NATIONAL BANK OF THE REPUBLIC OF MACEDONIA
Financial Stability, Banking Regulations and Methodology Department

Report on Banking System and Banking Supervision of the Republic of Macedonia in 2009

April, 2010

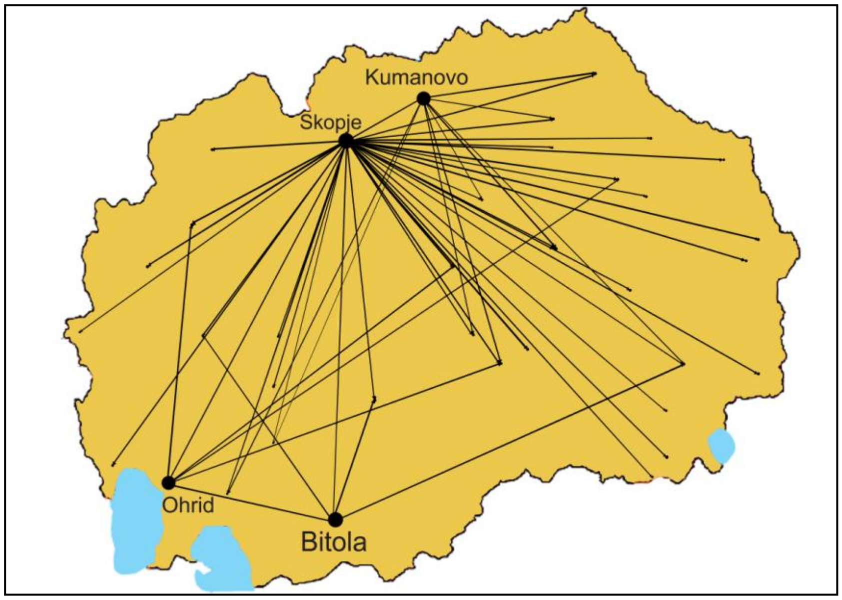
C O N T E N T S

I. BANKING SYSTEM IN 2009

1. Structure of the banking system on 31.12.2009

1.1. Access to banking services

Figure 1.1
Bank network in the Republic of Macedonia



Central offices of the banks are located in Skopje, Kumanovo, Ohrid and Bitola.
Source: NBRM, based on data submitted by the banks

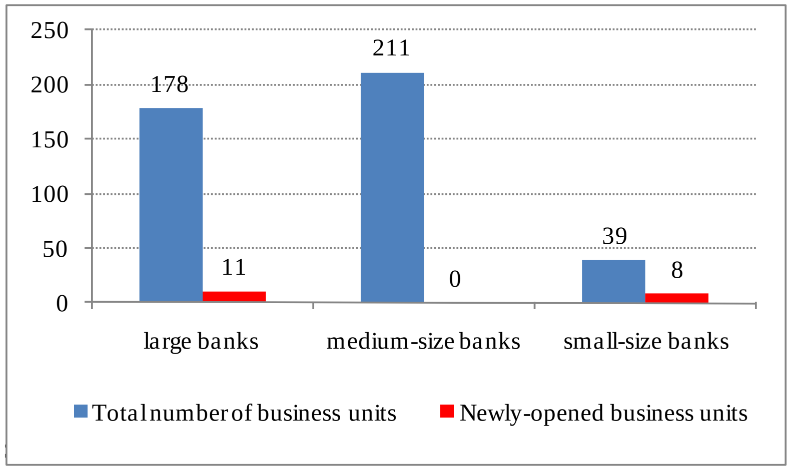
The banking system of the Republic of Macedonia consists of eighteen banks[1] and ten saving houses[2]. Compared to the last year, the number of banks has remained unchanged, with insignificant changes in the area of the bank network (the number of business units has increased by 19). One bank provides services to 112.364 citizens or almost twice more than the average of the EU-27; however, this indicator is significantly better than the indicator in some of the EU member countries, such as, Bulgaria, Romania, Slovakia and the Czech Republic. (Annex number 1) The bank network consisting of 428 business units (including the central offices of banks) is developed in almost all towns throughout the country. One business unit provides services to 4,786 citizens, which is twice more than the average of the EU-27. Compared to the geographical concentration, 40% of the bank network is located in the region of Skopje, where the access to banking services is the most convenient. Namely, in the region of Skopje, the number of citizens per business unit is the lowest (3,381). The highest number of citizens per business unit is still present in the region of Polog (8,945 citizens per business unit).

[1] Due to the insignificant role of saving houses in the overall activities of the banking system (share of 1.2% in the total assets of the banking system, 1.7% in the total credits and 0.3% in the total deposits by non-financial entities), this Report is focused on banks operation.

[2] At the end on 2009, on the territory of the Republic of Macedonia there were 10 saving houses, which means one less when compared to 2008. Upon request by the owners of the saving house, in August 2009, the Governor of the National Bank made a decision for withdrawal of the license for establishment and operation and for initiation of a liquidation procedure for the saving house “Inko” DOO Skopje.

In spite of the slowdown in the development of the bank network, the group of medium-size banks[3] has continued to dominate with regard to the number of business units in 2009. The group of small-size banks is still the last in regard to the development of the bank network.

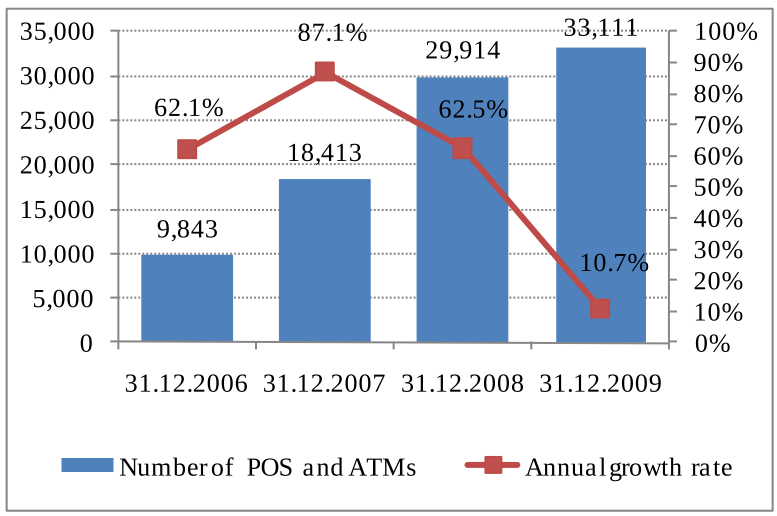
Figure 1.2
Business units per groups of banks in 2009



Source: NBRM, based on data submitted by the banks

During 2009, there was a slowdown in the growth of the number of devices which accept payment cards (POS and ATM terminals). The slowdown, which had started in the second half of 2008, was the result of the relatively wide use of payment cards, as well as of the developed infrastructure that is getting closer to the European average. The number of POS and ATM terminals on one million of citizens is 12,132 and 411, respectively, which is higher than the same in certain EU member countries (Annex number 1). The number of payment cards on annual level has increased by 21.9% (in 2008: 46.2%), whereas the number of realized transactions through devices using payment cards, has increased by 3.3% (in 2008: 40.2%).

Figure 1.3
Number of POS and ATM terminals and their annual growth rate



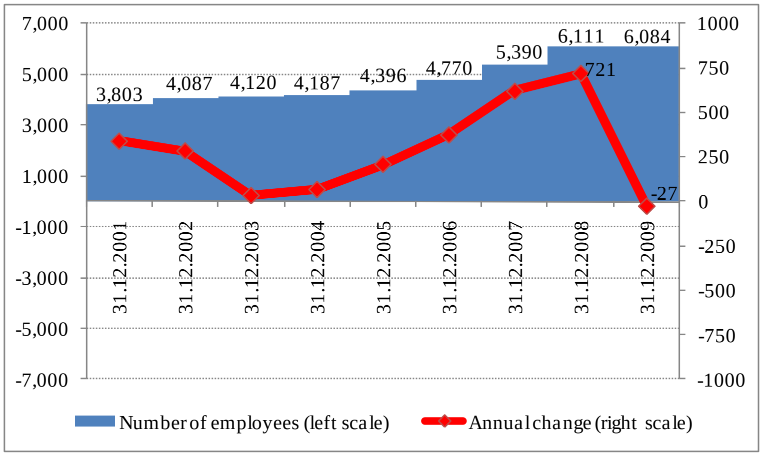
Source: NBRM, based on data submitted by the banks

[3] Grouping of banks is made according to the size of their assets: the group of small-size banks consists of banks whose assets are less than Denar 5 billions, the group of medium-size banks are banks whose assets range between Denar 5 and 20 billions and the groups of large banks consists of banks whose assets are higher than Denar 20 billions. The limits between separate groups of banks are corrected once a year, according to the economic principle of average growth of total assets.

1.2. Employment in the banking system

The annual change of employment in the banking system at the end of 2009 was negative (-0.4% or 27 persons less). This situation to a great extent is a consequence of the reduction of employees in medium-size banks (by 58) compared to 2008. The largest number of persons employed in the banking system, are in the group of large banks (50.6%), although the reduction of employees is also present in this group of banks (by 28). Opposite of this, in 2009, the number of employees has increased only in the group of small-size banks (by 59).

Figure 1.4
Employment in the banking system



Source: NBRM, based on data submitted by the banks

Despite the reduced number of employees in the banking system during 2009, the qualitative improvement of their qualification structure has continued. Thus, for the account of the reduction of employees with lower level of education (high, secondary and other lower levels of education) by 265 positions, the number of employees with higher level of education (Ph.D., Master Degree and employees with University Degree) has increased by 238. Such qualification restructuring of employees is expected to have a positive impact on the overall activity of banks, especially in conditions of greater sophistication and complexity of banks' activities, and bearing in mind the risk exposure during their operation, risk management systems, as well as the complexity of the bank legislation that follows the international standards.

Table 1.1
Qualification structure of employees in the banking system and per bank groups

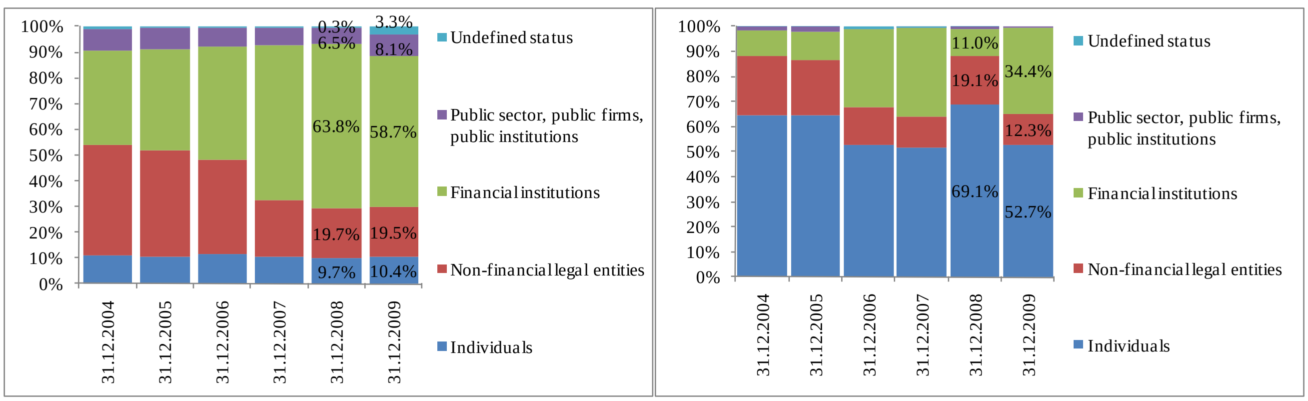
	31.12.2006	31.12.2007	31.12.2008	31.12.2009			
	whole banking system				large banks	medium-size banks	small-size banks
PhD and MSc	1,5%	1,6%	1,9%	2,4%	2,8%	1,5%	4,3%
University ed.	41,4%	47,0%	53,5%	57,1%	49,1%	67,6%	55,0%
College ed.	6,8%	5,7%	5,0%	4,9%	6,5%	3,1%	4,6%
High school ed.	48,4%	44,0%	38,6%	34,7%	40,6%	27,2%	34,8%
Other	2,0%	1,8%	1,1%	0,9%	1,0%	0,7%	1,3%

Source: NBRM, based on data submitted by the banks

1.3. Ownership structure of the banking system

No significant changes have been noticed in the ownership structure of the banking system at the end of 2009 compared to the end of 2008. The same as the preceding year, stocks owned by foreign private banks (34.7%) have the highest share in the ownership structure. Analyzed per types of stocks, financial institutions are the dominant owners of common stocks, in spite of the decrease of their share (this decrease is a result of the initiated bankruptcy procedure for the owner of one of the small-size banks[4], where these stocks, for the purposes of this report are treated as common stocks with undefined status[5]. This is the reason for the increase of common stocks with undefined status by Denars 535 million compared to 2008). Financial institutions increased their share in the structure of preferred stocks of banks due to the conversion of a portion of common stocks into preferred stocks in one of the small banks, owned by a foreign private bank. The natural persons remained the dominant owners of preferred stocks.

Figure 1.5
Ownership structure of the banking system - common stocks (left) and preferred stocks (right)



Source: NBRM, based on data submitted by the banks

During 2009, the foreign investments in the banking system of the Republic of Macedonia decreased compared to the preceding years. In 2008 there had been acquisition of three banks by foreign private banks, but in 2009, no such transactions were performed. The invested foreign capital in 2009 (in total amount of Denar 573 millions) was mostly in the form of subordinated deposit (69.4%), in one of the medium-size banks. The purchase of domestic shareholders' stocks by foreign shareholders during 2009 decreased by 92.2% on annual level. This decrease may be defined as expected, bearing in mind that the largest part of the banking system is owned by shareholders from abroad and the opportunities for acquisitions by domestic shareholders are scarce. In all bank groups, the foreign capital remained dominant in the total shareholders capital. Thus, in the group of large banks, the foreign capital had the largest share (79.5%) in the total shareholders capital, whereas in the group of medium-size and small-size banks, this share was 66.8% and 57.5%, respectively. The number of banks with predominant foreign ownership (fourteen banks), as well as the number of banks that are branch offices of foreign banks (eight), remained unchanged.

[4] In March 2010, the Governor of NBRM issued a prior approval to the Central Cooperative Bank AD Sofia, Republic of Bulgaria for acquiring 100% of stocks of Stater Banka AD Kumanovo.
[5] The expression "undefined status" covers the stock owned by entities which cannot be identified, entities which are in a bankruptcy procedure, in liquidation procedure or whose bankruptcy / liquidation procedure has been closed.

Figure 1.6
Market share of banks with dominant foreign ownership and trend of share in the foreign capital

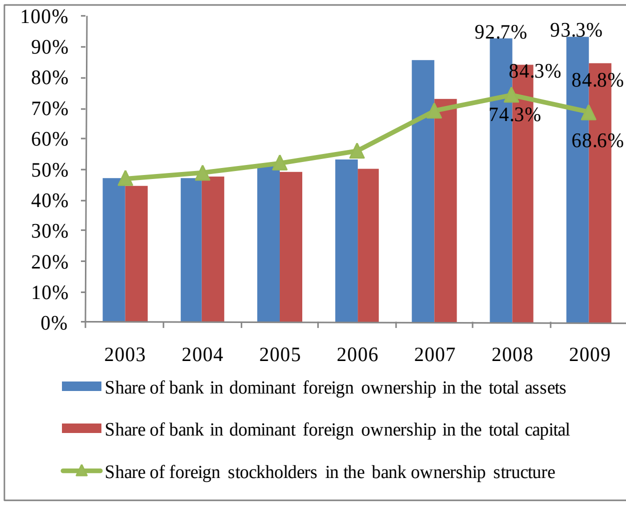
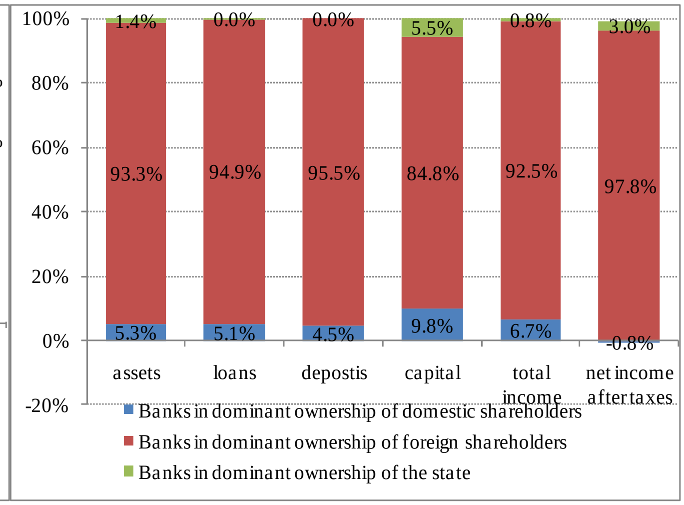


Figure 1.7
Structure of the more significant positions of banks' balances by dominant ownership of banks

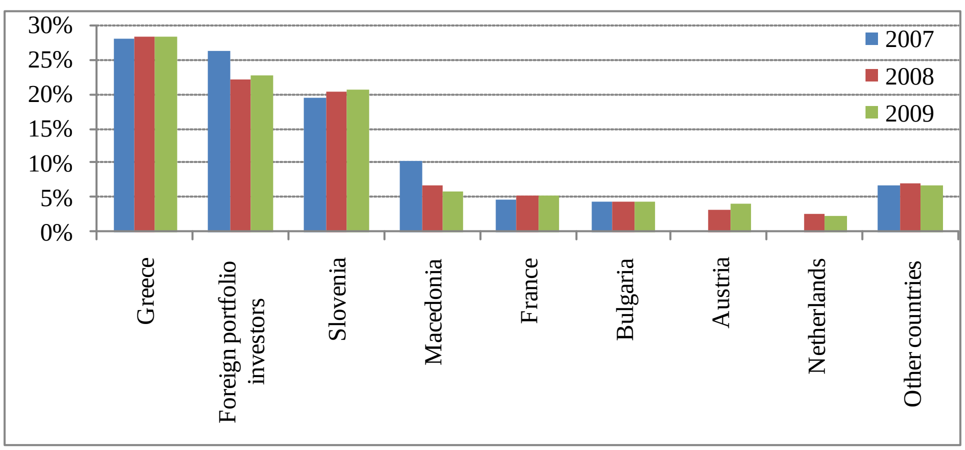


Source: NBRM, based on data submitted by the banks

Banks predominantly owned by foreign shareholders, during 2009 retained their domination in the market.

1.4. Market share and concentration of the banking system

Figure 1.8
Assets structure according to the origin country of the dominant shareholders of banks



Source: NBRM, based on data submitted by the banks

The market share (share of total assets in the banking system) from the aspect of country of origin of shareholders that are dominant owners of banks in the Republic of Macedonia has not changed. The banks that are dominantly owned by shareholders from Greece, Slovenia and foreign portfolio investors still dominate in the total assets. The share of banks in domestic ownership is only 6.7% in the total assets of the banking system (decline by 0.2 percentage point compared to 2008).

The high level of concentration reached during the previous years has been increasing in all analyzed segments. The three largest banks cover 66% to 74% of all more important positions of aggregate balances of the banking system. Ten out of eighteen banks cover less than 3% of total assets of the banking system.

Figure 1.9
Market share of banks assets

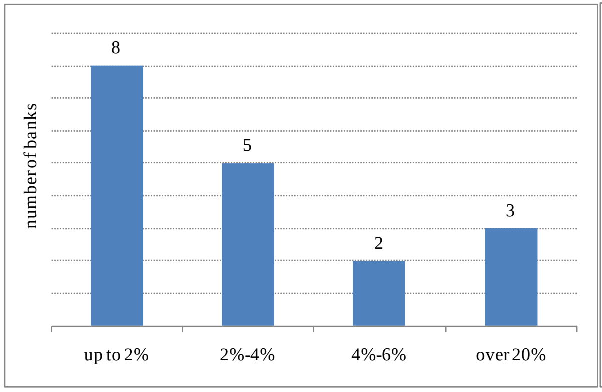
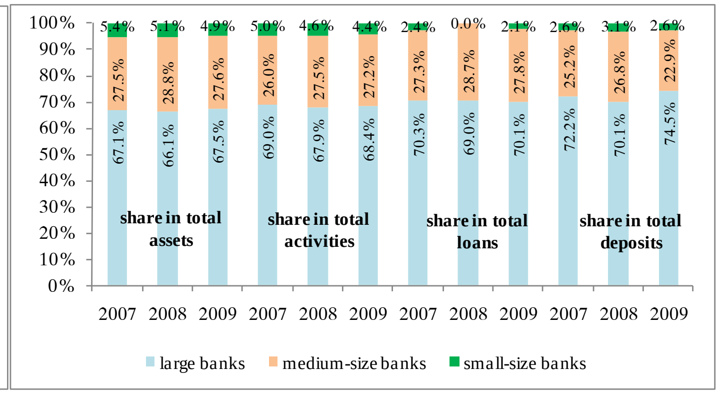
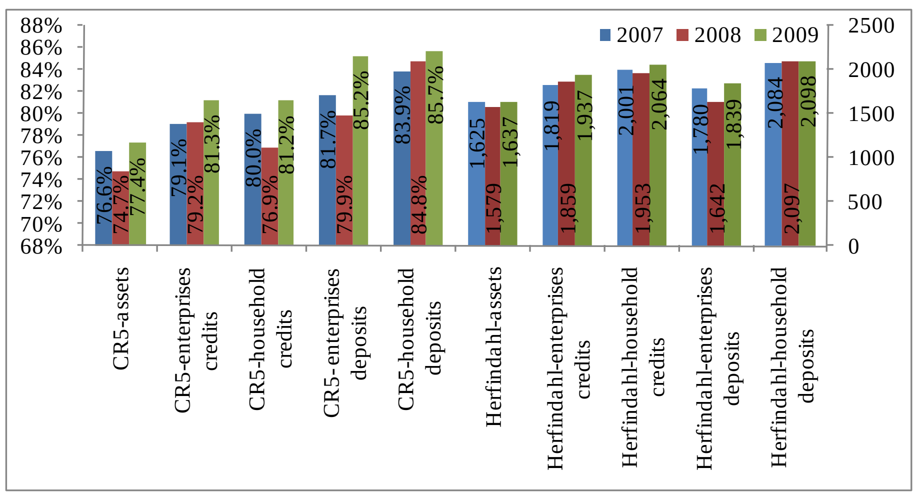


Figure 1.10
Market share per groups of banks



Source: NBRM, based on data submitted by the banks

Figure 1.11
Dynamics of CR5 indicator (left scale) and Herfindahl-index (right scale) for the banking system of the Republic of Macedonia



Source: NBRM, based on data submitted by the banks

Indicators for concentration measuring (CR5[6] indicator and Herfindahl index[7]), show increased degree in the already high concentration, in all domains of bank operation. The highest level of concentration according to both indices is present in the deposit activities of banks. From the aspect of sectors, the concentration is the highest in the bank activities related to the services provided to the population.

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[6] The CR5 indicator presents the share of assets (i.e. the analyzed category, for example, company credits, deposits of companies, etc.) of the five credit institutions with largest assets (i.e. the analyzed category) in the total assets (i.e. the analyzed category) of the banking system. In the case of the Republic of Macedonia, the the banks are the analyzed category.

[7] Herfindahl-index is calculated according to the formula $HI = \sum_{j=1}^{n} (S_j)^2$, where S is the share of each bank in the total amount of the analyzed category (for example: total assets, total deposits, etc.), whereas n is the total number of banks in the system. When the index moves within an interval of 1,000 units, the level of concentration in the banking system is considered as acceptable.

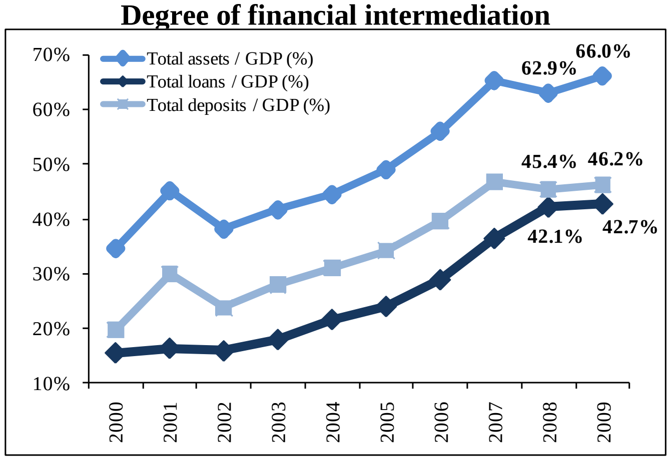
2. Bank activities

During the first half of 2009, the level and dynamics of activities of the domestic banking system were under the influence of the contraction of the domestic economic activity and the still present uncertainty as concerns the final effect of the international financial crises on the overall economic movements and the operation of banks in the Republic of Macedonia. During the second half of the year, more significant stabilization was registered in the activities in the global and domestic economy and decreased impact of psychological pressures in the decision-making by business entities. During the entire year, there was a relevant influence of the changes in the crediting conditions by the banks, as a prudent response to the deteriorated economic conditions, and as a measure for harmonization with the macro-prudent measures undertaken by the National Bank. In such conditions, at the end of 2009 a growth was accomplished in the three basic balance categories on the banking system level (total assets, total credits and total deposits), but with a significantly slower dynamics compared to the preceding years.

2.1. The extent of financial intermediation

At the end of 2009, the level of financial intermediation of the banking system in the Republic of Macedonia registered an increase. Compared to the end of 2008, when the level of financial intermediation had been analyzed through the ratio of total assets of the banking system and GDP[8] and the ratio of deposit activity and GDP and showed a downward trend, in 2009, it began to move upward. The level of financial intermediation measures through the ratio of credit activity and GDP this year has also continued to grow as in the preceding years, although at a slower pace. The group of large banks has a dominant position in the financial intermediation.

Figure 2.1.1.
Degree of financial intermediation



Source: NBRM

The banking system of the Republic of Macedonia still has a significantly lower level of financial intermediation compared to the banking systems of analyzed EU member countries, as well as with the average levels of financial intermediation in the European Union and the Euro-zone. With the exception of Romania (which in 2008 also had the lowest level of financial intermediation), the banking system in the Republic of Macedonia is characterized by the lowest level of indicators regarding the ratio between the total assets, credits and deposits and the GDP.

[8] The data on GDP for 2008 is from earlier, whereas the data for 2009 is an estimate.

Table 2.1.1.
Degree of financial intermediation

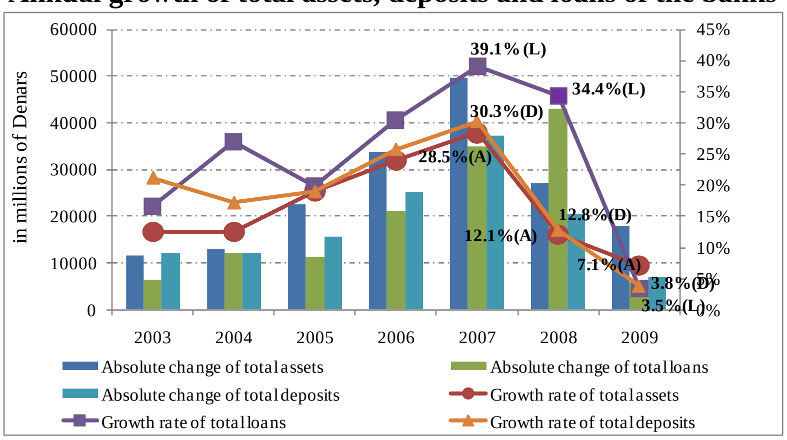
Country	Assets/GDP	Deposits/GDP	Loans/GDP
Romania	61,7%	29,4%	37,1%
Poland	72,7%	42,5%	43,7%
Lithuania	82,2%	34,8%	64,6%
Slovakia	101,0%	62,2%	47,4%
Hungary	117,8%	52,1%	72,2%
Bulgaria	107,9%	63,1%	74,3%
Czech Republic	104,4%	67,3%	52,2%
Slovenia	132,0%	56,9%	93,0%
Estonia	139,0%	59,8%	104,9%
Latvia	139,5%	57,7%	99,3%
Cyprus	697,1%	330,5%	321,2%
Malta	734,2%	266,3%	433,5%
EU	331,9%	117,3%	137,9%
MU	337,4%	134,2%	154,1%
Republic of Macedonia (2008)	62,9%	45,4%	42,1%
Republic of Macedonia (2009)	66,0%	46,2%	42,7%

*The data for the EU countries refers to 2008.
Source: NBRM and the Report on EU Banking Structures, ECB, January 2010. Data on the Member States of EU and the Euro area pertain to 2008.

2.2. Banks' balance sheet

The total assets of the banking system continued to grow in 2009, as well, but with lesser intensity, where for the first time in the last seven years, it registered a single digit growth rate. On 31.12.2009, the total assets equaled Denar 268.543 million, whereas the annual growth rate (7.1%) was almost reduced by half relative to 31.12.2008.

Figure 2.2.1.
Annual growth of total assets, deposits and loans of the banks



Source: NBRM based on data submitted by the banks

The significant slowdown of growth of deposit core of banks was the main factor for the decline of growth of total assets, which in spite of such dynamics, managed to retain the role of dominant source of assets for financing the banks' activities. Negative effects of the global financial crises (which, inter alia, the domestic banking system felt in the form of prominent psychological pressures in the decision-making process by business entities and decreased saving preferences) were particularly prominent during the first quarter of the year, when the deposits registered a negative growth rate of change. The gradual stabilization of movements in the domestic economy and the decrease of psychological pressures as of the beginning of the second quarter of 2009 had impact in the light of "revival" of deposit activity of banks. Thus, at the end of 2009, although at a much slower pace compared to 31.12.2008, the deposits of the banking system registered a growth by 3.8%. This represents the lowest growth rate of deposits over the past seven years. For the account of such slowdown in the growth of deposits of non-financial entities, and by that of their share in the total assets, the importance of deposits from banks and other financial institutions has increased.

Table 2.2.1
Structure of assets and liabilities on the banking system level

Balance sheet	Amount in millions of Denars		Structure		Change 31.12.2009/31.12.2008			
	31.12.2008	31.12.2009	31.12.2008	31.12.2009	Change in absolute amount	In percentage	In the structute (in percentage points)	Share in the change
Cash and balances with NBRM	27.031	32.224	10,8%	12,0%	5.193	19,2%	1,2	29,1%
Securities portfolio	28.805	30.639	11,5%	11,4%	1.834	6,4%	-0,1	10,3%
Placements to banks and other financial institutions	27.168	33.854	10,8%	12,6%	6.686	24,6%	1,8	37,5%
Loans to non-financial entities (net)*	154.272	157.128	61,5%	58,5%	2.856	1,9%	-3,0	16,0%
Accured interest and other assets	5.260	6.151	2,1%	2,3%	891	16,9%	0,2	5,0%
Fixed assets	8.168	8.547	3,3%	3,2%	379	4,6%	-0,1	2,1%
Unallocated loan loss provisions	0	0	0,0%	0,0%	0	0,0%	0,0	0,0%
Total assets	**250.704**	**268.543**	**100,0%**	**100,0%**	**17.839**	**7,1%**	**0,0**	**100,0%**
Deposits from banks and other financial institutions	12.006	18.031	4,8%	6,7%	6.025	50,2%	1,9	33,8%
Deposits of non-financial entities	180.913	187.875	72,2%	70,0%	6.962	3,8%	-2,2	39,0%
Borrowings (short-term and long-term)	20.238	24.020	8,1%	8,9%	3.782	18,7%	0,9	21,2%
Other liabilities	7.688	7.247	3,1%	2,7%	-441	-5,7%	-0,4	-2,5%
Provisions for off-balance sheet items	926	760	0,4%	0,3%	-166	-18,0%	-0,1	-0,9%
Capital and reserves	28.932	30.609	11,5%	11,4%	1.677	5,8%	-0,1	9,4%
Total liabilities	**250.704**	**268.543**	**100,0%**	**100,0%**	**17.839**	**7,1%**	**0,0**	**100,0%**

* Loans to non-financial entities are on net base and they are decreased for the impearment of the loans.

Source: NBRM based on data submitted by the banks

Credits of non-financial entities are dominant category in the banking system assets. They continued to grow in 2009, but at a much slower pace compared to 31.12.2008 (the annual growth rate for 2009 is 3.5%). This slowdown of the credit activity of the banking system to a large extent occurs as a prudent response of banks to the deteriorated economic conditions, which involves more rigorous crediting conditions, and partially for the purposes of harmonization with the macro-prudent measures undertaken by the National Bank. Due to the slowdown in the growth dynamics, their share in the total assets registered a decline at the end of 2009, for the account of the increased share of placements in banks and other financial institutions and increased share of cash and balances with NBRM. Especially cash and balances with NBRM, as well as the placements in other domestic and foreign banks had the biggest contribution in the growth of total assets. The growth of cash and balances with NBRM was the most prominent in the third quarter of 2009, which to a great extent is a result of the legislation changes concerning the calculation and meeting the requirements for reserve requirement of banks (increase of reserve requirement[9] and introduction of obligation for including part of the

[9] In May 2009, amendments were introduced to the Decision on Reserve requirement by which the rates of mandatory reserve increased from 10% to 11.5% for liabilities in foreign currency for the period of July (or 13% for the period of August) and from 10% to 20% for the Denar liabilities with currency clause.

reserve requirement in the foreign currency in the calculation and meeting the reserve requirement in Denars[10]). Compared to the trend in 2008, when the placements in domestic and foreign banks registered a decline (by Denar 12,398 millions compared to 2007), in 2009 there has been an increase in the placements in banks (mostly in foreign banks). This, to a large extent, is a result of the introduced obligation for banks to achieve minimum liquidity rates prescribed by the National Bank[11], as well as of the more rigorous credit policies by banks, which with different intensity was present during the entire 2009.

Figure 2.2.2.
Structure of assets of the banking system

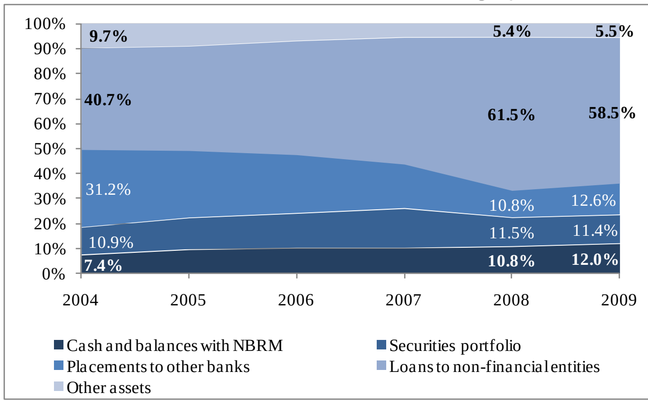
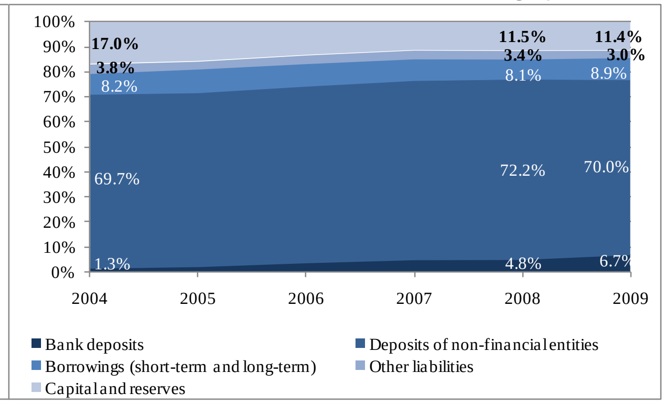


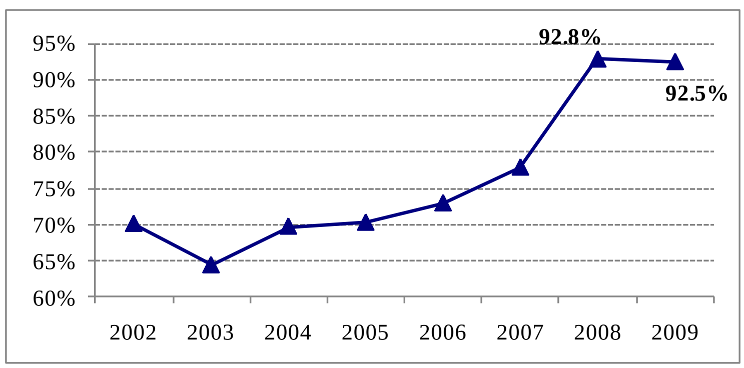
Figure 2.2.3.
Structure of liabilities of the banking system



Source: NBRM based on data submitted by the banks

In 2009, the growth of total credits was less dynamical compared to total deposits, which means that their ratio registered an insignificant decline. However, its value still indicates almost complete utilization of deposits as a "traditional" source of financing the credit activities. The analysis per individual banks indicates that one third of the banks (where this indicator is above 100%), with the exception of deposits, also finance their credit activity from other fund resources. Most of these banks used the deposits and loans from their central offices as secondary resources of funds, while the remaining banks used their own capital in order to finance their credit activity. This depletion of deposits of non-financial entities had impact on the interest policy of banks. Namely, while trying to retain the existing deposits of non-financial entities and attract at the same time new deposit core, the banks increased their interest rates.

Figure 2.2.4.
Structure of liabilities of the banking system



Source: NBRM based on data submitted by the banks

[10] With the amendments to the Decision for mandatory reserve, an obligation has been introduced for the banks as follows: part of the calculated mandatory reserve in foreign currency (13% for the period of July and 23% for the period of August) to be met in Denars.

[11] NBRM at the end of 2008 adopted a new Decision for liquidity risk management of banks. This decision, inter alia, imposed an obligation for the banks to retain the minimum level of the coefficient of liquidity, defined as a ratio between the balance and off-balance assets and liabilities that mature in 30 and 180 days, separately for the Denar and foreign currency assets and liabilities.

The share of **claims from non-residents** in total bank assets interrupted the decline trend that had been present over the past five years. Their growth in 2009, to a large extent is a result of the growth of placements in foreign banks. The share of total claims from non-financial entities - non-residents in approved credits is only 0.1%, which is by 0.6 percentage points less than the preceding year.

Figure 2.2.5.
Assets structure of banks

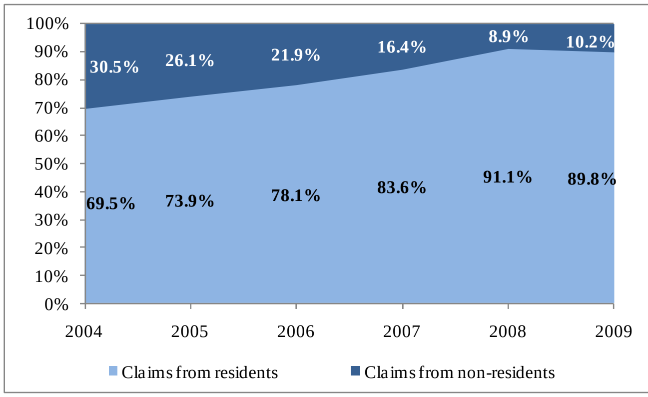
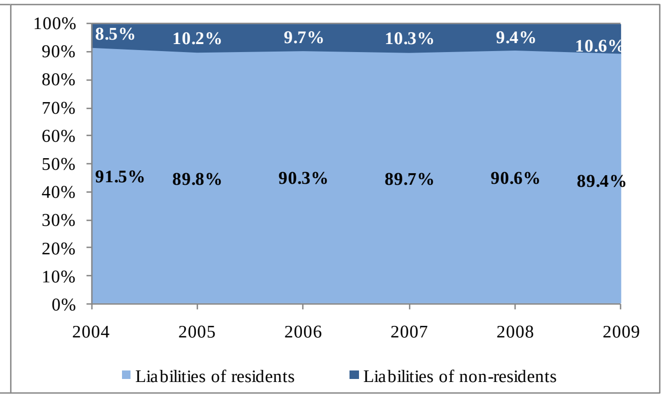


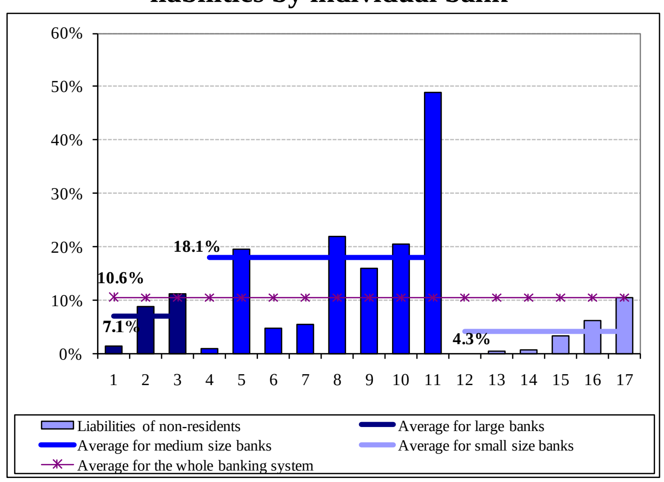
Figure 2.2.6.
Liabilities structure of banks



Source: NBRM based on data submitted by the banks

In spite of the growth compared to the preceding year, **liabilities toward non-residents** at the end of 2009 had a relatively low share in the total liabilities of the banking system. Their growth is due to the increased use of loans and deposits from parent banks (which in the total growth of loans and deposits of foreign banks participated with 98.9% and 81.2% respectively), as well as to the growth of subordinated and hybrid capital instruments (the share of parent banks in the growth of this category is 48.6%). This year, in the structure of liabilities towards non-residents, loans and deposits from foreign banks also dominate with 65.6%, whereas the subordinated and hybrid capital instruments participate with 20.6%.

Figure 2.2.7.
The share of liabilities to non-residents in total liabilities by individual bank



Source: NBRM based on data submitted by the banks

On the level of individual banks, the share of liabilities towards non-residents in the total liabilities moves in the interval from 0% to 49%. This indicates greater sensitivity of some banks to certain movements in the international financial markets. This year as well, seven of the banks exceed the average on the level of the banking system[12]. Greatest indebtedness towards non-residents is present among the group of medium-size banks. In this group, compared to the preceding year, the share of liabilities towards non-residents in the total liabilities has increased by 3.6 percentage points. In the groups of small-size and large banks, the changes are on the level of minimum.

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[12] The Macedonian Bank for Promotion Development AD Skopje is not included in the analysis because of the specific nature of its activities.

2.2.1. Balance sheet of the individual groups of banks

In 2009, movements of the three main balance categories of the banking system (total assets, credits and deposits of non-financial entities) were entirely defined by the group of large banks. This was particularly typical for the credit and deposit activities of banks, whose positive annual change was almost entirely defined by the growth of these categories in the group of large banks. This has also defined the increase of the already high market share of the group of large banks in the total assets, credits and deposits of the banking system. Due to this, the decrease of market share of medium-size banks has continued, as well as their share in the annual changes of the three balance categories of banks (most prominent decrease has been registered in their share in deposits of non-financial entities).

Table 2.2.2.
Market share and growth of total assets, credits and deposits by groups of banks

ITEMS	Amount in millions of Denars		Structure		Annual change 31.12.09/31.12.08			
	31.12.2008	31.12.2009	31.12.2008	31.12.2009	In absolute amount	In percent	In the structure (in percentage	Share in the change
Total assets	**250.704**	**268.543**	**100,0%**	**100,0%**	**17.839**	**7,1%**		**100,0%**
- Large banks	165.798	181.398	66,1%	67,5%	15.600	9,4%	1,4	87,5%
- Medium size banks	72.136	74.062	28,8%	27,6%	1.926	2,7%	-1,2	10,8%
- Small size banks	12.770	13.082	5,1%	4,9%	312	2,4%	-0,2	1,7%
Loans to non-financial entities	**154.272**	**157.128**	**100,0%**	**100,0%**	**2.856**	**1,9%**		**100,0%**
- Large banks	105.527	109.591	68,4%	69,7%	4.063	3,9%	1,3	142,3%
- Medium size banks	45.952	44.730	29,8%	28,5%	(1.221)	-2,7%	-1,3	-42,8%
- Small size banks	2.793	2.807	1,8%	1,8%	14	0,5%	0,0	0,5%
Deposits of non-financial entities	**180.913**	**187.875**	**100,0%**	**100,0%**	**6.962**	**3,8%**		**100,0%**
- Large banks	129.909	139.933	71,8%	74,5%	10.024	7,7%	2,7	144,0%
- Medium size banks	45.941	43.007	25,4%	22,9%	(2.934)	-6,4%	-2,5	-42,1%
- Small size banks	5.063	4.935	2,8%	2,6%	(128)	-2,5%	-0,2	-1,8%

Source: NBRM based on data submitted by the banks

Figure 2.2.8.
Assets structure by groups banks

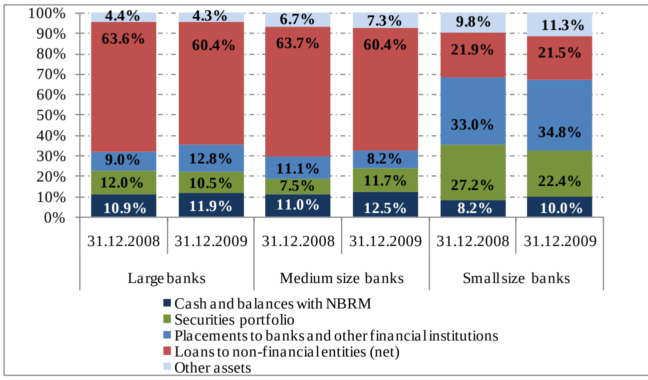
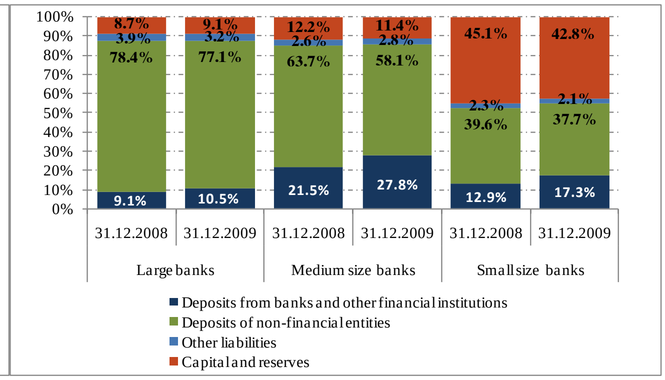


Figure 2.2.9.
Liabilities structure by groups banks



Source: NBRM based on data submitted by the banks

At the end of 2009, almost the same structure of assets and liabilities was preserved in the individual groups of banks. On the side of assets in all three groups of banks, a decrease of share of credits in their assets was registered, which was particularly present in the group of large and medium-size banks. Among the large banks, this decrease was done for the account of the increased share of placements in other domestic and foreign banks and other financial institutions, whereas among the medium-size banks, this was done for the account of the increase of share of investments in securities. In spite of this decrease, the credits of non-financial entities still represent the dominant component of assets in these two groups of banks. Contrary to this, most the assets of small-size banks are in the form of placements in banks and other financial institutions.

On the side of liabilities in all three groups of banks, a decreased share of deposit core in the financing of their activities was registered. Deposits of non-financial entities still represent an important source of financing the activities of groups of large and medium-size banks. On the side of medium-size banks, there is a relatively lower structural share of this source of funds for the account of higher dependence on the so called "secondary" source of funding (deposits from banks and loans).

2.3 Bank's lending activity

In 2009, the banks' lending activity kept on slowing down. Such developments were determined by several factors: contracted activity of the domestic economy, lower credit demand (except for the last quarter of the year), slower deposit growth as a major source of bank funding, continuation of the regime of stricter monetary policy and higher prudence by the banks when extending new credits. The impact of these factors was felt through the slowdown of the dynamics of banks' lending to both the household and the corporate sector. In the fourth quarter of 2009, lending to nonfinancial entities showed its first signs of stabilization, reflecting the slight relaxation of lending terms by the banks, the gradual improvement of the expectations of economic entities and relatively stable economic flows.

Figure 2.3.1
Dynamics and annual growth rate of total credits to nonfinancial entities in 2009

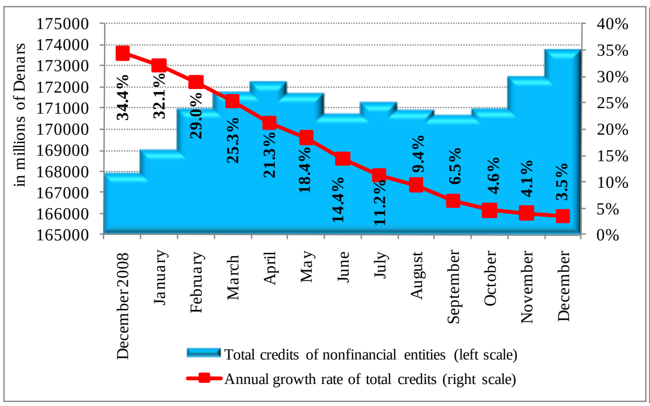
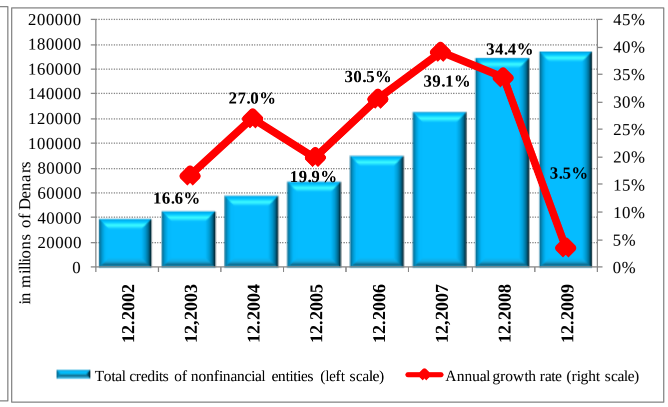


Figure 2.3.2
Dynamics and annual growth rate of total credits to nonfinancial entities

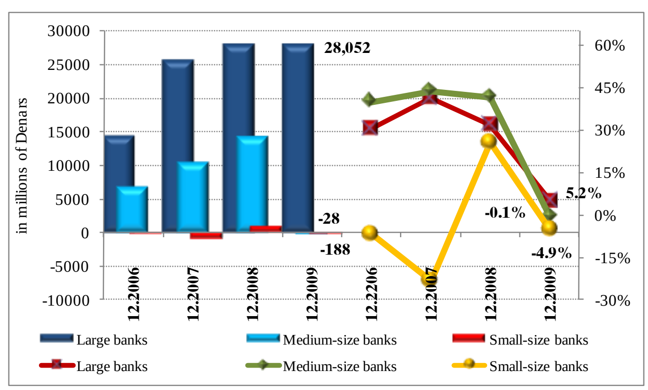


Source: NBRM, based on data submitted by the banks

At the end of 2009, total credits to nonfinancial entities were valued at Denar 173,710 million. Annual growth rates of the lending activity registered a permanent downtrend in 2009 (at the end of 2009, the annual growth rate was by almost 10 times lower compared to 2008). At the end of 2009, however, the reduction of annual growth rates became moderate, so that one could expect stabilization of the banks' lending activity in the forthcoming period. The banks' perceptions and expectations[13] for the first quarter of 2010 are exactly the same: gradual relaxation of the corporate and households lending terms and partial increase in the demand for credits by both sectors.

In 2009, only the group of large banks reported higher lending, which was ample for offsetting the credit fall of other two groups of banks.

Figure 2.3.3
Absolute and relative annual change in the total credits of nonfinancial entities, by groups of banks



Source: NBRM. based on data submitted bv the banks

[13] Source: NBRM Lending Survey, January 2010.

The annual growth rate of total credits to nonfinancial entities in the banking system of the Republic of Macedonia was lower compared to the growth rates of the banking systems of countries under observation, except for Italy and France. In case of Bulgaria, the growth rate of total credits is almost the same with the one of the Republic of Macedonia.

Table 2.3.2
Annual growth rate of the total credits to nonfinancial entities, by country

Country	Italy	France	Macedonia	Bulgaria	Hungary	Serbia	Montenegro	Slovenia	Slovakia
Annual growth rate of total credits to nonfinancial entities	1.0%	1.3%	3.5%	3.6%	6.1%	9.6%	14.3%	17.7%	21.0%

Source: Web sites of the central banks by country. The data for the total credits to nonfinancial entities of the analyzed countries refers to 2009, except for the data for Serbia and Slovenia which refers to 2008.

The dynamics of new credits extended by the banks in 2009 also reflect the slower lending activity. In 2009, the newly extended credits amounted to Denar 119,194 million, which is a decrease (of 28,312 million compared to 2008) for the first time after years of permanent growth. The decrease in the newly extended credits was registered at the end of each month of 2009 (most evident being in May, as much as 41.4%). However, the switch towards the zone of positive annual growth rates in 2009, underpins the gradual stabilization of the banks' lending activity.

Figure 2.3.4
Annual amount and annual growth rates of newly approved credits

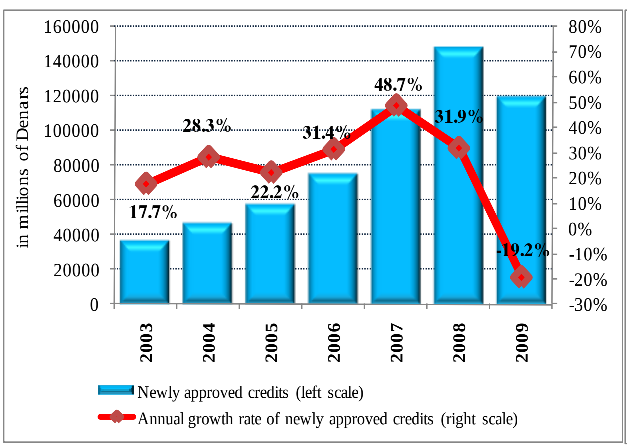
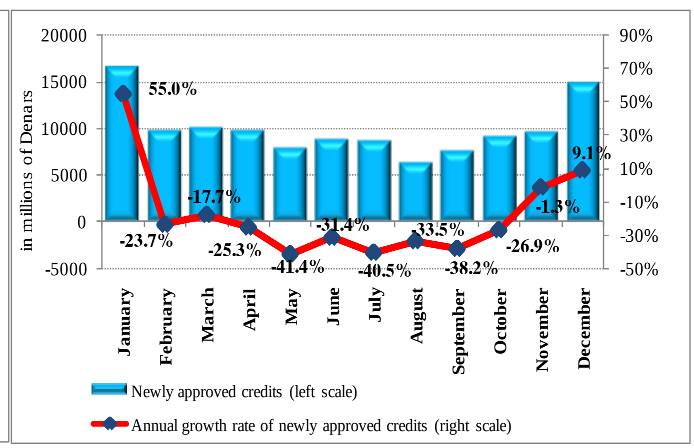


Figure 2.3.5
Monthly amount and annual growth rates of newly approved credits in 2009

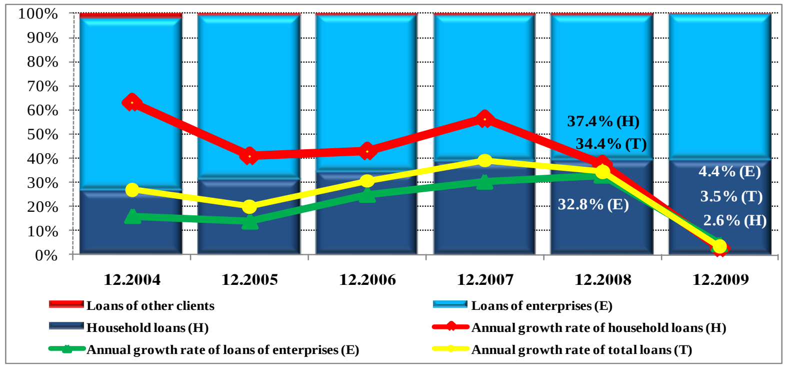


Source: NBRM, based on data submitted by the banks

2.3.1 Structure of credits to nonfinancial entities (sector, maturity and currency structure)

Both the corporate and household sector were affected by the contracted landing activity of the banking system. The corporate lending registered faster annual growth rate compared to household lending. With an annual growth of Denar 4,461 million, corporate credits were once again the major driving force, making up 76.9% of the annual growth of total credits to nonfinancial entities.

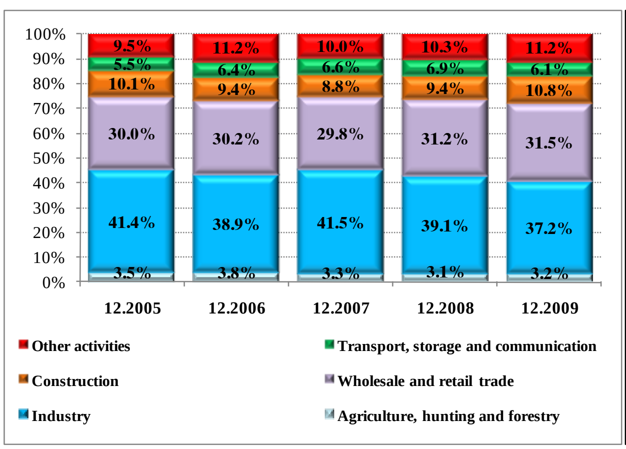
Figure 2.3.6
Structure of total credits to nonfinancial entities by sector and annual growth rates



Source: NBRM, based on data submitted by the banks

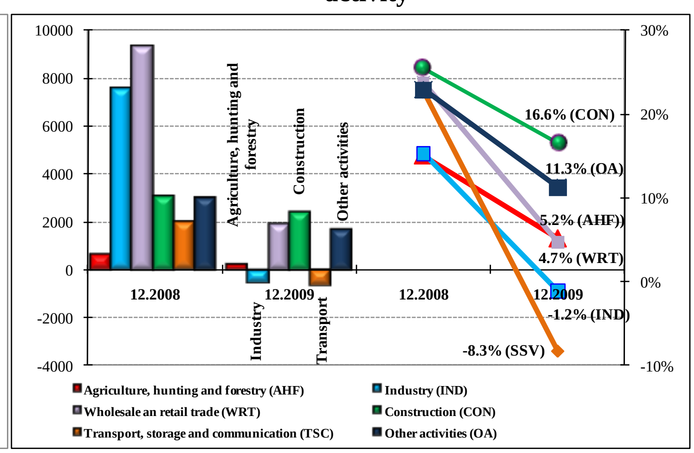
Household credits increased by Denar 1,752 million, constituting 30.2% of the increase in total credits. Such pace of lending to some sectors triggered no significant changes in the sector structure of total credits. At the end of 2009, corporate credits had a dominant structural share of 60.6%, while the share of household credits in the structure of total credits equaled 39.2%.

Figure 2.3.7
Structure of the credit exposure to enterprises and other clients, by their activity



Source: NBRM, based on data submitted by the banks

Figure 2.3.8
Absolute and relative annual change in the credit exposure to enterprises and other clients, by their activity



In 2009, credit exposure by activity was characterized with various developments, from increase in the exposure (construction), through slowdown (retail and whole sales), to decrease in the exposure (industry, and transport, storage and communication). In spite of such developments, the lending exposure to corporate and other clients sector by activity registered no significant structural changes. The exposure to industry remained dominant in the structure of total credit exposure.

Figure 2.3.9
Structure of the credit exposure to households, by type of credit product

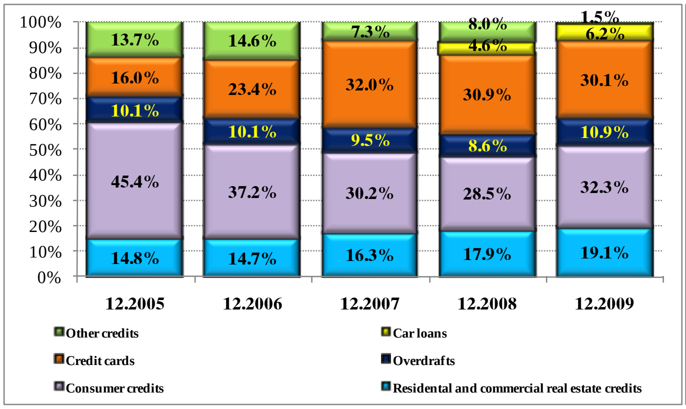
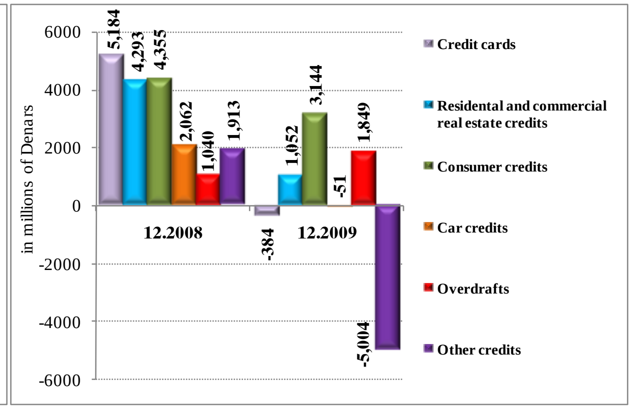


Figure 2.3.10
Absolute annual change in the credit exposure to households, by type of credit product



Source: NBRM, based on data submitted by the banks

Credit products to households also registered various tendencies. The consumer credits reported the fastest absolute growth, yet, in a slower pace compared to the preceding year. An increase was registered in the residential and business premises credits and overdraft credits. The decrease in category of other credits mostly results from the reentries made by the banks and adequate recognition of the types of household credit products. The structure of total credit exposure to households shows that the consumer credits and credit cards still remain the most important types of credit products the banks offer to this sector.

Figure 2.3.11
Dynamics of the number of issued payment cards

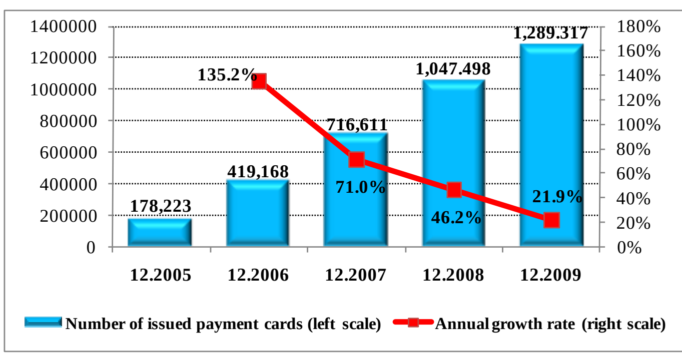
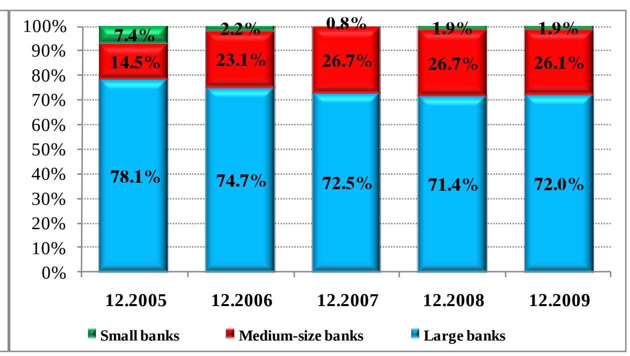


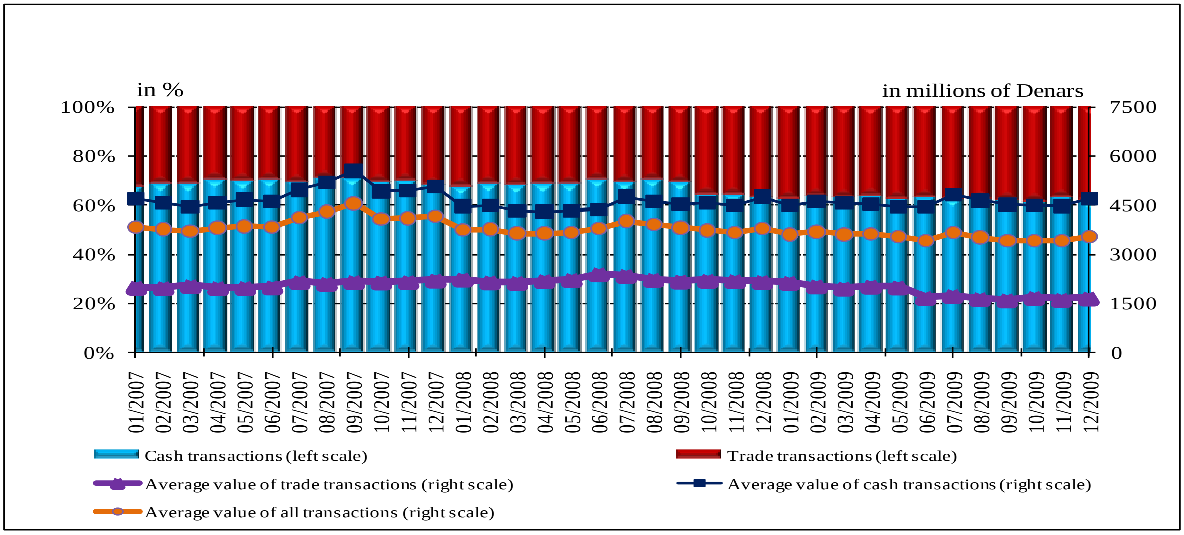
Figure 2.3.12
Structure of issued payment cards by groups of banks



Source: NBRM, based on data submitted by the banks

In 2009, the growth of banks' payment card operations also slowed down.

Figure 2.3.13
Structure of payment cards transactions (according to total value) and average value of a transaction

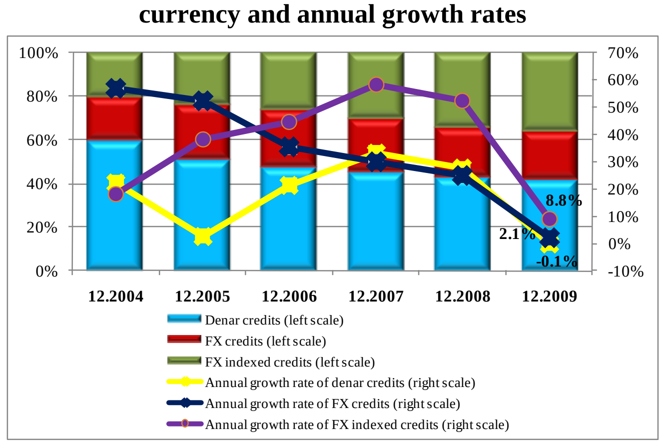


Source: NBRM, based on data submitted by the banks

The number of payment cards issued by the banks slowed down, as expected, taking into account the high number of payment cards issued to clients. Cards are still mostly used for withdrawing cash, rather than for trade payments. In 2009, the value of trade transaction also went down (by 18.4%), compared to the value of cash payment transactions which registered a marginal annual increase (of 0.3%). Most of the payment cards in circulation were issued by the group of large banks.

The currency structure of total credits is dominated by credits with currency component (currency indexed credits in foreign currency and in Denars), in spite of their significantly slower growth pace. 2009 was still witnessing the banks' propensity to use currency risk hedging clauses, which is noticeable through the permanent increase in the share of currency indexed credits. The currency indexed credits in Denars reported the fastest annual growth and made the highest contribution (of 87.2%) to the annual growth of total credits to nonfinancial entities. Conversely, Denar credits registered a negative annual growth rate for the first time over the recent years, which contributed to the additional decrease in their share in the total credits to nonfinancial entities.

Figure 2.3.14
Structure of total credits to nonfinancial entities by currency and annual growth rates



Source: NBRM, based on data submitted by the banks

Figure 2.3.15
Structure of credits to enterprises and other clients by currency

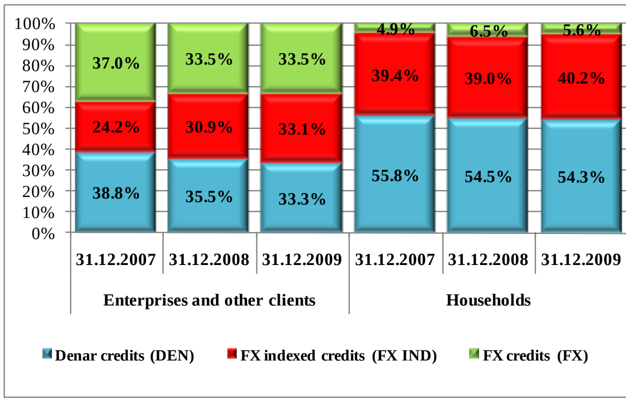
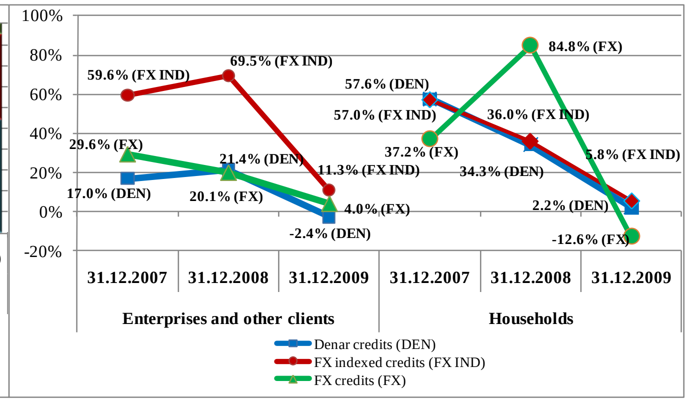


Figure 2.3.16
Annual growth rate of credits to enterprises and households by currency



Source: NBRM, based on data submitted by the banks

Same as in the preceding years, credits with currency component constituted most of the credit support to the corporations and other clients sector. In 2009, the growth rates of currency indexed credits in foreign currency and in Denars significantly slowed down, and the growth rate of corporate Denar credits was negative.

The household Denar lending kept on dominating the currency structure of total credits, with the foreign currency credits registering an insignificant share. On the other hand, the currency indexed credits in Denars went up by Denar 1,506 million on annual basis, thus making the greatest contribution (86.0%) to the upward trend of the total household credits.

Figure 2.3.17
Currency structure of credits by activities

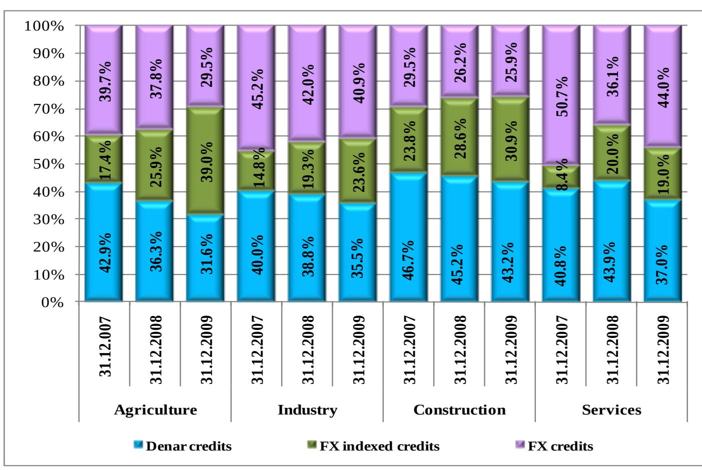
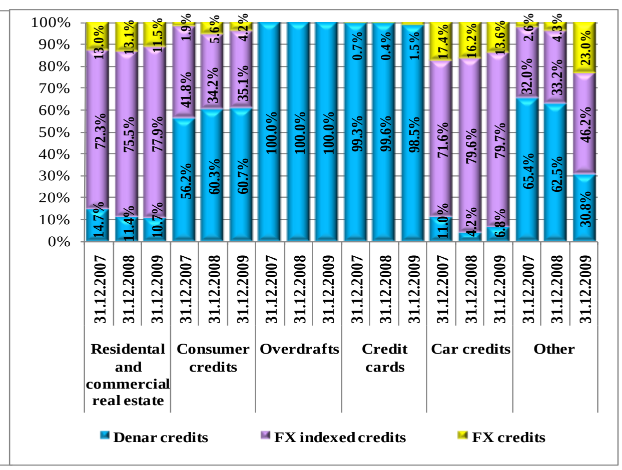


Figure 2.3.18
Currency structure of credits by credit products



Source: NBRM, based on data submitted by the banks

Observing the maturity, the long-term credits remained dominating the structure of total credits to nonfinancial entities, although their growth was slower compared to 2008. Short-term lending registered a negative growth rate on annual basis.

Figure 2.3.19
Maturity structure of the total credits of nonfinancial entities

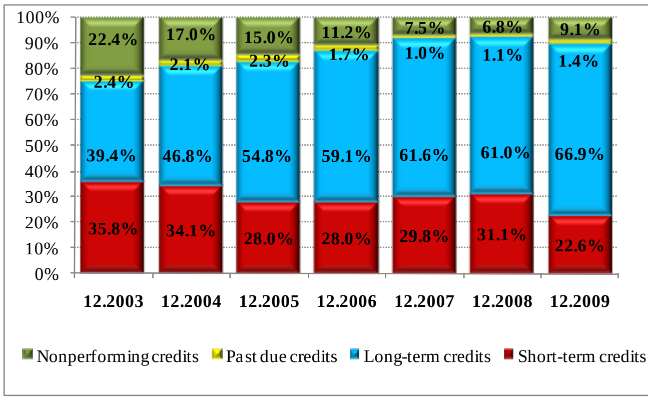
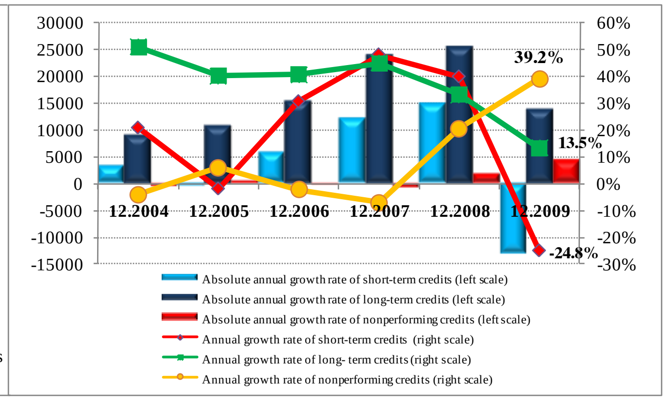


Figure 2.3.20
Annual growth rates of the total credits by maturity



Source: NBRM, based on data submitted by the banks

Such growth was most evident in the household credits, determining 82.7% of the total fall of short-term credits. As a result of such developments, the structural share of short-term credits in the total credits to nonfinancial entities registered a significant decrease compared to the preceding year.

The quality of banks' credit portfolio deteriorated due to the higher share of nonperforming and due credits in the total credits to nonfinancial entities. Continuing the growth trend from 2007, nonperforming and due credits registered an annual increase of Denar 4,442 million and Denar 507 million, respectively, hence, increasing their share in the structure of total credits. In 2009, nonperforming credits registered the highest annual growth rate compared to the preceding six years.

Table 2.3.3
Distribution of credits to nonfinancial entities, by groups of banks

Structure of credits		31.12.2008				31.12.2009			
		Large banks	Medium-size banks	Small-size banks	Total	Large banks	Medium-size banks	Small-size banks	Total
Sector structure	Enterprises	71.3%	26.7%	2.0%	60.0%	71.4%	26.7%	1.9%	60.6%
	Households	65.4%	32.2%	2.4%	39.5%	68.3%	29.3%	2.4%	39.2%
	Other clients	68.0%	7.6%	24.4%	0.5%	54.4%	44.8%	0.9%	0.2%
Maturity structure	Short-term	75.4%	22.8%	1.8%	31.1%	72.5%	26.1%	1.4%	22.6%
	Long-term	65.7%	32.4%	1.9%	61.0%	70.0%	28.2%	1.8%	66.9%
	Past-due	54.5%	40.3%	5.2%	1.1%	64.7%	31.3%	4.1%	1.4%
	Non-performing	71.2%	21.2%	7.6%	6.8%	66.4%	28.1%	5.5%	9.1%
Currency structure	Denar	70.9%	24.8%	4.3%	43.0%	78.1%	18.5%	3.5%	41.5%
	FX indexed	63.4%	35.5%	1.2%	34.1%	58.9%	39.4%	1.7%	35.9%
	FX	73.7%	26.2%	0.1%	22.9%	73.4%	26.4%	0.1%	22.6%

Source: NBRM, based on data submitted by the banks

The group of large banks had a dominant share in the overall lending activity on all bases. Significant differences were registered neither in the sector nor in the maturity structure of all groups of banks. All groups of banks reported a prevalence of corporate and long-term lending.

Table 2.3.4
Structural features of credits to nonfinancial entities, by groups of banks

Structure of credits		31.12.2008			31.12.2009		
		Large banks	Medium-size banks	Small-size banks	Large banks	Medium-size banks	Small-size banks
Sector structure	Enterprises	62.1%	55.7%	53.6%	61.7%	58.3%	54.5%
	Households	37.4%	44.2%	41.0%	38.1%	41.3%	45.4%
	Other clients	0.5%	0.1%	5.4%	0.2%	0.4%	0.1%
	Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
Maturity structure	Short-term	33.9%	24.6%	25.0%	23.3%	21.3%	15.2%
	Long-term	58.2%	68.8%	49.8%	66.8%	68.0%	58.4%
	Past-due	0.9%	1.6%	2.6%	1.3%	1.6%	2.7%
	Non-performing	7.0%	5.0%	22.6%	8.6%	9.2%	23.7%
	Total	**99.9%**	**100.0%**	**100.1%**	**100.0%**	**100.0%**	**100.0%**
Currency structure	Denar	44.2%	37.0%	81.7%	46.2%	27.6%	68.9%
	FX indexed	31.3%	42.1%	17.4%	30.1%	50.9%	29.5%
	FX	24.5%	20.9%	0.9%	23.7%	21.5%	1.6%
	Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

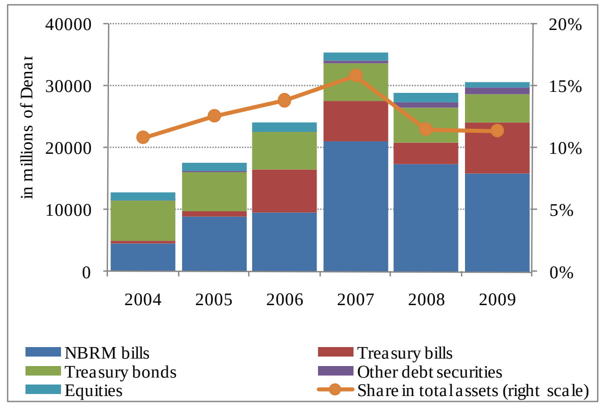
Source: NBRM, based on data submitted by the banks

The group of small-size banks reported a permanent high share of nonperforming credits. **Observing the currency structure,** the group of large and medium size-banks reported higher lending with currency component, unlike the domination of Denar lending reported by the group of small-size banks.

2.4. Securities portfolio

In 2009, securities portfolio of the banking system increased primarily as a result of the higher banks' preference to invest in treasury bills. On December 31, 2009, the securities portfolio totaled Denar 30,639 million, while the treasury bills (which in 2008 almost halved), increased by considerable 143.6% or by Denar 4,828 million in 2009. 2009 witnessed a currency transformation of treasury bills, which from Denar treasury bills were almost entirely transformed into currency indexed bills in Denars. On the other hand, the CB bills continued with the downtrend that started in the preceding year.

Figure 2.4.1.
Dynamics of the bank's securities portfolio

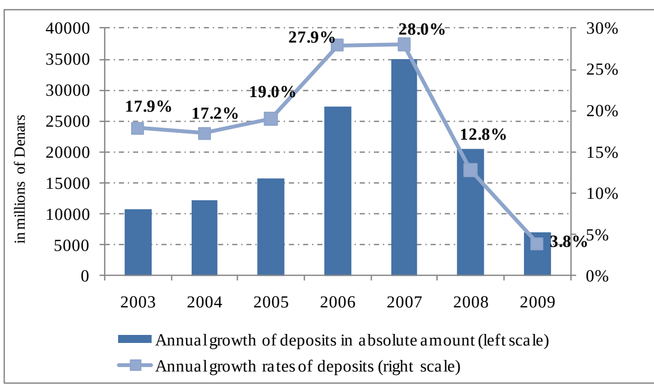


Source: NBRM based on data submitted by the banks

2.5. Bank deposit activity

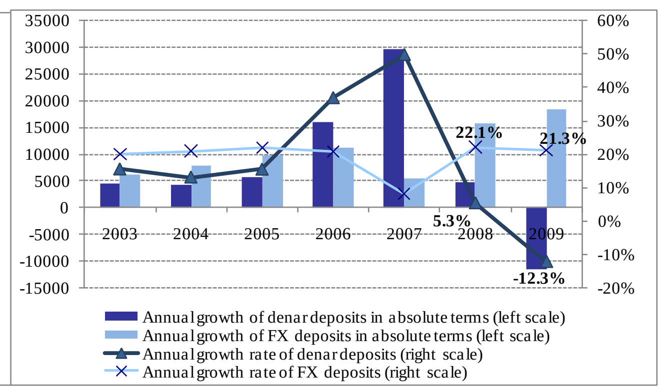
As a result of negative economic developments, amidst psychological pressures on the domestic entities and their uncertainty regarding the effects and duration of the financial crisis, banks deposits registered a slower growth. The deposit base currency also transformed, particularly in the first half of the year. In 2009, the downtrend of the deposit growth rate, evident in the last two years, continued. Thus, on December 31, 2009, after seven years, the growth rate of total deposits touched the bottom; it was by three times lower compared to the preceding year, and some months of the year reported even negative growth of deposits. On December 31, 2009, the deposits of nonfinancial entities total Denar 187,875 million.

Figure 2.5.1.
Annual changes in the total deposits



Source: NBRM based on data submitted by the banks

Figure 2.5.2.
Dynamics of the deposits by currency structure



The intensive currency transformation of deposits was evident through the permanent growth of foreign currency deposit (on December 31, 2009, the annual growth rate equaled 21.3%), accompanied with a decrease in Denar deposits[14] (by 12.3%). **Denar deposits went down for the first time in the last seven**

[14] Denar deposits also include currency indexed deposits in Denars, constituting 4.7% of the total deposits.

years. Accordingly, the structural share of Denar deposits in total deposits went down by as much as 8 percentage points, whereas the share of foreign currency deposits increased.

Figure 2.5.3.
Contribution of the Denar and foreign currency deposits in the total deposit growth

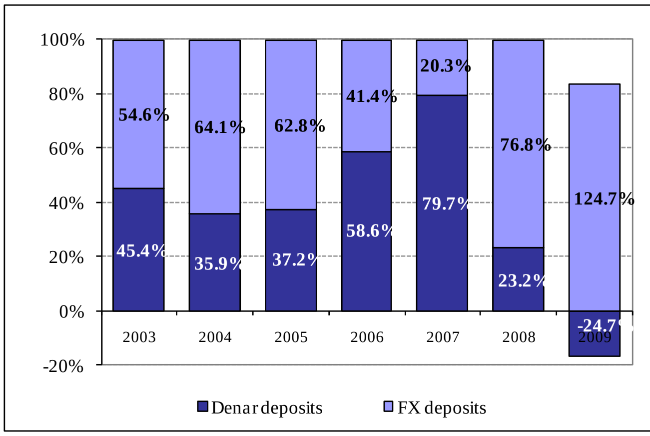
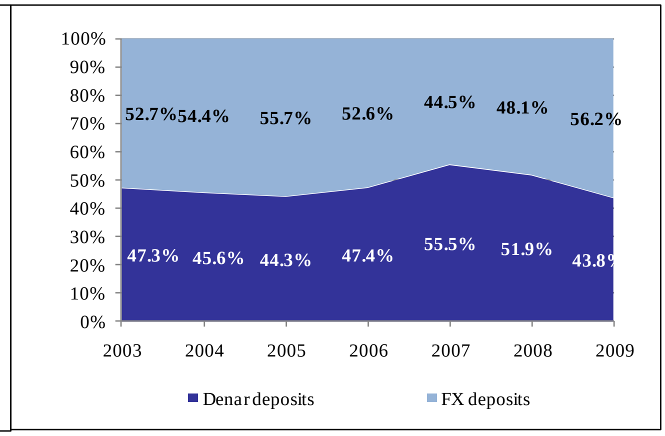


Figure 2.5.4.
Currency structure of the total bank deposits



Source: NBRM based on data submitted by the banks

From 2007, the growth rate of corporate deposits kept on decreasing, and at the end of 2009 showed a negative value of as much as 11.2% for the first time. Consequently, corporate deposits reduced their share in the sector structure of total deposits, whereas the share of household deposits went up, a trend registered over the last four years. Observing the deposit structure by sector, the household deposits still dominate. In 2009, they registered a growth rate of over 3.4 percentage points, compared to 2008, which is significantly lower compared to the last several years.

Figure 2.5.5.
Annual growth in the deposits by sector

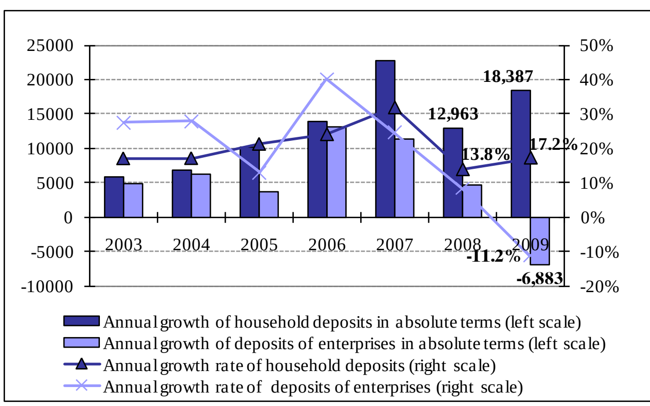
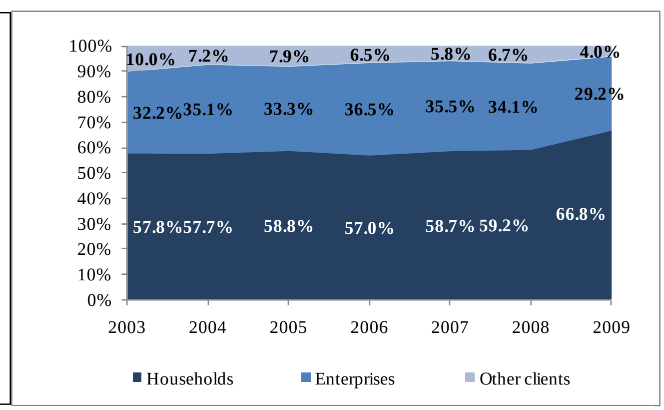


Figure 2.5.6.
Sector structure of the total deposits



Source: NBRM based on data submitted by the banks

The analysis of deposit maturity shows that, in spite of the uncertainty surrounding the domestic entities and the generally lower propensity to save, the long-term deposits with maturity of over one year registered the fastest increase. Such growth was a result of the banks' interest rate policy that encouraged savings on a longer run. Such developments contributed to the improvement of maturity structure of banks' deposits, where the long-term deposits increased the share in the maturity structure of total deposits by 3 percentage points. Unlike the higher long-term savings, sight deposits reduced by as much as 7.3% for the first time in the last seven years. These deposits have decreased their share in total deposits over the last few years. Compared to 2003, their share almost halved.

Figure 2.5.7.
Absolute annual deposit growth by maturity

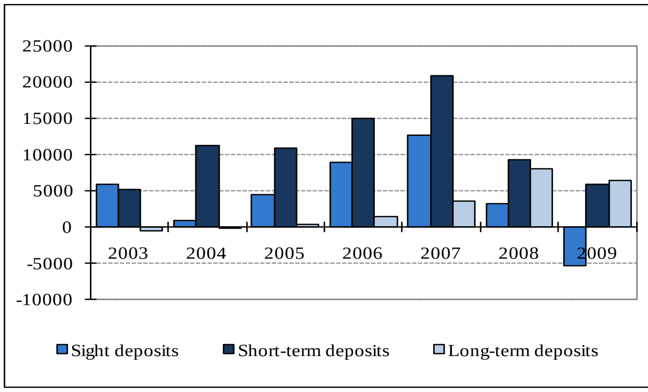
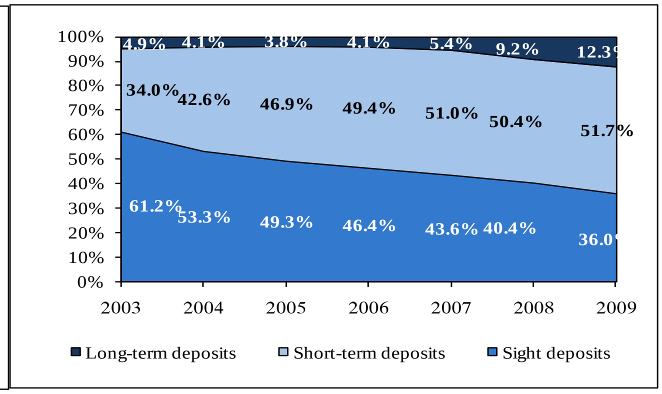


Figure 2.5.8.
Maturity structure of the total bank deposits



Source: NBRM based on data submitted by the banks

Observing by group of banks, the group of large banks still dominates in every aspect of the deposit analysis (sector, maturity and currency structure).

Table 2.5.1.
Deposit distribution by group of banks, as of December 31, 2009

Groups of banks	Sectoral structure				Maturity structure				Currency structure			
	Enterprises	Households	Other clients	Total	Sight deposits	Short-term deposits	Long-term deposits	Total	FX deposits	Denar deposits	Denar deposits with foreign exchange	Total
Large banks	27,9%	68,6%	3,6%	100,0%	36,4%	52,2%	11,4%	100,0%	56,4%	38,9%	4,8%	100,0%
Medium-size banks	32,5%	63,2%	4,3%	100,0%	33,2%	51,5%	15,2%	100,0%	58,6%	37,2%	4,2%	100,0%
Small-size banks	37,8%	49,0%	13,1%	100,0%	50,6%	39,1%	10,4%	100,0%	30,3%	61,0%	8,8%	100,0%

Source: NBRM based on data submitted by the banks

Table 2.5.2
Deposit structure by group of banks, as of December 31, 2009

Groups of banks	Sectoral structure			Maturity structure			Currency structure		
	Enterprises	Households	Other clients	Sight deposits	Short-term deposits	Long-term deposits	FX deposits	Denar deposits	Denar deposits with foreign exchange clause
Large banks	71,1%	76,4%	66,8%	75,2%	75,2%	69,4%	74,7%	74,1%	75,0%
Medium-size banks	25,5%	21,6%	24,6%	21,1%	22,8%	28,4%	23,9%	21,8%	20,2%
Small-size banks	3,4%	1,9%	8,6%	3,7%	2,0%	2,2%	1,4%	4,1%	4,9%
Total	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

Source: NBRM based on data submitted by the banks

According to the structural analyses by group of banks, all groups report a prevalence of household deposits, foreign currency deposits (except for the small-size banks) and short-term deposits (except for the small-size banks).

3. Bank risks

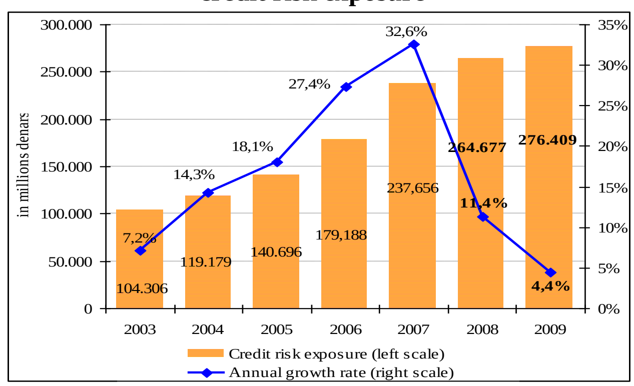
3.1. Credit risk

The Macedonian economy faced the effects of the crisis in the developed economies in 2009, both through the fall in external demand and the lower foreign currency inflows, and through the tightening of lending terms and increase in the costs for funding the domestic real sector. In such circumstances, the banks showed far lower appetite to take risks, which caused more prudential approach to their lending activity and focus on the efforts to increase liquid assets, which mainly bears insignificant credit risk. In 2009, however, the trend of deterioration of credit portfolio intensified, reflecting the increase in the exposure with higher risk level and identified impairment losses and special reserve. Additionally, the level of coverage of higher risk exposure with impairment losses and special reserve went down. These developments in the banks' credit portfolio primarily reflect the worsened business conditions of domestic borrowers, but also illustrate the embedded pro-cyclical behavior of bank activities.

3.1.1. Bank credit risk exposure[15]

The trend of slowing down the growth of credit risk exposure continued in 2009. Its annual growth rate equaled 4.4% at the end of 2009, which is the lowest growth rate over the last seven years. Major determinants of the slowdown of the growth of total credit risk exposure[16] were the negative effects on the domestic economy caused by the global economic crisis. These effects made the banks change their business behavior through reassessment of risks in the real sector, i.e. to restrain from lending and to increase liquid assets with low risk profile.

Figure 3.1.1
Dynamics and growth rate of banking system' credit risk exposure



Source: NBRM, based on data submitted by the banks

The groups of large and medium-size banks, which, prior to 2009 were major drivers of the intensive growth of credit risk exposure of the banking system, in 2009 registered the lowest annual growth rates in the last five years. The credit risk exposure of the group of small-size banks reduced compared to the preceding year. The group of large banks remained dominant in the total credit risk exposure accounting for 70.7%, which is by 1.1 percentage point higher compared to the end of 2008. The groups of medium- and small-size banks constitute 25.0% and 4.3%, respectively, of the total credit risk exposure of the banking system.

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[15] Source: This part of the Report uses data the banks submit to the NBRM, on the structure and the risk of their credit exposure.

[16] The dynamics of credit risk exposure was, to a lower extent, determined also by the narrowing of the scope and definition of the banks' credit risk exposure, in line with the new Decision on credit risk management, which started to be applied on January 1, 2009. Compared to the preceding regulation, differences occur regarding the scope and definition of credit exposure, methods and criteria for its classification by the level of credit risk, differences in the procedure for determining the impairment and special reserve for credit risk (impairment losses), etc. According to the new Decision, the total credit risk exposure does not include investments in securities and other financial instruments held for trading, measured at fair value through the income statement, investments in subsidiaries, affiliated companies and joint ventures and credit claims measured at fair value through the income statement (these positions, as of December 31, 2008, were included in the definition of credit risk exposure). On December 31, 2009, these banks' positions equaled Denar 1,583 million, making up 0.6% of the total credit risk exposure on December 31, 2009.

Figure 3.1.2
Absolute annual change of credit risk exposure by group of banks

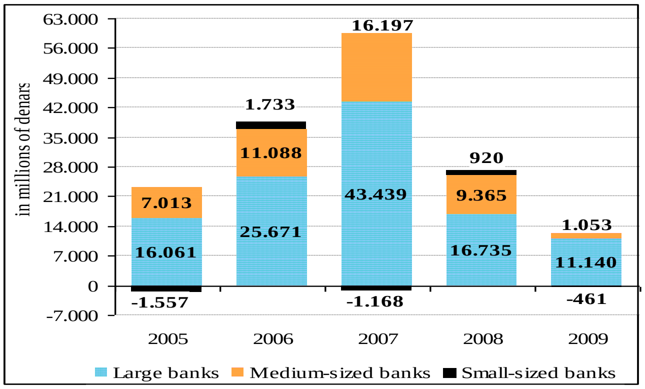
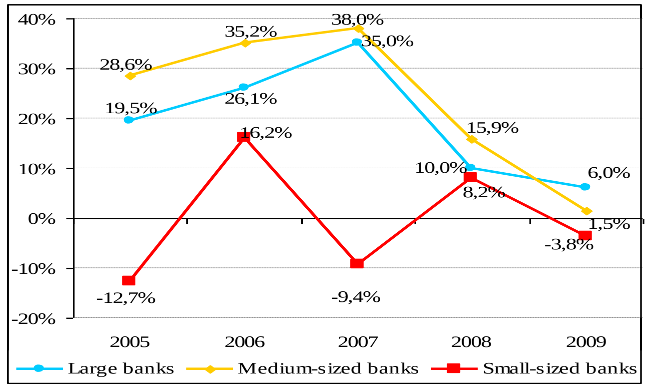


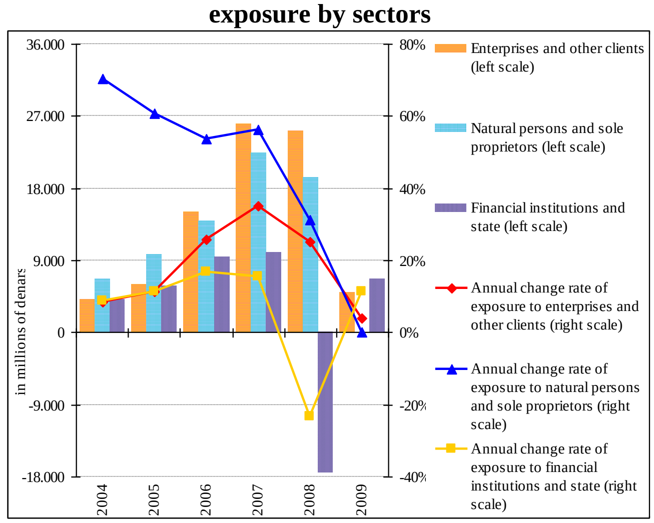
Figure 3.1.3
Relative annual change of credit risk exposure by group of banks



Source: NBRM, based on data submitted by the banks

The change in banks' business behavior during and in the wake of the crisis was most evident through the faster growth of exposure to the financial institutions and government sector, contrary to the slower growth of exposure to corporations and households. Unlike 2008, when the exposure to the financial institutions and government sector was almost halved, in 2009 this exposure registered the highest growth rate of 11.5% (Denar 6,625 million). On the other hand, the exposure to corporations and other clients sector reported an annual growth of Denar 4,985 million, i.e. of 4.0%, while the exposure to the sector of natural persons and sole proprietors[17] registered a marginal annual growth of 0.1%. The intensive exposure to the sector of financial institutions and government primarily arises from the banks' preference to place their funds in treasury bills[18], and partially from the growth of placements of accounts with foreign banks. Prudential regulatory measures undertaken by the NBRM, particularly in the area of bank liquidity management, and the tightening of monetary policy in the first half of 2009 also affected the banks' business policies.

Figure 3.1.4
Absolute and relative annual change of credit risk exposure by sectors

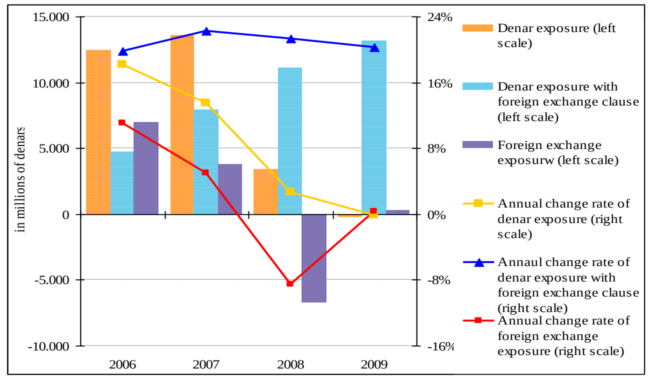


Source: NBRM, based on data submitted by the banks

[17] For the purposes of this analysis, natural persons and sole proprietors are being analyzed together.
[18] The first half of 2009, the Ministry of Finance started issuing currency indexed treasury bills. In spite of the lower return on currency indexed treasury bills compared to the CB bills, the embedded protection from currency risk proved to be attractive for the banks which placed their available funds in these instruments.

The fastest growing component in the **currency structure of credit risk exposure** was the Denar exposure with foreign exchange clause (growth of 20.3%), which also constitute the overall annual growth of total credit risk exposure. The foreign currency credit risk exposure in 2009 registered an annual growth of Denar 243 million or by minor 0.3%, whereas the Denar credit risk exposure reduced by Denar 231 million, i.e. by 0.2%. These developments contributed to the annual increase of 4.3 percentage points of the structural share of Denar xredit risk exposure with foreign exchange clause, i.e. it equaled 28.2% on December 31, 2009. The Denar exposure kept its currency dominance, making up 43.2% of the total credit risk exposure, even though it reduced its share by 5.4 percentage points.

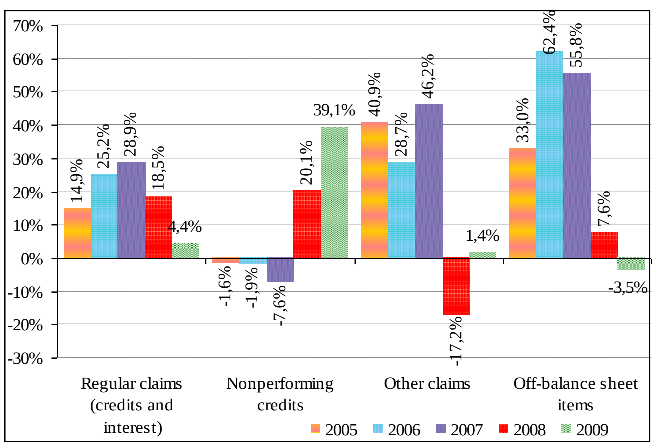
Figure 3.1.5
Absolute and relative annual change of credit risk exposure by currency structure



Source: NBRM, based on data submitted by the banks

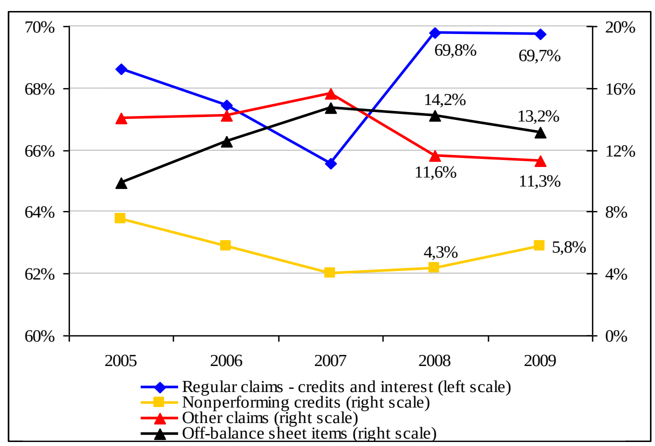
In environment of slower pace of overall credit risk exposure and lower economic activity, nonperforming loans were the fastest growing component of credit risk exposure in 2009. They reported an annual growth of Denar 4,491 million (39.1%), accounting for 5.8% of the credit risk exposure on December 31, 2009. On the other hand, undue credits and credits that matured less than 90 days ago, including the interest (for the purposes of this report: regular claims) and other claims, in 2009 registered modest annual growth rates of 4.4% and 1.4%, respectively. Yet, the regular claims remained dominant, making up 69.7% of the structure of credit risk exposure.

Figure 3.1.6
Annual rate of change of credit risk exposure by individual items (components)



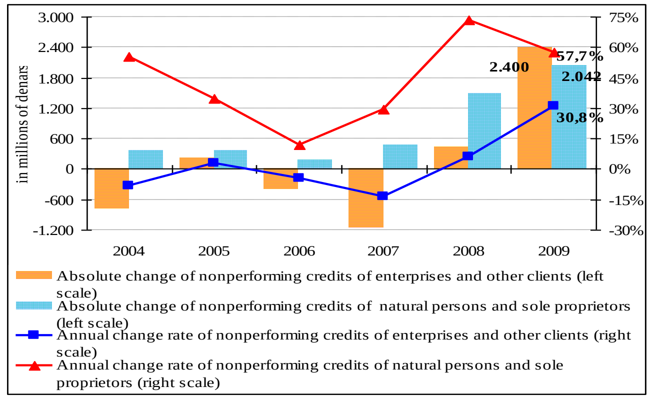
Source: NBRM, based on data submitted by the banks

Figure 3.1.7
Structure of credit risk exposure by individual items (components)



In 2009, all sectors reported higher amount of nonperforming credits. The above illustrates the deteriorated performances of domestic borrowers amidst global economic distortions and unfavorable domestic economic developments. The sector of natural persons and sole proprietors registered faster annual growth of nonperforming credits. The steeper growth of nonperforming credits of this sector primarily reflect the process of "maturing" of credit portfolio, which is relatively young and was formed under more relaxed lending terms typical for the period of credit expansion (2005 - 2007). In 2009, the growth of nonperforming credits of corporations and other clients sector accelerated, and therefore, remained dominant, constituting 63.6% of the structure of total nonperforming loans.

Figure 3.1.8
Distribution of nonperforming credits' growth by sectors



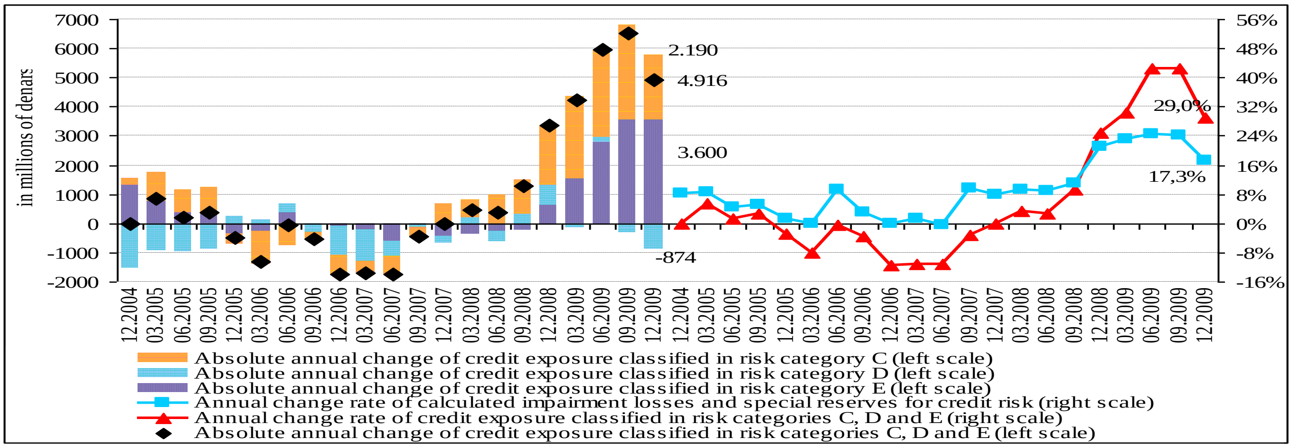
Source: NBRM, based on data submitted by the banks

3.1.2. Level of credit risk exposure in the banking system[19]

Amidst modest annual growth of credit risk exposure in 2009, the exposure classified in higher risk categories (C, D and E) registered a significantly high relative growth of 29.0%. Also, compared to the developments registered over the recent years of economic growth, in 2009, given the fall of gross domestic product, the higher risk exposure growth was faster compared to the growth of identified and calculated impairment losses and special reserve for credit risk of 17.3%. This discrepancy in the growth of identified impairment losses and special reserve and the growth of higher risk exposure provides a possibility for increase of costs related to recognition of new losses, i.e. additional provisioning of higher credit risk exposures. In 2009, three fourths of the growth of higher risk exposure was concentrated in the corporations and other clients sector.

[19] The bank credit risk assessment should also take into account the start of application of the new Decision on credit risk management, which contains changes in the method and criteria for classification of credit risk exposure, and modifications in the procedure and the method of determining the impairment and special reserve for credit risk. The new Decision allows for the banks to classify the individually important items, retail credit portfolios and group of similar financial instruments (a new category introduced by this Decision). In addition, the criteria (the new Decision defines general and special criteria) and the manner of classification of the banks' credit exposure into one of the five risk categories were also subject to changes. Impairment losses (i.e. impairment for on-balance sheet credit exposure and special reserve for off-balance credit exposure) represent the difference between the carrying value and the determined present value by discounting the expected future cash flows. Unlike before, when each risk category had its assigned percentage of special reserve, the new Decision allows intervals for determining the impairment/ special reserve for each risk category (0-10% for A, over 10 to 25% for B, over 25 to 50% for C, over 50 to 75% for D and over 75 do 100% for E). The Decision on credit risk management has been developed in line with the International Financial Reporting Standards.

Figure 3.1.9
Absolute (left) and relative (right) annual change of credit risk exposure classified in risk categories C, D and E and impairment losses



Source: NBRM, based on data submitted by the banks

Intensified migration of credit risk exposure to categories with higher risk in 2009 made the credit risk indicators for the banking system deteriorate. Thus the share of exposure classified in C, D and E risk categories in the total exposure of credit risk increased by 1.5 percentage points on December 31, 2009. The decrease in the coverage of credit risk exposure in C, D and E risk categories with impairment and special reserve is particularly significant (a decrease of 8.8 percentage points). The loss coverage, in case of full non-collectability of exposure classified in C, D and E risk categories would absorb 23.0% of the banks' own funds, which is by 2.8 percentage points more compared to the end of 2008. Additionally, the capital adequacy ratio would reduce from the current 16.4% to 12.6%.

Table 3.1.1
Credit risk indicators for the credit risk exposure of the banking system

Credit risk indicators	31.12.2006	31.12.2007	31.12.2008	31.12.2009
Average level of riskiness	6,6%	5,3%	5,8%	6,5%
Impairment losses and special reserves / Own funds	49,8%	45,8%	45,2%	51,3%
% of „C“, „D“ and „E“ in total credit risk exposure	7,6%	5,7%	6,4%	7,9%
% of „E“ in total credit risk exposure	3,5%	2,5%	2,5%	3,7%
Coverage of „C“, „D“ and „E“ with allocated impairment losses and special reserves	86,8%	94,1%	91,2%	82,4%
Coverage of nonperforming credits with calculated impairment losses for nonperforming loans	n.p	n.p	n.p	70,9%
% of „C“, „D“ and „E“ in own funds	57,4%	48,9%	49,9%	62,2%
% of „E“ in own funds	26,7%	21,2%	19,2%	28,8%
% of nonperforming credits, net of calculated impairment losses for nonperforming credits in own funds	n.p	n.p	n.p	13,2%
% of net „C“, „D“ and „E“ in own funds	19,4%	17,9%	20,2%	23,0%
% of bullet credits in total gross-credits to nonfinancial entities	15,1%	14,9%	14,8%	16,4%
% of net written-off claims during current year in total credit exposure at the end of previous year	3,7%	1,6%	0,7%	0,9%

Source: NBRM, based on data submitted by the banks

The average risk level[20] of total credit risk exposure equaled 6.5% at the end of 2009, which is by 0.7 percentage points more compared to the end of 2008. The beginning of application of the Decision on credit risk management, inter alia, created a room for segmentation of credit risk exposure by using the

[20] Average risk level is a ratio of calculated impairment losses (for on-balance sheet credit risk exposure) and special reserve (for off-balance sheet items of credit risk exposure) - to - total credit risk exposure.

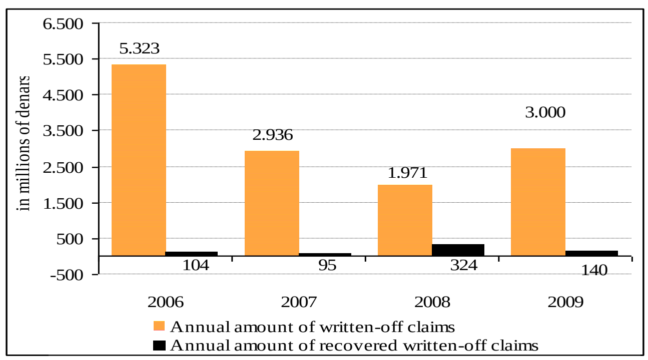
technique for determining impairment, which, in turn, provides an opportunity to determine the average risk indicators for each exposure segment. At the end of 2009, the banks determined impairment losses or special reserve for most of the credit risk exposure on individual basis, whereas less than 20% of the credit risk exposure has been classified on a group basis[21].

At the end of 2009, the average risk level of exposure classified on individual basis, calculated as a share of identified impairment losses in the credit risk exposure, equaled 7.4%. Observing by risk category, at the end of 2009, the average risk level equaled 1.0% for exposure in A risk category, 10.9% for B, 28.3% for C, 58.9% for D and 94.5% for E. This actually shows that, even though the Decision on credit risk management allowed for extending the ranges for quantification of impairment losses and special reserve for each risk category, its one-year practical application show that the banks, when calculating and allocating impairment losses by the credit risk exposure on individual basis, usually adhere to or keep close to the lower range limit, which corresponds to the minimum amount of impairment losses / special reserve which needs to be allocated.

On December 31, 2009, 89.4% of the exposure classified on a group basis is an exposure classified on a group basis in the retail credit portfolio. The average risk of such classified exposure equals 2.8%. The average risk of exposure classified on a group basis in homogenous portfolios of similar financial instruments which have not been impaired on individual basis equaled 0.3%. The relatively small amount of impairment losses and special reserve for exposure classified on a group basis could prove to be a source of contingent credit risk losses, particularly if models used for its calculation are not properly constructed and underrate losses which could arise from credit portfolios.

In 2009, the amount of written off claims went up. In 2009, the written off claims on a net-basis[22] accounted for 1.1% of the credit risk exposure at the end of the preceding year. If the banks did not write off claims in 2009, the indicators for credit risk exposure on December 31, 2009 would register even stronger negative developments. The exposure in C, D and E risk categories would make up 8.9% (instead of 7.9%) of the total credit risk exposure, and the average risk level of the total exposure would be 7.5% (instead of 6.5%). Thus, 73.3% of the written off claims in 2009 were made in the last quarter of the year, while 92.6% of the written off claims in 2009 were made by one bank. Analyzing the sector and currency structure of written off claims, written off claims on corporate sector and written off Denar claims dominate, constituting 80.7% and 64.6%, respectively.

Figure 3.1.10
Dynamics of the annual amount of net written off claims



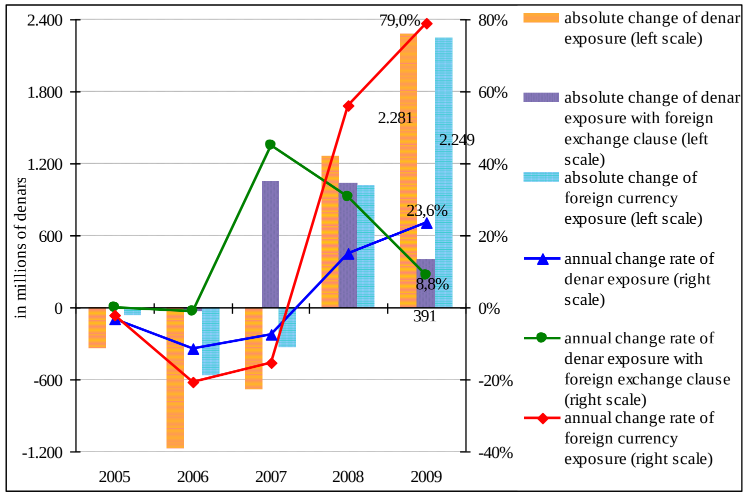
Source: NBRM, based on data submitted by the banks

[21] According to the provisions of the Decision on credit risk management ("Official Gazette of the Republic of Macedonia" no. 17/2008 and 31/2009) which started to be applied on January 1, 2009, each exposure considered an individually significant items shall be classified on individual basis by the banks. Individually significant item shall be considered an exposure to a client exceeding 300,000 or 0.007% of the total bank's credit risk exposure. Exposures not considered individually significant items may be classified on a group basis in the retail credit portfolio by the banks, and the total amount of such classified exposure may not exceed 33% of the total bank's credit risk exposure. Exposures for which, at the classification on individual basis, no impairment losses or special reserve has been allocated, will be reclassified by the bank on a group basis for similar financial instruments, in homogenous portfolios according to the credit risk affinity. There is an exception if they cannot be classified in homogenous portfolios. Impairment losses and special reserve of assets on a group basis shall be calculated by using the statistical model.

[22] The amount of written-off claims on a net basis shall be the difference between the amount of written off claims within a certain period and the amount of collected written-off claims in the same period under observation.

With respect to currency structure, in 2009, the risk level of Denar and foreign currency exposure registered a faster increase (the fastest growth of credit risk exposure classified in C, D and E). Denar and foreign currency exposure contributed with 46.3% and 45.7% respectively, to the annual exposure growth of higher risk categories. The growth in percentages of the higher risk categories in foreign currency was remarkably high and equaled 79.0% (nearly two thirds of this growth arise from one bank). Moreover, almost half of the growth of riskier categories in Denars arises from one bank. Also, major driver of the growth of exposure of riskier categories was the industry, which generated 55.9% and 33.3%, respectively, of the growth of Denar and foreign currency exposure classified in C, D and E, followed by hotels and restaurants with 19.0% and 14.3%, respectively. On the other hand, currency indexed exposure classified in C, D and E risk categories went up by 8.9% in 2009.

Figure 3.1.11
Annual absolute and relative change of credit risk exposure with higher riskiness, according to currency structure



Source: NBRM, based on data submitted by the banks

According to the currency structure of credit risk exposure, deterioration of the indicators for risk level was registered in both the foreign currency exposure and the Denar exposure. The indicators for the credit risk exposure of currency indexed exposure in Denars improved. This is due to the modest annual growth of currency indexed exposure in Denars classified in higher risk categories, and to the fast pace of growth of total currency indexed exposure in Denars, primarily arising from the banks' interest to invest in currency indexed treasury bills.

Table 3.1.2
Indicators for the risk level of credit exposure, by currency structure

Credit risk indicators	Denar exposure		Denar exposure with foreign exchange clause		Foreign currency exposure	
	31.12.2008	31.12.2009	31.12.2008	31.12.2009	31.12.2008	31.12.2009
Credit risk indicators for total credit risk exposure						
Share of „C“, „D“ and „E“ in total credit risk exposure	7,5%	10,0%	7,0%	6,2%	3,9%	6,5%
Average level of riskness	6,9%	8,5%	5,6%	5,0%	4,1%	5,1%
Calculated impairment losses for nonperforming credits / Nonperforming credits	n.p.	74,4%	n.p.	68,6%	n.p.	64,8%
Calculated impairment losses and special reserves for credit risk / Exposure in „C“, „D“ and „E“	91,8%	85,0%	80,2%	80,6%	103,1%	77,8%
Credit risk indicators for credit risk exposure without exposure to sector „financial institutions and state“						
Share of „C“, „D“ and „E“ in total credit risk exposure	9,1%	11,7%	7,9%	7,5%	5,3%	10,2%
Average level of riskness	6,9%	9,9%	6,3%	6,0%	5,4%	7,8%
Calculated impairment losses for nonperforming credits / Nonperforming credits	n.p.	74,4%	n.p.	64,2%	n.p.	68,2%
Calculated impairment losses and special reserves for credit risk / Exposure in „C“, „D“ and „E“	91,8%	84,7%	79,1%	80,2%	102,4%	76,3%

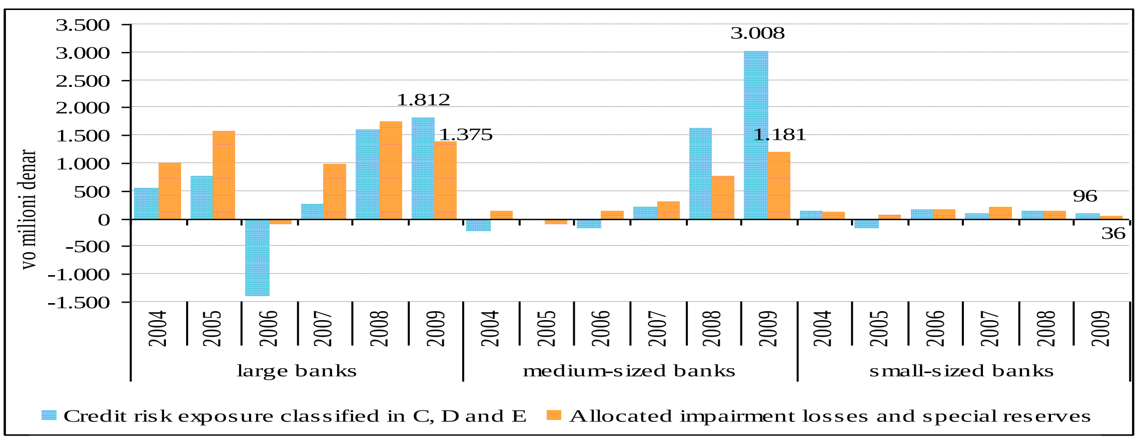
Source: NBRM, based on data submitted by the banks

Indirect credit risk arising from the banks' practice to hedge the foreign currency risk and interest rate risk by embedding currency clauses and applying adjustable interest rates[23] in credit relations with clients remained one of the major risk factors for the credit portfolio. At the end of 2009, the currency component was present in 62.0% of the exposure to corporations and other clients sector, and compared to the end of 2008, it increased by 3.7 percentage points. Exposure with currency component was also present in the exposure to natural persons sector, however with a slightly lower volume. At the end of 2009, exposure with currency component accounted for 36.9% of the exposure to natural persons, which is by 9.4 percentage points lower on annual basis. Adjustable interest rates were applied in 85.1% of credits to nonfinancial entities, being equally used in both corporate credits (82.4%) and household credits (88.9%).

The growth of credit risk exposure in 2009 in all groups of banks was faster compared to the growth of the calculated and allocated impairment losses and special reserve. The growth of exposure classified in C, D and E risk categories in the group of medium size bank was significant. Higher risk exposure in this group of banks in 2009 surged by 80.9%, i.e. Denar 3,008 million, whereas the impairment losses and special reserve registered substantially slower growth of 44.1%, i.e. Denar 1,181 million. Hence, this group made the highest contribution to the annual growth of total higher risk exposure in the banking system of 61.2%, which, to a certain extent, corresponds with the more aggressive penetration on the market and the accelerated growth of lending over the recent years by this group. Groups of small- and medium-size banks reported moderate annual growth of higher risk exposure of 15.1% and 8.1%, respectively.

Figure 3.1.12

Annual change of credit risk exposure classified in risk categories C, D and E and impairment losses and special reserves, by group of banks



Source: NBRM, based on data submitted by the banks

These developments in the credit risk exposure classified in C, D and E risk categories worsened the credit risk indicators for all groups of banks, particularly the group of medium-size banks. Notwithstanding, the average risk level of the exposure of the group of medium-size banks is lower compared to the groups of large and small-size banks.

[23] Interest rates changed with a decision of the bank's management bodies are considered adjustable interest rates.

Table 3.1.3
Credit exposure risk level indicators, by group of banks

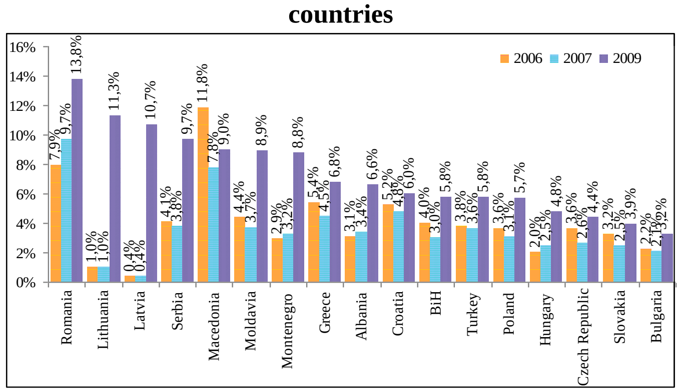
Credit risk indicators	Large banks			Medium-sized banks			Small-sized banks		
	31.12.2007	31.12.2008	31.12.2009	31.12.2007	31.12.2008	31.12.2009	31.12.2007	31.12.2008	31.12.2009
Average level of riskiness	5,8%	6,3%	6,6%	3,3%	3,9%	5,6%	8,8%	9,2%	9,9%
Impairment losses and special reserves / Own funds	67,2%	58,6%	63,3%	22,6%	29,0%	40,5%	21,7%	22,6%	23,0%
% of „C“, „D“ and „E“ in total credit risk exposure	6,2%	6,5%	7,1%	3,6%	5,5%	9,7%	9,3%	9,8%	11,0%
% of „E“ in total credit risk exposure	2,6%	2,6%	3,6%	1,2%	1,1%	3,0%	7,0%	7,2%	8,6%
Coverage of „C“, „D“ and „E“ with allocated impairment losses and special reserves	94,6%	96,5%	93,8%	91,8%	71,8%	57,4%	94,7%	94,8%	90,5%
Coverage of nonperforming credits with calculated impairment losses for nonperforming loans	n.p.	n.p.	76,3%	n.p.	n.p.	55,0%	n.p.	n.p.	86,8%
% of „C“, „D“ and „E“ in own funds	71,1%	61,0%	67,4%	24,6%	40,4%	70,4%	22,9%	23,8%	25,4%
% of „E“ in own funds	29,8%	24,6%	34,3%	8,4%	8,5%	21,7%	17,1%	17,6%	19,8%
% of nonperformng credits, net of allocated impairment losses for nonperforming loans in own funds	n.p.	n.p.	12,2%	n.p.	n.p.	21,2%	n.p.	n.p.	2,5%
% of net „C“, „D“ and „E“ in own funds	26,3%	23,7%	21,7%	11,1%	21,4%	35,8%	3,5%	4,1%	4,2%

Source: NBRM, based on data submitted by the banks

The slower growth of calculated and allocated impairment losses and special reserve acted towards decreasing of the coverage of credit risk exposure classified in C, D and E risk categories with impairment losses and special reserve. Such annual decrease was the most noticeable in the group of medium size banks, arising from the rapid growth of exposure from riskier categories of this group of banks. Also, the group of medium-size banks reported the lowest coverage of nonperforming credits with impairment losses and special reserve for nonperforming loans, and of the exposure classified in C, D and E with impairment losses and special reserve of 55.0% and 57.4%, respectively. If the existing nonperforming credits were to be fully provisioned on December 31, 2009, most of the own funds (21.2%) would be absorbed in the group of medium-size banks.

The effects of global financial disturbances were felt in almost all countries of the region. The strong role and importance of external financing for the small and open economies of the region of Central and East Europe, contributed to the contraction of economic activity, lower capital inflows and reduction of foreign trade. These unfavorable developments in the economic environment, together with the expansive credit growth in the recent period, created conditions for increasing the share of nonperforming credits in total credits. Countries which were most affected by the global financial crisis also registered the fastest growth of the share of nonperforming credits in the total credits. The Republic of Macedonia is at the upper part of the list of analyzed countries, but the relative growth of this indicator was slightly slower, which corresponds with the milder fall of gross domestic product in 2009, compared to the remaining countries under observation.

Figure 3.1.13
Share of nonperforming credits in total credits, by countries



Source: IMF - Global financial stability report October 2009
Data on individual countries are the last available data in 2009, except for the data on Albania and Romania, which are as of December 31, 2008. Data on Greece and Bosnia and Herzegovina are taken from the central banks' websites. Data on the Republic of Macedonia are as of December 31, 2009 and exclude the deposits with domestic and foreign banks from the calculations, which, in the credit risk exposure structure, belong to the category of regular credits.

3.1.3 Level of credit risk exposure to the corporations and other clients sector[24]

The contraction of economic activity in the country and the stricter terms of lending, amidst contraction of external demand, in 2009 made the business conditions of the domestic companies harder. The decrease in liquidity of companies had an adverse effect on their creditworthiness, which inevitably increased the banks' risk exposure to this sector. Thus, at the end of 2009, exposure classified in C, D and E risk categories to the corporations and other clients sector registered an annual growth rate of 32.5%, which is as twice as higher compared to 2008. On the other hand, the growth of identified impairment losses and special reserve (calculated impairment losses) in 2009 was slower, and equaled 13.2%. Observing by activity, the growth of higher risk exposure was most noticeable in the industry, hotels and restaurants, and activities related to real estate, renting and business activities, which jointly constituted more than 90% of the total growth of higher risk exposure to corporations and other clients sector. On December 31, 2009, the credit risk exposure classified in C, D and E risk categories to industry was dominant, accounting for 52.0% of the total higher risk exposure to corporations and other clients sector, followed by retail and wholesale sector, which constitute 20.1%.

Table 3.1.4
Change in the credit risk exposure classified in C, D and E risk categories and in the calculated impairment losses by the exposure to corporations and other clients sector

Credit risk exposure to enterprises and other clients, by activities	Credit exposure classified in „C“, „D“ and „E“ (in million of denars)		Impairment losses calculated by banks (in millions of denars)		Absolute annual changes (in millions of denars)		Relative annual changes (in %)		Distribution of annual change (in %)	
	31.12.2008	31.12.2009	31.12.2008	31.12.2009	Exposure in „C“, „D“ and „E“	Impairment losses	Exposure in „C“, „D“ and „E“	Impairment losses	Exposure in „C“, „D“ and „E“	Impairment losses
Industry	5.724	7.847	5.263	6.135	2.123	872	37,1%	16,6%	57,3%	61,5%
Agriculture, hunting and forestry	706	684	676	550	-22	-126	-3,1%	-18,6%	-0,6%	-8,9%
Construction	1.074	937	896	768	-137	-128	-12,7%	-14,3%	-3,7%	-9,0%
Wholesale and retail trade	2.755	3.027	2.651	3.002	272	351	9,9%	13,2%	7,3%	24,8%
Transport, storage and communication	609	728	521	549	119	28	19,6%	5,4%	3,2%	2,0%
Hotels and restaurants	247	1.021	209	486	774	277	313,4%	132,5%	20,9%	19,5%
Real estate activities	157	608	306	413	451	107	287,3%	35,0%	12,2%	7,5%
Other activities	118	240	199	236	122	37	103,2%	18,6%	3,3%	2,6%
TOTAL	**11.390**	**15.092**	**10.721**	**12.139**	**3.702**	**1.418**	**32,5%**	**13,2%**	**100,0%**	**100,0%**

Source: NBRM, based on data submitted by the banks

The growth of higher risk exposure amidst modest annual increase in the total credit risk exposure to the corporations and other clients sector made the credit risk indicators for this sector demonstrate negative developments in 2009. The average level of credit risk exposure to corporations and other clients sector registered an annual increase of 0.7 percentage points, whereas the share of exposure classified in C, D and E risk categories in the total credit risk exposure to this sector increased by 1.5 percentage points. However, the banks' practice to write off claims had a considerable impact on the indicators for credit risk exposure to this sector. Thus, if we exempt the effects of the writing off of claims of this sector, i.e. assume that the banks did not write off claims in 2009, than on December 31, 2009, the indicator for the share of exposure classified in C, D and E risk categories in the total credit risk exposure to this sector would equal 13.2%, and compared to December 31, 2008, it would be by 4.1 percentage points higher. The increase in the level of risk exposure is particularly remarkable in the activities of hotels and restaurants, real estate related activity and industry. On the other hand, the average risk level and share of higher risk exposure in the

[24] Credit exposure quality indicators have been determined for seven activities, which on December 31, 2009 made up 97.3% of the total credit risk exposure to corporations and other clients sector, and 98.1% of the total calculated impairment and special reserve for the credit risk exposure to this sector.

activities of construction, and agriculture, hunting and forestry, went down compared to 2008. The highest average risk level was registered in the exposure to the activities of agriculture, hunting and forestry, industry, and hotels and restaurants.

On the other hand, the slower growth of calculated impairment losses and special reserve in 2009 acted towards decreasing the level of coverage of the credit risk exposure to this sector classified in C, D and E risk category, with impairment losses and special reserve. At the end of 2009, this indicator registered an annual decrease of 13.7 percentage points.

Table 3.1.5
Indicators for the level of risk of credit risk exposure to the corporations and other clients sector

Credit risk indicators, by activities	Date	Industry	Agriculture, hunting and forestry	Construction	Wholesale and retail trade	Transport, storage and communication	Hotels and restaurants	Real estate activities	Total exposure to enterprises and other clients
Share in total credit exposure to enterprises and other clients	31.12.2008	39,2%	3,1%	9,4%	31,2%	6,9%	3,1%	4,5%	100,0%
	31.12.2009	37,2%	3,2%	10,9%	31,5%	6,1%	2,9%	5,5%	100,0%
Average level of riskiness	31.12.2008	10,7%	17,3%	7,6%	6,8%	6,0%	5,4%	5,3%	8,6%
	31.12.2009	12,7%	13,3%	5,4%	7,3%	6,9%	12,8%	5,8%	9,3%
Share of „C“, „D“ and „E“ in total credit exposure	31.12.2008	11,7%	18,1%	9,1%	7,1%	7,1%	6,3%	2,8%	9,1%
	31.12.2009	16,2%	16,6%	6,6%	7,4%	9,2%	26,9%	8,6%	11,6%
Allocated impairment losses for nonperforming credits / nonperforming credits	31.12.2009	73,8%	72,0%	78,8%	77,4%	70,9%	65,0%	58,5%	74,4%
Impairment losses / exposure classified in „C“, „D“ and „E“	31.12.2008	91,9%	95,7%	83,5%	96,2%	85,5%	84,7%	191,5%	94,1%
	31.12.2009	78,2%	80,4%	82,0%	99,2%	75,4%	47,6%	68,0%	80,4%

Source: NBRM, based on data submitted by the banks

Almost all activities reported a decrease in the ratio between the calculated impairment losses and special reserve and the exposure classified in C, D and E risk categories. This indicator was the lowest in the activity of hotels and restaurants, and the highest in the activity of retail sale and wholesale. Additional aspect in the analysis of the level of risk exposure to this sector is its collateralization. At the end of 2009, 13.5% of the total exposure to corporations and other clients sector were not collateralized, whereas most of the exposure was collateralized with real estate (53.2%)[25].

Table 3.1.6
Indicators for the concentration of exposure to corporations and other clients sector

Concentration indicators for credit risk exposure by activities	Date	Industry	Agriculture, hunting and forestry	Construction	Wholesale and retail trade	Transport, storage and communication	Hotels and restaurants	Real estate activities	Total exposure to enterprises and other clients
Herfindahl index	31.12.2008	2.349	1.704	2.160	1.986	1.442	1.862	2.114	1.981
	31.12.2009	2.373	1.526	2.292	2.005	1.491	1.593	2.523	2.029
CR 5	31.12.2008	86,2%	79,5%	85,3%	81,6%	70,7%	79,3%	85,0%	80,7%
	31.12.2009	86,6%	79,2%	87,1%	81,6%	73,4%	79,2%	87,1%	82,0%

Source: NBRM, based on data submitted by the banks

In 2009, the slowdown of the growth of exposure to enterprises and other clients sector triggered no significant developments in the concentration of credit risk exposure to this sector. Herfindahl index for the overall exposure to corporations and other clients sector at the end of 2009 equaled 2,029 points, which is above the upper acceptable limit of 1,800 points. Analyzing by activity, the highest concentration was registered in the exposure to real estate - related activities, construction and industry, and the lowest in the transport, storage and communications.

[25] Source: NBRM, based on data submitted by banks.

3.1.4. Level of credit risk exposure to natural persons

Factors that triggered the deterioration of the quality of corporate credit portfolio also triggered the deterioration of the risk profile of credit risk exposure to natural persons. Simultaneously, the negative effects of the economic crisis on the domestic economy, inter alia, made the banks more prudent in establishing new credit risk exposures, particularly to the sector of natural persons, and, after a certain time period from the initial expansion of the household lending, they additionally worsened the indicators. Hence, in 2009, credit risk exposure to natural persons classified in C, D and E risk categories registered an annual growth of Denar 1,225 million, i.e. 25.9%. Thus, the total identified impairment losses and special reserve for exposure to natural persons, in 2009, registered a higher growth (Denar 1,403 million or by 37.8%). The greatest contribution to the annual growth of the exposure to natural persons classified in C, D and E risk categories and the identified impairment losses and special reserve, was made by the consumer credits and credit card exposure.

Table 3.1.7
Change in the credit risk exposure classified in C, D and E risk categories and in the calculated impairment losses by the exposure to natural persons sector

Credit exposure to natural persons, by products	Credit risk exposure classified in „C“, „D“ and „E“ (in millions of denars)		Impairment losses calculated by banks (in millions of denars)		Absolute annual changes (in millions of denars)		Relative annual changes (in %)		Distribution of annual changes (in %)	
	31.12.2008	31.12.2009	31.12.2008	31.12.2009	Exposure in „C“, „D“ and „E“	Impairment losses	Exposure in „C“, „D“ and „E“	Impairment losses	Exposure in „C“, „D“ and „E“	Impairment losses
Residential and commercial real estate credits	388	568	522	463	180	-59	46,3%	-11,3%	14,7%	-4,2%
Consumer credits	2.207	2.827	1.319	2.136	620	817	28,1%	61,9%	50,6%	58,2%
Overdrafts	433	335	337	522	-98	185	-22,7%	54,9%	-8,0%	13,2%
Credit cards	1.089	1.571	911	1.504	482	593	44,2%	65,1%	39,3%	42,3%
Car credits	138	269	159	211	131	52	94,5%	32,7%	10,7%	3,7%
Other credit risk exposure	482	393	466	281	-89	-185	-18,4%	-39,7%	-7,3%	-13,2%
Total credit risk exposure to natural persons	**4.738**	**5.963**	**3.714**	**5.117**	**1.225**	**1.403**	**25,9%**	**37,8%**	**100,0%**	**100,0%**

Source: NBRM, based on data submitted by the banks

The growth of higher risk exposure and the identified impairment losses and special reserve in 2009, given the minor annual growth of total exposure to natural persons contributed to significant deterioration of credit risk indicators. However, the average level of risk of the credit portfolio of natural persons is almost as twice as lower compared to nonfinancial legal entities. Yet, this indicator for exposure to natural persons went up by 1.8 percentage points on annual basis, compared to legal entities, where this indicator went up by 0.7 percentage points. The share of exposure classified in C, D and E risk categories in the total credit risk exposure to this sector rose by 1.6 percentage points. Under the assumption that banks did not write off claims on this sector in 2009, on December 31, 2009, the indicator for the share of exposure classified in C, D and E risk categories in the total credit risk exposure to this sector would be by 0.6 percentage points higher. The faster growth of impairment losses and special reserve compared to the growth of exposure to this sector classified in C, D and E risk categories, contributed to the increase of 7.4 percentage points in the coverage of exposure classified in C, D and E risk categories with impairment losses and special reserve.

Table 3.1.8
Indicators for the level of credit risk exposure to natural persons

Credit risk indicators, by products	Date	Residential and commercial real estate credits	Consumer credits	Overdrafts	Credit cards	Car credits	Total credit exposure to natural persons
Share of exposure to natural persons in total exposure	31.12.2008	17,9%	28,5%	8,6%	30,9%	6,2%	100,0%
	31.12.2009	19,1%	32,3%	10,9%	30,1%	6,1%	100,0%
Share of „C“, „D“ and „E“ in total credit exposure	31.12.2008	2,9%	10,1%	6,0%	4,6%	2,9%	6,1%
	31.12.2009	3,8%	11,3%	4,0%	6,7%	5,7%	7,7%
Average level of riskiness	31.12.2008	3,7%	6,0%	4,7%	3,9%	3,3%	4,8%
	31.12.2009	3,1%	8,5%	6,2%	6,4%	4,5%	6,6%
Allocated impairment losses for nonperforming credits / nonperforming credits	31.12.2009	52,7%	58,5%	86,8%	74,5%	61,1%	64,1%
Impairment losses / credit exposure classified in „C“, „D“ and „E“	31.12.2008	129,3%	59,7%	77,8%	83,7%	114,8%	78,4%
	31.12.2009	81,5%	75,6%	155,6%	95,7%	78,5%	85,8%

Source: NBRM, based on data submitted by the banks

Analyzed by credit product offered to households, 2009 mainly witnessed a deterioration of the risk level. The highest share of exposure classified in riskier categories was registered in the consumer credits, which dominate the total exposure to the natural persons sector. At the end of 2009, consumer credits had the highest average risk level compared to other credit products. At the end of 2009, 37.8% of the total credit risk exposure to natural persons sector was not collateralized, which is by 2.1 percentage points higher compared to the end of 2009. This relatively higher share of uncollateralized part of exposure to natural persons is due primarily to overdrafts and credit card exposures, where roughly three thirds of the exposure was not collateralized. Exposure based on residential and business premises credits was mainly collateralized with real estate (89.6% of the exposure on this basis), while car credits were mainly collateralized with movables (92.3% of this credit product).

Table 3.1.9
Indicators for the concentration of exposure to natural persons

Concentration indicators of credit risk exposure	Date	Residential and commercial real estate credits	Consumer credits	Overdrafts	Credit cards	Car credits	Other credits	Total credit exposure to natural persons
Herfindahl index	31.12.2008	2.185	1.469	3.135	5.343	2.260	5.940	2.286
	31.12.2009	2.431	1.569	2.754	5.145	2.384	1.854	2.356
CR 5	31.12.2008	87,7%	75,8%	91,7%	94,0%	89,2%	95,1%	84,3%
	31.12.2009	88,3%	79,3%	91,3%	93,3%	87,5%	85,8%	84,8%

Source: NBRM, based on data submitted by the banks

The level of concentration for the total credit risk exposure to natural persons sector and by credit product is still high. Only consumer credits reported a Herfindahl index below the upper acceptable limit of 1,800 points. Credit card exposure registered the highest concentration according to both the Herfindahl-index and the CR5 ratio.

Stress-test simulation[26] for the resilience of the banking system to the deterioration of the quality of credit exposure to corporations and other clients and / or to natural persons

In spite of the deterioration of earnings, the increase in nonperforming credits and the stricter credit policy, the banks in the Republic of Macedonia demonstrated resilience to potential credit shocks, which is also illustrated by the results from the stress test simulation. However, there is still a need of prudential monitoring of the developments in the exposure to nonfinancial entities and continuation with the prudential practices in the implementation of credit strategies and polices and credit risk management. This is particularly evident because of the relatively high correction of the indicators for credit risk exposure in the results derived from the scenarios.

The stress test simulation on the resilience of the banking system to the potential deterioration of the credit risk exposure to nonfinancial entities is based on the presumption for migration of a part of the exposure from each risk category to the next two higher risk categories, distributed equally. Other relevant assumption is that the average risk of each of the five risk categories, and therefore, the percentage used for determining the impairment losses and special reserve for redistributed exposure would remain identical as before the simulation. The purpose of simulation is to determine the potential adverse effect of the exposure migration (for both the total exposure, and exposure by sector and activity) from the existing to higher risk categories, on the capital adequacy and the risk level of exposure. **The stress test analysis was conducted by applying two scenarios:** 1) **migration of 10%** of the credit risk exposure from each risk category to the next two higher risk categories, distributed equally and 2) **redistribution of 30%** of the exposure from each risk category to the next two higher risk categories. Both scenarios were conducted for each activity within the sector of corporations and other clients, and for each credit product offered to households.

The result of this simulation for the credit risk exposure to corporations and other clients sector shows potential decrease in the capital adequacy ratio from the initial 16.4% to 15.2%, in the case of first scenario, i.e. to 12.8% in the case of second scenario. At the same time, the average risk level of exposure to corporations and other clients sector would increase from the initial 9.3% to 11.3% (in the case of first scenario), i.e. would reach 15.4% (in the case of second scenario). Analyzed by activity, the fastest decrease in the capital adequacy of the banking system would occur in case of potential migration of the exposure to larger risk level in the industry, retail sale and wholesale, of 1.4 and 1.1, respectively, in the case of second, more extreme scenario. The significant effect on the capital adequacy of the banking system, in case of potential deterioration of the risk profile of the exposure to the industry and retail sale and wholesale, primarily results from the fact that these activities constitute 37.2% and 31.5% of the total credit risk exposure to the corporations and other clients sector.

Table 3.1.10
Initial condition and results from the redistribution of the credit exposure to activities of the corporations and other client sector

	Indicators	Industry	Agriculture, hunting and forestry	Construction	Wholesale and retail trade	Transport, storage and communication	Hotels and restaurants	Real estate activities	Total exposure to enterprises and other clients
baseline	CAR of banking system	16,4%							
	% of C, D and E in total credit exposure	16,2%	16,6%	6,6%	7,4%	9,2%	26,9%	8,6%	11,6%
	Average level of riskiness	12,7%	13,3%	5,4%	7,3%	6,9%	12,8%	5,8%	9,3%
I scenario	CAR of banking system	15,9%	16,3%	16,3%	16,0%	16,3%	16,3%	16,3%	15,2%
	% of C, D and E in total credit exposure	21,0%	21,7%	11,5%	12,7%	14,1%	30,9%	14,1%	16,6%
	Average level of riskiness	14,7%	15,5%	7,2%	9,2%	8,8%	15,2%	7,9%	11,3%
II scenario	CAR of banking system	15,0%	16,3%	16,0%	15,3%	16,2%	16,2%	16,2%	12,8%
	% of C, D and E in total credit exposure	30,7%	31,9%	21,4%	23,3%	24,0%	39,0%	25,0%	26,7%
	Average level of riskiness	18,7%	19,9%	10,7%	13,1%	12,7%	20,1%	12,0%	15,4%

Source: NBRM internal calculations, based on data submitted by the banks
Note: Assumes an insulated deterioration of the quality of credit exposure to individual activities and deterioration of the quality of the total credit exposure to corporations and other activities

[26] Stress-test simulation has been conducted by using data from the Credit Registry (Credit Risk Exposure Report and calculated impairment losses by activity and by risk category) as of December 31, 2009.

Under the assumption for migration to riskier categories of the credit risk exposure to the natural persons sector, the capital adequacy ratio would decrease from the initial 16.4% to 15.6%, in the case of first scenario, i.e. to 14.1% in case of second scenario. On the other hand, the average risk exposure to natural persons would go up by 2.1 percentage points, in the case of first scenario, i.e. by 6.3 percentage points in the case of second scenario. Analyzed by credit products offered to natural persons, the fastest deterioration of the capital adequacy ratio would be caused by the potential increase in the risk level of exposure based on credit cards and consumer credits. The consumer credits would register the highest average risk, and also the largest share of exposure of higher risk categories, in the case of both scenarios.

Table 3.1.11
Initial condition and results from the redistribution of the credit exposure to the natural persons sector and based on credit products

	Indicators	Retail and commercial real estate credits	Consumer credits	Overdrafts	Credit cards	Car credits	Total exposure to natural persons
baseline	CAR of banking system	16,4%					
	% of C, D and E in total credit exposure	3,8%	11,3%	4,0%	6,7%	5,7%	7,7%
	Average level of riskiness	3,1%	8,5%	6,2%	6,4%	4,5%	6,6%
I scenario	CAR of banking system	16,2%	16,1%	16,3%	16,1%	16,3%	15,6%
	% of C, D and E in total credit exposure	8,8%	16,3%	9,6%	11,7%	10,7%	12,7%
	Average level of riskiness	5,1%	10,6%	8,1%	8,7%	6,7%	8,7%
II scenario	CAR of banking system	16,0%	15,6%	16,2%	15,6%	16,2%	14,1%
	% of C, D and E in total credit exposure	18,8%	26,5%	20,8%	21,8%	20,5%	22,9%
	Average level of riskiness	9,1%	14,9%	11,9%	13,2%	11,1%	12,9%

Source: NBRM internal calculations, based on data submitted by the banks
Note: Assumes an insulated deterioration of the quality of credit exposure to individual activities and deterioration of the quality of the total credit exposure to corporations and other activities

Under the assumption of simultaneous redistribution from lower risk categories to higher risk categories of the credit risk exposure to all nonfinancial entities (i.e. simultaneous migration registered in both corporations and other clients sector and natural persons sector), the capital adequacy of the banking system would reduce by 2.0 percentage points in the case of first scenario, i.e. by 5.9 percentage points in the case of second, more extreme, scenario. Given such migration, the share of exposure classified in C, D and E risk categories in the overall credit risk exposure in the banking system would increase by 3.8 percentage points, i.e. by 11.4 percentage points, respectively, in the case of first and second scenario.

Table 3.1.12
Initial condition and results from the potential deterioration of the quality of credit exposure to the sectors of corporations and other clients and of natural persons

	Indicators	Credit risk exposure to enterprises and other clients an to natural persons	Total exposure of banking system
baseline	CAR of banking system	16,4%	
	% of C, D and E in total credit exposure	10,1%	7,9%
	Average level of riskiness	8,3%	6,5%
I scenario	CAR of banking system	14,4%	
	% of C, D and E in total credit exposure	15,2%	11,7%
	Average level of riskiness	10,4%	8,1%
II scenario	CAR of banking system	10,5%	
	% of C, D and E in total credit exposure	25,3%	19,3%
	Average level of riskiness	14,5%	11,2%

Source: NBRM internal calculations, based on data submitted by the banks

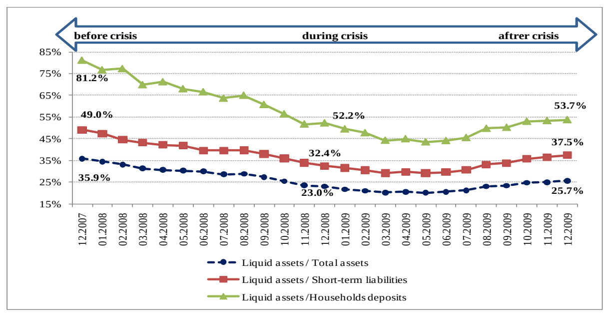
3.2. Liquidity risk

At the end of 2009, improvement in the liquidity of the banking system has been registered. The volume of the liquid assets is significantly beyond the level registered in 2008, but still below the level from 2007 (the negative effects of the global financial crisis in the banking system of the Republic of Macedonia have been felt with a delay, the first signs of the crisis began to show during 2008 and culminated at the end of 2008). The conservative liquidity management in the past enabled the banks a satisfactory accumulated level of liquid assets, which had direct influence towards stability maintenance and overcoming the tightened market conditions. The prudently regulatory measure of NBRM, introduced at the beginning of 2009, for maintenance of minimal liquidity ratios influenced on the maintenance of the banks' stable liquid position. The qualitatively improved liquidity position of the banking system can be perceived through the following: improved liquidity indicators, bigger number of banks with a liquidity ratio over 1, improved results of the performed stress test analysis, decrease in the negative gap between the assets and the liabilities from the aspect of their contractual maturity and high percentage of stable deposits.

3.2.1. Banks' liquidity indicators[27]

The negative changes with the banks' liquidity from the end of 2008, were partially present also at the beginning of 2009. Starting from the second quarter of 2009, the downward trend of the liquidity indicators ceased. On December 31,2009, all liquidity indicators improved in comparison with the end of 2008, although they are still evidently lower than in 2007. The level of coverage of the households' deposits with liquid assets[28] is lower by roughly 30 percentage points than at the end of 2007 (annex no. 13 - Liquidity indicators).

Figure 3.2.1
Monthly movement of banks' liquidity indicators



Source: NBRM, based on data submitted by the banks

The positive growth rates of the liquid assets, which were far higher at the end of 2009 than those of other components of the liquidity indicators, determine to great extent the upward dynamics of all liquidity indicators. On December 31,2009, the volume of the banks' liquid assets reached the level of Denar 67,461 million, which is far beyond the level of the liquid assets registered at the end of 2008 and in the first five months of 2009 (during the financial crisis peak in our country) and almost to the level before the global crisis effects in the Republic of Macedonia were felt (end of 2007).

[27] The calculation of the individual components for analyzing the banks' liquidity position does not take into consideration the deposits with and the credits of the domestic banks (assets components), i.e. the deposits of and borrowings from domestic banks (liabilities components).
[28] The liquid assets encompass the cash and the balances with the NBRM accounts, the CB bills, the correspondent accounts and short-term placements with foreign banks and placements in short-term securities issued by the Government.

Figure 3.2.2
Annual change in the components of the banks' liquidity indicators

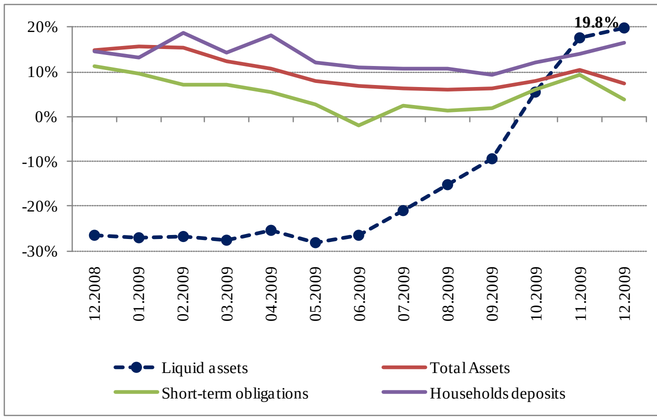
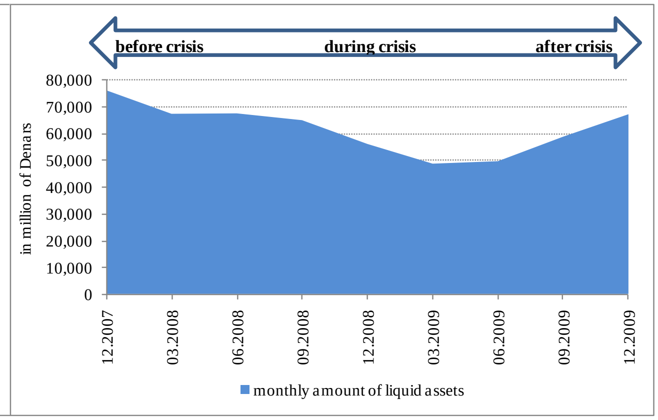


Figure 3.2.3
Movement of the banks' liquid assets



Source: NBRM, based on data submitted by the banks

At the end of 2009, the Treasury bills, although with the smallest structural share, had the largest contribution (of 43.3%) to the increase in the liquid assets. They registered the highest annual growth of Denar 4,828 million (or of 143.6%). The cash and balances with NBRM, as well as the short-term placements with foreign banks contributed to the liquid assets growth by roughly 35% each. The high level of short-term assets with foreign banks emerged as a banks' response to the requirement for compliance with the prescribed minimum liquidity levels by the National Bank[29][30], tightening of their credit policies, as well as negative expectations (in 2009 in conditions of still present uncertainty about the ultimate effects of the international crisis on the real sector in the Republic of Macedonia). Simultaneously, the high level of cash and balances with NBRM is mostly due to the amendments to the legal framework pertaining to the banks' reserve requirement (presented in details in part 2.1. Banks' activities). Opposite to all other elements of the liquid assets, the CB bills registered negative annual growth rate of 9.1%, which arises from the changes in the first half of the year. Namely, in this period, in conditions of higher risks (decrease in the economy, uncertainty about the future movements, pressures for depreciation of the domestic currency) propensity for having foreign exchange was evident, which resulted in a significant drop in the banks' interest for investment in CB bills. However, the increase in the basic interest rate of the NBRM and stabilization in the expectations contributed to the banks' redirecting of their interest to the CB bills in the second half of 2009.

[29] Since February 2009, the new Decision on managing the banks' liquidity risk became effective. This Decision, inter alia, imposed a requirement for the banks to maintain minimal level of liquidity ratio (equal to 1), defined as a relation between the on-balance sheet and off-balance sheet assets and liabilities maturing in the maturity segments up to 30 and 180 days, and especially for assets and liabilities in Denars and for the assets and liabilities in foreign currency.

[30] From January 2009, the level of stable deposits refers to the total deposits at the level of the banking system, not only to the deposits of the non-financial entities.

Figure 3.2.4
Monthly movement of the banks' liquid assets components

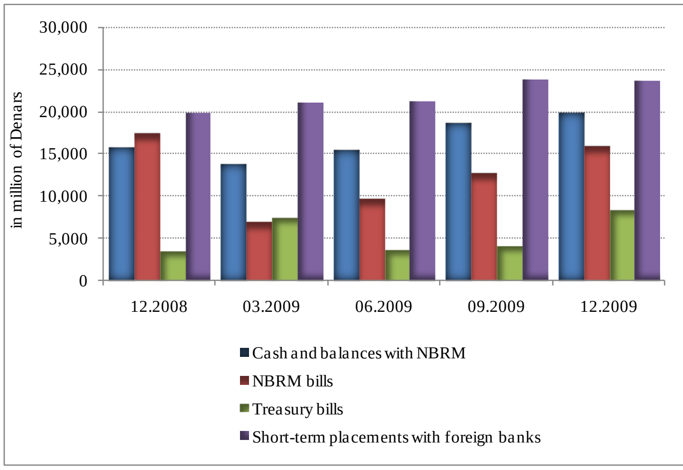
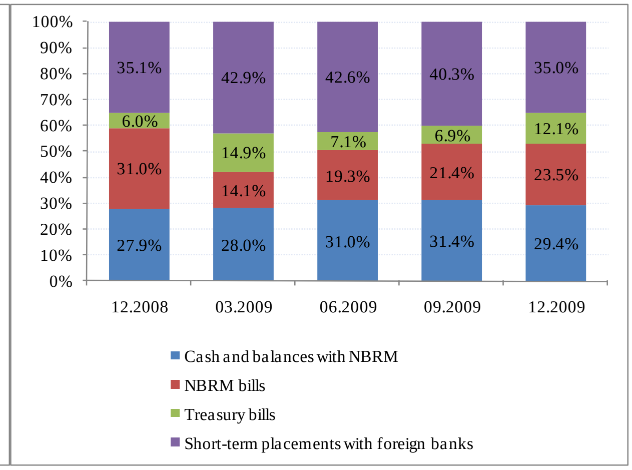
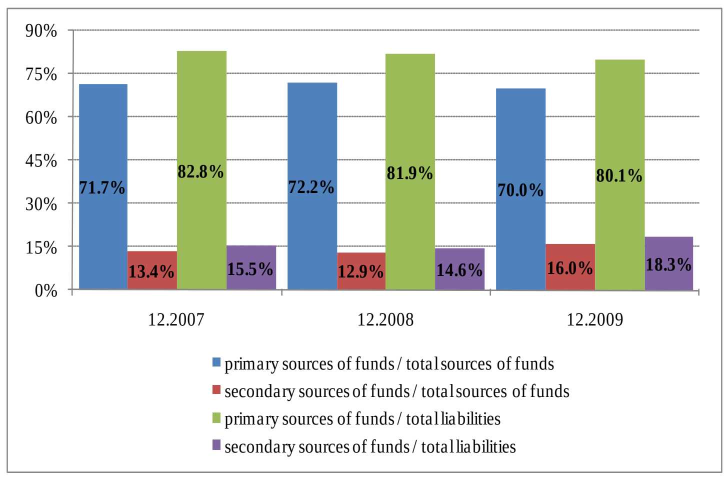


Figure 3.2.5
Structure of the banks' liquid assets by components



Source: NBRM, based on data submitted by the banks

Figure 3.2.6
Relative significance of the individual sources of funds



Source: NBRM, based on data submitted by the banks

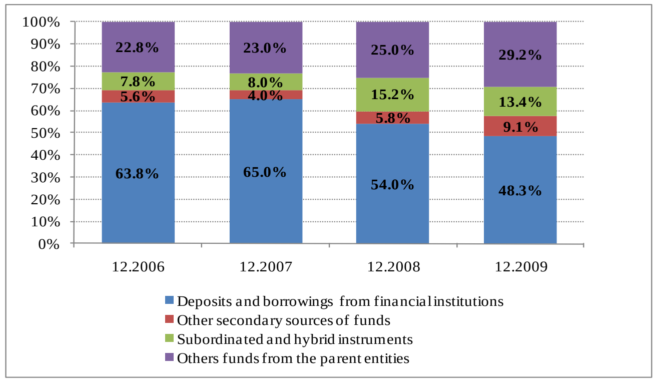
3.2.2. Sources of financing of the banking system

At the end 2009, the structure of the sources of financing of the banks is almost unchanged compared to the preceding two years. The deposits of the non-financial entities (the so-called primary sources of funds) preserved the role as the main source of financing of the banking activity, despite their significantly slower growth at the end of 2009. The indicator for the correlation between the banks' total credits and total deposits equaled 92.5%, which proves the dominance of the deposits in the sources of funds. Such a structure of the sources reduces the sensitivity of the banking system of the Republic of Macedonia to external liquidity shocks, which was one of the reasons for maintenance of its stability during the crisis. But, on the other hand, the banking system traditionally remains exposed to the classical risk of deposits withdrawal. Additionally, the financing of the activities mostly with domestic deposits, contributes to procyclical behavior of the banks in case of possible tightening of their liquidity, as well as procyclical movements with the deposits themselves. This was proven in the last two months of 2008 and in the first quarter of 2009, when the deposits registered negative quarterly growth rates. The two-digit annual growth rates of the deposits in 2008, since the beginning of 2009, were replaced with one-digit rates (on December 31,2009 the annual growth rate of the deposits reached the level of 3.8%). **On December 31, 2009, according to the banks' expectations,**

the level of the stable deposits[31] is high (83.1%) despite the decrease of 1.2 percentage points relative to 2008 and of 3.2 percentage points compared to 2007.

The secondary sources of funds have low structural share in the total sources of financing. However, their significance in the total sources of financing of the banks is mounting having in mind their annual growth of 33.3%. The deposits and the borrowings from financial institutions despite the reduced share retained the dominance in the structure of the secondary sources of funds. The used funds from the parent entities (including also the subordinated and hybrid instruments of the parent entities) increased the share in the structure of the secondary sources of funds and at the end of 2009 they reached the level of almost 40%. They also registered the highest absolute annual increase and registered the largest share (45.5%) in the total increase in the secondary sources of funds. The largest part (of about 46%) of the funds from the parent entities are in form of deposits, and about half of these deposits are placed only with one bank.

Figure 3.2.7
Structure of the secondary sources of funds

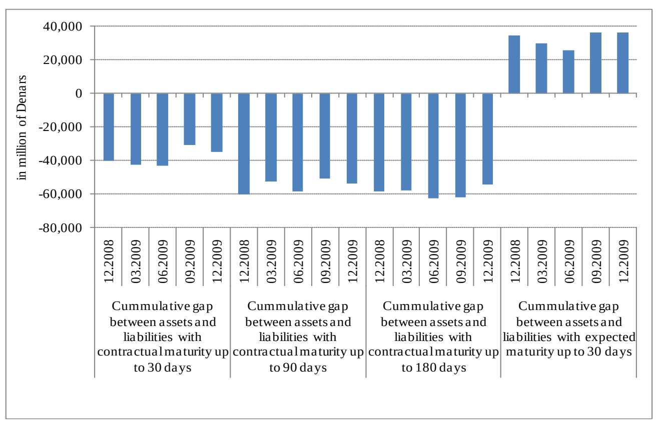


Source: NBRM, based on data submitted by the banks

3.2.3. Maturity structure of the banks' assets and liabilities

At the end of 2009, the negative gap between the assets and liabilities, from the aspect of their contractual maturity, is decreasing compared to the end of 2008. Such a situation is mostly related to the banks' slower credit activity, as well as the changes in the assets structure, towards maintaining larger amount of liquid assets with shorter maturity, which corresponds to the short-term maturity characteristic for the largest part of the liabilities. Despite the mismatch in the contractual maturity of the assets and the liabilities, according to the banks' expectations, the maturity of the assets and liabilities is harmonized, **primarily as a result of the high degree of stability of the short-term sources in conformity with their expectations.** (annex no. 14 and 15 - Contractual and anticipated maturity structure of the assets and liabilities of the banking system of December 31,2009).

Figure 3.2.8
Dynamics of the gap between the contractual and anticipated maturity of the assets and liabilities for different maturity segments



Source: NBRM, based on data submitted by the banks

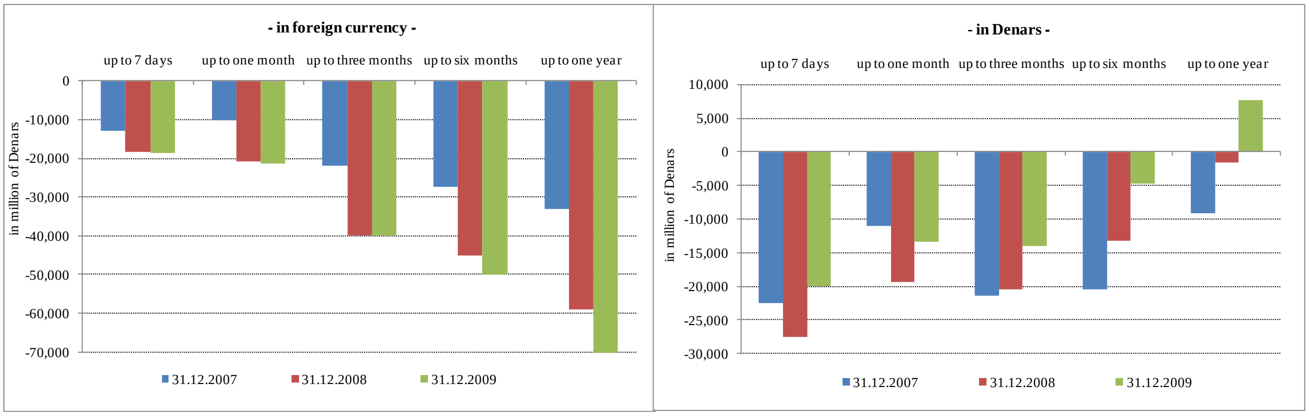
From the aspect of the gap currency structure, opposite movements can be registered. Namely, at the end of 2009, the contractual mismatch of the assets and liabilities in Denars in all maturity blocks reduced, reaching even positive gap in the maturity block of up to one year. It is mostly due to the higher

[31] Pursuant to the Decision on managing the banks' liquidity risk ("Official Gazette of RM" no. 163/08, 66/09 and 144/09) the banks shall be required, according to the prescribed dynamics, starting from March 2009, to reach the liquidity ratio for assets and liabilities in Denars and foreign currency up to 30 and 180 days, equal to 1.

placements in Treasury bills and bigger Denar cash of the banks. **Oppositely, the maturity mismatch between assets and liabilities in foreign exchange deepened,** mostly in the maturity segment of up to twelve months. This occurrence is mostly due to the bigger presence of the deposits and borrowings from their parent

Figure 3.2.9

Cumulative contractual residual maturity (mis)match of the assets and liabilities of the banking system by currency



Source: NBRM, based on data submitted by the banks

entities with some of the banks in the Republic of Macedonia.

The banks' liquidity position can be perceived also through the realization of the prescribed liquidity ratios, for both maturity segments[32]. In comparison with February 28,2009[33], the number of banks that reached and exceeded the liquidity ratio of 1, in Denars and in foreign currency in both maturity segments, incremented.

Table no. 3.2.1
Survey of the fulfillment of the liquidity ratio up to 30 and 180 days

Number of banks	Maturity segments up to 30 days								Maturity segments up to 180 days							
	in Denars				in foreign currency				in Denars				in foreign currency			
	28.02.2009	30.06.2009	30.09.2009	31.12.2009	28.02.2009	30.06.2009	30.09.2009	31.12.2009	28.02.2009	30.06.2009	30.09.2009	31.12.2009	28.02.2009	30.06.2009	30.09.2009	31.12.2009
liquidity ratio > 1	14	17	17	17	12	17	16	17	9	11	16	16	8	10	10	10
liquidity ratio < 1	4	1	1	1	6	1	2 (1)*	1	9	7 (3)*	2	2	10	8 (1)*	8 (3)*	8

Source: NBRM, based on data submitted by the banks
***Note**: the number in the brackets denotes the number of banks with liquidity ratio below 1 that failed to register the required minimal level of the liquidity ratio set for the specific date.

3.2.4. Liquidity of individual groups of banks

The improved liquidity of the banking system is almost completely due to the better liquidity with the group of large banks. Over 97% of the increase in the liquid assets of the banking system refers to the liquid assets growth with the group of large banks. Almost all liquidity indicators with the group of large and medium size banks registered an improvement and positive annual change. Worsening of the indicators can be registered only with the group of small banks, although the level of the liquidity indicators is

[32] On February 29, 2009 the banks were required to calculate for the first time the liquidity ratio introduced with the new legal framework.
[33] Quartile denotes any of the three values dividing the data series into four equal parts. The first quartile is the value dividing the first and the second quart of the series, while the third quartile is the value which divides the third and the fourth quarter. The difference between the first and the third quartile (inter-quartile range) is a measure of statistical dispersion, compiled of half of the sample with medium values. The data with highest and lowest values are excluded, thus eliminating the influence of the extreme values.

the highest in comparison with the remaining two groups. This occurrence with the small banks is totally expected regarding their significantly lower credit activity, keeping high volume of liquid assets and financing of the activities mostly with own funds.

Table no. 3.2.2
Liquidity indicators by groups of banks

Indicators	31.12.2007			31.12.2008			31.12.2009		
	Large banks	Medium-sized banks	Small-sized banks	Large banks	Medium-sized banks	Small-sized banks	Large banks	Medium-sized banks	Small-sized banks
Liquid assets / Total assets	34,7%	36,6%	48,0%	21,1%	22,6%	55,1%	25,2%	23,8%	48,5%
Liquid assets / Total liabilities	38,8%	43,6%	99,1%	23,3%	25,8%	123,5%	28,2%	27,1%	120,8%
Liquid assets / Short-term liabilities	43,3%	58,3%	136,3%	28,1%	34,8%	121,6%	34,7%	38,6%	111,6%
Liquid assets / Total deposits of non-financial entities	43,1%	53,3%	122,9%	26,6%	34,9%	113,7%	32,4%	40,6%	94,1%
Liquid assets / Households deposits	71,9%	96,0%	217,9%	42,3%	66,8%	253,0%	47,3%	64,2%	191,8%
Gross loans / Deposits	75,8%	84,3%	75,1%	89,2%	105,0%	75,7%	87,1%	112,1%	73,8%

Source: NBRM, based on data submitted by the banks

Table no. 3.2.3
Annual change in the components for the liquidity indicators by groups of banks

Banks' liquidity indicators components	31.12.2007			31.12.2008			31.12.2009		
	Large banks	Medium-sized banks	Small-sized banks	Large banks	Medium-sized banks	Small-sized banks	Large banks	Medium-sized banks	Small-sized banks
Liquid assets	16,9%	33,0%	8,5%	-30,9%	-25,6%	15,4%	31,5%	8,8%	-19,4%
Total assets	31,0%	37,2%	7,8%	13,4%	20,7%	0,4%	10,3%	3,2%	-8,3%
Total obligations	31,8%	43,9%	15,5%	15,2%	25,6%	-7,4%	8,5%	3,7%	-17,6%
Short-term obligations	34,9%	44,5%	55,4%	6,4%	24,7%	29,3%	6,5%	-1,8%	-12,1%
Total deposits of non-financial entities	31,0%	42,0%	-1,3%	12,2%	13,6%	24,7%	7,7%	-6,4%	-2,5%
Households deposits	32,1%	46,6%	4,9%	17,4%	7,0%	-0,6%	17,7%	13,2%	6,4%
Gross loans	41,2%	43,8%	4,3%	32,0%	41,6%	25,7%	5,2%	-0,1%	-4,9%

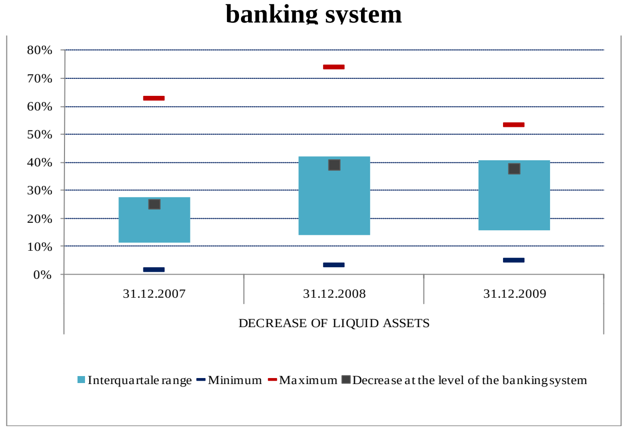
Source: NBRM, based on data submitted by the banks

Stress test simulation for the resistance of the banking system to liquidity shocks

On December 31, 2009 the stress test analysis showed that also in conditions of possible unfavorable shocks, the banks can maintain the liquidity on satisfactory level. The upward trend of the liquid assets and the improved liquid position of the banks compared to the end of 2008 caused significantly better results of both scenarios used in this analysis.

Thus in case of **simulation of withdrawal of 20% of the households' deposits outside the banking system,** the decrease in the liquid assets of the banking system is smaller, compared to the preceding year. At

Figure 3.2.10
Results of the stress-tests simulation of withdrawal of 20% of the households' deposits outside the banking system



Source: NBRM, based on data submitted by the banks

the end of 2009, contraction in the spread between the first and the third quartile[34] has been registered (which shows decrease in the negative effect on the banks from this simulation), as well as decrease in the difference between the bank with the largest percentage and the bank with the smallest percentage of decrease in the liquid assets. After the simulation, all banks manage with sufficient liquid assets for outflow coverage.

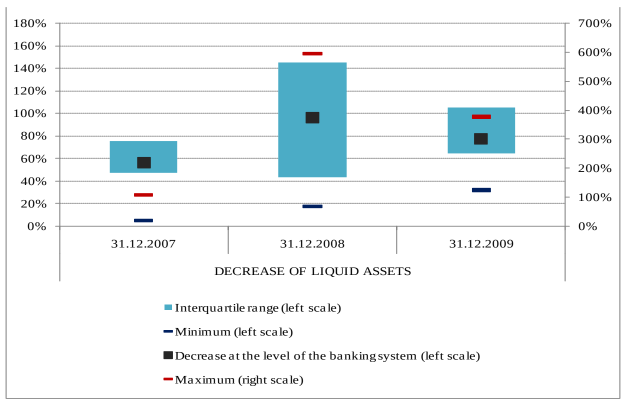
Table no. 3.2.4
The share of the liquid assets before and after the simulation

Ratios/ Results	Liquid assets / Total assets		
	31.12.2007	31.12.2008	31.12.2009
Before simulation	34,1%	22,3%	25,2%
After simulation : Withdrawal of 20% of the households' deposits outside the banking system	28,0%	14,9%	17,3%
Withdrawal of the deposits of the twenty largest depositors of each bank individually	18,6%	1,0%	7,0%

Source: NBRM, based on data submitted by the banks

The influence on the banks liquidity is more apparent when **simulate withdrawal of the deposits of the twenty largest depositors of each bank individually.** In case of this scenario, the decrease in the liquid assets is larger than according to the previous scenario, which can be explained with significantly apparent concentration of the deposits with part of the banks. Namely, on December 31,2009, the deposits concentration (of the largest 20 depositors) with part of the banks exceed 50%, and even 90%. However, in comparison with the end of 2008, significant narrowing of the spread between the first and the third quartile was registered. This points to evident improvement of the banks liquidity at the end of 2009 compared to the end of 2008. On December 31,2009, five banks registered a lack of liquid assets for covering the liabilities based on deposits of the twenty largest depositors (with six banks on December 31,2008).

Figure 3.2.11
Results of the stress-tests simulation of withdrawal of the deposits of the twenty largest depositors of each bank individually



Source: NBRM, based on data submitted by the banks

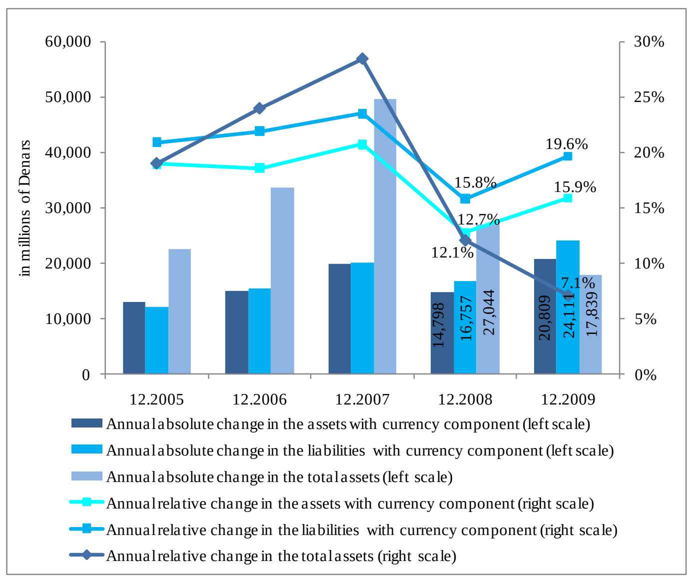
3.3. Currency risk

The euroization of the Macedonian economy has been registered also with banks where the high presence of the foreign currency component in the total assets and liabilities withhold also in 2009. The present uncertainty about the effects of the international financial and economic crisis on the domestic economy resulted in additional strengthening of the foreign currency component, especially with the deposit base. On the other hand, the worsening of the banks' credit portfolio quality with foreign currency component caused significant annual increase in the impairment of the assets with foreign currency component classified in the risk categories C, D and E (deductable item of the assets with foreign currency component). Such movements resulted in a decrease in the assets - liabilities gap with foreign currency component, i.e. their larger compliance. In 2009, the banks have been managing with the currency risk generally within the prescribed limits for aggregate foreign currency position. The analysis of both segments of the foreign currency component (in foreign currency and in Denars with FX clause) shows that the banks have long position in Denars with FX clause, but extremely short position in foreign currency.

3.3.1. Currency structure of the assets and liabilities

In 2009, the foreign currency component of the total assets and liabilities[35] registered faster growth intensification. The assets with foreign currency component registered an annual increase of 15.9% and on December 31,2009 it reached the amount of Denar 151,837 million. On the other hand, with the registered annual growth of 19.6%, the liabilities with foreign currency component reached the level of Denar 146,928 million on December 31,2009. **Opposite to such movements, the banks' Denar assets and liabilities went down** by 2,970 million (i.e. 2.5%) and Denar 6,272 million (i.e. by 4.9%).

Figure 3.3.1
Annual change in the banks' total assets and the assets and liabilities with currency component



Source: NBRM, based on data submitted by the banks

The annual increment of the assets with currency component, given simultaneous fall in the Denar assets caused rise in the share of the currency component in the total bank assets. The annual increase in the share of the currency component in the total bank assets by 4.2 percentage points arises primarily from the increase in the deposit placements with foreign banks and the reserve requirement in foreign currency allocated with NBRM, as well as on the banks investments in Treasury bills in Denars with FX clause and on the increase in the credits in Denars with FX

[35] Source: Report on the exposure to currency risk by positions (Form ODP-p). Note: The foreign currency component of the assets and liabilities of the banks encompasses the assets and liabilities items denominated in foreign currencies and in Denars with FX clause. In conformity with the Instructions for implementation of the Decision on managing the currency risk, in the fulfillment of the Report on the currency risk by positions, the banks are obliged to present the on-balance sheet items classified in the risk categories C, D and E on a net basis, i.e. reduced by the amount of the impairment. The on-balance sheet positions classified in the risk categories A and B are presented on a gross basis, i.e. they are not reduced by the amount of the impairment.

clause. On the other hand, in 2009 the CB bills placements and the Treasury bills in Denars, as well as the Denar credits extended to non-financial entities registered a decrease.

The evident currency transformation of the banks' deposits in favor of foreign currency deposits conditioned increase in the share of the currency component in the total banks' liabilities. The increase in the liabilities with foreign currency component is also partially due to the rise in the banks' liabilities based on credits in foreign currency, mostly evident in the last quarter of 2009 (in the fourth quarter of 2009 some of the banks provided new financial support primarily intended for crediting of the corporate sector). The structural changes in the liabilities have been elaborated in details in the parts Liquidity risk and Banks' activities.

Figure 3.3.2
Currency structure of the assets of the banking system

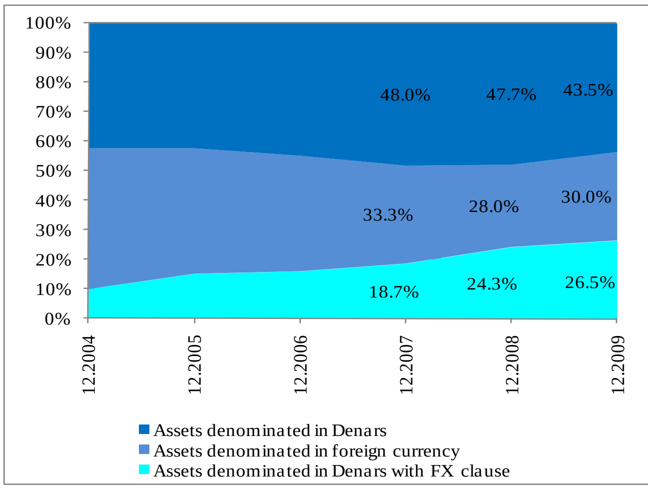
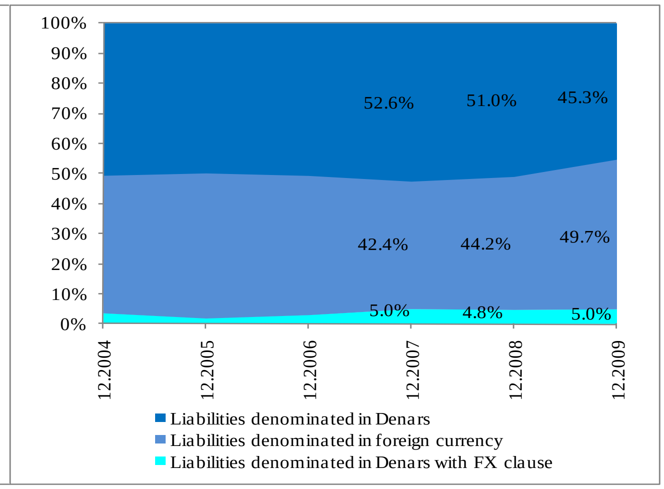


Figure 3.3.3
Currency structure of the liabilities of the banking system



Source: NBRM, based on data submitted by the banks

By groups of banks, the share of the currency component in the total assets and liabilities is the highest with the group of medium size banks. In 2009, the presence of the currency component in the total assets and liabilities augmented with all groups of banks.

Figure 3.3.4
Share of the assets with currency component in the total assets, by groups of banks

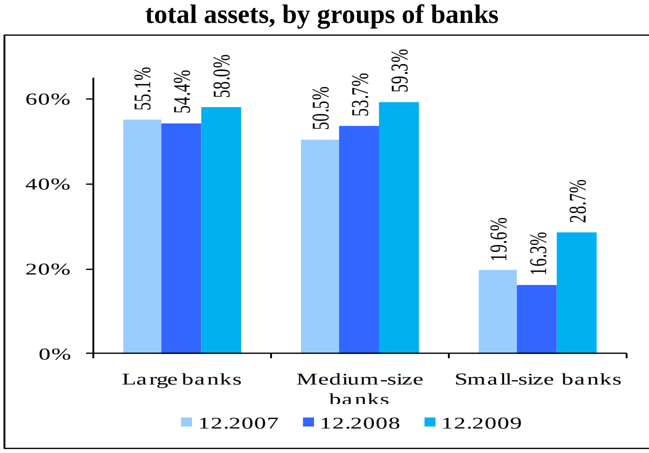
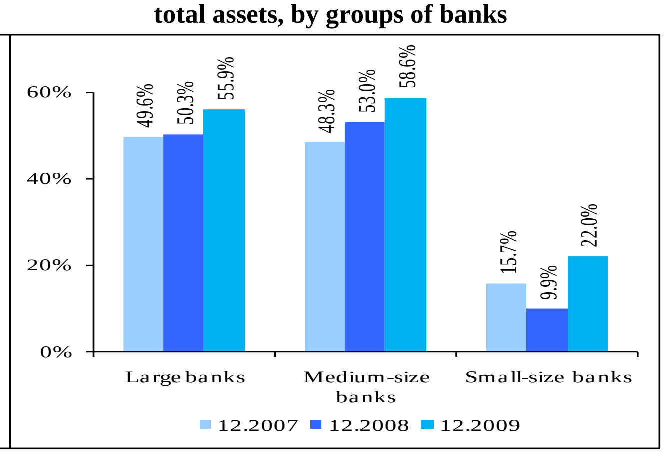


Figure 3.3.5
Share of the liabilities with currency component in the total assets, by groups of banks



Source: NBRM, based on data submitted by the banks

The currency structure of the assets and liabilities with currency component registers no significant changes. Namely, in 2009 the dominant share of the Euro in the banks' balance sheets continued to increase, for the account of the decrease in the share of the other currencies.

Table 3.3.1
Currency structure of the assets and liabilities with currency component and the gap between them

Currency	31.12.2007		31.12.2008		31.12.2009	
	Currency structure of the assets with currency component	Currency structure of the liabilities with currency component	Currency structure of the assets with currency component	Currency structure of the liabilities with currency component	Currency structure of the assets with currency component	Currency structure of the liabilities with currency component
Euro	86.8%	87.0%	88.4%	88.8%	89.9%	89.8%
US Dollar	8.2%	9.0%	7.5%	8.0%	6.9%	7.3%
Swiss franc	2.7%	2.2%	2.2%	1.6%	1.8%	1.4%
Other	2.3%	1.8%	1.9%	1.6%	1.5%	1.4%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Source: NBRM, based on data submitted by the banks

The comparison analysis with certain countries from East and Central Europe shows relatively high share of the currency component in the balance sheets of the Macedonian banks. The indicator for the share of the assets with currency component in the total assets of the banking system of the Republic of Macedonia (56.5%) is lower relative to the adequate share with five of the analyzed countries: Bulgaria, Croatia, Lithuania, Estonia and Latvia, where this indicator ranges from 56.9% to 80.5%. On the other hand, the share of the liabilities with currency component in the total liabilities of the banking system of the Republic of Macedonia (54.7%) is lower relative to Bulgaria, Estonia, Lithuania, Bosnia and Herzegovina and Latvia, where this share ranges from 60% to 75.2%.

Figure 3.3.6
Share of the assets with currency component in the total assets of the countries from Central and Eastern Europe

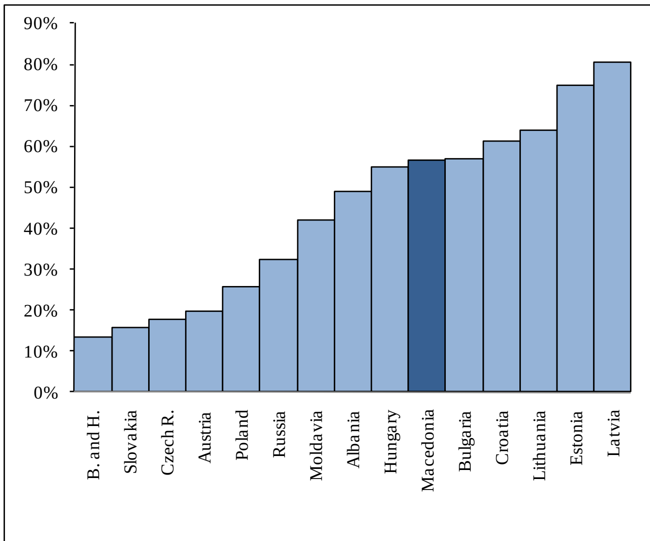
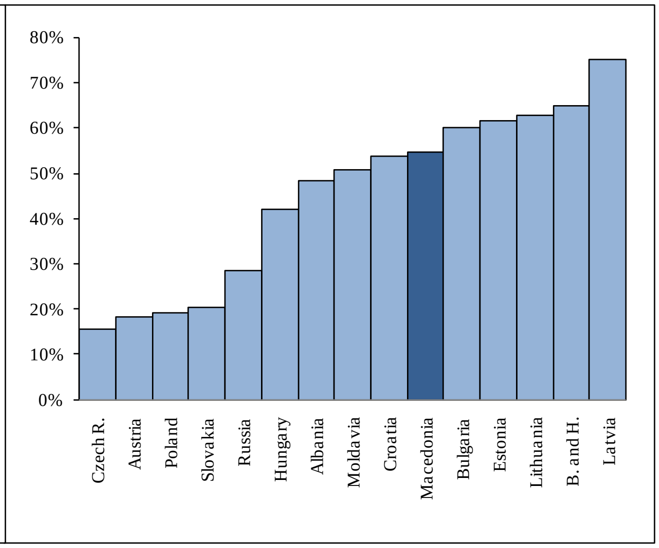


Figure 3.3.7
Share of the liabilities with currency component in the total liabilities of the countries from Central and Eastern Europe



Source: NBRM and BSCEE Review 2008

3.3.2. Movements and indicators for the banks' exposure to currency risk

The continuing gap contraction between the assets and liabilities with currency component contributed to relatively high compliance level between assets and liabilities with currency component. On December 31,2009, the gap between assets and liabilities with currency component went down by 40.2% (or Denar 3,302 million) compared to the end of 2008. This decrease, parallel to the increase in the banks' own funds, caused downward trend in their ratio, i.e. decrease in the level of the currency risk the banks are exposed to. The narrowing of the gap between assets and liabilities with currency component arises from the more apparent increase in the liabilities with foreign currency component (annual rise by Denar 24,111 million) compared to the growth in the foreign currency assets (annual increase of Denar 20,809 million). The currency transformation is mostly apparent through the currency transformation with the deposit base. The contraction of the gap between assets and liabilities with currency component arises also from the high annual increase in the impairment of the assets with currency component classified in the risk categories C, D and E by Denar 1,970 million, which conditions almost 60% of the decrease in the gap in 2009. On December 31,2009, the share in the gap between assets and liabilities with foreign currency component in the banks' own funds equaled 14.6%, which is annual decline of 10.5 percentage points.

Figure 3.3.8
Structure of the gap between the assets and the liabilities with currency component

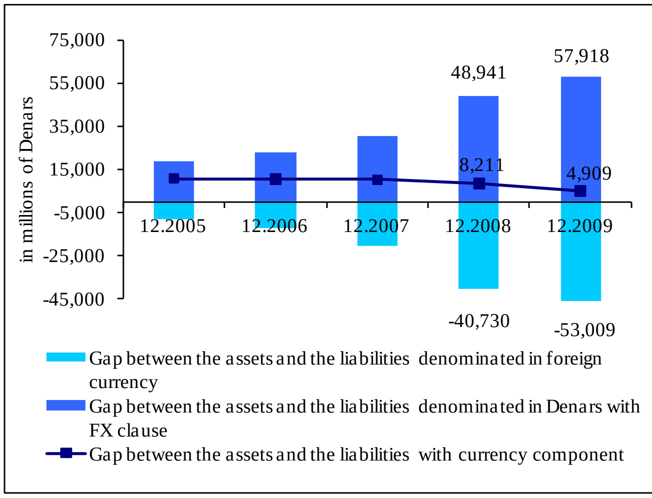
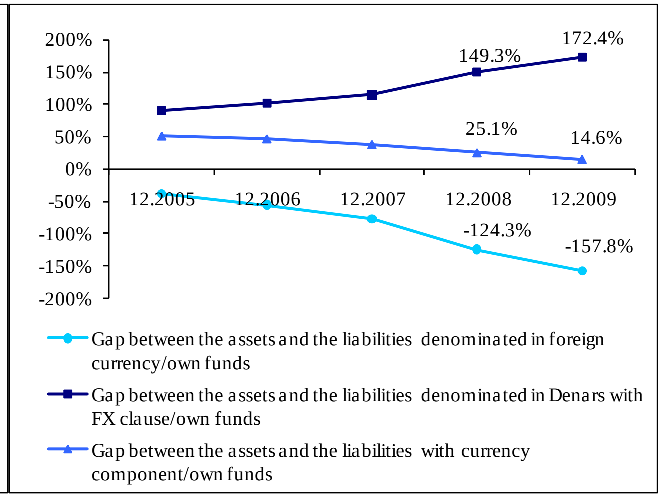


Figure 3.3.9
Share of the gap between the assets and the liabilities with currency component in the banks' own funds



Source: NBRM, based on data submitted by the banks

The analysis of the currency structure of the gap between assets and liabilities with currency component points that it is completely due to the positive gap between the items in Denars with FX clause. The gap between the items in foreign currency is constantly negative. Namely, the positive gap between the assets and liabilities in Denars with currency clause registered annual rise by Denar 8,977 million, or by 18.3% (Denar assets with FX clause registered annual growth of 17%, or by Denar 10,345 million, while the Denar liabilities with FX clause went up by 11.4%, or Denar 1,368 million). On the other hand, in 2009, the banks' negative gap between assets and liabilities denominated in foreign currency deepened by Denar 12,279 million, or by 30.1% (the assets denominated in foreign currency went up by 14.9%, or by Denar 10,464 million, while the liabilities denominated in foreign currency surged by 20.5%, or Denar 22.743 million).

According to the analysis made by currencies, the ratio between the open currency position by currency and own funds ranges up to 5% with most of the banks. This ratio fails to exceed 30% with any bank.

Table 3.3.2
Open currency position by 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%	5		11	3	9	3	14	2
from 5% to10%	1	2		1	1	1		
from 10% to 20%	5							
from 20% to 30%	4							
over 30%								

Source: NBRM, based on data submitted by the banks

The banks maintain the currency risk exposure within the prescribed limits for aggregate foreign currency position[36]. On December 31,2009, one bank of the group of large banks and two banks of the group of medium size banks registered aggregate short foreign currency position, while all other banks registered aggregate long foreign currency position.

Table 3.3.3
List of banks according to the share of the aggregate foreign currency position in the own funds

Aggregate currency position/own funds	Number of banks	
	Aggregate long position	Aggregate short position
under 5%	3	1
from 5% to 15%	5	2
from 15% to 30%	6	
over 30%		

Source: NBRM, based on data submitted by the banks

3.4. Insolvency risk

After the several year period of constant intensification of the own funds growth dynamics, in 2009 they went up with a rate which was smaller by almost seven times compared to the growth rate in 2008. This is mainly due to two reasons. First in 2009 the procyclical nature of the financing of the banks' activities by new issuance of share come to the fore (in conditions of low level of available liquid assets with potential investors, the owners and the banks management failed to decide on increasing the own funds by new issuances of shares). Second, the severe decrease in the banks' profitability in 2009 and the loss registered by some of them (the loss in 2009 is higher in comparison with 2008), caused core capital "erosion" with some of the banks. Thus the slight increase in the own funds in 2009 aroused solely from the reinvested gain from 2008 with part of the banks and higher utilization of subordinated instruments by some banks.

The effect of the sudden drop in the growth (the so-called "fall off cliff" effect) was even more apparent with the risk weighted assets, which in 2009 registered slower growth rate by thirteen times than that registered in 2008. Namely, the slower credit activity of the banks (due to the decrease in the activity of the domestic economy, and the tightened credit policy of the banks) caused slower growth of the credit risk weighted assets. Additionally, the currency transformation of the banks' deposit core and the consequent contraction of the gap between assets and liabilities with foreign currency component contributed to the decrease in the currency risk weighted assets.

The larger deceleration in the growth of the risk weighted assets compared to the deceleration in the growth in the banks' own funds resulted in certain improvement in the capital adequacy ratio, which is higher by double then the legally prescribed minimum of 8%. However the analysis of the more conservative indicators for the solvency of the banking system points to stagnated movement (Tier -1

[36] Pursuant to the new Decision, the aggregate foreign currency position can equal maximum to 30% of the bank's own funds, contrary to previous practice, when the prescribed limit equaled 50% for the long, i.e. 10% for the short aggregate foreign currency position.

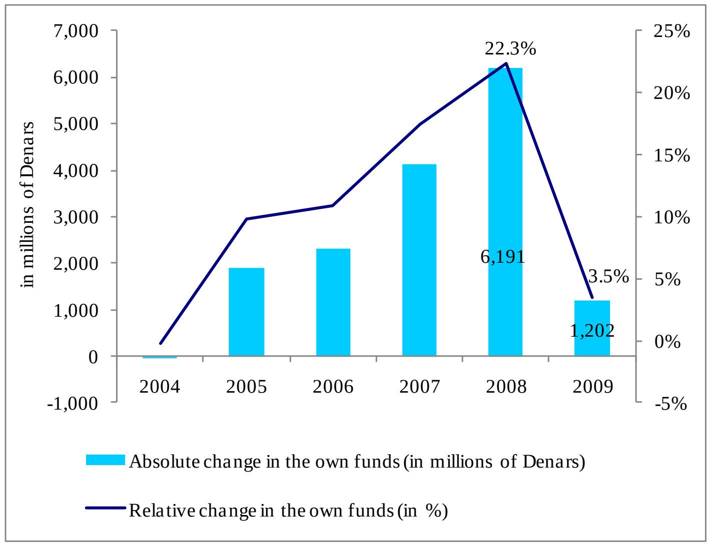
indicator), and even to worsening with some of them (the capitalization rate and TCE/TA indicator - share of tangible common equity (TCE) in tangible assets (TA).

Finding ways how to increase the own funds is the main challenge of the domestic banks in the following period, within the solvency management domain. Having in mind the lessens we learned from the global financial crisis, the latter especially refers to the systemic significant banks in the Macedonian financial system, (primarily the banks with large market shares and high degree of interdependence with other segments of the economy), the stability of which largely impacts the soundness of the financial system and the total domestic economy.

3.4.1. Own funds and risk weighted assets

In 2009, the own funds of the banking system continued to grow, although with quite smaller intensity. The moderate increase in the own funds occurs in conditions of absence of new issues of shares by the banks[37], but it results also from the relatively high amounts of loss at the end of the year registered with individual banks. The rise in the own funds is due to the increase in the core capital, i.e. profit distribution for 2008 in reserves and retained gain by the banks that registered positive financial result in the previous year. Additionally, in 2009 the utilization of the subordinated instruments continued to increase. They incremented by Denar 504 million (or 10.9%) on a net basis, contributing to the total annual growth in the own funds with 41.9%. Opposite to such movements, the loss at the end of the year, as deductable item of the banks' core capital is higher by Denar 425 million (or 78.9%), compared with the end of 2008, which was one of the reasons for the slower growth in the own funds of the banking system.

Figure 3.4.1
Annual change of the own funds at the level of the banking system



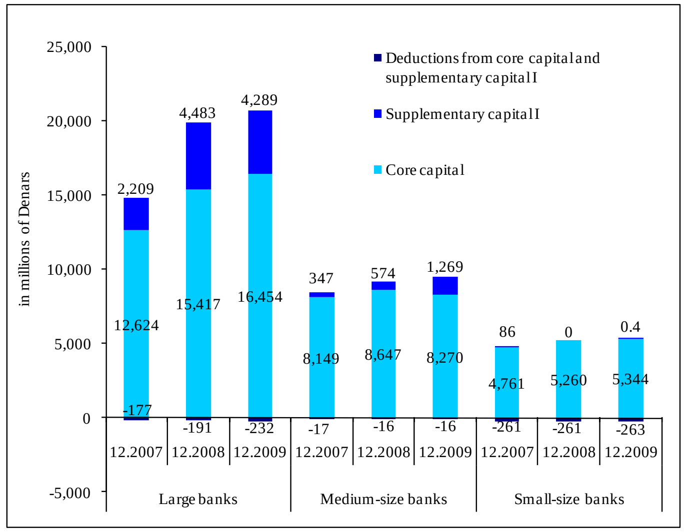
Source: NBRM, based on data submitted by the banks

The relatively quality structure is still one of the basic features of the banks' own funds. The core capital, with a share of 85.6%, is dominant item in the structure of the total own funds of the banking system. The largest portion of it (70.4%) accounts for the value of the common and non-cumulative preference shares and the registered premium of these shares. The share of the supplementary capital 1 in the banks' own funds is still small (15.8%). The largest significance in the creation of the supplementary capital 1 accounts for the subordinated instruments, at which account 92.6% of the total supplementary capital of the banks. Despite the higher utilization of the subordinated instruments, they still have small structural share in the banks' own funds (14.7%).

[37] In 2009, the amount of the paid-in and subscribed common shares increased with the Macedonian Bank for Development Promotion AD Skopje (MBPR), as a result of the transfer of funds from the bank's Guarantee Fund established with the Law on Establishing the Macedonian Bank for Development Promotion ("Official Gazette of the Republic of Macedonia no. 24/98, 6/2000, 109/2005 and 130/2008), in the initial capital of MBPR, pursuant to Article 23 of the Law on the Macedonian Bank for Development Promotion ("Official Gazette of the Republic of Macedonia no. 105/2009).

The increase in the core capital with the group of large banks was the main driving force of the annual increase in the own funds of the banking system, contributing with 86.2% in the total increase in the own funds of the banking system. In 2009, the core capital of the group of large banks registered an increase of Denar 1,037 million, as a result of the profit distribution for 2008 in reserves and retained gain with this group of banks. Oppositely, the supplementary capital with this group of banks registered annual decrease of Denar 194 million, which is completely concentrated with one bank[38]. Opposite to the large banks, **the increase in the own funds with the group of medium size banks arises exactly from the supplementary capital** (due to higher utilization of subordinated instruments with this group of banks). The core capital with the group of medium size banks went down as a direct consequence of the higher loss at the end of the year (on December 31,2009, the loss with the group of medium size banks, as a deductable item of the core capital is higher by Denar 342 million, or 99.7% larger compared to the end of 2008). **With the group of small banks, the annual increase in the own funds exclusively results from the increase in the core capital with one bank** (Macedonian Bank for Development Promotion - MBPR)[39]. If the initial capital of the MBPR is excluded, the core capital of the small banks would decline by Denar 177 million. This is a consequence from the larger loss at the end of the year, as a deductable item of the core capital (on December 31, 2009, with the group of small banks, the loss at the end of the year, as a deductable item of the core capital, is larger by Denar 83 million, or 42.3% in comparison with the end of 2008) and the decrease in the reserve fund and increase in the accumulated loss of the previous years, due to the loss from 2008.

Figure 3.4.2
Own funds by groups of banks



Source: NBRM, based on data submitted by the banks

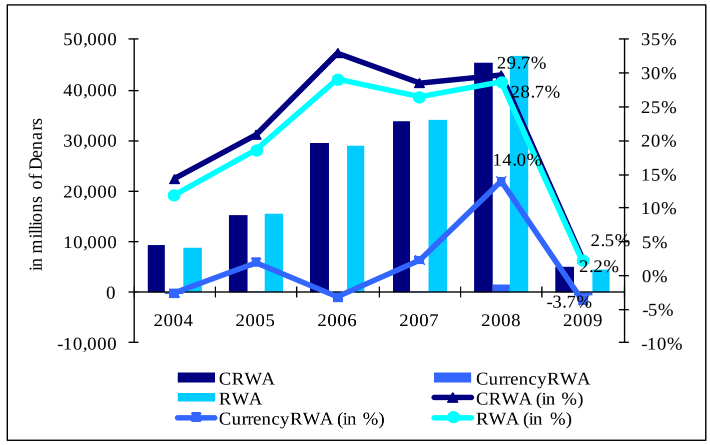
[38] Pursuant to item 16, paragraph 4 of the Decision on the methodology for determining capital adequacy ("Official Gazette of the Republic of Macedonia" no. 159/2007; 32/2008; 31/2009; 96/2009; 157/2009), in the calculation of the bank's own assets in the last five years up to the maturity or payment, the amount of subordinated instrument is discounted by 20% every year. In 2009, one of the subordinated instruments "penetrated" in one bank from the group of large banks in the last five years up to the maturity date or payment, because of which it was included in the calculation of the own funds in the amount discounted by 20%.

[39] The amount of the paid-in and subscribed common shares, as a result of the transfer of funds from the Guarantee Fund of MBPR in the initial capital of MBPR surged by Denar 261.4 million (or by 28%).

In 2009, the risk weighted assets augmented, although with significantly slower intensity. Such a movement, from one hand, is due to the slower rise in the credit risk weighted assets which corresponds to the slower dynamics of the banks' credit activity. On the other hand, it is a result of the lower gap between the assets and liabilities with foreign currency component, which contributed to the decrease in the currency risk weighted assets. Such movements in 2009 conditioned strengthening of the dominant share of the credit risk weighted assets in the total risk weighted assets, from 94.2% at the end of 2008, to 94.5% on December 31, 2009.

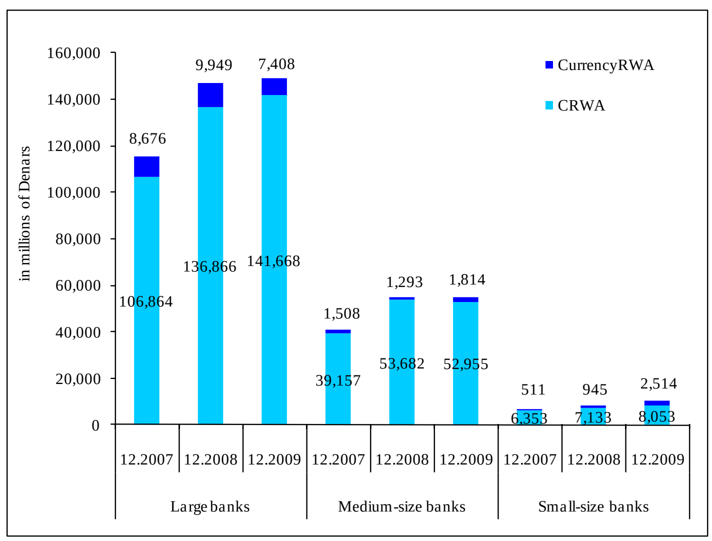
The increase in the credit risk weighted assets with the group of large banks was the main driving force of the annual growth in the risk weighted assets at the level of the banking system. In 2009, the credit risk weighted assets with the group of large banks went up by Denar 4,802 million, contributing to 96% in the total risk weighted assets in the banking system. Oppositely, the large banks registered the biggest annual decrease in the currency risk weighted assets (by Denar 2,541 million) giving the largest contribution to the annual fall in the currency risk weighted assets of the banking system. **The increase in the risk weighted assets with the group of small banks should be emphasized (by Denar 2,490 million, or by 30.8%), which mostly arises from the increase in the currency risk weighted assets (Denar 1,569 million, or 166.1%) with the small banks, totally concentrated with only one bank.**

Figure 3.4.3
Annual change of CRWA, CurrencyRWA and RWA at the level of the banking system



Source: NBRM, based on data submitted by the banks
CRWA: Credit risk weighted assets
CurrencyRWA: Currency risk weighted assets
RWA: Risk weighted assets

Figure 3.4.4
Risk weighted assets, by groups of banks



Source: NBRM, based on data submitted by the banks
CRWA: Credit risk weighted assets
CurrencyRWA: Currency risk weighted assets

The slower annual increase in the risk weighted assets compared to the rise in the own funds caused certain increase (of 0.6 percentage points) in the share of the own funds over the minimal necessary level[40] in the banks' total own funds. The main carrier of such movements were the banks from the group of large and medium size banks. The group of small banks has the highest level

[40] The minimum required level of own funds is calculated as a sum of the capital requirement for credit risk coverage (8% of the credit risk weighted assets) and the capital requirement for currency risk coverage (8% of the currency risk weighted assets). The gap between the own funds and the minimum required level of own funds represent the level of the own funds over the minimum required level.

(83.4%) of own funds over the necessary level for risk coverage. Such a situation is a reflection of the relatively high capitalization level, compared to the relatively smaller credit activity of this group of banks.

Figure 3.4.5
Distribution of own funds by risks at the level of the banking system

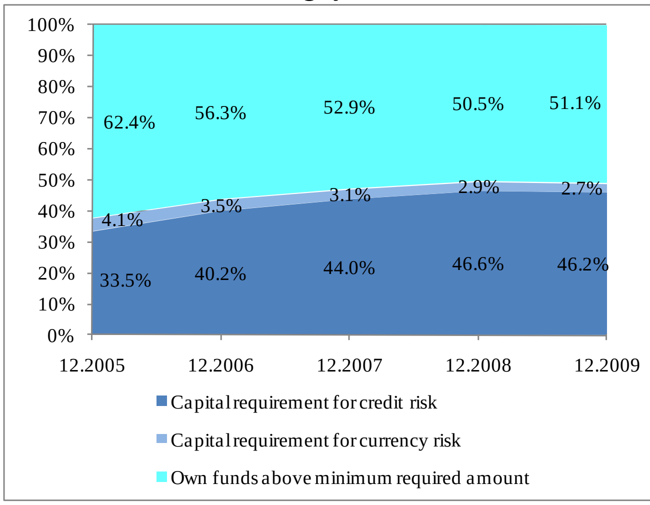
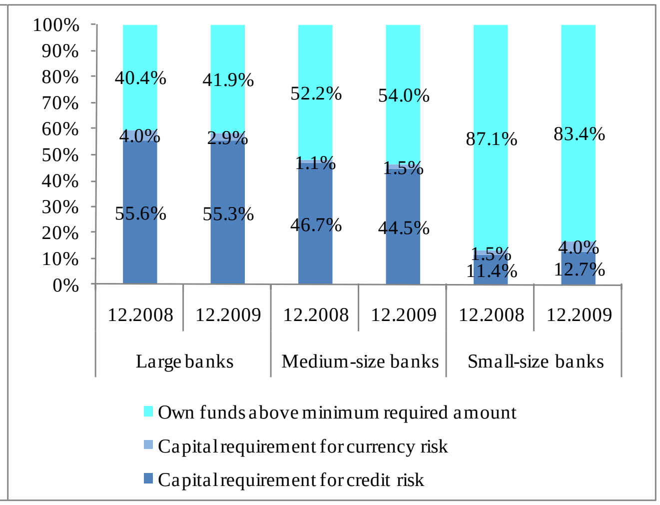


Figure 3.4.6
Distribution of own funds by risks, by groups of banks



Source: NBRM, based on data submitted by the banks

3.4.2. Indicators for the solvency of the banking system

In conditions of slower increase in the risk weighted assets, in comparison with the increase in the own funds, the capital adequacy ratio at the level of the banking system registered certain rise. On December 31, 2009 the capital adequacy ratio at the level of the banking system equaled 16.4%, which is annual increase of 0.2 percentage points.

Figure 3.4.7
Movement of the capital adequacy ratio

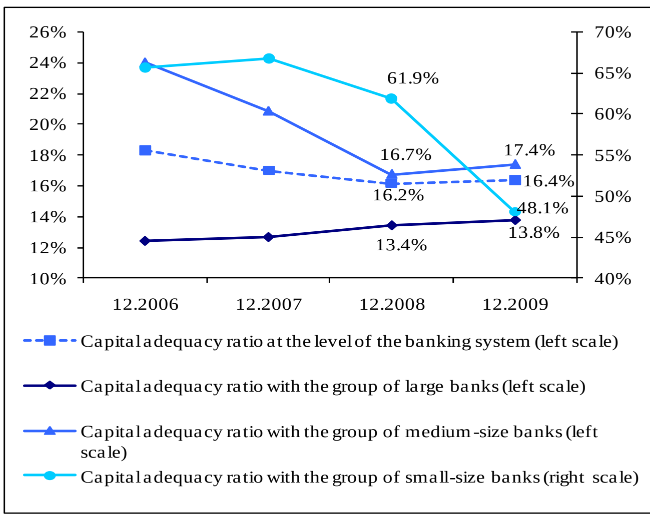
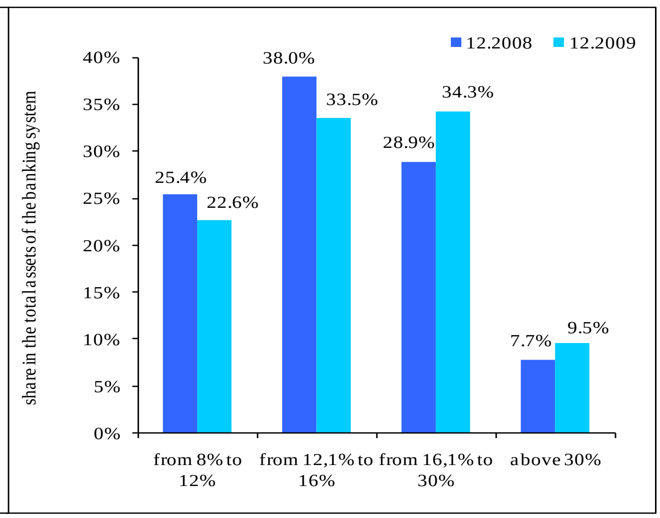


Figure 3.4.8
Distribution of the banks' assets by the capital adequacy ratio



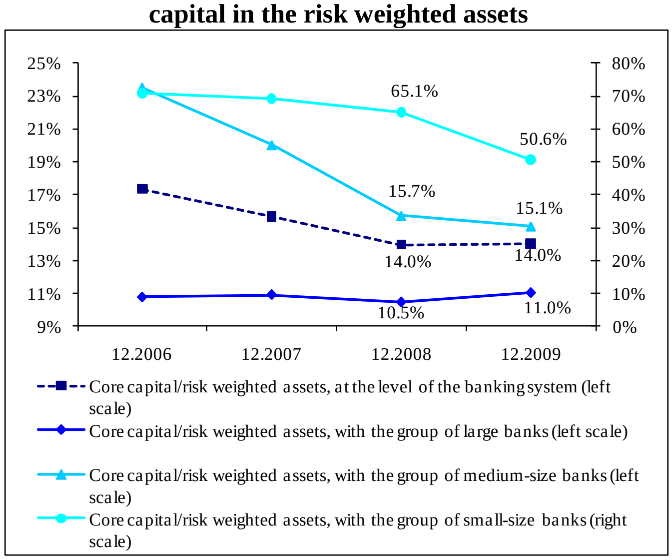
Source: NBRM, based on data submitted by the banks

As in the previous years, the group of large banks registered the lowest capital adequacy ratio (13.8%), while a capital adequacy ratio with the group of medium size and small banks equaled 17.4% and 48.1%, respectively. In comparison with December 31,2008 the capital adequacy ratio went down only with the small banks (by 13.8 percentage points).

In 2009, the share of the banks with higher capital adequacy ratio in the total assets of the banking system incremented. However, for the account of the reduced share of the banks with capital adequacy ratio within an interval from 8% to 16% in the total assets of the banking system, the share of the banks with capital adequacy over 16% increased.

The indicator for the share of the core capital of the banking system in the risk weighted assets[41] (Tier 1 indicator) registered stagnated movement. On December 31,2009 this indicator equaled 14% and it remained unchanged relative to December 31,2008. Its increase of 0.5 percentage points with the group of large banks is a result of the annual growth in the core capital of this group of banks. With the group of medium and small banks this indicator fell by 0.6 and 14.5 percentage points, respectively (with the group of medium banks the decrease in Tier 1 indicator results from the decrease in the amount of the core capital, while with the small banks, this indicator reduced as a result of the increase in the risk weighted assets.

Figure 3.4.9
Movement of the indicator for the share of the core capital in the risk weighted assets



Source: NBRM, based on data submitted by the banks

In 2009, the capitalization rate[42] of the banking system equaled 11.4% and it registered a minimal decrease of 0.1 percentage point compared to the end of 2008. This decrease mainly arises from the annual drop in both the capital and the reserves with the group of medium and small banks.

The indicator for the share of the tangible common equity[43] (TCE) in tangible assets[44] (TA), as the most conservative indicator for the banks capacity for absorbing the potential losses in conditions of the global financial crisis, at the level of the banking system registered an annual fall of 0.6 percentage points. The annual decrease in this indicator results from the decrease of TCE, given simultaneous increase in TA. The decrease in TCE is mostly a consequence of the changes in the accounting framework the application

[41] The core capital before deductable items is used as a numerator in the calculation of this indicator (due to comparability with the previous dates).
[42] The capitalization rate represents the ratio between the capital and reserves of the banks and their total sources of funds.
[43] Tangible common equity is obtained by reducing the accounting value of the banks' equity by the amount of all assets which in case of possible liquidation of the bank would have minor, or it would have no value at all (non-tangible assets, which include: founding investment, patents, licenses and concessions, software, goodwill, design, model and brands and other rights and items of non-tangible assets), as well as for the amount of the paid-in capital of the bank based on preference shares.
[44] Tangible assets are obtained by reducing the total assets by the amount of the non-tangible assets, which include: founding investments, patents, licenses and concessions, software, goodwill, design, model and brands and other rights and items of non-tangible assets.

of which began from January 2009[45], and partially is due to the increase in the non-tangible assets of the banks. This indicator with the European banks ranges within 2 - 4%[46].

Figure 3.4.10
Movement of the capitalization rate

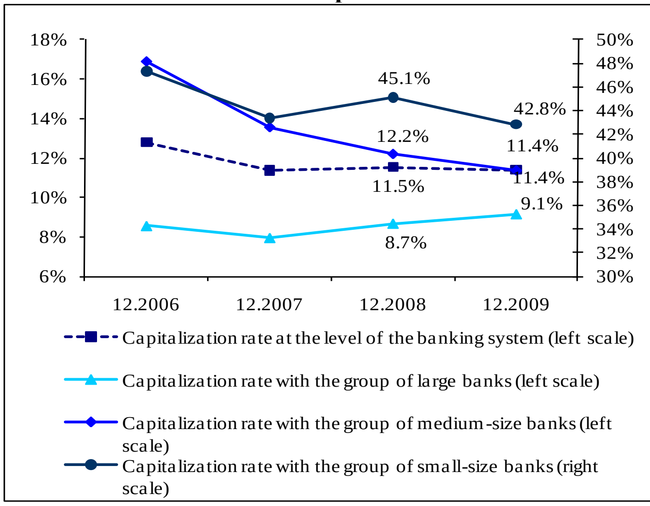
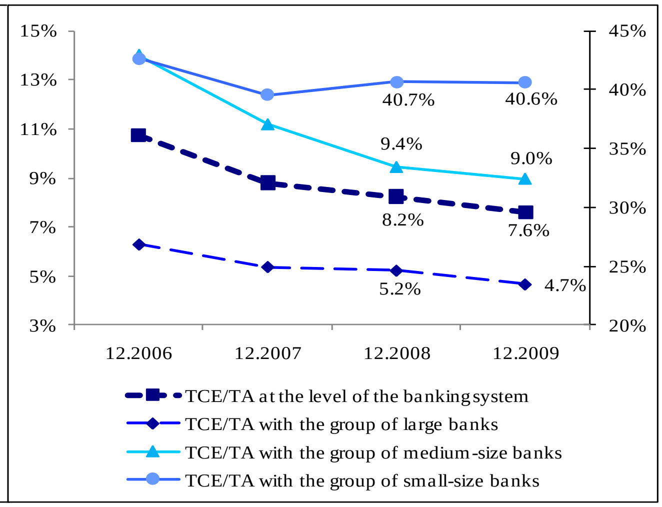


Figure 3.4.11
Movement of the indicator TCE/TA



Source: NBRM, based on data submitted by the banks

The comparison with the banking systems of certain countries show that the banking system of the Republic of Macedonia, according to the amount of the capital adequacy ratio and the capitalization rate is in the upper part of the list of the analyzed countries. The capital adequacy ratio of the banking system of the Republic of Macedonia (16.4%) is lower in comparison with the adequate ratio only with three of the analyzed countries: Bulgaria, Albania and Serbia, where this indicator ranges from 16.5% to 21.2%. On the other hand, the capitalization rate of the banking system of the Republic of Macedonia (11.4%) is lower only with respect to Bosnia and Herzegovina, Croatia and Serbia, where this ratio ranges from 13.1% to 19.6%.

Figure 3.4.12
Capital adequacy ratio, by individual countries

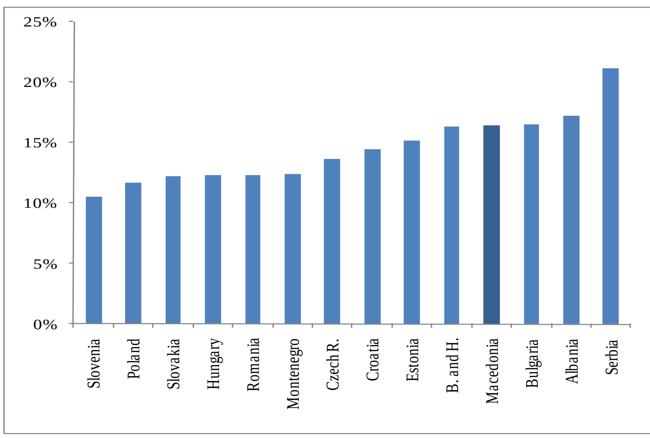
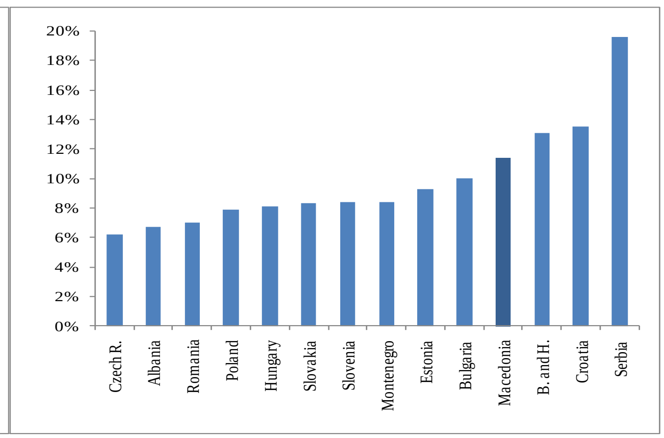


Figure 3.4.13
Capitalization rate, by individual countries



Source: NBRM and Global Financial Stability Report- Navigating the Financial Challenges Ahead, IMF, October 2009

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[45] Part of the premiums based on common shares were re-entered in the banks' reserve fund.
[46] Source: Financial Stability Report- May 2009, Central Bank of the Republic of Turkey.

Stress test simulation for the resistance of the banking system to hypothetical shocks as of December 31,2009

At the end of 2009, the conducted stress test simulations[1] for the resistance of the banking system of individual banks in the Republic of Macedonia to possible external shocks showed that the banking system and individual banks are still relatively resistant to the influence of these shocks. However, in the implementation of more extreme simulations, decrease in the capital adequacy ratio below 8% can be evidenced, not only with individual banks, but at the level of the banking system as well.

Table 3.4.1
The results from the stress test simulations for the resistance of the banking system and the individual banks to hypothetical shocks, as of December 31, 2009

No. of simulation	CAR at the level of the banking system, before simulation	CAR at the level of the banking system, after simulation	Number of banks with a result (CAR after simulation) below the CAR of the overall banking system after simulation
1	16.4%	15.7%	2 (l); 3 (m)
2	16.4%	14.5%	2 (l); 3 (m)
3	16.4%	13.2%	2 (l); 4 (m)
4	16.4%	14.5%	2 (l); 3 (m)
5	16.4%	13.1%	2 (l); 4 (m)
6	16.4%	13.1%	2 (l); 3 (m)
7	16.4%	16.5%	2 (l); 3 (m)
8	16.4%	13.8%	2 (l); 3 (m)

Source: internal NBRM calculations, based on the data submitted by the banks.
Notes: (l) - large bank; (m) - medium bank; (s) - small bank

With individual banks the capital adequacy ratio reduces below 8%, in case of the third, fifth, sixth and the eighth simulation. In case of even severer simulation which is applied in the analyses, the capital adequacy ratio is reducing even more.

*This stress test analysis is based on the application of ten hypothetical simulations, of which:

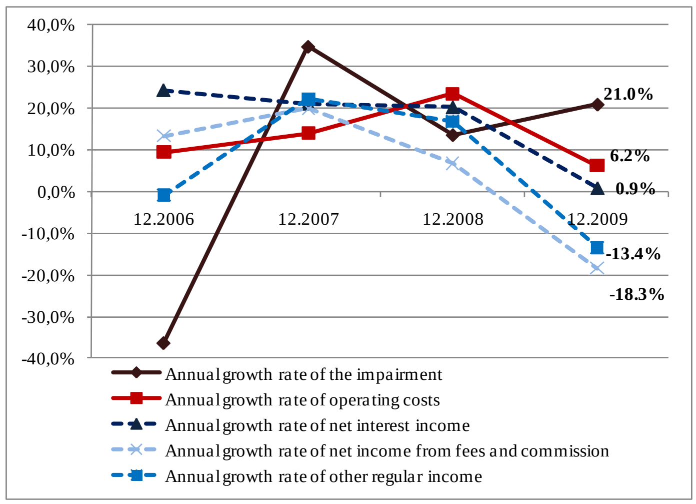
- Three simulations for the isolated credit shock (increase in the exposure to credit risk classified in the risk categories C, D and E of 10%, 30% and 50%),
- fourth simulation as a combination of credit and interest rate shock (increase in the exposure to credit risk in the risk categories C, D and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

3.5 Profitability

In 2009, the profitability of the banks in the Republic of Macedonia had considerably lower level relative to 2008. The total profit of the banking system realized in 2009 was halved relative to the previous year equaling Denar 1.676 million. Simultaneously, the number of banks that showed loss went up from six at the end of 2008 to seven at the end 2009, and their participation to the total assets of banks grew up from 9.4% on December 31, 2008 to 9.8% on December 31, 2009. However, the capitalization of the banks which in 2009 had a loss was not an issue. On December 31, 2009, the average capital adequacy rate of these banks amounted to 23.9%, whereas at the level of individual bank it ranged between 14.9% and 90.4%.

The lower rise in the banks activities, the worsened quality of their credit portfolio, as well as the limited possibilities for the banks to decrease the operational costs were identified as the main reasons for the lower profitability and efficiency of the banking system. The most evident negative influence on the profitability of banks resulted from the credit risk, i.e. from the rise in the impairment[47] due to the worsened credit portfolio quality. Simultaneously, the operational costs[48] of banks continued growing, but with lower dynamics relative to the previous years. The largest share or 41.9% of the operational costs were the costs for the employees which determined most of their total annual growth as well (80%). Opposite to the rise in the costs, **for the first time in the past few years** the income of banks registered drop (both, the total regular income[49] and the extraordinary income[50]). The fall in the total regular income of banks, which were the main career of their profitable operating in the previous few years, was assessed as considerably negative. The minimal growth in the net interest income was not enough to buffer the considerable drop in the net income from fees and commissions and other regular income, which resulted in annual drop in the total regular income of 5.8%. In conditions of considerable weakening in the growth of the interest income, opposite to the still intensive rise in the interest expenses, the realized net interest income in 2009 was almost at the same level relative to 2008. The slower credit activity and the worsened quality of the credit portfolio were the main reasons for the considerable slowing down in the rise of the interest income of banks (annual rise of 6.7% in

Figure 3.5.1
Dynamics of the main profitability components



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

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[47] The impairment includes: impairment of the financial assets on net-basis, unrecognized (additionally determined) impairment, release of the impairment of interest income, net provisions for off-balance sheet items.

[48] The operational costs include: employees expenses, depreciation, general and administrative costs, deposit insurance premiums, other provisions and other expenditures of the activity excluding the extraordinary expenditures.

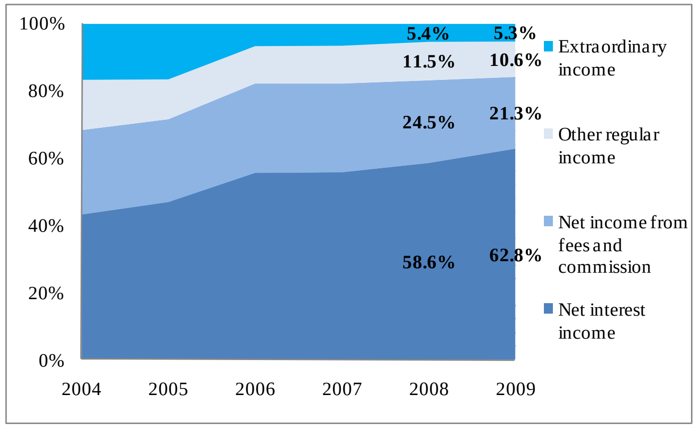
[49] The total regular income include: the net interest income, the net income from fees and commissions and other regular income. The other regular income include: net trading income, net income from other financial instruments designated at fair value, net income from foreign exchange rate differentials, dividends and revenues based on capital investments, profit from sale of financial assets available for sale, capital gain realized from sale of assets, release of other provisions, other income and losses from sale of financial assets available for sale.

[50] The extraordinary income includes also the income based on collected, previously written off claims based on principal and interest.

2009, opposite to the annual growth of 31.6% in 2008). Opposite to this, the stimulating interest policy which was directed towards maintaining the current and potential broadening of the deposit core, contributed to relatively more intensive increment in the interest expenses (rise of 11.8% relative to 2008). The fall in the net income from fees and commissions was largely determined by the general slowing down in the activities of banks in this period[51].

The fall in the income of banks had no considerable influence on the structure of the total income, as well as on the structure of the regular income of banks. The net interest income strengthe ned its dominant position in the structure of the total income of banks. Simultaneously, this income component created most of the total regular income of banks as well (approximately two thirds). The increased significance of the net interest income in the structure of the total income resulted mostly from the negative annual change rates of the other income categories of banks. Despite the lower participation of the net income from fees and commissions, they are still the second most significant component in creating the total income of banks.

Figure 3.5.2
Structure of the total income of banks



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

3.5.1 Profitability and efficiency indicators for banks

The negative developments of the fees and commissions, the expenses and the financial result of banks resulted in worsening of all analyzed profitability and efficiency indicators for the banking system.

Table 3.5.1
Profitability and efficiency indicators for banks

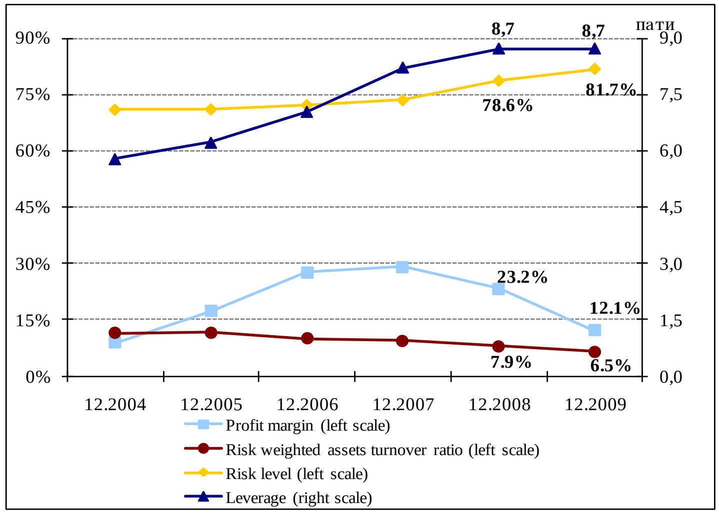
Indicator	Banking system		Large banks		Medium-size banks		Small-size banks	
	31.12.2008	31.12.2009	31.12.2008	31.12.2009	31.12.2008	31.12.2009	31.12.2008	31.12.2009
Rate of return of average assets (ROAA)	1.4%	0.6%	2.1%	1.3%	0.2%	-0.5%	-0.7%	-1.3%
Rate of return of average equity (ROAE)	12.5%	5.6%	25.8%	14.2%	1.2%	-4.1%	-1.5%	-2.9%
Cost-to-income ratio*	62.2%	70.1%	50.6%	58.5%	82.3%	88.3%	99.6%	112.7%
Non-interest expenses / Total regular income	67.2%	75.5%	54.0%	62.5%	89.7%	95.2%	112.6%	126.4%
Labour costs / Total regular income*	24.6%	29.4%	19.9%	24.8%	32.3%	36.0%	41.3%	48.4%
Impairment losses / Net interest income	27.4%	32.8%	27.1%	29.2%	26.1%	42.8%	37.3%	18.0%
Net interest income / Average assets	3.8%	3.5%	3.7%	3.4%	4.1%	3.9%	3.8%	3.7%
Net interest income / Total regular income*	61.9%	66.3%	60.6%	65.0%	64.4%	69.5%	65.3%	65.5%
Net interest income / Non-interest expenses	92.1%	87.8%	112.1%	103.9%	71.8%	73.0%	58.0%	51.8%
Financial result / Total regular income*	23.2%	12.1%	34.9%	24.3%	2.4%	-8.7%	-11.3%	-22.4%
Number of employees	6,111	6,084	3,106	3,078	2,504	2,446	501	560
Financial result per employee (in millions of Denars)	0.6	0.3	1.1	0.7	0.0	-0.1	-0.2	-0.3
Number of banks with positive financial result	12	11	3	3	6	5	3	3

*Note: Total regular income is calculated as a sum of net interest income, net income from fees and commission, other net financial income and other regular income.
Source: NBRM, based in the data submitted by the banks.

[51] The application of the new regulation framework dated January 1, 2009 may have certain influence on the amount of the income from fees and commissions. Namely, with the application of the new accounting framework for the banks and the new Decision on credit risk management the category "cumulated depreciation" was introduced. Previously (with part of the banks) the collected commissions based on credits were shown as income from commission in full amount, without allocating the income over the expected life of the credit. With the new regulations, such commissions represent interest income, which is shown as income over the credit maturity.

The fall in the profit, opposite to the rise in the assets of banks contributed to fall in the rate of return on assets (ROAA). Namely, at the end of 2009, the contribution of the assets of banks was more than halved relative to the previous year. Simultaneously, **the rate of return on equity (ROAE) considerably dropped relative to 2008 and for the first time in the last few years it reduced to one digit. In 2009 the dynamics of the ROAE indicator[52] was under a negative influence of the developments of the profit margin[53], as well as the indicator on the general risk level the banking activities.** Namely, at the end of 2009, the profit margin, different from the continuous growth till the third quarter of 2008, registered considerable annual fall and it reduced to the levels registered before 2005. The rise in the general risk level of the banking activities, evident through the higher ratio between the risk weighted assets and the average assets of bank, gave additional negative effect on the level of the ROAE indicator in 2009.

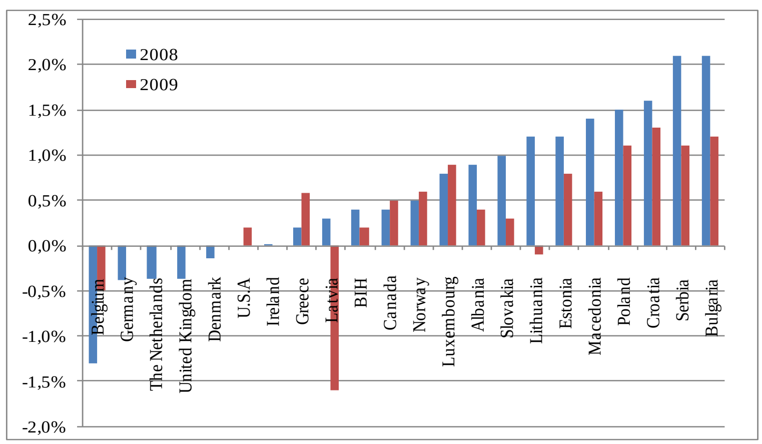
Figure 3.5.3
Dynamics of the ROAE components



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

The trend of profitability of the banking system in the Republic of Macedonia was identical with the one characteristic for the banking systems in the countries from the area and the other fast growing economies in Europe. Different from the banking systems of the developed countries that felt the first impact on the profitability in 2008, as a result of the international economic crisis, the banking systems of these countries faced with worsened profitability one year later. Opposite to the upward trend of the rate of return on assets of the banking systems in the developed countries, in 2009 the banking systems of the fast growing economies registered drop, and negative values of this basic indicator on the level of profitability as

Figure 3.5.4
Dynamics of the ROAA indicator by individual countries



Source: IMF Global Financial Stability Report, October 2009 and web sites of the central banks of respective countries.
Note: In 2009 ROAA in the Netherlands amounted to -0.02%, and in the USA to 0.0% in 2008.

[52] The rate on return on average own funds (ROAE) can be shown on the following manner: $ROAE = \frac{P}{CR} * \frac{S}{S} * \frac{A}{A} * \frac{RWA}{RWA} = \frac{P}{S} * \frac{S}{RWA} * \frac{A}{CR} * \frac{RWA}{A} = PM * RWAturnover * L * RBAratio$

where: P=after tax profit; CR=average capital and reserves; S=total regular income; A=average assets, RWA=risk weighted assets; PM=profit margin; RWAturnover=risk weighted asset turnover; L=leverage or debt ratio and RBAratio=ratio on the level of assumed risk.

[53] The profit margin was calculated as a correlation between the profit and the total regular income.

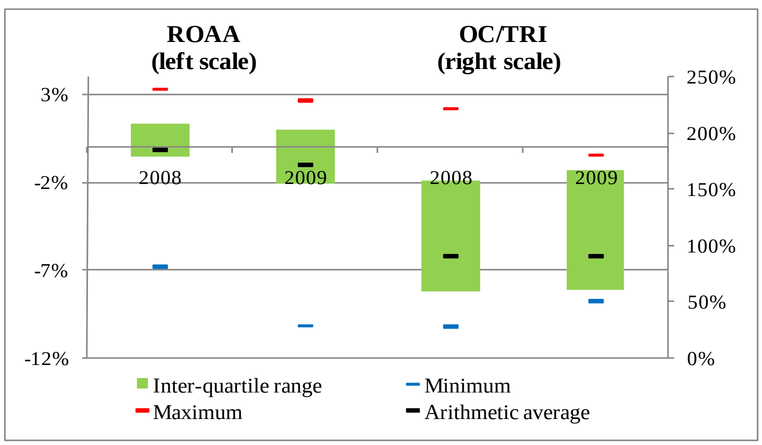
well. The main reason for such profitability trend in the banking systems of the fast growing economies was the "delay" of the negative effects from the global economic crisis, which transferred in these economies through indirect transmission channels, mainly through the negative effects on the real sectors. In accordance with the value of the indicator of return on assets, the banking system of the Republic of Macedonia was in the middle of the list of analyzed fast growing economies, including the countries from the area. On the other hand, the comparison between the profitability of the domestic subsidiaries of foreign banks and the profitability of their parent banks indicated to a lower level of the domestic banks (excluding one).

In 2009 the trend of worsening of the operational efficiency of banks which started at the end of 2008, continued. In conditions of annual rise in all expenses, opposite to the fall in the regular income, considerable part of the income from regular activities was used for covering the expenses of banks. All indicators on the ratio between the individual types of costs and total regular income registered worsening relative to the previous year. The worsening in the operational efficiency was confirmed by the lower margin of coverage of the non-interest expenses by the net interest income. In the future, the banks' efforts for improving the profitability position should be generally directed towards better control and lower operating costs.

The rise in the impairment, opposite to the lower net interest income, contributed to growth in the share of this regular income which is required for absorbing the determined possible losses from the credit portfolio of banks. Namely at the end of 2009, almost one third of the realized net interest income was used for covering the impairment for potential credit losses.

There are significant differences in the level of profitability and efficiency of individual banks. The development of the indicator of return on assets showed that the differences between the individual banks additionally deepened in 20 09. Namely, on December 31, 2009 the inter-quartile range[54] broadened, as well as the difference between the bank with the highest and lowest rate on return. The broadening of the inter-quartile range was especially evident on the side of negative values of the indicator. With respect to the efficiency, **despite the broadening of the inter-quartile range with the indicator of the ratio between the operational costs and the total regular income, the differences between the individual banks reduced** and the indicators by individual banks were approximating the middle value at the level of the banking system (the drop in the highest value of this basic indicator for the operational efficiency of banks was positively assessed relative to 2008, but the increase in the highest level of the indicator in the same period was negatively assessed).

Figure 3.5.5
Dispersion of the indicator for return on assets (ROAA) and the indicator for operational costs/total regular income (OC/TRI)



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

[54] The definition for inter-quartile range is included in section 3.2 Liquidity risk.

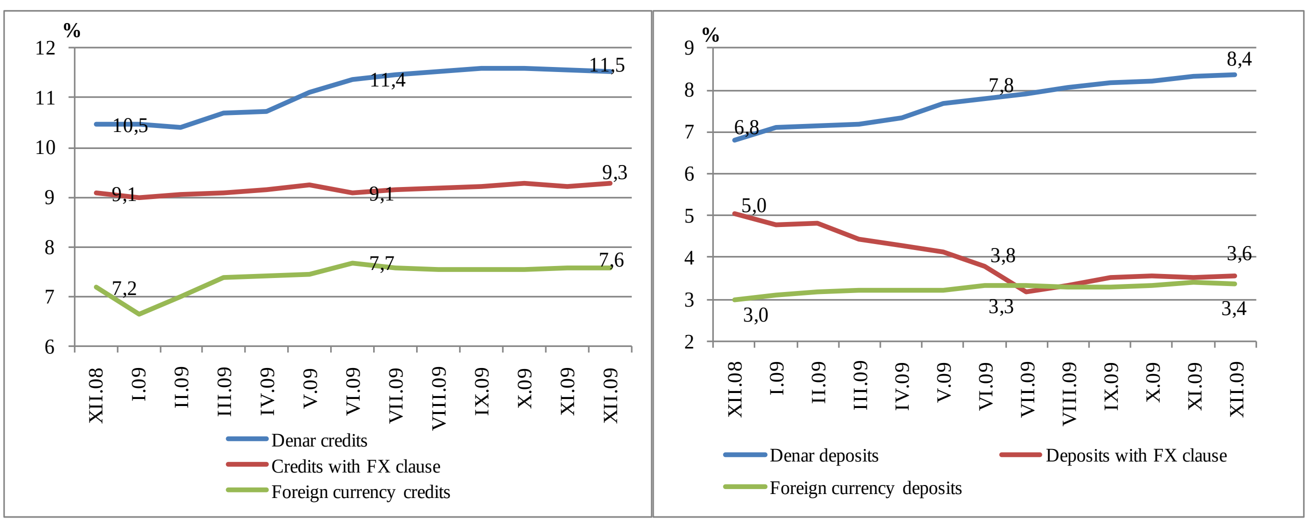
3.5.2 Profitability in individual groups of banks

The worsened profitability in 2009 was characteristic for all three groups of banks. Only the group of large banks finished 2009 with positive financial result, which was by 35.2% lower relative to the last year. The group of medium-size banks showed loss of Denar 355 million, opposite to the positive financial result of Denar 104 million realized in the previous year. The rise in the impairment and the operational costs, opposite to the lower net income from fees and commissions and other regular income were the common factors which determined considerable fall in the profit with the group of large banks and loss with the group of medium-size banks. Within the group of large banks, the lower extraordinary income gave additional negative effect on the profitability. The higher operational costs, opposite to the lower net income from fees and commissions and extraordinary income were the main factors for the loss in the group of small-size banks, which was almost twice higher (by 99.7)% from the loss in 2008 (Annex No. 3 - Statement of the comprehensive income at the level of the banking system).

3.5.3. Development of the interest rates and interest range

In 2009 the development in the interest rates of banks was under the influence of the changes in the monetary policy and the perceptions of banks for the risks in the economy and in their operating. In accordance with the reaction of banks, generally two periods of the year can be separated. In the first half of the year, the interest rates generally registered upward trend, mainly as a reaction to the deepened effects from the global economic crisis, the perceptions for higher risks and the respective measures of the monetary policy in direction of its restriction. In the second half of 2009, in conditions of gradual stabilization of the anticipations of banks for the future development of the domestic and global economy, as well as moderate relaxation of the monetary policy (which started at the end of the year), stabilization of the level of the interest rates as well as their downward development with certain types of credits and deposits were registered.

Figure 3.5.6
Development of the interest rates of credits and deposits of banks



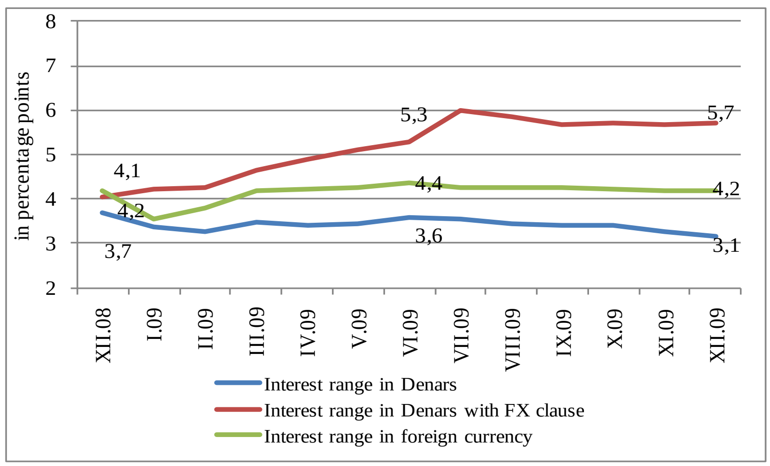
Source: NBRM, based on the data submitted by the banks.

In 2009, the interest rates of the Denar credits manifested most evident upward trend, opposite to the relatively lower rise in the interest rates of the foreign currency credits and the relatively stable level of FX indexed lending interest rates of the credits with clause. Such dynamics of the interest rate of credits in domestic currency was partially under the influence of the more restrictive course of the monetary policy in this period. The highest risk level of the credit portfolio of banks in denars influenced as well, which also means a higher risk premium in the structure of the interest rates.

On the side of the sources of financing, the price of the deposit core in denars registered most considerable growth, opposite to the relatively stable level of its foreign currency component and the downward trend in the price of the deposits with FX clause. The rise in the interest rates of the deposits (mainly the Denar) was generally under the influence of the stimulating interest policy of banks directed towards keeping the existing and attracting new depositors. The change in the rates of reserve requirements by NBRM[55] had some influence for non-stimulating interest policy of banks relative to the deposits with FX clause, in the second half of 2009.

In 2009 the discrepancies between the interest ranges in denars, foreign currencies and with FX clause increased, opposite to the relatively close levels present at the end of the previous year. The broadening in the difference between the interest rates of credits and deposits with FX clause was due to the considerable downward trend in the interest rate of the deposits with FX clause, in conditions of relatively stable interest rate of the credits with FX clause. Simultaneously, the interest range was highest exactly with this type of credits and deposits. Opposite to this, in conditions of relatively synchronized developments between the interest rates of the foreign currency credits and deposits, the interest range in foreign currency manifested stability. The narrowing of the range in denars reflected mostly the more stimulating interest policy of banks for Denar saving, and especially in the second half of 2009 when the rise in the interest rate on Denar credits stabilized.

Figure 3.5.7
Interest range development



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

[55] In May 2009 the Decision on reserve requirements was amended, so the rates of reserve requirements were increased from 10% to 11.5% for the foreign currency liabilities for the period of fulfillment in July (i.e. 13% in the period of fulfillment in August) and from 10 to 20% for Denar liabilities with FX clause.

II. BANKING SUPERVISION IN 2009

1. Legal framework of the banking supervision

The legal framework for banks was completed in 2008, when most of the new regulations started being applied. Some segments of it, especially those which required larger adjustment of the banking systems had delayed implementation (in 2009, and one small part in 2010 as well).

Considering the generally completed regulations for banks, the activities of NBRM in the area of improvement of the legal framework of banks in 2009 were intended towards the following:

1. Preparing special bylaws which were pertaining to:

   - the manner and the procedure for establishment and implementation of program of a bank for prevention of money laundering and financing of terrorism and
   - the methodology for determining the impairment and for allocation of special reserve by the Macedonian Bank for Development Promotion.

2. Amendments of the bylaws for the purpose of adequate promotion and improvement of the current bylaws which were pertaining to the following:

   - methodology for determining the capital adequacy and
   - liquidity risk management.

1.1. Program of a bank for prevention of money laundering and financing of terrorism

Considering the significance of the banking system in the combat against money laundering and financing of terrorism, and in order to enable conditions for efficient implementation of the provisions of the Law on Prevention of Money Laundering and Other Proceeds from Crime and Financing of Terrorism, by all banks in the country, in July 2009 a **Decision on the manner and procedure for implementation and application of a bank's program for prevention of money laundering and financing of terrorism** was adopted. This Decision determines in details the manner of application of the measures and activities for prevention of money laundering and financing of terrorism, having in mind the activities performed by banks and their features.

The Decision prescribes the following more significant aspects of the measures and activities for prevention of money laundering and financing of terrorism:

- Specifying the manner of analysis of the client and creating risk profile for each client, which shall determine the level of risk arising from money laundering and terrorist financing related with that client;

- Performance of enhanced analysis for certain clients or types of business relation (politically exposed persons, correspondent banks, private banking, clients not being physically present when concluding or performing the business relation etc.);

- Determination of the documents and data which the bank is obliged to keep;

- Specifying the tasks and responsibilities of the responsible person for prevention of money laundering and financing of terrorism;

- Establishment and application of efficient plan for training of the employees in the bank for all significant aspects of money laundering and financing of terrorism;

- Inclusion of the audit of the process of prevention of money laundering and financing of terrorism in the annual audit plan of the Internal Audit Department.

1.2. The Methodology for determining the impairment and for allocation of special reserve by the Macedonian Bank for Development Promotion

According to the new Law on the Macedonian Bank for Development Promotion, the National Bank of the Republic of Macedonia developed a Methodology for the impairment, i.e. for allocation of special reserve for this Bank, considering its specific status and tasks.

The basis for the manner for determining impairment and allocating special reserve for the on-balance sheet and off-balance sheet claims of the Macedonian Bank for Development Promotion are derived from the current regulations for credit risk management by the banks in the Republic of Macedonia, which includes the methodology on determining the impairment as well. These regulations follow the accepted international principles and practices in this area and the international standards for accounting and reporting. Considering the features and nature of the activities of the Macedonian Bank for Development Promotion, the separate methodology for determining and allocating impairment by this bank, determines certain differences relative to other banks. Namely, this methodology envisages for the allocation of impairment, i.e. the special reserve to be performed only on individual basis.

1.3. Changes in the methodology for determining the capital adequacy

Considering the commitment of NBRM to apply the New Basel Capital Accord (Basel 2), in February 2009 the current methodology on determining the capital adequacy was amended. These changes defined the method of determining the capital requirements for operational risk.

In accordance with this methodology, the banks shall have a right to chose between two approaches for determining the capital requirements for operational risk, as follows: the Basic Indicator Approach and the Standardized Approach. These two approaches differ by the level of sophistication of the method for determining the capital requirements for operational risk. When calculating, both approaches start from determining the so called basic indicator, which relates the size of the operational risk with the realized income and expenditures of the bank from regular operations. For the needs of the Standardized Approach, the bank shall segregate its operations into eight business lines (corporate finance, trading and sale, retail banking, commercial banking, payment operations and settlement, agent services, asset management and brokerage retail services), with the basic indicator being determined based on the income and expenditures from the regular operations of the bank for each business line where they emerged. Considering the differences in the risk level and the possibility for realizing losses within certain activities performed by the bank, such segregation of the banks' operations in eight business lines enables more adequate association of the risk level and the level of capital requirements. Also, different from the Basic Indicator Approach, the application of which is not determined by fulfillment of certain criteria, the bank can use the Standardized Approach only if it fulfills series of criteria, such as: segregation of activities by business lines according to defined principles and adoption of an adequate policy; ensuring fully documented system for operational risk management; regular independent check-up of the operational risk management system by the internal audit department and/or audit company etc.

According to the Plan of Activities of NBRM for introduction of the New Capital Accord (more detailed in the box text), the amended methodology for determining the capital adequacy which covers the capital requirements for operational risk, shall become effective on December 31, 2011.

Besides the previous novelty introduced in the methodology on determining the capital adequacy, in 2009 the status of the agreements on hybrid capital instruments and subordinated instruments, which were concluded before the current methodology became effective, was more precisely regulated.

1.4. Changes in the methodology for liquidity risk management

The Decision on liquidity risk management was adopted in 2008, but it became effective in February 2009. According to this Decision, the banks are obliged to determine and to adhere to minimal liquidity ratios equal to 1. The liquidity ratios are calculated as a ratio between the assets and liabilities (separately in denars and in foreign currencies) which due within the maturity blocks up to 30 and 180 days. When determining the liabilities for the purpose of these liquidity ratios, the level of concentration of deposits of each bank is considered. In 2009 changes in the methodology for determining the liquidity ratios were made, enabling the banks to include their placements in the instruments of the monetary policy of the NBRM (excluding the foreign currency reserve requirements) in the calculations of the liquidity ratios, in denars or in foreign currencies.

Activities for implementation of the New Capital Accord (Basel 2)

In order to implement the New Capital Accord (Basel 2) and the European Directive relating to the taking up and pursuit of the business of credit institutions adequately, NBRM developed a plan for their gradual implementation in the domestic regulations. Considering the nature and the features of the banking system of the Republic of Macedonia, the intentions of NBRM are to enable the use of the standardized approaches for determining the capital requirements for credit, market and operational risk in the initial period. In accordance with the plan, in the past few years, part of the regulations based on Basel 2 was adopted, as follows:

- In March 2008 the new Decision on the methodology for determining the capital adequacy of banks in the Republic of Macedonia became effective. This Decision envisages use of the Standardized Approach for determining the capital requirements for market risk, whereas the determination of the capital requirements for the credit risk follows the standards prescribed by Basel 1;
- At the beginning of 2009 the obligation of banks for determining the capital requirements for operational risk was regulated, through application of one of the two simplified approaches - the Basic Indicator Approach or the Standardized Approach. This regulation shall become effective on December 31, 2011;
- During the previous years, NBRM conducted several activities which enable application of the principles defined in the second pillar of Basel 2. Accepting the risk based approach, the banks and the NBRM are required to assess the exposure to all material risks and to allocate an adequate amount of required capital if needed. Also, the new Decision on risk management introduced an additional standards and principles for efficient management of all material risks. This Decision, since 2010, introduced the obligation for banks to establish internal capital adequacy assessment processes (ICAAP).
- With the adoption of the regulation for publishing adequate data by banks, NBRM started with the implementation of the Pillar 3. The banks are required to publish data on a regular basis on their operations, shareholders, capital adequacy, the risk management systems and process, the

corporate governance etc. (part of this regulation became effective on December 31, 2007, whereas the other part on January 1, 2009).

Besides the activities conducted in the previous years, the following activities are planned for the following period:

- In 2010 the Standardized Approach for determining the capital requirements for credit risk will be prescribed. In order to adjust the banks adequately to the new methods for calculation of capital adequacy, this regulation shall become effective on December 31, 2011;
- After the application of the standardized approaches for determining the capital requirements, the NBRM will start preparing and adopting the methodology for application of the advanced approaches. The NBRM intends not to apply the advanced approaches for determining the capital required before 2013.

2. Banking supervision activities

2.1. Licensing - issuing licenses and approvals to banks and saving houses

In 2009, the NBRM continued performing its regular activities in the area of licensing the banks and saving houses and issued the following licenses and approvals:

Type of license/approval	issued	refused	stopped
Banks			
Amendment and/or supplement to a statute	22	/	/
Issuing approval for initiation of performing financial activities	1	1	1
Appointment of members of Supervisory Board	15	/	1
Appointment of members of Board of Directors	23	/	3
Change of address of a bank	4	/	/
Acquiring shares in a bank the cumulative nominal amount of which equals or exceeds 5%, 10%, 20%, 33%, 50% and 75% of the total number of shares, or of the total number of issued voting shares	1	/	1
Allowing a look at the Examination Report	11	1	1
Total (banks)	**77**	**2**	**7**
Saving houses			
Transformation of a saving house into a bank	/	2	/
Termination of operation	1	/	/
Amendments to the agreement/ statement of company	7	/	/
Appointment of manager/director	4	/	/
Allowing a look at the Examination Report	2	/	/
Total (saving houses)	**14**	**2**	/

2.1. Supervision of the operating of banks and saving houses

In 2009 there were thirty nine on-site examinations of the operating of banks and saving houses in the Republic of Macedonia. Thirteen of them were risk examinations, whereas twenty six were examinations of the compliance of the operation with the regulations. NBRM continued to perform the regular monthly examinations of saving houses, with respect to the disclosure of the updated lists of deposits, in 2009 as well.

The risk examinations were made according to internal methodology of NBRM for risk assessment, which is based on the cumulative risk profiles determined on the basis of the assessment of the level of exposure of individual risks and the manner of their management. According to this approach, the priority while conducting the on-site examination, are the material risks the banking institutions are exposed to in their operation.

In 2009, four of the conducted risk examinations were full-scope examinations, whereas nine of them were targeted. The goal of the conducted on-site risk examinations was to determine the safety, stability, level of risk and compliance of the banks and saving houses with the regulations, through assessment of the system of established internal controls, the adequacy of the established risk management systems, as well as the effectiveness of the corporate governance system. The goal of four of the nine conducted targeted risk examinations was to assess the established systems for credit risk measurement and monitoring in order to determine the possible influence of the world economic crisis on the quality of the credit portfolio of banks. The focus of the other five targeted risk examinations was on the management of the risk from inadequate banks' information systems.

From the performed full-scope risk-based on-site examinations, it can be concluded that the banks in general adequately measure the losses from granted credits and that the solvency and the liquidity of the examined banks are not threatened. But, weaknesses were found in the method of functioning of the internal control systems, risks management and corporate governance with the examined banks. The conducted targeted examinations which assessed the credit risk management demonstrated that the banks undertook activities for improvement of the systems for management of this risk. But, despite that, some weaknesses were found in the part of the internal policies and procedures for management of such risk. Also, some omissions were determined in the process of measuring the credit losses from credit risk exposure, as well as in the method of conducting the stress testing. The targeted examinations which focused primarily on the information security of banks showed certain weaknesses regarding the adequacy of the audit trail management systems, staffing of the information technology organizational units and the contracts concluded with the companies for information system services to the bank which were not fully complied with the respective regulation requirements.

In accordance with the examinations on the compliance of the operation with the regulations, most of the determined non-compliances refer to the Consumer Protection Law, Law on Prevention of Money Laundering and Other Proceeds from Crime and Financing of Terrorism and certain aspects from the regulations concerning the performance of the international payment operations.

The changes in the legal framework made in 2008 regarding the credit risk management and the introduction of the new methodology for recording and assessing the accounting items and preparing of financial reports, imposed the need for assessment of the implementation of some more significant aspects of this regulation, especially those that could cause more considerable financial effects in the balance sheets of banks or significant changes in the banks' systems. In this regard, in the second half of 2009 there were inspections with twelve banks. The banks' processes for credit risks management were also examined, with respect to the classification of claims and determination of the impairment and special reserve. Based on the inspections, it can be concluded that in general there are no considerable deviations from the accounting and financial reporting regulations.

2.1. Undertaken corrective actions to banks and saving houses

Within its legal authorization, and in order to maintain the stability and the safety of certain banking institutions and the whole banking system, NBRM undertook corrective actions towards banks and saving houses where illegitimacies, irregularities and incorrectness in their operation were found. In 2009, NBRM imposed two written warnings to one bank and one saving house, three recommendations to three banks and two memorandums with two banks were concluded. Five decisions imposing measures against two banks, one savings house and one shareholder of a bank were issued.

As a result of the determined incompliance with the Banking Law and the respective bylaws, in 2009 eight procedures for intermediation with seven banks and the responsible persons in the banks and other offenders and to one saving house and its responsible persons were conducted. Due to two unsuccessful procedures for intermediation in two banks, three requests for initiating misdemeanor procedure to persons with special rights and responsibilities in those banks were submitted, and as a result of one unsuccessful settlement procedure, a request for initiating misdemeanor procedure to one responsible person in a bank was submitted. In the Annex No. 22 a detailed review of the written recommendations and recommendations imposed by NBRM in 2009 is given.

In 2009, prior consent for termination of operation of one saving house was issued, its founding license was revoked and it was determined that the conditions for conducting liquidation procedure were fulfilled. Till the day of recording the liquidator in the trade registry, the saving house was forbidden to perform all activities, except for collecting claims, and NBRM employees were authorized to verify the payment orders from the account of the saving house.

Besides the procedures for intermediation and the initiated misdemeanor procedures for the incompliance with the Banking Law, according to the legally prescribed authorizations, NBRM also conducts settlement procedures and initiates misdemeanor procedures towards banks and saving houses according to the Law on Foreign Exchange Operations, Law on Consumer Protection in Connection with Consumer Credits and the Law on Prevention of Money Laundering and Other Proceeds from Crime and Financing of Terrorism. On such basis, in 2009, 126 settlement procedures were conducted with offenders from banks and saving houses. Out of the total conducted settlement procedures, 107 were successful, whereas 19 had negative result which resulted in submission of requests for misdemeanor procedures.

A N N E X

Annex 1

Comparative indicators of the credit institutions activities in the Republic of Macedonia and the analyzed EU countries

	Number of credit institutions*	Number of inhabitants per credit institution	Number of business units	Number of inhabitants per business unit	Number of POS per million inhabitants	Number of ATMs per million inhabitants	Number of employees	Herfindahl index	CR5 (assets)
Macedonia	18	112,364	428	4,726	12,132	411	6,084	1,637	77.4%
Bulgaria	30	255,333	6,080	1,260	7,049	667	34,930	834	57.3%
Greece	66	170,015	4,095	2,740	33,059	692	66,165	1,172	69.5%
Slovenia	24	85,000	698	2,923	18,384	848	12,284	1,268	59.1%
Slovakia	26	207,923	1,258	4,297	6,015	416	20,598	1,197	71.5%
Poland	712	53,534	12,914	2,952	5,571	356	188,969	562	44.2%
Romania	43	498,698	7,375	2,908	3,769	431	71,622	922	54.0%
Estonia	17	78,882	257	5,218	17,846	692	6,144	3,120	94.8%
Czech Republic	54	193,130	1,993	5,233	5,537	327	39,882	1,000	62.0%
Italy	818	73,214	34,139	1,754	22,283	914	340,463	344	33.0%
Netherlands	302	54,437	3,421	4,806	19,232	526	116,000	2,168	86.8%
Belgum	105	101,162	4,316	2,461	11,759	1,456	65,246	1,877	80.8%
Germany	1,989	41,287	39,531	2,077	7,221	968	685,550	191	22.7%
Spain	362	125,948	46,065	990	31,162	1,353	276,497	497	42.4%
France	728	88,077	39,634	1,618	21,469	832	492,367	681	51.2%
Hungary	197	50,954	3,515	2,856	6,055	460	43,640	822	54.5%
Malta	23	17,913	111	3,712	21,568	395	3,915	1,236	72.8%
Austria	803	10,391	4,243	1,967	12,801	916	78,754	454	39.0%
Sweden	182	50,654	2,025	4,553	21,263	305	50,115	953	61.9%
United Kingdom	391	156,079	12,514	4,877	17,942	1,047	495,917	412	36.5%
EU 27	8,510	58,550	238,117	2,092	16,314	855	3,335,210	1,120	59.6%

*The data is related to all credit institutions in the financial system of the countries. The data for the Republic of Macedonia is only for the banks.
Source: NBRM, based on data submitted by banks and ECB, Structural indicators for the EU banking sector, published 15.01.2010.

Annex 2

Balance Sheet - ASSETS

in millions of denars

No.	Assets	Large banks	Medium-size banks	Small-size banks	Total
1	CASH AND BALANCES WITH NBRM	21,664	9,245	1,315	32,224
2	FINANCIAL ASSETS HELD FOR TRADING	582	568	0	1,151
3	DERIVATIVES HELD FOR TRADING AT FAIR VALUE	15	0	0	15
4	FINANCIAL ASSETS DESIGNATED AT FAIR VALUE THROUGH PROFIT AND LOSS	0	0	0	0
5	EMBEDDED DERIVATIVES HELD FOR HEDGING	0	0	0	0
6	FINANCIAL ASSETS HELD-TO-MATURITY	4,154	1,597	1,014	6,764
7	FINANCIAL ASSETS AVAILABLE FOR SALE	14,139	6,474	1,665	22,278
8	PLACEMENTS TO THE CENTRAL BANK	0	0	0	0
9	PLACEMENTS TO FINANCIAL INSTITUTIONS (NET)	23,245	6,062	4,547	33,854
10	PLACEMENTS TO NONFINANCIAL ENTITIES (NET)	109,591	44,730	2,807	157,128
11	ACCRUED INTEREST	753	484	39	1,277
12	INVESTMENTS IN ASSOCIATES, SUBSIDIARIES AND JOINT VENTURES	180	0	252	431
13	OTHER ASSETS	1,060	659	120	1,840
14	FORECLOSURES	1,830	968	426	3,223
15	INTANGIBLE ASSETS	293	407	142	842
16	FIXED ASSETS (PROPERTY, PLANT AND EQUIPMENT)	3,913	2,867	924	7,705
17	NON CURRENT ASSETS HELD FOR SALE	0	0	58	58
18	NET COMMISSION RELATIONS	-19	-2	-226	-246
19	UNRECOGNIZED IMPAIRMENT	0	0	0	0
20	TOTAL ASSETS	181,398	74,062	13,082	268,543

Balance Sheet - LIABILITIES

in millions of denars

No.	Liabilities	Large banks	Medium-size banks	Small-size banks	Total
1	INSTRUMENTS FOR TRADING AND FINANCIAL LIABILITIES DESIGNATED	1	0	0	1
2	DERIVATIVES HELD FOR HEDGING	0	0	0	0
3	DEPOSITS OF FINANCIAL INSTITUTIONS	8,623	9,185	222	18,031
4	SIGHT DEPOSITS OF NONFINANCIAL ENTITIES	50,909	14,283	2,495	67,687
5	SHORT TERM DEPOSITS OF NONFINANCIAL ENTITIES	73,024	22,168	1,928	97,120
6	LONG TERM DEPOSITS OF NONFINANCIAL ENTITIES	16,000	6,557	512	23,069
7	DEBT SECURITIES IN ISSUE	630	300	0	930
8	BORROWINGS	5,956	10,147	2,043	18,146
9	LIABILITY COMPONENT OF HYBRID INSTRUMENTS	0	184	0	184
10	SUBORDINATED DEBT AND CUMULATIVE PREFERRED SHARES	4,468	1,223	0	5,691
11	INTEREST LIABILITIES	962	548	61	1,571
12	OTHER LIABILITIES	1,402	610	93	2,105
13	PROVISIONS	641	109	9	760
14	CAPITAL AND RESERVES	16,587	8,418	5,604	30,609
15	GROSS PROFIT*	2,195	331	113	2,639
16	TOTAL LIABILITIES	181,398	74,062	13,082	268,543

* The sum of the financial result of the banks that have profit. The total loss of the banks is deducted item from the capital and reserves

Annex 3

Income statement

in millions of denars

No.	STATEMENT OF COMPREHENSIVE INCOME	Large banks	Medium-size banks	Small-size banks	Total
1	INTEREST INCOME	12,668	5,769	694	19,131
2	INTEREST EXPENSES	-5,834	-2,437	-165	-8,436
3	NET INTEREST INCOME (1-2)	6,833	3,333	529	10,695
4	NET FEES AND COMMISSION INCOME	2,192	787	134	3,113
5	NET TRADING INCOME	274	31	6	311
6	NET INCOME FROM FINANCIAL INTRUMENTS DESIGNATED AT FAIR VALUE	0	0	0	0
7	NET (GAINS - LOSSES) FROM FOREIGN EXCHANGE DIFFERENCES	461	264	25	750
8	OTHER OPERATING INCOME	1,117	293	134	1,544
9	NET IMPAIRMENT LOSSES (PROVISIONS) OF FINANCIAL ASSETS	-2,803	-1,322	-129	-4,254
10	IMPAIRMENT LOSSES OF NON-FINANCIAL ASSETS	-94	-60	0	-154
11	EMLOYEES EXPENSES	-2,245	-1,465	-355	-4,064
12	DEPRECIATION	-559	-410	-84	-1,053
13	OTHER OPERATING EXPENSES	-2,958	-1,782	-421	-5,161
14	CURRENT PROFIT/LOSS	2,219	-332	-161	1,725
15	TAXES	-24	-22	-3	-50
16	NET INCOME AFTER TAXES	2,195	-355	-164	1,676

Annex 4

Credit structure of nonfinancial entities

in millions of Denars

Date	Description	Total	Total		Enterprises		Households		Other clients	
			Denar	FX	Denar	FX	Denar	FX	Denar	FX
31.12.2008	Past-due credits	1,907	1,403	504	1,025	470	377	34	1	1
	Short-term credits	52,165	42,827	9,337	26,954	9,288	15,798	13	76	37
	Long -term credits	102,501	75,400	27,101	32,810	22,745	42,458	4,036	131	320
	Nonperforming credits	11,335	9,848	1,487	6,280	1,237	3,295	245	272	5
	Total credits	**167,908**	**129,478**	**38,430**	**67,069**	**33,739**	**61,928**	**4,328**	**480**	**363**
	Impairment losses	-13,636								
	Total net credits	**154,272**								
31.12.2009	Past-due credits	2,414	2,087	327	984	309	1,099	18	4	0.3
	Short-term credits	39,229	30,996	8,233	25,858	8,221	5,100	8	38	4
	Long -term credits	116,290	89,930	26,360	36,913	22,851	52,875	3,325	142	184
	Nonperforming credits	15,777	11,456	4,321	6,244	3,889	5,151	432	60	0
	Total credits	**173,710**	**134,468**	**39,242**	**70,000**	**35,270**	**64,225**	**3,783**	**244**	**189**
	Impairment losses	-16,054								
	Total net credits	**157,128**								
Increase 31.12.2009/ 31.12.2008	Absolute increase in gross credits	5,802	4,991	812	2,930	1,530	2,297	-545	-237	-174
	Increase in %	3.5%	3.9%	2.1%	4.4%	4.5%	3.7%	-12.6%	-49.3%	-47.9%
	Growth structure		86.0%	14.0%	50.5%	26.4%	39.6%	-9.4%	-4.1%	-3.0%

Annex 5

Securities portfolio structure

in millions of denars

No.	Securities portfolio	Amount in millions of denars		Strukture (in %)		Annual change 31.12.2009/31.12.2008		
		31.12.2008	31.12.2009	31.12.2008	31.12.2009	Absolute change	In percent	Participation in change
1.	**Debt securities (1.1.+1.2.)**	**27,496**	**29,664**	**95.5%**	**96.8%**	**2,168**	**7.9%**	**118.2%**
1.1.	**Money market instruments**	**20,798**	**24,036**	**72.2%**	**78.4%**	**3,237**	**15.6%**	**176.5%**
	-NBRM bills	17,437	15,846	60.5%	51.7%	-1,591	-9.1%	-86.8%
	-Treasury bills	3,362	8,190	11.7%	26.7%	4,828	143.6%	263.3%
1.2.	**Bonds (1.2.1.+1.2.2.+1.2.3.)**	**6,698**	**5,628**	**23.3%**	**18.4%**	**-1,069**	**-16.0%**	**-58.3%**
1.2.1.	**Bonds issued by the state**	**5,803**	**4,639**	**20.1%**	**15.1%**	**-1,164**	**-20.1%**	**-63.5%**
	- Treasury bonds (continuous government securities)	781	221	2.7%	0.7%	-560	-71.6%	-30.5%
	-Structured treasury bonds	1,860	1,443	6.5%	4.7%	-418	-22.5%	-22.8%
	-Bond for privatisation of Stopanska banka AD Skopje	3,162	2,625	11.0%	8.6%	-537	-17.0%	-29.3%
	-Eurobond	0	350	0.0%	1.1%	350	/	19.1%
1.2.2.	**Corporate bonds issued by domestic banks**	**836**	**831**	**2.9%**	**2.7%**	**-4**	**-0.5%**	**-0.2%**
1.2.3.	**Foreign treasury bonds**	**58**	**158**	**0.2%**	**0.5%**	**99**	**169.9%**	**5.4%**
2.	**Equity securities**	**1,309**	**960**	**4.5%**	**3.1%**	**-349**	**-26.6%**	**-19.0%**
	-issued by non-financial entities	364	72	1.3%	0.2%	-292	-80.3%	-15.9%
	-issued by banks and other financial organizations - residents	754	795	2.6%	2.6%	40	5.4%	2.2%
	-issued by financial organizations- non-residents	191	94	0.7%	0.3%	-97	-50.9%	-5.3%
3.	**Derivatives**	**0**	**15**	**0.0%**	**0.0%**	**15**	**/**	**0.8%**
4.	**Total securities portfolio (1+2+3)**	**28,805**	**30,639**	**100.0%**	**100.0%**	**1,834**	**6.4%**	**100.0%**

Annex 6

Deposit structure of non-financial entities

in millions of denars

Sector	Currency	Sight deposits	Restricted deposits	Short term deposits	Long-ter deposits	Total
Enterprises	Denar deposits	18,321	316	6,955	1,346	26,937
	Denar deposits with foreign exchange clause	0	0.3	8,241	210	8,451
	FX Deposits	7,713	1,921	9,378	429	19,441
	Total	**26,033**	**2,237**	**24,574**	**1,985**	**54,829**
Households	Denar deposits	15,334	0	21,410	5,990	42,734
	Denar deposits with foreign exchange clause	0	0	76	5	81
	FX Deposits	19,651	0	48,879	14,192	82,722
	Total	**34,985**	**0**	**70,366**	**20,187**	**125,538**
State	Denar deposits	1,027	1	229	18	1,275
	Denar deposits with foreign exchange clause	0	0	0	0	0
	FX Deposits	13	0	0	0	13
	Total	**1,040**	**1**	**229**	**18**	**1,289**
Other clients	Denar deposits	1,476	50	841	77	2,444
	Denar deposits with foreign exchange clause	0	0	300	54	354
	FX Deposits	1,774	89	811	747	3,422
	Total	**3,250**	**140**	**1,951**	**879**	**6,220**
Total	Denar deposits	36	0	29	7	73,391
	Denar deposits with foreign exchange clause	0	0	9	0	8,886
	FX Deposits	29	2	59	15	105,598
	Total	**65,309**	**2,378**	**97,120**	**23,069**	**187,875**

Annex 7

Structure characteristics of credit risk exposure by groups of banks (sector, currency and items which are constituting credit risk exposure)

Structures of credit risk exposure (in %)		31.12.2008			31.12.2009			Change of structural share (in percentage points)		
		Large banks	Medium-sized banks	Small-sized banks	Large banks	Medium-sized banks	Small-sized banks	Large banks	Medium-sized banks	Small-sized banks
Structure of credit risk exposure by sectors	Enterprises and other clients	49.8%	45.6%	19.6%	48.4%	48.2%	19.0%	1.3	0.2	-1.6
	Natural persons and sole proprietors	30.8%	34.2%	16.2%	29.8%	31.1%	16.7%	0.6	-1.0	-0.6
	Financial institutions and state	19.4%	20.2%	64.2%	21.8%	20.7%	64.3%	-1.9	0.8	2.2
	Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**0.0**	**0.0**	**0.0**
Currency structure of credit risk exposure	Denar exposure	48.2%	46.6%	56.5%	44.1%	40.3%	46.2%	-1.2	-6.3	-4.5
	Denar exposure with FX clause	32.0%	25.9%	16.6%	25.9%	35.5%	23.7%	-9.7	6.4	1.0
	FX exposure	19.8%	27.5%	26.9%	30.0%	24.2%	30.1%	10.9	-0.1	3.5
	Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**0.0**	**0.0**	**0.0**
Structure of credit risk exposure by individual items	Regular credits	66.5%	78.9%	57.6%	68.8%	71.8%	61.5%	4.5	-3.1	3.8
	Nonperforming credits	4.4%	3.6%	8.0%	5.4%	6.5%	8.3%	0.9	2.3	-0.5
	Other claims and regular interest	12.0%	9.4%	29.4%	10.3%	13.6%	24.7%	-5.3	0.8	-3.0
	Off balance sheet exposure	17.1%	8.2%	5.0%	15.4%	8.1%	5.4%	-0.1	-0.1	-0.4
	Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**0.0**	**-0.1**	**-0.1**

Annex 8

Credit risk indicators

in millions of denars

Items	31.12.2004	31.12.2005	31.12.2006	31.12.2007	31.12.2008	31.12.2009
A	91,394	108,913	143,707	198,617	215,279	231,166
B	12,025	16,487	21,931	25,484	32,467	23,395
C	4,826	4,473	3,807	4,469	6,531	8,721
D	4,191	4,420	3,435	3,219	3,884	3,010
E	6,744	6,403	6,308	5,867	6,517	10,117
Total credit risk exposure	**119,179**	**140,696**	**179,188**	**237,656**	**264,677**	**276,409**
Calculated impairment losses	**11,591**	**11,753**	**11,762**	**12,690**	**15,341**	**17,996**
total C,D and E	15,761	15,296	13,550	13,555	16,932	21,848
total D and E	10,935	10,823	9,743	9,086	10,401	13,127
total C and D	9,017	8,893	7,242	7,688	10,415	11,731
% of C,D and E in total credit exposure	**13.22**	**10.87**	**7.60**	**5.70**	**6.40**	**7.90**
% of C and D in total credit exposure	9.18	7.69	5.40	3.82	3.93	4.75
% of C and D in total credit exposure	7.57	6.32	4.00	3.23	3.93	4.24
% of D in total credit exposure	3.52	3.14	1.90	1.35	1.47	1.09
% of E in total credit exposure	5.66	4.55	3.50	2.47	2.46	3.66
% of C in total credit exposure	4.05	3.18	2.10	1.88	2.47	3.15
Average level of riskiness (impairment losses/total credit exposure)	**9.73**	**8.35**	**6.60**	**5.34**	**5.82**	**6.51**
Own funds	**19,397**	**21,292**	**23,604**	**27,721**	**33,912**	**35,115**
% of C, D and E in own funds	**81.25**	**71.84**	**57.40**	**48.90**	**49.93**	**62.22**
% of D and E in own funds	56.37	50.83	41.30	32.78	30.67	37.38
% of C and D in own funds	46.49	41.77	30.70	27.73	30.71	33.41
% of D in own funds	21.61	20.76	14.60	11.61	11.45	8.57
% of E in own funds	34.77	30.07	26.70	21.17	19.22	28.81
% of C in own funds	24.88	21.01	16.10	16.12	19.26	24.84
% of net C, D and E in own funds	**29.46**	**26.13**	**19.40**	**17.90**	**20.17**	**22.98**
Capital adequacy	**23.03**	**21.32**	**18.30**	**17.00**	**16.16**	**16.38**

Annex 9

Credit risk exposure to enterprises and other clients, by activities

Credit risk exposure to enterprises and other clients, by activities	Exposure classified in risk categories „C“, „D“ and „E“ (in millions of denars)		Impairment losses calculated by banks (in millions of denars)		Absolute annual change (in millions of denars)		Relative annual change (in %)		Distribution of annual change (in %)	
	31.12.2008	31.12.2009	31.12.2008	31.12.2009	Exposure in „C“, „D“ and „E“	Impairment losses	Exposure in „C“, „D“ and „E“	Impairment losses	Exposure in „C“, „D“ and „E“	Impairment losses
Industry	5,724	7,847	5,263	6,135	2,123	872	37.1%	16.6%	57.3%	61.5%
Agriculture, hunting and forestry	706	684	676	550	-22	-126	-3.1%	-18.6%	-0.6%	-8.9%
Construction	1,074	937	896	768	-137	-128	-12.7%	-14.3%	-3.7%	-9.0%
Wholesale and retail trade	2,755	3,027	2,651	3,002	272	351	9.9%	13.2%	7.3%	24.8%
Transport, storage and communication	609	728	521	549	119	28	19.6%	5.4%	3.2%	2.0%
Hotels and restaurants	247	1,021	209	486	774	277	313.4%	132.5%	20.9%	19.5%
Real estate activities	157	608	306	413	451	107	287.3%	35.0%	12.2%	7.5%
Other activities	118	240	199	236	122	37	103.2%	18.6%	3.3%	2.6%
TOTAL	**11,390**	**15,092**	**10,721**	**12,139**	**3,702**	**1,418**	**32.5%**	**13.2%**	**100.0%**	**100.0%**

Annex 10

Credit risk exposure to natural persons by products

Credit risk exposure to natural persons by products	Credit risk exposure classified in risk categories „C“, „D“ and „E“ (in millions of denars)		Impairment losses calculated by banks (in millions of denars)		Absolute annual change (in millions of denars)		Relative annual change (in %)		distribution of annual change (in %)	
	31.12.2008	31.12.2009	31.12.2008	31.12.2009	Exposure in „C“, „D“ and „E“	Impairment losses	Exposure in „C“, „D“ and „E“	Impairment losses	Exposure in „C“, „D“ and „E“	Impairment losses
Residential and commercial real estate credits	388	568	522	463	180	-59	46.3%	-11.3%	14.7%	-4.2%
Consumer credits	2,207	2,827	1,319	2,136	620	817	28.1%	61.9%	50.6%	58.2%
Overdrafts	433	335	337	522	-98	185	-22.7%	54.9%	-8.0%	13.2%
Credit cards	1,089	1,571	911	1,504	482	593	44.2%	65.1%	39.3%	42.3%
Car credits	138	269	159	211	131	52	94.5%	32.7%	10.7%	3.7%
Other credit risk exposure	482	393	466	281	-89	-185	-18.4%	-39.7%	-7.3%	-13.2%
TOTAL	**4,738**	**5,963**	**3,714**	**5,117**	**1,225**	**1,403**	**25.9%**	**37.8%**	**100.0%**	**100.0%**

Annex 11

Coverage of credit risk exposure to natural persons with collateral

Type of collateral	Residential and commercial real estate credits		Consumer credits		Overdrafts and credit cards		Car credits		Total exposure to credit risk to natural persons	
	31.12.2008	31.12.2009	31.12.2008	31.12.2009	31.12.2008	31.12.2009	31.12.2008	31.12.2009	31.12.2008	31.12.2009
Unsecured credit exposure	0.0%	3.0%	43.2%	18.7%	60.3%	75.8%	0.0%	0.1%	35.7%	37.8%
Credit exposure secured by real estate	90.4%	89.6%	11.0%	27.6%	0.1%	1.0%	0.8%	2.9%	23.8%	27.5%
Credit exposure secured by movables (including deposits and securities)	1.1%	1.6%	4.6%	6.8%	0.4%	0.4%	94.9%	92.3%	8.8%	8.4%
Credit exposure secured by bills of exchange, endorsers, guarantees and other types of collateral	8.5%	5.7%	41.2%	46.9%	39.3%	22.8%	4.3%	4.6%	31.7%	26.2%

Annex 12

Credit risk indicators for exposure to sole proprietors, natural persons not considered as proprietors and natural persons that perform small scale commercial activity

Economic activities	Average level of risk		% of "C", "D" and "E" in total credit exposure		Calculated impairment losses / Exposure classified in risk categories C, D and E		Impairment losses and special reserves for nonperforming credits / Nonperforming credits
	31.12.2008	31.12.2009	31.12.2008	31.12.2009	31.12.2008	31.12.2009	31.12.2009
Agriculture	4.0%	5.6%	4.7%	8.0%	85.0%	70.0%	48.9%
Trade	3.6%	9.2%	2.7%	13.1%	134.8%	70.3%	72.3%
Other service activities	4.5%	5.0%	4.4%	7.3%	101.7%	68.6%	73.7%
Other activities	7.8%	5.8%	7.0%	8.3%	112.7%	70.6%	71.8%
Total exposure to sole propreitors	**5.1%**	**6.7%**	**4.7%**	**9.6%**	**107.2%**	**70.2%**	**64.6%**

Annex 13

Liquidity indicators

Indicators	12.2007	12.2008	01.2009	02.2009	03.2009	04.2009	05.2009	06.2009	07.2009	08.2009	09.2009	10.2009	11.2009	12.2009
Liquid assets / Total assets	35,9%	23,0%	21,7%	21,0%	20,2%	20,6%	20,1%	20,5%	21,3%	23,0%	23,3%	24,8%	25,0%	25,7%
Liquid assets / Total liabilities	41,8%	26,2%	25,3%	24,4%	23,3%	23,8%	23,3%	23,8%	24,7%	26,6%	26,9%	28,6%	28,8%	29,5%
Liquid assets / Short-term liabilities	49,0%	32,4%	31,5%	30,5%	29,2%	29,7%	29,2%	29,7%	30,6%	33,1%	33,8%	35,8%	36,5%	37,5%
Liquid assets / Total deposits of non-financial entities	47,7%	31,1%	30,7%	29,6%	27,8%	28,4%	27,8%	28,2%	29,2%	31,3%	32,0%	33,9%	34,3%	35,9%
Liquid assets / Households deposits	81,2%	52,2%	49,4%	47,7%	44,2%	44,9%	43,5%	44,1%	45,5%	49,7%	50,2%	53,0%	53,3%	53,7%

Annex 14

CONTRACTUAL MATURITY STRUCTURE OF THE ASSETS AND LIABILITIES as of 31.12.2009

Number	Description		up to 7 days	from 8 to 30 days	from 31 to 90 days	from 91 to 180 days	from 181 to 365 days	TOTAL
Assets								
1	Cash, cash equivalents, gold and precisious metals		24,539,967	120,097	0	0	6,117	24,666,181
2	Financial intruments held for trading		32,734	435,188	66,895	104,155	31,142	670,114
		Money Market instruments	29,810	79,475	0	0	0	109,285
		other debt instruments	0	355,713	60,169	104,155	31,142	551,179
		equity instruments	2,924	0	6,726	0	0	9,650
3	Derivatives for trading		14,612	0	0	0	0	14,612
4	Embeded derivtives and derivatives held for hedging		0	0	0	0	0	0
5	Financial instruments at fair value through profit and loss, identified as such at initial recognition		0	0	0	0	0	0
		Money Market instruments	0	0	0	0	0	0
		other debt instruments	0	0	0	0	0	0
		equity instruments	0	0	0	0	0	0
		credits	0	0	0	0	0	0
6	Financial instruments held to maturity		549,812	2,494,226	256,088	302,174	723,962	4,326,262
		Money Market instruments	549,812	2,494,226	69,047	0	387,845	3,500,930
		other debt instruments	0	0	187,041	302,174	336,117	825,332
7	Financial instuments available for sale		3,433,696	9,770,976	2,991,559	4,425,255	63,974	20,685,460
		Money Market instruments	3,382,181	9,770,976	2,991,559	4,112,938	22,280	20,279,934
		other debt instruments	6	0	0	312,317	32,358	344,681
		equity instruments	51,509	0	0	0	9,336	60,845
		other instruments	0	0	0	0	0	0
8	Credits and claims		17,610,777	14,941,448	17,067,308	18,596,064	32,350,611	100,566,209
		interbank transactions	11,738,941	7,707,116	1,818,391	144,443	92,370	21,501,261
		deposits	56,388	0	0	0	0	56,388
		financial leasing	0	0	0	0	0	0
		credits	5,810,705	7,204,579	15,204,897	18,420,382	32,228,370	78,868,933
		other claims	4,743	29,753	44,020	31,239	29,871	139,626
9	Interest receivables		746,363	446,127	85,755	43,348	366,049	1,687,642
10	Commission and fees receivables		107,156	13,563	0	2,806	0	123,525
11	Other on-balance sheet assets		1,104,623	189,461	68,078	48,302	24,010	1,434,474
12	**Total Assets (1+2+3+4+5+6+7+8+9+10+11)**		48,139,741	28,411,085	20,535,682	23,522,105	33,565,865	154,174,479
Liabilities								
13	Transaction accounts		56,803,172	0	0	0	0	56,803,172
14	Financial liabilities at fair value through profit and loss		0	0	0	0	0	0
		Money Market instruments	0	0	0	0	0	0
		other debt instruments	0	0	0	0	0	0
		equity instruments	0	0	0	0	0	0
		deposits	0	0	0	0	0	0
		liabilities from credits	0	0	0	0	0	0
		subordinated intruments	0	0	0	0	0	0
15	Derivatives for trading		0	0	0	263	0	263
16	Embeded derivatives and derivatives held for hedging		0	0	0	0	0	0
17	Deposits		20,820,472	22,429,770	34,647,807	20,670,649	34,276,842	132,845,540
		sight deposits	12,637,067	0	0	0	0	12,637,067
		term deposits	8,183,405	22,429,770	34,647,807	20,670,649	34,276,842	120,208,473
18	Liabilities from credits		750,778	168,796	1,753,964	370,836	2,825,310	5,869,684
19	Issued debt securities		0	0	0	0	0	0
20	Interest payable		597,151	349,092	326,396	112,046	160,879	1,545,565
21	Commissions and fees payable		4,609	4,181	0	1,637	0	10,427
22	Financial leasing		6,178	97	194	292	553	7,314
23	Other on-balance sheet liabilities		1,466,005	446,320	16,904	5,430	3,318	1,937,976
24	**Total Liabilities (13+14+15+16+17+18+19+20+21+22+23)**		80,448,365	23,398,256	36,745,265	21,161,152	37,266,903	199,019,941
Off-Balance sheet items								
25	Off-balance sheet assets		86,802	0	650,956	53,915	203,043	994,716
26	Off-balance sheet liabilities		6,325,339	1,156,605	3,479,244	3,383,696	4,368,350	18,713,234
27	**Net off-balance sheet items (25-26)**		-6,238,537	-1,156,605	-2,828,288	-3,329,781	-4,165,307	-17,718,518
28	**Gap (12-24+27)**		-38,547,161	3,856,225	-19,037,871	-968,828	-7,866,344	-62,563,980
29	**Cummulative gap**		-38,547,161	-34,690,936	-53,728,807	-54,697,635	-62,563,980	

Annex 15

ANTICIPATED MATURITY STRUCTURE OF THE ASSETS AND LIABILITIES as of 31.12.2009

Number	Description		Anticipated maturity (on-balance sheet and off-balance sheet items)			Anticipated maturity (future activities)		
			up to 7 days	from 8 to 30 days	from 31 to 90 days	up to 7 days	from 8 to 30 days	from 31 to 90 days
Assets								
1	Cash, cash equivalents, gold and precisious metals		22,654,028	87,946	0	0	0	0
2	Financial intruments held for trading		32,734	435,188	66,895	0	0	0
		Money Market instruments	29,810	79,475	0	0	0	0
		other debt instruments	0	355,713	60,169	0	0	0
		equity instruments	2,924	0	6,726	0	0	0
3	Derivatives for trading		14,612	0	0	0	0	0
4	Embeded derivtives and derivatives held for hedging		0	0	0	0	0	0
5	Financial instruments at fair value through profit and loss, identified as such at initial recognition		0	0	0	0	-120,000	0
		Money Market instruments	0	0	0	0	0	0
		other debt instruments	0	0	0	0	0	0
		equity instruments	0	0	0	0	0	0
		credits	0	0	0	0	-120,000	0
6	Financial instruments held to maturity		551,102	2,494,226	254,579	0	0	0
		Money Market instruments	509,812	2,494,226	69,047	0	0	0
		other debt instruments	41,290	0	185,532	0	0	0
7	Financial instuments available for sale		2,710,845	10,441,228	2,838,659	708,000	120,000	-314,000
		Money Market instruments	2,672,181	10,432,228	2,838,659	708,000	120,000	-314,000
		other debt instruments	0	9,000	0	0	0	0
		equity instruments	38,664	0	0	0	0	0
		other instruments	0	0	0	0	0	0
8	Credits and claims		14,273,495	13,449,426	15,630,686	-189,344	-2,486,918	-1,906,923
		interbank transactions	11,174,473	7,195,195	1,869,848	0	50,000	0
		deposits	51,997	0	0	0	0	0
		financial leasing	0	0	0	0	0	0
		credits	3,043,616	6,224,478	13,716,818	-189,344	-2,536,918	-1,906,923
		other claims	3,409	29,753	44,020	0	0	0
9	Interest receivables		509,606	470,898	270,390	32,575	116,979	235,356
10	Commission and fees receivables		102,886	16,753	3,660	3,138	12,299	36,186
11	Other on-balance sheet assets		870,591	189,571	68,077	801	0	0
12	**Total Assets (1+2+3+4+5+6+7+8+9+10+11)**		41,719,898	27,585,237	19,132,947	555,170	-2,357,640	-1,949,381
Liabilities								
13	Transaction accounts		8,620,527	5,434,691	949,292	2,147,188	821,811	836,616
14	Financial liabilities at fair value through profit and loss		0	0	0	0	0	0
		Money Market instruments	0	0	0	0	0	0
		other debt instruments	0	0	0	0	0	0
		equity instruments	0	0	0	0	0	0
		deposits	0	0	0	0	0	0
		liabilities from credits	0	0	0	0	0	0
		subordinated intruments	0	0	0	0	0	0
15	Derivatives for trading		0	0	0	0	0	0
16	Embeded derivatives and derivatives held for hedging		0	0	0	0	0	0
17	Deposits		4,476,828	9,215,287	15,831,191	1,756,873	4,573,105	8,708,122
		sight deposits	1,250,462	26,882	33,649	177,133	-6,972	10,038
		term deposits	3,226,365	9,188,405	15,797,542	1,579,740	4,580,077	8,698,084
18	Liabilities from credits		526,052	1,391,796	530,963	4,908	42,292	1,964,437
19	Issued debt securities		0	0	0	0	0	0
20	Interest payable		321,457	345,202	324,580	659	3,294	1,115,920
21	Commissions and fees payable		2,141	4,181	0	0	0	15,250
22	Financial leasing		6,450	97	194	0	0	0
23	Other on-balance sheet liabilities		1,153,924	453,240	13,931	774	0	0
24	**Total Liabilities (13+14+15+16+17+18+19+20+21+22+23)**		15,107,378	16,844,494	17,650,151	3,910,402	5,440,502	12,640,345
Off-Balance sheet items								
25	Off-balance sheet assets		34,798	0	639,348	0	505	30,600
26	Off-balance sheet liabilities		802,424	261,444	1,900,683	-9,056	-43,415	-89,991
27	**Net off-balance sheet items (25-26)**		-767,626	-261,444	-1,261,335	9,056	43,920	120,591
28	**Gap (12-24+27)**		25,844,894	10,479,299	221,461	-3,346,176	-7,754,222	-14,469,135
29	**Cummulative gap**		25,844,894	36,324,193	36,545,654	-3,346,176	-11,100,398	-25,569,533

Annex 16

Structure of on-balance sheet assets and off-balance sheet assets in foreign currency and in Denars with FX clause, as of 31.12.2009

No.	Item	31.12.2009	
		Amount (in million of Denars)	Structure (in %)
1	Cash, cash equivalents, gold and precious metals	**19,679**	**13.0%**
2	Financial instrument for trading	**724**	**0.5%**
3	Derivatives for trading	**15**	**0.0%**
4	Embedded derivatives and derivatives held for risk management	**0**	**0.0%**
5	Financial instruments at fair value through profit and loss as such at initial recognize	**0**	**0.0%**
5.1	in foreign currency	0	0.0%
5.2	in Denars with FX clause	0	0.0%
6	Financial instruments held to maturity	**3,551**	**2.3%**
6.1	in foreign currency	0	0.0%
6.2	in Denars with FX clause	3,551	2.3%
7	Financial instruments available for sale	**9,107**	**6.0%**
7.1	in foreign currency	197	0.1%
7.2	in Denars with FX clause	8,911	5.9%
8	Credits and claims in foreign currency	**59,631**	**39.3%**
8.1	deposits	22,908	15.1%
8.2	financial leasing	0	0.0%
8.3	credits	39,847	26.3%
8.4	other claims	61	0.0%
8.5	impairment	-3,184	-2.1%
9	Credits and claims in Denars with FX clause	**58,020**	**38.2%**
9.1	deposits	306	0.2%
9.2	financial leasing	0	0.0%
9.3	credits	59,647	39.3%
9.4	other claims	8	0.0%
9.5	impairment	-1,941	-1.3%
10	Interest receivable in foreign currency	**244**	**0.2%**
10.1	accrued interest	442	0.3%
10.2	impairment	-199	-0.1%
11	Interest receivable in Denars with FX clause	**488**	**0.3%**
11.1	accrued interest	765	0.5%
11.2	impairment	-278	-0.2%
12	Commissions and fees receivables	**0**	**0.0%**
12.1	accrued commissions and fees	1	0.0%
12.2	impairment	-1	0.0%
13	Investments	**0**	**0.0%**
14	Other non-mentioned on-balance sheet assets	**377**	**0.2%**
15	**Total on-balance sheet assets (1+2+3+4+5+6+7+8+9+10+11+12+13+14)**	**151,837**	**100.0%**
16	Off-balance sheet assets	**-56**	**0.0%**
17	**Total on-balance sheet assets and off-balance sheet assets in foreign currency and in Denars with FX clause (15+16)**	**151,780**	**100.0%**

Annex 17

Structure of on-balance sheet and off-balance sheet liabilities in foreign currency and in Denars with FX clause, as of 31.12.2009

No.	Item	31.12.2009	
		Amount (in million of Denars)	Structure (in %)
1	Current accounts	22,471	15.8%
2	Financial liabilities at fair value through profit and loss	0	0.0%
2.1	in foreign currency	0	0.0%
2.2	in Denars with FX clause	0	0.0%
3	Derivatives for trading	1	0.0%
4	Embedded derivatives and derivatives held for risk management	0	0.0%
5	Deposits in foreign currency	92,027	61.7%
5.1	financial institutions	1,395	1.4%
5.2	nonfinancial institutions	9,816	5.9%
5.3	natural persons	72,682	49.2%
5.4	non-residents	8,117	5.2%
5.5	other clients	16	0.0%
6	Deposits in Denars with FX clause	9,646	8.8%
6.1	financial institutions	875	0.6%
6.2	nonfinancial institutions	8,371	7.9%
6.3	natural persons	81	0.1%
6.4	non-residents	57	0.0%
6.5	other clients	262	0.1%
7	Liabilities from credits	15,032	8.3%
7.1	in foreign currency	12,018	6.4%
7.2	in Denars with FX clause	3,014	2.0%
8	Issued debt securities	630	0.5%
9	Interest payable in foreign currency	824	0.6%
10	Interest payable in Denars with FX clause	68	0.0%
11	Commissions and fees payable	1	0.0%
12	Financial leasing	5	0.0%
13	Hybrid and subordinated instruments in foreign currency	5,768	3.8%
14	Hybrid and subordinated instruments in Denars with FX clause	0	0.0%
15	Other non-mentioned on-balance sheet liabilities	456	0.5%
16	**Total on-balance sheet liabilities (1+2+3+4+5+6+7+8+9+10+11+12+13+14+15)**	**146,928**	**99.9%**
17	Off-balance sheet liabilities	487	0.1%
18	**Total on-balance sheet and off-balance sheet liabilities in foreign currency and in Denars with FX clause (16+17)**	**147,415**	**100.0%**

Annex 18

Own funds as of 31.12.2009

in millions of Denars

No.	Description	TOTAL
	CORE CAPITAL	
1	Paid in and subscribed common and non-cumulative preference shares and premiums based on these shares	21,245
1.1	Nominal value	17,589
1.1.1	Nominal value of common shares	17,497
1.1.2	Nominal value of non-cumulative preference share	93
1.2	Premium	3,656
1.2.1	Premium based on common shares	3,656
1.2.2	Premium based on non-cumulative preference shares	0
2	Reserve and retained profit/loss	9,944
2.1	Reserve fund	6,762
2.2	Retained profit restricted to distribution to shareholders	3,767
2.3	Accumulated loss from previous years	-585
2.4	Current profit	0
2.5	Unrealized loss on equities available for sale	0.1
3	Positions arising from consolidation	0
3.1	Minority interest	0
3.2	Reserves from exchange rate differentials	0
3.3	Other differentials	0
4	Deductions	1,122
4.1	Loss at the end of the year, or current loss	963
4.2	Own shares	0
4.3	Intangible assets	151
4.4	Net negative revaluation reserves	7.357
4.5	Difference between the amount of required and made impairment/special reserve	0
4.6	Amount of unallocated impairment and special reserve as a result of accounting time lag	0
5	Common shares, reserves and retained profit and deductions	29,975
6	Amount of other positions that may be included in the core capital	93
I	**CORE CAPITAL**	**30,067**
	SUPPLEMENTARY CAPITAL 1	
7	Paid-in and subscribed cumulative preference shares and premium on such shares	158
7.1	Nominal value	122
7.2	Premium	36
8	Revaluation reserves	70
9	Hybrid capital instruments	184
10	Subordinated instruments	5,341
11	Amount of subordinated instruments that may be included in the additional capital I	5,147
II	**SUPPLEMENTARY CAPITAL 1**	**5,558**
	DEDUCTIONS FROM CORE CAPITAL AND SUPPLEMENTARY CAPITAL 1	
12	Capital investments in other banks or financial institutions of over 10% of the capital of such institutions	319
13	Investments in subordinated and hybrid capital instruments and other instruments of institutions referred to in 12	0
14	Aggregate amount of investments in capital, subordinated and hybrid instruments and other instruments exceeding 10% of (I+II)	0
15	Direct capital investments in insurance and reinsurance companies and pension fund management undertakings	192
16	Investments in financial instruments issued by the insurance and reinsurance companies and pension fund management undertakings	0
17	Amount of excess of limits on investments in nonfinancial institutions	0
18	Positions arising from consolidation (negative amounts)	0
III	**Deductions from the core capital and supplementary capital 1**	**511**
IV	**CORE CAPITAL AFTER DEDUCTIONS**	**29,621**
V	**SUPPLEMENTARY CAPITAL 1 AFTER DEDUCTIONS**	**5,493**
	SUPPLEMENTARY CAPITAL 2	
19	Subordinated instruments of supplementary capital 2	0
20	Supplementary capital 1 and 2	5,493
21	Allowed amount of supplementary capital 1 and 2	5,493
21.1	Supplementary capital 1	5,493
21.2	Supplementary capital 2	0
22	Core capital	12,468
22.1	Excess core capital (150%)	18,702
22.2	Excess core capital (250%)	31,171
VI	**Allowed amount of supplementary capital 2**	0
	OWN FUNDS	
VII	Core capital	29,621
VIII	Supplementary capital 1	5,493
IX	Supplementary capital 2	0
X	**OWN FUNDS**	**35,115**

Annex 19

Structure and change of the own funds at the level of the banking system

in millions of Denars

	Amount (in millions of Denars)		Structure (in %)		Annual change*		
	31.12.2008	31.12.2009	31.12.2008	31.12.2009	In millions of Denars	In %	Share in the change
Own funds	**33,912**	**35,115**	**100.0%**	**100.0%**	**1,202**	**3.5%**	**100.0%**
Core capital	**29,324**	**30,067**	**86.5%**	**85.6%**	**743**	**2.5%**	**61.8%**
-Paid in and subscribed common and non-cumulative preference shares and premiums based on these shares	21,371	21,245	63.0%	60.5%	-126	-0.6%	-10.5%
-Reserve and retained profit/loss	8,624	9,944	25.4%	28.3%	1,320	15.3%	109.8%
-Deductions	671	1,122	2.0%	3.2%	451	67.2%	37.5%
1. current loss	538	963	1.6%	2.7%	425	78.9%	35.3%
2. unallocated impairment and special reserves	0.1	0	0.0%	0.0%	-0.1	-100.0%	0.0%
3. other deductions	132	159	0.4%	0.5%	26	19.8%	2.2%
Supplementary capital 1	**5,057**	**5,558**	**14.9%**	**15.8%**	**501**	**9.9%**	**41.7%**
-Paid-in and subscribed cumulative preference shares and premium on such shares	230	158	0.7%	0.4%	-72	-31.3%	-6.0%
-Revaluation reserves	/	70	/	0.2%	84	/	7.0%
-Hybrid capital instruments	184	184	0.5%	0.5%	-1	-0.4%	-0.1%
-Subordinated instruments	4,643	5,147	13.7%	14.7%	504	10.9%	41.9%
Deductions from core capital and supplementary capital 1	**468**	**511**	**1.4%**	**1.5%**	**43**	**9.1%**	**3.6%**

* Decreases which occur with paid in and subscribed common and non-cumulative preference shares and premiums based on these shares is due to the changes in the accounting framework enforced from January 2009

Annex 20

Structure and change of the own funds by group of banks

in millions of Denars

	Large banks			**Medium-size banks**			**Small-size banks**		
	31.12.2009			**31.12.2009**			**31.12.2009**		
	Amount (in millions of Denars)	**Structure (in %)**	**Annual change***	**Amount (in millions of Denars)**	**Structure (in %)**	**Annual change***	**Amount (in millions of Denars)**	**Structure (in %)**	**Annual change***
Own funds	**20,511**	**100.0%**	**802**	**9,523**	**100.0%**	**318**	**5,081**	**100.0%**	**82**
Core capital	**16,454**	**80.2%**	**1,037**	**8,270**	**86.8%**	**-377**	**5,344**	**105.2%**	**84**
-Paid in and subscribed common and non-cumulative preference shares and premiums based on these shares	8,747	42.6%	-257	7,007	73.6%	-90	5,491	108.1%	221
-Reserve and retained profit/loss	7,784	37.9%	1,310	2,015	21.2%	58	146	2.9%	-47
-Deductions	77	0.4%	16	752	7.9%	345	293	5.8%	90
1. current loss	0	0.0%	0	685	7.2%	342	278	5.5%	83
2. unallocated impairment and special reserves	0	0.0%	0	0	0.0%	0	0	0.0%	0
3. other deductions	77	0.4%	16	67	0.7%	3	15	0.3%	7
Supplementary capital 1	**4,289**	**20.9%**	**-194**	**1,269**	**13.3%**	**695**	**0**	**0.008%**	**0**
-Paid-in and subscribed cumulative preference shares and premium on such shares	107	0.5%	-71	51	0.5%	-1	0	0.0%	0
-Revaluation reserves	64	0.3%	/	6	0.1%	/	0.4	0.008%	/
-Hybrid capital instruments	0	0.0%	0	184	1.9%	-1	0	0.0%	0
-Subordinated instruments	4,118	20.1%	-187	1,029	10.8%	691	0	0.0%	0
Deductions from core capital and supplementary capital 1	**232**	**1.1%**	**41**	**16**	**0.2%**	**0**	**263**	**5.2%**	**3**

* Decreases which occur with paid in and subscribed common and non-cumulative preference shares and premiums based on these shares is due to the changes in the accounting framework enforced from January 2009

Annex 21

Capital adequacy ratio as of 31.12.2009

in millions of Denars

No.	Description	TOTAL
I	**CREDIT RISK WEIGHTED ASSETS**	
1	On-balance sheet credit risk weighted assets	177,369
2	Off-balance sheet credit risk weighted assets	25,307
3	**Credit risk weighted assets (1+2)**	**202,676**
4	Capital requirement for credit risk	16,214
II	**CURRENCY RISK WEIGHTED ASSETS**	
5	Aggregate currency position	11,735
6	Net-position in gold	0
7	**Currency risk weighted assets (5+6)**	**11,735**
8	Capital requirement for currency risk	939
III	**RISK WEIGHTED ASSETS (3+7)**	**214,411**
9	Capital requirement for risks (4+8)	17,153
IV	**OWN FUNDS**	**35,115**
V	**CAPITAL ADEQUACY RATIO (IV/III)**	**16.38%**

Annex 22

Measures imposed by NBRM in the period January 1, 2009 - December 31, 2009

Type of measure		
Written warning	**Number of banks**	**Number of saving houses**
Establishment of adequate accounting record of liabilities arising from deposits	1	
The explanation of requests for prolongation of the maturity date of credits to be based on analysis of the reasons that caused the prolongation of the maturity date	1	
Annulment of decision on decreasing of the equity		1
Recommendation	**Number of banks**	**Number of saving houses**
Holding the meetings of the Information Technology Surveillance Board at least on three months basis or more often if required	1	
Review and verification by the Information Technology Surveillance Board of the information technology development strategies, significant operational plans, as well as issues concerning the larger purchases	1	
Monitoring of the size of the information technology risk by the bank's bodies	1	
Adequate distribution of the responsibilities among the employees of the Information Technology Division/Department	2	
Strengthening of the capacity of the Internal Audit Department concerning the information technology audit through continuous and adequate training of the employees	2	
Integration and unification of the password policy at the level of the operative system and database	1	
Preparing a plan of activities for overcoming the determined irregularities and for implementation of recommendations given in the Examination Report	1	

Strengthening of the credit risk management system obliging the Internal Audit Department to assess the bank's activities for enhancing the respective risk management system	1	
Strengthening of the reporting system of the respective bank's bodies regarding all risks	1	
The Risk Management Board to define, and the Supervisory Board to approve the following: - critical values of the liquidity indicators which would represent a basis for activating the plan for liquidity risk management in extraordinary conditions; - precisely determined extraordinary conditions which would be a trigger of the plan for liquidity risk management in extraordinary conditions and - acceptable level of concentration of the deposit base	1	
Assessment of the liquidity risk management systems by the Risk Management Board	1	
Reporting of NBRM on the status of the lawsuits against a bank	1	
Inclusion of the audit of the management of legal and reputational risk in the scope of activities of the Internal Audit Department	1	
Strengthening of the system for managing the risk from money laundering and financing of terrorism	1	
Memorandum	**Number of banks**	**Number of saving houses**
Achieving the legally prescribed amount of own funds by a bank	1	
Strengthening of the credit risk management system	2	
Strengthening of the system for managing the risk from money laundering and financing of terrorism	2	
Strengthening of the liquidity risk management system	2	
Strengthening of the strategy risk management system	2	
Strengthening of the operational risk management system, including the legal risk	1	
Assessment by the Internal Audit Department of the bank's acting upon the measures for strengthening of the systems for managing credit risk, risk from money	1	

laundering and financing of terrorism, liquidity risk, operational and legal risk (with respect to the performance of the payment operations) and the strategy risk		
Removal of the incompliance with the Payment Operations Law	1	
Concluding an agreement on the manner of managing, intermediating and archiving the data and documentation and the covering of costs, including an instruction for keeping of payment instruments	1	
Strengthening the information security management system	1	
Strengthening the interest rate risk management system	1	
Strengthening of the capacity of a bank for controlling the compliance with the regulations through engaging additional human resources	1	
Preparing a plan for continuous training of the employees of the Internal Audit Department and the Legal Center in order to strengthen the capacity of the employees of these organizational units	1	
Recording the written off claims to depositors on the respective deposit accounts	1	
Overcoming the weaknesses of the internal acts which increase the legal risk the bank is exposed to	1	
Decision	**Number of banks**	**Number of saving houses**
Deleting the financial activity: "lending abroad, including factoring and financing commercial transactions " from the operating license of a bank, as a result of the failure to fulfill the legally prescribed amount of own funds	1	
Requesting a bank to achieve an amount of liquid assets which shall ensure an adequate percentage of coverage of the total liabilities and to constantly maintain this level of coverage	1	
Requesting a bank to submit a calculation of the total liabilities and the total liquid assets from the previous day, to the NBRM, each operating day	1	
Ban for granting credits and other forms of credit exposure to legal entities, excluding the credit exposure	1	

collateralized with first class instruments		
Requesting a bank to inform NBRM prior to each change in the internal policies for credit risk management	1	
Revision of the liquidity risk management policy by the Supervisory Board of a bank through prescribing liquidity indicator, on a manner defined by NBRM	1	
Measures to shareholders	**Number of banks**	
Withdrawal of the approval for acquiring shares in a bank, determining that the shares do not give a voting right to the shareholder and imposing their sale by the shareholder in a given period	1	

Annex 23

Groups of banks as of 31.12.2009

	Large banks		Medium-size banks		Small-size banks
1	Komercijalna banka AD Skopje	1	Alfa banka AD Skopje	1	Centralna kooperativna banka AD Skopje
2	NLB Tutunska banka AD Skopje	2	Investbanka AD Skopje	2	Eurostandard banka AD Skopje
3	Stopanska banka AD Skopje	3	Izvozna i kreditna banka AD Skopje	3	Kapital banka AD Skopje
		4	Ohridska banka AD Ohrid	4	Macedonian Bank for Development Promotion AD Skopje
		5	Prokredit banka AD Skopje	5	Postenska banka AD Skopje
		6	Stopanska banka AD Bitola	6	Stater banka AD Kumanovo
		7	TTK banka AD Skopje	7	Ziraat banka AD Skopje
		8	UNI banka AD Skopje		

* Banks are in alphabetical order