NATIONAL BANK OF THE REPUBLIC OF MACEDONIA

Report on Banking System and Banking Supervision of the Republic of Macedonia in 2010

April, 2011

Contents

Ladies and Gentlemen,

In 2010, the banking system in the Republic of Macedonia operated in a stable environment. Such a condition was mostly influenced by the gradual recovery of domestic economy, the favorable developments in the external sector, the gradual exhaustion of the impact of negative expectations associated with the effects of the global financial crisis and the positive signals of the monetary policy conducted by the National Bank.

The stable environment boosted the increase of the banks' activities, which reflected positively on the level of financial intermediation in the Republic of Macedonia. In 2010, after the moderate single-digit annual growth rate in the previous year, total banks' assets again started to register double-digit growth rates. The growth of banking activities was mainly supported by growth of banks' deposits, primarily in the household sector. Deposits growth rate recorded a significant boost and at the end of 2010, it was three times higher than in 2009. In conditions of a stable environment and lower influence of the psychological pressures, during 2010, economic agents generally saved in local currency, a trend that began in late 2009.

One part of the expansion of deposits was directed towards credit support of the real sector. However, despite the considerable amplification, at the end of 2010, banks' credit activity remained with a single digit growth rate. Moreover, this growth rate was at the level of only one half of the realized annual growth rate of banks' deposits. However, even such a low level of growth rate of the credit activity of banks in the Republic of Macedonia is among the highest in the region.

The banks have used another important part of the credit potential for further strengthening of their liquidity position, by directing it toward low-risk domestic securities. The macroprudent measure of the National Bank for maintaining minimum levels of liquidity, also gave a positive impetus to the increase in liquidity.

Stability and soundness of the banking sector in the Republic of Macedonia was confirmed also in December 2010. The capital adequacy ratio was maintained at a level twice higher than the legally prescribed minimum. The increase in own assets with most banks also contributed to this end. The several new issues of shares, after their long-term complete absence as a source of increasing banks' own funds, also deserves credit. Banks' recapitalization through new issues of shares means further improvement of the quality and quantity of own funds, which is essential for supporting future activities of the banking system.

In 2010, the risk level was kept in a controlled framework. After two years of deterioration of the loan portfolio quality, at the end of 2010, some indicators of credit risk in the banking system showed initial post-crisis improvement. However, the improvement in credit risk indicators should be interpreted cautiously, as it does not indicate major change in the risk profile and reduction of the risks that are present with the economic agents, but it is under significant influence of other factors. The main factor for improving the indicators of credit risk in the banking system was the growing exposure to the sector "financial institutions and government", which usually bears a low degree of risk. Additionally, the movement of the credit risk indicators was strongly influenced by the carried out collections through acquisition of movable and immovable assets used as collateral for banks' claims. Such acquisition of claims also acted toward increasing the banking system profitability, which was typical for the last quarter of 2010. Significant annual reduction of impairment (in conditions of significant acquisition of assets) fully determined the higher level of profitability relative to the previous year. The movement of all other components of banks' profitability (net interest income, other income, operating costs) was in the direction of its decrease compared to 2009.

From a static viewpoint, banks' exposure to risk from changes in interest rates and currency risk is relatively low. However, they are an important risk factor for the quality of banks' loan portfolio in the future, given the fact that these two types of risk are associated with potential threat of transformation into so-called indirect credit risk. The widespread application of safeguard clauses by the banks in terms of currency risk and the risk of changing interest rates, provides an opportunity to avoid the direct effects of possible unfavorable changes in exchange rates and interest rates. But on the other hand, the transfer of these risks on users of banking products emphasizes the impact of possible changes in exchange rates and interest rates on future ability of borrowers to service their debt and hence on the performance of banks.

In 2010, the National Bank continued its activities for the licensing and supervision of banks and savings houses in the country. Further application of the concept of Risk-Based Supervision enabled efficient and timely determination of the risks faced by individual banking institutions and banking system as a whole. Also, the National Bank continued to monitor international activities and discussions for strengthening the financial supervisory framework and to analyze the conditions for their application in the Republic of Macedonia.

The past year will be remembered also for the 23rd annual conference of the Group of Banking Supervisors from Central and Eastern Europe (BSCEE), which in 2010 was organized and chaired by the National Bank of the Republic of Macedonia. At the Conference two extremely important topics were considered, about the lessons from the global financial crisis and about the latest developments in the way of quantitative determination of liquidity risk, with particular reference to the measures undertaken during and after the crisis, by the supervisory authorities of different Member States of the Group. Such activities are part of the orientation of the National Bank to actively participate and monitor the development and financial innovation in the world and the answers to never sufficiently predictable risks.

Ladies and Gentlemen,

Regardless of the favorable developments during 2010, the National Bank will continue to closely monitor the situation in the banking system. The need for this is even more emphasized if we take into account the still present risks for the future trends in global and domestic macroeconomic environment. The worldwide present uncertainty regarding the future pace of recovery of global economic activity, largely conditions the pace of future economic activity of the domestic economy, as well. Furthermore, world financial markets are characterized by recurrence of pressures, this time caused by problems with the sovereign debt of certain EU Member States, which negatively affects the availability and cost of capital (financial assets). Additional negative impulse for the domestic environment comes from the strengthening of inflationary pressures in the Republic of Macedonia, which began in the second half of 2010. These movements may affect the profitability and capital position of domestic economic agents. Rising costs of living, possible reduction in the creditworthiness of customers and in the quality of credit demand may have further negative effects on banks' performances in the future. In this context, the National Bank, as before, will take all necessary measures to maintain the security and stability of the banking sector.

Governor and Chairman
of the National Bank
of the Republic of Macedonia Council
Petar Goshev, MSc.

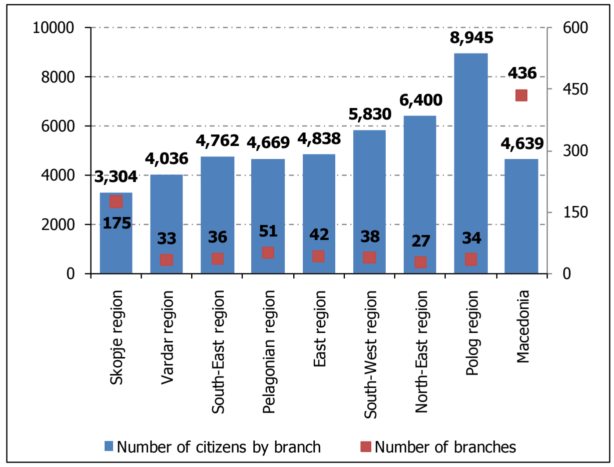
I. BANKING SYSTEM IN 2010[1]

1. Banking system structure

1.1. Access to banking services

On December 31, 2010 the banking system in the Republic of Macedonia comprised of eighteen banks and eight savings houses. Relative to the end of 2009 the number of banks remained unchanged[2] while the number of savings houses decreased by two.[3] The banks network includes 436 business units (including banks' headquarters) and is spread in almost all towns in the country. The number of business units increased by eight compared to December 31, 2009 (thirteen new business units were opened, and five of the existing ones were closed)[4]. Compared to some EU member countries a single bank in the Republic of Macedonia provides services to a lesser number of residents than the number of residents to which one credit institution renders its services in eight EU member countries included in this analysis (Annex no.1 – Comparable indicators of credit institutions activity in the Republic of Macedonia and several EU member countries). However, in terms of the average of all EU member countries (EU-27) the indicator for number of residents to which a single bank in the Republic of Macedonia can render its services is almost double. On the other hand, only four of the analyzed countries have higher indicator for the number of residents per business unit than the indicator for the banking system in the Republic of Macedonia.

Figure 1.1.1
Bank network by region in the Republic of Macedonia



Source: NBRM on the basis of data obtained from the banks

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[1] This report focuses exclusively on the banks' activity due to their prevailing share in activities of depositary institutions. The savings houses' share has remained insignificant with only 1% of the total assets, 1.5% of total credits and 0.3% of total deposits in the banking system.

[2] In January 2011 the number of banks were reduced to seventeen banks. . According to the Decision by the Governor of the National Bank of the Republic of Macedonia no.5082 dated December 7, 2010 permission was issued for statute changes- Starter Banka AD Kumanovo acquisition by Centralna Kooperativna Banka AD Skopje. On January 3, 2011 the acquisition was registered in the Central Registry of the Republic of Macedonia, and Starter Banka AD Kumanovo was deleted from the registry.

[3] With the Decision by the Governor of the National Bank no.2294 from April 2010 a preliminary consent was issued for ceasing of work of Fersped DOO Skopje savings house (the founding license was annulled and was confirmed that there were conditions for starting liquidation procedure) while with the Decision no.7580 from November 2010 the founding license was annulled for AM DOO Biljana savings house and was confirmed that there were conditions for starting liquidation procedure.

[4] In 2010 the large banks opened 3 new business units and closed 1 existing business unit, the medium banks opened 6 new business units and closed 3 existing business units, while the small banks opened 4 new business units and closed 1 existing business unit.

Figure 1.1.2
Number of business units of individual groups of banks, by region

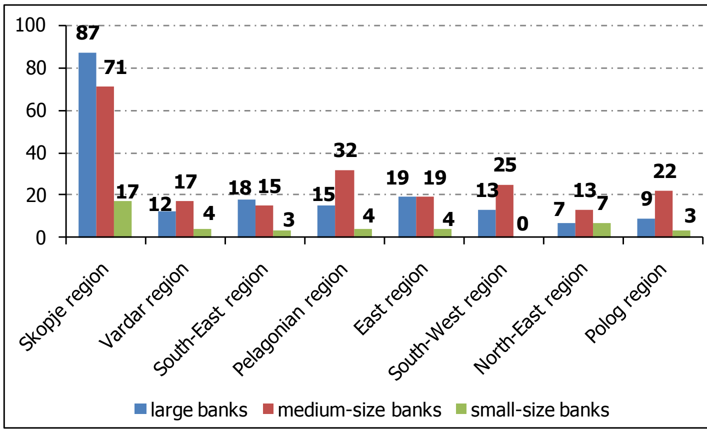
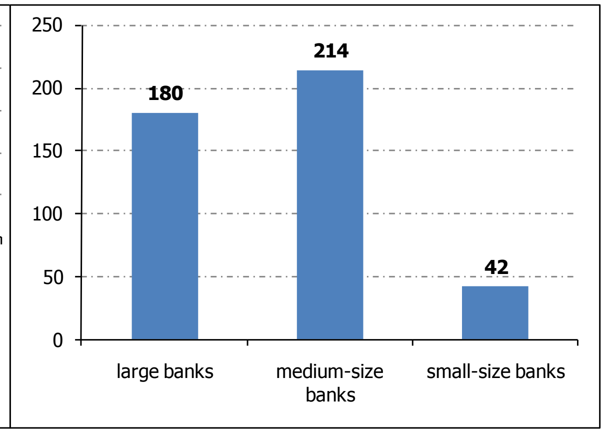


Figure 1.1.3
Number of business units by groups of banks

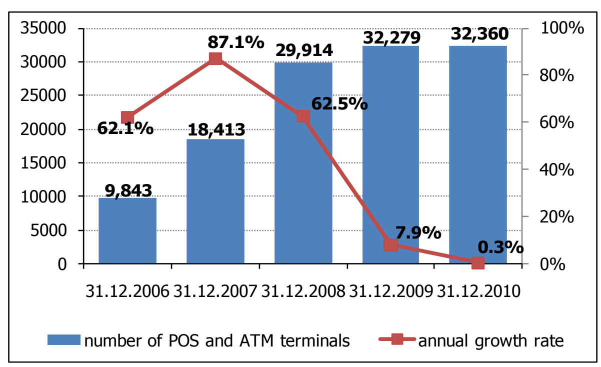


Source: NBRM on the basis of data obtained from the banks

In 2010 there were no major changes in the regional setting of the bank network. Geographical concentration of the bank network remained on the territory of the capital city. Namely, 40.1% of banks belong to Skopje region, where one business unit renders services to the lowest number of residents. On the other hand, in Polog region one business unit still renders services to the largest number of residents, on average. The newly opened business units do not have significant influence on banking services access in certain regions. In 2010 most of the business units were opened in Skopje and Pelagonija region (four in each region) and none of the business units was closed[5], which additionally improved the already existing best access by residents to banking services in Skopje region.

In 2010 the number of devices which work with credit cards (POS and ATM terminals) continued to increase but with much slower dynamics. Higher growth rates of these devices in the previous years are mainly a result of low starting point of these devices in the previous years. The number of realized transactions through these devices in 2010 increased by 4.9% and has been moving with lower intensity. This rate decreased by 0.9% compared to the previous year. At the same time the annual growth rate of the number of newly issued credit cards continued to decline. On December 31, 2010 this rate was 10.3%

Figure 1.1.4
Number of POS and ATM terminals and their annual dynamics



Source: NBRM on the basis of data obtained from the

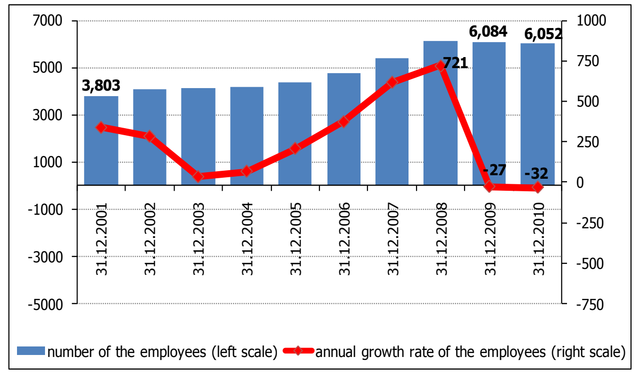
which was twice lower than the credit cards annual growth rate as of December 31, 2009 (23.1%). The average amount of one transaction with a credit card is Denar 3,482 and is almost the same as the previous year.

[5] In 2010 one new business unit was opened in Vardar and southwestern region, in the northeastern region two were opened and one was closed, in Polog area one business unit was opened and one was closed, and in the southeastern and the eastern region one, i.e. two business units, respectively, were closed.

1.2. Employment in the banking system

The decrease in number of employees (by 32 people) in the banking system continued also in 2010. That is due to the lower number of employees with the small and large groups of banks by 14 and 34, respectively. The number of employees increased only in the group of medium banks by 16 people[6]. At large banks the decrease in number of employees is mainly a result of downsizing the employees in one bank (by 75 employees). Within the group of medium banks, there was a significant downsizing while at the other eight the number of employees increased.

Figure 1.2.1
Employment in the banking system



Source: NBRM on the basis of data obtained from the banks

Even with reducing the number of employees, the group of large banks has maintained the highest share in the total number of employees in the banking system. Their share has remained almost unchanged with 50.3% while the groups of medium and small banks have a share of 41.2% and 8.5%, respectively, in the total number of employees in the banks in the Republic of Macedonia.

Table 1.2.1
Qualification structure of people employed in the banking system by groups of banks

	whole banking system				large banks	medium-size banks	small-size banks
	31.12.2007	31.12.2008	31.12.2009	31.12.2010	31.12.2010		
PhD and MSc	1.6%	1.9%	2.4%	2.8%	3.2%	2.2%	4.3%
University ed.	47.0%	53.5%	57.1%	60.0%	51.6%	70.7%	57.6%
College ed.	5.7%	5.0%	4.9%	4.7%	6.2%	2.9%	4.9%
High school ed.	44.0%	38.6%	34.7%	31.6%	38.0%	23.6%	33.1%
Other	1.8%	1.1%	0.9%	0.8%	1.0%	0.6%	0.2%

Source: NBRM on the basis of data obtained from the banks

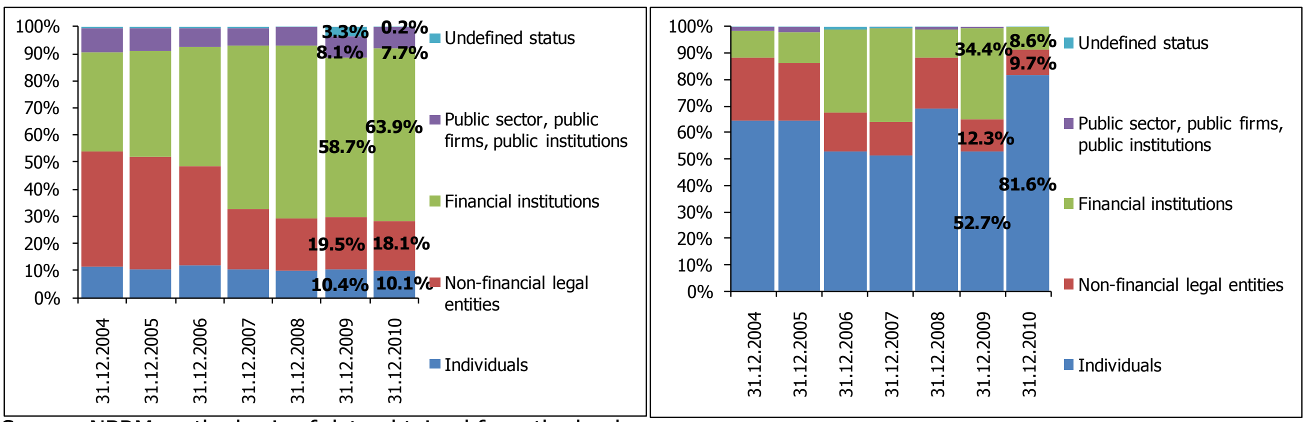
The trend of quality improvement of the qualification structure of the employees in the banking sector also continued in 2010. The number of employees with higher levels of education (Ph.D., masters and university degree) increased by 185 people, thus making their share in the qualification structure to increase by 3.4%. Along with this, the trend of decreasing the share of employees with lower educational level continued whose number in 2010 reduced by 217. Such qualification restructuring is positively assessed from the point of view of widening the quality and offer of banking products and services, better implementation of banks' strategies, strengthening of risk management systems etc.

[6] Due to data comparability there has been correction of data regarding number of employees in 2009 at small and medium banks i.e. assuming that in 2009 Macedonian Bank for Development Promotion (MBDP) AD Skopje belongs to medium banks group.

1.3. Banking system ownership structure

In 2010 the role of the financial institutions as dominant shareholders in banks became stronger. They increased their participation in the number of common stocks as a result of: purchase of stocks of one bank by another foreign bank[7], additional capitalization of three banks (Alfa Banka AD Skopje, Ohridska Banka AD Ohrid and Ziraat Banka AD Skopje) and conversion of part of preferred stocks into common stocks[8]. Natural entities have major involvement in the preferred stocks. As a result of the executed conversion and reduction of total number of preferred stocks, the participation of natural entities in the preferred stocks additionally increased (by 28.9 percentage points) compared to December 31 2009.

Figure 1.3.1
Ownership structure of ordinary (left) and preference (right) shares in the banking system



Source: NBRM on the basis of data obtained from the banks
Note: "undefined status" refers to shares owned by entities that cannot be identified, which are under bankruptcy procedure, liquidation procedure or the bankruptcy/ liquidation procedure has been closed.

In 2010 the foreign shareholders increased their investments in the banking system in the Republic of Macedonia amounting to Denar 2,779 million. Compared to the previous investments these investments have increased by Denar 2,158 million i.e. almost five times. The structure of this growth encompasses three types of investments: purchase of stocks (32.1%), investing in subordinated deposits (28.7%) and recapitalization (31.8%). The investments in the form of subordinated deposits this year still have the major part in foreign investments (37.3%) regardless of the decreased share of 32.4% percentage points compared to the previous year (in 2009 this type of investment was 69.7%). The investments through purchase of stocks had 31.3% of the annual foreign capital investments out of which domestic capital (88.8%) belongs to one of the large banks. Also the invested capital based on recapitalization of three banks by their foreign shareholders also represents significant part of the foreign investments (25.2%). In 2009 there was no such type of investments by foreign shareholders.

[7] In April 2010, 93.8% of Starter banka AD Kumanovo were purchased by Centralno Kooperativna banka AD Sofija. The purchased stocks were owned by Milestone, Island, under bankruptcy, which in April 2009 had undefined status. As a result of the purchase, the participation of entities with undefined status in the ordinary stocks structure decreased.

[8] Three banks made conversion of the preferred stocks into common stocks in the total amount of Denar 104,864 thousand. The conversion made by one bank (Centralno Kooperativna banka AD Skopje) had influence on the increase of participation of financial institutions in the common stocks, in which the financial institutions are owners of 80.6% of the converted stocks. In the other two banks (Komercijalna banka AD Skopje and Starter banka AD Kumanovo) natural entities appear as dominant participants in the conversion of preferred stocks into common stocks, with 85.9%.

Figure 1.3.2
Banks' market share in dominant foreign ownership and trend of foreign capital share in total capital

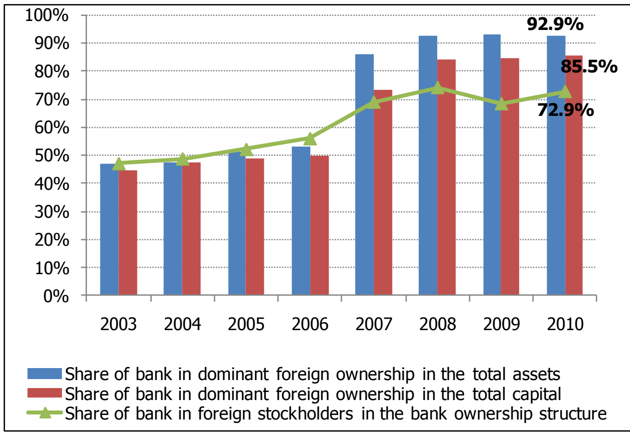
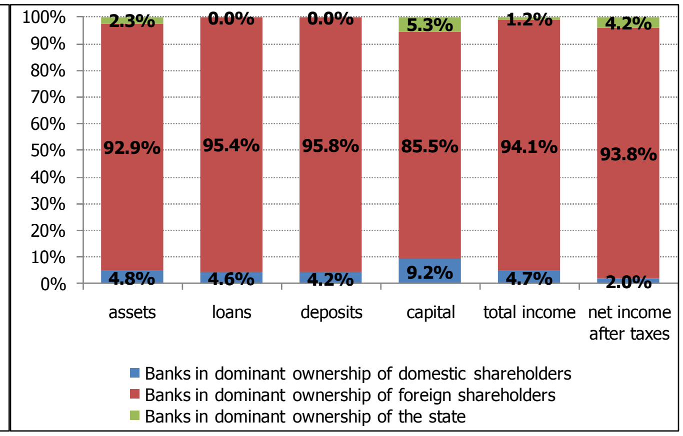


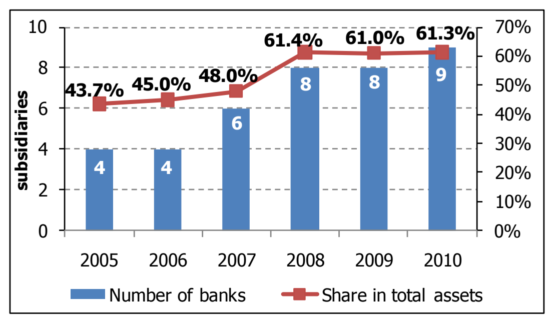
Figure 1.3.3
Structure of more important positions in banks' balances according to dominant ownership of banks



Source: NBRM on the basis of data obtained from the banks

On December 31, 2010 fourteen out of the total number of eighteen banks in the Republic of Macedonia had foreign shareholders as dominant owners. Out of them nine are subsidiaries of foreign banks. As the number of foreign subsidiaries increases also does their share in the total assets of the banking system. Starting as of 2008 the foreign subsidiaries maintain their market share (in the banking system total assets) of around 61% (besides the increased number of subsidiaries in 2010 there was a minimal increase in their market share due to the insignificant share in the bank's total assets which obtained dominant ownership by a foreign bank).

Figure 1.3.4
Dynamics of share of banks' subsidiaries assets in total assets



Source: NBRM on the basis of data obtained from the banks

1.4. Market share and banking system concentration

On December 31, 2010 the banking system concentration measured by CR5 indicator [9] and Herfindahl index [10] remained on a high level in all segments of the banking activities whereas the highest concentration was noticed with the household deposits. However, compared to the previous year these indicator showed certain decrease at most of the analyzed categories, except in corporate deposits, where both indicators for measuring concentration increased. The participation of the five largest banks with major assets (CR5 indicator) showed decrease by 0.2 percentage points compared to the previous year. This index

[9] CR5 index denotes assets share (i.e. analyzed category, for example, corporate credits, corporate deposits etc.) of the five top banks with major assets (i.e. analyzed category) in the banking system.

[10] The Herfindahl index is calculated according to the equation $HI = \sum_{j=1}^{n} (S_j)^2$ where S denotes each bank's share in the total amount of analyzed category (for example: total assets, total deposits etc.), while *n* denotes the total number of banks in the system. When the index ranges between 1,000 and 1,800 units the level of concentration in the banking system is generally considered acceptable.

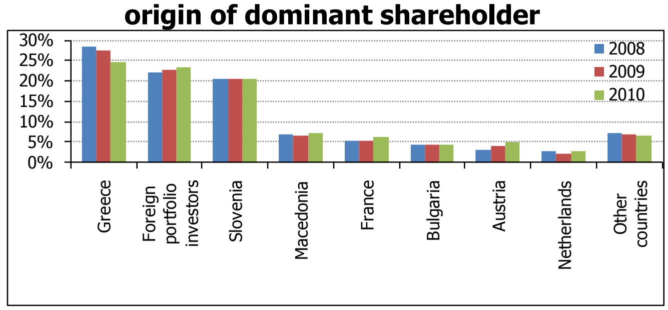
calculated for the three banks with major assets (so called CR3 indicator) reduced by 1.5 percentage points. The sharper decline of the CR3 index in 2010, shows that two of the medium banks have higher influence on CR5 indicator with the assets.

Table 1.4.1
Dynamics of the Herfindahl index and CR5 index in the banking system in the Republic of Macedonia

	Year	Total assets	Household credits	Enterprises credits	Household deposits	Enterprises deposits
Herfindahl	31.12.2007	1,625	2,001	1,819	2,084	1,780
	31.12.2008	1,579	1,953	1,859	2,097	1,642
	31.12.2009	1,637	2,064	1,937	2,098	1,312
	31.12.2010	1,578	2,050	1,855	2,079	1,598
CR5	31.12.2007	76.6%	80.0%	79.1%	83.9%	81.7%
	31.12.2008	74.7%	76.9%	79.2%	84.8%	79.9%
	31.12.2009	77.4%	81.2%	81.3%	85.7%	81.5%
	31.12.2010	77.2%	79.3%	81.1%	84.9%	83.3%

Source: NBRM on the basis of data obtained from the banks

Figure 1.4.1
Market share (assets) of banks by country of origin of dominant shareholder



Source: NBRM on the basis of data obtained from the banks

Analyzed by shareholders' country of origin the banks which are dominantly owned by shareholders from Greece and Slovenia, as well as the banks owned by foreign portfolio-investors[11] still have dominant share in the total assets of the banking system in the Republic of Macedonia (68.4%). In the last three years the market share of banks dominantly owned by Greek shareholders has decreased (at the end of 2010 their share in the total assets was lower by 2.9 percentage points compared to the previous year). The decrease of the share with these banks is mainly for the benefit of the increased share of banks owned by shareholders from France and Austria. Banks dominantly owned by domestic shareholders have 7.1% share in the total assets and on December 31, 2010 had an increase of only 0.4 percentage points relative to December 31, 2009. Market share of banks owned by shareholders from the other countries, including those from Slovenia, has not changed significantly.

Figure 1.4.2
Market share of individual banks (by assets)

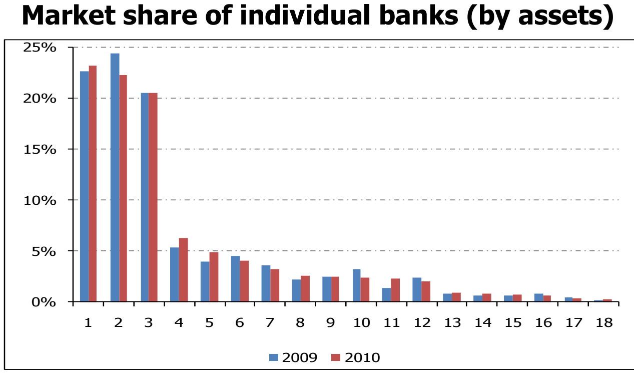
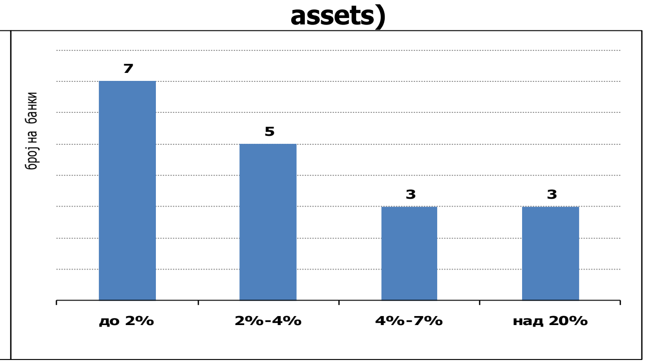


Figure 1.4.3
Allocation of banks by their market share (in assets)



Source: NBRM on the basis of data obtained from the banks

[11] Banks with dominant foreign ownership but lack of strategic investor.

The market share of individual banks also has not significantly changed relative to the previous year, except for one bank's share. As in 2009 eleven out of eighteen banks each have less than 3% of the banking system total assets. The assets share has insignificantly increased with nine out of the total number of eighteen banks. One of the large banks had major decrease of the market share (2.1 percentage points) which is mainly due to the lower assets growth of this bank relative to the assets growth of the banking system and the large banks group.

Table 1.4.2
Market share by individual groups of banks

Groups of banks	Number of banks		Share in the total assets		Share in the total activities		Share in the total loans		Share in the total deposits	
	31.12.2009	31.12.2010	31.12.2009	31.12.2010	31.12.2009	31.12.2010	31.12.2009	31.12.2010	31.12.2009	31.12.2010
Големи банки	3	3	67.5%	66.0%	68.4%	66.8%	70.1%	68.9%	74.5%	72.7%
Средни банки	8	9	27.6%	30.2%	27.2%	29.8%	27.8%	28.8%	22.9%	24.3%
Мали банки	7	6	4.9%	3.8%	4.4%	3.4%	2.1%	2.3%	2.6%	3.0%
Вкупно	**18**	**18**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Source: NBRM on the basis of data obtained from the banks

In 2010 the large banks' market share decreased in all analyzed segments, although insignificantly. On the other hand, it increased in all analyzed segments with the group of medium banks' share. The increased number of banks which belong to this group (due to the transfer of Macedonian Bank for Development Promotion from the small banks group) has a certain influence on the increased market share by the medium banks, but this group would have had an increase (although lower) even if the number of banks had remained unchanged[12].

[12] Macedonian Bank for Development Promotion contributes with 2.3 percentage points and with 2.0 percentage points in the growth of the medium banks' share in total assets and overall activities in the banking system, respectively.

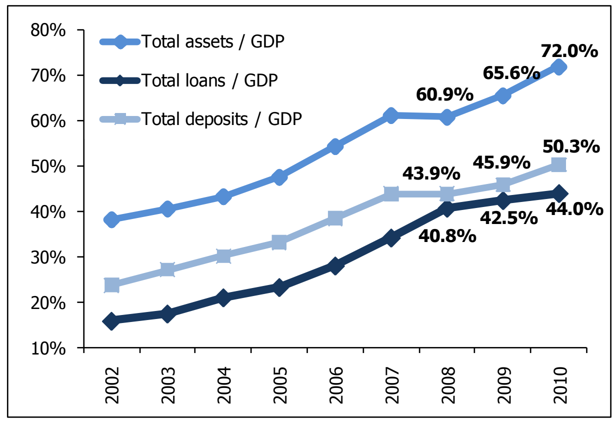
2. Activities of the banks

In 2010 the activities of the banks increased in line with the revitalization of the domestic economy and the Central Bank's monetary policy. The credit activity growth of the banks this year is slightly more than twice higher compared to the growth in the previous year. This growth was enabled by the growth of non-financial entities' deposits. Their growth rate significantly accelerated and at the end of 2010 it was almost three times higher compared to December 31, 2009. The banks are still cautious in taking risks which is pointed out also by the significant growth of the banks' investments in low-risk securities.

2.1. Financial intermediation level

Revitalization of the banks' activities had a positive effect also on the financial intermediation in the country. The faster growth dynamics of total assets and total deposits, relative to the credit activity growth, provided higher growth of the financial intermediation measured by the credits and GDP ratio. The large banks group still has dominant share in the financial intermediation in the country.

Figure 2.1.1
Financial intermediation level



Source: NBRM on the basis of data obtained from the banks

Table 2.1.1
Financial intermediation level in the Republic of Macedonia and EU countries

Country	Assets/GDP	Deposits/GDP	Loans/GDP
Romania	74.6%	35.7%	43.0%
Poland	88.4%	55.3%	56.6%
Lithuania	98.2%	45.6%	72.4%
Slovakia	86.0%	34.7%	49.1%
Hungary	135.5%	60.5%	78.5%
Bulgaria	112.0%	67.5%	78.1%
Czech republic	116.7%	77.3%	58.1%
Slovenia	153.0%	69.4%	101.5%
Estonia	155.4%	73.4%	114.0%
Latvia	161.4%	114.2%	69.9%
Cyprus	822.4%	343.2%	341.5%
Malta	721.0%	293.2%	373.2%
EU	333.6%	122.7%	141.5%
MU	357.3%	143.2%	162.2%
Republic of Macedonia (2009)	65.6%	45.9%	42.5%
Republic of Macedonia (2010)	72.0%	50.3%	44.0%

*The data for the EU countries refers to 2009.

Source: NBRM and Report on structure of banking systems in EU, ECB, September 2010

Despite the positive movements compared to the previous year, the financial intermediation in the Republic of Macedonia is still on the lowest level relative to some countries from the European Union, the EU average and the Eurozone average. Only three countries make an exception (Romania, Lithuania and Slovakia) where the financial intermediation expressed through deposits and GDP ratio is lower than the financial intermediation in the Republic of Macedonia. The financial intermediation measured through the credits and GDP ratio in the banking systems in Romania and the Republic of Macedonia are almost at the same level.

Business expectations and planned activities of the banks in 2011

Numerous surveys conducted over different types of organization which operate in the developed economies and the emerging economies point out to business planning, as the highest ranked and the most important managing function which is a precondition for successfully conducting other managing functions. The business expectations and plans of the banks in the Republic of Macedonia are an important signal for the National Bank of the Republic of Macedonia regarding the future business climate and may represent an important orientation in creating the NBRM policies in terms of maintaining macroeconomic and financial stability in the country. In that sense at the end of 2010 the NBRM sent to the banks a Questionnaire on business expectations and planned activities for 2011[13]. Besides the quantitative aspects of the plans of the banks for 2011 (planed change of certain items in financial reports or other important variables for operation of the banks) the questionnaire covers also the quality dimension of business plans presented through basic goals of the banks for 2011 and the most important activities for their realization, intentions for introducing new products, development of business network and distribution channels, etc. It further analyzes the situation and developments on the banking system level, which may be expected in 2011 and there are also conclusions presented which can be considered valid for the whole banking system based on aggregation and processing of answers provided by the banks in the questionnaire, without analyzing the reality and sustainability of the projections or making any assessment of the quality of the planning process of the banks[14].

Priority goals of the banks in 2011 are increasing the profitability and work efficiency, growth of activities (first of all credit and deposit activities) and risk management enhancement (providing stable and secure operations and efficient managing of assets and liabilities)[15]. **The banks plan to achieve these goals through** a) current products and services development, introduction of new, redesign and/or enhancement of the variety of products and services according to clients' needs and increasing the quality of services; increasing the number of employees, extending and enhancing of current or introducing new channels for distribution and sale and increasing the number of ATM and POS terminals; b) efficient cash management, portfolio diversification, taking activities for collection of problematic claims and c) sale of undertaken assets based on uncollected claims[16].

The expectations for positive tendencies in domestic economic activity (GDP growth, output, exports, capital inflows, increased activity of the real sector and pursuant to that employment and income increase, increase in credit demand) have been set out as **the most significant factor from the exterior surrounding which provides opportunity[17]** for the banks to achieve the set goals. At the same time, the banks point out to the slower recovery of domestic and world economic activity than expected **as the most significant threat[18] from the external surrounding** which creates obstacles in achieving their goals.

[13] The questionnaire can be found on the NBRM website www.nbrm.mk
[14] The questionnaire was completely or partially answered by 17 banks. CKB AD Skopje in their plans for 2011 takes into account also the joining by Stater Banka AD Kumanovo.
[15] These goals were stressed out as high priority, by 11 i.e. 10 banks respectively out of 17 banks in total.
[16] These activities were pointed out as the most important by 14, 10 and 9 banks, respectively out of 17 banks in total.
[17] This external factor has been pointed out as opportunity for the banks by 9 out of 17 banks in total.
[18] This external factor has been pointed out as threat to the banks by 14 out of 17 banks in total.

Information and data published by international financial institutions and relevant domestic institutions as well as the system for knowledge and experience of management in the bank have been pointed out as two most used data sources necessary for successful implementation of planning process in the banks. These sources of information/data were pointed out by 16 i.e. 15 banks, respectively.

Quality (intuitive)[19] methods of forecasting are the most used methods by the banks in the planning process (15 banks use these techniques). The number of banks which additionally use time series analysis in the planning process is also big (13 banks). More sophisticated forecasting techniques (for example, quantitative – causal methods) are used by two banks in projecting some of the items in financial reports.

The interval of omission for what was realized in 2010 from that planned before for the same year[20] (in the area of quantitative projections by the banks) is quite broad and it ranges from minus 1,800.7% (a bank with the highest percentage of negative omission of realized vs. planned for 2010, which refers to the achieved profit) to plus 926% (a bank with the highest percentage of positive omission, which refers to trading assets for 2010)[21].

The largest number of banks point out to improvement of profitability and efficiency as top priority goal in 2011. In this context, only two banks expect to have losses at the end of 2011 (but to have profit in the following 2012). According to the banks' plans for 2011 the whole banking system would have profit, which is around 35% higher than the profit gained in 2010. According to the banks' answers obtained in January 2011, most of the banks plan to reduce the interest rates on credit and deposit products in 2011[22].

Planned income statement for 2011

in millions of Denars

Selected items from the income statement	Planned for 2011	Realized in 2010	Planned increase (+)/ decrease (-)	
			in absolute amount	in %
Net interest income	**11,335**	**10,397**	**938**	**9.0%**
interest income	**20,659**	**19,535**	**1,124**	**5.8%**
households	7,005	7,245	-240	-3.3%
corporates (private and public)	10,227	8,647	1,580	18.3%
financial institutions	1,388	2,099	-710	-33.9%
other entities	1,260	828	432	52.1%
impairment of interest income (net basis)	196	716	-521	-72.7%
interest expenses	**-9,324**	**-9,138**	**186**	**2.0%**
households	-5,725	-5,939	-213	-3.6%
corporates (private and public)	-1,421	-1,238	183	14.8%
financial institutions	-1,631	-1,056	575	54.4%
other entities	-289	-905	-617	-68.1%
Net fees and commission income	**3,744**	**3,383**	**361**	**10.7%**
Impairment losses (net basis)	**-2,821**	**-2,856**	**-35**	**-1.2%**
Operating expenses	**-10,349**	**-10,573**	**-224**	**-2.1%**
of which, employees expenses	-3,918	-4,139	-221	-5.3%
Profit (loss) after taxes	**3,111**	**2,307**	**804**	**34.9%**

Source: NBRM, on the basis of data obtained from the banks

Note: The question regarding the planned income statement of the banks for 2011 was completely answered by 14 banks. The data from the remaining 3 banks, although partial (do not have detailed structure of all items in this report) are also presented in the report.

The major absolute growth by Denar 1,397 million is expected with the net-interest revenues from the corporate sector (non-financial companies) and additional cuts are planned in the operating expenses, in the total amount of Denar 224 million or by 2.1%. Besides that in 2011 the banks expect Denar 35 million lower

[19] Based on subjective opinion, knowledge, experience, intuition and reasoning by individual and/or group of experts who in predicting of future developments of certain variables can also use market movements and/or to decide based on historical analogy.

[20] It is calculated this way: (achieved in 2010-planned for 2010)/ planned for 2010

[21] The analysis by individual banks showed that this interval is the tightest at one medium bank (it moves from -1% to 1.7%) and the widest also at one medium bank moving from -1.800,7% to 272%.

[22] According to the results from the questionnaire, 12 banks plan to reduce their credit interest rates, and 10 banks plan reducing of the deposit interest rates. The rest of the banks do not plan any changes in the interest rate policy.

impairment of financial assets (on net basis) as item in the income statement. Thus in line with the banks' plans at the end of 2011 the rates of return on average assets and average equity and reserves are targeted on the level of 1% and 9.1%, respectively (at the end of 2010 ROAA was 0.8% while ROAE was 7.3% at the banking system level).

Despite giving priority to the profitability in their work, the banks do not expect deterioration in their solvency position in 2011. Namely, according to the answers obtained from 16 banks (out of 17 in total) at the end of 2011 the capital adequacy ratio on the banking system level would be 15.8% (0.3 percentage points lower compared to the realized capital adequacy ratio at the end of 2010)[23]. The analysis of the answers by individual banks refer to improvement of the banks' distribution according to the capital adequacy level, i.e. the banks which have lower capital adequacy mainly plan to improve or maintain the capital adequacy ratio on the same level as it was at the end of 2010, while those with quite high capital adequacy ratio plan to reduce it during 2011, mostly as a result of the planned increase of activities.

The increase in the volume of activities is also one of the top priority goals for 2011 for most of the banks. However, the planned increase of assets in 2011 is projected at Denar 32,667 million (or by 10.7%) which is around Denar 4,000 million less than the realized growth in 2010[24]. On the other hand, according to the plans of the banks, a significantly more dynamic credit activity should be expected in 2011. Namely, to the question about the planned change in the assets structure for 2011, 14 banks replied that they planed to increase the crediting, while 3 banks plan equal dynamics of change of crediting and liquid assets, by which their share in the total assets would remain unchanged. According to the banks' plans for 2011, total number of credits would increase by Denar 30,449 million (or by 15.7%) which is a twice higher credit activity growth compared to the realized growth in 2010. The credits extended to non-financial entities are expected to have major share in the growth (they would have 58.8% of the planned total credits growth) while according to the currency, loans in foreign currency are expected to have the largest share (39.8% from the planned growth). From a viewpoint of the maturity structure, major share in the planned increase of total credits would be that of the long-term credits (they are planned to have 43% of the total credits growth planned for 2011). In 2011 the banks expect the non-performing loans to increase by Denar 206 million (or by 1.2%) which is seven times lower growth compared to that in 2010. In a situation of a relatively high planned total credits growth (including credits to financial institutions) the indicator for non-performing loans' share in the total credits would decrease by 1.1 percentage points (from 9% on December 31, 2010 to 7.9% on December 31, 2011). At the same time the indicator for coverage of the total non-performing loans with the total impairment is expected to increase by almost 15 percentage points (from 110.2% at the end of 2010 to 125.1% at the end of 2011.

[23] It should be taken into account that one small bank with quite high capital adequacy ratio was not considered in the calculations (the bank does not have projections for the capital adequacy ratio for 2011). If this bank was also considered in the accounts, even under extreme assumption that its own funds would decrease by 25%, in 2011, and the risk weighted assets would increase by 100% than the capital adequacy ratio on the banking system level would be 16% at the end of 2011 which is a minimal fall of only 0.1 percentage points compared to the end of 2010.

[24] 17 banks replied to the question on planned change in total assets.

Planned credit change during 2011

in millions of Denars

Planned change in total credits		Sector structure of the planned change in total credits			Currency structure of the planned change in total credits			Maturity structure of the planned change in total credits			
Absolute change	Relative change	Credits to households	Credits to corporates (public and private)	Credits to financial institutions	Credits in denars	Credits in denars with FX clause	Credits in foreign currency	Short-term credits	Long-term credits	Past-due credits	Nonperforming credits
30,449	15.7%	10,468	17,916	2,065	11,316	7,020	12,113	4,994	13,099	178	206

Source: NBRM on the basis of data obtained from the banks
Note: The presented data are on the basis of answers from the questionnaire, submitted by 17 banks. The only exception is data which refer to maturity structure of the planned credit growth, where 11 banks submitted complete answers.

The banks plan to increase the off-balance sheet activities, during 2011, by Denar 2,888 million (or by 7.5%)[25]. Thus most of the banks (13 banks) plan to increase the off-balance sheet activities based on issued guarantees and based on approved but not used overdrafts on current accounts and credits by credit cards.

According to the banks' plans, the development of current and/or introduction of new products and services is one of the most frequently planned activities for 2011. Almost all of the banks, during 2011, plan to offer new credit and/or deposit products to their clients (new for the bank, but not for the Macedonian market) and there are also banks which plan to introduce completely new offers on the Macedonian market. On the other hand, almost half of the banks do not plan to introduce new services on the market.

In 2011 the banks plan to provide better access to their services and products offered on the market through opening of 20 new branch offices[26] and 129 new ATMs[27]. Moreover, 218 new employments[28] are planned to occur in 2011 (188 out of which would be open to economists).

Most of the sources of finance during 2011 are planned to be provided through collection of deposits. Namely, the expected deposit growth in 2011 is Denar 20,625 million (or 8.9%). Additional amount of sources of finance would be provided through borrowings (including subordinate instruments) which are planned to increase by Denar 7,953 million. Some banks plan new issues of shares in the total amount of Denar 1,606 million and the reinvested profit is expected to be Denar 2,386 million. Taking into account the higher planned absolute growth of credits of non-financial entities, compared to the planned deposit growth, the ratio indicator of total credits and bank deposits is expected to increase by 4.8 percentage points (from 87.5% at the end of 2010 to 92.3% on December 31, 2011).

Planned changes in sources of finance during 2011

in millions of Denars

Planned change in total deposits		Planned change in borrowings and subordinated instruments		Planned change in capital and reserves			Shortage (-)/ surplus (+) of sources of funds for maintaining of the planned increase in assets for 2011
Absolute change	Relative change	New borrowings	New subordinated instruments	Issues of common shares	Distribution of profits registered in 2010	Loss in 2011	
20,625	8.9%	7,584	369	1,606	2,386	-224	323

Source: NBRM, on the basis of data obtained from the banks
Note: Two banks did not reply to the questions regarding planned change in liabilities based on credits as well as plans for new emission of shares.

Household deposits, according to the sector structure; denar deposits, according to currency structure; and short-term deposits, according to maturity structure, are dominant in the structure of the overall planned deposit increase in 2011. Thus, the expected household deposits

[25] 14 banks provided complete answers to the questions about off-balance activities.
[26] On the basis of answered obtained by 16 banks.
[27] On the basis of answered obtained by 15 banks.
[28] On the basis of answered obtained by 15 banks.

growth is 69% of the total planned deposit growth in 2011. On the other hand, denar deposits and short-term deposits are planned to participate with 51.8% each in the total planned deposit growth in 2011.

Planned deposit change during 2011

in millions of Denars

Sector structure of the planned change in total deposits				Currency structure of the planned change in total deposits			Maturity structure of the planned change in total deposits		
Deposits of households	Deposits of corporates (public and private)	Deposits of financial institutions	Deposits of other entities	Deposits in denars	Deposits in denars with FX clause	Depositsin foreign currency	Short-term deposits	Sight deposits and current accounts	Long-term deposits
14,226	5,318	923	158	10,687	755	9,183	10,685	5,334	4,481

Source: NBRM on the basis of data obtained from the banks
Note: One bank did not answer the questions regarding planned change in deposits according to their maturity structure.

Regarding the planned changes in the risk management systems in 2011, the banks' answers are quite various thus no conclusions may be drawn which would apply to the whole banking system. However, common for most of the banks are the plans for enhancement of the information systems being a component of the risk management systems[29]. Thus in 2011 several banks plan to enhance their current software and/or to introduce a new one in order to follow the servicing of clients' liabilities and the risk profile of the bank in general as well as to generate reports about that, to enhance the information system management, filing and back-up systems, to increase the level of protection and security of the information systems, etc.

2.2. Banks' balance sheet

In 2010 the banks' assets continued with the growing trend at a significantly faster pace relative to the previous year. This year, the assets growth rate is almost twice higher relative to 2009 reaching 13.7% (in 2009 this rate was a one-digit number for the first time in the last several years). **The investments in securities and credits to non-financial entities had major contribution to the growth of banks' assets.** In 2010 the banks significantly increased their CB bills and T-bills placements, thus by the end of the year the assets invested in these low-risk instruments were Denar 25,942 million and Denar 14,294 million, respectively. The annual growth of CB bills placements was Denar 10,096 million or by 63.7% (they decreased in the previous year) while the T-bills had annual increase by Denar 6,104 million or by 74.5% (in 2009 they significantly increased by 143.6%). The increased interest for investing in these securities is a result of still present precaution by the banks regarding the increasing of the credit activity. With such annual dynamics, the CB bills and T-bills placements caused the biggest share (44.1%) of the annual growth of banks' assets.

[29] Eleven out of 17 banks in total plan to enhance the information system as risk management system component.

Figure 2.2.1
Absolute growth of total assets, deposits and gross credits of the banks

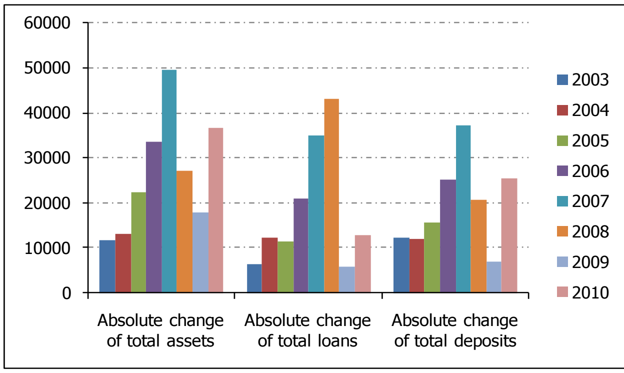
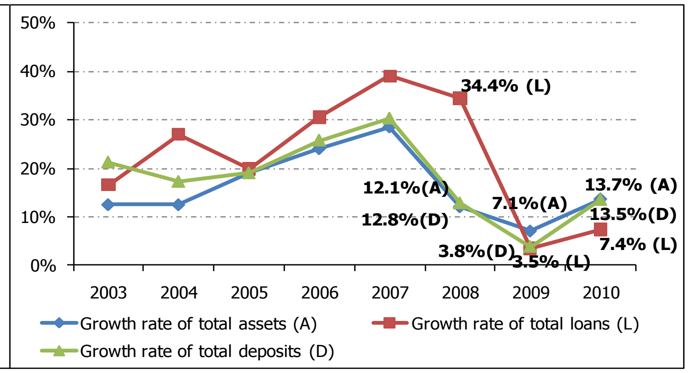


Figure 2.2.2
Annual growth rates of total assets, deposits and gross credits of the banks



Source: NBRM on the basis of data obtained from the banks

There was a faster growth also of credits[30] to non-financial entities[31]. The recovery of the domestic economy and loosening of the monetary policy in 2010 contributed towards relaxation of credit criteria by the banks, thus making positive movements in the credit activity. In 2010 credits grew by 7.4% which is twice higher than the year before (when this growth was 3.5%). The non-financial entities credit growth conditioned around one third of the annual growth of total assets of the banks (in 2009 this contribution was 16%). The higher volume of credit offer was caused by the deposits growth, which grew faster than credits. In 2010 the deposits had 13.5% growth rate which is three times higher than the year before.

Table 2.2.1
Banking system assets and liabilities structure

Balance sheet	Amount in millions of Denars		Structure		Change 31.12.2010/31.12.2009			
	31.12.2009	31.12.2010	31.12.2009	31.12.2010	Change in absolute amount	In percentage	In the structute (in percentage points)	Share in the change
Cash and balances with NBRM	32,224	34,674	12.0%	11.4%	2,450	7.6%	-0.6	6.7%
Securities portfolio	30,639	45,439	11.4%	14.9%	14,800	48.3%	3.5	40.3%
Placements to banks and other financial institutions	33,854	40,609	12.6%	13.3%	6,755	20.0%	0.7	18.4%
Loans to non-financial entities (net)*	157,128	168,346	58.5%	55.1%	11,219	7.1%	-3.4	30.5%
Accured interest and other assets	6,151	7,887	2.3%	2.6%	1,737	28.2%	0.3	4.7%
Fixed assets	8,547	8,334	3.2%	2.7%	-213	-2.5%	-0.5	-0.6%
Unallocated loan loss provisions	0	0	0.0%	0.0%	0	0.0%	0.0	0.0%
Total assets	**268,543**	**305,290**	**100.0%**	**100.0%**	**36,747**	**13.7%**	**0.0**	**100.0%**
Deposits from banks and other financial institutions	18,031	18,372	6.7%	6.0%	341	1.9%	-0.7	0.9%
Deposits of non-financial entities	187,875	213,270	70.0%	69.9%	25,395	13.5%	-0.1	69.1%
Borrowings (short-term and long-term)	24,020	32,729	8.9%	10.7%	8,708	36.3%	1.8	23.7%
Other liabilities	7,247	8,002	2.7%	2.6%	756	10.4%	-0.1	2.1%
Provisions for off-balance sheet items	760	661	0.3%	0.2%	-98	-13.0%	-0.1	-0.3%
Capital and reserves	30,609	32,256	11.4%	10.6%	1,646	5.4%	-0.8	4.5%
Total liabilities	**268,543**	**305,290**	**100.0%**	**100.0%**	**36,747**	**13.7%**	**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 on the basis of data obtained from the banks

[30] The analysis refers to gross credits.

[31] There is more detailed analysis of structure and movements of credits endorsed to non-fiancial entities presented in the part 2.3. Credit activity

In the assets structure there has been a downward trend in the share of credits to non-financial entities in the last three years. This comes as a result of the faster growth of the banks' investments in securities, whose share in the total assets has increased.

Figure 2.2.3
Banks' assets structure

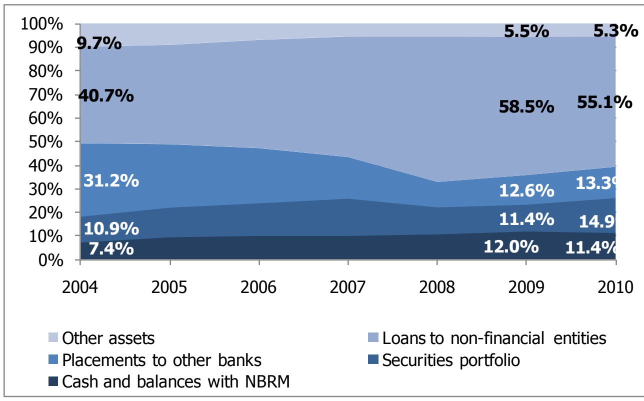
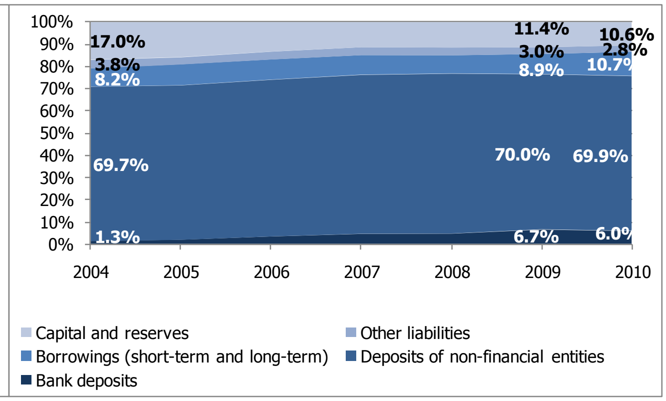


Figure 2.2.4
Banks' liabilities structure



Source: NBRM on the basis of data obtained from the banks

Besides the significant increase of non-financial entities' deposits, their share in the banking sector's liabilities has insignificantly changed. In 2010 the use of long-term and short-term borrowings by the banks increased. Compared to the year before, only the share of borrowings increased (by 1.8 percentage points) in the liabilities structure while the share of all other components decreased. The growth of banks' credit liabilities increased by Denar 7,435 million or by 41.0% while the share of subordinated liabilities is much lower and it is 14.6%. The credit liabilities towards foreign banks which in 2010 increased by Denar 5,389 million or by 53.1% had dominant influence in the growth of credit liabilities of the banks.

The assets used by parent entities had 26.5% share in the growth of credits from foreign banks, whose annual growth rate is 32.3%. On the other hand, the parent entities' deposits decreased by 6.2% on annual basis compared to the 30.6% growth achieved in the previous year. As a result of these changes, the total liabilities of the banks towards non-residents increased by 24.6% compared to the previous year. **This caused an increase in the share of liabilities towards non-residents in the total assets structure of the banks, up to a level of 11.6%.**

Figure 2.2.5
Claims from non-residents and their share in the banking system's assets

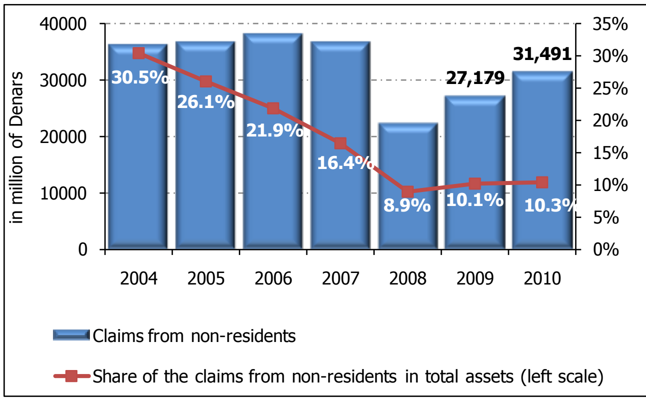
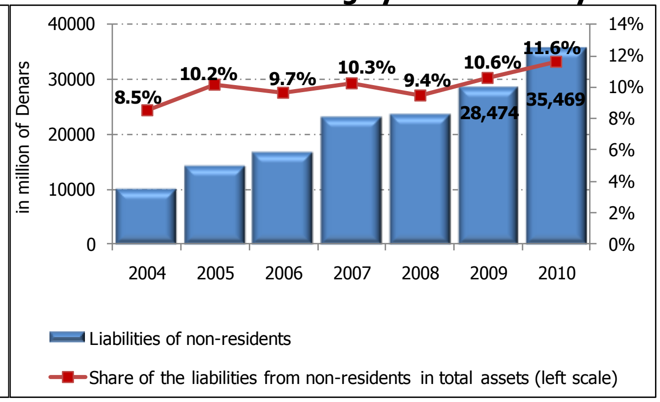


Figure 2.2.6
Liabilities towards non-residents and their share in the banking system's liability

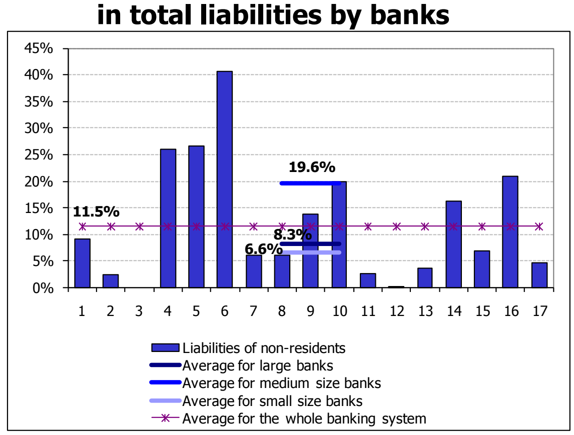


Source: NBRM on the basis of data obtained from the banks

The share of claims on non-residents in the banks' total assets did not significantly change at the end of 2010. The claims on non-residents increased by 15.9%, which was completely caused by the increase of assets on the accounts with foreign banks which is also a dominant item in the structure of total claims on non-residents. This year the funds on the accounts with foreign banks increased by Denar 4,864 million or by 18.5%.

The share of liabilities to non-residents in the total liabilities by individual bank ranges between 0% to 40.6%. Thus, compared to the previous year there is a decrease in the upper threshold of this interval by 14.9 percentage points (at a same bank). The number of banks which exceed the banking system average level remains unchanged, thus at the end of 2010 seven banks in total had higher share in the debt towards non-residents in the total amount of liabilities compared to the level typical for the whole banking system. The medium banks, on average, continue to be the most indebted towards non-residents.

Figure 2.2.7
Share of liabilities towards non-residents in total liabilities by banks



Source: NBRM on the basis of data obtained from the banks

In 2010 the interest-bearing assets and interest-bearing liabilities of banks increased compared to the previous year. At the end of the year the interest-bearing funds amounted to Denar 214,178 million and on the annual basis they increased by Denar 28,689 million or by 15.5%. This growth contributed also towards increasing of the share of interest-bearing assets in the banks' total funds by 1.1 percentage point. The interest-bearing liabilities were Denar 198,052 million. Their annual growth was Denar 24,384 million or 14.0% but the share in the liabilities structure remained almost unchanged. The group of medium banks[32] had the major share (over 50%) in the growth of interest-bearing assets and interest-bearing liabilities.

[32] This group of banks would have had the major contribution in the growth if the MBDP AD Skopje had remained in the small banks group.

Figure 2.2.8
Share of interest-bearing assets in the total assets of the banking system

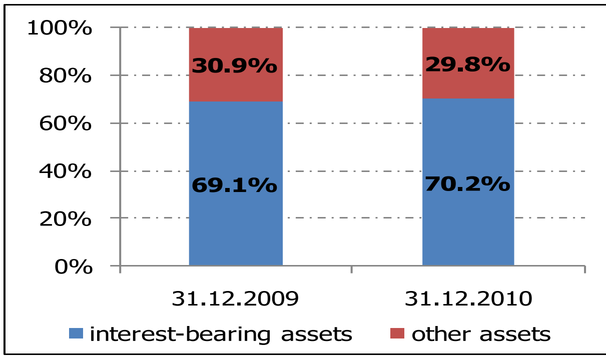
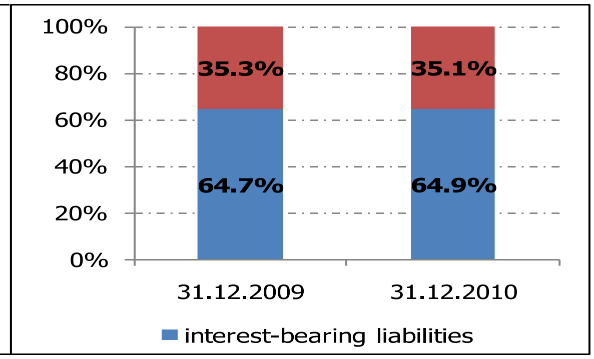


Figure 2.2.9
Share of interest-bearing liabilities in the total liabilities of the banking system



Source: NBRM on the basis of data obtained from the banks

At the end of 2010 there was again an increase in the share of Denar component in the banks' total assets and liabilities structure, after the decrease which was present during the two previous years. However, the assets and liabilities with FX component still have high share in the banks' assets and liabilities structure (53.7% and 51.5%, respectively). The decreased share of assets with FX component is mainly due to the decline in the share of assets in denars with FX clause. On the other hand, on the liabilities part there is decrease in the share of FX liabilities as well as liabilities in denars with FX clause. The gradual revitalization of the domestic economic activity and lower psychological pressures which were caused by the financial crisis, credibility of the monetary authority, stabilization of the developments on the foreign exchange market and termination of the currency transformation of sources (especially deposits) in 2010 led to a return of the growth of the denar component in the assets and liabilities of banks.

Figure 2.2.10
Banking system assets currency structure

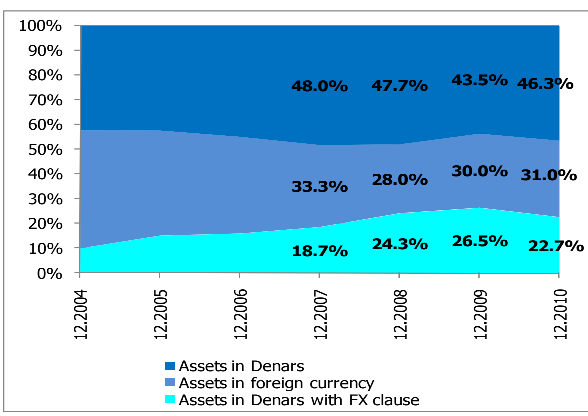
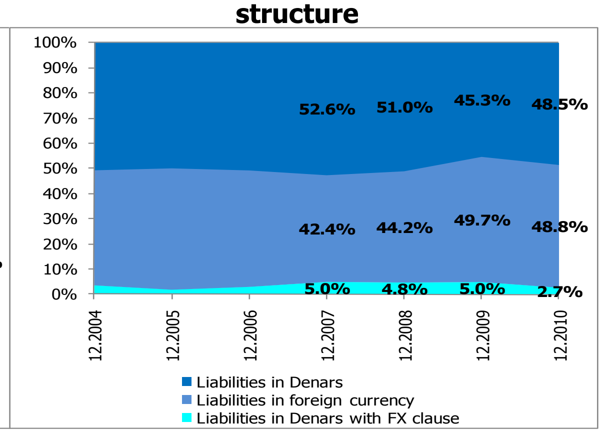


Figure 2.2.11
Banking system liabilities currency structure



Source: NBRM on the basis of data obtained from the banks

2.3. Balance sheet of the individual groups of banks

In 2010 there were not significant changes in the share of the individual groups of banks in the three main balance sheet categories on the banking system level (assets, loans and deposits of non-financial entities). The large banks still have dominant role in these categories. However, certain decreasing in their share can be noticed, for the account of the increased share mainly of the medium banks group in the three analyzed balance sheet categories. Also, changes can be noticed in certain banks' share in the annual growth of assets, loans and deposits. Opposite to the previous year when the group of large banks dominated in the growth of total assets (with around 87%) and in the total loans and deposits (entirely) this year the group of large banks caused less than 60% of the annual growth of these categories. The transfer of the MBDP AD Skopje from the group of small to medium banks had only affected the assets. Thus, if this transfer had not occurred, the small banks instead of decrease of assets by 11.9% would have had 41.6% increase. The growth of assets in the group of medium banks would have been 15.0% instead of 24.4%.

Table 2.3.1
Market share and growth of total assets, credits and deposits by groups of banks

ITEMS	Amount in millions of Denars		Structure		Annual change 31.12.10/31.12.09			
	31.12.2009	31.12.2010	31.12.2009	31.12.2010	In absolute amount	In percent	In the structure (in percentage	Share in the change
Total assets	**268,543**	**305,290**	**100.0%**	**100.0%**	**36,747**	**13.7%**		**100.0%**
- Large banks	181,398	201,609	67.5%	66.0%	20,211	11.1%	-1.5	55.0%
- Medium size banks	74,062	92,155	27.6%	30.2%	18,093	24.4%	2.6	49.2%
- Small size banks	13,082	11,526	4.9%	3.8%	(1,557)	-11.9%	-1.1	-4.2%
Loans to non-financial entities	**157,128**	**168,346**	**100.0%**	**100.0%**	**11,219**	**7.1%**		**100.0%**
- Large banks	109,591	115,223	69.7%	68.4%	5,632	5.1%	-1.3	50.2%
- Medium size banks	44,730	49,411	28.5%	29.4%	4,681	10.5%	0.9	41.7%
- Small size banks	2,807	3,712	1.8%	2.2%	905	32.3%	0.4	8.1%
Deposits of non-financial entities	**187,875**	**213,270**	**100.0%**	**100.0%**	**25,395**	**13.5%**		**100.0%**
- Large banks	139,933	154,966	74.5%	72.7%	15,033	10.7%	-1.8	59.2%
- Medium size banks	43,007	51,930	22.9%	24.3%	8,922	20.7%	1.5	35.1%
- Small size banks	4,935	6,374	2.6%	3.0%	1,439	29.2%	0.4	5.7%

Source: NBRM on the basis of data obtained from the banks

The transfer of the Macedonian Bank for Development Promotion from the group of small to the group of medium banks caused certain changes in the assets and liabilities structure of these two groups of banks. For the group of medium banks this transfer affected the intensity, but not the direction of structural changes in the assets. Namely, if this transfer had not occurred, that would have affected mainly the share of loans to non-financial entities with medium banks (the decrease of total assets share would have been lower) as well as placements with banks and other financial institutions (the increase of total assets share would have been lower). On the contrary, if the transfer of the Macedonian Bank for Development Promotion had not occurred then the changes in the structural share of almost all components of the group of small banks would have moved to another direction than the current one (except for the securities portfolio where the increase in its share would have been only 0.7 percentage points).

In 2010 the group of large banks increased its interest in investing in low-risk securities which in this group have higher dynamics relative to the credit growth. The securities portfolio with this group of banks increased by 46.9% (Denar 8,952 million) and net-credits by 5.1.% (Denar 5,632 million). Thus, with the group of large banks the securities share in the total assets increased by 3.4 percentage points. Taking into account the specific characteristics of the Macedonian Bank for Development Promotion, the structural changes in medium banks' assets first of all refer to a decrease in the share of the deposit base and increase in the share of deposits from banks and other financial institutions as well as borrowings. On the other hand, the group of small banks registered an increase in the share of the deposit base in the creation of the sources of funds, for the account of the lower share of capital and reserves and deposits from banks and other financial institutions as well as borrowings. If this transfer had not occurred, the share of non-financial entities' deposits with the group of small banks would have decreased to 34.4% at the end of 2010.

Figure 2.3.1
Assets structure by groups of banks

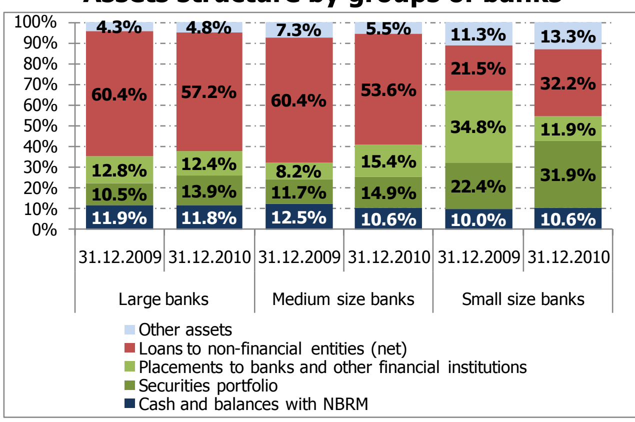
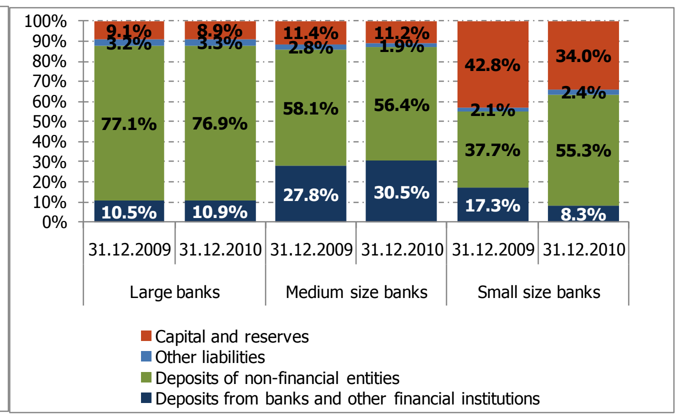


Figure 2.3.2
Liabilities structure by groups of banks



Source: NBRM on the basis of data obtained from the banks

Figure 2.3.3
FX component assets share in total assets, by groups of banks

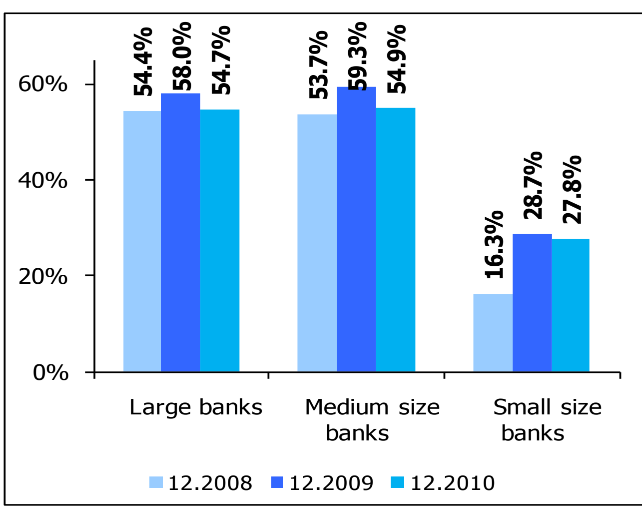
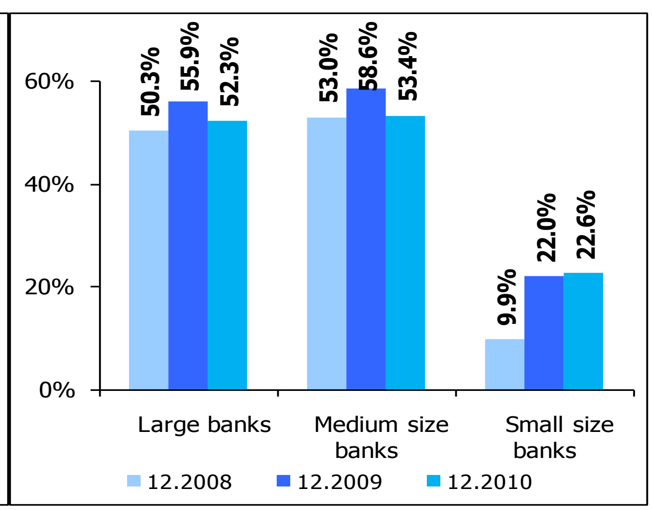


Figure 2.3.4
FX component liabilities share in total liabilities, by groups of banks



Source: NBRM on the basis of data obtained from the banks

The share of the FX component is more present in the balance sheets of large and medium banks (over 50% on the assets as well as on the liabilities part). On the other hand, in the group of small banks the assets and liabilities with FX component have less than 30% of the total assets and liabilities. Compared to the previous year, there is a decline in the FX component in the structure of assets and liabilities in all groups of banks, excluding the liabilities of small banks, where there is minimal increase in the share of the FX component.

2.4. Bank's lending activity

In 2010, the bank's lending activity revived after the slower dynamics typical for 2009. At the end of 2010, the total credits made to nonfinancial entities went up by 7.4%, which is a significant acceleration compared to the preceding year when the credit growth increased by 3.5% (Annex 5 - Structure of credits to nonfinancial entities).

Figure 2.4.1
Credits to nonfinancial entities

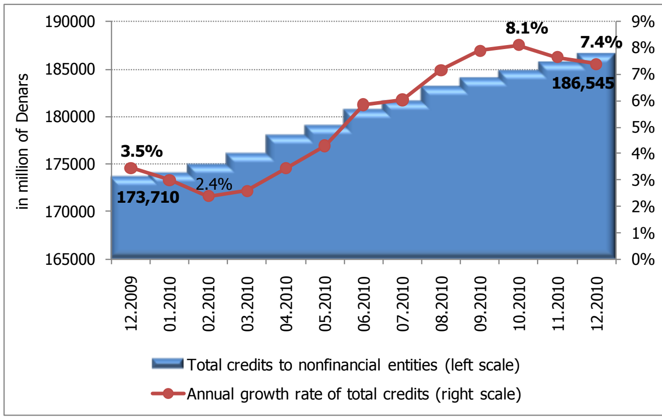
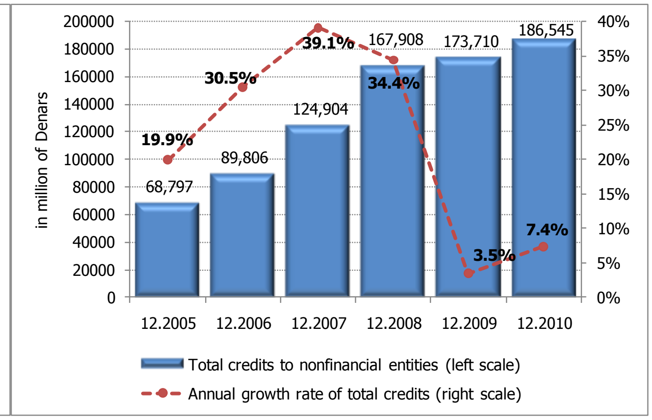
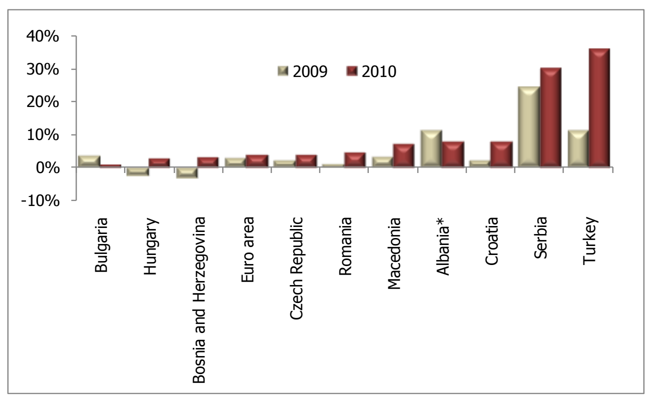


Figure 2.4.2
Annual (absolute and relative) growth of credits to nonfinancial entities



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

Figure 2.4.3
Annual growth rates of the total credits by country



Source of data: NBRM, EUROSTAT and websites of the respective central banks.
*Data on credits in Albania for 2010 is as of November 2010.

Yet, the acceleration of lending activities of the banks in the Republic of Macedonia was gradual, reflecting the banks' orientation, over the last two years, to preserve the credit portfolio quality and to maintain the bank stability, in general. This is different from the pre-crisis period of credit expansion, when the banks were mainly focused on increasing the size of credit portfolio and ensuring larger market share. The stable global and domestic macroeconomic environment, the steady increase of banks' deposits in 2010, and the improved expectations of the banking and private sector made the lending activity accelerate. The monetary policy followed this trend by multiple decrease of the key interest rate in 2010. **The annual growth rate of credits in the Republic of Macedonia in 2010 (along with Albania and Croatia) is above the annual growth rate of credits at other countries under observation (excluding Turkey and Serbia, as the most credit active countries).**

In 2010, the credit growth of all groups of banks accelerated. The group of large banks made the greatest contribution to the credit growth of 52.2% of the total annual credit growth to nonfinancial entities, whereas the group of medium-size banks accounted for 42.8% of the total credit growth. The group of small-size banks, although with the lowest contribution (of

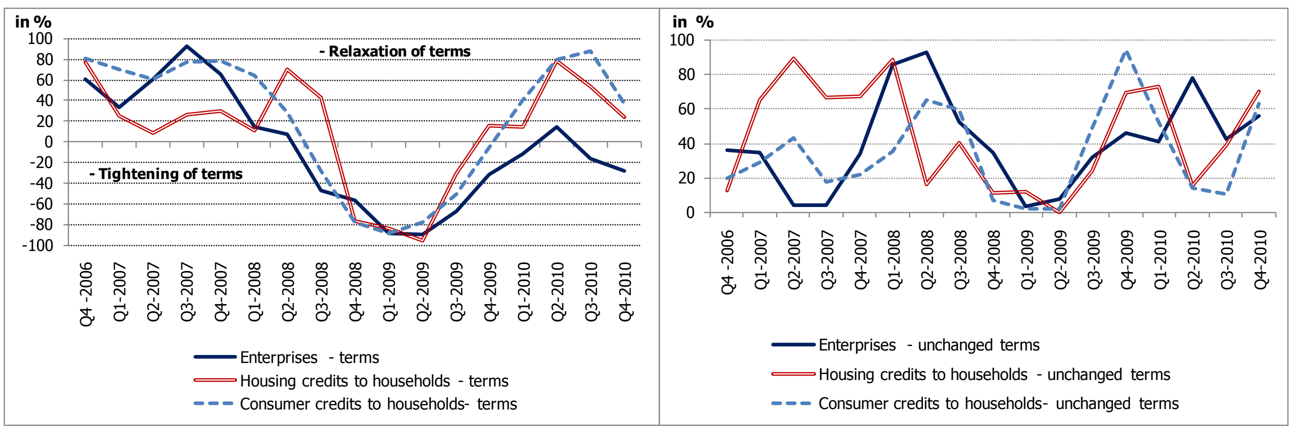
5.1%) to the total growth of credits to nonfinancial entities, registered the highest annual credit growth rate (by 17.9%), compared to the annual growth rates of the other two groups of banks (annex 6 - Credits by group of banks).

Table 2.4.1
Credits to nonfinancial entities by group of banks

Group of banks	Annual change in million of Denars					Annual change in percenatge					Share in the change				
	31.12.2006	31.12.2007	31.12.2008	31.12.2009	31.12.2010	31.12.2006	31.12.2007	31.12.2008	31.12.2009	31.12.2010	31.12.2006	31.12.2007	31.12.2008	31.12.2009	31.12.2010
Large banks	14,516	25,631	28,053	6,019	6,695	30.5%	41.2%	32.0%	5.2%	5.5%	69.1%	73.0%	65.2%	103.7%	52.2%
Medium -size banks	6,773	10,384	14,168	-28	5,490	40.0%	43.8%	41.6%	-0.1%	11.4%	32.2%	29.6%	32.9%	-0.5%	42.8%
Small-size banks	-280	-917	784	-188	651	-6.6%	-23.1%	25.7%	-4.9%	17.9%	-1.3%	-2.6%	1.8%	-3.2%	5.1%

Source: NBRM, banks' lending activity surveys.
***Changes in the lending terms** - a difference between the percentage of banks that eased their lending terms over the last three months and the percentage of banks that tightened their lending terms over the last three months. Positive difference indicates relaxation of the lending terms in the overall banking system, and negative difference indicates tightening of the lending terms in the overall banking system.
****Unchanged lending terms** - the percentage of banks that reported unchanged lending terms over the last three months.

Figure 2.4.4
Changes in the terms* (left) and unchanged terms (right) of lending to corporations and households**



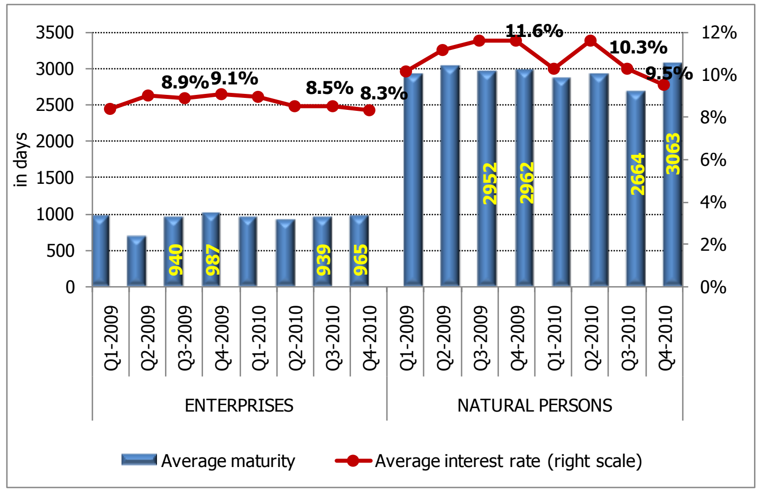
Source of data: NBRM, based on data submitted by banks.

The relaxation of the banks' lending terms[33] was more evident in the first half of 2010. The banks started relaxing the terms of lending to corporations and households (primarily housing credits) back in the last quarter of 2009 (five quarters ago). On the other hand, in the second half of 2010, most banks reported unchanged terms of corporate and household lending. Most of the banks expect[34] no significant changes in the terms of corporate lending, and partial relaxation of the terms of household lending in the first quarter of 2011.

[33] The corporate and household lending terms are presented, in more details, in the credit activity surveys published on the NBRM website - www.nbrm.mk.
[34] The banks' expectations for the corporate and household lending terms are presented, in more details, in the Credit Activity Survey of January 2011.

The average interest rates on newly extended credits in 2010 were mainly moving downwards, reaching the lowest level in the fourth quarter. The average interest rate on corporate credits approved in the fourth quarter of 2010 was by 0.8 percentage points lower compared to the fourth quarter of 2009 (annex 7 - Newly extended credits in a period). The average interest rate on newly extended credits to natural persons also went down. In the fourth quarter of 2010, the average interest rate on consumer credits reduced in the fastest pace, compared to the preceding quarter (from 11.3% to 10.3%), and compared to the fourth quarter of 2009, the interest rates on overdrafts went down from 14.2% to 8.7% (Annex 7 - Newly extended credits in a period).

Figure 2.4.5
Average maturity and interest rate on newly extended credits in 2009 and 2010



Source of data: NBRM, based on data the banks fill in the Credit Registry.

The average maturity of newly extended credits to nonfinancial entities in 2010 went up. Thus, the average maturity of newly extended credits to nonfinancial entities went up from 3.5 years (fourth quarter of 2009) to 4 years (fourth quarter of 2010). The sector-by-sector analysis shows that the average maturity of newly extended credits to corporations and natural persons swings around two and a half and eight years, respectively.

Figure 2.4.6
Changes in the demand for credits to corporations and households

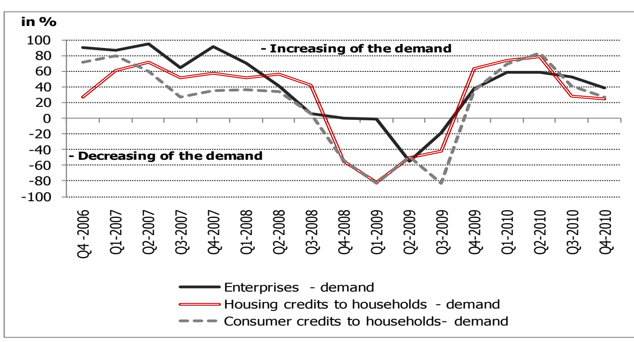
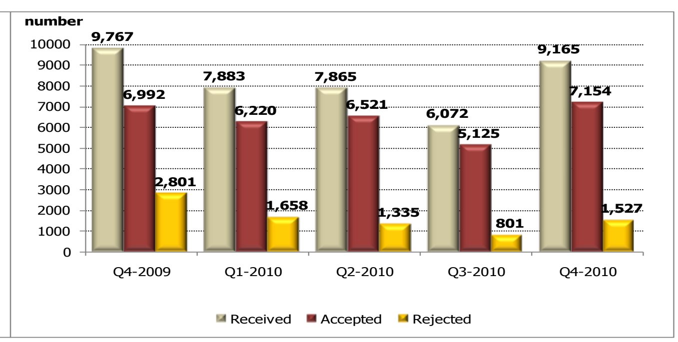


Figure 2.4.7
Number of received, accepted and rejected credit applications by corporations, by quarter



Source: NBRM, based on data submitted by banks (Figure 2.4.7) and banks' lending activity surveys (Figure 2.4.6).
***Changes in the lending terms** - difference between the percentage of banks that reported higher credit demand over the last three months and the percentage of banks that reported lower credit demand over the last three months. Positive difference indicates higher credit demand in the overall banking system, and negative difference indicates lower credit demand in the overall banking system.

According to the lending activity surveys[35], the credit demand accelerated in the first half of 2010, and in the second half of 2010 it remained mainly unchanged. Thus starting from the last quarter of 2009 through the second quarter of 2010, the credit demand (by both the households and the corporations) went up. In the second half of 2010, the household credit demand remained mainly unchanged, and most of the banks reported partially higher credit demand by corporations (even though the number of such banks reduced compared to the preceding periods). Conversely to the banks' perceptions for mainly unchanged credit demand indicated in the surveys in the second half of 2010, the number of approved credit applications by both corporations and households increased, particularly in the fourth quarter of 2010, relative to the same quarter of the last year. That points to gradual adjustment of the banks to the changed economic conditions due to the crisis, end of the "stage of refraining" from lending and beginning of the stage of increasing the credit support to nonfinancial entities. According to the number of approved credit applications, the most attractive credit product are the consumer credits, making up 50% of the total number of approved credit applications of natural persons in all five quarters under observation (Annex 8 - Number of received, accepted and rejected credit applications of natural persons). On the other hand, the lower number of rejected credit applications of corporations in the fourth quarter of 2010 compared to the same quarter of the last year, could be an indicator for improved quality of projects submitted by clients and lower risk perceptions of the domestic banks, considering the almost unchanged terms of lending in the second half of 2010 reported in the lending activity surveys. Almost half of the banks expressed their expectations[36] that the credit demand would remain unchanged and the other banks expect that corporate credit demand will increase partially in the first quarter of 2011. Most of the banks expect partial increase in the household credit demand for in the same period.

In 2010, the credit activity to both sectors revived. The corporate credits kept on increasing in a faster pace compared to the household credits. At the end of 2010, the corporate credits surged by 8.5% on annual basis, while the household credits growth amounted to 5.7%. Accordingly, corporate credits contributed with roughly two thirds to the total annual credit growth. The annual credit growth rates at the end of 2010, to both sectors were doubled compared to the rates at the end of 2009, largely due to the recovery of the domestic economic activity and improvement of the perceptions of nonfinancial entities and the banking sector. **The acceleration of credit activity induced no greater movements in the credit sector structure.** At the end of 2010, corporate credits remained dominant in the structure of total credits.

[35] The corporate and household credit demand is presented, in more details, in the credit activity surveys published on the NBRM website - www.nbrm.mk.
[36] The banks' expectations for corporate and household credit demand are presented, in more details, in the Credit Activity Survey of January 2011.

Figure 2.4.8
Credit stock and structure by sector

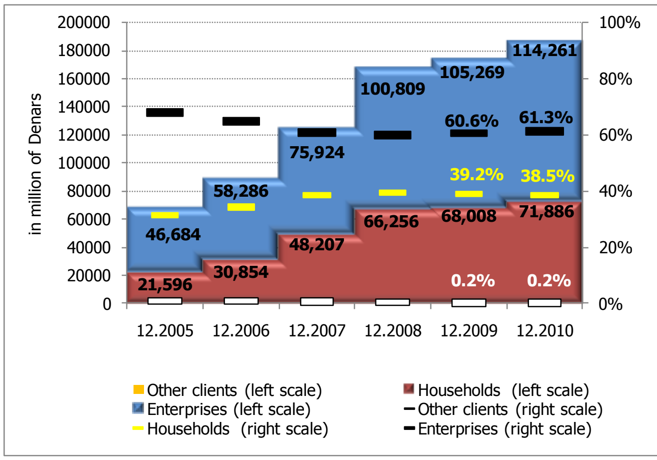
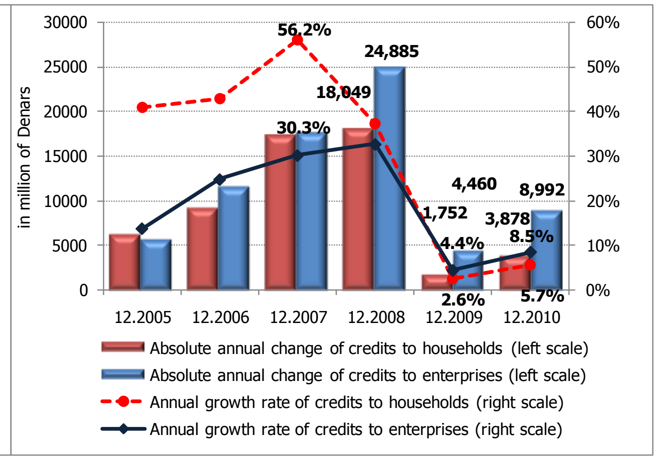


Figure 2.4.9
Annual credit growth by sector structure



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

Table 2.4.2
Credit exposure in 2010 by activity / credit product

Sector	Credit products / individual sectors	Credit risk exposure in million of Denars as of December 31, 2010	Absolute annual growth of credit risk exposure in million of Denars	Annual growth rate	Share in the total growth of the credit risk exposure	Average interest rate on regular loans as of December 31, 2009	Average interest rate on regular loans as of December 31, 2010
NATURAL PERSONS	Residential and commercial real estate credits	17,066	2,180	14.6%	40.0%	8.6%	7.5%
	Consumer credits	28,461	3,333	13.3%	61.1%	12.7%	10.6%
	Overdrafts	9,252	798	9.4%	14.6%	13.6%	11.2%
	Credit cards	23,147	-302	-1.3%	-5.5%	14.3%	12.1%
	Car credits	4,219	-486	-10.3%	-8.9%	9.4%	8.2%
	Other credits	1,124	-69	-5.8%	-1.3%	12.2%	8.9%
TOTAL NATURAL PERSONS		**83,269**	**5,454**	**7.0%**	**13.7%**		
ENTERPRISES AND OTHER CLIENTS	Agriculture, forestry and fishing	4,329	74	1.8%	0.7%	8.4%	7.8%
	Industry	49,948	1,493	3.1%	13.5%	8.5%	7.9%
	Construction	15,423	1,297	9.2%	11.7%	9.1%	8.5%
	Wholesale and retail trade	44,752	3,737	9.1%	33.8%	9.0%	8.4%
	Transport, storage, information and communication	10,860	2,922	36.8%	26.4%	9.3%	8.9%
	Accomodation facilities and catering services	3,698	-97	-2.6%	-0.9%	9.0%	8.8%
	Real estate, professional, scholar and technical activities, administrative and auxiliary services	8,216	1,124	15.9%	10.2%	8.7%	8.4%
	Other sectors	4,049	496	14.0%	4.5%	9.1%	8.1%
TOTAL ENTERPRISES AND OTHER CLIENTS		**141,274**	**11,047**	**8.5%**	**27.8%**		
TOTAL CREDIT EXPOSURE		**316,123**	**39,714**	**14.4%**	**100.0%**		

Note: The changes in all activities and credit products arising from credit risk exposure are discussed, in more details, in Annex 13 - Credit risk exposure and calculated impairment in the overall banking system by risk category and sector.
Source of data: NBRM, based on data submitted by banks.

On December 31, 2010, most of the banks' credits were made to clients of the industrial sector. The greatest contribution to the total increase of credit risk exposure to nonfinancial entities in 2010 was made by the credits to clients engaged in wholesale and retail sale. In the same period, observing the banks' credit products, **the household sector remained the most interested in consumer credits, which went up by 13.3% on annual basis, contributing with 61.1% to the total growth of credit risk exposure to natural**

persons (thus making positive contribution to the increase of personal consumption[37]). On annual basis, housing credits registered the highest growth rate, thus being the second credit product according to the contribution they make to the total growth of credit risk exposure to natural persons. On the other hand, the car credits, other credits and credit cards went down. The average interest rate in all activities and on all credit products was reduced.

Figure 2.4.10
Credit development by currency structure

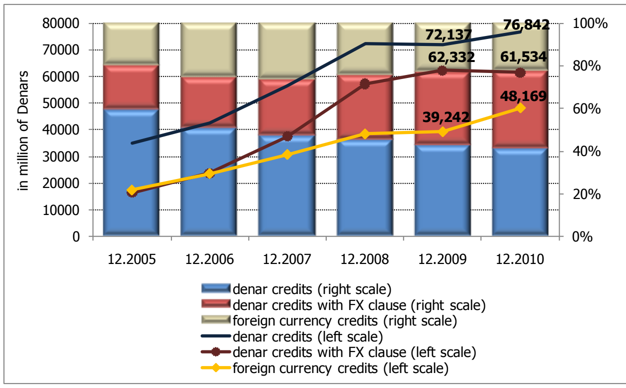
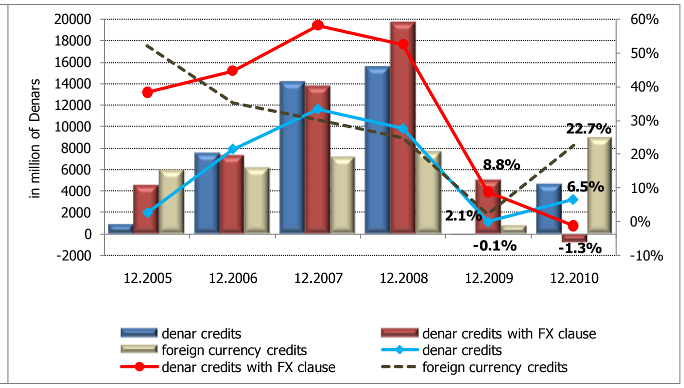


Figure 2.4.11
Annual absolute (left) and relative (right) credit growth by currency



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

Credits with currency component (foreign currency credits and Denar credits with FX clause) constitute 58.5%, thus still dominating the total credits (share of 22.6% of foreign currency credits and 35.9% of credits with FX clause). The fastest annual growth of Denar 8,927 million (or by 22.7%) was reported by foreign currency credits, thus being a main driving force (69.6%) for the total credit growth (the growth was almost entirely due to the increase in foreign currency credits approved to residents, intended for domestic payments, with over 80% originating from the growth of category of other residents[38]. By its essence, these foreign currency credits are almost identical with the credits with FX clause. The Denar credits were increasing in a slower pace compared to foreign currency credits, yet contributing with 36.7% to the total credit growth. At the end of 2010 compared to the end of 2009, the Denar credits with FX clause went down, even though they registered a significant annual growth the year before.

[37]The personal consumption in 2010 registered an annual growth of 1.1%. Source: SSO.

[38] Refers to non-net exporter residents companies of the category of others and residents where the price of dominant product does not depend on the changes in the price of such products in the global markets.

Table 2.4.3
Foreign currency credits to residents

Category of residents	31.12.2009		Total as od December 31, 2009	31.12.2010		Total as od December 31, 2010	Absolute annual change		Annual rate of change		Share in the change of the total foreign currency credits of residents	
	Credits for repaying due liability to a non-resident	Credits for domestic payments		Credits for repaying due liability to a non-resident	Credits for domestic payments		Credits for repaying due liability to a non-resident	Credits for domestic payments	Credits for repaying due liability to a non-resident	Credits for domestic payments	Credits for repaying due liability to a non-resident	Credits for domestic payments
Enterprises net exporters	4,999	812	5,811	3,720	1,277	4,998	-1,279	465	-25.6%	57.3%	-13.7%	5.0%
Residents whose prise of prevailing product depends on the price movement of such product on the international market	1,448	455	1,903	1,828	422	2,250	380	-33	26.2%	-7.2%	4.1%	-0.4%
Natural persons	4	3,723	3,728	5	4,989	4,994	0	1,266	5.4%	34.0%	0.0%	13.6%
Other enterprises	15,744	11,633	27,377	16,576	19,313	35,889	832	7,680	5.3%	66.0%	8.9%	82.5%
TOTAL	**22,196**	**16,623**	**38,819**	**22,129**	**26,001**	**48,130**	**-67**	**9,378**	**-0.3%**	**56.4%**	**-0.7%**	**100.7%**

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

The credits with currency component still dominate the corporate credit structure. The foreign currency credits to corporations and other clients surged by 21.6% on annual basis, making up over 85% of the total annual credit growth to corporations and other clients. Observing the households, Denar credits made greater contribution to the total growth of credits (of over 65%). The household Denar credits increased by 6.9% annually, but the growth rate of foreign currency credits to this sector was faster, equaling 33.4%.

Figure 2.4.12
Currency structure of corporate and household credits

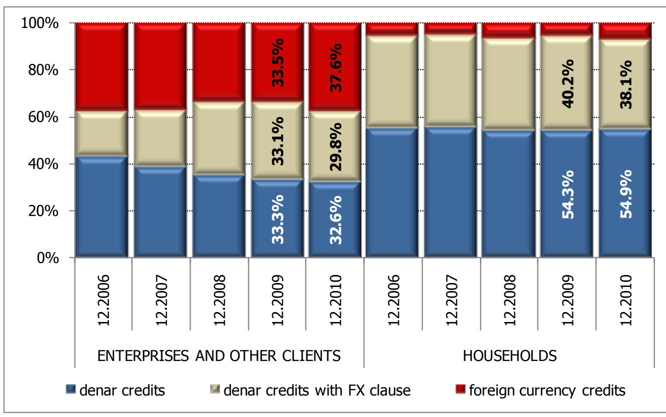
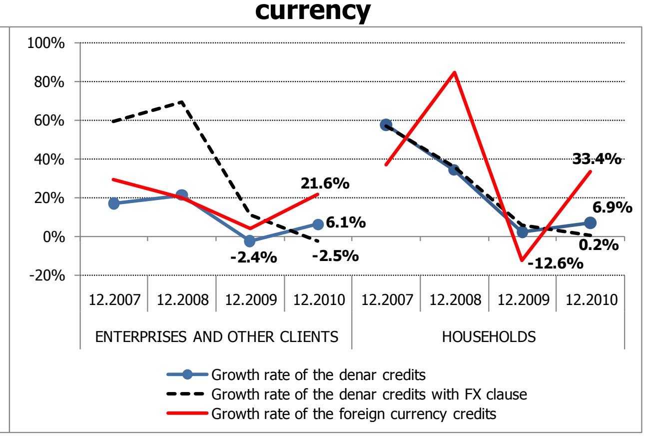


Figure 2.4.13
Annual credit growth rates by sector and currency



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

The faster increase of long-tem credits and the slower growth of nonperforming loans constitute the basic features of the maturity structure of banks' lending activity in 2010. On annual basis, **long-term credits** went up by 9.3%, mostly due to the growth of long-term foreign currency corporate lending (contribution of 75.8%). **The nonperforming loans** reported the most rapid slowdown of the growth, and the annual growth rate dropped by 29.6 percentage points. This is mainly due to the 5.6% decrease in nonperforming foreign currency corporate credits, and to the slower growth of Denar nonperforming loans to households. On the other hand, the nonperforming Denar corporate credits made the largest contribution of 74.5% to the growth of the total nonperforming loans. The insignificant annual growth of **due credits** and the decrease of **short-term credit** induced no considerable changes in their share in the total credits.

Figure 2.4.14
Maturity structure of total credits to nonfinancial entities

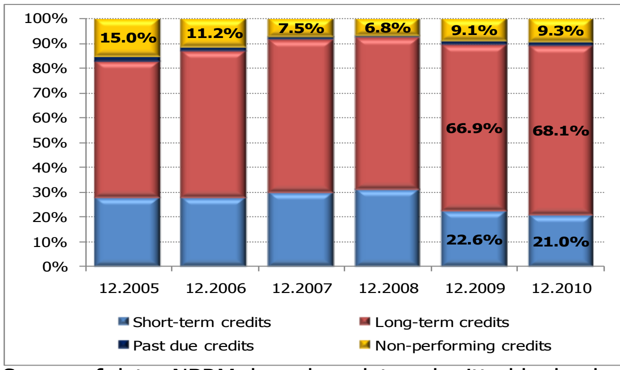
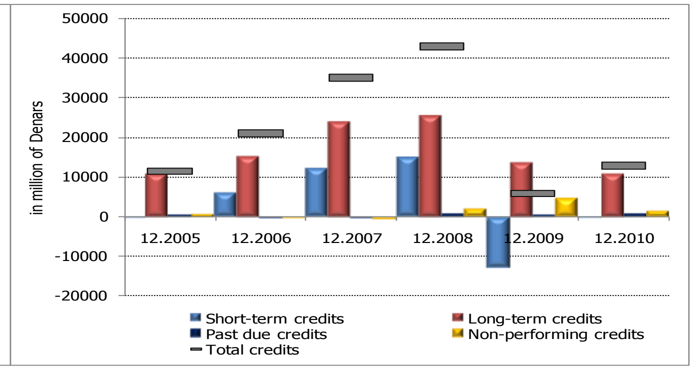


Figure 2.4.15
Absolute annual growth of credits by maturity and of total credits



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

The slower growth of nonperforming loans in 2010 caused insignificant changes in their share in the total credits and respectively, by sector. At the end of 2010, the share of nonperforming loans in the total credits increased by 0.2 percentage points compared to 2009, which is considerably less compared to the increase of 2.3 percentage points in 2009. In 2010, observing the households, this share decreased by 0.1 percentage points, whereas observing the corporations and other clients, it increased by 0.3 percentage points. The higher share of nonperforming loans in the total credits to corporations and other clients, in spite of the faster lending activity to this sector, reflects the higher annual growth rate of nonperforming loans compared to the growth rate of total credits to corporations and other clients. Thus, on December 31, 2010, the annual growth rate of nonperforming loans of corporations and other clients and of households equaled 12.2% and 4.7%, respectively. For comparison purposes, on December 31, 2009, these rates equaled 30.8% and 57.7%, respectively. The slower growth of nonperforming loans could also reflect the more active approach of the banks when making new credits over the year, the improved discipline in the credit repayment, and the write off of nonperforming claims and foreclosures.

Figure 2.4.16
Annual credit growth rates

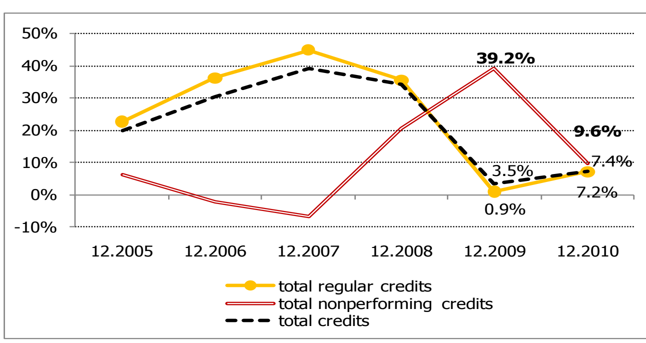
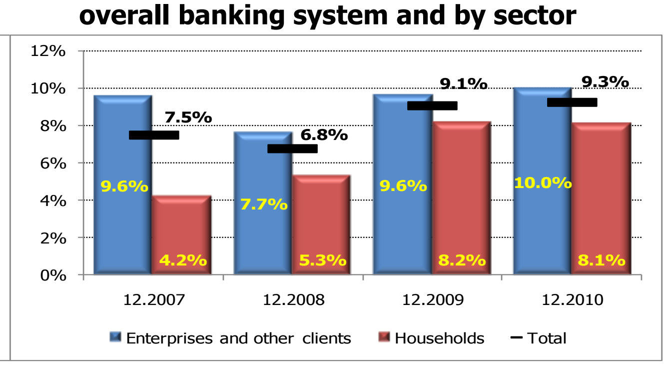


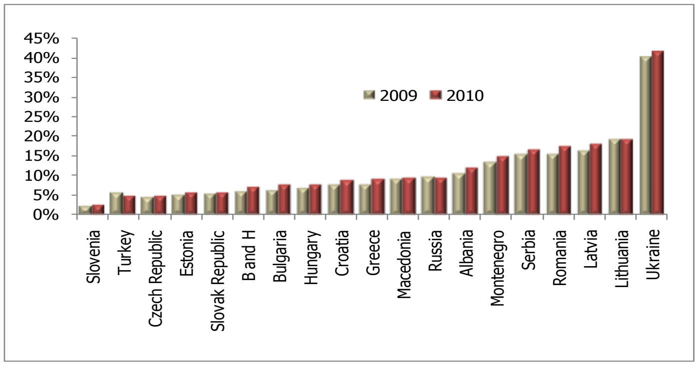
Figure 2.4.17
Nonperforming loans in the total credits, in the overall banking system and by sector



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

The comparison of the share of nonperforming loans in the total credits puts the Republic of Macedonia in the middle of the list of countries under observation. The share of nonperforming loans in the total credits in the Republic of Macedonia is similar as in Greece and in Russia. Same as the Macedonian economy, most countries under observation reported moderate pace of increase of nonperforming loans in the total credits in 2010 compared to 2009.

Figure 2.4.18
Nonperforming loans / Total credits, by country



Source of data: IMF's Statistical Annex of GFRS, October 2010.

On December 31, 2010, the housing and business credits reported the longest weighted average residual maturity (expressed as an average period to maturity in years) (14.6 years). Most sectors reported that the average residual credit maturity ranges from two to four years. Compared to December 31 2009, no significant changes were registered in the average term of maturity.

Table 2.4.4
Weighted average residual maturity of credits to nonfinancial entities (by activity and credit product)

Sectors for legal entities / Credit products for natural persons	Average period till maturity (in years) as of December 31, 2009	Average period till maturity (in years) as of December 31, 2010
Agriculture, forestry and fishing	3.5	3.4
Industry	3.0	3.1
Construction	3.0	2.8
Wholesale and retail trade	3.1	2.9
Transport, storage, information and communication	3.4	3.2
Accomodation facilities and catering services	4.8	4.2
Real estate, professional, scholar and technical activities, administrative and auxiliary services	3.3	3.0
Residential and commercial real estate credits	14.7	14.6
Consumer credits	5.1	5.0
Overdrafts	0.7	0.6
Credit cards	1.3	1.4
Car credits	4.2	3.8

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

Credit distribution by group of banks reconfirms the primary position of the group of large banks in the banking system. The group of large banks has the greatest share in all structural categories of credits. On annual basis, the largest changes in the credit distribution pertained to the increase in the share of the group of large banks in the due credits and decrease in the share of this group of banks in the credits to other clients, nonperforming loans and foreign currency credits. On the other hand, in the same period, the share of the group of middle-size banks moved in opposite direction in the aforementioned credit categories.

Table 2.4.5
Credit distribution by group of banks

Credit structures		31.12.2009 Large banks	31.12.2009 Medium-size banks	31.12.2009 Small-size banks	31.12.2009 Total	31.12.2010 Large banks	31.12.2010 Medium-size banks	31.12.2010 Small-size banks	31.12.2010 Total
Sector structure	Enterprises	71.4%	26.7%	1.9%	100.0%	69.2%	28.5%	2.3%	100.0%
	Households	68.3%	29.3%	2.4%	100.0%	68.6%	29.1%	2.3%	100.0%
	Other clients	54.4%	44.8%	0.9%	100.0%	49.9%	49.8%	0.2%	100.0%
Maturity structure	Short-term	72.5%	26.1%	1.4%	100.0%	70.2%	27.2%	2.5%	100.0%
	Long-term	70.0%	28.2%	1.8%	100.0%	69.2%	28.8%	2.0%	100.0%
	Past due	64.7%	31.3%	4.1%	100.0%	75.6%	21.9%	2.4%	100.0%
	Non-performing	66.4%	28.1%	5.5%	100.0%	62.7%	33.6%	3.7%	100.0%
Currency structure	Denar	78.1%	18.5%	3.5%	100.0%	78.7%	17.4%	3.9%	100.0%
	Denar with Fx clause	58.9%	39.4%	1.7%	100.0%	59.3%	38.6%	2.1%	100.0%
	Foreign currency	73.4%	26.4%	0.1%	100.0%	65.7%	34.3%	0.0%	100.0%

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

All groups of banks reported the highest share of corporate credits, observing by sector, and of long-term credits, analyzing by maturity structure. Credits with currency component were primarily extended by the groups of large and medium-size banks, while the small-size banks reported the highest approval of Denar credits.

Table 2.4.6
Structural features of credits by group of banks

Structure of credits		31.12.2009 Large banks	31.12.2009 Medium-size banks	31.12.2009 Small-size banks	31.12.2010 Large banks	31.12.2010 Medium-size banks	31.12.2010 Small-size banks
Sector structure	Enterprises	61.7%	58.3%	54.5%	61.5%	60.7%	61.0%
	Households	38.1%	41.3%	45.4%	38.4%	38.9%	38.9%
	Other clients	0.2%	0.4%	0.1%	0.2%	0.4%	0.0%
	Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
Maturity structure	Short-term	23.3%	21.3%	15.2%	21.4%	19.9%	23.2%
	Long-term	66.8%	68.0%	58.4%	68.4%	68.1%	60.1%
	Past due	1.3%	1.6%	2.7%	1.7%	1.2%	1.7%
	Non-performing	8.6%	9.2%	23.7%	8.4%	10.8%	15.0%
	Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
Currency structure	Denar	46.2%	27.6%	68.9%	47.0%	25.0%	69.7%
	Denar with FX clause	30.1%	50.9%	29.5%	28.4%	44.3%	30.0%
	Foreign currency	23.7%	21.5%	1.6%	24.6%	30.8%	0.3%
	Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

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

2.5. Banks' deposit activity

In 2010, in environment of favorable macroeconomic environment compared to the preceding year, the banks' deposit base demonstrated faster growth and propensity of depositors to save in domestic currency. Given the gradual revival of the domestic economic activity, the favorable developments in the external sector, as well as the gradual depletion of the influence of psychological pressures due to the effects of the global economic and financial crisis, there was an evident acceleration of the growth of nonfinancial entities' deposits. Additionally, as the foreign exchange market developments stabilized, the depositors' propensity to save in domestic currency that started in the last quarter of 2009 continued in 2010.

At the end of 2010, banks' total deposits registered a substantially higher growth rate compared to the preceding year. As of December 31, 2010, the total deposits of nonfinancial entities were Denar 213,270 million, which is by Denar 25,395 million, i.e. 13.5% higher compared to the end of 2009. The growth rate was by 3.6 times higher relative to 2009. In spite of such acceleration, the annual growth rate of the banks' deposit base is still below the levels registered before 2008 (in 2008, the banking system experienced the first negative effects of the global economic and financial crisis). In 2010, the deposits at all groups of banks went up, with a faster growth being reported by the groups of medium- and small-size banks, which registered downward trends of deposits in 2009. Yet, major driver of the dynamics of the banks' deposit base is the group of large banks, constituting 59.2% of the total annual growth of deposits of the nonfinancial entities.

Figure 2.5.1
Level and annual growth rates of the total deposits of nonfinancial entities

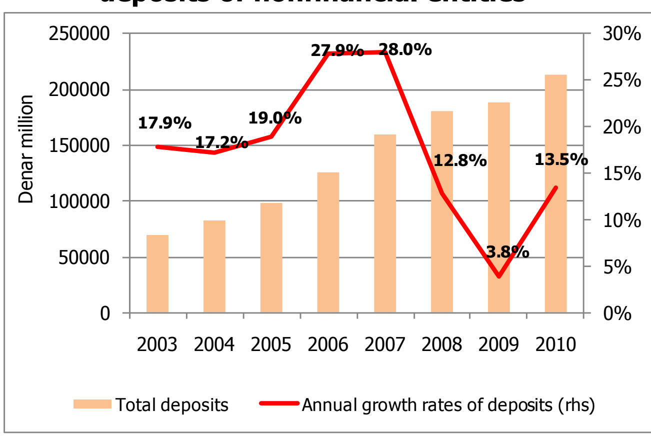
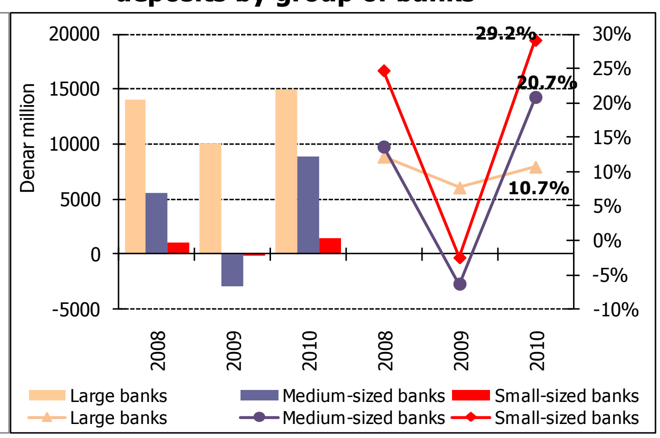


Figure 2.5.2
Absolute and relative annual growth of deposits by group of banks



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

The stabilization of the foreign exchange market and the higher yields of domestic currency deposits resulted in greater propensity of the depositors to save in Denars in 2010.

Figure 2.5.3
Absolute and relative annual deposit growth by currency

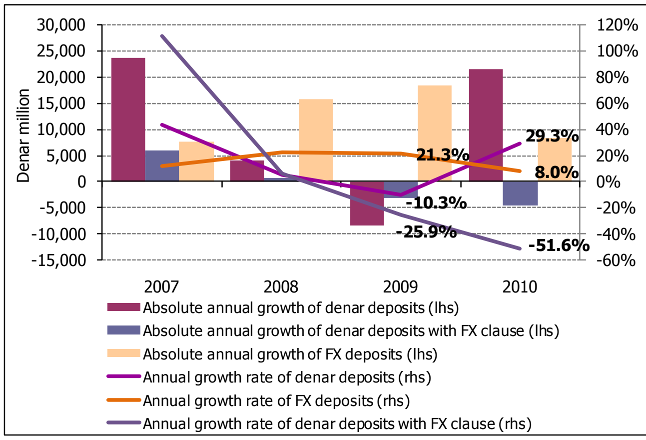
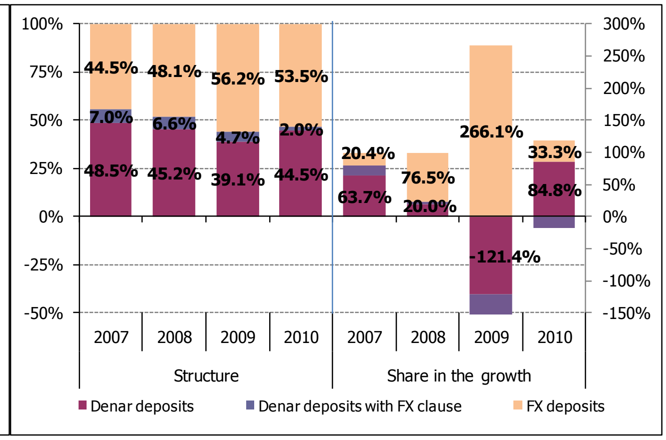


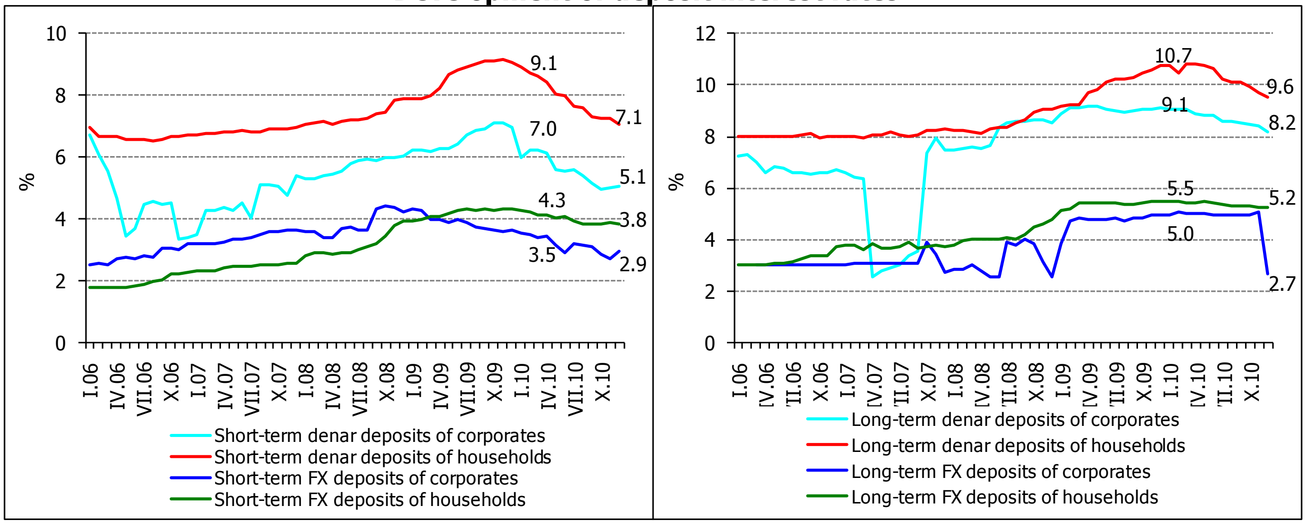
Figure 2.5.4
Structure and share of the deposits in the annual growth, by currency



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

Such propensity was demonstrated through the faster growth and the higher contribution of Denar deposits to the total annual deposit growth, and the higher share of Denar deposits in the structure of total banks' deposit base. Denar deposits registered substantially higher absolute and relative growth compared to the foreign currency deposits, for the first time in the last three years. As of December 31, 2010, the annual growth rate of Denar deposits (29.3%) was the highest in the last three years, and was by significant 21.3 percentage points higher compared to the annual growth rate of foreign currency deposits. Also, most of the annual growth of total deposits resulted from the growth of their Denar component, which is completely opposite to 2009, when Denar deposits dropped. The faster growth of Denar deposits contributed to the increase of their share in the total deposits, discontinuing the uptrend of the share of foreign currency component, which started in 2008. Yet, foreign currency deposits still constitute most of the banks' deposit base. Foreign currency deposits dominate the currency structure of deposits of the groups of large and medium-size banks, while Denar deposits prevail only with the group of small-size banks. In consistence with the switch of the depositors' propensity to save in Denars, all groups of banks reported an increase in the share of Denar deposits compared to 2009 (Annex 10 - Structure of deposits of nonfinancial entities, by group of banks). Faster growth of Denar deposits was evident both with households and corporates in 2010 (Annex 9 - Structure of deposits of nonfinancial entities).

Figure 2.5.5
Development of deposit interest rates



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

Main driver of the deposit growth in 2010 were household's deposits. After the decrease in 2009, in 2010, corporate deposits registered an annual growth of Denar 2,677 million, i.e. 4.9%. Yet, household's deposits remained the major driver of the dynamics of the total deposits of nonfinancial entities. In 2010, they grew at a significantly faster pace, compared to corporate deposits (annual growth of 17.5%), making up 86.7% of the total annual deposit growth. Such dynamics of the deposits of the individual sectors further increased the share of household's deposits in the total banks' deposit base. Household's deposits have the highest share in the structure of the deposit base with all groups of banks, with it being the highest with the group of large banks and lowest with the group of small-size banks (Annex 10 - Structure of deposits of nonfinancial entities, by group of banks).

Figure 2.5.6
Absolute and relative annual deposit growth, by sector

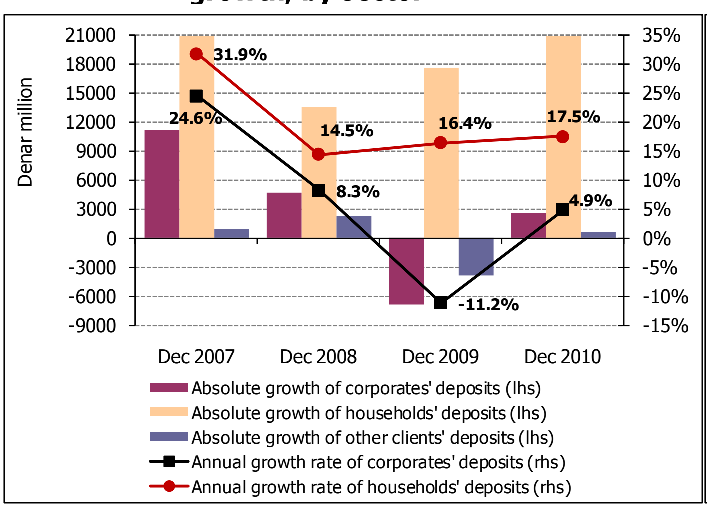
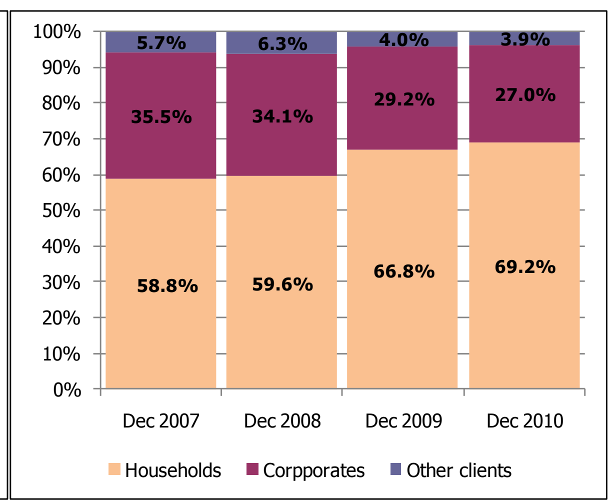


Figure 2.5.7
Sector structure of total deposits



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

The increase in the maturity of banks' deposit base continued in 2010, given the banks' stimulating interest rate policy for long-term saving (milder fall of interest rates on long-term deposits[39], contrary to the faster fall of interest rates on short-term deposits). The increase in deposit maturity resulted from the continuous trend of faster growth of long-term deposits that started in recent years. Long-term deposits registered the highest absolute and relative annual growth (Denar 9.864 million, i.e. 42.8%), thus making up most (38.8%) of the total annual growth of deposits of nonfinancial entities. Along with these developments, the structural share of long-term deposits in the total banks' deposit base also increased. On the other hand, in spite of the considerable acceleration of the sight deposits growth (increase in 2010 contrary to the decrease in 2009), their share in the maturity structure of the deposit base continued its downward trend. Short-term deposits still make up most of the total deposits at the level of individual banks, in spite of the decrease in their structural share compared to 2009. The same applies to all groups of banks, i.e. each group of banks reported domination of short-term deposits in the maturity structure, with the group of medium-size banks reporting the highest share of long-term deposits.

Figure 2.5.8
Absolute and relative annual deposit growth, by maturity

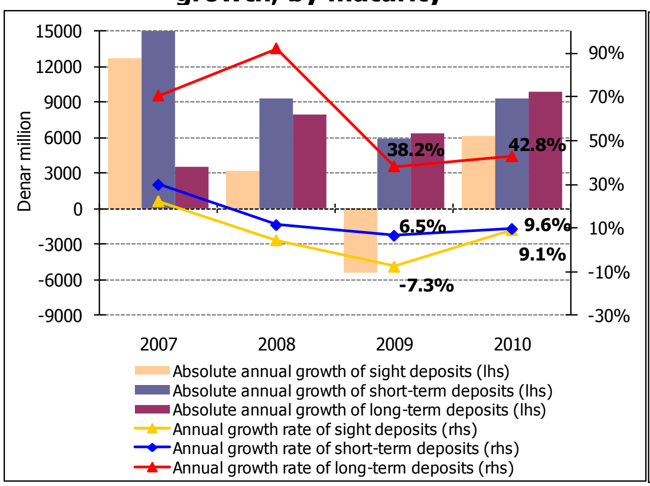
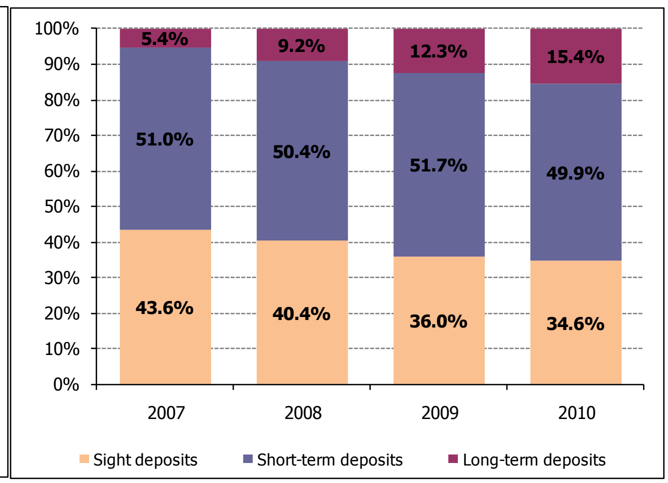


Figure 2.5.9
Deposit maturity structure



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

Deposit distribution by group of banks just confirms the dominant position of the group of large banks in the banking system (Annex 11 - Distribution of deposits of nonfinancial entities by group of banks). This group of banks has the largest share in all deposit categories, with the highest being registered within household's deposits, and the lowest within deposits with foreign currency clause. However, the group of medium-size banks increased its share in the deposits with foreign currency clause and corporate deposits, contrary to the decreased share of the group of large banks within this deposit categories.

[39] Exception is the interest rate on long-term foreign currency deposits of corporates, that account for insignificant 0.1% of the total deposits of nonfinancial entities of the overall banking system.

3. Bank risks

3.1. Credit risk

At the end of 2010, the banks' credit risk exposure totaled Denar 316,123 million, which is an annual rise of Denar 39,714 million, i.e. 14.1%. Thus the gradual acceleration of the growth of credit risk exposure continued after the period of substantial slowdown due to the crisis effects. Analyzing by group of banks, this trend was evident in all groups, particularly in the group of medium-size banks that registered an annual growth rate of 21.4% in 2010 compared to 2.2% in 2009. Accordingly, this group of banks contributed with 39.4% of the total growth of credit risk exposure in 2010. The group of large banks recorded an annual growth rate of 11.3% in 2010, contributing with 55.6% to the growth of credit risk exposure.

Figure 3.1.1
Development and growth rate of the credit risk exposure

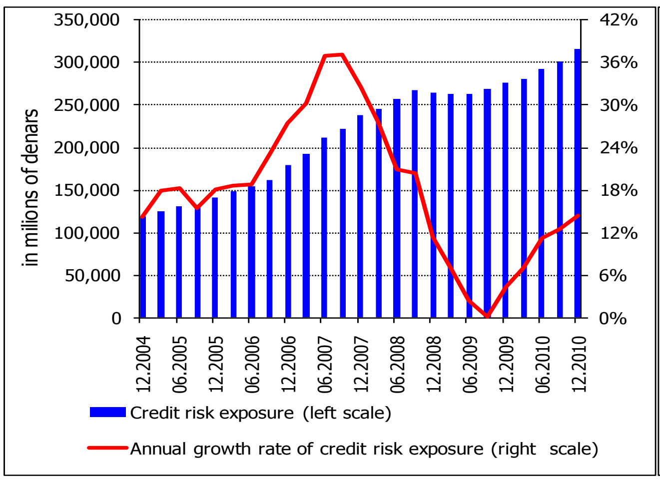
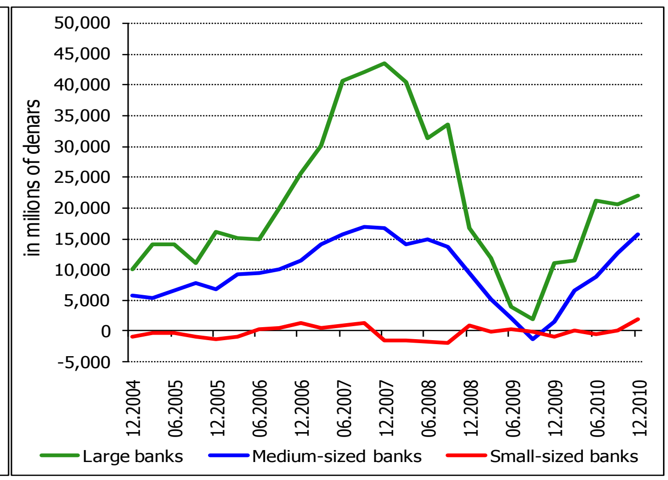


Figure 3.1.2
Absolute growth of the credit risk exposure by group of banks



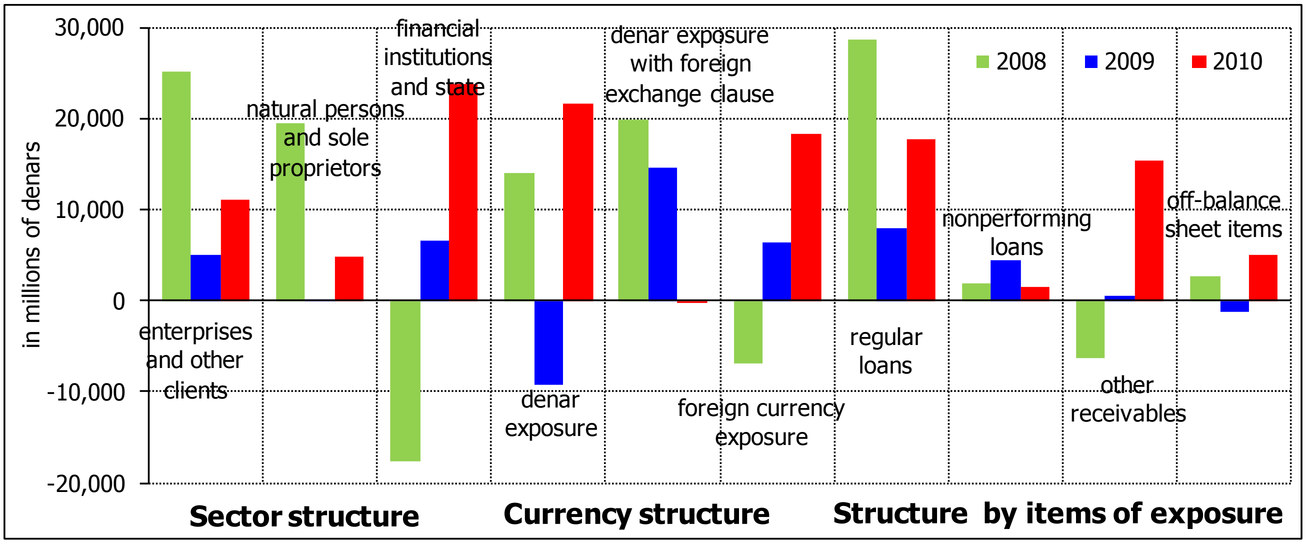
Source: NBRM, based on data submitted by the banks.

The banks' business behavior is still highly prudential, with a low "appetite" for undertaking new credit risk. This could be confirmed through the **distribution of the annual growth of credit risk exposure** according to its structural features. Faster growth of credit risk exposure was mainly registered in the exposure to the financial institutions and government sector that registered an annual growth rate of 36.9%, accounting for 60.0% of the total annual growth of the credit portfolio. In 2010, the exposure to the corporations and other clients sector recorded a moderate annual growth of 8.5%. However, this growth was faster compared to the annual growth of exposure to natural persons of 5.9%. Observing the **currency structure,** it should be noted that in 2010, the credit risk exposure in foreign currency reported a high annual growth rate of 23.2% (i.e. Denar 18,286 million), the Denar exposure went up by 18.1%, whereas the Denar exposure with currency clause registered a marginal annual decrease of 0.3% (Denar 259 million)[40]. As a result of

[40] The main reason is the decision of two banks to transform their Denar exposure with currency clause to the corporations and other clients sector into foreign currency or Denar exposure. On December 31, 2010, these two banks reported an annual fall of Denar exposure with currency clause to the corporations and other clients sector in the amount of Denar 5,385 million, with one of these banks reporting an annual growth of Denar exposure to this sector in the amount of Denar 3,621 million, while the other bank reported a growth in foreign currency exposure to this sector in the amount of Denar 3,069 million.

the substantial growth of the banks' demand for CB bills (annual growth of Denar 10,096 million, i.e. 63.7%) and treasury bills (annual growth of Denar 6,104 million, i.e. 74.5%), in 2010, the category of other claims registered the fastest increase (of 47.2%). Among the credit risk exposure components, regular credits registered the highest absolute annual growth of Denar 17,744 million (9.3%). Their growth primarily arises from the annual growth of foreign currency credits in the amount of Denar 8,297 million (22.7%) and the growth of short-term placements with foreign banks in the amount of Denar 6,027 million (25.5%).

Figure 3.1.3
Absolute growth of credit risk exposure by structural feature



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

The modest banks' "appetite" to take risks is also demonstrated through the distribution of the annual growth of credit risk exposure by group of banks (Annex 12 - Structural features of credit risk exposure by group of banks). In 2010, all groups of banks reported the highest annual growth rates for the exposure in the category of other claims, primarily due to the demand for CB bills and treasury bills. Hence, the sector structure of the exposure by group of banks indicates that all groups of banks in 2010 reported the highest absolute annual growth in the exposure to the sector of financial institutions and government.

Figure 3.1.4
Absolute and relative annual growth of nonperforming loans

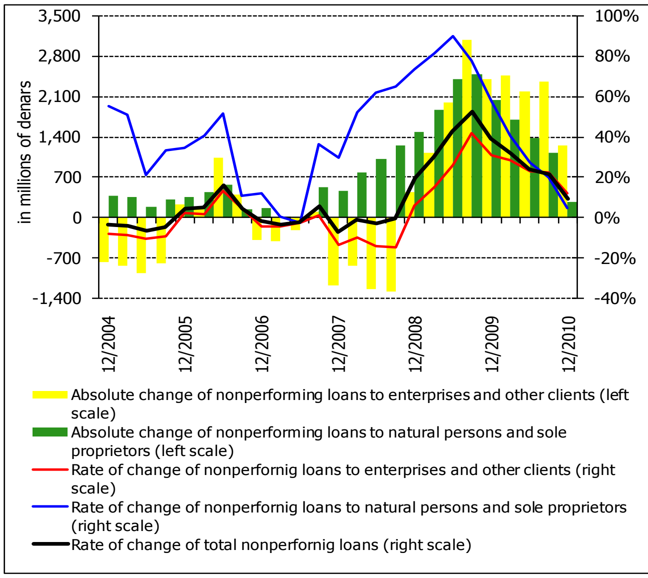
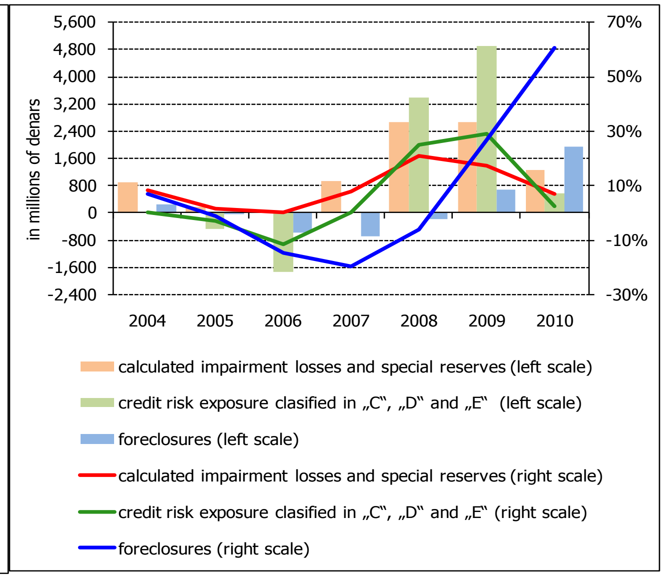


Figure 3.1.5
Dynamics of the higher risk exposure, impairment losses and foreclosures



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

In 2010, the growth of **nonperforming loans** registered a steady slowdown. Thus, the annual growth rate of the total nonperforming loans[41] equaled 9.3% on December 31, 2010, which is by 29.6 percentage points less compared to December 31, 2009. This slowdown was registered in both corporate nonperforming loans and household nonperforming loans. The slower pace of nonperforming loans resulted from their exceptionally rapid growth in 2009, accompanied by an intensive growth of the on-balance sheet value of foreclosures[42], which in 2010 registered an annual growth rate of 60.7%. If we ignore the effects of the foreclosure activities and write off of claims based on credits in 2010 on the nonperforming loans, the annual growth rate of nonperforming loans would equal 32.9%[43].

In the value structure of foreclosed assets, foreclosed real estate accounts for 92.6%, and the remaining part are foreclosed movable assets. Most of the total value of foreclosed assets, or 46.9% are business premises, followed by various production facilities and apartments, which account for 26.2% and 8.6%, respectively. On December 31, 2010, the total on-balance sheet value of foreclosed assets equaled Denar 5,181 million[44], and in 2010, the banks foreclosed assets with initial carrying value of Denar 2,297 million. On the other hand, in 2010 the banks sold foreclosed assets in the modest amount of Denar 230 million.

[41] For all sectors, including the financial institutions.
[42] The on-balance sheet value of foreclosures equals the accounting value of foreclosures less the total amount of impairment losses recorded by the banks. The regulatory and accounting treatment of foreclosures is presented, in more details, in the Decision on accounting and regulatory treatment of foreclosures ("Official Gazette of the Republic of Macedonia" no. 79/2007).
[43] This calculation assumes that all foreclosures in 2010 and all claims written off on the basis of credit principal in 2010 were recognized as nonperforming loans on December 31, 2009. If nonperforming loans for 2009 are corrected for foreclosures and for written off claims in 2009 in the same manner, the annual growth rate of nonperforming loans would equal 13.8%.
[44] On December 31, 2010, the banks recognized Denar 611 million impairment losses from foreclosures.

Generally speaking, the domestic real estate market seems to lack a depth, liquidity, homogeneity and is characterized by restricted functionality due to its incapability to precisely identify the market value of real estate in a given period. Hence, the banks, when establishing credit risk exposures, are instructed to use the value of real estate estimated in the acts for establishing rights of real estate. The existing practice of the banks in the **asset foreclosure**, according to which the initial carrying value is most often the same as that of the respective uncollectable claim, creates certain risks in terms of the possibility and the time needed for selling the foreclosed assets without suffering capital losses from the sale. At the moment of foreclosing the asset, the banks usually record no impairment losses, i.e. the asset value estimated by authorized appraisers is very often equal to the so-called purchasing value of the foreclosed asset, which actually represent the asset value indicated in the act adopted by a competent authority, which lays the legal grounds for foreclosing the asset[45]. Thus, **at the moment of foreclosing the asset, the impairment for the uncollected claim is released and in fact improves the profitability, and simultaneously decreases the risk profile of the credit portfolio.** However, the banks' practice to adhere to the estimations of the values of foreclosed assets as a source for their book recording and consequently, to release the impairment for uncollected claim, without recognizing any impairment loss for the foreclosed assets, could easily create a gap between the estimated value of the foreclosed asset and its fair market value. On the one hand, this creates a new source of bank risk due to the possibility to face an obligation for outright allocation of the full amount of impairment losses for a certain foreclosed asset, five years after the foreclosure of the asset, without being sold[46].

Table 3.1.1
Indicators for the credit portfolio quality of the banking sector

INDICATOR	31.12.2008	31.12.2009	31.12.2010
Average level of risk	5.8%	6.5%	6.1%
Share of „C", „D" and „E" in total credit risk exposure	6.4%	7.9%	7.1%
Share of „C", „D" and „E" in total credit risk exposure, without exposure to financial institutions and state	7.9%	10.1%	9.6%
Share of „E" in total credit risk exposure	2.5%	3.7%	3.6%
Coverage of „C", „D" and „E" with total calculated impairment losses and special reserves	90.6%	82.4%	85.8%
Coverage of nonperforming loans with total calculated impairment losses and special reserves	133.5%	112.6%	110.2%
Coverage of nonperforming loans with total calculated impairment losses and special reserves for nonperforming loans	n.a.	70.9%	74.2%
Share of „C", „D" and „E" in own funds	49.9%	62.2%	59.3%
Share of „E" in own funds	19.2%	28.8%	30.4%
Calculated impairment losses and special reserves / Own funds	45.2%	51.3%	50.9%
Share of nonperforming loans net of calculated impairment losses for nonperforming loans in own funds	n.a.	13.2%	11.9%
Share of „C", „D" and „E" net of calculated impairment losses and special reserves in own funds	20.2%	23.0%	19.5%
Share of nonperforming loans in total loans	6.8%	9.1%	9.3%
Share of bullet loans in total loans to nonfinancial entities	14.8%	16.4%	15.1%
Share of restructured and rolled-over loans in total loans	n.a.	10.7%	10.9%
Share of net-written off claims during the year in total credit risk exposure n the end of previous year	0.7%	1.1%	0.9%
Unsecured exposure / Total credit risk exposure to nonfinancial entities	19.8%	25.3%	20.1%

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

[45] Normally, the value indicated in the act that lays the legal grounds for foreclosing assets is the estimated value of the asset at the moment of concluding credit or other related agreement, with this estimation being made by authorized appraiser.
[46] The banks' obligation to allocate, in full, the impairment losses for foreclosed asset not being sold for five years or more, and consequently, reducing of its carrying value at zero, has been specified in item 9 of the Decision on accounting and regulatory treatment of foreclosed assets ("Official Gazette of the Republic of Macedonia" no. 79/2007). This practice is not fully conformed to the International Financial Reporting Standards (the standard that addresses this issue is IAS 36 - Impairment) and the period of five years for reducing the value of foreclosed assets to zero is arbitrary and bases on the experience. This is a result of the features of the domestic market of immovable property that appears to be a frequently used form of collateral.

In 2010, some **credit portfolio indicators for the overall banking system showed initial post-crisis improvement.** Thus, the average risk level of the credit risk exposure equaled 6.1% at the end of 2010 and compared to the end of 2009 it is by 0.4 percentage points lower. The share of exposure classified in C, D and E risk categories in the total credit risk exposure registered an annual decrease, primarily arising from the slower growth of exposure classified in riskier categories (Annex 13 - Credit risk exposure and calculated impairment in the overall banking system by risk category and sector). In the case of extreme scenario for full non-collectability of exposure in C, D and E, loss coverage would absorb 19.5% of the banks' own funds, thus reducing the capital adequacy ratio from the present 16.1% to 12.8%.

In 2010, some improvement was also registered in the indicators for **coverage of higher risk exposure with impairment and special reserve.** On December 31, 2010, the coverage of exposure classified in C, D and E risk categories with impairment and special reserve equaled 85.8%, which is by 3.4 percentage points more on annual basis. One should note the full coverage of nonperforming loans with total impairment and special reserve (on December 31, 2010, this indicator equaled 110.2%). Main determinant for the improvement of the credit risk exposure indicators at bank level was the higher exposure to the sector of financial institutions and government which usually has low risk level, and slower credit activity to the private nonfinancial sector. Moreover, in 2010, the development of credit risk indicators was under the strong influence of the asset foreclosure and the writing off of claims made by the banks. Hence, **the improvement of credit risk indicators should be carefully interpreted, since it does not indicate greater change in the risk profile and mitigation of risks faced by the economic agents.** For illustration purposes, the share of exposure classified in C, D and E risk categories in the total credit risk exposure, ignoring the effects of the foreclosure activities and the claims write offs[47], it would equal 8.3% instead of 7.1%. The share of exposure classified in C, D and E risk categories not covered with impairment and special reserve in the own funds would equal 21.6%, instead of 19.5%.

In 2010, **the amount of claims written off** by the banks totaled Denar 2,507 million, which is by 16.4% less compared to 2009. In spite of the lower amount of write offs, their volume affected the credit risk exposure quality indicators. If the banks did not make any write off of claims in 2010, on December 31, 2010, the share of exposure classified in C, D and E risk categories in the total exposure would equal 7.5% (instead of 7.1%), and the average risk level of the total exposure would equal 6.6% (instead of 6.1%). In 2010, Denar 141 million were collected of the claims written off in previous years. In 2010, changes were registered in the sector structure of written off claims. Compared to the last three years, when the claims on legal entities dominated the written off claims, in 2010, the share of written off claims on natural persons was almost identical. In 2010, Denar claims dominated the currency structure of written off claims with 86.9%, and most (60.1%) of the write offs were claims based on credits (principal). In 2010, the written off claims based on credit made up 0.9% of the total credits as of December 31, 2009. The share of written off credits of natural persons was higher, constituting 1.3%, and the share of written off credits of corporations and other clients equaled 0.6%. Compared to previous years, when most of the written claims were concentrated in only one bank, in 2010, four banks made claims write-off that constituted 92.5% of the total amount of written off claims.

[47] This calculation assumes that the written off claims would be fully covered with impairment and special reserve.

Figure 3.1.6
Absolute amount of claims written off by banks

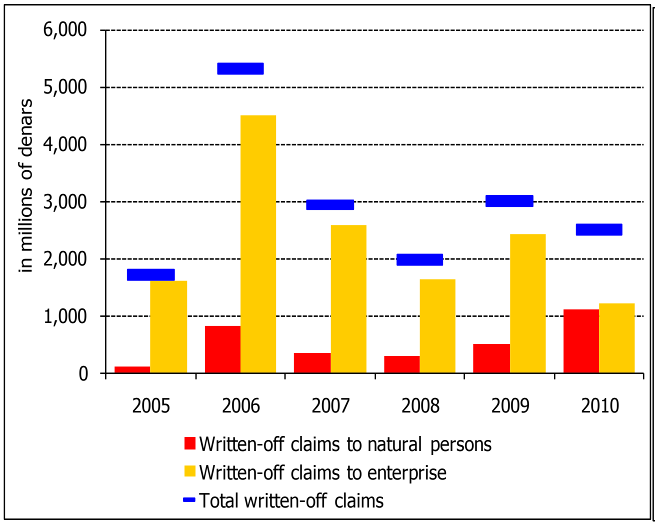
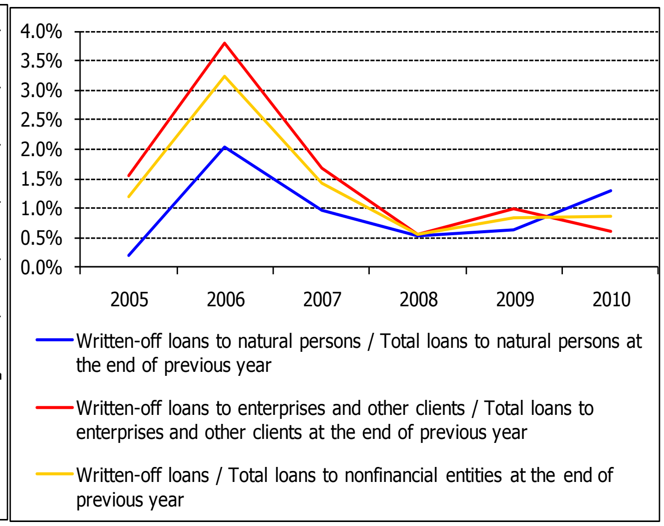


Figure 3.1.7
Written off claims based on credit - total credits ratio at the end of the preceding year



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

The indirect credit risk, arising from the application of clauses in the credit agreements for hedging of currency risk and interest rate risk remained exceptionally important to the risk profile of the banks in the Republic of Macedonia. At the end of 2010, 67.3% of the credits to natural persons and 45.1% of the corporate credits included currency component (foreign currency credits and Denar credits with currency clause). Furthermore, on December 31, 2010, 73.3% of the total credits to nonfinancial entities had the so-called adjustable interest rates, changeable only by decisions of the banks. The reason for the strong role of the indirect credit risk is the manner in which the banks conducted their business strategies and credit policies over the recent years, particularly in the years of credit expansion (2005 - 2008). The banks used the incorporation of clauses for protection against changes in the financial variables (interest rates and exchange rate), with lower attention being paid to the economic features of the clients and the relation between their creditworthiness and the changes in the financial variables.

Other significant source of credit risk for the banks in the Republic of Macedonia is the extension of **bullet loans.** These credits imply that the borrower should repay, in a single installment, the principal of the used credit on its due date, which basically implies higher default risk. On December 31, 2010, bullet loans accounted for 15.1% of the total credits to nonfinancial entities (16.4% on December 31, 2009). Credits approved to legal entities dominated the sector structure of these credits, making up 99.7% of all bullet loans at the end of 2010, constituting 24.4% of the total corporate credits at the end of 2010 (24.2% on December 31, 2009).

The remarkable share of **restructured (renegotiated) and prolonged credits**[48] in the total credits also appears to be a source of bank credit risk, equaling 10.9% at the end of 2010,

[48] According to the provisions of the Decision on supervisory standards for regulating overdue banks' claims ("Official Gazette of the Republic of Macedonia" no. 134/2007), restructured credits (or credit risk exposure) include claims where the modifications in the contractual terms arise from the deteriorated financial standing of the debtor, and prolonged credits (or credit risk exposure) include claims where the maturity date has been extended, not due to the deteriorated

preserving the level of 2009. The structure of such credits was dominated by prolonged credits (82.5%). On December 31, 2010, the average restructured credit risk exposure equaled 52.0% (35.3% on December 31, 2009), and the average prolonged credit risk exposure equaled 10.7% (8.9% on December 31, 2009)[49]. Crucial criterion for making distinction between the prolonged and restructured credits is the criterion for existing (or non-existing) of deteriorated financial standing of the borrower (debtor), which actually depends on the bank's judgment and interpreting the standing of the specific borrower. Thus there is a possibility of deliberate or accidental mistakes when analyzing the financial standing of the clients, thus making the difference between the prolonged and restructured credits relative, provided for in the bylaws. Hence, the banks' need of maximizing the profit and minimizing the costs makes them to involve in the process of so called regulatory arbitrage, by establishing broad criteria for the meaning of the term "deteriorated financial standing".

On December 31, 2010, 17.7% of the total credit risk exposure was classified on a group basis (17.6% on December 31, 2009). Exposure grouped in so called retail portfolios[50] dominate the **exposure classified on a group basis,** with a share of 80.0%, the average risk level[51] of which equaled 1.0% at the end of 2010 (2.8% on December 31, 2009). The remaining portion of the exposure classified on a group basis (20.0%) was grouped in the portfolios of similar financial instruments not impaired on individual basis with average risk level of 0.2% (0.3% on December 31, 2009)[52]. The substantial difference between the average risk levels of the total credit portfolio and of the portfolio classified on a group basis could be an indicator for improper and insufficient coverage of the retail portfolios and the portfolios of similar financial instruments not impaired on individual basis with the calculated impairment and special reserve, thus creating a potential source of additional losses for the banks. Also, the calculation of impairment and special reserve on a group basis, by using statistical models is always accompanied by so called model risk, i.e. risk arising from the use of models for evaluating certain financial instruments, including the determination of

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financial standing of the debtor, but to the changes in the financial services offered by the bank and/or changes in the business of the person and/or the bank.

49 According to the provisions of the Decision on supervisory standards for regulating overdue banks' claims ("Official Gazette of the Republic of Macedonia" no. 134/2007) and the Decision on credit risk management ("Official Gazette of the Republic of Macedonia" no. 17/2008 and 31/2009) the restructured credit risk exposure is classified in C (or D and E) risk category and cannot be classified in a better risk category within 6 months after the restructuring. This classification requires allocation of impairment and special reserve of at least 25% of the respective credit risk exposure. On the other hand, the credit risk exposure with extended maturity date (prolongation) could be classified in any risk category, according to the criteria for client's creditworthiness, the regularity in the settlement of liabilities and the quality of collateral, that ensures impairment and special reserve below 25% (minimum for restructured exposure).

50 The definition and meaning of the terms "exposure classified on a group basis:, "retail portfolios" and "group of similar financial instrument not impaired on individual basis" is stated in the Decision on credit risk management ("Official Gazette of the Republic of Macedonia" no. 17/2008 and 31/2009). This decision also discusses criteria for classification of on-balance sheet positions and off-balance sheet items by their risk level, and the manner of determining the impairment and special reserve.

51 Average risk level - impairment and special reserve-to-credit risk exposure ratio.

52 The banks are required to calculate the impairment and special reserve for exposure classified on a group basis, under the provisions of the Decision on credit risk management ("Official Gazette of the Republic of Macedonia" no. 17/2008 and 31/2009) by using statistical models for determining the default ratio of each homogenous portfolio. The use of retail portfolio is at the bank's discretion (item 27 of the Decision on credit risk management) while the banks are required to reassess (classify), on a group basis in a portfolio of similar financial instruments, each item not subject to calculation of individual impairment (item 30 of the Decision). On December 31, 2010, six banks (constituting 75.7% of the total assets and 77.9% of the total credit risk exposure in the overall banking system) reported credit risk exposure classified on a group basis (retail portfolio and portfolio of similar financial instruments), ranging from 1.5% to 54.4% of the total credit risk exposure on December 31, 2010. On December 31, 2010, the share of exposure based on retail portfolio in the total credit risk exposure ranges from 1.5% to 39.5%.

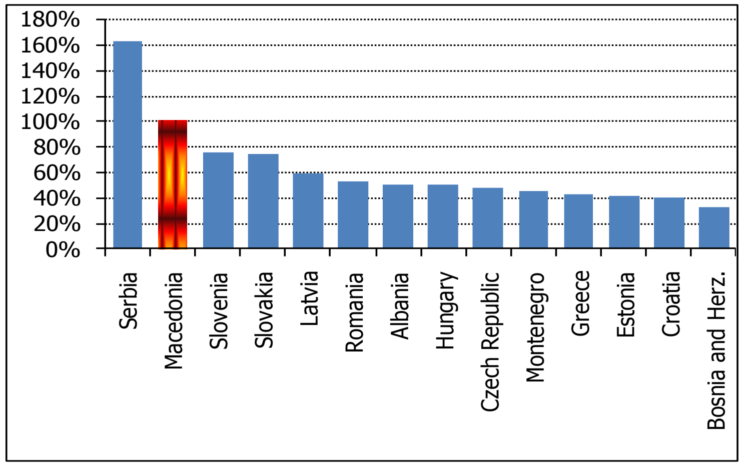
the impairment level. Basically, this risk implies that the statistical model does not serve its purpose, i.e. it generates wrong results, and the model risk refers not only to the possible theoretical errors in the model conception, but also to the deliberate and accidental mistakes made in its practical application. The additional importance of statistical models arises from the fact that in some banks, the systems for calculating the impairment and special reserve for exposures on individual basis are based on statistical determination of the claim impairment percentage, mostly on the basis of one criterion - the regularity of liability settlement by the client.

In 2010, the group of medium-size banks reported the fastest growth of the nonperforming loans and exposure classified in C, D and E risk categories, accompanied by the fastest annual growth rate of the calculated impairment and special reserve of this group of banks (Annex 15 - Nonperforming loans, credit risk exposure classified in C, D and E and calculated impairment, sector structure by group of banks). Hence, only the group of medium-size banks reported an annual increase of the share of nonperforming loans in the total credits (from 9.3% to 10.8%) (Annex 16 - Credit risk indicators by group of banks). Other credit risk indicators of the group of medium-size banks generally improved. The calculated impairment of the group of large banks registered a steeper annual increase compared to the growth of the higher risk exposures. This group of banks made the most of the written off claims in 2010 (56.1%) and asset foreclosures[53] in 2010 (83.6%). Accordingly, the credit risk indicators of this group of banks improved in 2010. The exposure classified in C, D and E risk categories accounted for 6.7% of the total exposure of the group of large banks on December 31, 2010, which is by 0.4 percentage points less compared to the end of 2009. If we ignore the effect of written off claims and foreclosures on the riskier exposure, this indicator would equal 7.8% at the end of 2010. The group of small-size banks reported a decrease of the nonperforming loans, the higher risk exposures and the calculated impairment and special reserve. Consequently, in 2010, this group of banks registered an improvement of the average risk indicator, the share of exposure classified in C, D and E and the share of nonperforming loans in the total credits. On the other hand, the indicators for the coverage of nonperforming loans and higher risk exposure with calculated impairment and special reserve, deteriorated.

[53] In 2010, after the asset foreclosure, the group of large banks showed return on provisioning in the amount of Denar 1,305 million.

Compared to the banking systems of other surrounding countries, the banking system of the Republic of Macedonia has among the highest value of the indicator for coverage of nonperforming loans with total calculated impairment and special reserve. This reflects the depth and liquidity of markets of various assets used as collateral (primarily real estate), the design of credit risk management regulations particularly in terms of the treatment of collateral in the calculation of impairment, differences in the legal protection of creditors (primarily during bankruptcy proceedings), the various qualitative features of the supervisory function in various countries, the difference in the level of prudence of the commercial banks and the differences in the sophistication of the risk management and measurement processes in the banks worldwide.

Figure 3.1.8
Coverage of nonperforming loans with impairment and special reserve, by country



Source: Global Financial stability Report, IMF, October 2010. The data on each country are the last available data for 2010, and the data on the Republic of Macedonia is as of December 31, 2010.
Note: The calculation of indicator uses nonperforming loans according to the scope of the sector as defined by the IMF in the Compilation Guide on Financial Soundness Indicators that include nonperforming claims on financial institutions.

Observing the **currency structure of the exposure,** in 2010, the indicators for risk exposure in foreign currency improved, with signs of deterioration being registered in the Denar exposure with currency clause. On the other hand, in 2010, only the coverage of higher risk exposure and nonperforming loans in Denars with calculated impairment and special reserve decreased (Annex 14 - Credit risk exposure and calculated impairment in the banking system - currency structure). Also, the Denar exposure registered the highest share of nonperforming loans (12.3%) in the total credits.

Table 3.1.2
Credit risk indicators by currency structure of the exposure

Indicators	Denar exposure			Denar exposure with FX clause			Foreign currency exposure		
	31.12.2008	31.12.2009	31.12.2010	31.12.2008	31.12.2009	31.12.2010	31.12.2008	31.12.2009	31.12.2010
Share in total credit risk exposure	48.7%	43.2%	44.7%	23.9%	28.2%	24.6%	27.4%	28.5%	30.7%
Average level of risk	6.9%	8.5%	6.9%	5.6%	5.0%	6.0%	4.1%	5.1%	5.0%
Share of „C“, „D“ and „E“ in total credit risk exposure	7.5%	10.0%	8.1%	7.0%	6.2%	7.0%	3.9%	6.5%	5.7%
Share of „C“, „D“ and „E“ in total credit risk exposure without exposure to financial institutions and state	9.1%	11.7%	10.7%	7.9%	7.5%	8.5%	5.3%	10.2%	8.8%
Share of „E“ in total credit risk exposure	3.6%	5.1%	4.5%	1.6%	2.6%	3.4%	1.4%	2.5%	2.5%
Coverage of „C“, „D“ and „E“ with total calculated impairment losses and special reserves	91.8%	85.0%	84.8%	80.2%	80.6%	85.9%	103.1%	77.8%	88.0%
Coverage of nonperforming loans with total calculated impairment losses and special reserves	n.a.	115.7%	101.8%	n.a.	104.3%	111.8%	n.a.	113.9%	130.0%
Coverage of nonperforming loans with calculated impairment losses for nonperforming loans	n.a.	74.4%	73.9%	n.a.	68.6%	74.8%	n.a.	64.8%	74.3%
Share of nonperforming loans in total loans	n.a.	11.5%	12.3%	n.a.	5.0%	5.8%	n.a.	11.0%	8.9%

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

Significant feature of the credit risk exposure of the domestic banks is the relatively **high concentration ratio of the exposure to corporations and other clients.** The concentration of this segment of credit portfolio results from both single-name concentration and sector-name concentration of credit risk exposure to corporations[54]. On December 31, 2010, the share of credit risk exposure to the 10 largest clients in the total exposure to this sector, in the overall banking system equaled 23.6%, and in some sectors it ranged from 37.2% (for the 10 largest clients in the wholesale and retail sail sector) to 86.6% (for the 10 largest clients in the sector of hotels and restaurants). Analyzing by bank, the share of credit risk exposure to the 10 largest clients in the total exposure to corporations and other clients ranged from 3.6% to 85.1%, with a median of 33.7%. The share of credit risk exposure to the 10 largest clients in the banks' own funds reconfirms the high concentration of exposure to this sector. Thus the share of credit risk exposure to the 10 largest clients in the own funds of the banking system equaled 99.9%, and observing by bank, it ranged from 10.2% to 178.9%, with a median 78.8%. The sector-by-sector analysis indicates that the share of exposure to the 10 largest clients in the industrial sector, in the own funds was the greatest (of 69.2%), followed by the wholesale and retail sale (47.9%). Moreover, it should be noted that at the end of 2010, the group of large banks reported the highest concentration and the highest share in the total exposure to this sector, but the lowest capital adequacy.

[54] Single name concentration is defined as the extent to which a certain entirety (portfolio) could be divided, i.e. broken into its integral parts, i.e. the higher the single name concentration, the lower the concentration, i.e. the portfolio is well diversified. Hence, the single name concentration of credit risk exposure shows the extent to which it could be divided into exposures to certain clients and the concentration ratio through distribution of exposure to individual clients. On the other hand, the sector concentration of credit risk exposure to corporations shows the concentration ratio illustrated through the structural share of exposures to the sectors.

Table 3.1.3
Concentration ratio - single name concentration of credit risk exposure to corporations and other clients sector on December 31, 2010

Activities	Industry	Agriculture, forestry and fishing	Construction	Wholesale and retail trade	Transport, storage and communication	Hotels and restaurants	Real estate activities, administrative and auxiliary service activities	Total exposure to enterprises and other clients
Share of credit risk exposure to 10 largest clients in total credit risk exposure								
Large banks	49.6%	87.4%	78.4%	38.5%	61.1%	87.9%	79.3%	*25.0%*
Medium-sized banks	30.1%	63.9%	51.0%	32.4%	53.3%	83.9%	70.5%	*19.3%*
Small-sized banks	74.0%	97.0%	96.4%	76.2%	83.0%	98.0%	97.0%	*50.5%*
Banking system	*43.7%*	*78.8%*	*70.0%*	*37.2%*	*58.9%*	*86.6%*	*77.9%*	23.6%
Share of credit risk exposure to 10 largest clients in own funds								
Large banks	85.6%	11.2%	40.6%	51.3%	17.4%	8.8%	20.3%	*112.2%*
Medium-sized banks	53.4%	10.9%	27.2%	50.7%	20.0%	11.6%	17.1%	*95.1%*
Small-sized banks	13.3%	1.6%	6.1%	20.1%	6.7%	2.0%	14.0%	*39.8%*
Banking system	*69.2%*	*10.1%*	*33.3%*	*47.9%*	*17.0%*	*8.9%*	*18.8%*	*99.9%*

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

The concentration of credit risk exposure to the corporations and other clients sector was demonstrated through the relatively high share of the industry and wholesale and retail sale, of 35.4% and 31.7%, respectively, in the total exposure to this sector on December 31, 2010. The high sector concentration ratio of exposure to the corporations and other clients sector reflects the structural features of the domestic economy and corresponds with the importance of these activities to the total economic activity in 2010, when their share in GDP equaled 19.7% and 14.9%, respectively[55]. Having the share of exposure to the construction sector added to their share in the total credit risk exposure to the corporations and other clients sector, the CR-3 as a measure of sector concentration of the exposure would equal 77.9% on December 31, 2010 (75.1% on December 31, 2009). At the end of 2010, the banks' CR-3 for the exposure to corporations and other clients ranged from 69.6% to 96.1% (Annex 17 - Indicators for credit risk exposure to the sector of corporations and other clients).

Compared to the credit risk exposure to the sector of corporations and other clients, **the credit risk exposure to the natural persons sector** demonstrates substantially higher single name concentration, **i.e. reports considerably lower concentration ratio.** On the one hand, this results from the features of this credit risk exposure segment with a number of clients with low individual exposure, but on the other hand, the banks' aggressive strategies to penetrate this market segment in the period of credit expansion (2005 - 2008) also made its contribution. Thus at the end of 2010, the share of credit risk exposure in the overall banking system to the 10 largest clients in the total exposure to natural persons equaled 1.5%, and analyzing by credit product it ranged from 0.2% (credit card exposure) to 5.1% (housing and business credits). Exception is the group of small-size banks that reported a higher concentration ratio, particularly in the car credits and housing and business credits, showing that this group has no active approach or established business relations with the housing sector. The low concentration of exposure to the sector of natural persons is also confirmed through its share of exposure to the 10 largest clients in its own funds, which equaled 4.8% of the overall banking system, and ranged from 1.1% to 11.9%, with a median of 4.7% by individual bank. Analyzing by group of banks, the group of medium-size banks reported the highest value of this indicator (6.9%) due to the exposure of this group on the basis of

[55] Source of data: SSO press release dated March 22, 2011.

housing and business credits and consumer credits, the share of which equaled 4.7% and 4.0%, respectively, at the end of 2010.

Table 3.1.4
Concentration ratio - single name concentration of credit risk exposure to the sector of natural person on December 31, 2010

Products	Residential and commercial real estate loans	Consumer loans	Overdrafts	Credit cards	Car loans	Total exposure to natural persons
Share of credit risk exposure to 10 largest clients in total credit risk exposure						
Large banks	5.3%	3.0%	0.2%	0.2%	1.9%	1.5%
Medium-sized banks	4.6%	2.6%	0.8%	0.2%	3.6%	1.4%
Small-sized banks	95.9%	8.5%	2.3%	7.1%	100.0%	6.3%
Banking system	*5.1%*	*3.0%*	*0.5%*	*0.2%*	*2.7%*	*1.5%*
Share of credit risk exposure to 10 largest clients in own funds						
Large banks	2.8%	2.5%	0.1%	0.2%	0.2%	4.0%
Medium-sized banks	4.7%	4.0%	0.3%	0.4%	0.9%	6.9%
Small-sized banks	0.9%	2.9%	0.2%	0.5%	0.1%	3.5%
Banking system	*3.2%*	*3.0%*	*0.1%*	*0.2%*	*0.4%*	*4.8%*

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

Slower growth of exposure classified in C, D and E and of the calculated impairment losses and special reserve in 2010, was typical for the exposure to both corporations and other clients sector and to natural persons sector. The annual growth rate of exposure in C, D and E categories to the corporations and other clients sector equaled 1.0% at the end of 2010 (32.5% on December 31, 2009), while the calculated impairment losses and special reserve increasing at the rate of 9.0% (13.2% on December 2009). The slower growth of exposure classified in C, D and E risk categories compared to the faster growth of impairment losses and special reserve in 2010 resulted from the asset foreclosure. At the end of 2010, the annual growth rate of the exposure in C, D and E risk categories to natural persons equaled 4.8% (25.9% at the end of 2009). The calculated impairment losses for exposures to natural persons also registered a slower annual growth of 2.0% (37.8% on December 31, 2009).

Figure 3.1.9
Absolute and relative annual growth of the exposure in C, D and E and the calculated impairment losses and special reserve for exposure to the sector of corporations and other clients

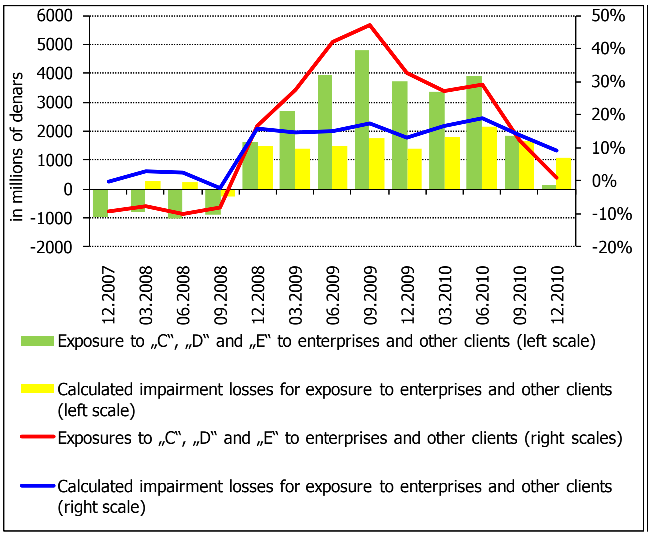
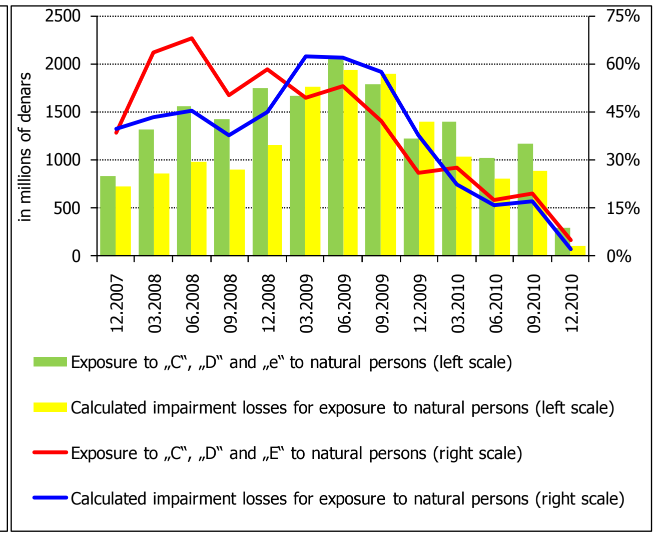


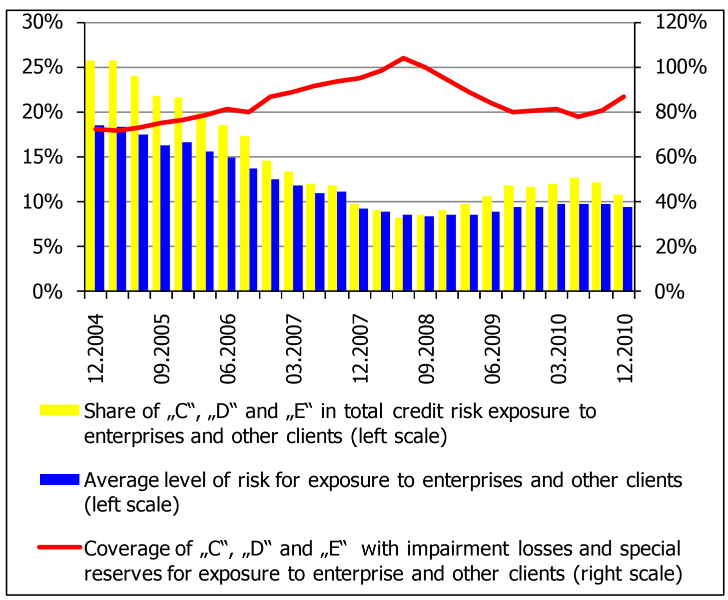
Figure 3.1.10
Absolute and relative annual growth of the exposure in C, D and E and the calculated impairment losses and special reserve for exposure to the sector of natural persons



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

At the end of 2010, the credit risk exposure to corporations and other clients sector constituted 44.7% of the total credit risk exposure in the overall banking system, thus having the greatest influence on the credit risk indicators in the overall banking system. The share of exposure classified in C, D and E risk categories to this sector went down by 0.6 percentage points in 2010, equaling 10.8% on December 31, 2010. This improvement mainly took place in the second half of the year, arising from the write offs and the fall of higher risk exposure due to asset foreclosure. If the banks did not write off claims in 2010, the share of C, D and E in the total credit risk exposure to the sector of corporations and other clients would equal 11.3% on December 31, 2010. The coverage of exposure in C, D and E risk categories with the calculated impairment and special reserve equaled 86.8% at the end of 2010, which is by 6.4 percentage points more

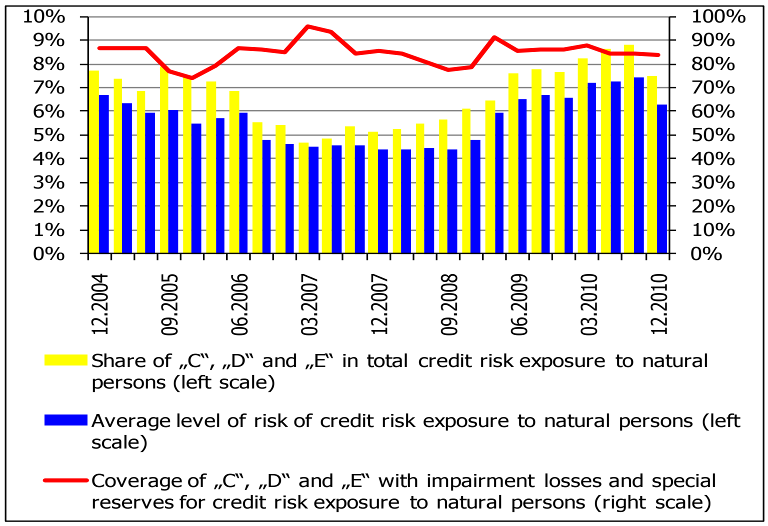
Figure 3.1.11
Indicators for credit risk exposure to the sector of corporations and other clients



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

compared to December 31, 2009. Analyzing by activity, the credit risk indicators for the agriculture, forestry and fishing, and transport and communications improved at the end of 2010, with the most significant deterioration being registered in the real estate activities, administrative and auxiliary service activities (Annex 17 - Indicators for credit risk exposure to the sector of corporations and other clients). The average risk indicators for the industry and wholesale and retail sale registered modest changes, but the coverage of the nonperforming loans and the higher risk exposures improved.

Figure 3.1.12
Indicators for credit risk exposure to household sector



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

In 2010, the credit risk exposure to the natural persons sector increased by 5.9%, accounting for 27.4% of the banks' credit portfolio on December 31. 2010. The credit risk indicators for this segment of bank portfolio registered moderate improvement on annual basis, solely due to the developments in the last quarter of 2010, particularly the write off of claims made by the banks. If the banks did not write off claims in 2010, the share of exposure to natural persons classified in C, D and E risk categories would equal 8.1%, instead of 7.5% (7.7% on December 31, 2009), and the average risk level would equal 7.0% instead of 6.3% (6.6% on December 31, 2009). Most of the credit risk exposure to natural persons includes consumer credits (34.2%), followed by credit card exposure (27.8%) and exposure based on housing and business credit (20.5%). Also, consumer credits were the main drivers of the annual growth of exposure to the sector of natural persons, contributing with 61.1%. The risk indicators for the car credits and housing and business credits worsened, while those of other products improved (Annex 18 - Indicators for credit risk exposure to natural persons).

Stress-test simulation[56] for the banking system resilience to higher credit risk exposure to the sector of corporations and other clients and/or sector of natural persons

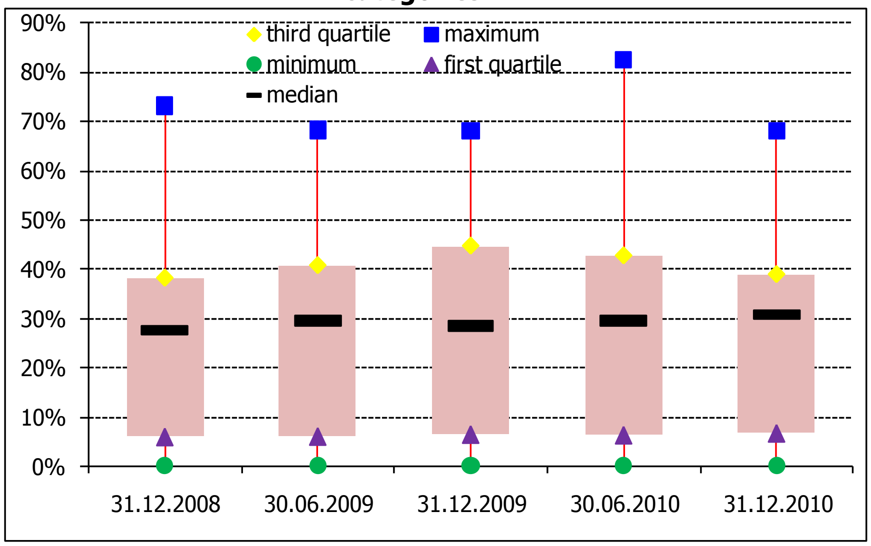
The stress testing of the banking system resilience to simulated deterioration of the credit risk exposure to nonfinancial entities assumes migration of a certain percentage of exposure from each risk category to the next two higher risk categories, distributed equally. Moreover, during the simulation, identical average risk level is assumed of each risk category, as well as prior to the exposure migration. The simulation is aimed to determine the adverse effect of the migration of credit risk exposure from the existing to higher risk categories (for both the total exposure and the exposure by sector and activity) on the capital adequacy and the exposure risk.

[56] Stress test simulation has been conducted by using data from the NBRM Credit Registry, as of December 31, 2010.

Assuming simultaneous redistribution of 10% (first scenario) and 30% (second scenario) of the credit risk exposure to the sectors of corporations and other clients, and natural persons, from lower risk categories to higher risk categories, the industry and consumer credits reported the highest deterioration of the exposure quality. The capital adequacy of the banking system would decrease by 1.9 percentage points in the case of first scenario, i.e. 6.4 percentage points in the case of second, more extreme scenario. With such migration, the share of exposure classified in C, D and E risk categories in the total credit risk exposure of the overall banking system would increase by 2.4 percentage points (in the case of first scenario) and by 7.0 percentage points (in the case of second scenario). If only corporate and household exposure is taken into consideration, i.e. exempting the exposure to financial institutions and government from the simulations, the share of exposure classified in C, D and E risk categories in case of the first and the second exposure migration scenarios would increase by 4.9 and 9.9 percentage points, respectively.

Figure 3.1.13

Decrease of capital adequacy in percentages as a result of the simulation - migration of 30% of the credit risk exposure from each risk category to the next two categories



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

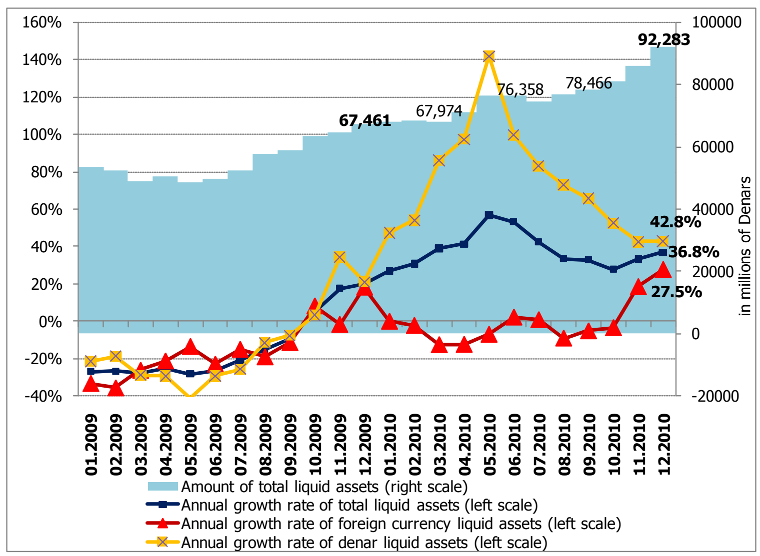
3.2. Liquidity risk

In 2010, the liquidity of the banking system of the Republic of Macedonia considerably improved compared to the preceding year. The volume of liquid assets registered high annual increase, causing an upward dynamics of all liquidity indicators. The group of large banks remains to be the main bearer of the liquid assets of the banking system. The results of the stress-test-simulations for the resistance of the banking system to liquidity shocks improved, although individual banks are still sensitive in case of hypothetical withdrawal of the deposits of the twenty largest depositors. The negative gap between the assets and liabilities, according to the contractual maturity, registered slight increase, as a result of the increase in the negative gap in the maturity segment from 181 to 365 days in foreign currency.

3.2.1. Movement of the liquid assets[57] and the liquidity indicators of the banking system[58]

A continuous upward trend is the main characteristic of the banks' liquid assets in 2010. At the end of the year, the liquid assets registered annual rise of 36.8%, i.e. Denar 24,822 million. **The propulsive component of the liquid assets growth was the Denar[59] liquid assets.** At the end of 2010, it reached Denar 58,735 million, which is an absolute annual increase of Denar 17,591 million (or of 42.8%). The largest share in the Denar liquid assets growth accounts for the CB bills, which at the end of 2010 augmented by 63.7% and participated in the annual rise in the total liquid assets with 40.7%. The second large component in the structure of the Denar liquid assets, as well as in the banks' total liquid assets, was the Treasury bills ,which registered an annual growth rate of 74.5% and participated in the annual rise in the total liquid assets of the banking system with 24.6%. Significant

Figure 3.2.1
Movement and annual growth rate of the liquid assets of the banking system

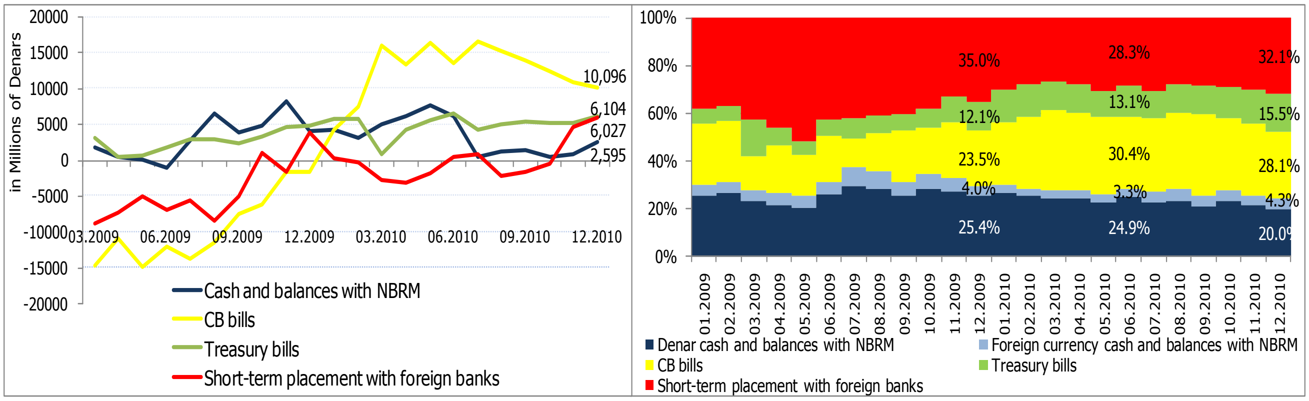


Source: NBRM, based on data submitted by the banks.
*The growth slowdown in the banks' Denar assets in the second half of 2010 is due to the payment of a dividend by one large company to the shareholders - nonresident and the Government.

[57] The liquid assets encompass the cash and balances on the accounts with the NBRM, the CB bills, the correspondent accounts and the short-term placements with foreign banks and placements in short-term securities issued by the Government.
[58] The analysis of the liquidity indicators at the level of the banking system does not take into the consideration the deposits with and the credits of the domestic banks (assets' components), i.e. the deposits and the loans of the domestic banks (liabilities' components).
[59] For the needs of the banks' liquidity analysis, the assets and liabilities in Denars with FX clause are included in the Denar assets and liabilities,

factor for strengthening of the Denar liquidity was the prudent and regulatory measure[60] of the National Bank for introducing minimal liquidity ratios.

Figure 3.2.2
Annual growth and structure of the liquid assets' elements



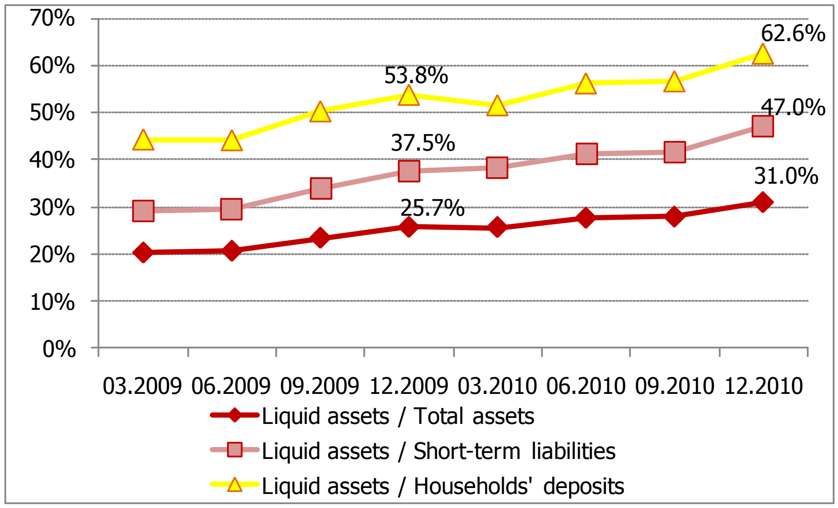
Source: NBRM, based on data submitted by the banks.

The increase in the foreign currency liquid assets[61] in 2010 showed intensification signs. Compared to the preceding year, their annual growth rate increased by 9.5 percentage points and on December 31,2010 it equaled 27.5%. **The largest portion (83.3%) of the annual increase in the foreign currency liquid assets is due to the increase in the assets on the correspondent accounts and the short-term time deposits in foreign banks, which enlarged also their share in the structure of the banks' liquid assets.** Despite the high annual growth rate of the foreign currency cash and the foreign currency assets on the accounts with the National Bank (of 44.2%, or Denar 1,204 million), their contribution to the increase in the total liquid foreign currency assets is lower and it equals 16.7%. The assets on the correspondent accounts and the short-term assets in foreign banks registered annual rise of 25.5% (i.e. Denar 6,027 million) and conditioned 24.3% of the annual increase in the total liquid assets. Most of this increase (75%) results from a bank from the group of large banks which maintains high liquidity position in foreign exchange. At the level of individual banks, the share of the correspondent accounts and short-term assets in foreign banks in their liquid assets ranges within 2.6% - 68.8% interval. The considerable annual increase in the foreign currency cash and the foreign currency assets on the accounts with the National Bank is a result of the deposited foreign currency deposit with the National Bank by one bank, on the basis of the auctions of foreign currency deposits. From the aspect of the liquid assets' maturity structure, 51.3% of the foreign currency assets account for the sight deposits, with 44.2% of them having one-month maturity (while 75.7% of the Denar liquid assets are sight deposits with one-month maturity).

[60] Decision on managing banks' liquidity risk ("Official Gazette of RM" no. 163/08, 66/09 and 144/09).
[61] At the end of 2010, the foreign currency liquid assets equaled Denar 33,548 million and registered annual increase of Denar 7,231 million.

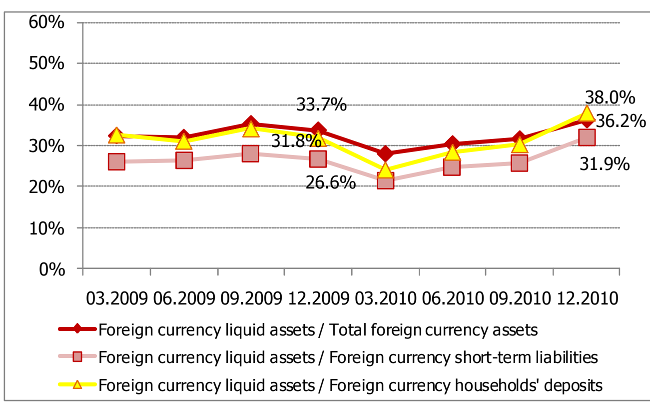
At the end of 2010, all liquidity indicators of the banks (cumulatively, as well as individually, by foreign currency and Denar[62] liquidity) improved relative to 2009. The Denar liquidity indicators generally show stable upward trend, while the indicators for the foreign currency liquidity registered larger oscillations. All components of the liquidity indicators increased annually, while the indicators improvement is due to the faster growth of the banks' liquid assets. The largest annual rise (of 9.5 percentage points) was registered in the correlation between the banks' liquid assets and short-term liabilities (the short-term liabilities registered annual increase of 9.0%, compared to the annual rise in the liquid assets of 36.8%). Simultaneously, the indicator for the coverage of the total households' deposits with liquid assets increased despite the annual growth of these deposits of 17.5%. The faster growth in the households' Denar relative to the foreign currency deposits, in conditions of higher increase in the Denar relative to the foreign currency liquid assets, contributed to larger coverage of the households' foreign currency deposits than the coverage of the households' Denar deposits with Denar liquid assets[63].

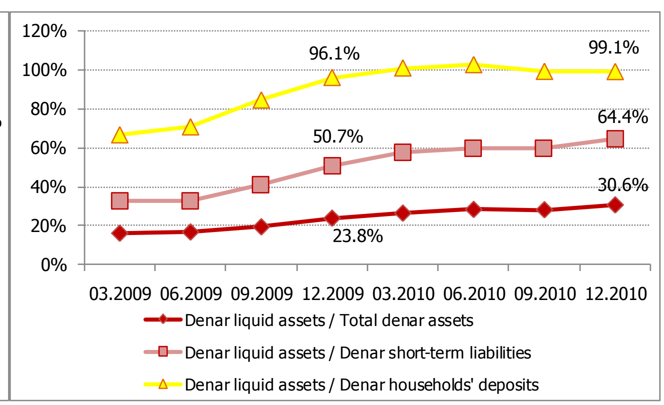
Figure 3.2.3
Movement of the banks' total liquidity indicators



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

Figure 3.2.4
Movement of the liquidity indicators for the positions in foreign currency (left) and in Denars (right)





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

62 Including those with currency clause.

63 In the calculation of the indicator for the Denar liquid assets in the total liquid assets, the fixed assets, the non-tangible assets and the assumed assets on the uncollected claims are deducted from the Denar assets.

The decrease in the indicators for the **foreign currency liquidity** in the first quarter of 2010 is mostly due to the redirecting of the bank assets to the correspondent accounts and the short-term assets in foreign banks towards investments in domestic low-risk instruments[64]. In the following quarters, the foreign currency liquid assets registered gradual rise, as a result of the surge in the banks' assets on the correspondent accounts and short-term assets in foreign banks. The other components of the indicators for foreign currency liquidity registered annual increase, which ranged within an interval from 6.2% with the total foreign currency short-term liabilities up to 18.6% for the total foreign currency assets of the banks. All indicators for the **Denar liquidity position** in the entire year registered moderate improvement. The highest increase is registered with the correlation between the Denar liquid assets and Denar short-term liabilities (13.6 percentage points compared to 2009). The correlation between the liquid assets and the households' Denar deposits during the year exceeded 100%, as a result of the higher rise in the Denar liquid assets relative to the Denar deposits.

In the comparison of all liquidity indicators with the other regional countries and wider, the banking system of the Republic of Macedonia is positioned in the mid of the list of the analyzed countries (Annex 19 - Indicators for the liquidity of the banking system with individual countries).

Table no. 3.2.1
Structure and movements of the sources of funding of the banking system

Source of funding	31.12.2009		31.12.2010		Annual change		
	Amount (in millions of Denars)	Structure (in %)	Amount (in millions of Denars)	Structure (in %)	Amount (in millions of Denars)	In %	% of change
Deposits of nonfinancial entities	**187,875**	**70.0%**	**213,270**	**69.9%**	**25,395**	**13.5%**	**69.1%**
-long-term	23,069	8.6%	32,933	10.8%	9,865	42.8%	26.8%
-short-term	164,806	61.4%	180,336	59.1%	15,530	9.4%	42.3%
Deposits of financial entities	**18,031**	**6.7%**	**18,372**	**6.0%**	**341**	**1.9%**	**0.9%**
-long-term	**3,785**	**1.4%**	**5,073**	**1.7%**	**1,288**	**34.0%**	**3.5%**
-of which : parent entities	*501*	*0.2%*	*4,085*	*1.3%*	*3,583*	*714.9%*	*9.8%*
-short-term*	**14,246**	**5.3%**	**13,299**	**4.4%**	**-947**	**-6.6%**	**-2.6%**
-of which : parent entities	*7,274*	*2.7%*	*3,208*	*1.1%*	*-4,066*	*-55.9%*	*-11.1%*
Borrowings, subordinated and hybrid capital instruments	**24,945**	**9.3%**	**33,341**	**10.9%**	**8,396**	**33.7%**	**22.8%**
-long-term	**21,634**	**8.1%**	**29,745**	**9.7%**	**8,110**	**37.5%**	**22.1%**
-of which : parent entities	*6,884*	*2.6%*	*8,831*	*2.9%*	*1,947*	*28.3%*	*5.3%*
-short-term**	**3,310**	**1.2%**	**3,596**	**1.2%**	**286**	**8.6%**	**0.8%**
-of which : parent entities	*2,447*	*0.9%*	*3,394*	*1.1%*	*947*	*38.7%*	*2.6%*
Capital, reserves and current financial result	**33,248**	**12.4%**	**35,344**	**11.6%**	**2,096**	**6.3%**	**5.7%**
Other sources (not included before)	**4,444**	**1.7%**	**4,963**	**1.6%**	**520**	**11.7%**	**1.4%**
Total source of funds	**268,543**	**100.0%**	**305,290**	**100.0%**	**36,747**	**13.7%**	**100.0%**
- total used funds from parent entities	***17,106***	**6.4%**	***19,518***	**6.4%**	***2,412***	**14.1%**	**6.6%**

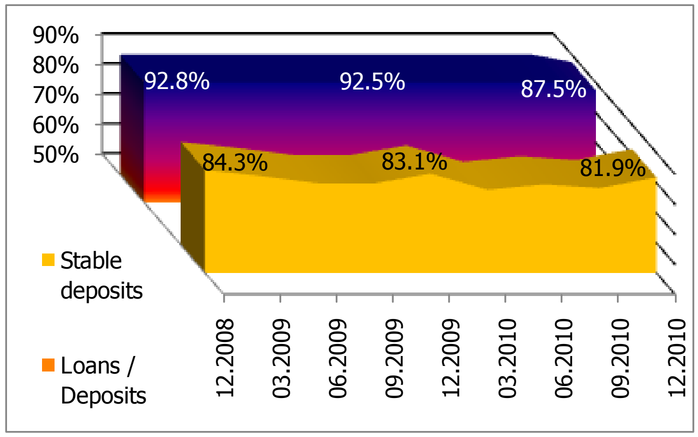
Source: NBRM, based on data submitted by the banks.
*Includes short-term deposits, sight deposits and current accounts.
**Includes short-term and past due loans.

On December 31, 2010 no significant changes in the structure of the banks' sources of financing compared to the end of the two preceding years were registered. The largest share still accounts for the short-term deposits of the non-financial entities, which have the largest participation in the annual increase of the total sources of funding. The used funds from parent entities registered annual growth of 14.1%, but it did not cause any change in their share in the structure of the sources of financing, compared to the preceding year. This increase is mostly due to the long-term borrowings and subordinated and hybrid instruments, which registered annual increase of 29.9% and 32.3%, respectively and participated in the increase in the used funds from the parent entities with 59.2% and 60.8%, respectively.

[64] On March 31,2010, the amount of subscribed CB bills exceeds the amount registered at the end of 2009 by about Denar 7 billion (44.8%).

As in the previous years, in 2010, as well, the deposits showed high level of stability. In 2010, the level of stable deposits was the lowest at the end of the first quarter, when it equaled 77.7%, while the highest at the end of the year (81.9%). Within two-year period, the correlation between the credits and the deposits of the non-financial entities reduced below 90%, as a result of the double higher annual increase in the deposits, relative to the gross credits growth. One third of the banks (where this indicators is over 100%), finance their credit activity, except from the deposits, also from other sources of funds. The largest portion of these banks, has used the deposits as secondary sources of funds (including also the subordinated deposits), and borrowings from the parent entities.

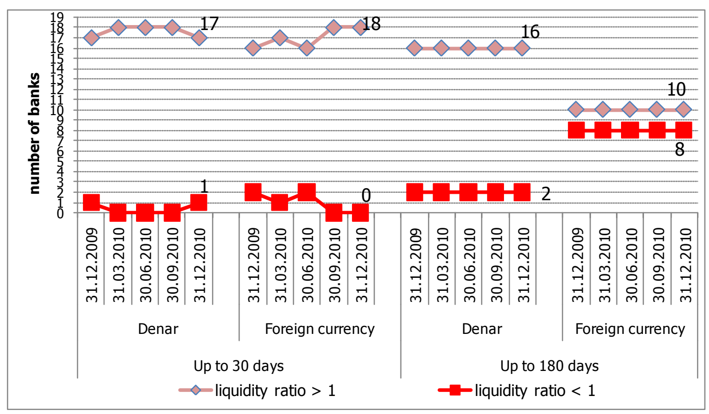
Figure 3.2.5
Movement of the stable deposits and the correlation between bank credits and deposits



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

The stable liquidity position with the banks is perceived also through the attainment of the prescribed liquidity ratios for both maturity segments. The number of banks registering liquidity ratio lower than 1, within the maturity segment of 180 days and in Denars and in foreign exchange remained unchanged (two banks and eight banks, respectively). However, these eight banks completely meet the prescribed dynamics[65] for reaching the rate equal to 1. The liquidity ratio up to 30 days in foreign exchange was attained by all banks. With one bank, the liquidity ratio up to 30 days fell below one in the last months of the year. Since January 2011, this bank has met the minimal level of the liquidity ratio up to 30 days.

Figure 3.2.6
Trend of fulfillment of the liquidity ratio up to 30 and 180 days with the banks in the Republic of Macedonia



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

[65] Pursuant to the Decision on managing banks' liquidity risk ("Official Gazette of RM" no. 163/08, 66/09 and 144/09), the banks are obliged, according to the prescribed dynamics (which began since March 2009), to reach liquidity ratios equal to 1, for assets and liabilities in Denars and in foreign exchange up to 30 days until February 28,2011, and for the assets and liabilities in Denars and foreign exchange up to 180 days until February 28,2014.

Table 3.2.2
Structure of the assets for meeting the level of liquidity ratio in Denars and in foreign currency, with banks

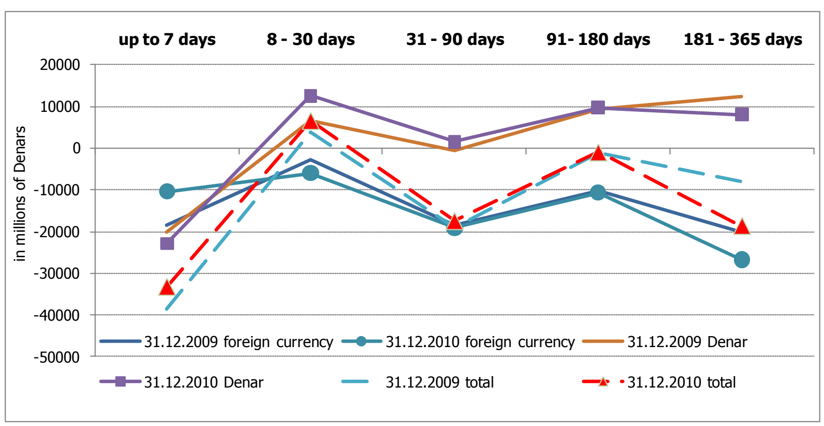
	Denar				Foreign currency			
	up to 30 days		up to 180 days		up to 30 days		up to 180 days	
	Amount (in millions of Denars)	Share of assets	Amount (in millions of Denars)	Share of assets	Amount (in millions of Denars)	Share of assets	Amount (in millions of Denars)	Share of assets
Compulsury reserve and placements with NBRM	32,572	62.8%	32,572	37.8%	10,041	23.7%	10,041	19.6%
- CB bills	18,040		18,040		8,176		8,176	
-Compulsury reserve and cash with NBRM	13,813		13,813		1,934		1,934	
Loans, interests, fees and commisions	8,465	16.3%	34,081	39.5%	23,329	55.0%	31,189	60.7%
Other assets due to 30/ 180 days	10,803	20.8%	19,546	22.7%	9,038	21.3%	10,119	19.7%
(+)/(-) of assets up to 30 / 180 days over/above liabilities up to 30 / 180 days	21,629	**41.7%**	21,270	**24.7%**	15,911	**37.5%**	-14,310	**-27.9%**
Total assets	51,839	**100.0%**	86,198	**100.0%**	42,408	**100.0%**	51,349	**100.0%**
Total liabilities	30,210		64,928		26,497		65,658	

*Note: The amount of the CB bills, the compulsory reserve requirement and placements with NBRM is given as of January 31,2011, while all other amounts (including also the assets and the debt instruments with /from NBRM) are presented as average for January 2011 (pursuant to the Decision and the Instructions for liquidity risk management).
Source: NBRM, based on data submitted by the banks.

The assets' structure, which is used for meeting the liquidity ratio in Denars up to 180 days almost equally encompasses assets placed with the National Bank and claims based on credits. The excess of funds over liabilities in this maturity segment is almost one fourth of the assets. Regarding the fulfillment of the liquidity ratio in foreign exchange up to 180 days, lack in the amount of Denar 14,310 million, or 21.8% of the liabilities occurs. The claims based on credits prevail in the assets' structure, which is used for meeting the liquidity ratios in foreign exchange. Pursuant to the regulations, when determining the liquidity ratios, the banks can use funds placed with the National Bank for covering the liabilities whether in Denars, or foreign exchange. The banks used the placements with the National Bank for covering 37.9% of the foreign currency liabilities up to 30 days and 15.3% of the foreign currency liabilities maturing up to 180 days.

At the end of 2010, gap between the contractual residual maturity of the assets and liabilities occurred, despite the banks' expectations for their compliance (such expectations are primarily based on the high stability of the short-term sources of funds). This is mostly due to the deepening of the negative gap in foreign exchange within the maturity segment from 181 to 365 days, which is due to the increase in the liabilities based on credit lines from abroad (Denar 3,202 million) and

Figure 3.2.7
Contractual residual maturity (mis)match of the assets and liabilities



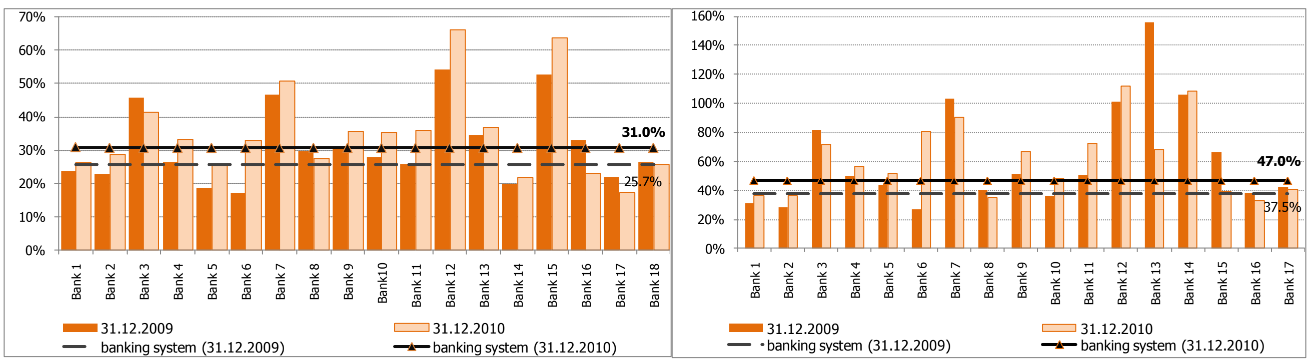
Source: NBRM, based on data submitted by the banks.

time foreign currency deposits (Denar 4,625 million), opposite to the smaller (Denar 1,786 million) rise in the claims based on foreign currency credits with maturity from 181 to 365 days (Annexes 20 and 21 - Contractual and anticipated maturity structure of the assets and liabilities of the banking system on December 31,2009 / December 31,2010).

3.2.2 Liquidity by banks and by group of banks

The liquid assets with all groups of banks registered annual growth at the end of 2010. The group of large banks had the largest contribution (61.1%) to the annual increase in the liquid assets of the banking system. The highest share of liquid assets in the total assets is characteristic for the group of small banks (47.6%), while this share with the groups of both large and medium-size banks, equaled 30.1% and 30.7%, respectively. The indicator for the coverage of the short-term liabilities with liquid assets ranged from 43.6% with the large banks, 51.6% with the medium banks and to 84% with the group of small banks.

Figure 3.2.8
Movement of the liquidity indicators: Liquid assets in the total assets (left) and liquid assets in the short-term liabilities (right), by bank



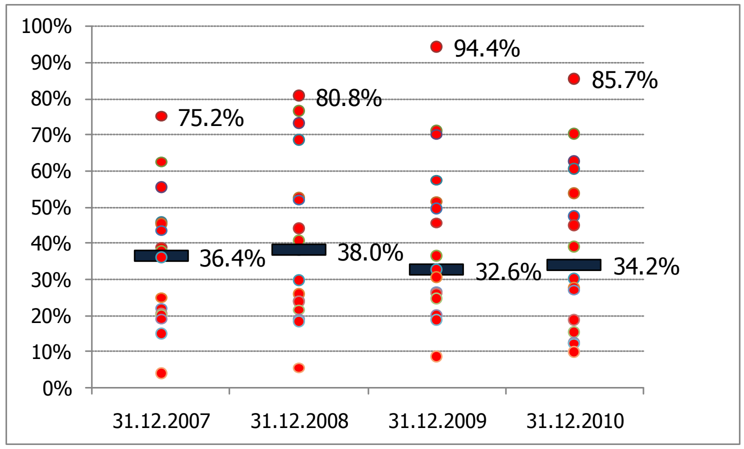
Source: NBRM, based on data submitted by the banks.
Note: One bank, with the short-term liabilities equal to zero is excluded from the analysis of the indicator for the correlation between the liquid assets and the short-term liabilities by banks.

The bank-by-bank analysis[66] showed that at the end of 2010, the liquidity indicators with three banks registered a decrease relative to 2009, primarily as a result of the annual fall with the liquid funds with these banks. The share of the liquid assets in the total assets by banks moved within an interval of 17.3% and 66.3%, while the level of coverage of the short-term liabilities with liquid assets ranged from 32.6% to 112.2%.

[66] The calculation of the individual components for analysis of the liquidity position of individual banks takes into consideration also the deposits with and credits of the domestic banks (assets' components), i.e. on the side of the liabilities, the deposits and the loans of the domestic banks are taken into consideration.

The deposits concentration in the banking system measured through the share of the twenty largest depositors in the total deposits[67] of individual banks, registered no considerable change at the end of 2010. The share of the twenty largest depositors in the total deposits with the individual banks ranged from 10% to 85.7%. With five banks, this share exceeds 50%.

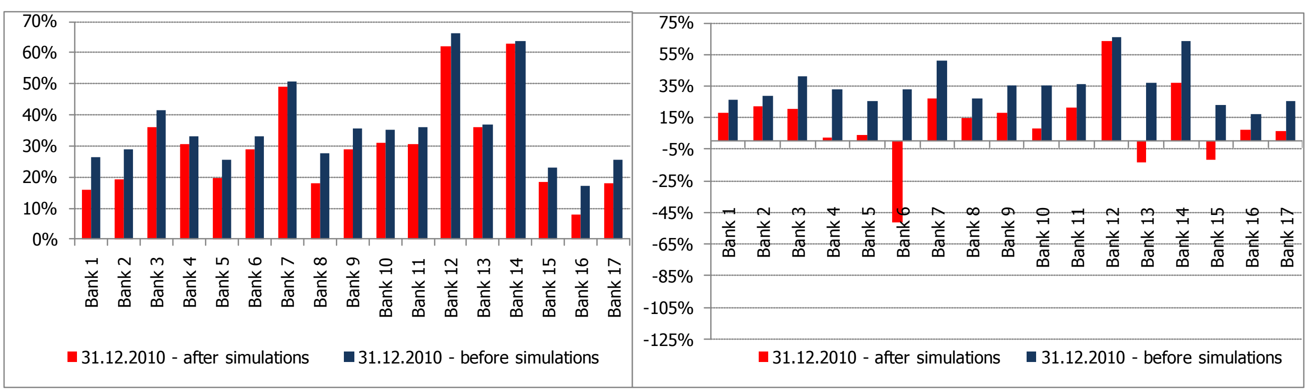
Figure 3.2.9
Share of the twenty largest depositors in the total deposits, by banks



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

Because of the high concentration of deposits with individual banks, in case of simulation of withdrawal of the deposits of the twenty largest depositors of the banking system (conducted as of December 31,2010), three banks registered lack of liquid assets for covering the liabilities in case of their outflow (one bank less compared to December 31,2009).

Figure 3.2.10
Share of the liquid assets in the total assets in case of hypothetical withdrawal of 20 largest depositors (left) and withdrawal of 20% of the households' deposits (right) in the stress-test analysis, by bank



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

Besides, the National Bank implements stress test analysis, which is based on hypothetical scenario for withdrawal of 20% of the households' deposits outside the banking system. The results show larger resistance of the banking system also to this liquidity shock compared to the previous year, with all banks having enough liquid assets to cover the simulated outflow of deposits.

[67] Deposits of the nonfinancial and financial entities are also included.

3.3. Currency risk

The presence of the foreign currency component[68] in the total assets and liabilities of the banks in the Republic of Macedonia is lower in 2010, after the two-year continuing growth. The gradual uncertainty easiness caused by the global economic and financial crisis on the banking system of the Republic of Macedonia, resulted in a smaller share of the foreign currency component in the total assets and liabilities. The absolute amount of the foreign currency mounted, but the twice bigger rise in the Denar assets and liabilities resulted in smaller share of the foreign currency component in the banks' balance sheets. In conditions of higher assets growth compared to the liabilities with currency component, in 2010 the gap between them deepened, which indicates higher currency risk. All banks, except one, managed the currency risk within the prescribed limits for aggregate foreign currency position. According to the analysis of the open currency position in 2010, the banks registered long position in Denars with FX clause, opposite to the extremely short position in Denars.

In 2010, the assets' currency component registered higher increase than the increase in the liabilities with foreign currency component. It resulted in **deepening of their gap, and thus higher currency risk the banks are exposed to.** The gap between assets and liabilities with foreign currency component incremented by 39.8% (or by Denar 1,955 million) at the end of the year, compared to December 31,2009. The enlargement of the gap between the assets and liabilities with currency component, together with the smaller increase in the own funds, caused their correlation to increase by 4.4 percentage points in 2010 relative to 2009.

The gap between the assets and liabilities with currency component is based on the high positive gap between the assets and liabilities in Denars with FX clause and the high negative gap between the assets and liabilities in foreign currency. The positive gap of the positions in Denars with FX clause incremented by 5.3% (or Denar 3,054 million), influenced by the severe drop of the liabilities of 37.3% (or Denar 4,984 million), compared to the slighter decrease in the assets of 2.7% (or Denar 1,930 million). On the other hand, the negative gap in foreign currency augmented by 2.1% (or Denar 1,099 million). It is due to the higher growth of the foreign currency liabilities (of Denar 15,274 million, or of 11.4%) relative to the increase in the foreign currency assets (which augmented by Denar 14,175 million, or 17.6%).

[68] The assets and liabilities with currency component encompass assets and liabilities items denominated in foreign currencies and in Denars with FX clause. Source: Report on the exposure of currency risk by positions (Form ODP-p), which is submitted by the banks to NBRM. The analysis of the currency risk does not include the Macedonian Bank for Development Promotion AD Skopje, because pursuant to Article 5 item 4 of the Law on the Macedonian Bank for Development Promotion ("Official Gazette of RM" no. 105/2009), the provisions for the open currency position do not, inter alia, apply to the bank.

Figure 3.3.1
Structure of the gap between the assets and liabilities with currency component

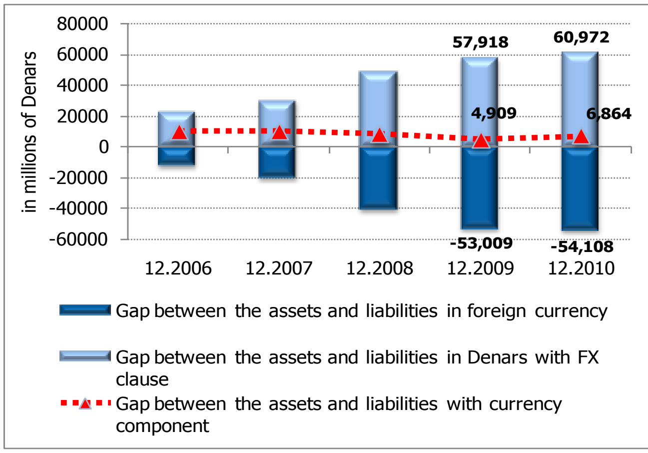
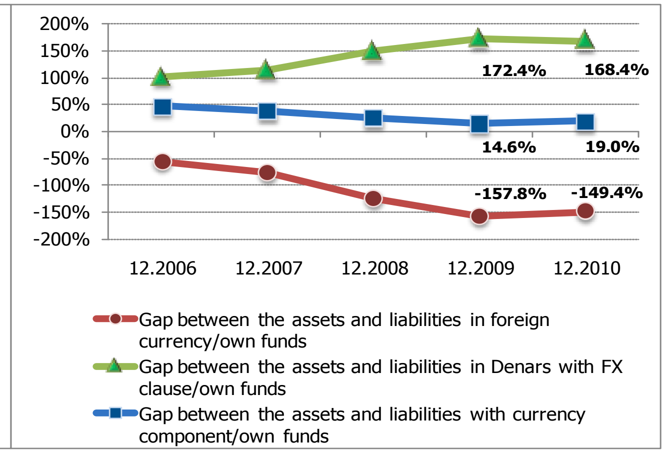


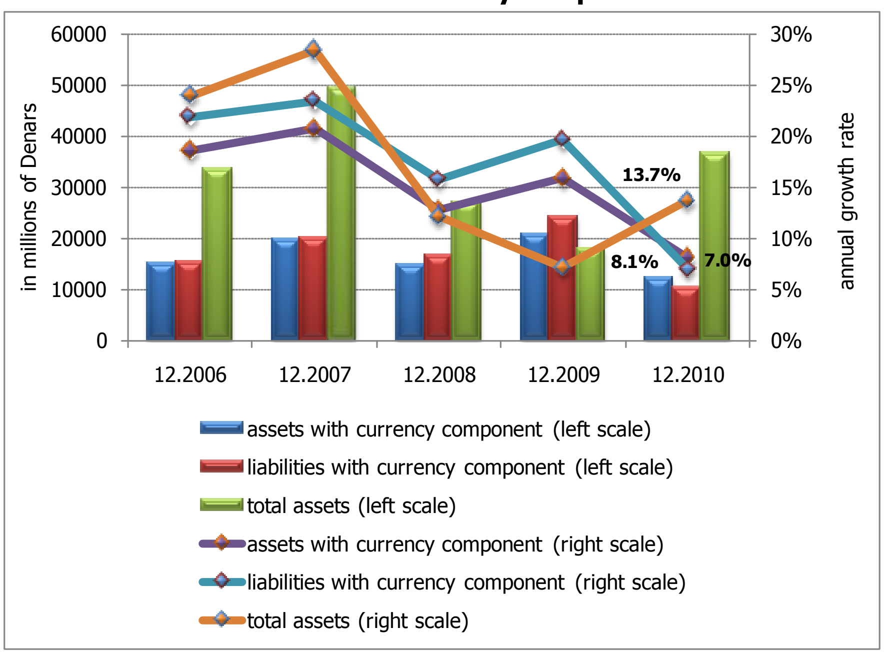
Figure 3.3.2
Share of the gap between assets and liabilities with currency component in the banks' own funds



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

The increase in the assets with foreign currency component (on annual basis of 8.1%, or Denar 12,245 million) is due to the increase in the following: foreign currency crediting (by Denar 8,927 million)[69], short-term assets placed with foreign banks (by Denar 6,027 million), and banks' investments in Treasury bills with FX clause (by Denar 462 million)[70], opposite to the decrease i n the credits in Denars with FX clause (of Denar 798 million). It should be emphasized that the increase in the banks' credit portfolio in foreign currency was followed by deterioration in the quality of

Figure 3.3.3
Annual change in the total assets and the banks' assets and liabilities with currency component



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

[69] The increase in the foreign currency crediting is a result of the higher amount of credits in foreign currency extended to enterprises and other clients, which conditioned 85.8% of the increase in the foreign currency credits. Almost half of the foreign currency credits of enterprises and other clients (48.7% on December 31,2010) are intended for payment of liabilities in the country, while the rest is aimed at payment abroad. Pursuant to the Decision on the terms and the manner of extending foreign exchange loans in foreign exchange and foreign exchange indexed loans between residents ("Official Gazette of RM no. 41/2006), the banks transfer credits used for payments in the country on the beneficiary's Denar account. Legal entities can pay the foreign currency credits in foreign exchange, if it arises from the collections from non-residents, or in Denars.

[70] The growth in the investments in Treasury bills in Denars with FX clause is due to the larger investments of one bank of the group of large banks.

this portfolio, which caused higher impairment and smaller increase in the foreign currency assets[71]. **On the other hand, the annual increase in the foreign currency component in the liabilities** (of 7%, or Denar 10,290 million) is prescribed to the increase in the foreign currency deposits of the non-financial entities (of Denar 8,461 million)[72], as well as the increase in the total liabilities by foreign currency credits (of Denar 8,018 million)[73], opposite to the decrease in the deposits of the non-financial entities with FX clause (of Denar 4,589 million)[74] and insignificant decrease in the total liabilities by credits in Denars with FX clause (of Denar 253 million).

Figure 3.3.4
Share of the assets with currency component in the total assets of the banking systems of the Central and Eastern European countries

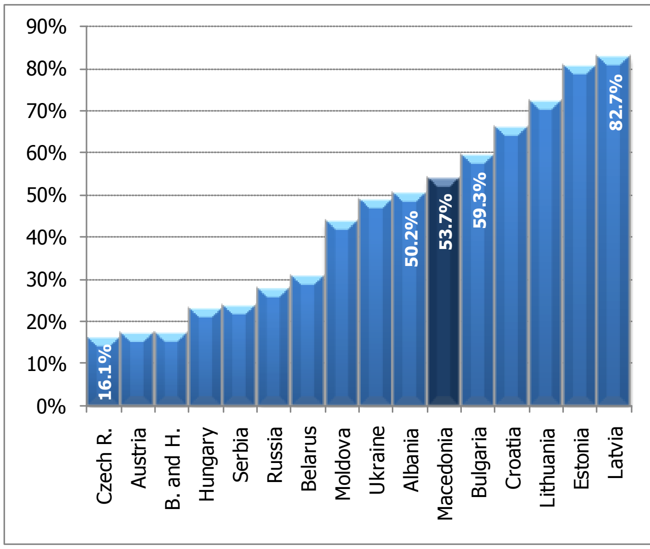
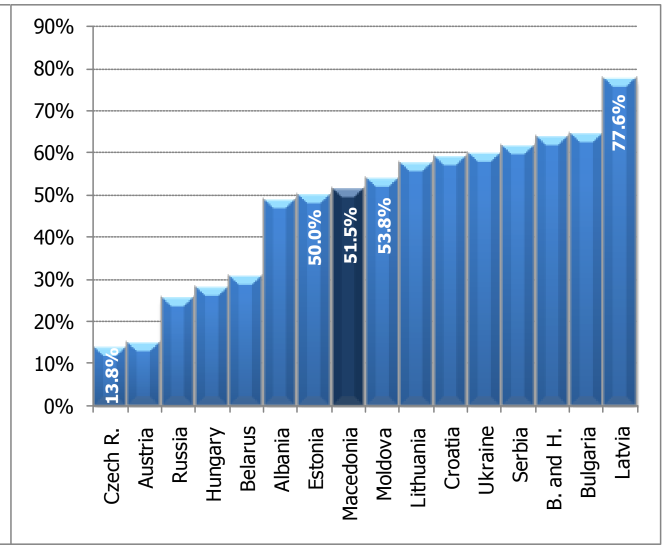


Figure 3.3.5
Share of the liabilities with currency component in the total assets of the banking systems of the Central and Eastern European countries



Source: NBRM and Report on the Banking Supervisors from Central and Eastern Europe (BSCEE), 2009

The comparative analysis of the share of the assets and liabilities with foreign currency component in the total assets and liabilities of the banking systems in individual countries of Eastern and Central European Union proved the relatively high presence of the foreign currency component in the balance sheets of the Macedonian banks.

[71] Pursuant to the Instructions on implementation of the Decision on managing currency risk, in the calculation of the open currency position, the allocated impairment of the assets with currency component classified in the risk category C, D and E is deductable item in the total assets with currency component.
[72] The increase in the foreign currency deposits with most banks is due to the increase in the natural persons' deposits.
[73] In 2010, the increase in the liabilities based on foreign currency credits, mostly arises from the long-term borrowing of two banks with the international financial institutions (IFC - International Financial Corporation and EIB - European Investment Bank) for the purpose of financial support to the domestic corporate sector and the short-term borrowing of one bank with the parent entity.
[74] The decrease in the Denar deposits with FX clause is primarily due to the payment of a dividend of one large company.

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

Currency	31.12.2009			31.12.2010		
	Currency structure of the assets with currency component	Currency structure of the liabilities with currency component	Currency structure of the gap between the assets and liabilities with currency component	Currency structure of the assets with currency component	Currency structure of the liabilities with currency component	Currency structure of the gap between the assets and liabilities with currency component
Euro	89.9%	89.8%	90.3%	89.7%	89.7%	90.1%
US Dollar	6.9%	7.3%	-5.9%	6.5%	7.1%	-6.9%
Swiss franc	1.8%	1.4%	13.4%	2.0%	1.6%	11.9%
Other	1.5%	1.4%	2.2%	1.8%	1.6%	4.9%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

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

The currency structure of the assets and liabilities with currency component and the gap between them registered no significant movements in 2010. The Euro still dominates in the banks' balance sheets, with insignificant decrease relative to its share registered at the end of 2009. On the other hand, the share of the Swiss Franc registered slight increase. **At the level of the banking system, the gap between the assets and liabilities with foreign currency component is positive for all currencies, except for the US Dollar.**

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%	2		10	6	10	5	16	
from 5% to 10%	2	1						
from 10% to 20%	8							
from 20% to 30%	3							
over 30%	1							

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

According to the analysis by currency, the correlation between the open currency position in Euros and own funds with the largest number of banks ranges within 10% - 20%, with this ratio exceeding 30% only with one bank. The correlation between the open currency position and own funds for all other currencies does not exceed 5% with all banks.

In 2010, the banks maintained the exposure to currency risk within the prescribed limit for the aggregate foreign currency position. The largest number of banks (except one bank) registered aggregate long foreign currency position, which ranged between 5% and 30%. Only one bank exceeded the prescribed limit of 30%.

Table 3.3.3
List of banks according to the share of the aggregate foreign currency position in the own funds, on December 31, 2010

Aggregate currency position/own funds	Number of banks	
	Aggregate long position	Aggregate short position
under 5%		
from 5% to 15%	7	1
from 15% to 30%	8	
over 30%	1	

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

3.4. Insolvency risk

In 2010, the indicators for the solvency and capitalization of the banking system registered certain decrease. The lower solvency was fully concentrated with the group of medium-size and small banks and it is a result of the slightly enhanced activity with these groups of banks in 2010. Oppositely, the solvency indicators with the group of large banks registered an increase, which primarily arises from the bigger precaution of this group of banks in taking additional risks. The own funds rouse with all groups of banks, with the realization of several new issues of shares, after a period of their full absence as a source for incrementing the banks' own funds needing to be emphasized. The risk weighted assets increased by more than four times also exceeding the annual growth rate of the own funds. The credit risk weighted assets retained the dominance in the risk weighted assets structure. Improvement of the banks' capacity for solvency management, and especially the use of all available possibilities for increasing the own funds, beside the most frequently used ones - retained gain and capital infusion from the parent entity, are some of the main challenges for the banks in the following period, for the purpose of smooth further enlargement of the activities' volume.

3.4.1 Indicators for the solvency and capitalization of the banking system

Figure 3.4.1
Movement of solvency and capitalization indicators

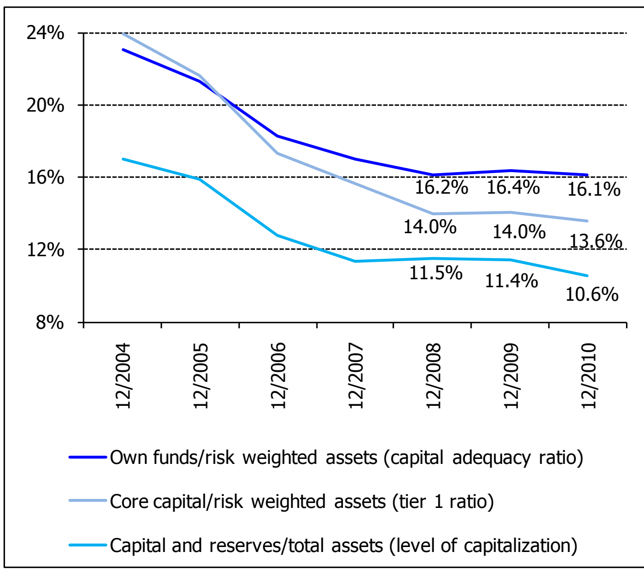
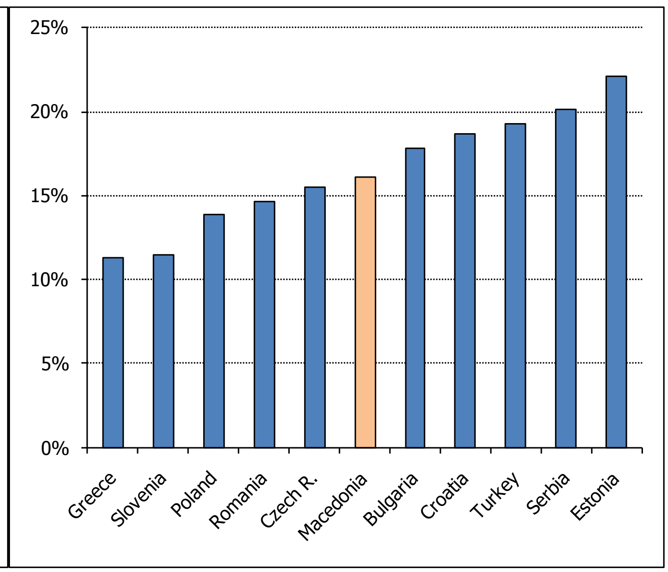


Figure 3.4.2
Comparison of the capital adequacy ratio, by countries



Source: NBRM, based on data submitted by the banks; web site of IMF, database for the financial stability indicators, by country; web sites of individual central banks.
Note: For most of the countries, the data on the capital adequacy ratio is given as of September 30, 2010, except for Greece (where the data is as of June 30, 2010), Macedonia and Estonia (where the data is as of December 31, 2010).

In 2010, the indicators for the solvency and capitalization of the banking system registered certain decrease. The capital adequacy fell by 0.3 percentage points (from 16.4% on December 31,2009 to 16.1% on December 31,2010)[75]. Annual decrease of 0.4 percentage points

[75] The legally prescribed minimum for the capital adequacy ratio equals 8%.

with Tier 1 indicator[76] was registered, as well, while the capitalization rate[77] fell by 0.8 percentage points. **The comparison with the banking systems of certain countries** shows that the banking system of the Republic of Macedonia, according to the level of the capital adequacy, is positioned at the middle of the list of the analyzed countries.

The decrease in the indicators for the solvency and capitalization of the banking system is concentrated with the groups of medium and small banks. The solvency with the group of large banks (all banks in this group), measured through the capital adequacy ratio and Tier 1 improved on annual basis. On the other hand, the capitalization rate with this group of banks fell slightly by 0.2 percentage points (the opposite movement of these indicators arises from the bigger caution of the large banks for taking additional risks in 2010, which conditioned more significant rise in those items of the accounting assets having 0% weight in the risk weighted assets, opposite to the slightly slower increase in the items, having 100% and 125% weight in the risk weighted assets. The solvency and the capitalization with the groups of medium and small bank, measured through all analyzed indicators, registered a decrease, which is mostly a result of the slightly larger activity with these groups of banks, especially in the second half of the year. Namely, the capital adequacy ratio registered an annual increase with 7 banks from the group of medium-size banks and with 4 small banks (on December 31,2010, the total market share of 11 banks, registering fall in the capital adequacy ratio, equaled 23.7%), while with one medium bank, this indicators remained unchanged.

Figure 3.4.3
Movement of the solvency and capitalization indicators, by groups of banks

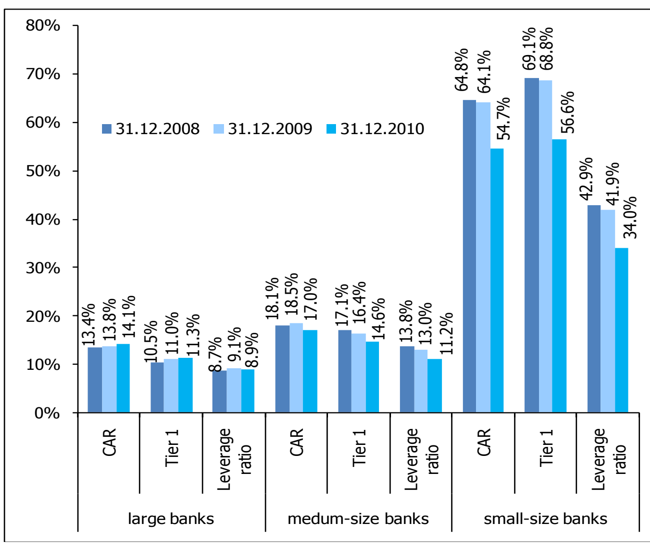
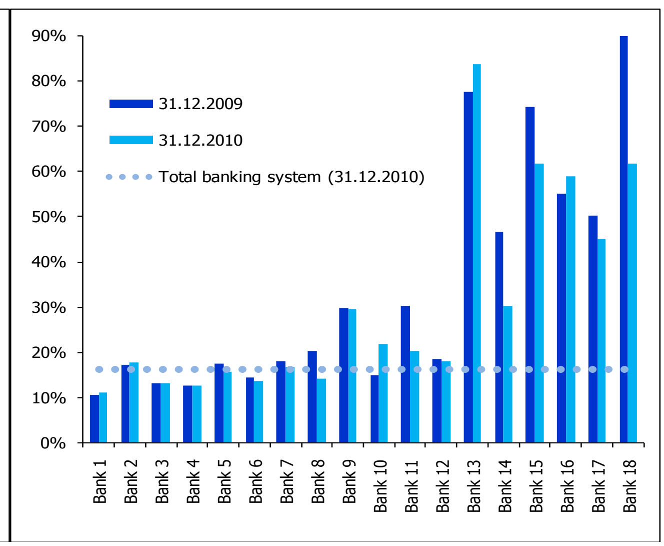


Figure 3.4.4
Capital adequacy ratio, by bank



Source: NBRM, based on data submitted by the banks.
Note: In the left figure, "CAR" denotes the capital adequacy ratio, "Tier 1" denotes ratio between the core capital (prior to deductable items) and the risk weighted assets, while "Leverage ratio" denotes the capitalization rate (ratio between the capital and reserves and the total assets). In the right figure, the order of the banks is given according to the market share volume of each bank in the total assets of the banking system (starting from the bank with the largest market share, and ending with the bank with the smallest market share.

[76] Tier 1 indicator is calculated as a ratio between the core capital (before deductable items) and the risk weighted assets.
[77] The capitalization rate is calculated as a ratio between the capital and the reserves of the banking system and the total assets.

Subordinated instruments and hybrid capital instruments in the banking system of the Republic of Macedonia

The subordinated instruments are financial liabilities containing a subordination clause, i.e. a clause according to which in case of bankruptcy or liquidation of the issuer of the instrument, the liabilities based on the subordinated instrument will be paid before the settlement of the liabilities towards the shareholders, but after the settlement of the liabilities to other fiduciaries. The subordinated financial liabilities can be in form of borrowings, or deposits, or issued securities. They are not covered with other type of collateral by the bank or a person/entity connected to the bank, neither they are used as collateral of the claims and potential liabilities of the bank; they don't have maturity date, or they do have maturity date longer than five years and one day from the date when the cash inflow based on this instrument occurred.

The hybrid capital instruments represent a hybrid form of capital, i.e. financial instruments having combined characteristics of both, liabilities and capital. This form of funding has similar characteristics as subordinated instruments. However, the payment of the liabilities based on these instruments is subordinated, i.e. it follows after the settlement of the liabilities towards the issuers of the subordinated instruments; they compulsory contain a clause for conversion in shares (if the capital adequacy ratio reduces below the prescribed level); they don't have predetermined maturity rate (payment of liabilities based on these instruments is possible at least five years and one day after the date of their issuance, and with prior approval from the National Bank) and they contain an option for deferred payment of the yield based on the instrument, in case when the bank is not profitable, or when the capital adequacy ratio reduces below minimal level prescribed by the NBRM increased by 4 percentage points.

Having in mind the aforementioned features of the subordinated instruments and hybrid capital instruments, the investment in these instruments means **larger risk for the investors. Hence the required yield rate (interest rate) is commonly higher in comparison with the debt instruments.** In case the clause for conversion in shares is activated (this clause is obligatory with the hybrid capital instruments, and it is possible with the subordinated instruments, as well), the fiduciaries obtain a voting right on the Meeting of shareholders, and accordingly, **the investor in this type of instruments can undertake specific corrective actions if the issuer of the instrument fails to attain the determined financial projections.** For the user (the issue bank of the instrument), the subordinated instruments and the hybrid capital instruments (having a treatment of a long-term liability in the balance sheet[78]) mean **providing additional liquidity,** which can be placed further in adequate high-yield projects. Additionally, the subordinated instruments and hybrid capital instruments represent **component of the banks' supplementary capital** (if they meet the adequate regulatory requirements), which is segment of the banks' own funds (the regulatory capital used in determining of the capital adequacy ratio). This enables **rise in the banks' own funds, and thus increase in the capital adequacy ratio, without increase in the shareholders' capital (without costs for new issue of shares).** This is also favorable for the bank's managers, because it does not cause lower profit per share, i.e. does not cause decrease in the rate of return on equity and reserves, while it provides strengthened bank's stability.

Despite the possibility for using the subordinated instruments and hybrid capital instruments for meeting the regulatory capital requirements, still, the common equity (including the reserve fund and retained gain) has primary meaning as and absorber of the occurred (unexpected) losses in the banks operating, which was proved also with the recent global financial crisis. Indubitably, the higher use of subordinated instruments and hybrid capital instruments enables strengthening of the regulatory capital position, simultaneously increasing the leverage (debiting) of the banks. The enormous indebtedness was one of the main problems of the large banks groups in the

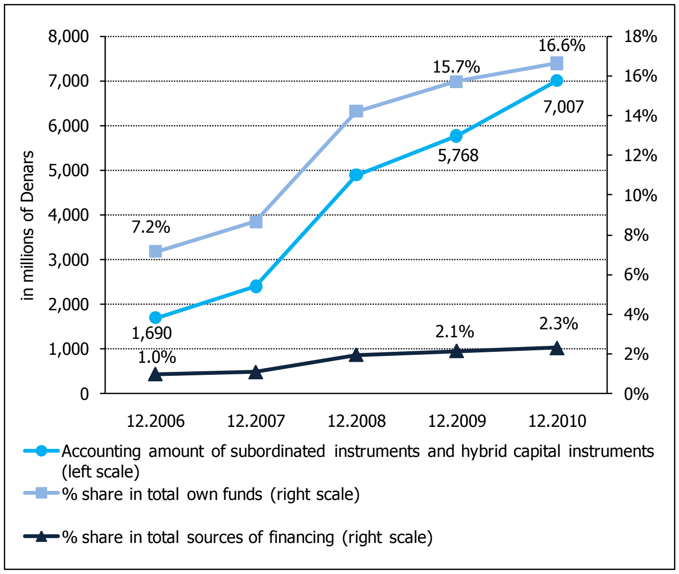
[78] Actually, the subordinated instruments are treated as long-term liability in the balance-sheet, while in case of initial recognition of the hybrid capital instrument, the bank must determine whether to classify the instrument or its component parts as financial liability, or as ownership instrument, in accordance with the contents of the agreement and the definitions of financial liability and ownership instrument.

developed economies during the global financial crisis. On the other hand, the practice in the developed economies showed that the replacement of the largest part of the subordinated instruments and hybrid capital instruments with equity usually is not performed, when the bank is solvent. This minimizes the significance of the so-called "banks capital instruments", as loss absorbers in case of banks' solvent operating[79]. Hence, the regulatory requirements for the banking systems are becoming more emphasized, not only for the quantity enlargement, but for the improvement of the capital positions' quality as well (based on common shares), for the account of the criteria enhancement which should be fulfilled by the subordinated instruments, hybrid capital instruments and other positions which are considered to have smaller loss absorption quality (preference shares, for example), in order to be part of the banks' own funds.

The subordinated instruments emerged as a source of financing in the banking system of the Republic of Macedonia at the end of 2002, with one bank. In the following year already, the subordinated instrument was converted in equity. The use of subordinated instruments as a source of banks funding was used again at the end of 2006, by three banks. In the following period, the amount of the subordinated instruments has been registering a continuing increase, while in the third quarter of 2008, for the first time, one bank emerges as a user of hybrid capital instrument (which is classified as a liability in the banks' balance sheet).

Within December 31.2006 - December 31, 2010, the subordinated instruments and hybrid capital instruments of the banks in the Republic of Macedonia registered an increase of Denar 5,316 million (or of 314.5%) and as of December 31,2010, these financial instruments amounted Denar 7,007 million. Despite the relatively high increase in the subordinated instruments and hybrid capital instruments, their share in the total sources of funding at the level of the banking system is on relatively low level and on December 31,2010 it equals 2.3%. The share of the subordinated instruments and hybrid capital instruments (those that meet the regulatory requirements[80]) in the total own funds of the banking system equals 16.6% on December 31,2010.

Figure 3.4.5
Movements of the subordinated and hybrid capital instruments



Source: NBRM, based on data submitted by the banks
Note:"% of share in total own funds" refers to the amount of those subordinated instruments that meet the regulatory requirements for their inclusion in the calculation of own funds.

On December 31,2010, seven banks have liabilities based on 18 subordinated instruments and one hybrid capital instrument. The total nominal amount of the instruments equals Denar 7,007 million. The

[79] See: Methodology, Rating Bank Subordinated Debt and Hybrid Capital Instruments with Contingent Risks, March 2010, DBRS, page 4-5.
[80] The Decision on the methodology for determining capital adequacy ("Official Gazette of RM" no. 159/2007, 32/2008, 31/2009, 96/2009, 157/2009) specifies certain characteristics, i.e. the conditions these financial instruments should fulfill in order to include them in the calculation of the supplementary capital. Besides, the amount of the subordinated instruments which are part of the supplementary capital I should not exceed 50% of the banks' core capital, while the amount of the subordinated instruments which are part of the supplementary capital II should not exceed 150% of the excess of the core capital (the banks haven't included subordinated instrument for the calculation of the supplementary capital II so far). Pursuant to this Decision, in the calculation of the bank's own assets in the last five years up to the maturity or payment deadline, the amount of subordinated instrument is discounted by 20% every year. During the last year before the maturity, or payment deadline, the subordinated instrument is not included in the calculation of the own assets.

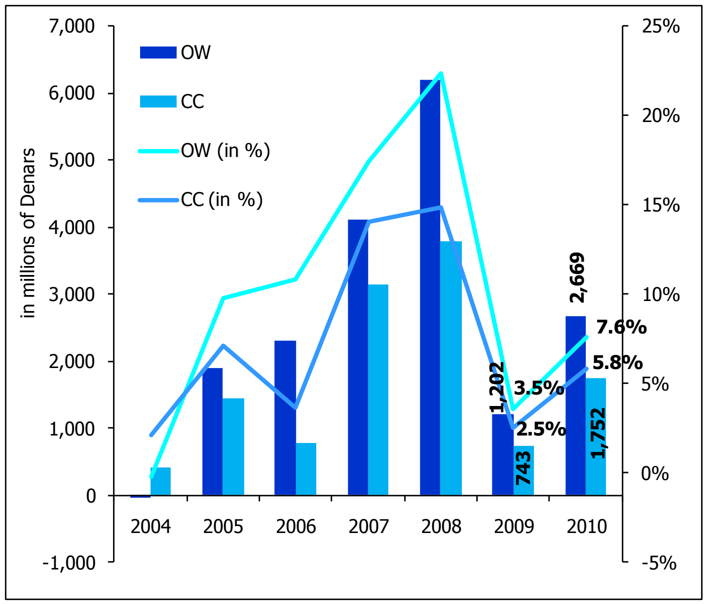
maturity deadline of the subordinated instruments (except hybrid capital instrument, having no predetermined maturity deadline) ranges from 6 to 10 years. The largest portion of the instruments is denominated in Euro (one subordinated instrument is denominated in Denars, and two in Swiss Francs). As of December 31,2010, the interest rate on the subordinated instruments and hybrid capital instruments ranges from 0.5% to 14%[81] annually. Larger portion of the subordinated instruments (twelve) are with fixed interest rate, while smaller portion are with variable interest rate, set according to the movements of the interest rates on the international financial markets (in conditions of upward movement of the interest rates on the international financial markets the banks' expenditures based on interest also increase).

Investors in the subordinated instruments and hybrid capital instruments are mainly foreign parent entities of the banks. Having in mind that the subordinated instruments and hybrid capital instruments are liability - banks' debt to nonresidents[82], these financial instruments are component of the total external debt of the Republic of Macedonia.

3.4.2 Movements of the own funds of the banking system

The retaining of part of the profit for 2009 in the banks' capital funds, the issuance of new subordinated instruments, the realization of new issues of common shares and presenting smaller loss for 2010 were the main sources of the increase in the own funds in 2010 (own funds incremented with all group of banks). On December 31, 2010, the own funds registered more than a twice larger annual growth rate compared to the realized growth rate at the end of 2009, thus reaching amount of Denar 37,784 million. In the second half of 2010 and at the beginning of 2011, part of the banks enlarged the capital based on new issues of shares[83], which is significant positive signal regarding new "defrosting" of this possibility of the banks for enlarging their own funds (after one and a half year period of absence

Figure 3.4.6
Annual change of own funds and core capital



Source: NBRM, based on data submitted by the banks.
Note: OF - own funds; CC - core capital.

[81] In the countries with developed financial markets, the interest rate on the subordinated instruments (or the spread between the interest rate of comparable non-risk bearing debt instruments - subordinated debt spread) is a significant market signal for the managers of the banks issuing these instruments, on how the market perceive the bank, its financial projections and the risk degree of its activities. Hence, the large banks in the developed economies, usually continuously issue series of subordinated instruments (mostly in form of debt securities), promoting themselves as institutions with strong market discipline, ready to present data to the public on how the market estimates and assesses their activities and projects. See: Markets for Bank Subordinated Debt and Equity in Basel Committee Member Countries, Basel Committee on Banking Supervision, Working Paper No. 12, August, 2003, page 3.
[82] Only one subordinated instrument has a domestic legal entity as an investor.
[83] In 2010, two banks of the group of medium-size banks have realized new issues of shares, in the total amount of Denar 676 million (capitalization performed by the banks' parent entities). Also, one bank from the group of small banks allocated the realized income in 2009 and accumulated gains in 2007 and 2008 in the banks' core capital, through issue of common shares in the total value of Denar 106 million. Additionally, at the beginning of 2011, one bank from the group of large banks has realized new issue of shares, in the amount of Denar 927.5 million.

of new issues of shares). The banks capitalization by new issues of shares means additional improvement of both the quality and the quantity of the own funds, which is especially important for supporting the future activities of the banking system. Besides, the increase in the own funds is due to the distribution of part of the gain for 2009 to the reserve fund and the retained gain of the banks[84], the issuance of new subordinated instruments[85], as well as smaller amount of current loss[86]. Such movements with the banks' own funds enabled maintenance of their **relatively quality structure.** Namely, the core capital continues to have the largest share in the total own funds of the banking system of about 85% (annex no. 26 - Own funds at the level of banking system and by groups of banks).

Figure 3.4.7
Use of own funds in the banking system (in absolute amount and in percentages)

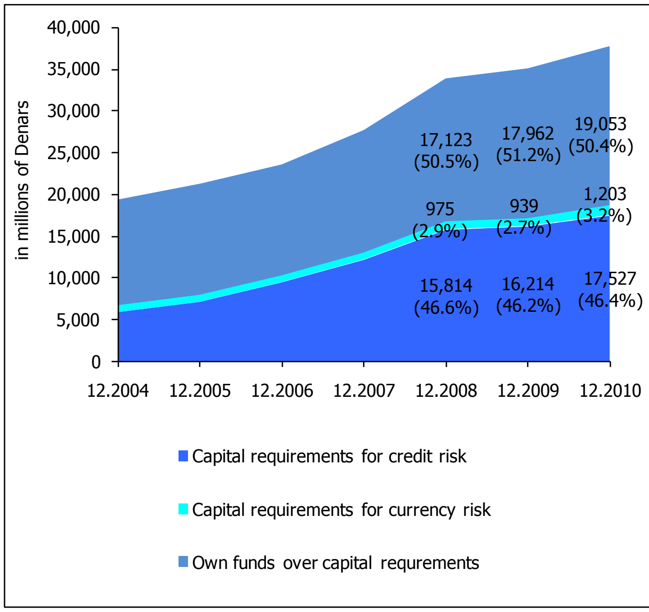
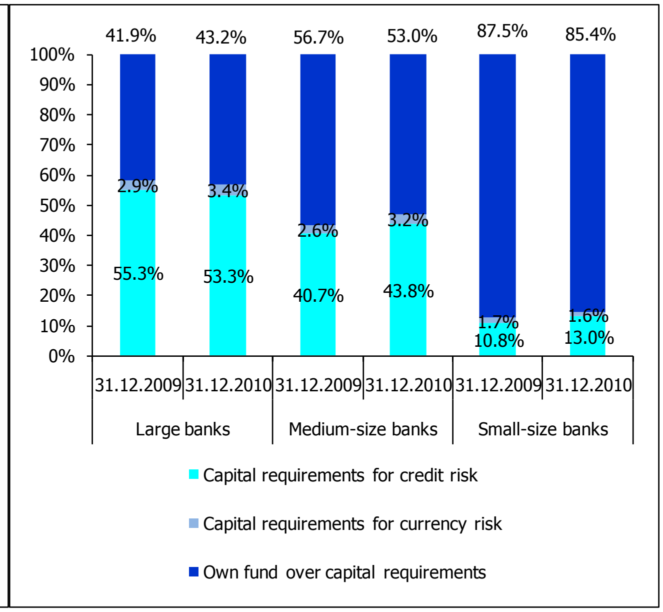


Figure 3.4.8
Use of own funds by groups of banks



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

The intensified credit activity of the banks in 2010 and the widening of the gap between assets and liabilities with currency component resulted in increase in the amount of own funds necessary for risk coverage. In 2010, the own funds for risk coverage went up by Denar 1,577 million (or by 9.2%), which is more than four times higher compared to the increase in 2009. The highest absolute increase (but the lowest relative change) of own funds necessary for risk coverage, of Denar 747 million (or 6.3%), was registered by the group of large

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[84] By ten banks (with three large banks, six medium banks and one small bank). Analyzed by individual groups of banks, only the group of large banks registered positive financial result in 2009. On annual basis, the retained gain and the reserve fund, as items of the core capital with this group of banks, augmented by Denar 1,420 million.

[85] Present with all groups of banks. On annual basis, the subordinated instruments that can be part of the supplementary capital I, mounted by Denar 954 million, or 18.5%. Denar 435 million of them account to one banks from the group of large banks, Denar 403 to two banks from the group of medium size banks, while the rest Denar 116 million account to one bank from the group of small banks.

[86] With four banks (by two banks from the group of medium and small banks). Analyzed by individual groups of banks, the group of small banks registered the largest annual drop in the current loss, as an item of the core capital. At the end of 2010, the current loss, as the core capital item, is lower by Denar 197 million (or by 71.1%) in comparison with the end of 2009.

banks, while the group of small banks registered the highest growth of 22.6% (or Denar 100 million). The relatively high increase in the own funds necessary for risks coverage, of Denar 730 million (or 15.3%) was registered with the group of medium-size banks. Opposite to such movements, the own funds over the minimal level for risk coverage registered a little bit slower growth (of Denar 1,092 million, or 6.1%), which caused decrease in their share in the total own funds (from 51.2% on December 31,2009 to 50.4% on December 31,2010). The largest decrease in the share of the own funds over the minimal level for covering risks in the total own funds of 3.7 percentage points, was registered by the group of medium-size banks, while the group of small banks continues to give the largest "free" capital for additional risks absorption. Only the group of large banks registered higher share of own funds over the level for risk coverage minimum in the total own funds in 2010 (from 41.9% to 43.2%), which points to larger caution of the large banks for taking additional risks.

Table no. 3.4.1
Own fund for credit risk coverage (in millions of Denars)

Description	31.12.2009	31.12.2010	Change
Goverment, government funds and state agencies	0	0	0
Financial institutions	814	1,007	193
Corporates	9,034	9,496	462
Households	5,231	5,522	291
- housing loans	467	544	77
Other	1,136	1,502	366
Total capital requirements for credit risk	**16,214**	**17,527**	**1,313**

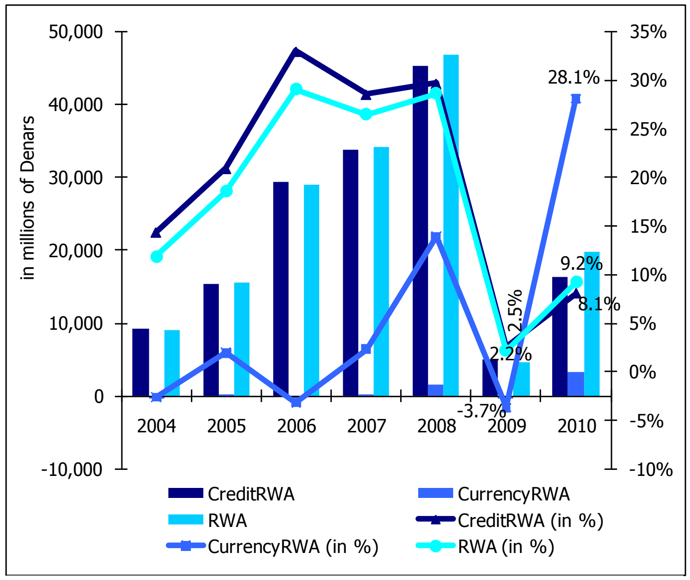
Source: Internal NBRM calculations, based on data submitted by the banks.

The highest annual increase in the structure of own funds necessary for credit risk coverage was registered by the capital necessary for covering the enterprises' credit risk. Namely, in 2010, the own funds necessary for credit risk coverage arising from the corporate crediting increased by Denar 462 million. Simultaneously, the increase in the exposure towards households, of Denar 5,454 million (or 7.0%) conditioned an increase in the capital requirement by Denar 291 million (or 5.6%) for covering credit risk from this bank activity. **On December 31,2010, the largest portion (54.2%) of the own funds necessary for credit risk coverage is used for covering of this risk from the enterprises' crediting, while for credit risk coverage from the lending to households, 31.5% are required.**

3.4.3 Movements of the risk weighted assets

At the end of 2010, the risk weighted assets registered annual growth rate higher by 4 times than the realized growth rate at the end of 2009, thus reaching the level of Denar 234.127 million (Annex no. 27 - Capital adequacy ratio, by groups of banks). **Also the annual growth rate of the risk weighted assets is by 1.6 percentage points higher compared to the realized growth rate of the banks' own funds for 2010.** The credit risk weighted assets increased by Denar 16,413 million (or 8.1%), while the currency risk weighted assets went up by Denar 3,303 million (or 28.1%)[87]. As a comparison, at the end of 2009, the annual rate of change of the credit risk weighted assets equaled 2.5%, while the currency risk weighted assets minus 3.7%. **The credit risk weighted assets still dominate in the risk weighted assets structure, with a share of about 94%.**

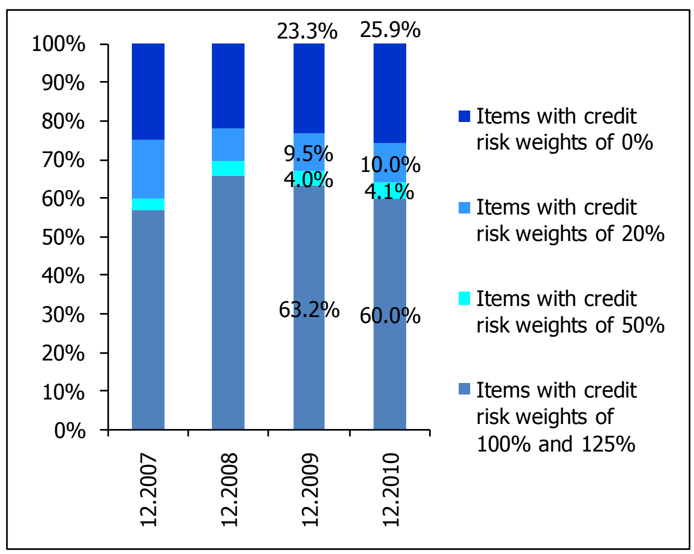
Figure 3.4.9
Annual change of the risk weighted assets



Source: NBRM, based on data submitted by the banks.
Note: CreditRWA- credit risk weighted assets; CurrencyRWA- currency risk weighted assets; RWA - risk weighted assets

In 2010, the largest annual increase of Denar 17,868 million (or of 26.2%) accounted to the bank activities being weighted with 0% in the calculation of the credit risk weighted assets (increase in the placements in CB bills and Treasury bills and rise in the banks' funds), which points to further caution of the banks for taking risk in their operating. This was especially characteristic for the group of large banks, which participated with approximately 70% in the total increase in the 0% weighted items. Oppositely, the items weighted with 100% and 125% in the calculation of the credit risk weighted assets (those encompassing the banks' credit portfolio) increased by Denar 14,319 million (or by 7.7%), which was largely contributed, by about 59%, by the banks from the group of medium and small banks. Significant annual increase, of Denar 5,654 million (or of 20.3%) was

Figure 3.4.10
Structure of the total activities exposed to credit risk



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

[87] It is explained in details in the parts pertaining to the credit and currency risk.

registered also by the items weighted with 20%, which is mainly due to the higher investments in banks.

Stress test simulations for the resistance of the banking system and individual banks to hypothetical shocks, as of December 31,2010

On December 31, 2010, the implemented stress tests simulations* for the resistance of the banking system and of individual banks in the Republic of Macedonia to possible shocks showed that the banking system is still relatively resistant to the influence of these shocks. However, during the implementation of certain simulations, decrease in the capital adequacy with individual banks below 8% is registered.

Table no. 3.4.2
Results of the stress test simulations for the resistance of the banking system and individual banks to hypothetical shocks, as of December 31,2010

No. of simulation	CAR at the level of banking system, before simulation	Number of banks with CAR before simulation below the CAR of the overall banking system before simulation	CAR at the level of banking system, after simulation	Bank with lowest CAR, after simulation	Number of banks with CAR after simulation below the CAR of the overall banking system after simulation (number of banks with CAR after simulation below 8%)
1	16.1%	6	15.5%	10.4%	6 (0)
2	16.1%	6	14.2%	9.0%	5 (0)
3	16.1%	6	12.9%	7.6%	7 (1)
4	16.1%	6	14.2%	9.0%	5 (0)
5	16.1%	6	12.8%	7.6%	7 (1)
6	16.1%	6	12.8%	7.6%	6 (1)
7	16.1%	6	16.2%	11.1%	6 (0)
8	16.1%	6	13.4%	7.4%	5 (1)

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

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

3.5. Interest rate risk in the banking book

The exposure of the banks in the Republic of Macedonia to the interest rate risk in the banking book is almost insignificant in comparison with the exposure to other risks they face with during their operations. The relatively large presence of the adjustable interest rates enables the banks to avoid future unfavorable changes of the interest rates, and thus avoiding the interest rate risk. Such a practice of the banks to transmit the interest rate risk on the users of bank products emphasizes the significance of the indirect credit risk in the total risk profile of the banks.

Results of the analysis of the policies and the procedures of the banks for managing the interest rate risk in the banking book

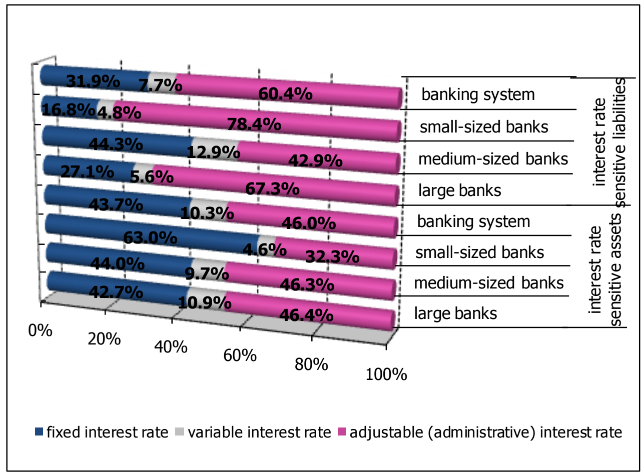
At the end of 2010, analysis of the policies and the procedures of individual banks for interest rate risk management was made. This analysis was focused on the approaches of individual banks in taking and managing interest rate risk. **The analysis showed that the banks in the Republic of Macedonia should focus on strengthening of their policies and procedures for interest rate risk management.** Namely, the contents of the interest rate policy management with most of the banks comes down to transcription of the provisions of the **Decision on managing the interest rate in the banking book and the appropriate Instruction.** There are few elements that can describe in details the "risk appetite" and "risk tolerance". Hence, it can be concluded that the **banks give lesser importance to the interest rate risk in the banking book**. **This corresponds to the possibility for unilateral change in the amount of the interest rate on the credit and deposit products, enabled through incorporated clauses for adjustable interest rates.**

An integral part of the analysis of the interest rate risk was the analysis of the banks' procedures for determining the probability and frequency of the change in the interest rates on the positions with adjustable interest rates[88]. Namely, the determining of the probability and the frequency of the interest rate variability is a basis for distribution on the positions with adjustable interest rate and the positions failing to have maturity date, or where it can not be determined with certainty, i.e. the time left until the next change of the interest rate (for ex. current accounts, sight deposits, positions with a possibility for early payment, or withdrawal etc.), within adequate period. Hence, the manner and the method the banks selected for determining of the probability and the frequency of change in the interest rates with these positions, have key influence on the change of the economic value of the banking book. **The results of the analysis show that the assumptions for determining the probability and the frequency of the change in the interest rates are quite simple, usually the description of some of the parameters or the manner they are obtained at is incomplete, or too short, there is absence of use of more complex statistical methods for determining of the behavior of certain positions, and it fails to provide comprehensive analysis on the dependence of the currency of the positions with its interest rate.** In other words, it is a general conclusion that the banks mainly "adjust" the amount of the interest rates depending on the banks' net interest margin, the deviation of the factual from the planned financial result, the need of liquid assets and the competitive pressure by other banks in the moment of adjustment.

[88] Pursuant to item 23 of the Decision on managing the interest rate risk in the banking book ("Official Gazette of the Republic of Macedonia" no. 163/2008 and 144/2009), the banks were obliged to submit notification to the National Bank on their activities for determining the probability and frequency of the change of the interest rates on the positions with variable interest rates until November 30, 2009.

Opposite to the common world practice for implementation of fixed and variable interest rates, in the Macedonian banking the adjustable interest rate dominate. These interest rates, at the level of the banking system, have the largest share in the structure of the interest rate sensitive positions also on the side of the assets (46.0%) and on the side of liabilities (60.4%). As a result of such established practice, the banks have relatively rudiment mechanism for protection from market movements and changes in the prices of individual financial instruments. From one hand, this mechanism serves the banks to measure their profitability and liquidity and on the other hand, it unilaterally and biased change the depositors yields, i.e. costs of funding of the credit users. On December 31,2010, in the structure of the interest sensitive bank assets, except the assets with adjustable interest rates, considerable share of 43.7% account for the interest sensitive assets with fixed interest rates, while the assets with variable interest rate participated only with 10.3%. In the structure of the interest rate sensitive liabilities, the liabilities with fixed interest rate participate with 31.9%, while those with variable interest rate with 7.7%.

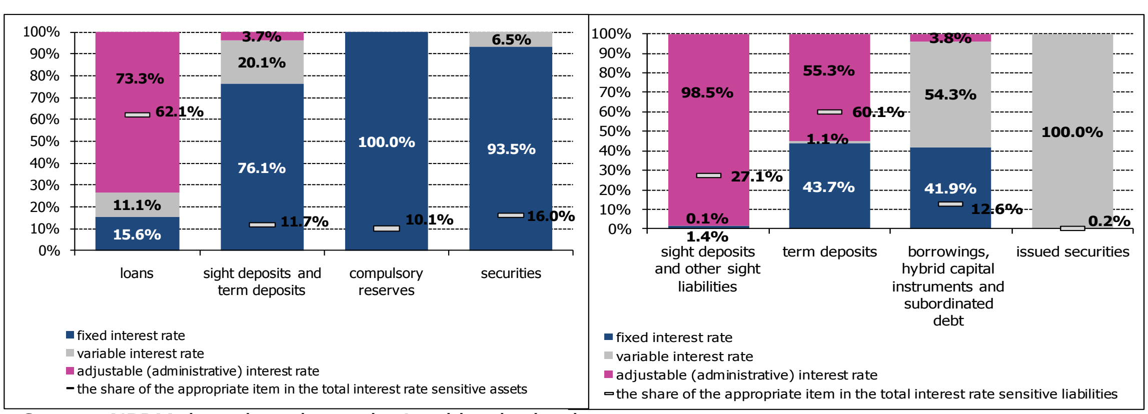
Figure 3.5.1
Structure of the interest rate sensitive assets and liabilities by the type of interest rates, on December 31,2010



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

Analyzed by the items comprising the interest rate sensitive assets, the dominant role in the adjustable interest rates is most apparent with the credits. The credits with adjustable interest rate in the total assets participate with 73.3%, while 99.0% in the total assets with adjustable interest rates[89]. In other financial instruments (sight assets, time deposits, reserve requirement, Government securities, CB bills), which create relatively smaller part of the interest rate sensitive assets (37.9%), the most evident is the share of the positions with fixed interest rates.

Figure 3.5.2
Structure of the interest rate sensitive assets (left) and liabilities (right) by the items they consist of and by the type of interest rates, on December 31,2010



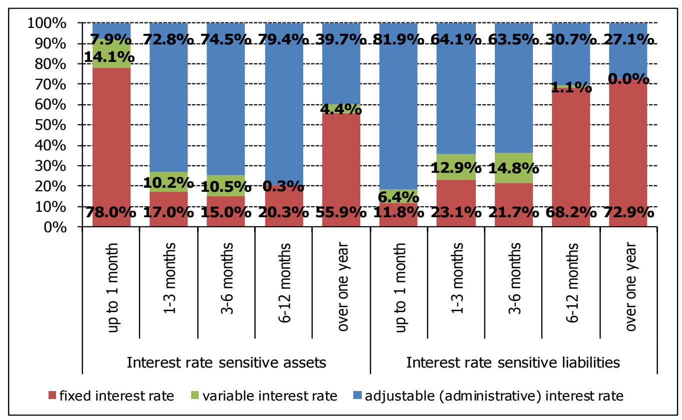
Source: NBRM, based on data submitted by the banks.

[89] The share of the credits as financial instrument in the total interest sensitive assets equals 62.1%.

On the side of the interest rate sensitive liabilities, the high share of the positions with adjustable interest rates is generally a result of the sight deposits and time deposits with adjustable interest rate. On December 31,2010, the sight deposits and time deposits with adjustable interest rate create 99.2% of the total liabilities of the banks with adjustable interest rate, while their share as financial instrument in the total interest rate sensitive liabilities equals 87.2%. Regarding the time deposits, except the positions with adjustable interest rate, considerable share (43.7%) accounts also for the positions with fixed interest rate, which create 82.3% of the total liabilities with fixed interest rate. The variable interest rates are most present with the liabilities based on credits, hybrid capital instruments and subordinated debt (54.3%), creating 88.3% of the total interest sensitive liabilities with variable interest rates.

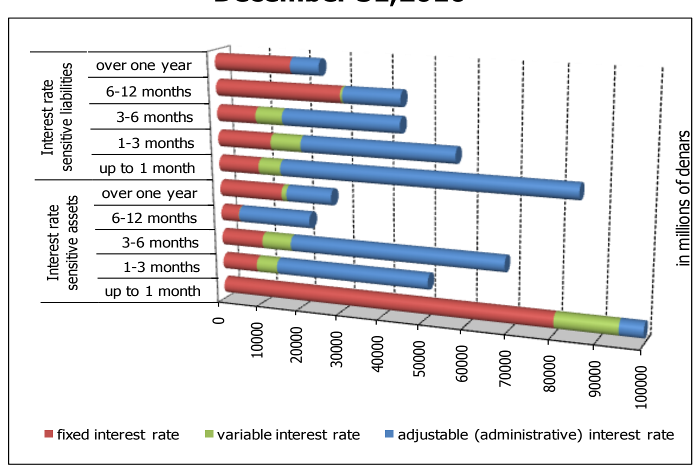
At the end of 2010, in most of the maturity segments, the positions with adjustable interest rates create largest portion of the interest rate sensitive assets and interest rate sensitive liabilities. The share of the positions with adjustable interest rate with the interest rate sensitive liabilities in the maturity segment of one month is most apparent (81.9%), primarily because the largest portion of the sight deposits (which are with adjustable interest rate) are distributed exactly in this maturity segment. Oppositely, with the interest rate sensitive assets, the largest share in the maturity segment of up to one month (reserve requirement and CB bills) and in the maturity segment encompassing the positions with maturity over one year, accounts for the positions with fixed interest rates. Regarding the interest rate sensitive liabilities, the fixed interest rates are dominant in the maturity blocks over six months, i.e. one year. The volume of the present positions with variable interest rates is small in all maturity segments and with both the interest rate sensitive assets and interest rate sensitive liabilities.

Figure 3.5.3
Maturity structure of the interest rate sensitive assets and liabilities by the type of interest rates, on December 31,2010



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

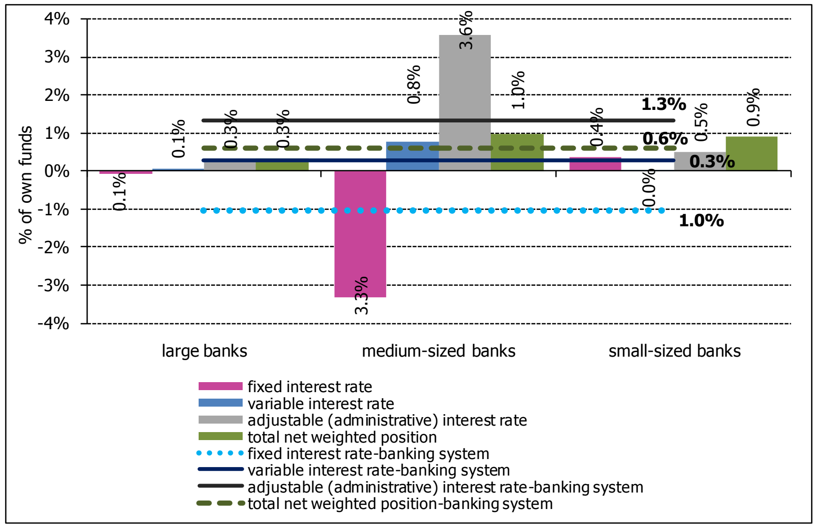
Figure 3.5.4
Absolute amount of the interest rate sensitive assets and liabilities according to the maturity structure and the type of interest rates, on December 31,2010



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

On December 31, 2010, the correlation between the total weighted value of the banking book[90] and the amount of the own funds of only 0.6%, points to extremely low presence of the interest rate risk of the banks in the Republic of Macedonia. None of the banks exceeds the set limit of 20%, and by banks it ranges in interval from 0.1% to 13.4%[91]. Such a low correlation between the total weighted value of the banking book and own funds, means that the changes in the interest rates would not have larger influence on the economic value of the banking book. However, the established practices of the banks to transfer the interest rate risk on the users of bank products[92], emphasizes the significance and the potential negative effects that the indirect credit risk may have on the banks' risk profile.

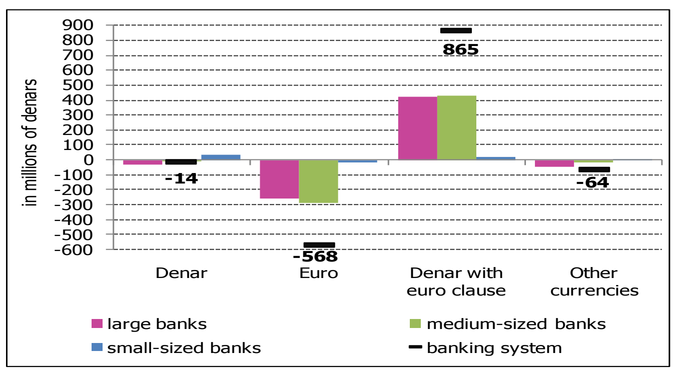
Figure 3.5.5
Ratio of the total weighted value of the banking book and own funds by type of interest rates, for the banking system and by groups of banks, on December 31,2010



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

From the aspect of the currency structure, significant differences in the share of the individual positions in the total weighted value of the banking book can be noticed. On December 31,2010, dominant role in the exposure to interest rate risk accounts have the items in Euro and in Denars with FX clause in Euros. At the level of the banking system, the positions in Denars with FX clause in Euros create positive weighted value, while the positions in Euros create negative weighted value of the banking book, which is generally a result of the structural

Figure 3.5.6
Currency structure of the total weighted value of the banking book, on December 31,2010



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

[90] The total weighted value of the banking book at the level of the banking system, which is obtained by aggregating of weighted values of the banking book of individual banks, is presented in absolute amount and it shows the change of the economic value of this portfolio, as a result of the assessment of the change in the interest rate by using standard interest shock (parallel positive or negative change of the interest rates by 200 base points). On December 31,2010, the total weighted value of the banking book at the level of the banking system equals Denar 220 million. The weighted value of the banking group of individual bank is a sum of the weighted net long or short positions by individual significant currencies (each currency with a share in the total on-balance sheet and off-balance sheet liabilities of at least 5%), or cumulatively for all other currencies.

[91] Group of large banks: 0.5% - 1.8%; group of medium banks: 0.1% - 13.4%; group of small banks: 1.3% - 5.5%.

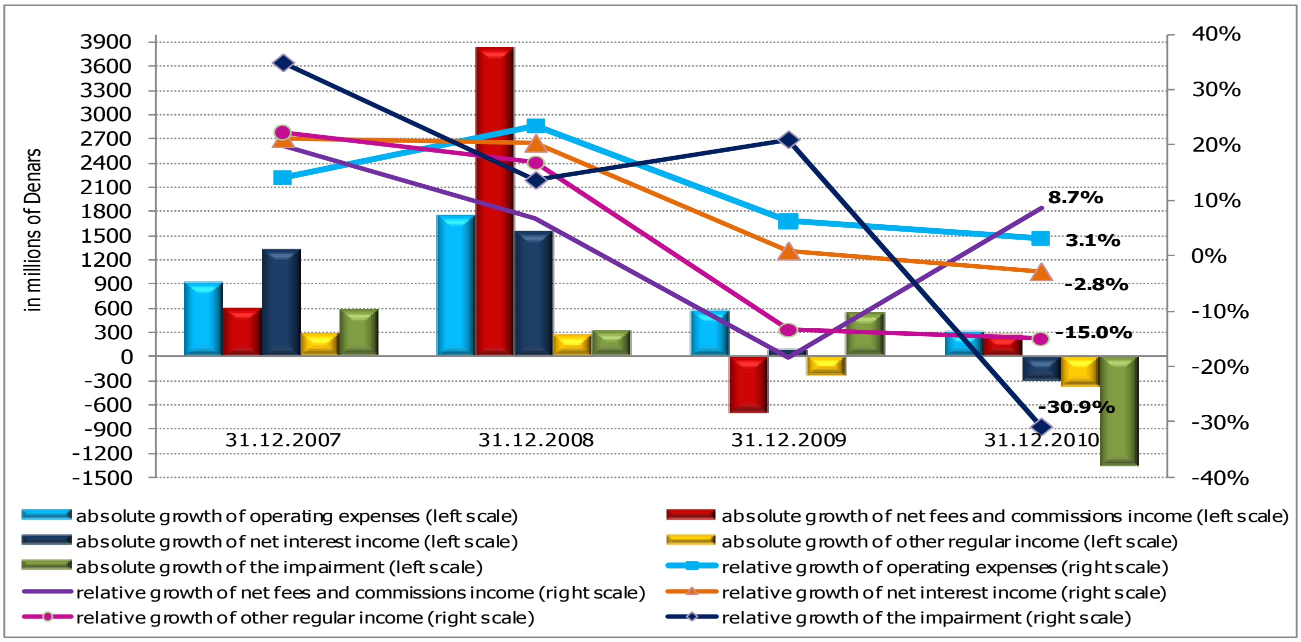
[92] By using clauses for the so-called adjustable interest rates in the agreements with the clients and the users of credit and deposit products, the banks have possibility for unilateral change in the amount of the interest rate any time and in any direction and/or volume.

characteristics of the assets and the sources of the banks funding. The presence of the financial instruments in Denars with FX clause in the banks' assets, in conditions when both the Denar and the Euro deposits are the main source of financing of the banks' activities, is especially present with the groups of large and medium size banks.

3.6. Profitability

In 2010, the banking system of the Republic of Macedonia registered larger profit compared to the previous year. The profit realized in 2010 in the amount of Denar 2.307 million rose by Denar 631 million, i.e. by 37.7% compared to 2009. At the same time, the number of banks which showed loss almost halved, from seven banks at the end of 2009, to four banks at the end of 2010, whereas the participation of the assets of these banks in the total assets of the banking system registered drop by 4.2 percentage points and on December 31, 2010 it amounted to 5.6%.

Figure 3.6.1
Annual dynamics of the key profitability components



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

The increase in the profitability of the banking system was not characteristic for the whole 2010, but it resulted from events which occurred in the last quarter of the year. Namely, in the first three quarters of the year, the banking system realized lower profit amounts relative to the same periods of 2009. In the last quarter of the year, as a result of the performed considerable overtaking of assets based on uncollected claims (generally with two banks) the profitability of the whole banking system considerably improved. These overtakings resulted in release of considerable amounts of impairment[93].

[93] The impairment includes: impairment of the financial assets on net-basis, losses from damage of non-financial assets and unrecognized (additionally determined) impairment and special reserve.

Figure 3.6.2
Quarterly dynamics of the impairment and the profit of the banking system

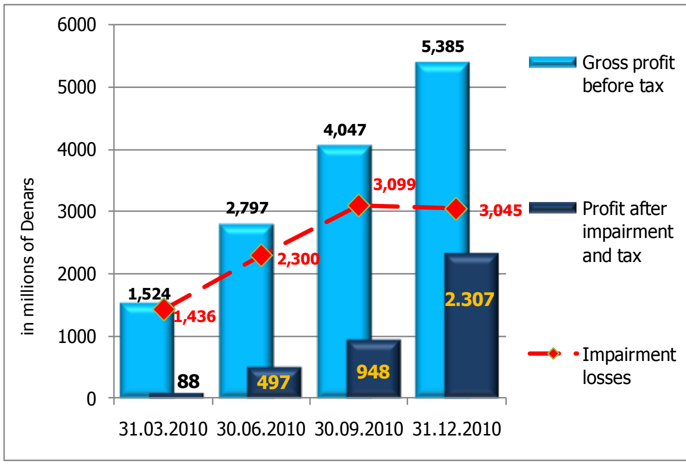
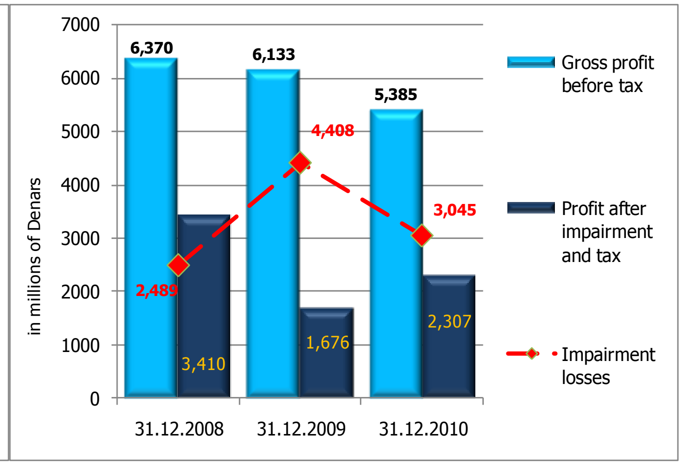


Figure 3.6.3
Annual dynamics of the impairment and the profit of the banking system



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

The considerable annual drop in the impairment (by 30.9%) solely determined the higher profitability level as well, relative to the previous year. The other banks' profitability components contributed to its drop relative to 2009. The total income of banks (total regular income[94] and extraordinary income) registered annual drop by 2.7%. The fall in the net interest income and the more considerable annual drop in the other regular income[95] were just partially neutralized by growth in the net income from fees and commissions, which resulted in smaller drop in the total regular income of banks (by 2.5%). The fall in the net interest income (by Denar 298 million or by 2.8%) occurred in conditions of relatively faster deposit activity relative to the credit activity, as well as relatively more moderate downward trend in the deposit than in the lending interest rates of banks. The banks' operating costs[96], although with slower dynamics relative to 2009, continued to grow. The employee costs dominated in the structure of the operating costs (39.1%), and they determined 23.6% of their annual growth, whereas most of the rise in the operating costs (53.8%) was determined by the general and administrative costs[97].

The larger gain of the banking sector mostly (78.2%) resulted from the increase in the gain of the group of large banks. The profit of the group of large banks realized in 2010 was by Denar 493 million or by 22.5% larger relative to the profit realized in the previous year. The lower impairment, which resulted from the performed overtaking of assets based on uncollected

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[94] The total regular income includes: net interest income, net fees and commissions income and other regular income. The other regular income includes: net trading income, net income from financial instruments recorded by objective value, net income from foreign exchange rate differentials, income based on dividends and capital investments, profit from sale of financial assets available for sale, capital profit realized from sale of assets, release of provisions for off-balance sheet items, release of other provisioning, income on other basis, income on the basis on collected, previously written off claims and losses from sale of financial assets available for sale.
[95] The fall in the other regular income on annual basis by Denar 378 million or by 15% was mostly due to the lower interest income from financial assets kept for trading, as a result to the downward trend of the interest rates and the lower amount of assets kept for trading relative to 2009. This fall was principally with the group of large banks.
[96] The operating costs include: employees expenses, depreciation, general and administrative costs, deposit insurance premiums and other expenditures, excluding the extraordinary expenditures.
[97] The largest share of the growth with the general and administrative costs was due to the larger amount of service costs with several banks, as a result to the investments in various developing projects (for exp. development of platforms for electronic banking etc).

claims in the last quarter of 2010, was the main generator of profit growth in this group of banks. The expenses based on impairment with this group of banks reduced by Denar 830 million (or by 28.7%). The net income from fees and commissions with the group of large banks registered annual rise by Denar 212 million (or by 9.7%), which was not sufficient to neutralize the fall in the net interest income of Denar 42 million (or by 0.6%) and the other regular income by Denar 341 million (or by 19.2%). As a result to such movements, the total income of the group of large banks registered negative annual change of 1.6%.

Figure 3.6.4
Quarterly dynamics of the impairment and the profit of the individual groups of banks

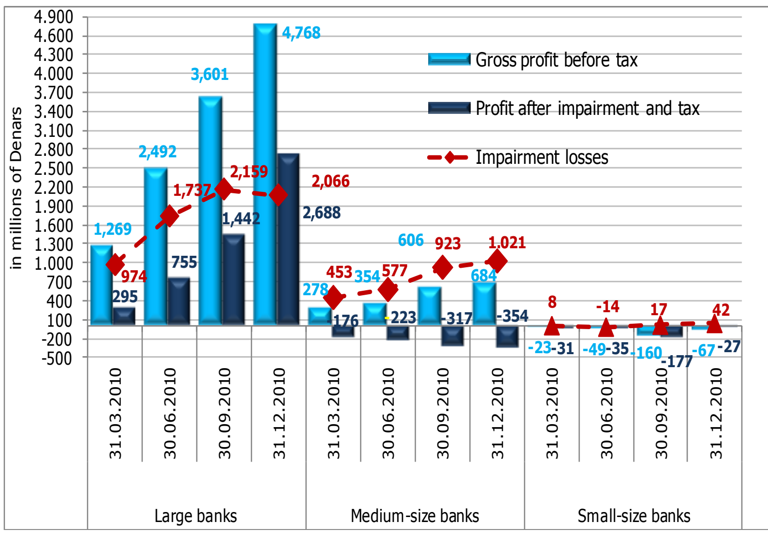
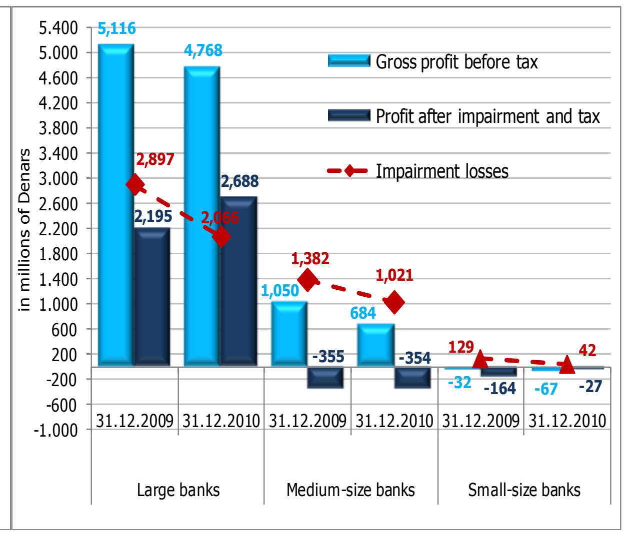


Figure 3.6.5
Annual dynamics of the impairment and the profit of the individual groups of banks



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

Same as in the previous year, the groups of medium and small banks are operating with loss. In conditions of drop in the impairment, opposite to the rise in the operating costs and the fall in the net interest income, the loss from operating of the group of medium banks realized in 2010 remained at almost the same level relative to 2009[98]. The transfer of the "Macedonian Bank for Development Promotion" AD Skopje from the group of small banks to the group of medium banks contributed to such condition as well (it operates with profit). If the transfer of this bank to the group of medium banks did not happen, the loss of the group of medium size banks would be considerably higher (by 36.4%) relative to the loss realized in 2009. The loss of the group of small banks registered considerable annual fall by 83.3%, which was solely determined by the considerably lower amount of the performed impairment in 2010[99]

[98] The operating costs rose by Denar 263 million, whereas the impairment and the net interest income reduced by Denar 361 million and Denar 142 million, respectively.
[99] The fall in the impairment was solely due to the lower amount of this item with two banks of the group of small banks. Such situation with one of these banks was due to the release of considerable amount of impairment, as a result to the performed overtaking of uncollected claims. With the other bank, the lower amount of impairment is a combined result of performed overtaking of uncollected claims and allocation of lower impairment amounts in 2010, in conditions of already relatively high "coverage" of the credit portfolio by impairment allocated in 2009.

3.6.1 Income and expenditures structure of the banking system

On December 31, 2010 the total income of banks amounted to Denar 15.967 million and it registered annual drop by Denar 444 million, or by 2.7%. This fall was determined by the drop in the net interest income and the more considerable annual fall of other regular income, opposite to the moderate rise in the net interest income from provisions. Most of the fall in the other regular income (90.2%) and the growth in the net income from fees and commissions (78.4%) were due to the dynamics of these two income categories with the group of large banks. Opposite to this, the fall in the net interest income was determined by the group of medium banks (47.6%) and the group of small banks (38.2%). Such developments did not cause any considerable movements **in the structure of the total income of banks, where the regular income still dominates, mainly the net interest income.** The net interest income remained the dominant and the most significant component in the creation of the total income of banks. The structure participation of the net income from fees and commissions registered increase for the account of the drop in the participation of the other regular income.

Figure 3.6.6
Structure of the total income of banks

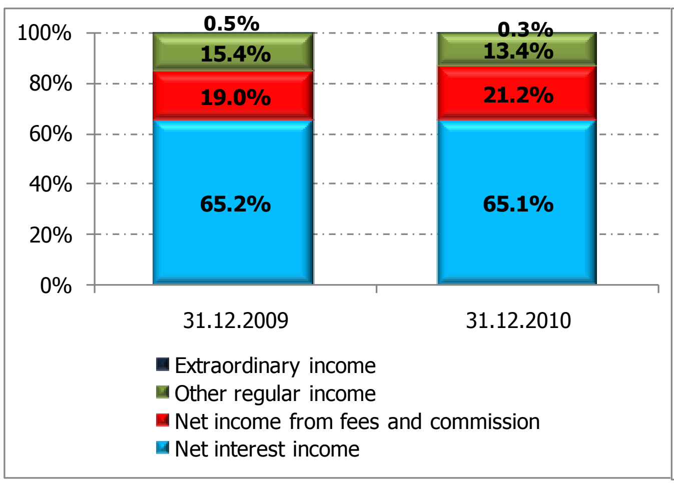
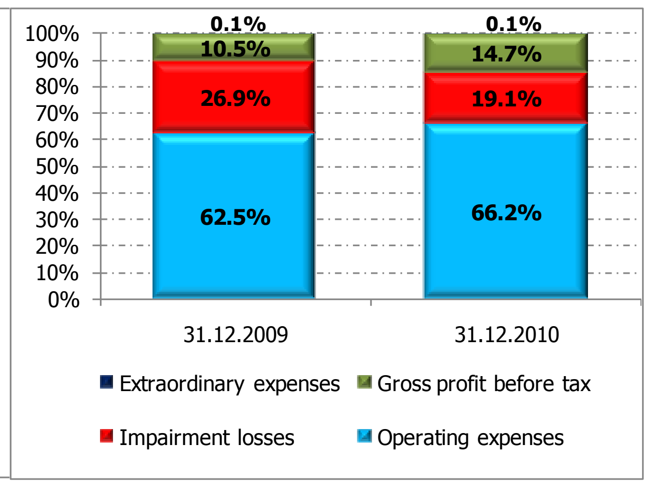


Figure 3.6.7
Utilization of the total income of banks

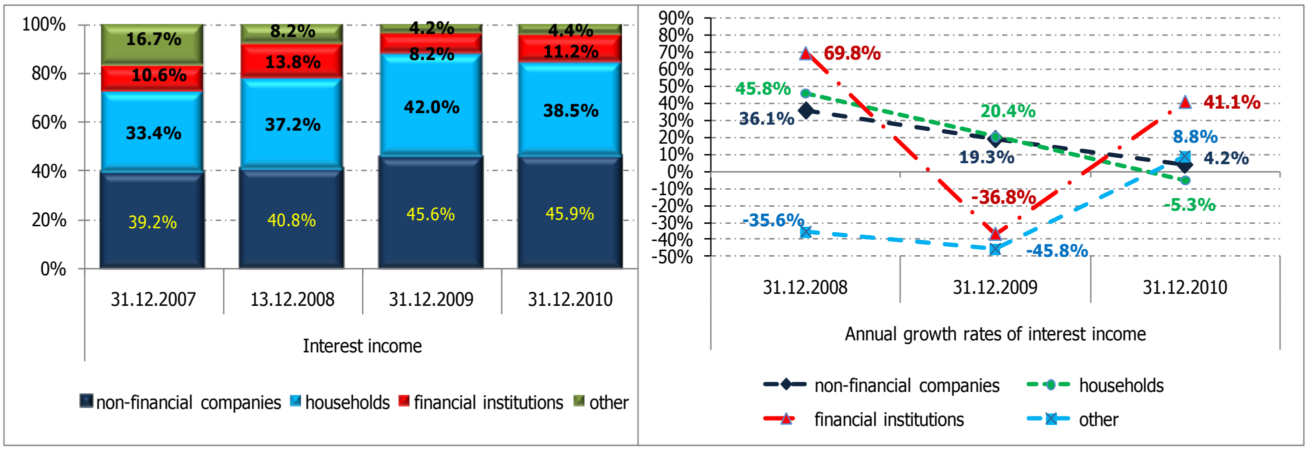


Source: NBRM, based on the data submitted by banks.

In 2010, most of the total income of banks was still used for covering the operating costs. As a result to the larger operating costs on the one side and the lower total income of banks on the other side, the part of the total income which is used for covering the operating costs rose by 3.7 percentage points. The group of medium banks contributed mostly to the rise in the operating costs (of Denar 263 million, or 84.0%) at the level of the banking system. The drop in the impairment in 2010 contributed to fall in its participation in the „spending" of the total income of banks as well.

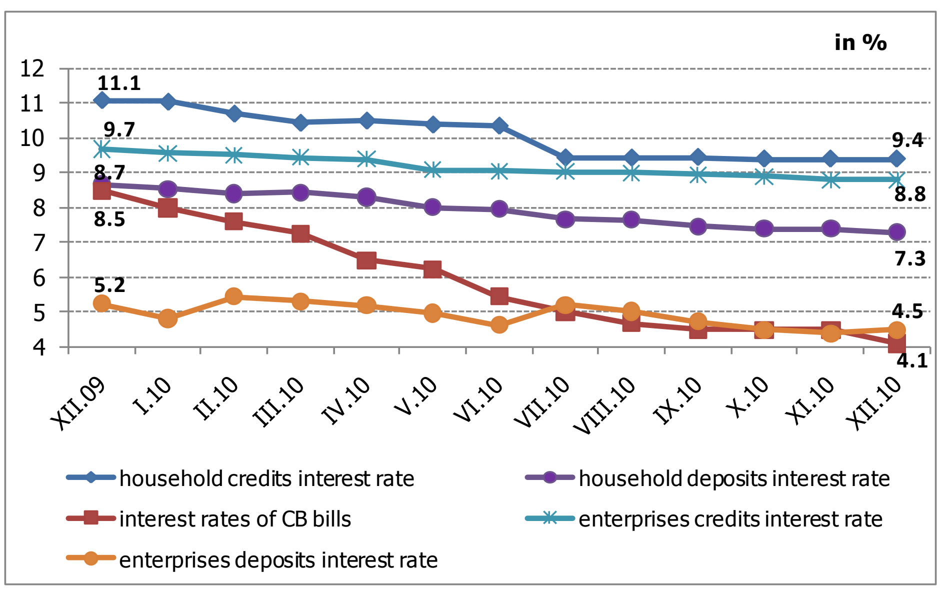
The income from the non-financial companies and the income from the households still participated mostly to the creation of the interest income. Relative to the previous year, the structure participation of the income from households reduced by 3.5 percentage points, at the expense of the growth in the participation of the income from financial companies. The participation of the income from non-financial companies did not register more considerable changes relative to 2009.

Figure 3.6.8
Sector structure and growth rates of the interest income by sectors



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

Figure 3.6.9
Development of the CB bills interest rates, of credits and deposits of non-financial entities

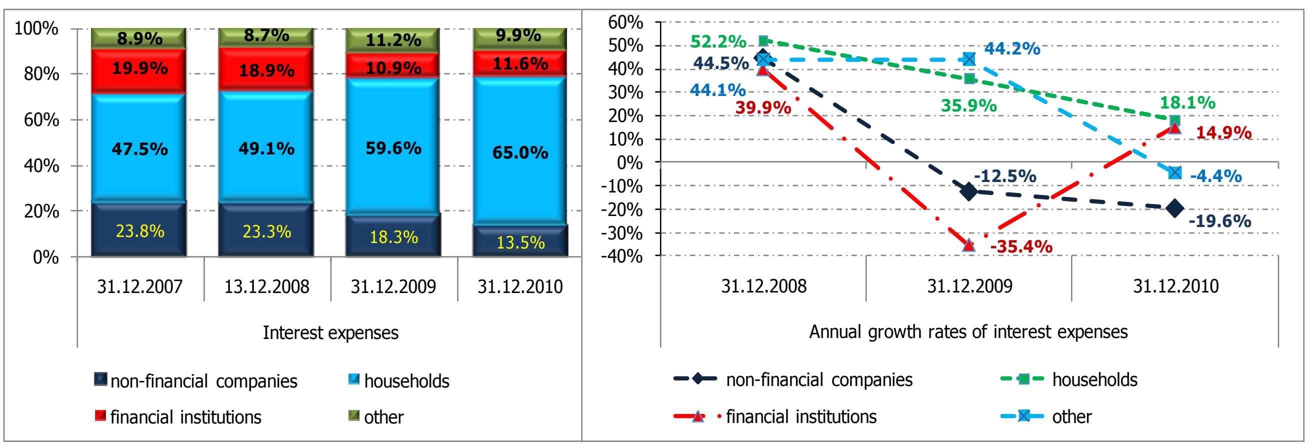


Source: NBRM, based on the data submitted by banks.

In 2010, with respect to certain sectors, only the interest income from the households registered a drop. Relative to 2009, the interest income from this sector reduced by Denar 403 million (or by 5.3%). This drop occurred in conditions of constant and larger downward trend in the interest rates of credits to households and relatively slower credit activity to the households compared to the enterprises. The fall in the interest income from the households was partially affected by the changes in the Law on Obligatory Relations (which became effective in February 2010), which limited the upper limit of the lending contractual and penalty interest rate[100]. **The interest income from the non-financial companies, although with slower dynamics relative to the previous year, continued to grow**, and in 2010 it registered annual rise of Denar 351.7 million or by 4.2%. The lower rise relative to the previous year emerged in conditions of downward trend in the interest rates of credits to enterprises in 2010. **The considerable annual increase in the interest income from financial companies, which in 2010 amounted to Denar 611 million (or by 41.1%), was almost solely determined by the rise in the interest income from the central bank.** Despite the continuous downward trend in the interest rates of the CB bills, the higher interest for investing in this instrument contributed to rise in the interest income from financial companies, relative to 2009. The interest income from investments in Treasury bills was included in the category "interest income form other entities", which in 2010 realized annual growth of 8.8%, opposite to the decrease registered in the previous two years. As a result to the realized growth, the participation of the interest income from other entities in the total interest income minimally rose.

In the structure of the interest expenses in 2010, the interest expenses of households continued to dominate, the annual increase of which by Denar 908 million contributed for further strengthening of their position in the total interest expenses. Such development resulted mainly from the more considerable annual growth in the household deposits[101], despite the gradual drop in the interest rates of the deposits of this sector.

Figure 3.6.10
Sector structure and growth rates of the interest costs by sectors



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

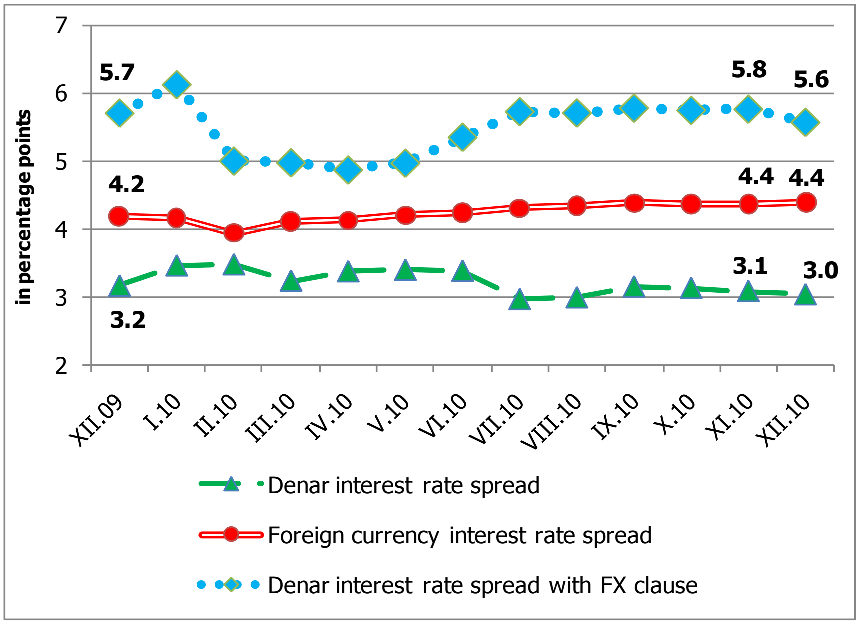
On the other hand, **the interest expenses of the enterprises registered annual drop** by Denar 302 million, which contributed to fall in their participation in the structure of the total interest expenses. This fall was registered in conditions of decrease in the interest rates of the deposits to enterprises, as well as the relatively slower dynamics of annual rise in the deposits of this sector, relative to the growth dynamics of the household deposits in 2010. At the expense of

[100] In 2010, the income from penalty interest from the households and from the enterprises was almost halved relative to the previous year.
[101] In 2010, the household deposits grew with considerably higher dynamics (annual rise of 17.5%) relative to the deposits of enterprises (annual increase of 4.9%) and they created 86.7% of the total annual rise in the deposits of the non-financial entities.

such developments, the participation of the interest expenses of financial companies registered moderate increase in the total interest expenses.

At the end of 2010, the interest rate spread for the on-balance sheet positions in denars, foreign currencies and in denars with FX clause registered minimal changes relative to the end of the previous year. In the first half of 2010 larger variability in the interest rate spreads was registered opposite to their more stable level in the second half of the year. In conditions of downward adjustment of the lending interest rates in accordance with the changes in the monetary policy and slightly lower downward trend in the deposit interest rates (in order comply with the downward trend of the lending interest rates, and in order to stimulate the deposit activity), the interest rate spreads in denars and in denars with FX clause registered minimal downward correction at the end of 2010, relative to December 31, 2009. Opposite to this, the relatively larger drop in the deposit foreign currency interest rates than the lending foreign currency interest rates determined certain growth in the foreign currency interest rate spread. In conditions of upward correction of the interest rate of the European Central Bank[102], an upward correction in the deposit interest rates in foreign currencies of the domestic banks can be expected. On the other hand, in accordance with the Lending Survey[103], most of the banks in the following period have no expectations for change in the lending conditions, including the lending interest rates. In this regard, in the following period the domestic banks can be facing with the challenge for maintaining the interest rate spread with the foreign currency positions.

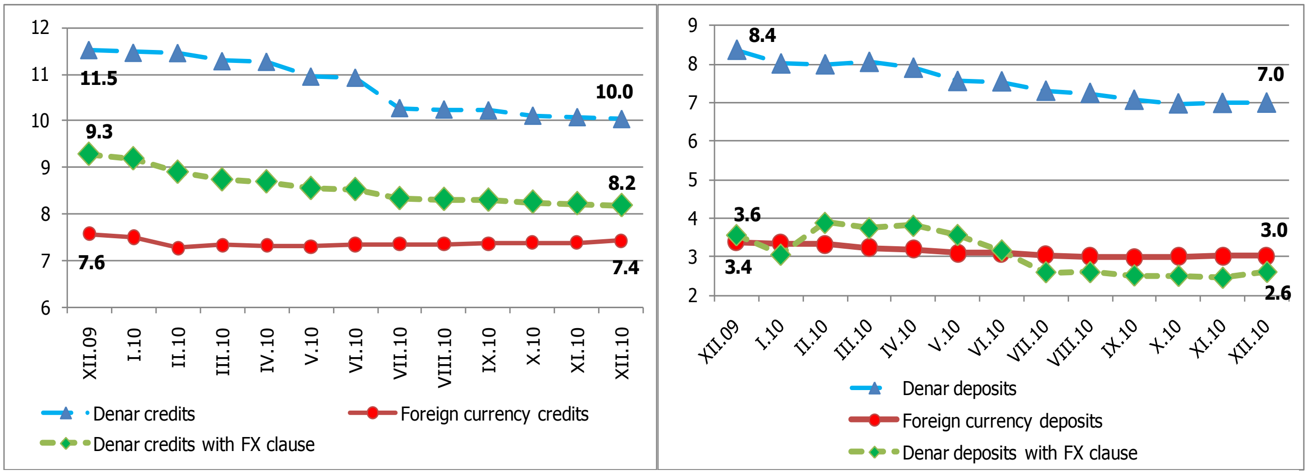
Figure 3.6.11
Development of the interest rate spread of the banking system in the Republic of Macedonia



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

[102] In conditions of exceeding the inflation rate target, and in order to prevent of midterm inflation pressures, at the beginning of April the ECB performed upward correction of the key interest rate by 0.25 percentage points, thus announcing possible further upward corrections in the following period.
[103] Lending Survey, January 2011.

Figure 3.6.12
Development of the lending (left) and deposit (right) interest rates by currency



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

3.6.2 Indicators on the profitability and efficiency of the banks

The larger income of the banking system in 2010 positively influenced the key indicators for banks' profitability. Compared to 2009, the rate of return on assets rose by 0.2 percentage points, while the rise in the rate of return on equity amounted to 1.7 percentage points.

As a result to the larger amount of release of impairment in 2010, the share of the net interest income required for "covering" the allocated impairment of banks reduced. At the end of 2010, approximately one third of the total net interest income was used for allocation of impairment, which was lower relative to the previous year when this share amounted to approximately 40%.

Table 3.6.1
Indicators on the profitability and efficiency of banks' operating

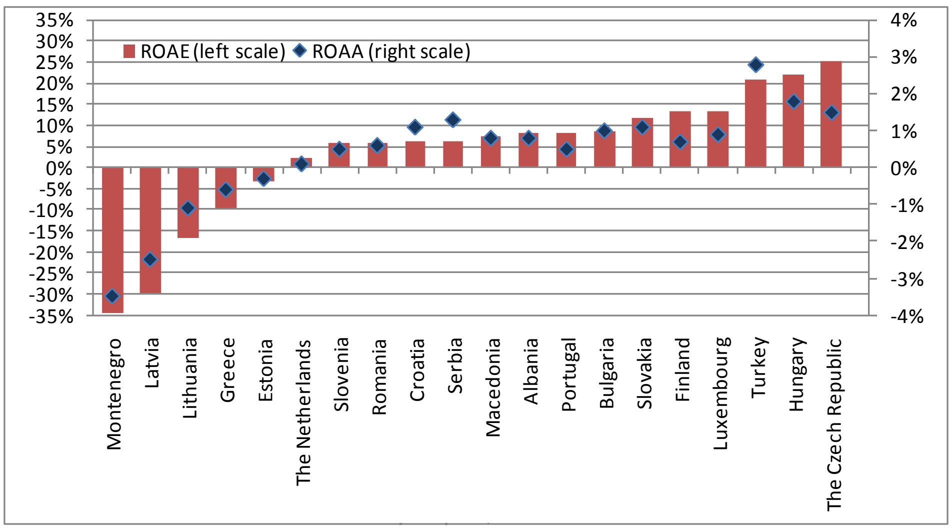
Indicators	Banking system		Large banks		Medium-size banks		Small-size banks	
	31.12.2009	31.12.2010	31.12.2009	31.12.2010	31.12.2009	31.12.2010	31.12.2009	31.12.2010
Rate of return of average assets (ROAA)	0.6%	0.8%	1.3%	1.4%	-0.5%	-0.4%	-1.3%	-0.3%
Rate of return of average equity (ROAE)	5.6%	7.3%	14.2%	15.5%	-4.1%	-0.7%	-2.9%	-0.7%
Cost-to-income ratio	62.8%	66.4%	53.2%	55.1%	77.8%	85.1%	104.0%	109.2%
Non-interest expenses/Total regular income	67.4%	72.1%	56.6%	59.3%	83.8%	94.2%	116.1%	120.7%
Labour costs /Total regular income	24.9%	26.0%	20.8%	21.4%	31.2%	33.5%	42.9%	46.8%
Labour costs /Operating expenses	39.6%	39.1%	39.1%	38.7%	39.0%	39.0%	41.3%	42.9%
Impairment losses of financial and non-financial assets /Net interest income	41.2%	29.3%	42.4%	30.4%	41.5%	32.0%	24.4%	-10.2%
Net interest income /Average assets	4.1%	3.6%	3.9%	3.5%	4.6%	3.8%	4.1%	4.0%
Net interest income /Total regular income	65.5%	65.3%	63.2%	63.9%	70.9%	69.9%	64.0%	57.3%
Net interest income /Non-interest expenses	104.2%	90.6%	111.8%	107.8%	84.7%	74.2%	55.1%	47.5%
Non-interest income/Total regular income	34.5%	34.7%	36.8%	36.1%	29.1%	30.1%	36.0%	42.7%
Financial result/Total regular income	10.3%	14.5%	20.3%	25.3%	-7.6%	-7.8%	-19.9%	-3.8%
Number of employees	6,084	6,052	3,078	3,044	2,446	2,494	560	514
Assets per employee (in millions of Denars)	44.1	50.4	58.9	66.2	30.3	37.0	23.4	22.4
Financial result per employee (in millions of Denars)	0.3	0.4	0.7	0.9	-0.1	-0.1	-0.3	-0.1
Operating expenses per employee (in millions of Denars)	1.7	1.7	1.9	1.9	1.5	1.6	1.5	1.5

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

The analysis of the other indicators on the profitability and efficiency of banks confirmed the stated findings for the dominant influence of the lower impairment on the improved profitability in the banking sector in 2010. Namely, all indicators which are calculated on the basis of items which are not affected by (do not include) the impairment, worsened relative to2009. Therefore, all indicators for the operating efficiency, i.e. the coverage ratios of various costs (operating costs, non-interest costs and wage costs) by the total regular income registered drop (worsening). Also, the coverage ratio of the non-interest costs by the net interest income, as well as the indicator on the average realized net interest income per average asset unit registered fall relative to 2009.

The comparison with the banking systems of the European countries showed that the indicators of return on assets and return on equity of the banking system of the Republic of Macedonia are in the middle of the list of analyzed European countries, including the countries from the area.

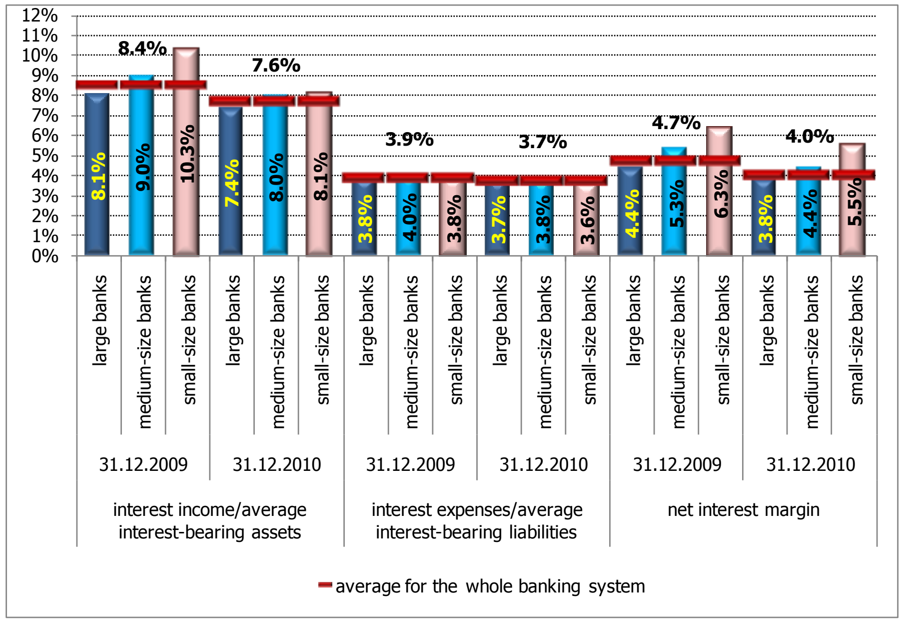
Figure 3.6.13
Comparison of the rate of return on assets and return on equity with the European countries



Note: The data on the analyzed countries are for March 2010, excluding Slovenia, Albania and Turkey the data of which pertains to May 2010, and Greece the data of which pertains to June 2010.

At the end of 2010 the net interest margin[104] at the level of the banking system registered drop of 0.7 percentage points, in conditions of rise in the average interest bearing assets[105] (by 13.3%) and simultaneous fall in the net interest income (by 2.8%). All groups of banks registered fall in the net interest margin relative to the previous year[106]. This drop was most evident in the group of medium banks (by 18.4%), in conditions of largest annual growth in the average interest bearing assets (by 13.9%), opposite to the largest fall in the net interest income (by 7.1%) with this group of banks[107]. On the other hand, the group of small banks realized the highest net interest margin, which in the same time was above the average level for the total banking system. Such situation was in line with the relatively highest lending, opposite to the relatively lowest deposit interest rates with this group of banks, which reflected their position at the market of bank services. From these reasons, the interest bearing asset unit creates the largest income in the group of small banks, opposite to the lowest price which this group of banks pays to interest bearing liability unit.

Figure 3.6.14
Net interest margin



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

At the level of the banking system, the fall in the income from interest per interest bearing asset unit (by 9.5%) was more evident relative to the fall in the interest expenses per interest bearing liability unit (by 5.1%). Such dynamics resulted from the slightly higher downward trend of the lending interest rates relative to the deposit interest rates, opposite to the higher dynamics of the deposit relative to the lending activity of banks in 2010.

[104] The net interest margin was calculated as ratio between the net interest income and the average interest bearing assets.
[105] The average interest bearing assets was calculated as arithmetic mid of the amounts of interest bearing assets at the end of the current year and at the end of the previous year.
[106] When calculating by individual banks an adjustment was performed of the group of medium banks and in 2009, the MBDP AD Skopje was added to this group of banks, and excluded from the group of small banks, thus not causing this transfer of the bank from one to another group to influence to the indicators' amount.
[107] The average interest nearing assets of the groups of large and medium banks in 2010 rose by 13.1% and 11.6%, respectively. The net interest income from the groups of large and small banks in 2010 dropped by 0.6% and 2.7%, respectively, relative to 2009.

II. BANKING SUPERVISION IN 2010

1. Regulatory framework of the banking supervision

In order to achieve further improvement and completion of the regulatory framework of banks and banking supervision of the National Bank, in 2010 the following acts were prepared and adopted:

- Decision on the Manner and the Procedure for Implementation and Application of a Bank's Program for Prevention of Money Laundering and Terrorist Financing;
- the Decision on amending the Decision on the Terms and Procedure for Implementing the Rehabilitation Plan and the **Assets and Liabilities Transfer Plan** and the Procedures for performing the transfer of **assets and liabilities of** a **bank** under administration and for performing the sale of assets of a bank under administration; and
- Instructions for enforcing the Decision on managing the interest rate risk in the banking book, which prescribed in details the method of determining the interest rate risk exposure in the portfolio of banking activities, as well as the form of reporting to the National Bank regarding the exposure.

1.1. Improvement of the manner and the procedure for implementation and application of a bank's program for prevention of money laundering and terrorist financing

In April 2010 amendments were adopted for the Law on Prevention of Money Laundering and Other Criminal Proceeds and Financing Terrorism. These changes pertained, inter alia, to the contents of the programs for prevention of money laundering and terrorist financing. Therefore, in order to comply with the amendments to the Law, the National Bank prepared a new **Decision on the Manner and the Procedure for Implementation and Application of a Bank's Program for Prevention of Money Laundering and Terrorist Financing**. The compliance mostly pertained to the broadening of the list of clients that should be subject of more intensive analysis (which uses new technologies or developing technologies), as well as to the cooperation with the Directorate for Prevention of Money Laundering and Financing of Terrorism. The Decision elaborates the minimal standards prescribed by the Law on Prevention of Money Laundering and Other Criminal Proceeds and Financing of Terrorism which should be applied by the banks in order to establish an adequate program, so that each bank, depending on the type of activities it performs and on the possibility to be involved in money laundering and financing of terrorism, could incorporate additional elements in its own internal acts.

1.2. Improvement of the implementation of the rehabilitation and assets and liabilities transfer of a bank under administration

In 2010, additional **amending was made to the Decision on the Terms and Procedures for Implementing the Rehabilitation Plan and the Assets and Liabilities Transfer Plan**. The purpose of the changes was to achieve more precise:

- segregation of the liabilities and competences of certain individuals included in the process of conducting the rehabilitation and in the assets and liabilities transfer of the bank under administration;

- definition of the assets which can be subject of sale (in cases when the rehabilitation plan envisages sale of part of the assets of a bank under administration) and definition of the assets and liabilities which can be included in the assets and liabilities transfer plan of the bank under administration.

Simultaneously, in 2010 **procedures for performing the transfer of assets and liabilities of a bank under administration** and **procedures for performing the sale of assets of a bank under administration** were adopted. The procedures determine the individual implementation phases for both plans and the activities which should be undertaken by the administration participants.

The existence of this regulation creates a basis for higher efficiency in the administration implementation, as a procedure which represents a transitory solution, i.e. transitory procedure for a bank which is facing with problems in operating, towards its recovery and further operating or towards leaving the banking system.

1.3. Other activities in the banking regulations area

Besides the activities related with the improvement of the banking regulations, large part of the activities of the National Bank were aimed at adherence to and analysis of the innovations in the international supervisory standards and practices. Namely, one of the most significant features on global level in 2009, and especially in 2010, was the intensive effort for transposing of the experiences and lessons learned from the financial crisis into the respective regulatory framework which shall enable higher resistance of the financial system. In this direction, one of the most significant activities in 2010 was the disclosure of the new global regulatory framework aimed at strengthening the resistance of the banks and banking systems (so called Basel 3) by the Basel Committee on Banking Supervision and its adoption by the heads of this Committee[108] and by the heads of the member states of G20[109].

1.3.1. Adherence to the changes in the Basel Capital Accord (introducing the Basel 3) and initial evaluation of their effect on the Macedonian banking system

Right after the adoption of the final document of changes in the Basel Capital Accord (Basel 3)[110], the National Bank conducted analysis and prepared statement of the changes, which is published on the National Bank's web page. The basic goal of the statement is to provide a description of the suggestions given by the Basel Committee on Banking Supervision for strengthening of the capital framework (increase in the required capital level) and introduction of the international liquidity standard. Besides this, the statement contains an assessment of the compliance of the existing methodology for determining the capital adequacy prescribed by the National Bank with the Basel 3 requirements. The National Bank's Methodology characterizes with

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[108] On the meeting of the Group of Central Bank Governors and Heads of Supervision, held on September 12, 2010 the suggested Basel Capital Accord reforms were confirmed. The Group of Central Bank Governors and Heads of Supervision is the governing body of the Basel Committee, consisted of the central bank governors and heads (managers) of supervision (when the supervisory bodies are not an integral part of the central banks) of the member states of this Committee.

[109] The content of the act was discusses and adopted on the summit of heads of G-20, held in November, 2010 in Seoul, Republic of Korea.

[110] Press release - Group of Governors and Heads of Supervision announced higher global minimum capital standards, 12 September 2010

higher prudency regarding the Tier 1 structure, where the common equity Tier 1 positions dominate. Considering the fact that the changes in the Basel capital framework were exactly in this direction (strengthening of the capital quality through increasing the level and the participation of equity), the existing methodology of the National Bank was complied with the Basel 3 requirements to a large extent. For this reason, the banks in the Republic of Macedonia are not expected to have difficulties in the process of fulfilling the new rates of required capital contained in the suggested reform of the Basel Accord. According to Basel 3, the introduction of the new requirements will be performed gradually within a longer period of time and it shall be fully completed at the beginning of 2019. For the three standards (capital adequacy rates, leverage ratio and liquidity rates) different dynamics for adherence, implementation and full application is envisaged.

The results from the performed calculations according to the new capital requirements of (1) the Tier 1 ratio and risk weighed assets, (2) the capital adequacy rate and (3) the leverage ratio[111] of banks in the Republic of Macedonia are in favor of such expectations. Analyzed by individual banks, the Tier 1 ratio and risk weighted assets was higher than the minimal common equity Tier 1 ratio, i.e. the Tier 1 ratio (4.50%, 6.00%, 7.00% and 8.50%). This indicator was little lower than the total minimum of 8.50% (8.39%) with only one bank, while the current Tier 1 ratio and risk weighted assets was lower than 10% with just one bank. All other banks have Tier 1 ratio and risk weighted assets which is higher than 10%, which represents an adequate basis for achieving the total capital adequacy rate as well (8%, i.e. 10.5%). Regarding the height of the leverage ratio of banks in the Republic of Macedonia, on December 31, 2010 all banks are far above the minimum of this ratio of 3%. The leverage ratio by individual banks is ranging between 6.1% and 43.6%, whereas the weighted average leverage ratio of the banking system amounts to 10.3%. Such result represented satisfactory indicator for the height of the additional costs which shall be made by the Macedonian banks to achieve the new capital requirements.

Table No. 1.3.1
Level of the new capital requirements in the banking system of the Republic of Macedonia as of 31.12.2010

	Minimum	Minimum plus additional amount for capital maintenance	Banking system of the Republic of Macedonia - the lowest and the highest rate (31.12.2010)
Common equity Tier 1 ratio and risk weighted assets	4.5%	7.0%	8.4% - 83.7%
Tier 1 ratio and risk weighted assets	6.0%	8.5%	8.4% - 83.7%
Capital adequacy ratio	8.0%	10.5%	11.1% - 83.7%
Leverage ratio	3%		6.1% - 43.6%

1.3.2. Analysis of the international activities in the banking supervision and regulation area

[111] The leverage ratio is calculated as a ratio between the Tier 1 ratio and the total on-balance and off-balance sheet assets of banks.

Besides the analysis of Basel 3 elements and their effect on the Macedonian banking system, in 2010 the National Bank conducted more analysis of the current international activities and trends in the area of the banking supervision and regulation structure. The following analysis can be emphasized as more significant:

- Analysis of the European Union financial supervision reform. This analysis contains data on the activities in the European Union for development of the micro-prudent and macro-prudent financial supervision and provides a detailed description of its new design. The new design consist of two key components: The European Systemic Risks Council, competent for implementation of macro-prudent financial supervision and the European System of Financial Supervisors within which the three new European supervisory institutions participate as well: the European Banking Authority (EBA), the European Insurance and Occupational Pensions Authority (EIOPA) and the European Securities and Market Authority (ESMA). These three bodies, together with the national supervisory bodies of the European Union member states, will be competent for implementation of the micro-prudent aspect of the financial supervision. The analysis showed in details the structure, responsibilities and competencies of these two key pillars of the European Unity financial supervision. Also the analysis contains an attempt for identification of the possible problems and weaknesses in the functioning of the new EU financial supervision.

- Statement for the USA measures for financial system reform in order to improve the financial stability, to strengthen the supervision of banking institutions and of the operating on the capital market, to protect the consumer rights and to improve the procedure for closing the financial institutions.

- Statement for the measures undertaken by the Government, the central bank and the supervisory body of Switzerland for financial crisis management. The statement pays special attention to the measures undertaken in this country aimed to increase the capital requirements level and to strengthen the liquidity level with the two largest banks in the country.

- Analysis of the stress testing of the EU banking system. The analysis represents a short review of the basic features of the conducted stress test in the EU banking system and of the results. Special part of the analysis concerns the results from the conducted stress testing in four banks which have subsidiaries in the Republic of Macedonia.

- Statement for the other activities of the Basel Committee on Banking Supervision which have influence not only the international banking and supervisory trends, but also to the future activities of the National Bank.

2. Banking supervision activities

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

In 2010 total of **107 procedures for issuing licenses and approvals** were conducted out of which 98 with banks and 9 with saving houses. An approval for status change - acquisition of "Stater Banka" AD Kumanovo to "Centralna Kooperativna Banka" AD Skopje was issued (with the registration of this change in the Central Registry of the Republic of Macedonia, on January 3, 2011 "Stater Banka" AD Kumanovo ceased to exist as individual legal entity).

Table No. 2.1.1
Number of licensing procedures in 2010

Type of request for issuing approvals/licenses in 2010	**Issued approvals/licenses**		**Non-issued approvals/licenses**		**Withdrawn requests**	
	Bank	**Saving house**	**Bank**	**Saving house**	**Bank**	**Saving house**
Appointment of members of Board of Directors / manager	28	1	2		1	
Appointment of members of Supervisory Board	25					
Amendment or supplement to Statute / Agreement	15	6				1
Acquiring qualified participation in a bank, i.e. acquiring above 5%, 10%, 20%, 33%, 50% and 75% of the of voting shares in a bank	4					
Change of address of a bank	1					
Change of name of a bank	1					
A look at a examination's Report	11				5	
Starting with performance of financial activities	3				1	
Status changes	1					
Approval for termination of operation		1				
Total	**89**	**8**	**2**	/	**7**	**1**

Upon a request of the saving house "Fersped" DOO Skopje, its founding and operating license was canceled and it was determined that the conditions for instigating liquidation procedure over this saving house are fulfilled. In November 2010 the founding and operating license of AM "Stedilnica Biljana" DOO Skopje was canceled and it was determined that the conditions for instigating liquidation procedure over the saving house are fulfilled.

2.2. Supervision of the operating of banks and saving houses

In 2010 total of 45 on-site examinations of the operating of banks, saving houses and outsourcing companies in the Republic of Macedonia were performed. Twenty three out of them were risk based examinations, whereas the other twenty two examinations pertained to control of the compliance of the operating with the regulations.

Three examinations out of the conducted examinations in 2010 were full scope, and twenty were targeted. Full scope examinations were conducted with three banks and they determined the security, stability, level of risk and compliance with the regulations of the examined institutions, through assessment of the system of established internal controls, adequacy of the risk management systems, as well as the effectiveness of the corporate governance system. The credit risk management, the liquidity risk management, the established risk management system, the compliance with the corrective measures imposed by the National Bank and the information risk management were in the focus of the conducted targeted examinations. The targeted examinations were conducted with twelve banks, six saving houses and two outscoring companies. With one outsourcing company, the information security was the subject of examination, while with the other company, the compliance with the imposed corrective measures, regarding the company's activities performed for the bank, represented a subject of examination.

With the performed on-site risk based examinations, a need for improvement of the established management rules for certain risk was determined, mainly the content of the internal acts which regulate the management process with certain risks, as well as their full application in practice. In the process of credit risk management, some weaknesses regarding the established criteria and practices when approving and monitoring the credit risk exposures were found, as well as regarding the established classification system for the credit risk exposures and the determination of the impairment, as well as the manner of conducting of the stress testing. In the process of liquidity risk management, with most of the controlled institutions there is a lack of elaboration of certain elements which should be included in the Liquidity Risk Management Plan in special situations, and with some institution a need for improvement in the methodology for determining the expected residual maturity of the future cash inflows and outflows was determined.

With some banks there was a need for strengthening of the established management system for interest rate risk in the portfolio of banking activities, in accordance with the regulation requirements for management with such risk, as well of the legal and reputational risk management systems regarding the improvement in the reporting to the management for the exposure to such risks. With respect to the risk of money laundering, weaknesses were identified with some banks in the process of data submission to the Directorate for Prevention of Money Laundering, as well as absence of internal act for defining the manner of generating the clients' risk profile, weaknesses in the organization of this segment, as well as lack of plan for constant training on annual level. As a result to these weaknesses, there was some incompliance with the Banking Law and the bylaws that arise from it, the Law on Obligations, the Law on Prevention of Money Laundry and Other Proceeds from Crime and Financing of Terrorism and the **Law** on **Protection** of **Consumers** in **Contracts** for **Consumer Loans**.

The boards of directors and the supervisory boards with most of the controlled institutions have managed to establish a satisfactory risk management system and they also have been responsive to the corrective measures imposed by the National Bank. Simultaneously, with some of the institutions it was determined that the boards of directors and the supervisory boards failed to fully meet the requirements from the regulations which arrange their operating, as a result to which the National Bank gave recommendations for strengthening the corporate management. The given recommendations pertained mostly to the realization of the competences of bodies pursuant to the regulations, avoiding conflict of interests, adequate reporting of the related persons by the persons with special rights and responsibilities, identification of the internal sources of strategic risk, providing adequate staffing, strengthening of the internal control system, strengthening of the established control system for the compliance of banks' operating with the regulations, as well as improvement in the internal audit operating.

The targeted examinations which were focused on the information security, determined some weakness in the reporting system to the supervisory board, insufficient staffing in the organizational units competent for information technology, inadequate duty segregation and control on the operating of the person responsible for the information system security, weaknesses in the contracts with outscoring persons who provide services for the bank, conflict of interests among the managers, lack of internal acts which should be adopted, pursuant to the information system security policy. The partial controls with the outscoring companies of the banks identified weaknesses related with certain control mechanisms which lacked as a result to the incompleteness of the risk analysis, non-adherence to the information system security policy regarding the use of some preventive controls of access and incompliance of the operational continuity plan with the provisions of the concluded contracts with banks.

2.3. Undertaken corrective activities to banks and saving houses

In 2010 additional measures to two banks were imposed, and memorandums for compliance with the regulations were signed with the supervisory boards of two banks.

As a result to the determined weaknesses in the area of management of the credit risk, liquidity risk, strategy risk, operational risk and other risks, in 2010 regular corrective measures were undertaken, i.e. fourteen written recommendations to five banks and three saving houses and five recommendations to three banks and two saving houses (Annex No. 28 - Measures imposed by NBRM in the period from January 1, 2010 to December 31, 2010). The weaknesses which motivated these measures pertained mainly to the process of measuring the anticipated credit losses, the manner of conducting the stress testing of the credit risk and liquidity risk exposure, as well as the prevention of money laundering.

3. Annual Conference of the Group of Banking Supervisors from Central and Eastern Europe

In the period from June 15 until June 17, 2010 in Ohrid, the National Bank hosted the 23th Annual Conference of the Group of Banking Supervisors from Central and Eastern Europe (BSCEE)[112]. The basic goal of this Group is to support the cooperation among its members, as well as to provide their training and upgrading. In the same time it represents a forum of exchange of knowledge and experiences among the members. One of the goals of this Group is to alleviate the integration process of the supervisory boards and its members to the European banking supervision system. The heads of the banking supervisory boards from Austria, Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Estonia, Russia, Slovenia, Slovakia, Serbia, Ukraine, Hungary, Croatia, Montenegro and Czech Republic participated on the conference in Ohrid. Representatives from the Bank for International Settlement (BIS) from Basel, Switzerland, from the European Central Bank and from one international banking group participated on the conference as guests and presenters.

On the conference, the participants exchanged their experiences for two topical issues: (1) The lessons learned from the global economic crisis and the measures undertaken for strengthening the resistance of the banking system and (2) Standards for measuring the liquidity risk, with special review to the measures undertaken during the crisis and after it by individual supervisory boards, members of the Group.

[112] The group is formed in 1991, and Republic of Macedonia is it member since 1996.