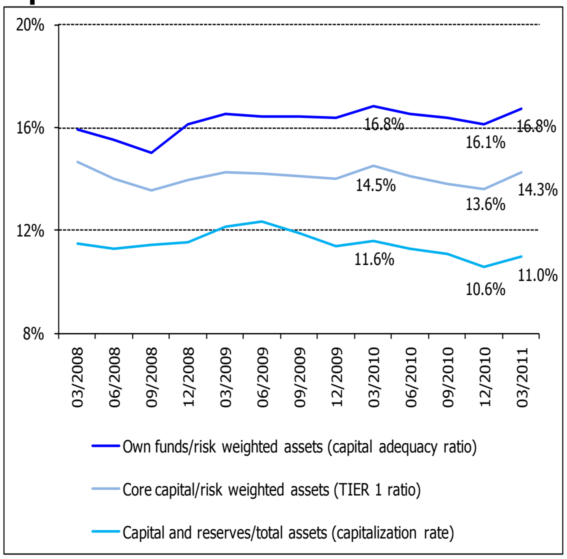
Source: NBRM, on the basis of data provided by banks.

while they take over and keep only credit risks that would arise from a certain business relation.

The currency structure of crediting as the most frequent activity of the banks (55.5% share in total assets as of March 31, 2011), in combination with currency structure of deposits as the main financing source of the banking system (70.0% share in the total liabilities as of March 31, 2011), with use of the administrative interest rates, explain the significant differences between the weighted values of the banking bopk according to currency (Figure 73 and Figure 74). Namely, in the structure of credits of domestic residents, the most dominant are credits in Denars and in Denars with FX clause (together they encompass 73.8% of the total credits of non-financial entities on March 31, 2011), while in the currency structure of deposits prevail the foreign currency deposits (53.8% share in total deposits, with the greatest share being the Euro deposits). Hence, in positions in Denars and in Denars with FX clause in Euros, a positive weighted value is registered in the banking book, which mainly arises from the administrative interest rates. On the other hand, the weighted value of the banking activities' portfolio in Euros is negative and mainly arises from positions with fixed interest rate.

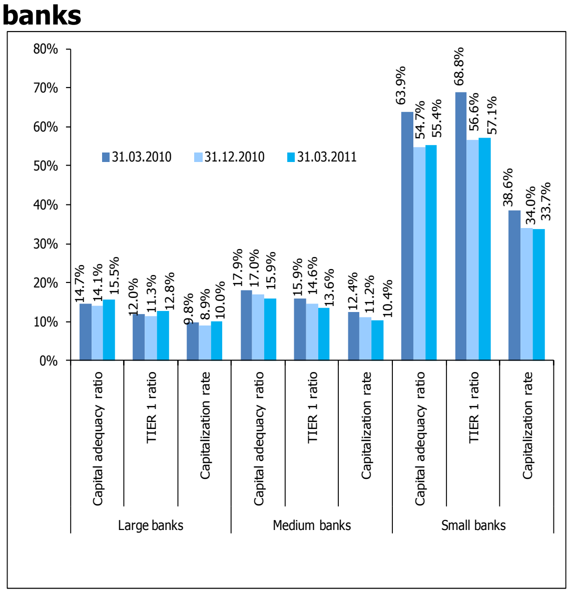
In the first quarter of 2011, the indicators of solvency and capitalization of the banking system registered an increase. The solvency increased in the groups of large and small-size banks. Namely, large banks registered a growth of the capital position with simultaneous drop in the activities', while the small banks registered a capital position fall and even larger drop in the activities'. On the other hand, the solvency indicators in the group of medium-size banks registered a decrease that resulted from the quarterly fall of the capital position with simultaneous increase of activities in this group. The conducted stress-test simulations showed a satisfactory resilience of the banking system and the individual banks to different shocks, as the capital adequacy did not fall below 8% in any of the banks.

Figure 75: Indicators of solvency and capitalization



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

Figure 76: Indicators of solvency and capitalization, by individual groups of banks



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

5.1. Indicators of solvency and capitalization of the banking system

In the first quarter of 2011, the indicators of solvency and capitalization of the banking system registered an increase (Figure 75). The capital adequacy ratio increased by 0.7 percentage points[30]. The indicator "Tier-1"[31] registered an identical quarterly growth, while the capitalization rate[32] grew by 0.4 p.p.

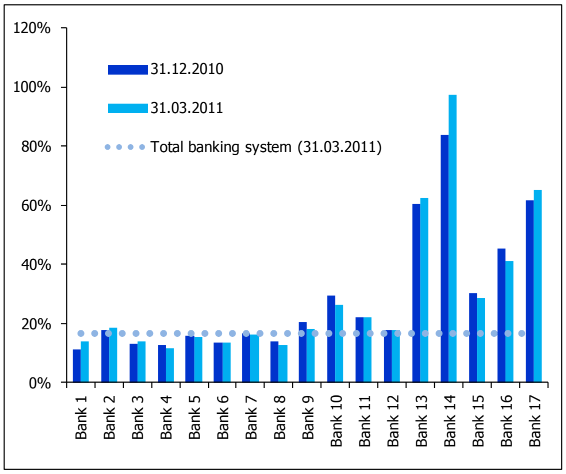
The increase of the indicators of solvency and of banking system capitalization was registered in the groups of large and small-size banks (Figure 76). In the group of large banks, all solvency indicators improved, while the group of small-size banks registered a quarterly decrease (by 0.3% percentage points) only of the capitalization rate (the other indicators registered an improvement, resulting from the more prominent drop of activities of the small banks compared to the decrease of their capital position). Contrary to that, the solvency and capitalization in the group of medium-size banks decreased, primarily as a result of the quarterly decrease of the capital position, with simultaneous growth of activities of this group of banks. In six medium-size and two small-size banks, the capital adequacy ratio registered a quarterly fall (as of March 31, 2011, the total market share of these eight banks equaled 23.8%), while in two medium-size banks this indicator remained unchanged. The capital adequacy ratio registered a quarterly increment in all three large banks, in one medium-size bank and in three small-size banks.

5.2. Banks' own funds and risk weighted assets

The main reasons for banks' own funds growth in the first three months of

[30] The legally prescribed minimum for the capital adequacy rate is 8%.
[31] Tier 1 indicator is calculated as a ratio between the core capital (prior to deductable items from the sum of the core and additional capital) and the risk weighted assets.
[32] The capitalization level represents a ratio between the banks' capital and reserves with their total assets.

Figure 77: Capital adequacy ratio, by individual banks



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

Note: The sequence of banks is according to each bank's market share in the total assets of the banking system on March 31, 2011 (starting with the bank with the largest market share, and finishing with the bank with the smallest market share).

2011 were the new issuance of ordinary shares by one large bank, maintenance of part of the 2010 gain in the banks' capital, and the smaller current loss (Error! Reference source not found.). As of March 31, 2011, the banking system's own funds equaled Denar 39,452 million and registered a quarterly growth of Denar 1,668 million (or by 4.4%), which was almost four times higher growth than in the preceding quarter. More than a half of the own funds quarterly growth arose from the realized issuance of ordinary shares by one large bank[33]. The own funds increase was also partially a result of the quarterly growth of reserves and retained gain, which predominantly resulted from the maintenance of a portion of the gain for 2010 in the banks' capital[34] (the latter was completely concentrated in the large banks). In addition, the current loss[35] amount, as an item in the banks' core capital, was smaller compared to end 2010, which also contributed for the quarterly increase of own funds[36] (medium-size banks registered a smaller current loss than in end 2010). Contrary to the trends of the preceding period, the subordinated instruments as an item of the banks' supplementary capital 1, in the first quarter of 2011 registered a decrease of Denar 60 million[37]. Nevertheless, one small bank issued a new subordinated instrument in total amount of Denar 31 million (Euro 500 thousand).

The growth of banking system's own funds was completely concentrated in large banks. Contrary to that, the medium-size

[33] In total amount of Denar 927.5 million.

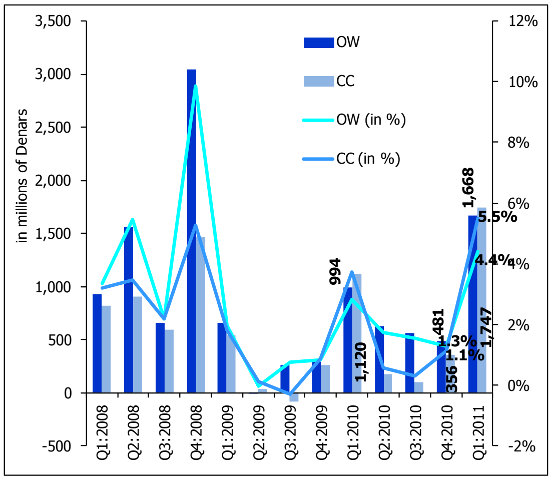
[34] The quarterly increase of this item of the banks' core capital (reserves and retained gain or loss) equaled Denar 610 million.

[35] Pursuant to the Decision on the methodology of establishing the capital adequacy ("Official Gazette of RM" No. 159/2007, 32/2008, 31/2009, 96/2009, 157/2009 and 91/2011), the realized current loss is fully incorporated in the amount of own funds (as a deductible item), while the incorporation of the current gain depends on meeting certain criteria.

[36] On quarterly basis (31.12.2010-31.03.2011), the current loss, as a deductible item of the core capital, registered a decrease of Denar 225 million.

[37] The decrease of the amount of subordinated instruments that can be a portion of the supplementary capital 1 was concentrated in two banks. Namely, in one medium-size bank, in the first quarter of 2011, the subordinated instrument "entered" in the last five years until the maturity or payment term, because of which in the calculation of the bank's own funds the amount discounted by 20% was incorporated. In addition, in one large bank a more considerable decrease of the subordinated instruments amount was registered, which are a portion of the supplementary capital 1, because of the negative FX rate differences realized in the first quarter of 2011.

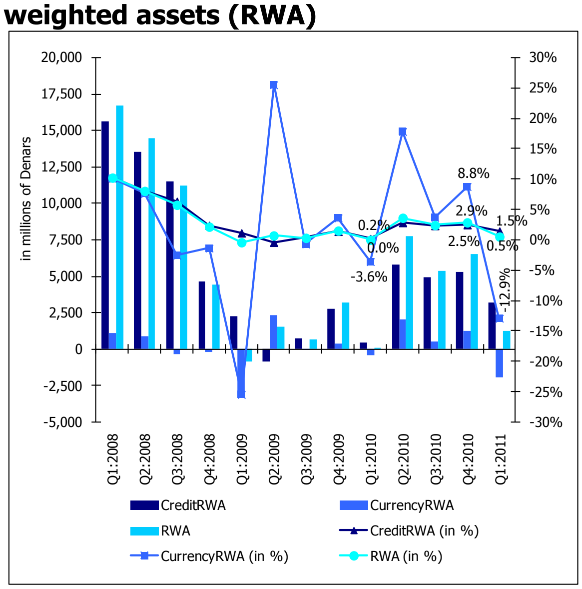
Figure 78: Quarterly change of OF and CC



Source: NBRM, on the basis of data provided by banks.
Note: OF – own funds; CC – core capital.

and small-size banks registered a quarterly drop of their own funds (Annex 22 – Own funds, by groups of banks). In the first quarter of 2011, the own funds of the group of large banks registered an increase of Denar 2,248 million (or by 10.1%), which resulted from the realized issuance of ordinary shares by one bank and maintaining of a portion of the gain from 2010 in the banks' capital. The group of medium-size banks registered a quarterly fall of their own funds equaling Denar 484 million (or by 4.1%), which mostly resulted from the increase of the item accumulated loss from preceding years[38] (loss in the previous year, 2010). The decline of own funds in the group of small-size banks (equaling Denar 96 million, or by 2.6%) also resulted from the increase of the item accumulated loss from preceding years (loss in 2010)[39], but also of the increased item current loss[40] (the small banks' loss in the first quarter of 2011 was larger than their total loss in 2010).

Figure 79: Quarterly change of risk weighted assets (RWA)



Source: NBRM, on the basis of data provided by banks.
Note: CreditRWA – credit risk weighted assets; CurrencyRWA – currency risk weighted assets; RWA – risk weighted assets.

In the first quarter of 2011, the risk weighted assets registered a decelerated growth compared to the preceding quarter (Error! Reference source not found.). The currency risk weighted assets registered a quarterly drop, while the credit risk weighted assets registered a slowdown of the growth. The credit risk weighted assets increased by Denar 3,188 million (or by 1.5%), and the currency risk weighted assets decreased by Denar 1,941 million (or by 12.9%), as a consequence of the larger absolute growth of liabilities with currency component, compared to the increase of claims with currency component. As of March 31, 2011, the risk weighted assets equaled Denar 235,374 million.

The quarterly growth of the risk weighted assets was completely concentrated in the group of medium-size banks. Namely, the risk weighted assets in this group of banks increased by Denar 1,796 million (or by 2.6%), which fully resulted from the

[38] The accumulated loss from preceding years increased by Denar 701 million in this group of banks.
[39] The accumulated loss from preceding years increased by Denar 81 million in the group of small banks .
[40] The current loss, as an item of the core capital of small banks, registered a quarterly growth of Denar 39 million.

growth of the credit risk weighted assets (of Denar 2,674 million, i.e. 4.2%). The credit risk weighted assets registered an increase in the group of large banks, as well (by Denar 592 million, or 0.4%), while in the group of small-size banks it registered a drop of Denar 78 million (or by 1.3%). **The currency risk weighted assets decreased in all groups of banks.** The greatest fall of the currency risk weighted assets (of Denar 883 million, or by 9.2%) was registered in large banks, which in the first quarter of 2011 registered a decrease of liabilities with currency component, but also an even greater drop of claims with currency component. The group of medium-size banks also registered a fall of Denar 877 million (or by 18.8%) of the currency risk weighted assets, but as a result of the increased growth of liabilities with currency component than the increasing of claims with currency component. The decrease of currency risk weighted assets in small-size banks (by Denar 181 million, or by 23.6%) was a consequence of the reduced claims with currency component with a simultaneous growth of liabilities with currency component (Annex 23 – Capital adequacy ratios by groups of banks).

5.3. Stress-test simulations of the banking system's resilience to hypothetical shocks

On March 31, 2011, the conducted stress-test simulations for the resilience of the banking system and of the individual banks in the Republic of Macedonia to hypothetical shocks showed that the banking system and the individual banks were relatively resilient to the impacts of those shocks. During the simulations, not a single bank registered a decrease of the capital adequacy below 8%.

Table 15: Results from the stress test simulations for the resilience of the banking system and individual banks to hypothetical shocks as of March 31, 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	16.8%	7	16.1%	10.9%	7 (0)
2	16.8%	7	14.7%	9.9%	6 (0)
3	16.8%	7	13.3%	8.4%	7 (0)
4	16.8%	7	14.8%	9.9%	7 (0)
5	16.8%	7	13.2%	8.7%	7 (0)
6	16.8%	7	13.3%	8.8%	7 (0)
7	16.8%	7	16.6%	11.0%	7 (0)
8	16.8%	7	14.1%	8.7%	7 (0)

Source: NBRM, on the basis of data provided 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 credit and interest rate shock (increase in the credit risk exposure in the risk categories C, D and E of 30% and increase of the domestic interest rates by 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 compared of 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 by 20%,
- eighth simulation, simultaneous reclassification in the risk category C of the five largest credit exposures to nonfinancial entities (including also the connected entities).

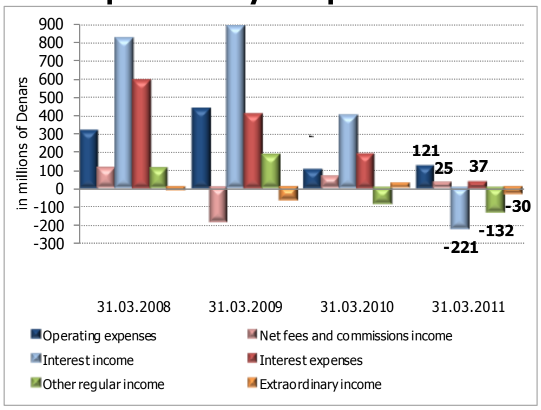
6. Profitability

In the first quarter of 2011, the banking system of the Republic of Macedonia registered a total negative financial result equal to Denar 80.5 million, after registering profit for several successive years. Compared to March 2010, the number of banks that registered loss remained unchanged[41], and their share in the total banking system assets was 15.1%. Nevertheless, already in April 2011, the banking system in the Republic of Macedonia registered a total positive financial result equal to Denar 111 million.

The deteriorated profitability of the banking system in the first three months of 2011 was primarily due to the reduced interest income and other regular income, as well as to the increased operating expenses[42], despite the fact that the impairment registered a decrease. The group of large banks had the largest share (81.5%) in the interest income reduction, and the decreased

[41] Eight banks registered losses in the first quarter both of 2010 and of 2011.
[42] The operating expenses include: costs for employees, depreciation, general and administrative costs, deposit insurance premiums, other provisioning and other expenditures excluding the extraordinary expenditures.

Figure 80: Absolute growth/decrease of the main profitability components



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

other regular income was due to the narrowed net-income from foreign exchange differences also in the group of large banks. Despite the significantly smaller growth of the interest expenditures compared to the first quarter of 2010, the considerable decrease of the interest income also caused a drop of the net interest income (Figure 80).

2.1. Income and expenditures structure of the banking system

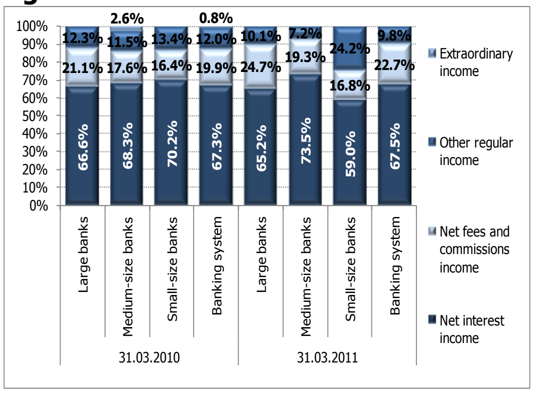
In the first quarter of 2011, the total income of the banking system of the Republic of Macedonia (total regular income[43] and extraordinary income) equaled Denar 3,611 million, which was less by Denar 395 million, i.e. by 9.9% compared to the first three months of 2010. The income reduction was due to the decrease of all its components[44], excluding the net fees and commissions income which registered a small increase. The greatest portion of the decrease of net interest income (81.5%) and of the other regular income (62.9%) was due to their decrease in the groups of large banks, against the extra income decline which was fully conditioned by the group of medium-size banks. Contrary to these reductions, in the first quarter of 2011, the net fees and commissions income grew by Denar 25 million, i.e. by 3.1% compared to the first quarter of 2010, which was mostly due to the group of large banks.

The reduction of almost all total income components (excluding the net fees and commissions income) did not cause any significant disruptions of the favorable structure of banks' total income, in which the regular income still has the largest share. In the first quarter of 2011, the net

[43] 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 registered according to objective value, net-income from foreign exchange differences, revenues from dividends and capital investments, gain from the sale of financial assets available for sale, capital gains realized from assets sale, released reservations for off-balance-sheet items, released other reservations, other income, revenues from settled previously written-off claims, and losses from sale of financial assets available for sale).

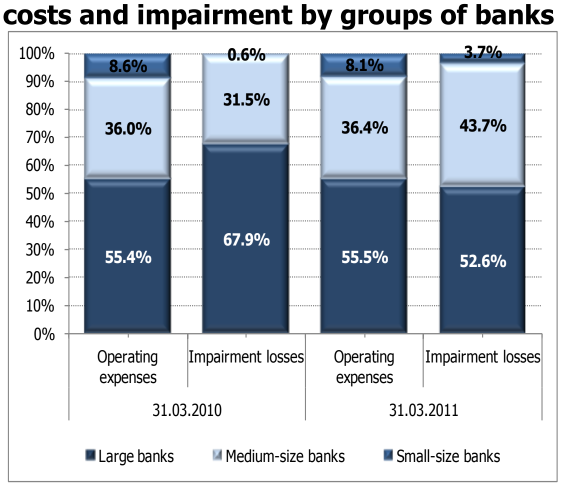
[44] In the first quarter of 2011, the net interest income dropped by Denar 258 million, or 9.6%, the other regular income by Denar 132 million, and the extraordinary income by Denar 30 million.

Figure 81: Total income structure



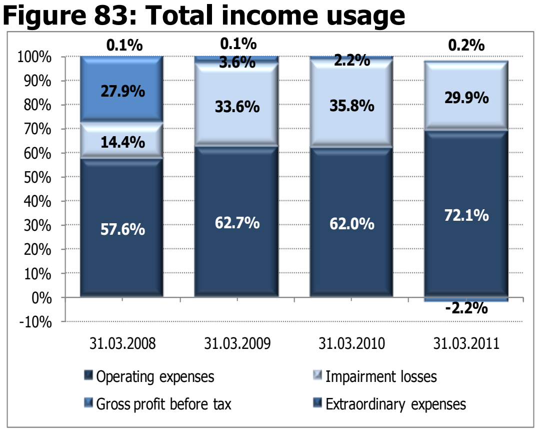
Source: NBRM, on the basis of data provided by banks.

Figure 82: Distribution of operational costs and impairment by groups of banks



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

Figure 83: Total income usage



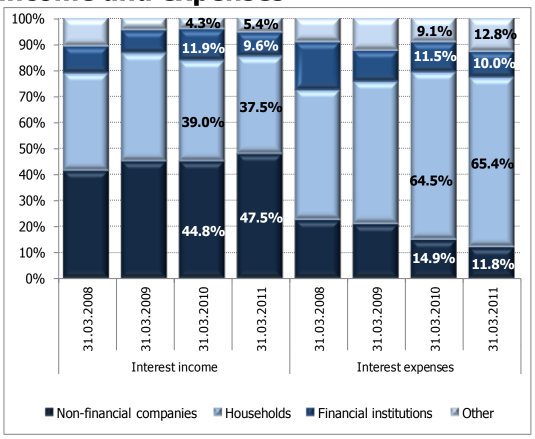
Source: NBRM, on the basis of data provided by banks.

interest income was still the most significant component in constituting the total income of all groups of banks (Figure 81). The structural share of the net fees and commissions income registered an increase (which is most prominent in the groups of large and medium-size banks), for the account of the reduced share of the other regular income and extraordinary income. The increase of the other regular income in the group of small-size banks (by Denar 7 million, or by 27.7%) contributed for their larger share in the total income structure of this group of banks.

In the first quarter of 2011, the largest share of banks' total income continued to be used for coverage of operating expenses (Figure 83). Compared to the first three months of 2010, the banks' operatind expenses increased by Denar 121 million, or by 4.9%, and their increase was mainly due to the group of large banks (56.1%) and the group of medium-size banks (45.1%). With the increase of the operating expenses, their coverage with total regular income reduced from 160.2% (in March 2010) to 138.7% (in March 2011). The largest share in the operating expenses structure still falls into costs for employees, which participate with 37.5%, while the second largest category are the general administrative expenses with 33.0% share. The decrease of the impairment compared to the first quarter of 2010 (by Denar 354 million, or 24.7%), which was fully caused by the group of large banks, produced a decrease of its share in the banks' total income by 5.9 percentage points.

In the sector structure of the interest income and interest expenses, no significant changes were registered (Figure 84). In the sector structure of interest income, the income from non-financial companies still had the largest share, and registered a slight rise (by Denar 26 million, or 1.2%) compared to the same period of the preceding year. On the other hand, the interest income from the sector "households" and income from financial companies decreased. The decline of households' interest income (by Denar 151 million, or 8.1%) occurred in an

Figure 84: Sector structure of interest income and expenses



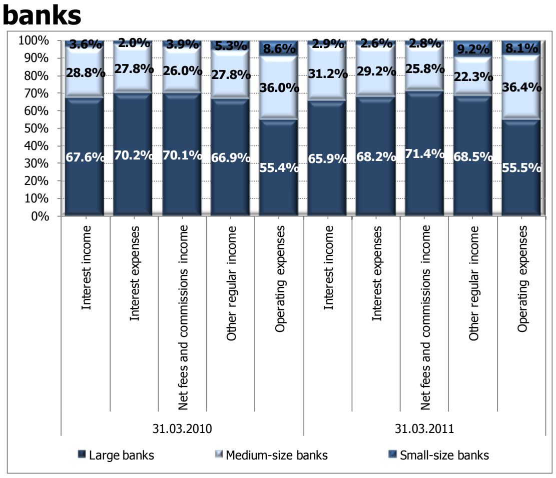
Source: NBRM, on the basis of data provided by banks.

environment of a more prominent downward trend of the lending interest rates of this sector, while the reduction of interest income from financial companies (by Denar 133 million, or 23.4%) was mostly due to the decreased interest income from the central bank (with lower interest rates on CB bills and smaller investments in this instrument). The interest income from investments in government treasury bills was incorporated in the category "interest income from other entities", which registered a 19.7% growth compared to March 2010.

The interest expenses to households, being the largest depositors of the banks, still represented the largest component in the structure of interest expenses. For the account of the increased share of the households' interest expenses, in the first quarter of 2011, the share of the interest expenses of enterprises and financial companies decreased by 3.1 p.p. and 1.5 p.p., respectively.

2.2. Profitability by groups of banks

Figure 85: Structure of the main components of profitability, by groups of banks

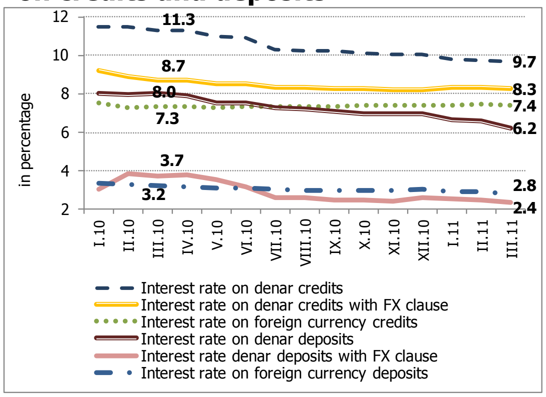


Source: NBRM, on the basis of data provided by banks.

The deteriorated profitability in the first quarter of 2011 was particularly common for the groups of medium and small banks, although on the banking system level it resulted from a decreased portion of the large banks' income and from increased operating expenses in the large and medium-size banks (Figure 85). In the first three months of 2011, the group of large banks continued to operate with profit, which, compared to the first quarter of 2010, was larger by Denar 66 million or 22.4%. The main instigator of the profit growth in this group of banks was the reduced impairment by 41.6%.

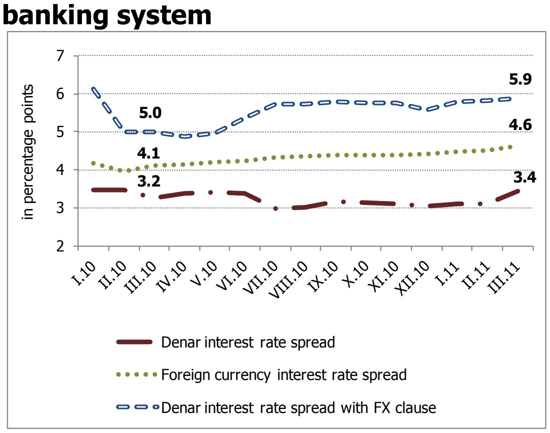
At the end of March 2011, the loss of the group of medium-size banks equaled Denar 325 million (in the same period of the preceding year, this group's loss was Denar 176 million). The increased loss of this group of banks resulted from the increased costs for employees, general

Figure86: Movement of interest rates on credits and deposits



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

Figure87: Interest rate spread of the banking system



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

and administrative costs, and impairment[45], but also from the reduced extraordinary revenues and other revenues. The group of small banks registered a four times larger loss compared to the same period of the preceding year, and the primary factors were the decreased net interest income and increased impairment.

2.3. Interest rate spread of the banking system

In the first quarter of 2011, the interest rate spread for the on-balance positions in Denars, foreign currency, and Denars with FX clause registered a minimal increase compared to the first quarter of 2010. The upward trend of the spread in foreign currency and Denars with FX clause was due to the downward trend of the deposit interest rates against the relatively stable movement of the lending interest rates on placements in foreign currency and in Denars with FX clause (Figure86). The upward movement of the spread for Denar positions was a result of the somewhat more prominent downward trend of the deposit interest rates in Denars due to the downward adjustment of the lending interest rates. The interest rate spread between Denar interest rates with FX clause was still the highest (Figure87).

2.4. Indicators on profitability and efficiency of the banks

The loss realized by the banking system in the first quarter of 2011 negatively influenced also the basic indicators of banks' profitability. The rates of return on average assets (ROAA) and on average equity (ROAE) were negative for the banking system in general and for the individual groups of banks, excluding the group of large banks.

[45] The largest portion of the increase of impairment in the group of medium banks was due to the impairment made by one bank.

Table16: Indicators on the profitability and efficiency of banks' operating

Indicators	Banking system		Large banks		Medium-size banks		Small-size banks	
	31.03.2010	31.03.2011	31.03.2010	31.03.2011	31.03.2010	31.03.2011	31.03.2010	31.03.2011
Rate of return of average assets (ROAA)	0.1%	-0.1%	0.7%	0.7%	-0.9%	-1.4%	-0.9%	-4.1%
Rate of return of average equity (ROAE)	1.1%	-1.0%	6.9%	7.5%	-8.4%	-12.9%	-2.3%	-12.1%
Cost-to-income ratio	62.4%	72.1%	52.0%	60.7%	78.3%	86.5%	112.2%	157.2%
Non-interest expenses/Total regular income	67.6%	78.5%	55.3%	65.4%	84.0%	94.8%	140.9%	178.0%
Labour costs /Total regular income	25.1%	27.0%	20.7%	21.4%	31.7%	34.8%	46.8%	63.5%
Labour costs /Operating expenses	40.2%	37.5%	39.8%	35.3%	40.5%	40.2%	41.7%	40.4%
Impairment losses of financial and non-financial assets /Net interest income	53.3%	44.4%	55.3%	36.6%	56.7%	58.7%	6.2%	49.9%
Net interest income /Average assets	4.0%	3.2%	3.9%	3.1%	4.3%	3.4%	3.9%	2.8%
Net interest income /Total regular income	67.8%	67.5%	66.6%	65.2%	70.1%	73.5%	70.2%	59.0%
Net interest income /Non-interest expenses	100.3%	86.0%	120.4%	99.7%	83.5%	77.6%	49.8%	33.1%
Non-interest income/Total regular income	37.4%	38.7%	36.7%	39.3%	35.5%	34.7%	58.5%	61.7%
Financial result/Total regular income	2.2%	-2.2%	11.2%	15.2%	-15.4%	-29.7%	-16.5%	-86.8%

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

The decrease of the profit margin[46] indicator (by 4.4 percentage points), as well as the increased share of operating expenses and non-interest expenditures in the total regular income by 9.7 and 10.9 percentage points, respectively, indicate a deteriorated efficiency in banks' operating. The worsened operating efficiency was particularly accentuated in the groups of medium-size and small-size banks, considering also the loss they registered in the first quarter of 2011.

The analysis of the remaining indicators on banks' profitability and efficiency reaffirms the previously depicted observation about the dominant impact of the decreased net interest income on the deteriorated profitability of the banking sector in the first quarter of 2011. All indicators that are computed on the basis of the net interest income were worse than in the same period of 2010, and the rate of non-interest expenses coverage with net interest income registered an especially prominent decline.

[46] The profit margin represents a ratio of the operating gain (loss) to the total regular income.

ANNEXES