

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



**Report on Banking System and Banking Supervision of the
Republic of Macedonia in 2008**

April, 2009

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Governor's foreword

We leave behind us a year of economic crisis, a year filled with many uncertainties. After many years of world economic progress, high confidence, abundance of liquidity on the international financial markets and low interest rates, in 2008, the world faced with the most severe financial and economic crisis experienced so far. The entirely deteriorated confidence in the financial markets, increased perception of the risks by the financial institutions and investors, which reflected in the higher interest rates, brought to strong restrictions on the side of the capital supply. The increased costs of financing and stricter credit standards contributed, on their part, toward further decline in the demand, evident through the refraining of the corporate sector and households from spending and investments. Exactly this trend led to a collapse of the global demand, dramatic decline in the volume of the world trade and deep recession of the world economy.

The Macedonian economy, as a small and open economy, was not immune to such developments. In the last quarter of 2008, the real sector felt the first major adverse effects from the global financial and economic crisis. The exports sector, was directly hit by the global recession, through a decline in the prices of the main export products and reduced demand for domestic products. The increased uncertainty, refraining from undertaking risks and from investing in general, resulted in a decline in the capital inflows in the country. All that has increased the external imbalances which were manifested through deepening of the current account deficit, which concentrated the main risks for the macroeconomic stability in the real sector. The world financial crisis also caused psychological pressures on the domestic entities, expressed through the increased demand for foreign exchange, which put greater pressure on the official foreign reserves.

Despite the numerous failures of banks from the developed economies, but also from the region, the Macedonian banking system remained safe and stable. The classical banking activities and the insignificant exposure of the Macedonian banks to non-residents were their main advantages compared with the internationally active banks, which are living through their hardest days. At the end of 2008, the total claims of the Macedonian banks on non-residents were on the historically lowest level and they were mainly claims on the basis of deposits with first-class foreign banks, as part of the payment operations and credit and guarantee operations with abroad. Additionally, banks' dependence on foreign sources of financing is relatively low, which is especially favorable under the current conditions of generally lower liquidity, deteriorated confidence and tightened conditions of borrowing on the international financial markets.

Stability and safety of the banks in the Republic of Macedonia is confirmed also through their high level of capitalization. Banks' capital adequacy ratio is twice higher than the legally prescribed minimum. The annual growth rate of banks' own funds for 2008 is the highest registered in the past six years, which could point to the banks' increased perception for increasing their capitalization level, in order to maintain the stability and safety in conditions of tightening the international capital flows.

However, the banking system of the Republic of Macedonia did not remain fully isolated from the effects of the global financial crisis. The banks felt the first more significant effects indirectly, through the deteriorated performances of the real sector. Decelerated domestic economic

activity and stronger psychological pressures on the domestic agents, primarily households, acted toward deceleration of the growth of the banks' deposit potential. The slower increment of the deposit base slowed down the growth of the banks' total assets, so that in 2008 the lowest growth rate in the past six years was registered. Such developments led to certain stagnation of the degree of financial intermediation. On the other hand, the increased uncertainty led to a change in the banks' expectations and their increased perceptions regarding the risk they undertake. This was especially evident in the tightening of the credit policies, through increasing the caution when extending credits and increasing the interest rates on some credit products intended for households. This, together with the measures of the NBRM undertaken in 2008, slowed down the banks' credit activity. However, banks' credit activity grew much more rapidly relative to the growth of deposits and total assets.

Along with the slowdown in the deposit growth, during 2008 they experienced more intensive currency transformation, as a consequence of the psychological pressure with the economic agents caused primarily by the inflationary pressures, as well as by the increased uncertainty related to the international financial developments. For the first time in the last three years, foreign currency deposits registered a significantly higher growth compared with Denar deposits, and had a larger share in the total growth of banks' deposits.

In 2008, the trend of improving banks' credit portfolio was interrupted, which was common for the past few years, when in relatively more relaxed conditions and higher optimism regarding the clients' creditworthiness, banks had a dynamic credit activity. In 2008, the first signs of increased risk for the credit portfolio, especially of the households, appeared. On the other hand, all indicators of the quality of the credit exposure to the corporate sector register an improvement. However, the expected further decline in the export demand and, generally, the contraction of the domestic economic activity, could lead to a deterioration in the quality of the credit exposure to this sector in the forthcoming period.

The significant presence of the so-called indirect credit risk, arising from the relatively high share of lending with foreign currency component and adjustable interest rates is an additional risk factor for the future quality of the banks' credit portfolio, through which banks transfer the currency and interest rate risks to their clients.

In 2008, the banks in the Republic of Macedonia disposed of a sufficient level of liquid assets and maintained stable liquidity position. They smoothly serviced their liabilities and had no need of liquidity support by the central bank. During 2008, however, the trend of deepening the maturity mismatch between banks' assets and liabilities continued, which was primarily a consequence of the fast growth of lending, especially long-term lending in the past few years, as opposed to the dominant presence of the short-term sources of funds. This, in conditions of highly limited access to free liquid funds on the global financial markets and deteriorated confidence, imposed a need of increased prudence in banks' liquidity management.

In 2008, banks in the Republic of Macedonia continued to make profits. However, the trend of improvement of their profitability and efficiency which lasted several years, was interrupted in 2008. The decline in the profit, relative to 2007, is mostly a result of the increased operational costs and interest expenditures, but also the slower growth of net-income from bank commissions. Banks' interest rate policy had two distinctive features: increase in the deposit interest rates in order to maintain the existing and attract new sources of financing, and second, slowdown in the downward trend of the lending interest rates. This contributed to a further reduction of the spread between

lending and deposit interest rates. However, the further increase in the banks' interest-bearing assets ensured full coverage of the interest-bearing liabilities, but also creation of an appropriate amount of interest rate margin for covering also the banks' non-interest-bearing expenditures.

In 2008, NBRM regularly and smoothly continued to perform its activities in the domain of its regulatory and supervisory function. The process of adopting the new by-laws in accordance with the Banking Law was completed. The process of licensing of banks in the area of corporate management and conducting financial activities, in accordance with the new Banking Law, was completed, too. In the beginning of 2008, NBRM started to apply the new concept of risk-based supervision. All these activities contributed to the qualitative improvement of the supervisory and regulatory function of the central bank. At the same time, the new prudential standards and the new requirements regarding the manner of conducting supervision, contributed to the improvement of banks' operations and strengthening of their stability and safety.

Ladies and Gentlemen,

The year ahead of us is a year filled with a number of challenges and uncertainties. The crisis which started as a crisis of one restricted portion of the financial markets, at the sub-prime mortgage market in the USA, rapidly spilled over to the other financial markets and other regions in the world. The financial crisis quickly turned into an economic crisis with devastating effect on the world economy. In conditions of continuous downward revision of the projected growth rates of the world economies, it is very difficult to tell how long it will last and what will be the consequences from the global financial crisis.

Despite the restricted influence of the financial crisis on the banking system of the Republic of Macedonia, the increased macroeconomic risks in the country could be a threat for its stability. The increased uncertainty and banks' risk aversion have already been incorporated in their business policies for 2009. Most of them have clearly expressed the orientation that 2009 is a year of their internal consolidation, strengthening of their risk management systems and internal control mechanisms. However, regardless of everything, NBRM will continue to monitor the conditions in the banking system and will undertake all measures necessary for maintaining its stability and safety. Actually, that, along with the maintaining of the price stability, as the main objective of the central bank, are the main precondition for the economic wellbeing in the country.

Skopje, May 2009

Petar Goshev, MSc.

Governor

and President of

the NBRM Council

I) BANKING SYSTEM IN 2008

1. Structure of the banking system

1.1. Number of banks and savings houses

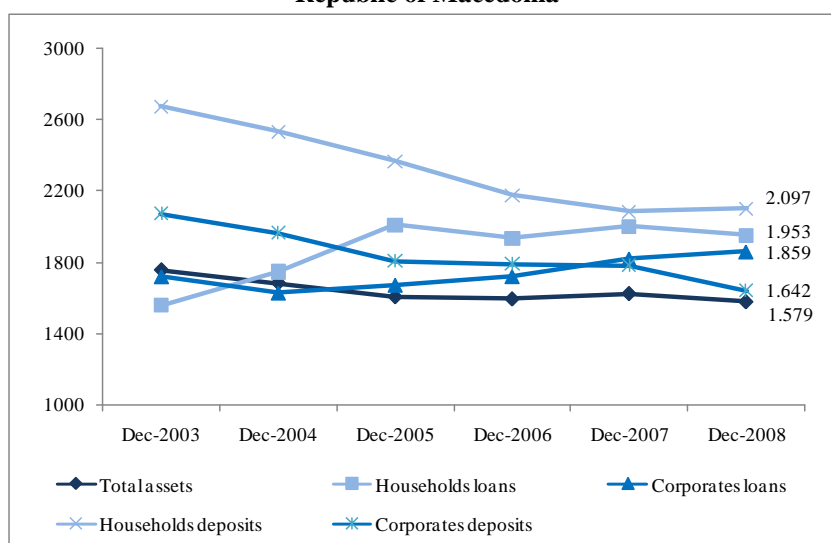
As of December 31, 2008, the banking system of the Republic of Macedonia comprised of eighteen banks and eleven savings houses. Relative to the end of 2007, the number of banks is unchanged, while the number of savings houses decreased by one¹.

Banks maintained their dominant position in the banking system, while the role of the savings houses changed marginally relative to 2007². Having in mind the insignificant role of the savings houses in the overall activities of the banking system, further analyses in this Report focus solely on the banks' operations. In order to obtain more comprehensive overview, the analysis of the operations of all banks is supplemented also with an analysis by group of banks. Grouping of banks according to their assets size has been maintained.³ In 2008, there were no structural changes, so that the number of banks in the individual groups remained the same.

1.2. Concentration and market share

The banking system of the Republic of Macedonia is characterized with a relatively high level of concentration of the activities. According to the Herfindahl index⁴, the level of concentration for all analyzed domains of banks' operations is high, except total assets and corporate deposits, which are within the level that is generally considered acceptable. The highest level of concentration remains present in the operations with

Figure 1
Dynamics of the Herfindahl-index for the banking system of the Republic of Macedonia



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

¹ On request of the owners of "Gragjanska Stedilnica" DOO Skopje, the Governor of NBRM issued a decision on revoking its founding and operating license, and on opening a liquidation procedure.

² At the end of 2008, the share of savings houses in the total credits to non-financial entities remained unchanged and equaled 1.9%, while the share in the total households' deposits dropped by 0.1 percentage point and equaled 0.6%. The share of savings houses in the total assets of the banking system went up by 0.1 percentage point and equaled 1.4% as of December 31, 2008.

³ Large are considered those banks the assets of which exceed Denar 15 billion, the group of medium banks comprises the banks with assets ranging between Denar 4.5 and 15 billion, while the banks with assets lower than Denar 4.5 billion are included in the group of small banks.

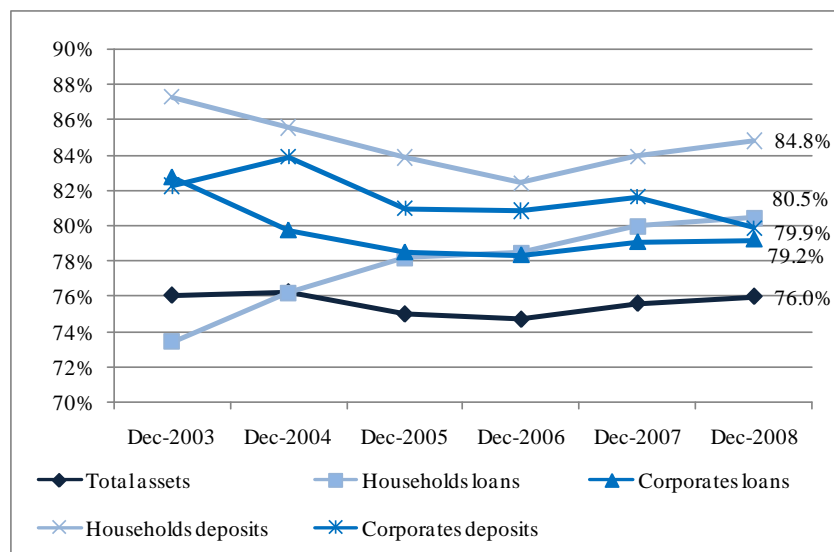
⁴ The Herfindahl index is calculated according to the equation $HI = \sum_{j=1}^n (S_j)^2$, where S denotes each bank's

share in the total amount of the analyzed category (for example: total assets, total deposits, etc.), while n denotes the total number of banks in the system. When the index ranges between 1,000 and 1,800 units, the level of concentration in the banking system is generally considered acceptable.

households. The downward trend in the level of concentration in household deposits, which was common for the past four years, has been interrupted, so that in 2008, it registered a moderate increase of 13 index points. Concentration in the credit activity with households decreased by 48 index points, down to the level registered in 1953. However, the analysis by individual banks indicates that the first bank according to the volume of credits to households, maintained its high share of 36.6% as of December 31, 2008 (a decline of only 0.8 percentage points relative to 2007). For comparison, the share of the following bank in the total credit activity with the households equaled 17.6%. During 2008, the most notable fall in the concentration was registered in the corporate deposits (by 138 index points), while the largest increase was registered in the Herfindahl index for the total corporate credits (by 40 index points).

The analysis of the CR5⁵ indicator implies almost identical conclusions about the relatively high level of concentration in the banking system. However, this indicator shows a tendency of moderate decline in the concentration. At the end of 2008, similarly as at the end of 2007, this indicator pointed to highest concentration of 84.8% in the household deposits. Actually, it is the category which registered the highest increase in the concentration by 0.9 percentage points, relative to 2007. On the other hand, the CR5 indicator for the corporate deposits is the only category which registered a decline (of 1.7 percentage points).

Figure 2
Dynamics of CR5 for the banking system of the Republic of Macedonia



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

⁵ The CR5 indicator represents the share of the assets (i.e. the category that is analyzed, e.g. corporate credits, corporate deposits, etc.) of the five credit institutions with largest assets (i.e. category that is analyzed) in the total assets (i.e. category that is analyzed) of the banking system. In the case of the Republic of Macedonia these are banks.

Table 1
Indicators of the concentration of the banking systems of individual EU Member States, the Republic of Macedonia and some countries in the region

| Country | Herfindahl index of the total assets* | CR5 ratio |
|---------------------------------------|---------------------------------------|-------------|
| Macedonia (2008) | 1,579 | 76.0 |
| Macedonia (2007) | 1,625 | 75.6 |
| Czech Republic | 1,100 | 65.7 |
| Bulgaria | 833 | 57,5* |
| Estonia | 3,410 | 95.7 |
| Cyprus | 1,082 | 64.8 |
| Latvia | 1,158 | 67.2 |
| Lithuania | 1,827 | 80.9 |
| Malta | 1,174 | 70.1 |
| Poland | 640 | 46.6 |
| Romania | 1,041 | 56 |
| Slovakia | 1,082 | 68.2 |
| Slovenia | 1,282 | 59.5 |
| Hungary | 839 | 54.1 |
| <i>New member-countries of the EU</i> | 1,289 | 66.3 |
| <i>Old member-countries of the EU</i> | 1,102 | 59.4 |
| <i>Euro zone countries</i> | 1,006 | 54.7 |
| Albania | 1,624 | n/a |
| Serbia | 617 | 49.5 |
| Croatia | 1,312 | 72 |

Source: ECB, EU Banking Structures, October 2008 and the web sites of the central bank of the countries. Data for the EU are of 2007, for Albania of 2007, for Serbia of the third quarter of 2008, and for Croatia of 2008.

*Figure for September 2008

The data for the new member countries, for the EU and for the Euro zone countries are unweighted averages.

The relatively high level of banking system concentration is confirmed also by the comparative analysis with the banking systems of the EU Member States. Only the concentration level present in the banking systems of Estonia and Lithuania is higher than the one common for the banking system of the Republic of Macedonia. The comparison with certain countries from the region, also confirms the relatively higher level of the Macedonian banking system concentration. From among the group of analyzed countries from the region, only the concentration level present in the banking system of Albania is higher than the one common for the banking system of the Republic of Macedonia.

Table 2
Market share of the 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 | |
|-----------------|-----------------|------------|---------------------------|---------------|-------------------------------|---------------|--------------------------|---------------|-----------------------------|---------------|
| | 31.12.2007 | 31.12.2008 | 31.12.2007 | 31.12.2008 | 31.12.2007 | 31.12.2008 | 31.12.2007 | 31.12.2008 | 31.12.2007 | 31.12.2008 |
| Large banks | 3 | 3 | 67.1% | 66.1% | 69.0% | 67.9% | 70.3% | 69.0% | 72.2% | 70.1% |
| Medium banks | 8 | 8 | 27.5% | 28.8% | 26.0% | 27.5% | 27.3% | 28.7% | 25.2% | 26.8% |
| Small banks | 7 | 7 | 5.4% | 5.1% | 5.0% | 4.6% | 2.4% | 2.3% | 2.6% | 3.1% |
| Total | 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

Concentration in the banking system of the Republic of Macedonia remains relatively high also from a viewpoint of the role of individual groups of banks in all segments of banks' operations. Despite the certain decline, the group of large banks maintained the dominant position on the banking market in the Republic of Macedonia. The group of medium banks continued to strengthen its market share, registering an increase in all segments. On the other end, there was a significant further marginalization of the role of the group of small banks, according to all analyzed segments of banking operations, except for the deposit activity, where the market share of this group of banks increased moderately.

1.3. Ownership structure of the banking system

1.3.1. Shareholders structure of the banks according to the type of shareholders

During 2008, financial institutions continued to strengthen their position as dominant owners of the banks in the Republic of Macedonia. As of December 31, 2008, financial institutions⁶ participated with 63.8% in the ownership structure of the common shares issued by banks, which is an increase of 3.4 percentage points relative to the end of 2007. The increase was accomplished at the expense of the lower share of the non-financial legal entities by 2.3 percentage points and of the natural persons by 0.8 percentage points. Such shifts in the ownership structure of the banks is primarily a result of the acquisition of three banks by foreign strategic investors. Natural persons increased their dominance in the ownership structure of the preference shares issued by the banks in the Republic of Macedonia, with a share of 69.1%.

⁶ The following are considered to be financial institutions: domestic and foreign banks, domestic and foreign brokerage houses, investment funds, pension funds, pension funds or investment funds management companies, insurance companies, as well as the international financial institutions (EBRD, IFC, etc.).

Table 3**Ownership structure of the banking system according to the type of shareholders**

| No. | Type of shareholders | Share of common stocks | | | Share of preferred stocks | | |
|--|---|------------------------|------------|------------|---------------------------|------------|------------|
| | | 31.12.2006 | 31.12.2007 | 31.12.2008 | 31.12.2006 | 31.12.2007 | 31.12.2008 |
| 1 | Individuals | 11.7% | 10.5% | 9.7% | 52.9% | 51.4% | 69.1% |
| 2 | Non-financial legal entities | 36.7% | 22.0% | 19.7% | 14.9% | 12.8% | 19.1% |
| 3 | Financial institutions | 44.0% | 60.4% | 63.8% | 31.0% | 35.1% | 11.0% |
| 4 | Public sector, public firms, public institutions | 7.0% | 6.7% | 6.5% | 0.1% | 0.1% | 0.8% |
| 5 | Undefined status | 0.6% | 0.4% | 0.3% | 1.1% | 0.6% | 0.1% |
| Total (1 to 5) | | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| <i>Total private capital (1+2+3+5)</i> | | 93.0% | 93.3% | 93.5% | 99.9% | 99.9% | 99.2% |

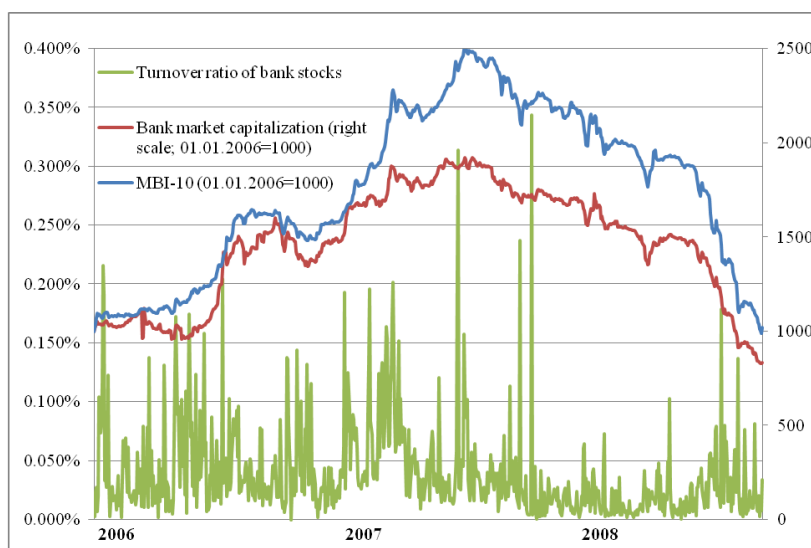
Note: The term "undefined status", generally comprises the shareholders whose bankruptcy procedure is concluded and those agents do not exist, while their stocks in the bank are not obtained by any creditor during the bankruptcy procedure.

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

In 2008, the interest in trading with banks' shares on the Macedonian Stock Exchange decreased, as a result of factors of economic and non-economic nature. The general stagnation on the Stock Exchange reflected to a large extent the serious turbulences and the negative price corrections present on the financial markets in the world and in the region, but also the increased uncertainty and deteriorated prospects for the economic growth of the country as a whole. Additional, however equally important factors which supported the downward price correction of shares were the internal factors, common for the Macedonian capital market, such as: low market liquidity, concentration of the portfolio investors with same geographical origin and similar investment inclinations, as well as the unsuccessful attempt of the Republic of Macedonia for admission to NATO. Such a situation resulted in a continuous downward correction of the stock exchange indices (MBI-10), which were especially emphasized in the second half of 2008, when the effects of the world financial crisis started to affect directly also the real sector (decline in the industrial output and reduced exports). Similarly, market capitalization of the banks in the Republic of Macedonia registered a continuous decline in 2008, falling down to a level lower than the one registered at the beginning of 2006. The smaller interest in trading with banks' shares was evident also from the low values of the indicator for their turnover, primarily in the first half of the year. Later, this indicator increased, which is to a certain extent a result of the sale of the dominant package of shares of two banks to a foreign shareholder.

Despite the dramatic decline in the banks' market capitalization, that did not reflect the banks' actual performances. However, in the second half of 2008, in conditions of an increased credit risk, banks themselves shifted toward credit rationalization and slowdown of the credit activity, which could cause contraction of their interest-bearing base and respective reduction of the possibility for generating profit.

Figure 3
Stock-market ratios for the banks and MBI 10

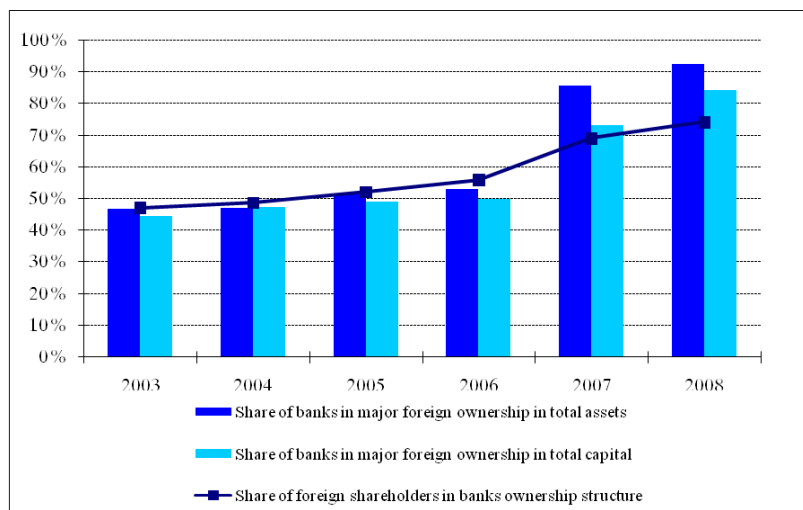


Source: NBRM and Macedonian stock exchange - Skopje

1.3.2. Share of foreign capital in the total capital of the banking system

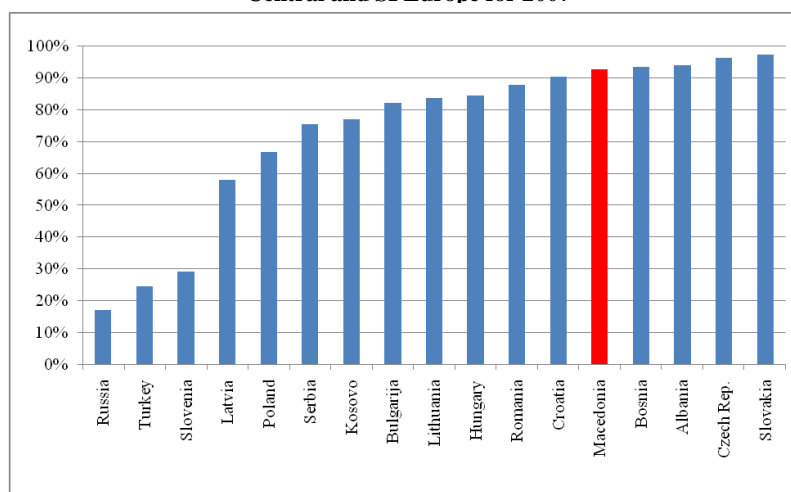
During 2008, the upward trend in the number of banks majority owned by foreign shareholders continued, followed by an appropriate increase in their market share. Thus, two medium and one small bank became majority foreign owned⁷. As a result of such movements, as of December 31, 2008, the share of foreign capital in the total shareholders' capital of banks equaled 74.3%, which is by 5.2 percentage points more relative to the end of 2007. In 2008, the number of banks majority owned by foreign shareholders increased by three banks, and the total number now is fourteen. From among them, eight banks are owned by foreign banks, whose market share in the total assets of the banking system is 59%, as of December 31, 2008. The increase in the number of banks which are majority owned by foreign shareholders caused their share in the total assets and in the total capital at the level of the banking system to reach 92.7% and 84.2%, respectively as of December 31, 2008, which is an annual increment of 6.8 and 11 percentage points, respectively. **Such a share of banks majority owned by foreign shareholders in the total assets puts the banking system of the Republic of Macedonia close to the upper limit from the range of countries in the comparative analysis.** The share of banks majority owned by foreign shareholders in the total assets of the banking system of the Republic of Macedonia is similar with the level present in the countries from the region (Croatia, Albania and Bosnia and Herzegovina), but also with that in the Czech Republic and Slovakia.

Figure 4
Relative importance of the foreign stockholders and of banks in a dominant foreign ownership for the banking system of the Republic of Macedonia



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

Figure 5
Percentage share of foreign banks in total assets - selected countries of Central and SE Europe for 2007



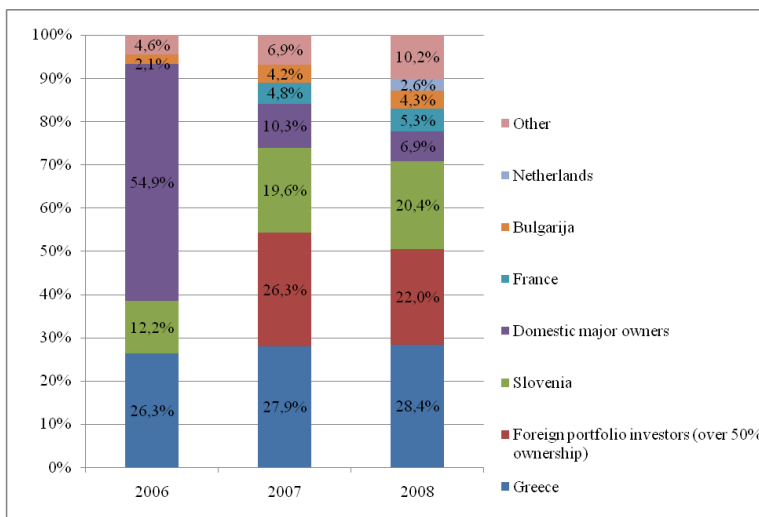
Source: Compilation of the reports of the web-sites of the central banks. The data for Macedonia is for 2008.

⁷ In 2008, "Centralna Kooperativna Banka" from Sofia acquired "Sileks Banka" AD Skopje, "Steiermärkische Bank und Sparkassen AG" from Graz, Austria acquired "Investbanka" AD Skopje and "Demir-Halk Bank" Rotterdam became majority owner of "Izvozna i Kreditna Banka" AD Skopje.

As to the country of origin of the dominant bank owners, no major change was registered at the end of 2008. Still the largest part of the assets of the banking system remained concentrated with the banks with dominant owners from the EU countries, with emphasized share of two Member States from the broader region.

As a result of the entry of dominant foreign shareholders from Holland, Austria and Bulgaria in three banks, at the end of 2008 the share of the banks majority owned by shareholders from EU in the total assets of the banking system increased by 7.7 percentage points and reached 68.7%. On the other end, the share of the assets that belong to the banks majority owned by shareholders from the Republic of Macedonia continued to decline and as of December 31, 2008 it was reduced down to the level of 6.9%, which is by 3.4 percentage points less compared with the same period of the preceding year.

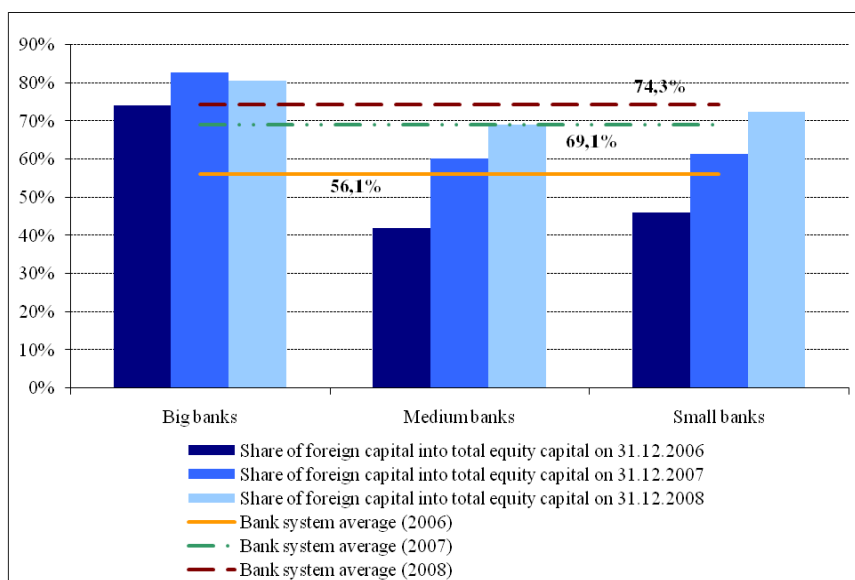
Figure 6
Assets structure according to the origin country of the dominant shareholders of banks



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

Acquisitions of two medium and one small bank in majority foreign ownership in 2008, led to an increase in the share of foreign shareholders in these groups of banks, and a stagnation in the group of large banks. Thus, relative to December 31, 2007, the share of foreign shareholders in the group of medium banks was higher by 8.8 percentage points, while in the group of small banks this share went up by 11.2 percentage points. Such movements contributed the share of the foreign capital in the total shareholders' capital with

Figure 7
Dynamics of the share of foreign shareholders in the capital of bank groups



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

the group of small banks to come closer to the average for the entire banking system (74.3%), while the share with the group of large banks still remains above this average.

1.4. Access to banking services

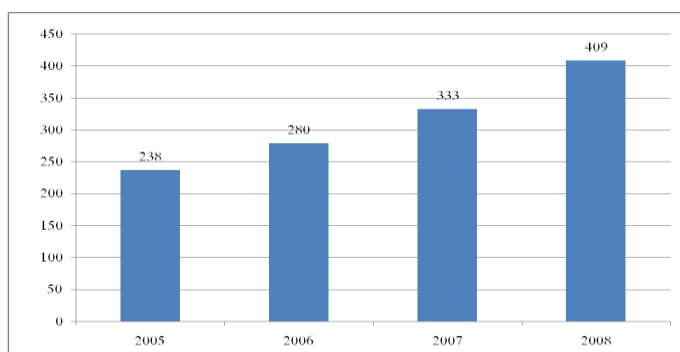
The network of business units of banks in the Republic of Macedonia continued to expand at a fast pace also during 2008. As of December 31, 2008 the bank network comprised 409 business units, which is by 76 business units (or by 22.8%) more relative to 2007. As in the previous year, the largest expansion of the network of business units was registered in the group of medium banks which covers 45 (or about 60%) of the newly-opened business units.

In 2008, the concentration of the network of banks' business units on the territory of the capital was maintained.

The concentration was additionally emphasized as a result of the dominance of the Skopje region in the number of newly-opened business units during the year. As a result of this increment, the number of citizens per business unit in this region additionally declined and was maintained at the lowest level relative to the other regions in the country. Improved access of the households to banking services, expressed through the reduced number of citizens per business unit, was registered also in all other regions, except one.

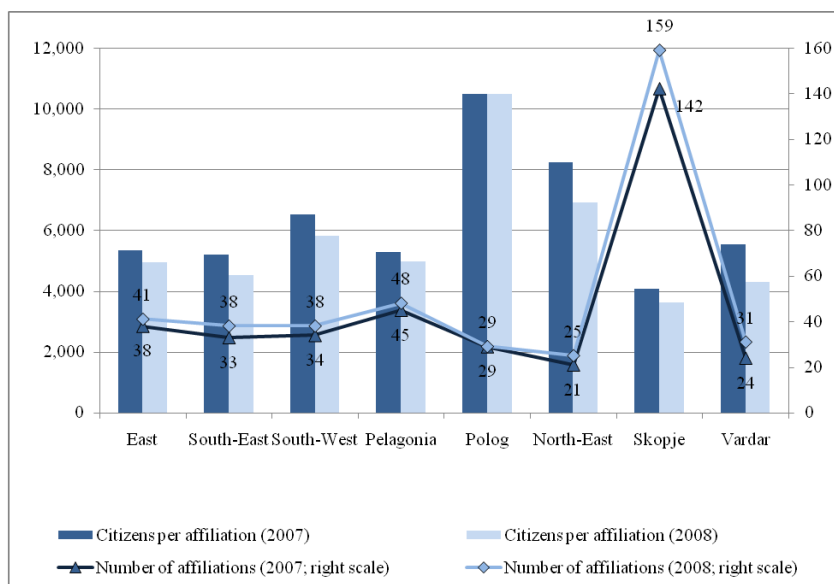
In 2008, the bank network observed through the number of POS and ATMs⁸, continued to expand, which was directly caused by the increase in the issued debit and credit cards. Thus, as of December 31, 2008, the number of installed POS and ATMs went up by significant 62.5% relative to the end of 2007. Cards representing electronic money have not been issued yet, although the respective regulation has been in effect since January 2008. Observed according to groups of banks, the largest number of cards was issued by the group of large banks, while the most widely spread ATM network is that of the group of medium banks. The group of small banks, according to both indicators, has an insignificant share in the banking system of the Republic of Macedonia.

Figure 8
Trend of the number of business units of the banking system



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

Figure 9
Geographic concentration of the bank network through regions in the Republic of Macedonia

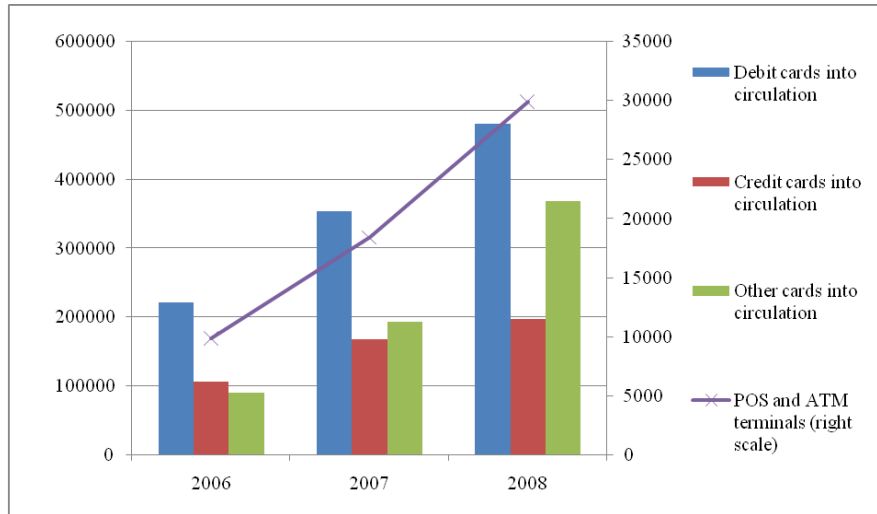


Source: NBRM on the basis of data obtained from the banks

⁸ POS - point of sale; ATM - automated teller machine

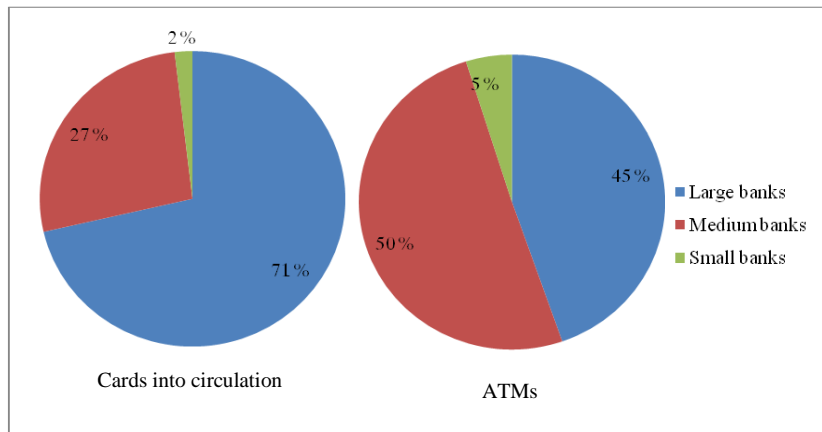
As of December 31, 2008, fourteen banks with market share of 91% in the total assets of the banking system, offered internet banking services. Eleven banks (with market share of 82.9% in the total assets) offered a set of internet services for natural persons and legal entities, while three banks (with market share of 8% in the total banks' assets) offered internet services solely for legal entities. The most common type of internet services available for banks' clients are: monitoring of account balances, transfer and payments from Denar accounts, filing applications for credit products for natural persons and legal entities, etc.

Figure 10
Development of the bank network according to the amount of payment cards and terminals



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

Figure 11
Amount of cards and ATMs according to bank groups



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

Table 4
Households' access to banking services in individual EU Member States, the Republic of Macedonia and some countries in the region

| Country | Citizens per credit institution | Citizens per ATM | Citizens per employee in the banking system | Citizens per affiliation | Assets per employee in the banking system (in thousands euro) |
|---------------------------------------|---------------------------------|------------------|---|--------------------------|---|
| Macedonia (2008) | 68,320 | 2,693 | 335 | 5,011 | 680 |
| Macedonia (2007) | 68,173 | 3,866 | 379 | 6,142 | 687 |
| Czech Republic | 184,250 | 3,129 | 258 | 5,541 | 3,497 |
| Bulgaria | 263,456 | 2,103 | 250 | 1,311 | 1,022 |
| Estonia | 89,493 | 1,465 | 212 | 5,047 | 3,261 |
| Cyprus | 3,663 | 1,474 | 70 | 855 | 8,076 |
| Latvia | 73,402 | 2,403 | 177 | 3,336 | 2,403 |
| Lithuania | 42,194 | 2,962 | 328 | 3,480 | 2,312 |
| Malta | 18,603 | 2,607 | 109 | 3,935 | 10,066 |
| Poland | 53,086 | 3,837 | 219 | 3,284 | 1,357 |
| Romania | 512,201 | 3,575 | 326 | 3,393 | 1,092 |
| Slovakia | 207,560 | 2,702 | 273 | 4,616 | 2,544 |
| Slovenia | 75,032 | 1,321 | 168 | 2,849 | 3,609 |
| Hungary | 48,814 | 2,643 | 240 | 2,969 | 2,589 |
| <i>New member-countries of the EU</i> | 130,980 | 2,518 | 219 | 3,385 | 3,486 |
| <i>Old member-countries of the EU</i> | 59,401 | 1,362 | 153 | 2,123 | 12,676 |
| <i>Euro zone countries</i> | 52,098 | 1,203 | 140 | 1,735 | 12,437 |
| Albania | 198,128 | 7,156 | 615 | 7,847 | 1,164 |
| Serbia | 210,457 | 2,953 | 230 | 3,134 | 535 |
| Croatia | 134,436 | 1,327 | 201 | 3,549 | 2,243 |

Source: ECB, EU Banking Structures, October 2008 and the web sites of the central bank of the countries. Data for the EU are of 2007, for Albania of 2007, for Serbia of the third quarter of 2008, and for Croatia of 2008.
*Figure for September 2008

The data for the new member countries, for the EU and for the Euro zone countries are unweighted averages.

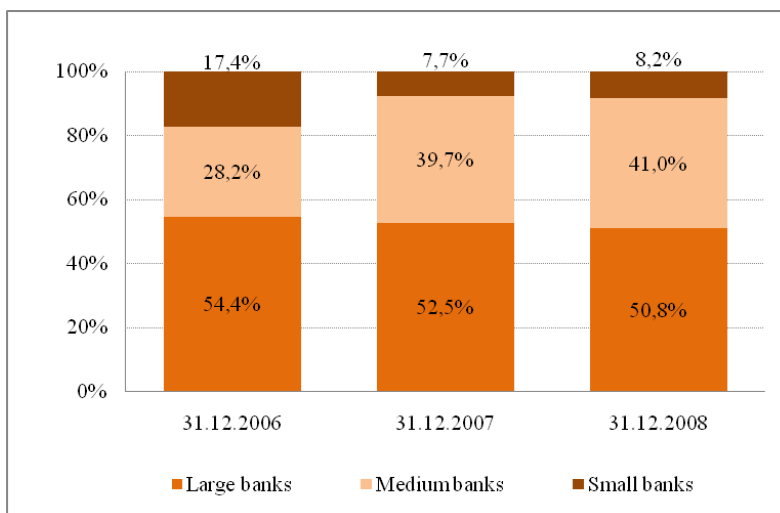
The comparative analysis indicates that households' access to banking services in the Republic of Macedonia has improved and is approaching the level present in the EU Member States. Getting closer to the banking systems of the EU Member States is especially evident in the indicator of the number of citizens per credit institution. The level of this indicator in the banking system of the Republic of Macedonia even exceeds the indicator at the level of the new EU Member States. On the other hand, the comparison of the indicator of the number of citizens per branch (subsidiary) indicates a significantly more developed business network of credit institutions and, accordingly, a better access of the citizens to banking services in the EU, at the level of the new Member States of the EU and the Euro area. During 2008, households' access to banks' services improved, measured both as a ratio of the number of citizens to the number of ATMs and a ratio of the number of citizens and the number of employees in the banking system in the Republic of Macedonia. The comparison with the banking systems of the countries from the region indicates lower level of households' access to the banking services relative to Serbia and Croatia, and a relatively better access compared with Albania. As of December 31, 2008, one employee in the banking system of the Republic of Macedonia generates Euro 680.000, on average, while one employee in the banks of all EU Member States generates Euro 12.7 million, on average. According to the same indicator, the banking system in the Republic of Macedonia is on a lower level also in comparison with the banking systems of the countries from the region, except the banking system of

Serbia. Such comparisons show that **there is a room for consolidation and increase in the activities of the banking system of the Republic of Macedonia.**

1.5. Number of employees in the banking system

The total number of employees in the banking system in the Republic of Macedonia continued to grow. As of December 31, 2008, the total number of bank employees reached 6,111 persons, which is by 721 persons or by 13.4% more compared with the end of 2007. Most of the employees in the banking system are employed with the large banks, although they register a trend of gradual decline in the share at the expense of the increased share of the employees in the group of medium banks. Relative to December 31, 2007, there is a minor increase in the share of the number of employees with the group of small banks, of 0.5 percentage points.

Figure 12
Structure of employees in the banking system, according to bank groups



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

Table 5

Qualifications structure of the employees in the banking system and by group of banks

| | 31.12.2006 | 31.12.2007 | 31.12.2008 | | | |
|------------------------|------------|------------|----------------------|-------------|--------------|-------------|
| | | | whole banking system | large banks | medium banks | small banks |
| PhD and MSc | 1.5% | 1.6% | 1.9% | 2.5% | 1.0% | 2.2% |
| University ed. | 41.4% | 47.0% | 53.5% | 47.2% | 61.4% | 52.3% |
| College ed. | 6.8% | 5.7% | 5.0% | 6.6% | 3.0% | 5.4% |
| High school ed. | 48.4% | 44.0% | 38.6% | 42.3% | 33.9% | 38.7% |
| Other ed. | 2.0% | 1.8% | 1.1% | 1.3% | 0.7% | 1.4% |

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

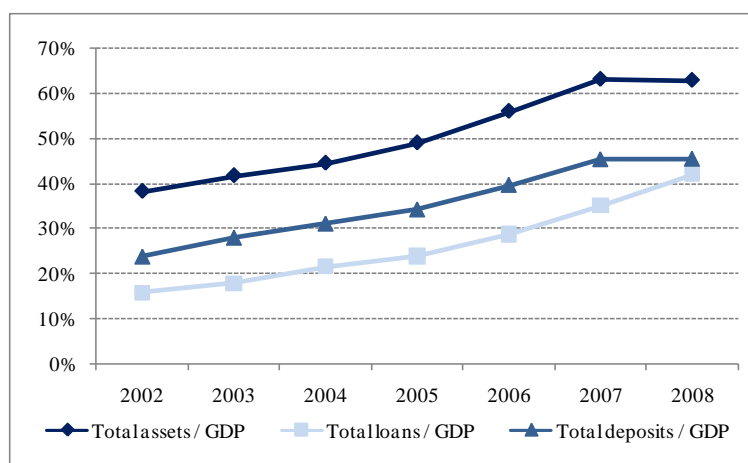
The qualitative improvement of the qualifications structure of the employees in the banks continued also during 2008. The trend of gradual increment of the share of employees with university degree (PhD, MSc and MA, and employees with university degree) at the expense of the decline in the share of the employees with lower level of education (employees with two years university degree, high school degree, etc.) continued also in 2008. At the level of the individual groups of banks, the most favorable qualifications structure of the employees is still present in the group of medium banks, where the employees with university degree (PhD, MSc and MA, and employees with university degree) exceed 60% of the total number of employees. The trend of qualitative improvement of the educational structure of the employees is expected to contribute for an additional improvement of the risk management systems, and within that framework, of the overall banks' operations.

2. Banks' activities

2.1. Degree of financial intermediation

At the end of 2008, in conditions of lower propensity to save, for the first time in the past six years stagnation in the degree of financial intermediation in the banking system of the Republic of Macedonia was registered, observed through the total assets and deposit activity. However, financial intermediation, observed through the credit activity, continued to grow. In conditions of slower deposit growth, as the dominant source of funds of the banks and tighter conditions of borrowing on the

Figure 13
Degree of financial intermediation



Source: NBRM based on data submitted by the banks.

international market, there was a minor decline in the degree of financial intermediation measured as a ratio of the total assets of the banking system to GDP⁹. At the end of 2008, this indicator was 62.9%, which is a decline of 0.2 percentage points relative to the end of 2007. The ratio of total deposits to GDP equaled 45.4%, which is almost unchanged level relative to the preceding year. On the other hand, even the slower increase in deposits, supplemented by the process of further restructuring of the banks' assets, given a stable demand for credits, was a solid basis for further continuation of the credit support for the private sector. Thus, at the end of 2008, the ratio of total credits to GDP reached 42.9%, which is an increment of 6.9 percentage points relative to the preceding year. As in the previous years, the group of large banks was dominant in the process of financial intermediation. At the end of 2008, the degree of financial intermediation of this group of banks, as a ratio of the total assets, total credits and total deposits to GDP equaled 41.6%, 29.1% and 32.6%, respectively.

Table 6
Degree of financial intermediation in different countries

| Country | Assets/GDP | Deposits/GDP | Loans/GDP |
|------------------------------|------------|--------------|-----------|
| Romania | 59.4% | 31.8% | 34.7% |
| Poland | 76.8% | 47.9% | 43.5% |
| Lithuania | 85.0% | 41.6% | 63.0% |
| Slovakia | 91.8% | 57.4% | 44.8% |
| Hungary | 107.3% | 50.6% | 64.9% |
| Bulgaria | 108.1% | 68.7% | 66.6% |
| Czech Republic | 109.8% | 72.9% | 52.8% |
| Slovenia | 129.7% | 59.1% | 87.1% |
| Estonia | 132.5% | 58.5% | 98.5% |
| Latvia | 154.6% | 72.1% | 104.3% |
| Cyprus | 588.4% | 339.0% | 264.8% |
| Malta | 700.3% | 259.6% | 374.9% |
| Euro zone | 318.5% | 112.1% | 135.8% |
| EU | 334.1% | 135.7% | 157.0% |
| Republic of Macedonia (2007) | 63.1% | 45.3% | 35.3% |
| Republic of Macedonia (2008) | 62.9% | 45.4% | 42.1% |

Source: NBRM and the Report on EU Banking Structures, ECB, October 2008. Data on the Member States of EU and the Euro area pertain to 2007

⁹ Data on GDP for 2007 is preliminary, while for 2008 it is estimated.

According to the degree of financial intermediation, the banking system of the Republic of Macedonia is still significantly behind the banking systems of the EU Member States, as well as the average levels of financial intermediation in the European Union and the Euro area. The three basic indicators (ratio of total assets, credits and deposits to GDP) show lowest level of financial intermediation in the Republic of Macedonia, compared with the other analyzed countries, except Romania.

2.2. Balance sheet of banks

In 2008, the total banks' assets grew at a much slower pace relative to the preceding years. The annual growth rate of 12.1% accomplished at the end of 2008, was the lowest growth rate registered during the past six years. Such a dynamics brought the banks' assets to the level of Denar 250,704 million, at the end of December, 2008.

Decelerated growth of the banks' assets mainly reflected the slower growth of banks' deposit base during 2008. Despite that, deposits are still dominant portion of the banks' total sources of funds, and they were the main generator of their growth. On annual level, deposits went up by Denar 20,532 million, or by 12.8%, which is the lowest annual growth rate in the past six years. Despite that, the increase in deposits generated the largest part (75.9%) of the annual growth of the banks' total sources of funds.

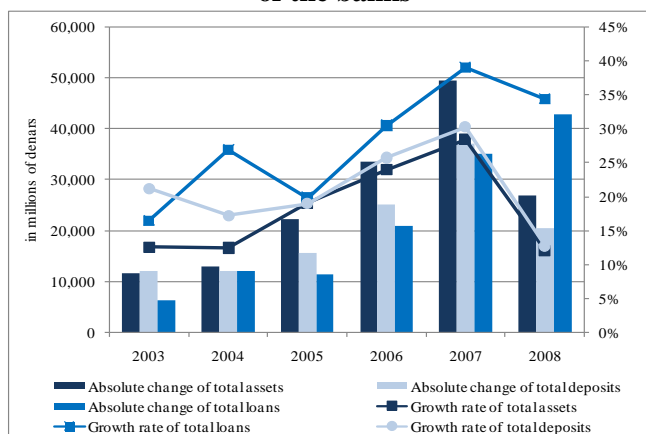
Table 7
Structure of assets and liabilities at the level of the banking system

| Balance sheet | Amount in millions of denars | | Structure | | Annual change 31.12.2008/31.12.2007 | | | |
|--|------------------------------|----------------|---------------|---------------|-------------------------------------|--------------|---|-----------------------|
| | 31.12.2007 | 31.12.2008 | 31.12.2007 | 31.12.2008 | In absolute amounts | In percent | In the structure (in percentage points) | Share in the increase |
| Cash and balances with NBRM | 22,612 | 26,979 | 10.1% | 10.8% | 4,367 | 19.3% | 0.7 | 16.1% |
| Securities portfolio | 35,497 | 28,857 | 15.9% | 11.5% | -6,640 | -18.7% | -4.4 | -24.6% |
| Placements to banks | 39,565 | 27,168 | 17.7% | 10.8% | -12,398 | -31.3% | -6.9 | -45.8% |
| Loans to non-financial entities (net) | 113,907 | 154,272 | 50.9% | 61.5% | 40,364 | 35.4% | 10.6 | 149.3% |
| Accrued interest and other assets | 4,912 | 5,260 | 2.2% | 2.1% | 348 | 7.1% | -0.1 | 1.3% |
| Fixed assets | 7,166 | 8,168 | 3.2% | 3.3% | 1,002 | 14.0% | 0.1 | 3.7% |
| Unallocated loan loss provisions | -1 | 0 | 0.0% | 0.0% | 1 | -100.0% | | 0.0% |
| Total assets | 223,659 | 250,704 | 100.0% | 100.0% | 27,045 | 12.1% | 0.0 | |
| Bank deposits | 10,482 | 12,006 | 4.7% | 4.8% | 1,524 | 14.5% | 0.1 | 5.6% |
| Deposits of non-financial entities | 160,381 | 180,913 | 71.7% | 72.2% | 20,531 | 12.8% | 0.5 | 75.9% |
| Borrowings (short-term and long-term) | 19,478 | 20,238 | 8.7% | 8.1% | 760 | 3.9% | -0.6 | 2.8% |
| Other liabilities | 6,981 | 7,688 | 3.1% | 3.1% | 706 | 10.1% | -0.1 | 2.6% |
| Provisions for off-balance sheet items | 872 | 926 | 0.4% | 0.4% | 55 | 6.3% | 0.0 | 0.2% |
| Capital and reserves | 25,465 | 28,932 | 11.4% | 11.5% | 3,467 | 13.6% | 0.2 | 12.8% |
| Total liabilities | 223,659 | 250,704 | 100.0% | 100.0% | 27,044 | 12.1% | | |

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

In spite of the deceleration relative to the preceding year, credits extended by banks continued to grow at a significantly faster pace relative to assets and deposits. In 2008, total credits went up by Denar 43,004 million, or by 34.4% on annual basis, which is a slowdown of 4.7 percentage points compared with the annual growth rate registered in 2007. Nevertheless, the credit growth in absolute terms, exceeded the growth of assets and deposits in absolute terms, for the first time in the past six years. In 2008, credit growth was by almost 60% higher than the annual

Figure 14
Annual growth of total assets, deposits and loans of the banks



Source: NBRM based on data submitted by the banks.

growth of assets in absolute terms, and more than twice (109.4%) higher than the increase in deposits.

In conditions of continuous and stable demand for credits, given a slower growth of collected deposits, the increase in the credit activity was to a large extent supported by the further restructuring of the assets of the banking system. As continuation of the trend which started in the past few years, credits increased their dominant share and formed 61.5% of the total banks' assets as of December 31, 2008. The rise in their share was accomplished primarily at the expense of the further decline in the assets placed with other banks. Additionally, at the end of 2008, for the first time in the past six years a decline in the securities portfolio was registered, and for the first time in the past four years there was a decline also in its share in the total assets.

Figure 15
Assets structure of the banking system

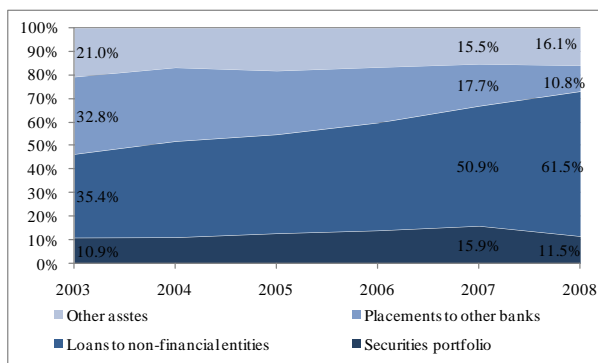
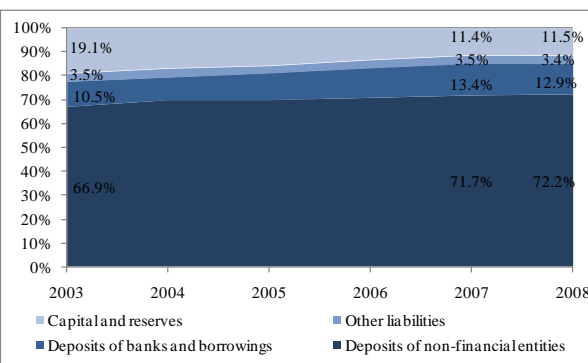


Figure 16
Liabilities structure of the banking system

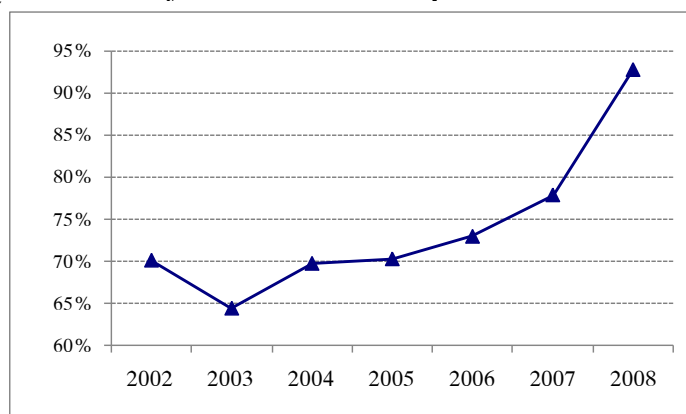


Source: NBRM based on data submitted by the banks.

On the other hand, the structure of the banks' total sources of funds was relatively more stable in the past few years. The main feature of the liabilities side is the dominance of deposits, which gradually and continuously increased their significance in the structure of the banks' total sources of funds. The next more significant category of sources of funds, besides capital and reserves, are borrowings, which despite the annual growth of Denar 760 million, as of December 31, 2008 registered a decline in share in total liabilities of 0.6 percentage points, and were reduced to 8.1% of total liabilities. All other items in the banks' liabilities had an almost unchanged share compared with the preceding year.

The relatively faster pace of credit activity compared to the increase in the total deposits, caused a significant rise in the ratio of the total loans to total deposits of the banking system, during 2008. At the end of 2008, this indicator equaled 92.8%, which is a significant annual growth of 14.9 percentage points. The high level of this indicator points to almost full utilization of the deposits as a "traditional" source of financing the credit activities. In such conditions, as well as in conditions of lower propensity to save and tighter terms of external borrowing, during 2008, increased competition among banks for taking as large portion of the deposit market as possible, was evident. Such a tendency is clearly confirmed also through the upward trend of the deposit interest rates, especially in the second half of 2008 (analyzed in more details in part 3.5. Profitability).

Figure 17
Dynamics of Loan / Deposit Ratio



Source: NBRM based on data submitted by the banks.

Despite the emphasized upward dynamics, the indicator of the total loans to deposits ratio in the Republic of Macedonia is on a relatively lower level compared with the European countries. Only in four out of thirteen analyzed countries, this indicator is on a lower level compared with the level common for the banking system of the Republic of Macedonia. At the same time, the indicator is far lower also with relation to the average level common for the Euro area and the European Union.

Figure 18
Loans / Deposits ratio in other countries

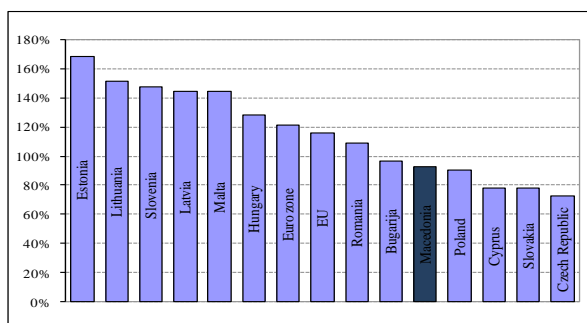
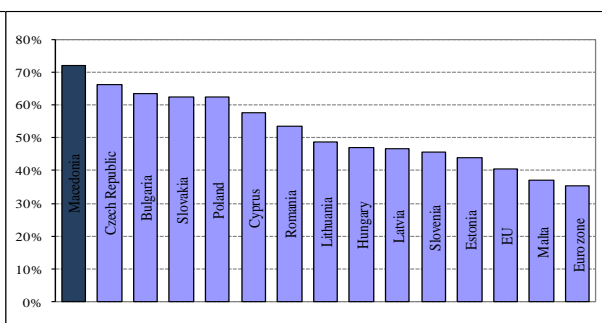


Figure 19
The share of total deposits in total liabilities in the other countries banking systems



Source: NBRM based on data submitted by the banks.

The different level of the total loans to deposits ratio in the Republic of Macedonia reflects the differences in the structure of the sources of funds among the banks in the Republic of Macedonia and the EU Member States. While the banking system of the Republic of Macedonia is for the largest part based on the so-called "traditional" sources of funds, the banks in the European Union are rather oriented toward other sources of financing of their activities, primarily issuing debt securities. However, in conditions of almost full utilization of the deposit base for financing the credit activity, in the future the banks in the Republic of Macedonia could turn toward other alternative options for attracting the savings in the domestic economy, which would mean a decline in the share of the deposits in their sources of funds. On the other hand, exactly the dominance of domestic deposits in the structure of the banks' sources of funds was one of the main factors for the resilience of the banking system to the direct effects from the international financial crisis. Additional factor which contributed to a higher level of resilience of the domestic banking system was its relatively small exposure to non-residents (both on the side of the assets and on the side of the liabilities).

The process of conversion of the assets of domestic banks placed with foreign banks into credits extended in the domestic economy, which was common for the past few years, continued also in 2008. This has additionally reduced the relative significance of the claims on non-residents in the structure of the total banks' assets. At the end of 2008, the share of the claims on non-residents in the total banks' assets was at the historically lowest level of 8.9%. Furthermore, banks are generally not inclined towards crediting non-financial entities - non-residents. As of December 31, 2008, credits extended to non-financial entities - non-residents, represent only 0.7% of the total claims on non-residents.

Figure 20
Assets structure of banks

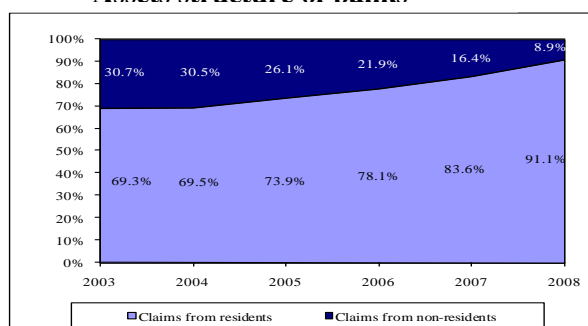
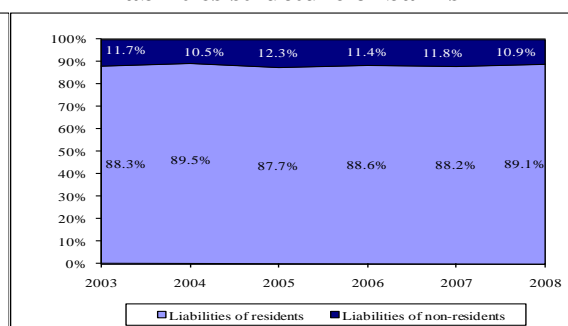


Figure 21
Liabilities structure of banks



Source: NBRM based on data submitted by the banks.

Also, in the past few years the banking system of the Republic of Macedonia has been characterized with a relatively low share of the liabilities to non-residents in its total liabilities¹⁰. As of December 31, 2008, total liabilities to non-residents comprised 10.9% of the banks' total liabilities, which is by 0.9 percentage points less relative to the previous year. Such a structure of financing of banks' activities is especially favorable under the current conditions of generally lower liquidity, deteriorated confidence and tightened terms of borrowing on the international financial markets. Borrowings and deposits from foreign banks participate with 55.8% in the structure of the liabilities to non-residents, while the share of the subordinated and hybrid capital instruments is 26% of the liabilities to non-residents.

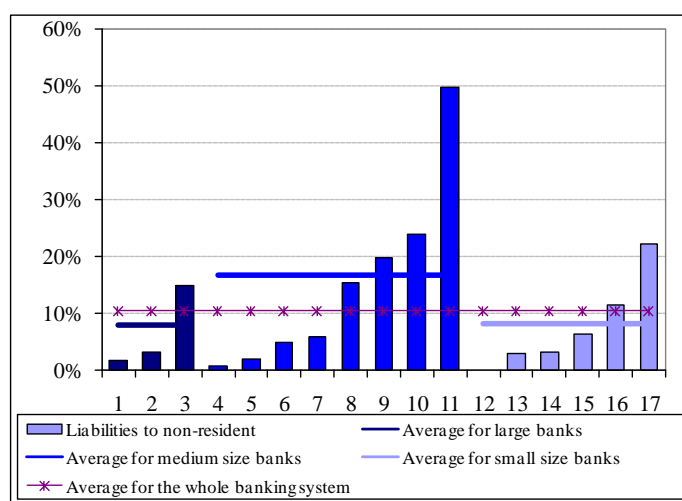
However, the analysis at the level of individual banks points to a relatively high sensitivity of certain banks to the developments on the international financial markets, as a result of the relatively high share of the liabilities to non-residents in financing of their activities. At the level of individual banks, this share ranges in an interval of 0% to significant 50%, while in seven banks it is above the average at the level of the banking system¹¹. This is especially emphasized in several medium banks, where the share of the liabilities to non-residents in the total liabilities exceeds the average of the group of medium banks, which equaled 16.6% as of December 31, 2008.

On the other hand, the lowest dependence on this source was registered in the group of large banks (7.8%), while in the group of small banks the share of the liabilities to non-residents in the total liabilities equaled 8.2%.

2.2.1. Balance sheet of the individual groups of banks

In 2008, there were no significant changes with respect to the positioning of individual groups of banks on the banking market in the Republic of Macedonia. The group of large banks maintained the dominance in the structure of the banks' total assets and sources of funds. At the same time, this group of banks registered the highest annual growth of the assets, credit activity and deposits in absolute terms, thus having the largest contribution to the annual growth of these three main balance sheet categories at the level of the banking system of 58%, 73%, and 68.7%, respectively. However, the contribution of the group of large banks to the annual growth of total balance sheet activities and collected deposits declined to some extent relative to the previous year (in 2007 the group of large banks caused 70.6% of the total growth of assets, 73% of the increase in the total credits, and 73.6% of the increase in deposits at the level of the banking system). On the other hand, as a result of the accomplished highest annual growth rate of total assets, at the end of 2008 the group of medium banks increased its share in the total assets of the banking system and caused substantial 39.1% of its annual growth. Despite the still minor significance of the group of small banks for the dynamics of the main balance sheet categories at the level of the banking system, certain positive movements were registered, especially with respect to the deposit activity of this group of

Figure 22
The share of liabilities to non-residents in total liabilities by individual bank



¹⁰ In the calculation of total liabilities, capital and reserves and the amount of unallocated gain are not included.

¹¹ The analysis does not include the Macedonian Bank for Development Promotion, ad Skopje, due to the specific character of its activities.

banks. Although at the end of 2008 the group of small banks generated only 4.5% of the total annual deposit growth, it accomplished the highest annual deposit growth rate of 22.2%.

Table 8

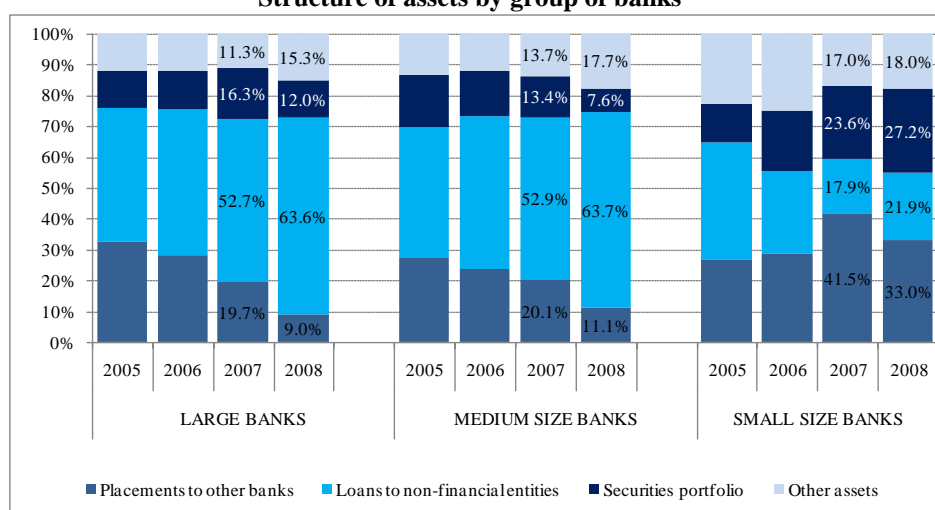
Market share and growth of the total assets, credits and deposits by group of banks

| Items | Amount in millions of denars | | Structure | | Annual change 31.12.08/31.12.07 | | | |
|---|------------------------------|----------------|---------------|---------------|---------------------------------|--------------|----------------------------------|-----------------------|
| | 31.12.2007 | 31.12.2008 | 31.12.2007 | 31.12.2008 | In absolute amount | In percent | structure (in percentage points) | Share in the increase |
| Total assets | 223,659 | 250,704 | 100.0% | 100.0% | 27,044 | 12.1% | | 100.0% |
| - Large banks | 150,122 | 165,798 | 67.1% | 66.1% | 15,675 | 10.4% | -1.0 | 58.0% |
| - Medium size banks | 61,571 | 72,136 | 27.5% | 28.8% | 10,565 | 17.2% | 1.2 | 39.1% |
| - Small size banks | 11,966 | 12,770 | 5.3% | 5.1% | 804 | 6.7% | -0.3 | 3.0% |
| Loans to non-financial entities | 124,904 | 167,907 | 100.0% | 100.0% | 43,003 | 34.4% | | 100.0% |
| - Large banks | 87,774 | 115,826 | 70.3% | 69.0% | 28,052 | 32.0% | -1.3 | 65.2% |
| - Medium size banks | 34,083 | 48,250 | 27.3% | 28.7% | 14,167 | 41.6% | 1.4 | 32.9% |
| - Small size banks | 3,048 | 3,831 | 2.4% | 2.3% | 783 | 25.7% | -0.2 | 1.8% |
| Deposits of non-financial entities | 160,381 | 180,913 | 100.0% | 100.0% | 20,531 | 12.8% | | 100.0% |
| - Large banks | 115,798 | 129,909 | 72.2% | 71.8% | 14,111 | 12.2% | -0.4 | 68.7% |
| - Medium size banks | 40,438 | 45,941 | 25.2% | 25.4% | 5,502 | 13.6% | 0.2 | 26.8% |
| - Small size banks | 4,145 | 5,063 | 2.6% | 2.8% | 918 | 22.2% | 0.2 | 4.5% |

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

Such movements of these balance sheet categories in the individual groups of banks were accompanied by respective structural changes in their assets. There are, however, still significant differences in the structure of the assets of individual groups of banks. As in the previous years, dominant in the assets structure of the groups of large and medium banks are the credits to non-financial entities. The increase in the share of credits came at the expense of the smaller significance of the securities portfolio and placements with other banks. Such structural changes in the assets in these two groups of banks are complementary with those at the level of the entire banking system. On the other hand, despite the increased share of credits in the total assets in the group of small banks relative to 2007, it is still significantly lower, at the expense of the higher share of the placements with other banks and the securities portfolio. During 2008, only with this group of banks the share of the securities portfolio increased by 3.6 percentage points.

Figure 23
Structure of assets by group of banks¹²

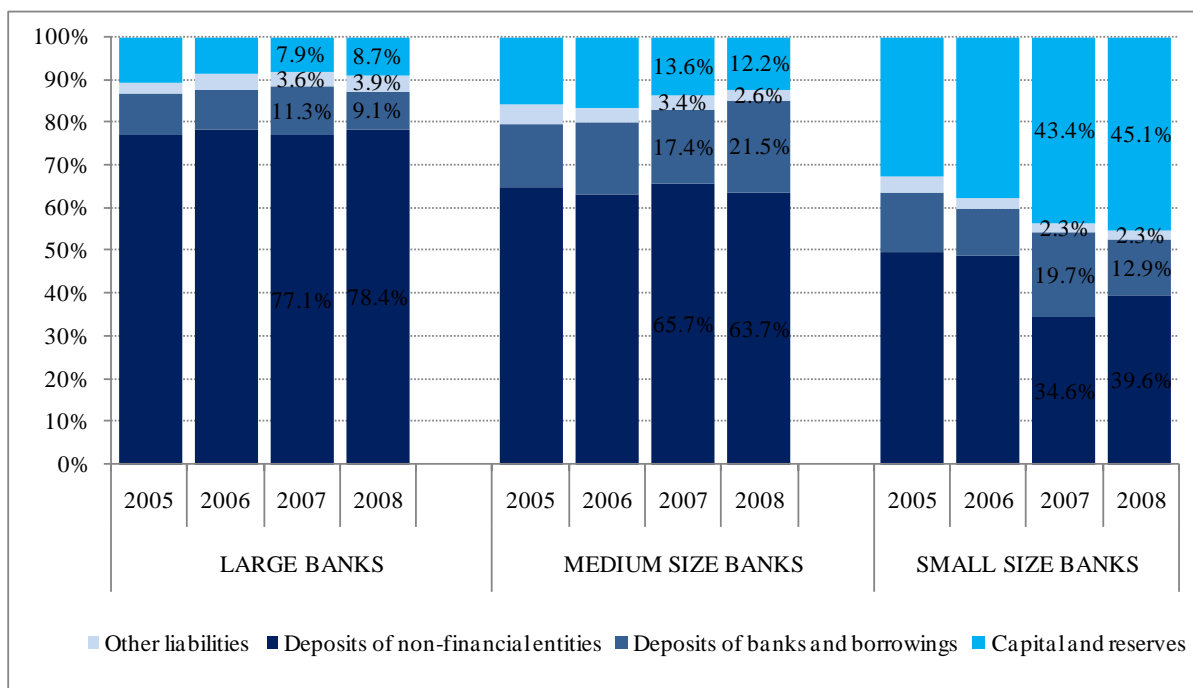


Source: NBRM based on data submitted by the banks.

¹² Part of the significant changes in the structure of banks' assets in 2007, relative to 2006 comes as a result of the structural changes in the composition of the groups of banks, i.e. transfer of banks from the group of small to the group of medium banks.

The structural analysis of liabilities, also reveals differences at the level of the individual groups of banks. With the groups of large banks and medium banks, deposits of non-financial entities represent the most significant source of financing of their activities. This is especially common for the group of large banks, which as of December 31, 2008 financed 78.4% of its total activities with this source of funds.

Figure 24
Structure of liabilities by group of banks¹³



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

In the group of medium banks, the somewhat lower structural share of this source of funds was compensated with the higher level of indebtedness. In comparison with 2007, this group of banks registered an increase in the share of the so-called "secondary" sources of funds, which reached a level far higher than the average for the banking sector (12.9%). The group of small banks finances far smaller part of its activities with the deposit base, at the expense of the higher share of capital and reserves.

Effects from the crisis on the international financial markets on the banks in the Republic of Macedonia

Current developments in the countries of South-Eastern Europe, including the Republic of Macedonia have shown that the economies of these countries were not immune to the influence of the crisis on the international financial markets. Despite the opinion that prevailed so far, that these countries will not feel its effects, it became evident that through certain direct or indirect transmission channels the crisis on the international financial markets spilled over to their economies and banking systems. The Republic of Macedonia, as a small and open economy, has not avoided such influences.

Direct transmission channels, which include: the direct exposure to the market of structured credit products (*so-called market channel*), dependence on international financial markets in providing the sources of funds (*so-called channel of the sources of funds*) and exposure to the financial institutions hit by the crisis (*so-called credit channel*), had no influence on the banking system of the Republic of Macedonia. The negative effects from the so-called market channel and credit channel, were not felt at all, in conditions when the banks in the Republic of Macedonia did not have any investments in the structured credit products market and had no

¹³ Part of the significant changes in the structure of banks' liabilities in 2007, relative to 2006 comes as a result of the structural changes in the composition of the groups of banks, i.e. transfer of banks from the group of small to the group of medium banks.

credit exposure to the financial institutions hit by the crisis. At the same time, the current structure of the sources of funds of the banking system of the Republic of Macedonia, which is characterized by a significant share of the domestic sources of funds, was a sufficient precondition for avoiding the materialization of the effects from the so-called channel of the sources of funds, in the current operations of the banks. However, as a result of the relatively greater dependence on the non-resident sources in the financing of their activities, certain banks show a relatively higher sensitivity to the movements on the international financial markets. Given the current circumstances of generally lower liquidity, deteriorated confidence and tighter terms of borrowing on the international financial markets, it could have significant negative consequences for the further operations of these banks.

The so-called indirect transmission channels, primarily *the channel of the real sector* and the effects of the *psychologically induced pressures*, have a more significant influence on the banking system in the Republic of Macedonia. The expected slowdown of the economic growth in the countries that are the main trading partners of the Republic of Macedonia and the subsequent decline in the export demand, the fall in the prices and in the demand for metals, as well as the expectations for deceleration of the overall economic growth in the country, could have an adverse impact on the quality of the credit exposure to the enterprises and, generally, the entire credit portfolio of banks. At the same time, these factors, along with the tightening of the banks' credit policy as a prudent response to the effects of the world financial crisis, could lead to deceleration of the credit support for the real sector and additional slowdown of the economic growth also in the domestic economy. The effects of the psychologically induced pressures were materialized through temporary deterioration of the confidence in the banking sector, expressed through a contraction of the banks' deposit base, especially in the last quarter of 2008. Also, in conditions of a significant degree of currency substitution present in the domestic economy, under the influence of the uncertainty created by the developments on the international financial markets, a change occurred in the expectations of the economic agents, followed by a currency transformation of banks' deposits.

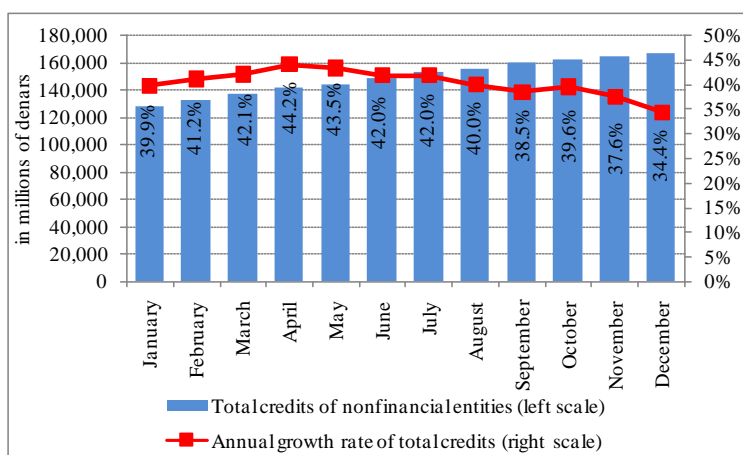
Contrary to the central banks in the developed market economies, which reacted to the crisis with a reduction of the reference interest rates, the National Bank of the Republic of Macedonia reacted with an increased restrictiveness of the monetary policy, primarily due to the current deterioration, as well as the uncertainty about the future movement of the basic macroeconomic variables. The measures undertaken by the NBRM were not only a reaction to the effects of the crisis. On the contrary, these were preventive activities of the central bank, which are expected to have a significant positive influence on the mitigation of the negative consequences from the international financial crisis for the domestic banking system.

2.3. Banks' lending activity - credits to nonfinancial entities

In 2008, the banks' lending activity was growing at a slower pace, particularly in the second half of the year. Such pace of the banks' lending activity was under the influence of the macro-prudential measures of the National Bank¹⁴, as well as the changed perceptions of the banks themselves reflected through the tightening of their lending policies. These factors were directed towards and particularly affected the pace of the lending to households which slowed down significantly compared to the preceding year. On the other hand, the lending to the corporate sector was characterized with relatively stable and slightly higher growth rate compared to 2007. These factors, along with the relatively high degree of utilization of the deposit core for funding the lending activity and the stricter lending terms on the international financial markets are expected to further hold up the pace of the lending activity of banks in the Republic of Macedonia.

At the end of 2008, the total credits to nonfinancial entities grew by 34.4%¹⁵ on annual basis, which is a certain slowdown compared to 2007, when the annual credit growth rate equaled 39.1%. The slowdown, which started in May, was particularly evident in the second half of the year, when the annual growth rates were registering a downtrend at the end of almost all months (except for October). In line with such dynamics, on December 31, 2008, the total credits to nonfinancial entities reached Denar 167,908 million. The group of large banks was the greatest contributor to the increase in the total credits, with 65.2%. On the other hand, the group of medium-size banks

Figure 25
Dynamics and annual growth rates
of the total credits to nonfinancial entities in 2008



Source: NBRM based on data submitted by the banks.

registered the highest relative annual growth of 41.6% in the total credits to nonfinancial entities. While in the previous years the small-size banks' lending activity registered a downtrend, at the end of 2008, this group reported an annual credit growth of 25.7%. This positive development of the lending activity of the group of small-size banks was largely a reflection of the changes in the ownership structure and the consequent changes in the operations in some small-size banks.

¹⁴Starting from February 2008, the interest rate on CB bills has increased on several occasions. In March 2008 the treatment of claims on credit cards and current account overdrafts was stricter when calculating the banks' capital adequacy ratio. Additionally, a measure was adopted at the end of June 2008 for subscribing a compulsory deposit with NBRM by the banks and savings houses, provided that at the end of a certain month, the household credit growth rate exceeds the growth rate set by the NBRM.

¹⁵ This change includes the effects from the newly approved credits, credit recovery and credit write-offs from December 31, 2007 to December 31, 2008.

Figure 26
Dynamics and annual growth rates of the total credits to nonfinancial entities

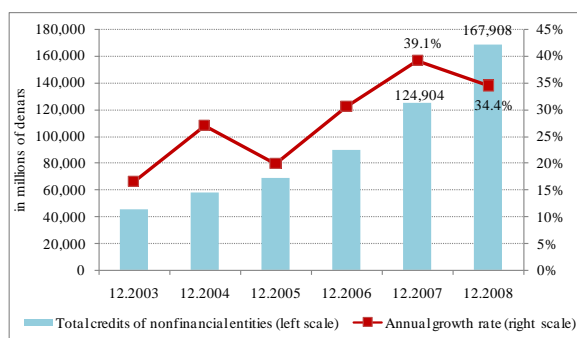
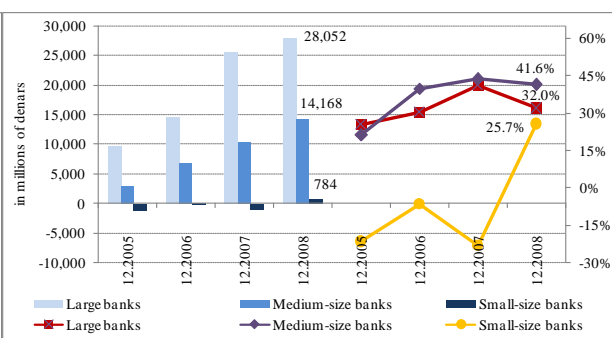


Figure 27
Absolute and relative change in the total credits, by group of banks



Source: NBRM based on data submitted by the banks.

The lending activity also slowed down from the aspect of the dynamics of the banks' newly approved credits¹⁶. The newly approved credits totaled Denar 147,506 million in 2008, which is by Denar 35,649 million more relative to 2007. The newly approved credits grew by 31.9% annually, which is by 16.8 percentage points less, compared to the growth rate of the last year. The slowdown in the dynamics of the newly approved credits was the most evident in the last quarter of the year, given the strong influence of the everyday adverse developments on the international financial scene and the uncertainty caused by the expected effects on the Macedonian economy. Thus, November, for the first time in the last few years, registered a negative annual change (decrease) in the amount of the newly approved credits.

Figure 28
Dynamics and annual growth rates of the newly approved credits

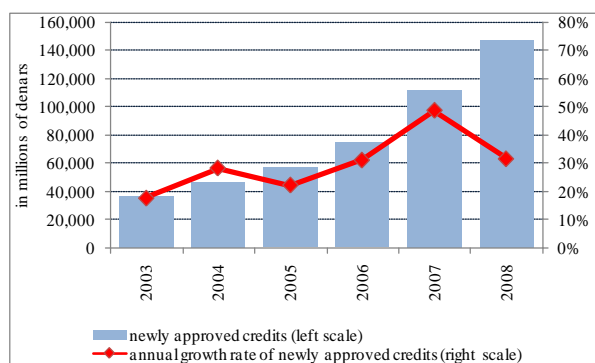
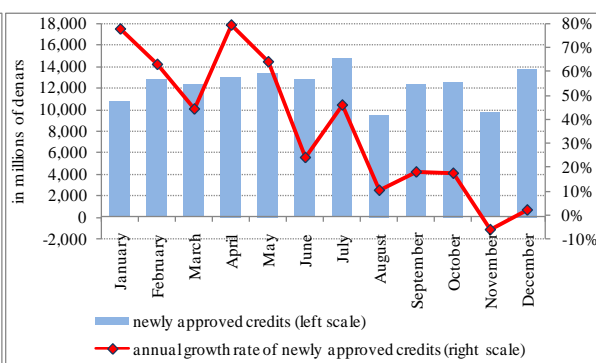


Figure 29
Monthly amount of newly approved credits and annual growth rates of the newly approved credits in 2008



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

The slowdown in the lending activity, especially in the last quarter of 2008, corresponds with the change in the banks' perceptions and the tightening of their lending policies. The results from the Banks' Lending Activity Survey¹⁷ show stricter terms of lending to the corporate and the household sector starting from the last quarter of 2008. While the lending terms in the first three quarters of 2008 remained mostly unchanged, the tightening of the lending policy in the last quarter was made primarily through the increase in the interest rates. In environment of relatively high uncertainty and unfavorable expectations for the future trajectory of the macroeconomic developments primarily in the domestic economy, the banks in the first quarter of 2009 expect further tightening of the lending terms to the households and the corporations. Given the

¹⁶ Report on new and renewed credits the banks submit on a monthly basis.

¹⁷ Since July 2006, the NBRM conducts regular quarterly Banks' Lending Activity Survey.

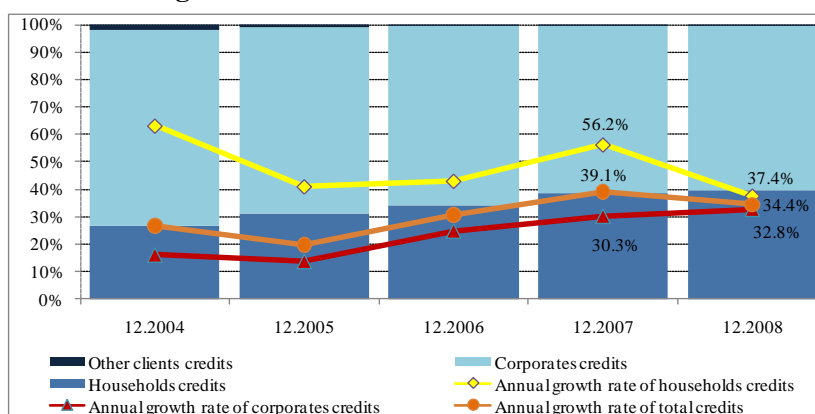
above, the demand for credits of the both sectors, the households in particular, is expected to reduce partially.

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

Notwithstanding the considerable slowdown, the rate of lending to households was faster compared to the rate of lending to corporations on annual basis. Such pace of lending to these sectors

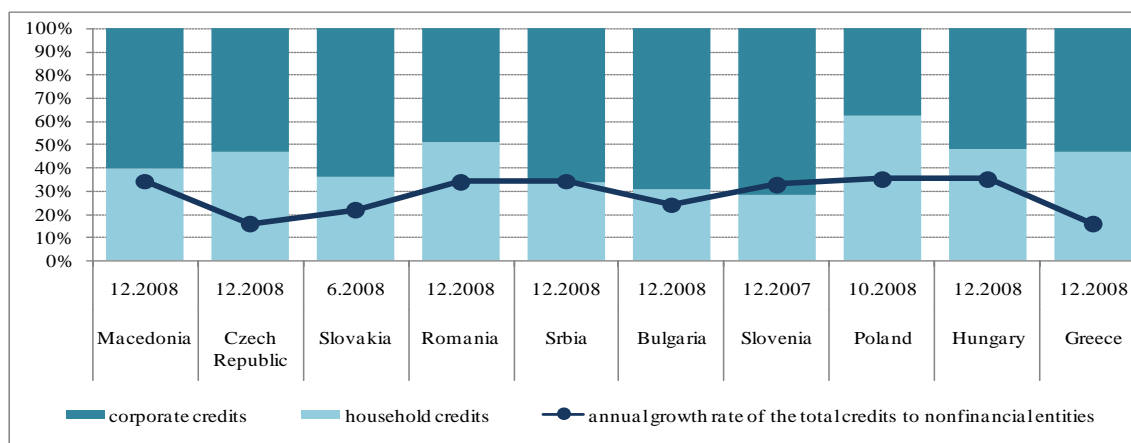
caused no considerable changes in the sector structure of the total credits, which is still characterized with dominant share of the corporate credits. At the end of 2008, the corporate credits constituted 60.0% of the total credits to nonfinancial entities, compared to the share of the household credits of 39.5%. The corporate credits were also the major driving force of the increase in the total credits. With an annual growth of Denar 24,885 million, they created 57.9% of the annual growth in the total credits. On the other hand, the household credits increased by Denar 18,049 million, or by 37.4% on annual basis, which is significant slowdown compared to the annual growth in 2007. In the sector structure of the total credits to nonfinancial entities, the credits to other clients¹⁸ went down steadily, and at the end of 2008 they made up only 0.5% of the total credits.

Figure 30
Sector structure of the total credits to nonfinancial entities and annual growth rates



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

Figure 31
Sector-by-sector structural and annual growth rate of the total credits to nonfinancial entities, by country



Source: Reports of central banks of other countries.

* The data on total credits to nonfinancial entities in Poland include only credits to residents

¹⁸ Other clients include nonprofit nonfinancial organizations, nongovernmental organizations, nonresidents, and alike.

Typical for the lending activity of the banks in the Republic of Macedonia is the relatively similar sector structure and dynamics with the banking systems of the countries region-wide. The corporate credits further dominate the total credits to nonfinancial entities, except for the banking systems of Poland and Romania, where the credits approved to this sector constitute less than 50% of the total credits. Simultaneously, the annual growth rate of the lending activity of the banking system of the Republic of Macedonia is almost the same as the growth rates in the other countries subject to analysis, except for Czech Republic, Slovakia and Greece where the annual growth rate of credits was below 20%.

Figure 32
Structure of credit exposure to corporates and other clients, by their activity

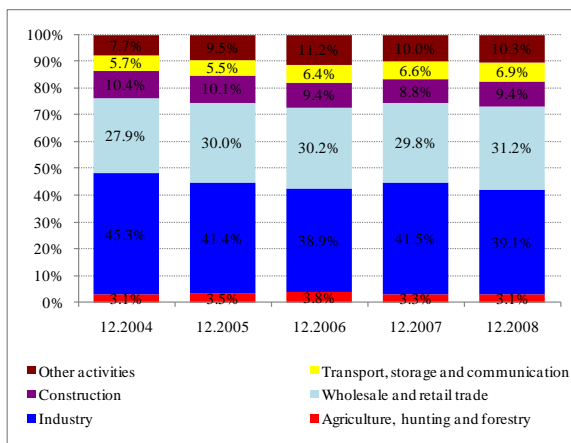
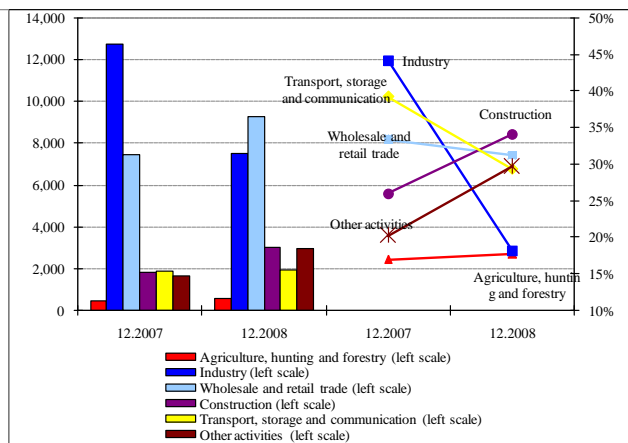


Figure 33
Absolute and relative annual change in the credit exposure to corporates and other clients by their activity



Source: NBRM based on data submitted by the banks.

The credit exposure¹⁹ to the industry and the retail sales and wholesales kept its dominant position in the structure of the total banks' credit exposure to the corporations and other clients sector. However, as a result of the considerable slowdown of the increase in the exposure to the activity of industry, its share registered a certain slowdown compared to the preceding year. On December 31, 2008, the credit exposure to the activity of industry went up by Denar 7,502 million annually, constituting slightly less than 60% of the increase in the preceding year. In addition, the annual growth rate of 18.1% is by substantial 26.1 percentage points lower compared to 2007. Certain slowdown in the growth rate of the wholesales and the retail sales was evident only from the aspect of the annual growth rate of 31.2%, which is by 2.2 percentage points less compared to the preceding year. On the other hand, this activity registered the highest absolute annual growth of Denar 9,292 million and the highest contribution of 36.7% to the total annual growth of the exposure to the corporations and other clients sector. The other activities reported minor changes in their shares in the structure of credit exposure to the corporations and other clients sector.

No considerable changes were registered in the structure of credit exposure to the household sector, by the purpose, at the end of 2008. Most important types of credit products the banks offer to the households are the credit cards and the various types of consumer credits. Also, the credit exposure based on credit cards registered the highest absolute annual growth and contributed the most (27.5%) to the annual growth in the total credit exposure to the households. However, its contribution decreased compared to the end of 2007, when the increase in the exposure based on credit cards constituted more than a half of the total increase in the exposure to households. The consumer credits and the credits for housing and business premises, which in 2008 reported an increase of 24.7% and 45.0%, respectively, made a considerable contribution of 23.1% and 22.8%,

¹⁹ The banks' credit exposure, besides the credits, includes the claims on other bases (interest, fees, advances, investments in equities), as well as uncovered guarantees, uncovered LCs and other potential banks' claims which reflect a credit risk.

respectively, to the total growth in the exposure to households. In spite of the highest relative annual growth of 76.5%, the credit exposure based on automobile credits still has the lowest share in the total exposure to the households.

Figure 34
Structure of the credit exposure to households, by a type of credit product

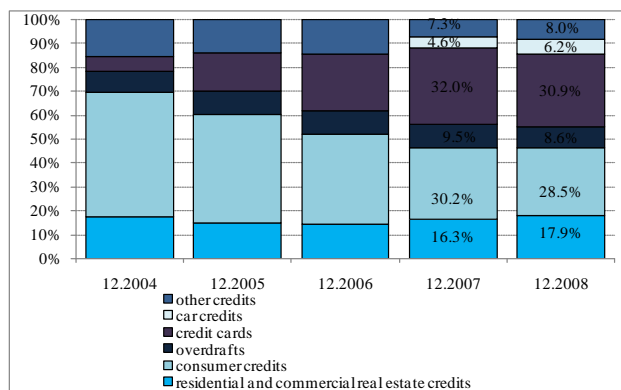
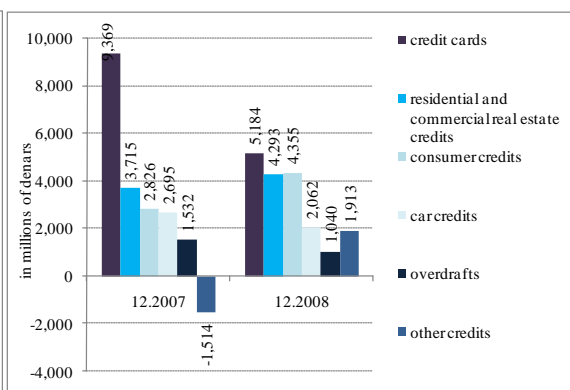


Figure 35
Absolute annual change in the credit exposure to household, by a type of credit product



Source: NBRM based on data submitted by the banks.

The increase in the credit exposure based on credit cards corresponded with the uptrend of the banks' activities related to the issuance of payment cards. In 2008 relative to December 31, 2007, the number of payment cards issued by the banks in the Republic of Macedonia increased by 86,470 or by 46.2%. Typical for these bank activities is the high degree of concentration. The group of large banks has the highest share in the total number of cards in circulation (71.4%), and the greatest contribution to the total growth in the number of payment cards (69%). Besides the decrease of 99 index points compared to the preceding year, on December 31, 2008, the Herfindahl index related to payment card operations is still relatively high (1,901). The relatively high level of concentration is also proved by the CR5 indicator, which on December 31, 2008 equaled 87.1% (91.3% on December 31, 2007).

Figure 36
Dynamics and increase in the number of issued payment cards

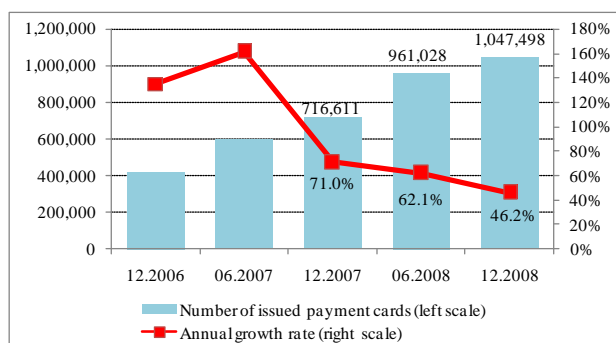
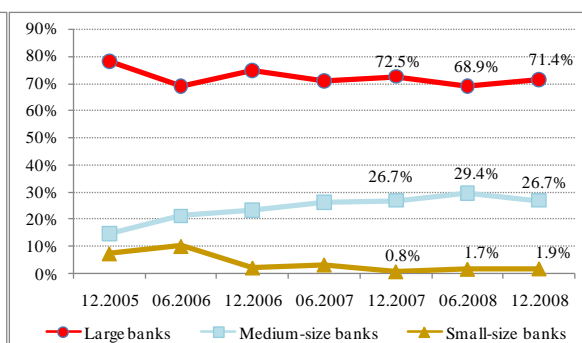


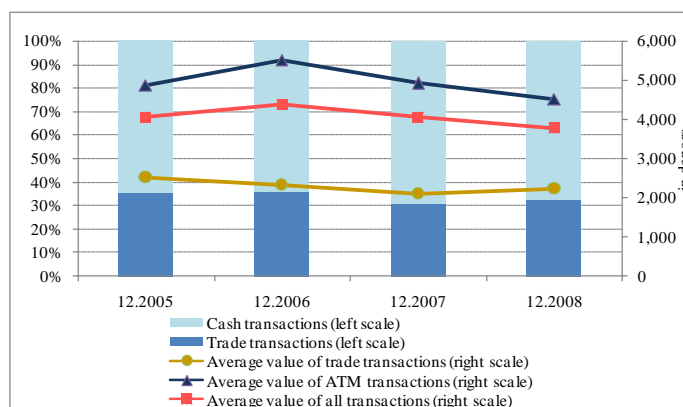
Figure 37
Structure of issued payment cards by group of banks



Source: NBRM based on data submitted by the banks.

Figure 38
Structure of payment cards transactions and average value of transactions

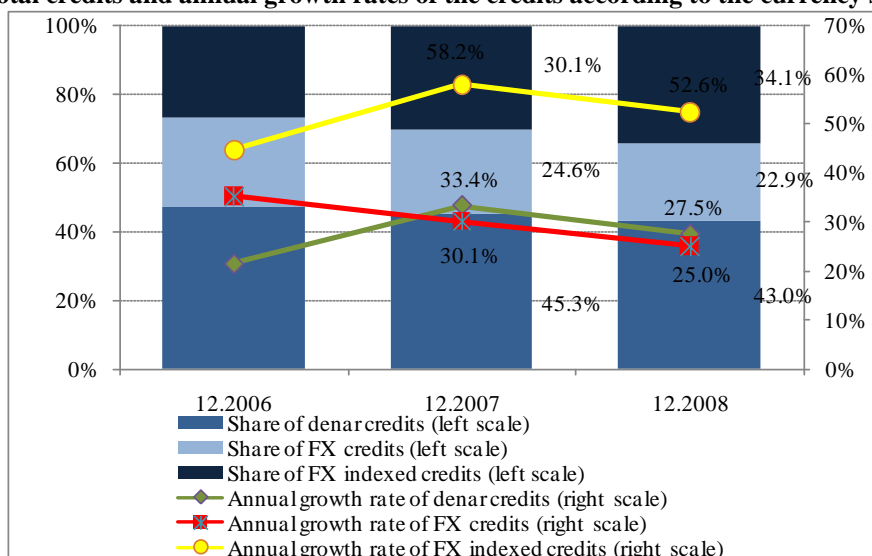
In 2008, the payment cards were still used for cash transactions rather than for trade payments. Thus, 64.9% were cash withdrawal transactions from ATMs, and 35.1% were trade transactions. Compared to 2007, the average value of the ATM transactions reduced and equaled Denar 4.5 thousand, whereas the trade transactions value increased and amounted to Denar 3.8 thousand, on average.



Source: NBRM based on data submitted by the banks.

The slowdown in the banks' credit activity is also illustrated in the analysis of its currency structure. However, in spite of the slowdown, in 2008, the lending with FX clause to nonfinancial entities continued going up in the fastest pace. These credits reported the highest absolute and relative annual increase, thus contributing with 45.9% to the growth in the total credits to nonfinancial entities. The foreign currency credits registered relatively lower annual growth rate in 2008. In spite of the slowdown in the growth of the credits with FX component²⁰, at the end of 2008, their presence in the banks' credit portfolio rose, and reached 57%, indicating the significant propensity of the Macedonian banks to use exchange rate risk hedging clauses. The annual growth rate of the Denar credits also slowed down, and in 2008 they were increasing in relatively slower pace. As a result of such dynamics, their share in the structure of the total credits to the nonfinancial entities further decreased.

Figure 39
Share in the total credits and annual growth rates of the credits according to the currency structure



Source: NBRM based on data submitted by the banks

In 2008, same as in the previous years, most of the credit support to the corporations and other clients sector by the banks was in the form of Denar lending with FX clause. The Denar credits with FX clause approved to this sector in 2008, registered the highest absolute and relative growth, accounting for considerable 51.7% of the total growth in the lending to corporations

²⁰ Credits with foreign currency component include foreign currency credits and Denars credits with FX clause.

and other clients sector. Such increase brought about 6.7 percentage points rise in their share in the currency structure of the lending activity to the corporations and other clients sector. On the other hand, as a result of the considerably lower absolute and relative growth, the share of the Denar and foreign currency credits was reduced by 3.3 and 3.5 percentage points, respectively. **At the end of 2008, the credit exposure with currency components to all activities within the corporations and other clients sector prevails in the structure of the total credit exposure** (Annex 4 - Currency structure of the credit exposure to corporations and other clients by activity).

Figure 40
Currency structure of credits to corporations and other clients sector

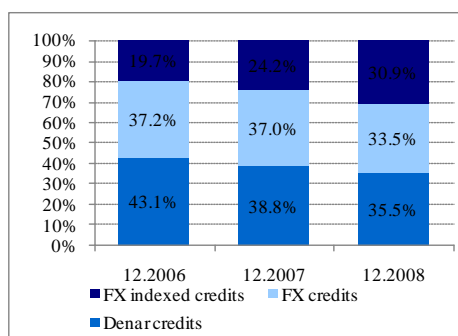
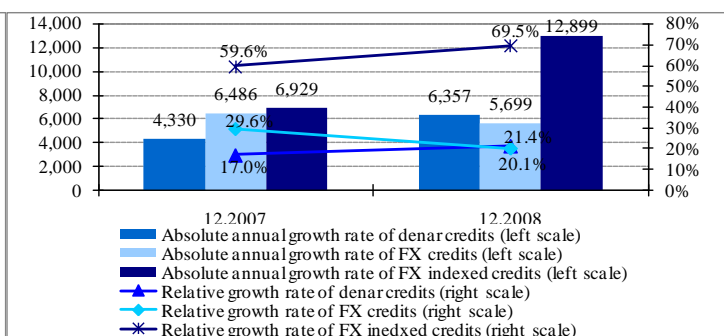


Figure 41
Annual growth in the credits to corporations and other clients sector by currency structure



Source: NBRM based on data submitted by the banks.

On the other hand, in spite of the slower growth in 2008, the Denar lending prevails in the structure and the household credit growth. Compared to the preceding year, when the household Denar credits were increasing in the fastest pace, in 2008, they registered the lowest annual growth rate. However, the Denar credits, by registering the highest annual absolute growth, were the major driving force of the increase in the total household credits (contributing with 51.1%), keeping the dominant position in their structure. In 2008, the household Denar credits with FX clause also registered a slowdown in their absolute and relative growth. While the foreign currency credits registered the highest annual growth rate in this sector, considering their low share, they have no significant contribution to the uptrend of the total credits of this sector. **At the end of 2008, the currency structure of the types of credit products to the households registered no substantial changes.** The Denar lending with FX clause was typical for the housing and automobile credits. On the other hand, the Denar component prevails in the consumer credits, credit cards and current account overdrafts (Annex 4 - Currency structure of the credit exposure to households, by credit product).

Figure 42
Currency structure of the household credits

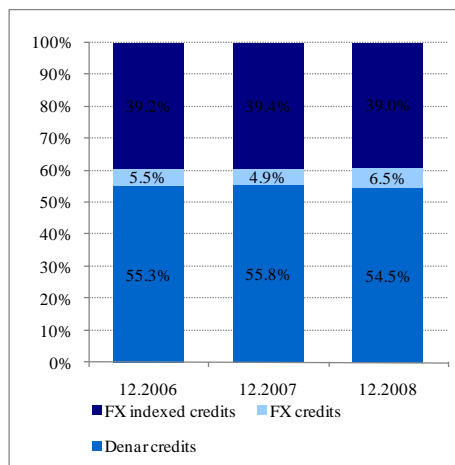
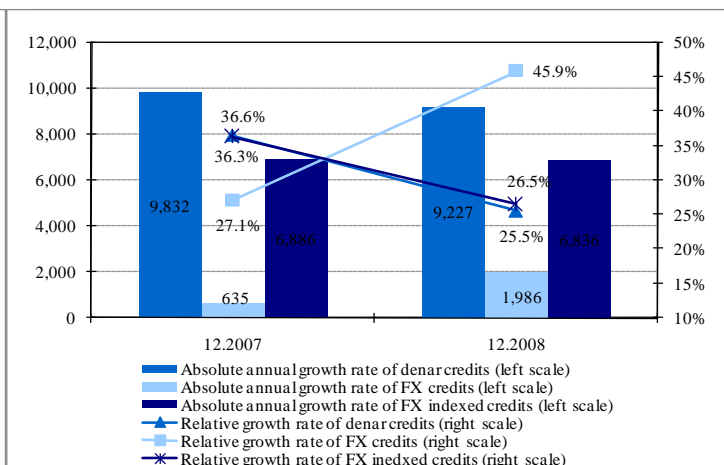


Figure 43
Annual growth in the household credits



Source: NBRM based on data submitted by the banks.

The slowdown in the banks' lending activity is also demonstrated in the analysis of its maturity structure. The short-term and long-term lending registered a slower relative growth, compared to the annual growth rate of these credits in 2007. However, the long-term credits remained dominant in the structure of total credits, constituting the largest portion of their growth. These credits, with their highest absolute annual growth of Denar 25,535 million, contributed with 60.3% of the total annual increase in the lending activity to nonfinancial entities in 2008. Moreover, these credits also had the greatest contribution of 53.1% and 68.2% to the total growth of the credits to the corporate and household sectors, respectively (Annex 3 - Structure of credits to nonfinancial entities) in 2008, **the short-term lending** registered the highest relative growth of 40%, thus contributing to further increase in its share in the structure of total credits. These credits reported faster relative growth of 41.4% to the corporate sector, compared to the households, where the growth rate of these credits equaled 36.0%. **Nonperforming credits**, after the two-year downtrend, in 2008 registered an increase of Denar 1,937 million, having a proportionate effect on the banks' credit portfolio quality. Yet, as a result of the faster growth in the other credit categories, the share of nonperforming credits in the total bank credits further decreased at the end of 2008.

Figure 44
Maturity structure of the total credits to nonfinancial entities

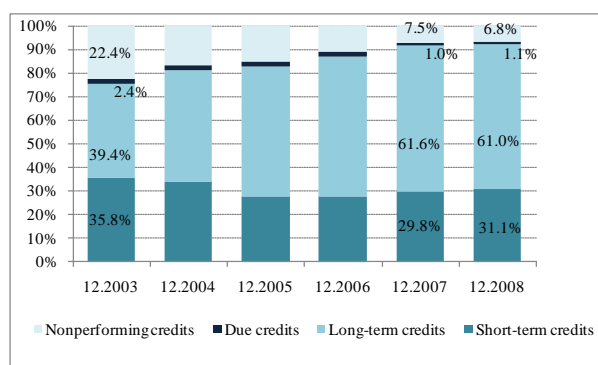
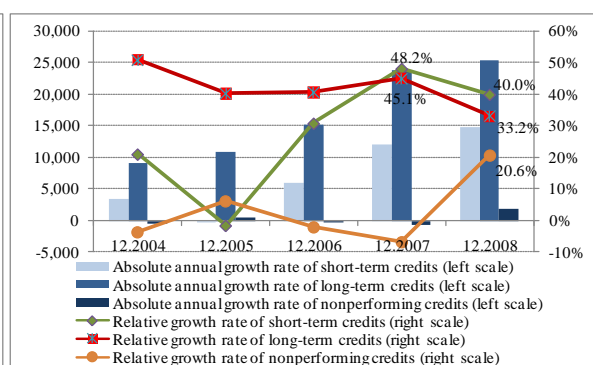


Figure 45
Absolute and relative annual growth in the total credits, by maturity



Source: NBRM based on data submitted by the banks.

At the end of 2008, the group of large banks remained dominant in the lending activity of the banking system in the Republic of Macedonia. However, compared to the preceding year, its share in the credit market in the Republic of Macedonia registered a certain decrease, whereas the share of the group of medium-size banks increased.

Table 9
Distribution of credits to nonfinancial entities, by group of banks

| Structures of credits | | 31.12.2007 | | | | 31.12.2008 | | | |
|-----------------------|----------------|-------------|-------------------|------------------|--------|-------------|-------------------|------------------|--------|
| | | Large banks | Medium-size banks | Small-size banks | Total | Large banks | Medium-size banks | Small-size banks | Total |
| Sector structure | Enterprises | 72.5% | 25.5% | 2.0% | 100.0% | 71.3% | 26.7% | 2.0% | 100.0% |
| | Households | 66.8% | 30.4% | 2.8% | 100.0% | 65.4% | 32.2% | 2.4% | 99.9% |
| | Other clients | 74.9% | 2.4% | 22.7% | 100.0% | 68.0% | 7.6% | 24.4% | 100.0% |
| Maturity structure | Short-term | 76.8% | 20.7% | 2.5% | 100.0% | 75.4% | 22.8% | 1.8% | 100.0% |
| | Long-term | 66.3% | 32.0% | 1.7% | 100.0% | 65.7% | 32.4% | 1.9% | 100.0% |
| | Due | 48.0% | 47.6% | 4.4% | 100.0% | 54.5% | 40.3% | 5.2% | 100.0% |
| | Non-performing | 80.0% | 11.9% | 8.1% | 100.0% | 71.2% | 21.2% | 7.6% | 100.0% |
| Currency structure | Denar | 70.2% | 25.0% | 4.8% | 100.0% | 70.9% | 24.8% | 4.3% | 100.0% |
| | FX indexed | 64.8% | 34.5% | 0.7% | 100.0% | 63.4% | 35.5% | 1.2% | 100.0% |
| | FX | 77.1% | 22.7% | 0.2% | 100.0% | 73.7% | 26.2% | 0.1% | 100.0% |

Source: NBRM based on data submitted by the banks.

The corporate credits and the long-term credits dominate the structure of the total credits in all groups of banks. Relative to 2007, the groups of large and medium-size banks reported higher share of credits to households, compared to the higher share of the credits to companies, which is typical for the group of small-size banks.

Table 10
Structural features of the credits to nonfinancial entities, by group of banks

| Structures of credits | | 31.12.2007 | | | 31.12.2008 | | |
|-----------------------|----------------|---------------|-------------------|------------------|---------------|-------------------|------------------|
| | | Large banks | Medium-size banks | Small-size banks | Large banks | Medium-size banks | Small-size banks |
| Sector structure | Enterprises | 62.7% | 56.9% | 49.5% | 62.1% | 55.7% | 53.6% |
| | Households | 36.6% | 43.0% | 44.8% | 37.4% | 44.2% | 41.0% |
| | Other clients | 0.7% | 0.1% | 5.7% | 0.5% | 0.1% | 5.4% |
| | Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Maturity structure | Short-term | 32.6% | 22.7% | 30.6% | 33.9% | 24.6% | 25.0% |
| | Long-term | 58.1% | 72.2% | 42.7% | 58.2% | 68.8% | 49.8% |
| | Due | 0.7% | 1.8% | 1.8% | 0.9% | 1.6% | 2.6% |
| | non-performing | 8.6% | 3.3% | 24.9% | 7.0% | 5.0% | 22.6% |
| | Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Currency structure | Denar | 45.3% | 41.5% | 89.1% | 44.2% | 37.0% | 81.7% |
| | FX indexed | 27.7% | 38.0% | 8.6% | 31.3% | 42.1% | 17.4% |
| | FX | 27.0% | 20.5% | 2.3% | 24.5% | 20.9% | 0.9% |
| | Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

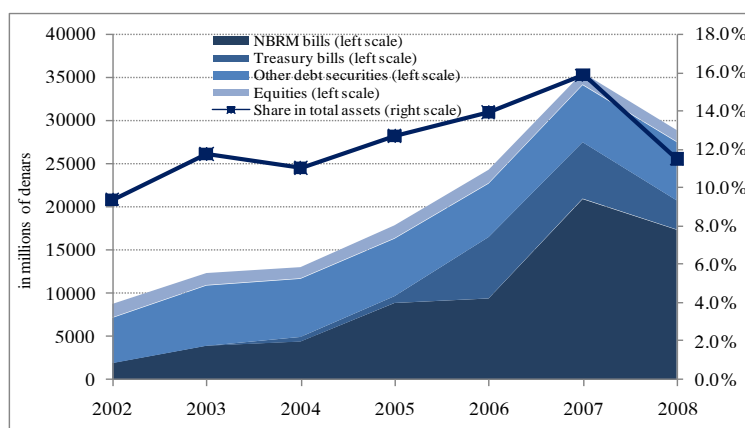
Source: NBRM based on data submitted by the banks.

All groups of banks reported higher share of the credits with currency component. However, at the end of 2008, the group of small-size banks still registered the highest share of Denar lending compared to the dominant position of the lending with currency component by the groups of large and medium-size banks.

2.4. Securities portfolio

At the end of 2008, for the first time in the last six years, the securities portfolio of the banking system narrowed. This decrease reflects the generally lower demand of the banks for debt securities (mainly CB bills and treasury bills), and the evident liquidity pressures, particularly in the second half of the year (for more details see part 3.2. Liquidity Risk). As a result of such developments, the securities portfolio on December 31, 2008 reduced to Denar 28,857 million, which is an annual decrease of Denar 6,640 million, or 18.7% (Annex 5 - Securities Portfolio). The narrowing of the securities portfolio is almost equally evident through the lower amount of subscribed CB bills and the lower amount of subscribed treasury bills.

Figure 46
Dynamics of the banks' securities portfolio



Source: NBRM based on data submitted by the banks.

The amount of subscribed CB bills and treasury bills on December 31, 2008 is lower by Denar 3,562 million and by Denar 3,168 million, respectively, compared to the end of 2007. At the end of 2008, such developments reduced the relative significance of the securities portfolio in the structure of the banks' total assets.

The securities portfolio of the banks in the Republic of Macedonia has an apparent liquidity character. This is illustrated by the fact that most of it (75.5%) was placed in short-term debt securities of the Government and the National Bank. On December 31, 2008, dominant part, or 60.4% of the securities portfolio was placed in CB bills. The next significant securities category was the treasury bills which accounted for 11.7% of the total securities portfolio. Compared to December 31, 2007, their share dropped by considerable 6.7 percentage points, as a result of the rapid decrease in the amount of subscribed treasury bills of 94.2%. After the introduction of the requirement (at the beginning of 2009) for the banks to maintain certain minimum liquidity, it is realistic to expect increase in the liquid assets of the banking system. Given the uptrend of the interest rates on CB bills and treasury bills, the banks are expected to meet a portion of these liquidity needs by subscribing of these debt securities. Such developments will contribute to further expansion of the securities portfolio and proportionate increase in its significance to the total banks' activities.

2.5. Bank deposit activity

In 2008, the banks' deposit core was characterized with two main features: slower growth and currency transformation. In environment of slowdown in the growth of the domestic economic activity and the noticeable influence of the psychological factors on the decision making of the private sector, in 2008, the bank deposits reported the lowest growth rate in the past several years. At the same time, under the influence of the uncertainty caused by the events on the international financial scene and its potential effects on the economy and the banks in the Republic of Macedonia, 2008 witnessed changes in the expectations of the economic entities, evident through the deposit currency transformation.

At the end of 2008, the total bank deposits registered the lowest annual growth rate in the last six years. On December 31, 2008, the total deposits stood at Denar 180,913 million, which is an annual growth of 12.8% (Annex 6 - Structure of deposits of nonfinancial entities). This deposit increase is by half lower compared to the increase in 2007.

October and November 2008 witnessed negative deposit developments, when, primarily due to the payment of a substantial amount of dividend to a foreign shareholder, the deposits dropped by 1.1% and 2.5%, respectively, on a monthly basis. Since December, the deposits started going up again.

Figure 47
Annual changes in the total deposits

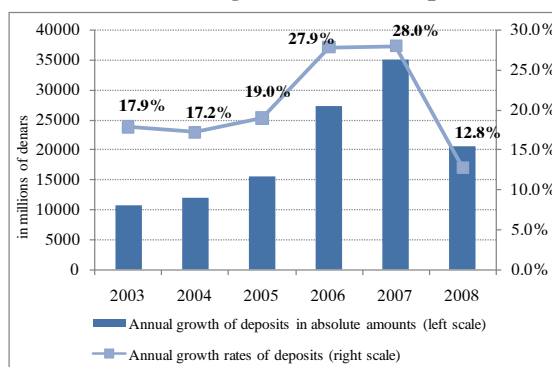
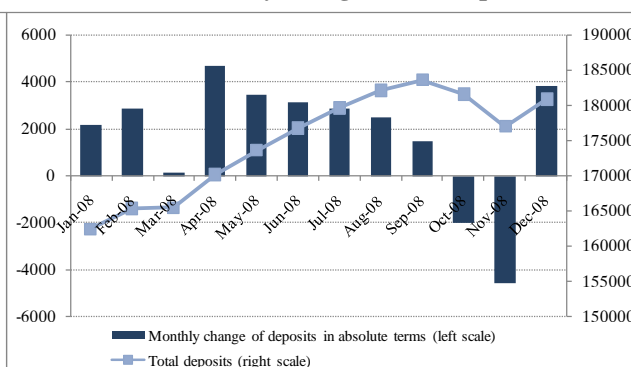


Figure 48
Balance and monthly changes in the deposits in 2008

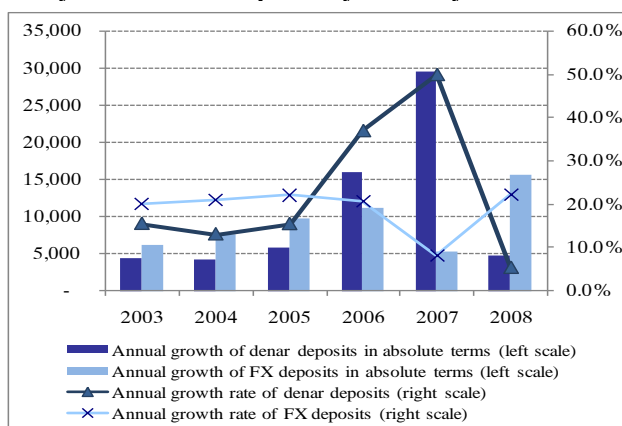


Source: NBRM based on data submitted by the banks.

In environment of considerable euroization of the Macedonian economy, the psychological pressure of the everyday unfavorable information from the international financial markets and the crisis all over the world, alongside the slowdown in the deposit growth, caused intensive transformation of their currency structure.

In 2008, the currency transformation of the deposits was evident through the faster growth and the higher contribution of the foreign currency deposits to the total annual deposit growth, and the increased share of foreign currency deposits in the structure of the total bank deposit core. For the first time in the last three years, the foreign currency deposits registered considerably higher absolute and relative growth compared to the Denar deposits. On December 31, 2008, the annual growth rate of the foreign currency

Figure 49
Dynamics of the deposits by currency structure



Source: NBRM based on data submitted by the banks.

deposits of 22.1% was the highest in the last six years, and higher by significant 16.8 percentage points relative to the annual growth rate of the Denar deposits. Also, most of the annual growth in the total deposits was due to the increase in their foreign currency component, which is almost entirely opposite to 2007. The more dynamic growth in the foreign currency deposits also contributed to the increase in their share in the total deposits, thus interrupting the uptrend of the share of the Denar component, which started in 2006²¹.

Figure 50
Contribution of the Denar and foreign currency deposits in the total deposit growth

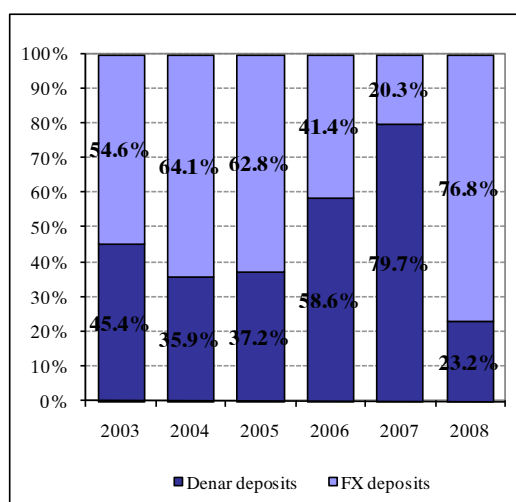
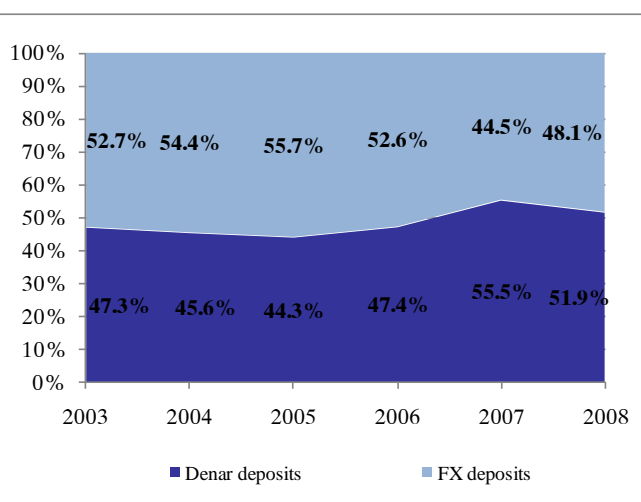


Figure 51
Currency structure of the total bank deposits



Source: NBRM based on data submitted by the banks.

In 2008, the slowdown in the growth was evident in both the corporate deposits and the household deposits. The corporate deposits registered an annual growth of 8.3%, which is by considerable 16.3 percentage points lower growth rate relative to 2007. The slower household deposits growth meant interruption of the trend of steady acceleration, typical for the previous years. At the end of 2008, these deposits registered an annual growth of 13.8%, which is by 18.3 percentage points less compared to 2007. Moreover, this growth rate is the lowest in the last six years. Such deposit dynamics of the individual sectors, however, caused no significant developments in the sector structure of the total deposits. The deposit base of the household sector remains dominant in the total deposits. The household sector, along with the slower growth, reports strong currency transformation of the deposit structure, evident through the considerable slowdown in the growth of the Denar deposit component. At the end of 2008, the annual growth rate of the Denar household deposits equaled only 2.1%, compared to the annual growth rate of 65.5% in 2007 (Annex 6 - Structure of the deposits of nonfinancial entities).

²¹ The positive expectations of the public, and the relatively higher interest rates on Denar deposits in the last three years contributed to the significant increase in the Denar deposit component.

Figure 52
Annual growth in the deposits by sector

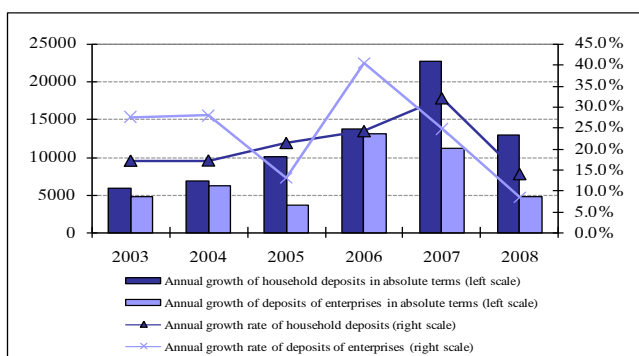
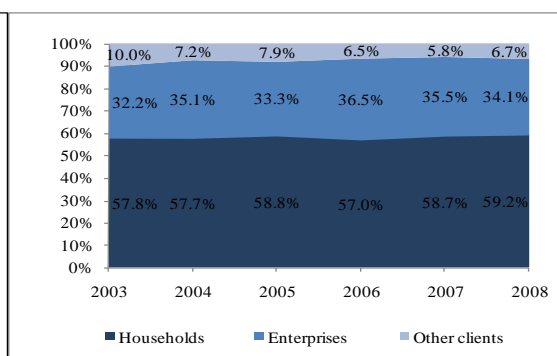


Figure 53
Sector structure of the total deposits



Source: NBRM based on data submitted by the banks.

In spite of the change in the public expectations, most likely **under the influence of the banks' offer of more attractive interest rates on deposits with longer maturities, 2008 witnessed acceleration of the growth in the long-term deposits of the banking system.** With an annual rise of Denar 8,007 million or 92.1%, they constituted a significant portion of around 40% of the total bank deposits growth, compared to the preceding years, when their contribution to the deposit growth was marginal. Such dynamics of the long-term deposits was largely due to the banks' interest rate policy, which in 2008 aimed to encourage long-term savings, as a basis for improving the deposit maturity structure and increasing their stability. These developments brought about higher share of the long-term deposits in the structure of the total banks' deposits. However, the unfavorable maturity structure, from the viewpoint of the domination of the short-term deposits (sight deposits²² and short-term time deposits), is still one of the major features of the bank deposits..

While the growth of long-term deposits accelerated, 2008 reported a slowdown in the growth of sight deposits and the short-term time deposits up to one year. The sight deposits registered an annual growth rate of 4.6%, which is the lowest rate since 2005, and is significant deceleration relative to 2007, when the annual growth rate equaled 22.2%. The annual growth rate of 11.4% of the short-term deposits implied a slowdown of considerable 23 percentage points relative to the preceding year.

Figure 54
Absolute annual deposit growth by maturity

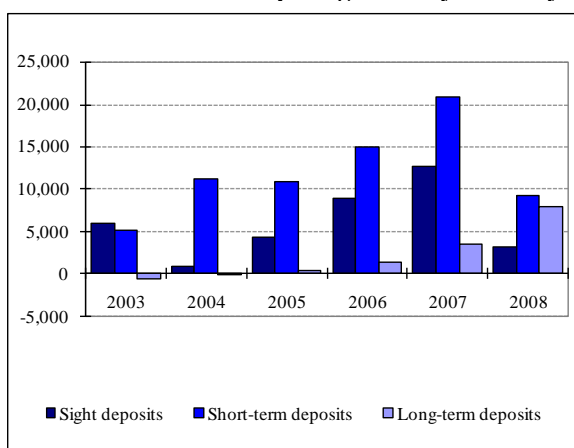
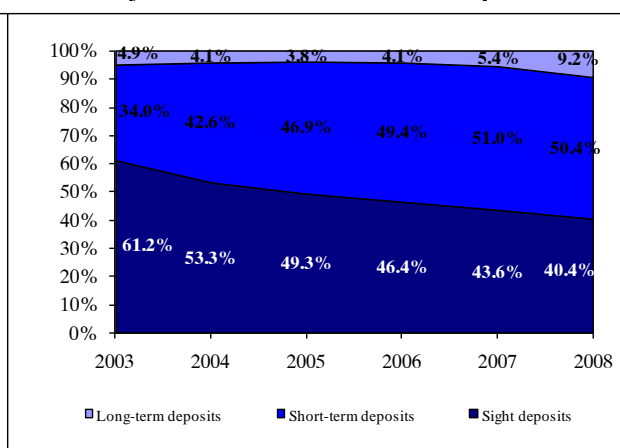


Figure 55
Maturity structure of the total bank deposits



Source: NBRM based on data submitted by the banks.

The group of large banks still holds the dominant position in the creation of deposits. This is confirmed by the analysis of the deposit structure from all three aspects (sector, maturity and currency).

²² Sight deposits also include demand deposits (transaction accounts of natural persons and legal entities).

Table 11**Deposit distribution by group of banks as of December 31, 2008**

| Groups of banks | Sectoral structure | | | Maturity structure | | | Currency structure | |
|-------------------|--------------------|---------------|---------------|--------------------|---------------------|--------------------|--------------------|---------------|
| | Enterprises | Households | Other clients | Sight deposits | Short-term deposits | Long-term deposits | Denar deposits | FX deposits |
| Large banks | 66.2% | 75.8% | 64.6% | 73.8% | 72.6% | 58.6% | 68.7% | 75.1% |
| Medium-size banks | 30.8% | 22.1% | 26.8% | 22.4% | 25.4% | 38.7% | 27.1% | 23.5% |
| Small-size banks | 2.9% | 2.1% | 8.5% | 3.8% | 2.0% | 2.8% | 4.2% | 1.3% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

Source: NBRM based on data submitted by the banks.

On December 31, 2008 no significant changes have been registered in the deposit structure across each group of banks.

Table 12**Deposit structure by group of banks as of December 31, 2008**

| Groups of banks | Sectoral structure | | | | Maturity structure | | | | Currency structure | | |
|-------------------|--------------------|------------|---------------|--------|--------------------|---------------------|--------------------|--------|--------------------|-------------|--------|
| | Enterprises | Households | Other clients | Total | Sight deposits | Short-term deposits | Long-term deposits | Total | Denar deposits | FX deposits | Total |
| Large banks | 31.4% | 62.5% | 6.0% | 100.0% | 41.5% | 51.0% | 7.5% | 100.0% | 49.6% | 50.4% | 100.0% |
| Medium-size banks | 41.4% | 51.6% | 7.1% | 100.0% | 35.6% | 50.3% | 14.0% | 100.0% | 55.4% | 44.6% | 100.0% |
| Small-size banks | 35.8% | 43.8% | 20.4% | 100.0% | 54.8% | 36.1% | 9.1% | 100.0% | 77.5% | 22.5% | 100.0% |

Source: NBRM based on data submitted by the banks.

The household deposits constitute the largest portion of the deposit base of all groups of banks. From the deposit maturity viewpoint, the group of large and medium-size banks reported higher share of short-term time deposits, compared to the group of small-size banks where most of the deposits are sight deposits. The foreign currency and Denar deposits make up about one half of the deposit currency structure of the group of large banks, whereas the other two groups of banks registered higher relative contribution of the Denar deposits, which is particularly evident in the group of small-size banks.

3. Banking operations risks

3.1. Credit risk

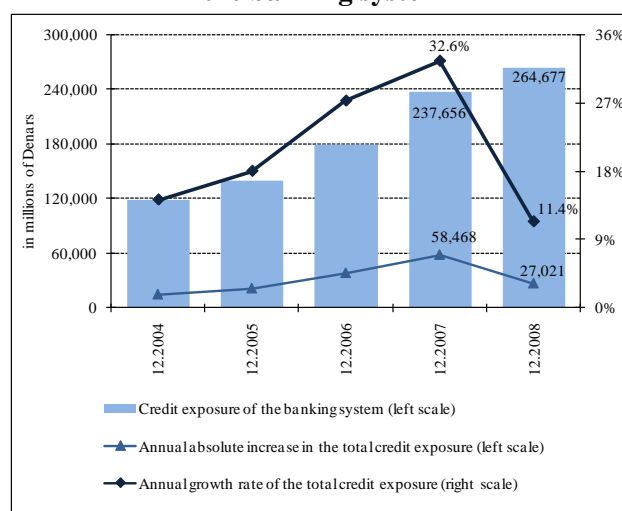
3.1.1. Bank credit exposure²³

After the intensive growth in the last few years, in 2008 the growth of the credit exposure of the banking sector substantially decelerated. Slowdown was also reported by the group of large and medium-size banks, mostly evident through the lower demand of the banks for CB bills and government securities, lower placements in foreign banks, and the substantial slowdown in the growth of the Denar credit exposure to the household sector and to the corporations and other clients. Major reason behind such developments is the slower deposit growth, as a basic source of funding the banks' activities, and the NBRM measures and actions for hedging risks of the high credit growth, especially to the households. The nonperforming credits are the fastest growing item of the credit exposure (according to the percentage growth rate), which foreshadows higher risk level of the banks' credit portfolio.

The uptrend of the credit exposure of the banking system carried on in 2008, but the growth considerably decelerated. At the end of 2008, the total credit exposure stood at Denar 264,677 million and compared to the end of 2007, it went up by Denar 27,021 million, i.e. 11.4%. This exposure increase is by Denar 31,447 million (or by 21.3 percentage points) lower compared to the annual growth in 2007, which is a signal for alleviation of the intensive growth of the banks' credit exposure over the recent years. The annual growth in the credit exposure slowed down particularly in the last quarter of 2008, thus reducing by Denar 3,391 million (or 1.3%).

The deceleration of the credit exposure growth is particularly typical for the group of large and medium-size banks, which in the recent years were major drivers of the intensive growth of the credit exposure of the banking system. In 2008, the growth rates of the credit risk exposure of these groups of banks dropped by three times compared to the annual growth rates in 2007. The group of large banks, however, remained dominant in the total credit exposure and its annual growth.

Figure 56
Credit exposure developments and growth in the banking system



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

Table 13
Credit exposure and its growth by group of banks

| Group of banks | Credit exposure (in millions of Denars) | | | Structure of the credit exposure (in %) | | | Annual change (31.12.2008-31.12.2007) | | | Annual change (31.12.2007-31.12.2006) | | |
|-----------------------------|---|----------------|----------------|---|---------------|---------------|---|--------------------|----------------------------|---|--------------------|----------------------------|
| | 31.12.2006 | 31.12.2007 | 31.12.2008 | 31.12.2006 | 31.12.2007 | 31.12.2008 | Absolute change (in millions of Denars) | Growth rate (in %) | Share in the change (in %) | Absolute change (in millions of Denars) | Growth rate (in %) | Share in the change (in %) |
| Large banks | 124,108 | 167,547 | 184,282 | 69.3% | 70.5% | 69.6% | 16,735 | 10.0% | 61.9% | 43,439 | 35.0% | 74.3% |
| Medium-size banks | 39,283 | 58,819 | 68,185 | 21.9% | 24.7% | 25.8% | 9,366 | 15.9% | 34.7% | 19,536 | 49.7% | 33.4% |
| Small-size banks | 15,797 | 11,290 | 12,210 | 8.8% | 4.8% | 4.6% | 920 | 8.1% | 3.4% | -4,507 | -28.5% | -7.7% |
| Total banking system | 179,188 | 237,656 | 264,677 | 100.0% | 100.0% | 100.0% | 27,021 | 11.4% | 100.0% | 58,468 | 32.6% | 100.0% |

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

²³ Source: This part of the Report uses data from the quarterly reports the banks submit to the NBRM, regarding the structure and quality of their credit exposure.

Figure 57
Annual absolute changes in the credit exposure by sector

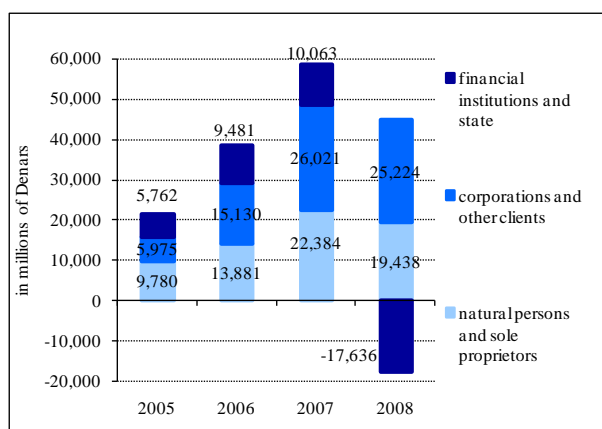
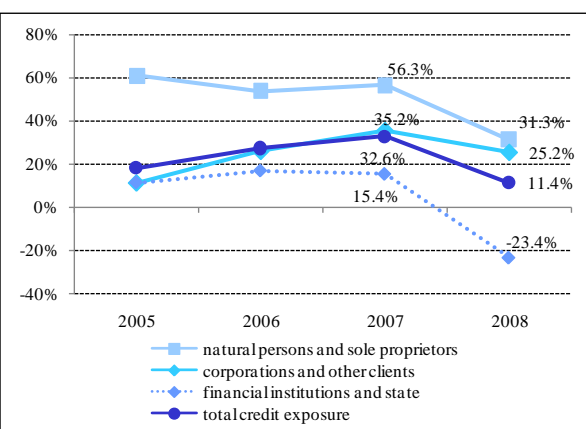


Figure 58
Annual relative changes in the credit exposure by sector

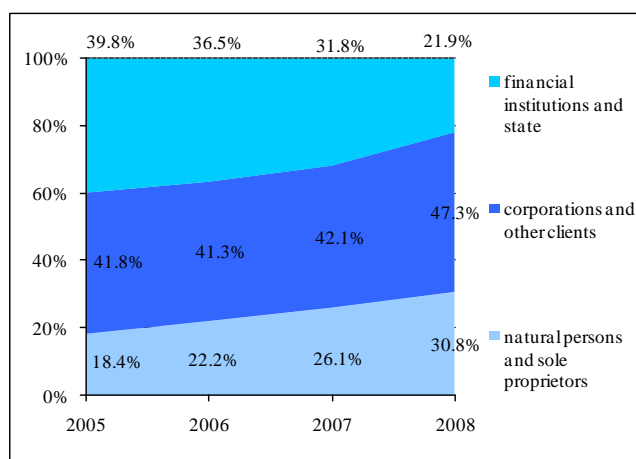


Source: NBRM, based on data submitted by the banks.

In 2008, the credit exposure to financial institutions and state reduced considerably, for the expense of the increase in the credit exposure to the nonfinancial sector. Exactly this structural transformation of the assets (placements), along with the slower growth of the deposit base, was one of the major reasons behind the slower growth of the total banks' credit exposure. In 2008, the credit exposure to the financial institutions and the state dropped by Denar 17,636 million (or by 23.4%)²⁴. The annual decrease in the credit exposure to this sector is mostly due to the lower banks' demand for CB bills, government securities and to the lower placements in foreign banks. On the other hand, the credit exposure to nonfinancial entities, although less intensive, kept on growing in 2008.

The annual absolute decrease in the credit exposure to the financial institutions and the government contributed to continuation of the downtrend of the share of exposure to this sector in the total credit exposure. Compared to the end of 2007, the share of exposure to the financial institutions and the government went down by 9.9 percentage points and on December 31, 2008 it reduced to 21.9% of the total banks' credit exposure. On the other hand, the share of credit exposure to the corporations and other clients sector²⁵ and to the natural persons and sole proprietors sector surged by 5.2 and 4.7 percentage points, respectively.

Figure 59
Sector structure of credit exposure



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

The slower growth pace of the total banks' credit exposure was characterized with lower foreign currency exposure and considerable deceleration of the Denar exposure growth. The Denar credit exposure with

²⁴ Source: NBRM Credit Registry; Report on Credit Exposure by Activity - KAD by risk category, by bank.

²⁵ The exposure to other clients category includes exposure to nongovernmental organizations, nonprofit organizations, social and security insurance funds etc. This exposure includes about 2.5% of the total exposure to the corporations and other clients sector.

currency clause kept on growing in 2008, however in a slower pace.²⁶ The annual decrease in the foreign currency credit exposure of the banks (of Denar 6,921 million or 8.7%) primarily results from the aforementioned decrease in the funds placed with foreign banks. On the other hand, the growth of the Denar credit exposure in 2008 is by 29.5 percentage points (or Denar 19,786 million) lower compared to the annual growth in 2007. The slower growth in the Denar credit exposure stems from the lower Denar exposure of the banks to the financial institutions and state sector (lower demand for CB bills and government securities), from the halving of the annual growth rate of the Denar exposure to the household sector (the annual growth of the Denar exposure to the household sector of 53.3%, in 2007, reduced to 27.5% in 2008) and from the deceleration of the Denar exposure growth to the corporations and other clients sector (in 2008, this banks' credit exposure component rose by 17.6%, which is by 7.5 percentage points less compared to the growth rate in 2007). On the other hand, the Denar exposure to credit risk with currency clause, kept on growing in 2008, however in slower pace, with a growth rate of 45.6%.

Figure 60
Annual absolute changes in the credit exposure,
by currency structure

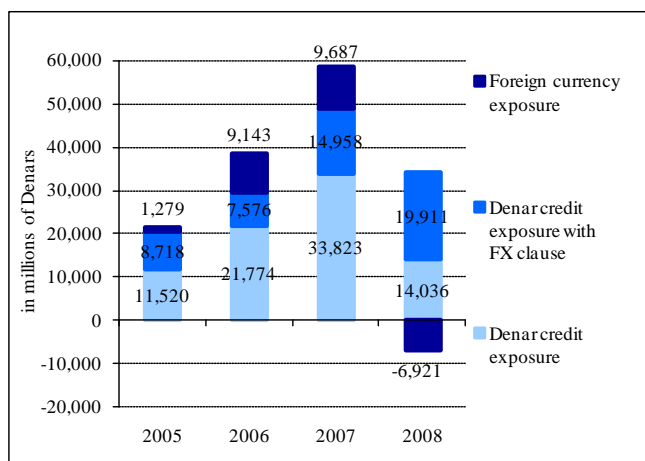
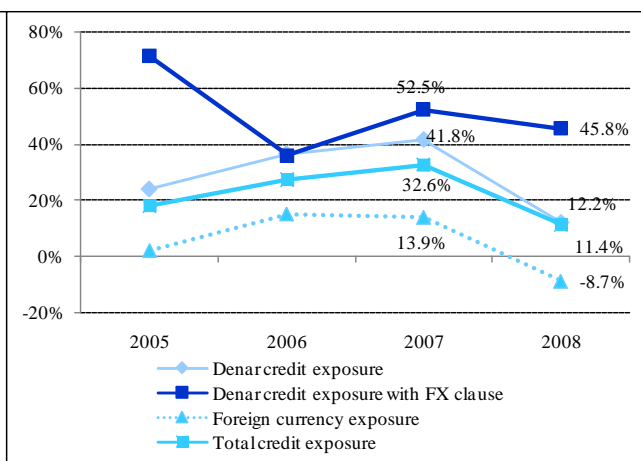


Figure 61
Annual relative changes in the credit exposure, by
currency structure

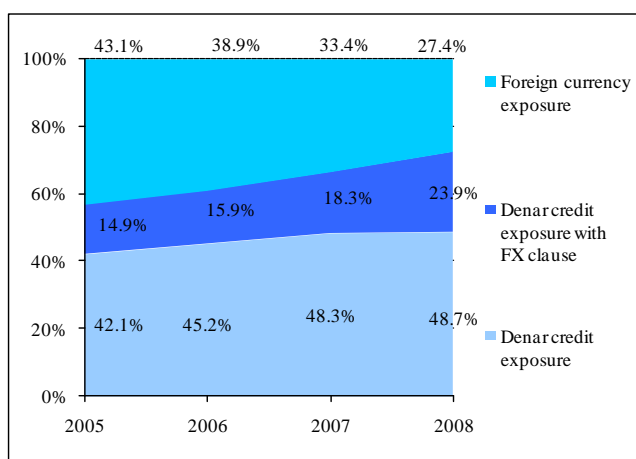


Source: NBRM, based on data submitted by the banks.

The decrease in the foreign currency credit exposure contributed to the continuation of the downward trend of its share in the total banks' credit exposure. Compared to the end of 2007, the share of this credit exposure component went down by 6 percentage points annually, reducing to 27.4% at the end of 2008.

The slower growth of the Denar credit risk exposure triggered only mild increase of its share in the total credit exposure. On the other hand, **the share of Denar credit exposure with currency clause registered annual increase of 5.6 percentage points in the currency structure of the banks' credit exposure.**

Figure 62
Currency structure of the credit exposure



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

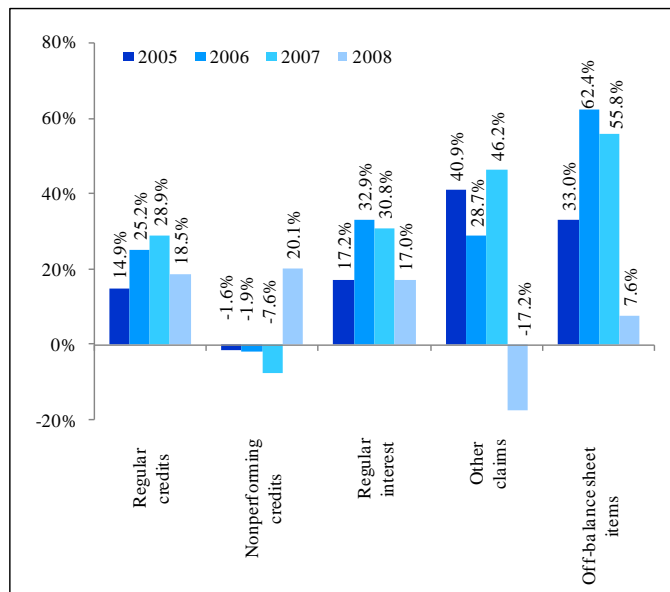
²⁶ Source: NBRM Credit Registry; Report on Credit Exposure by Activity - KAD by risk category, by bank.

In 2008, the slower credit exposure growth was evident through the considerable slowdown in the growth of the regular credits and off-balance sheet items and lower exposure based on other claims. The regular credits registered an annual growth rate of 18.5%, which is by 10.4 percentage points lower relative to the growth rate in 2007. In the same period, the off-balance sheet exposure rose by 7.6%, which is by more than 7 times lower growth rate relative to 2007. The fast slowdown in the growth of the off-balance sheet items mostly results from the slower growth pace of the banks' exposures based on credit card and current account overdrafts, and the decrease in the exposure based on uncovered guarantees and LCs. In 2008, the exposure based on other claims went down by 17.2%, primarily a result of the aforementioned banks' demand for CB bills and government securities.

Yet, the regular credits remained dominant in the total credit exposure in its absolute annual growth. Thus in 2008 the regular credits went up by Denar 28,650 million, contributing more than 100% to the total credit exposure growth, strengthening their dominant share of 69.3% in the total credit exposure of the banking system. On the other hand, the share of banks' exposure based on off-balance sheet items and other claims reduced by 0.5 and 4.2 percentage points, respectively.

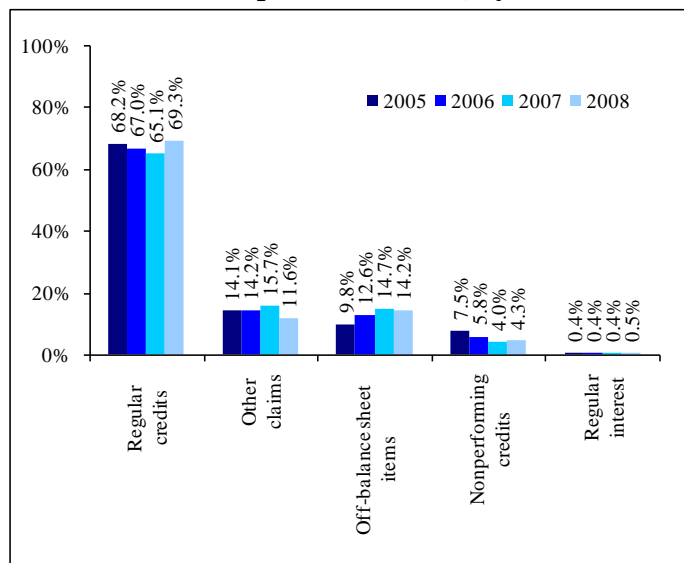
While the nonperforming credits registered a downtrend in the last few years, in 2008, they went up. They are the fastest growing item of the credit exposure of the banks, which in 2008 surged by 20.1% (or Denar 1,927 million). Yet, they registered a minimum increase in their share in the total credit exposure of 0.3 percentage points (from 4% on December 31, 2007, to 4.3% at the end of 2008).

Figure 63
Annual growth rates of the credit exposure, by item



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

Figure 64
Credit exposure structure, by item



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

Figure 65
Sector structure of nonperforming credits

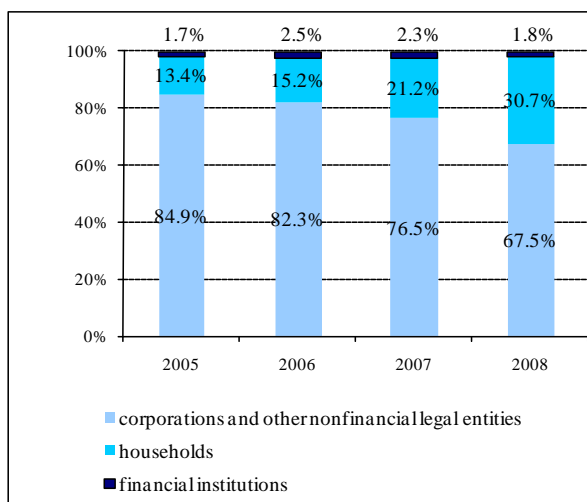
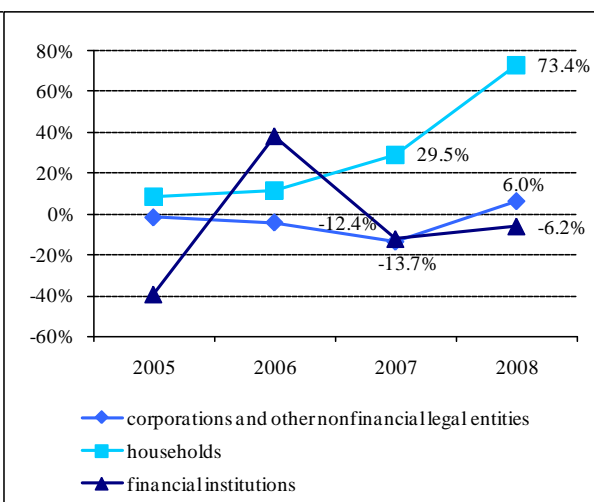


Figure 66
Annual growth rates of nonperforming credits



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

The sector-by-sector structure analysis of the nonperforming credits indicated rapid acceleration of the growth of nonperforming credits to the household sector. In 2008, the nonperforming credits to this sector went up by 73.4% (or Denar 1,499 million), thus increasing its share in the total nonperforming credits from 21.2% at the end of 2007, to 30.7% on December 31, 2008. The nonperforming credits to the corporations and other nonfinancial legal entities sector²⁷ reported relatively milder annual growth of 6%, whereas their share in the sector structure of nonperforming credits reduced by 9 percentage points.

Figure 67
Geographic structure of the total credit exposure to residents

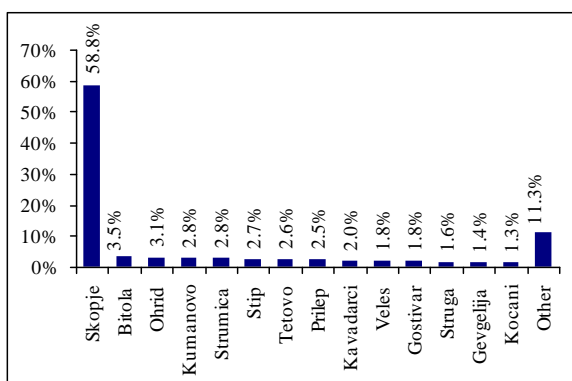
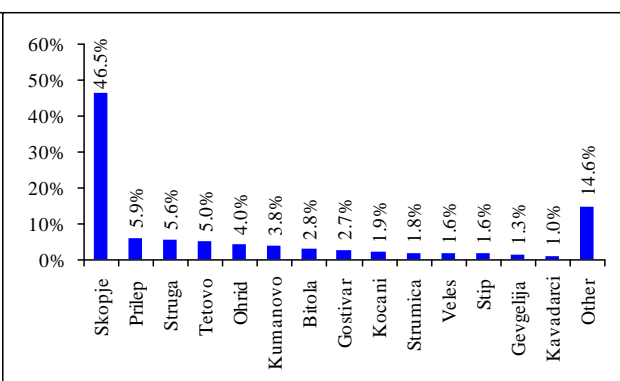


Figure 68
Geographic structure of nonperforming credits to residents



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

The largest portion of the credit exposure to residents is concentrated in Skopje. The credit risk exposure to residents in the capital constituted more than 58% of the total credit exposure²⁸. The city of Skopje also dominates in the analysis of the geographic structure of nonperforming credits, indicating that more than 46% of the total nonperforming credits were approved to the residents of this city.

²⁷ Other nonfinancial legal entities include foreign persons, public sector, etc.

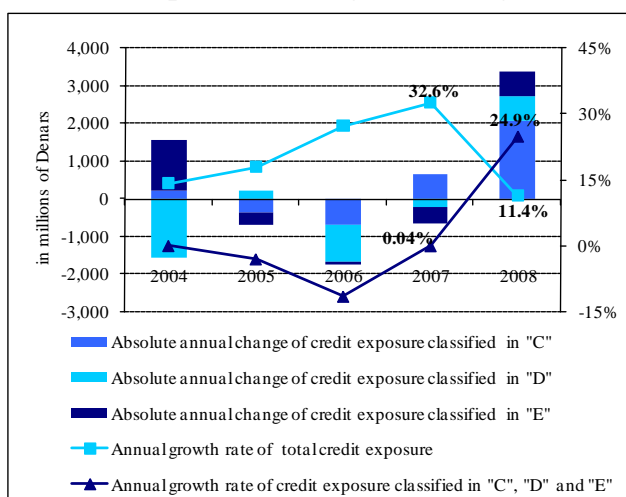
²⁸ Source: NBRM Credit Registry; Report on Credit Exposure by Activity - KAD by risk category, by bank.

3.1.2. Risk level and indicators for the credit risk exposure quality in the banking system

The trend of improving the credit portfolio quality of the banking system was interrupted in 2008, i.e. the first signs of increasing its riskiness become evident. On the one hand, this deterioration occurs in environment of slower credit exposure growth, which started at the end of 2007. On the other hand, it results from the so-called "maturing" of the credit portfolio established in more relaxed lending terms, typical for the previous period of credit expansion. Taking into account the expectations for deceleration of the overall economic activity in the Republic of Macedonia, and the tightening of the banks' credit policy as a reasonable response to the effects of the global financial crisis and the respective reactions and measures by the central bank, the next period could expect further slowdown in the credit exposure growth, with a possible one-time deterioration of the risk profile of some categories of bank clients.

In 2008, the credit exposure classified in C, D and E risk category registered a considerably higher relative growth compared to the total credit risk exposure. Therefore, the trend registered over the last years ceased, when the intensive growth of the total credit risk exposure was accompanied with simultaneous decrease in the absolute amount of credit exposure with a lower quality degree. The credit exposure classified in the higher risk categories registered an annual rise of 24.9% (or Denar 3,376 million), which is by 13.5 percentage points higher compared to the annual growth rate of the total banks' credit exposure. The greatest contribution of 61.1% in the total annual growth of the credit exposure with lower quality degree was made by the increase in the credit exposure classified in C risk category. Taking into account the steep growth pace of this risk category, which is transitional (short-term) by its nature, it is reasonable to expect, particularly in stricter economic conditions in the country and worldwide, that the banks' credit portfolio quality will keep on deteriorating.

Figure 69
Annual changes in the total credit exposure and the exposure with higher risk degree



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

Table 14
Credit exposure quality indicators

| Credit risk indicators | 31.12.2006 | 31.12.2007 | 31.12.2008 |
|--|------------|------------|------------|
| Average level of risk | 6.6% | 5.3% | 5.8% |
| % of "C", "D" and "E" in total credit exposure | 7.6% | 5.7% | 6.4% |
| % of net "C", "D" and "E" in own funds | 19.4% | 17.9% | 20.2% |
| % of "E" in total credit exposure | 3.5% | 2.5% | 2.5% |
| % of "E" in own funds | 26.7% | 21.2% | 19.2% |
| Coverage of "C", "D" and "E" by the allocated loan loss reserves | 86.8% | 94.1% | 91.0% |
| % of bullet credits in total gross-credits to nonfinancial entities | 15.1% | 14.9% | 14.8% |
| % of net written-off claims during current year in total credit exposure at the end of previous year | 3.7% | 1.6% | 0.7% |

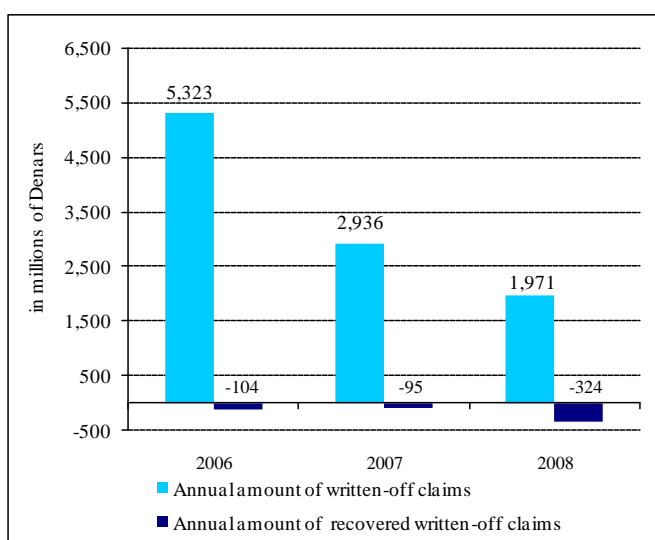
Source: NBRM, based on data submitted by the banks.

The increase in the exposure classified in the three categories with higher risk degree in 2008 had an adverse effect on all indicators for the banks' credit portfolio quality. On annual basis (December 31, 2008 - December 31, 2007), almost all analyzed indicators for the risk level of the credit portfolio of the banking system reported certain deterioration. The average risk degree of the credit exposure registered an annual growth of 0.5 percentage points (on December 31, 2008 this indicator reached 5.8%), whereas the share of the exposure classified in C, D and E risk categories in the total credit exposure equals 6.4%, which is by 0.7 percentage points more, relative to the end of 2007. Simultaneously, an increase of 2.3 percentage points was also registered in the indicator for the share of the nonprovisioned amount of the exposure classified in the C, D and E risk categories in the total own funds of the banking system. Thus, if the extreme scenario for full non-collectability of the exposure classified in these three categories with higher risk degree come true, the loss coverage would absorb 20.2% of the banks' own funds, compared to the end of 2007, when there was a need of 17.9% of the own funds. Therefore, the capital adequacy ratio would reduce from the current 16.2% to 12.9%.

The increase in the allocated loan loss provisions does not correspond with the increase in the exposure classified in the C, D and E risk categories, which brought about lower degree of coverage of this exposure with the amount of allocated provisions. In 2008, the allocated loan loss provisions went up by Denar 2,649 million, or by 20.8%. In the same period, the exposure classified in the C, D and E risk categories went up by 24.9%. Consequently, on December 31, 2008 the allocated loan loss provisions were sufficient for covering 91% of the exposure classified in the C, D and E risk categories, which is by 3.1 percentage points less compared to the preceding year. On the one hand, the lower coverage degree is due to the slower growth of the total credit exposure and the slower growth of the total allocated loan loss provisions. On the other hand, the higher exposure classified in the three categories with higher risk degree, is mostly due to the increase in the exposure classified in the C risk category, the allocation for which of loan loss provisions is 25%, which in environment of faster growth of the exposure in this risk category brings about lowering the degree of coverage with the allocated loan loss provisions.

In 2008, the amount of the banks' written-off claims went down, with an increase being registered in the collection of their previously written-off claims. However, the volume of written-off claims remains the same, thus affecting the indicator for the share of exposure classified in C, D and E risk categories in the total credit risk exposure (if the banks failed to write off claims, at the end of 2008 this indicator would be higher). Thus, in 2008, the amount of net write-offs totaled Denar 1,647 million,²⁹ which is by Denar 1,194 million less relative to 2007 (as much as 77.4% of the total written-off claims in 2008 were made in the first half of the year). The written-off claims on net basis³⁰ constitute 0.7% of the credit risk exposure at the end of 2007, which is an annual fall of 0.9 percentage points. The written-off

Figure 70
Developments of the annual amount of net write-offs of claims



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

²⁹ Source: Report on written off claims and collected written-off claims, the banks submit to the NBRM, as a part of the set of reports with general data on the banks.

³⁰ The amount of written-off claims on net basis is the difference between the amount of written-off claims in a certain period and the amount of collected written-off claims in the same analyzed period.

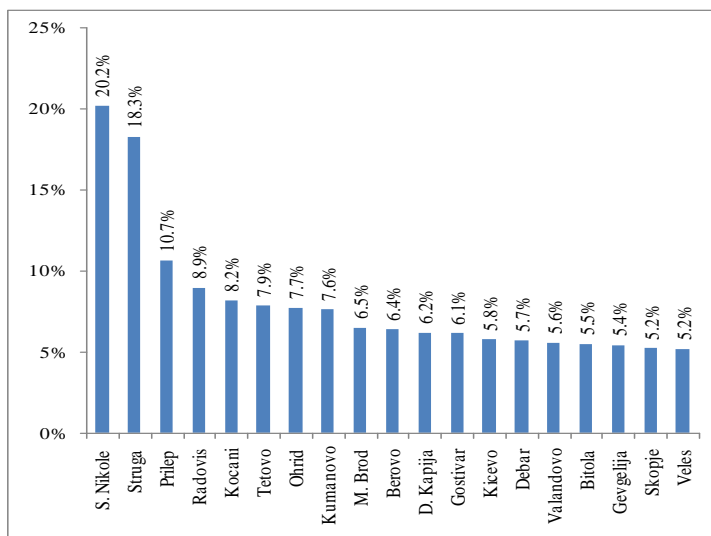
claims based on interest had the highest share in the structure of written-off claims in 2008 of 57.6%, and the written-off claims based on credit principal made up 34.9%. If the banks failed to write off their claims based on credits and interests, the share of the exposure classified in C, D and E risk category in the total exposure of credit risk, on December 31, 2008 would be 6.9%, which is by 1.2 percentage points more compared to the end of 2007. In 2008, same as in the recent years, the currency and sector structure of written-off claims is dominated by the Denar claims and claims on companies constituting 82.9% and 83.3%, respectively. Additionally, 86.6% of the written-off claims in 2008 were made by one bank of the group of large banks.

The analysis of the risk level of the banks' credit portfolio,

according to the geographic structure indicates that the quality of credit exposure to residents of Sveti Nikole is the lowest. On December 31, 2008, the average risk level of the credit exposure to the residents of this town equals 20.2%³¹, which is by 14.4 percentage points higher compared to the average risk level of the total credit risk exposure of the banking system (the Sveti Nikole residents account for only 0.6% of the total credit exposure to the residents of the Republic of Macedonia). Relatively low average risk level is typical for the exposure to the residents of the capital, mostly due to the fact that the relatively large portion of the exposure to the Skopje residents is riskless by its nature (for example, the credit risk exposure based on investments in CB bills and treasury securities). If these two components are exempted from credit exposure to the Skopje residents, the average risk level of the exposure to the residents of the capital would be 6.4%.

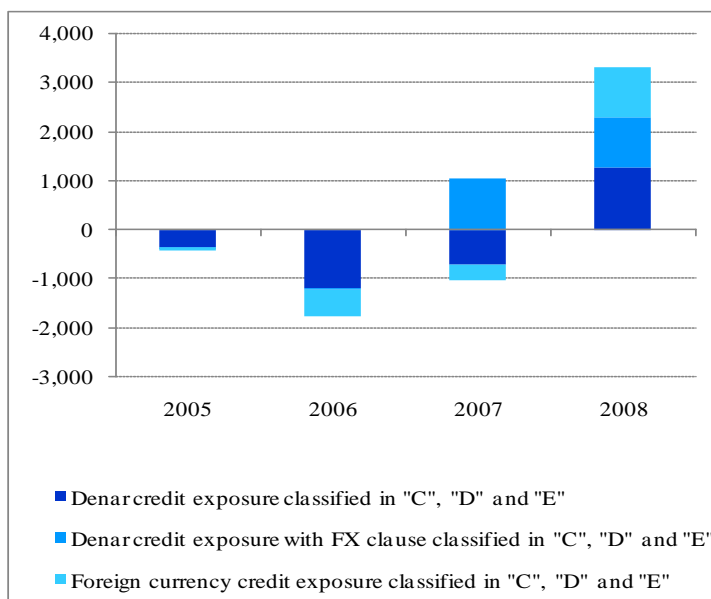
In 2008, the credit exposure quality in foreign currency and in Denars deteriorated. Such developments are particularly evident in the foreign currency credit exposure, which in 2008 went down by 8.7%, with an annual growth being registered in the foreign currency credit component with higher risk degree of 56%³². On the other hand, in 2008, the Denar exposure with lower quality

Figure 71
Average risk level of credit exposure to residents, by city in the Republic of Macedonia



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

Figure 72
Annual absolute change in the credit exposure with higher risk degree, by currency structure



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

³¹ Source: NBRM Credit Registry; Report on Credit Exposure by bank - KA 1/1.

³² Source: NBRM Credit Registry; Report on Credit Exposure by Activity - KAD by risk category, by bank.

level surged by 15.1%, which is by 2.9 percentage points more compared to the annual growth rate of the overall Denar credit exposure. Observing the credit portfolio indicators quality, only the Denar credit exposure with FX clause improved, mainly due to the considerable annual growth of this exposure. **In spite of these developments, the lowest risk level is still registered in the foreign currency exposure of credit risk.**

Table 15
Credit exposure quality indicators, by currency structure

| Indicator | Denar credit exposure | | | Denar credit exposure with FX clause | | | Foreign currency credit exposure | | |
|--|-----------------------|------|------|--------------------------------------|------|------|----------------------------------|------|------|
| | 2006 | 2007 | 2008 | 2006 | 2007 | 2008 | 2006 | 2007 | 2008 |
| % of "C", "D" and "E" in total credit exposure | 11.2% | 7.3% | 7.5% | 8.2% | 7.8% | 7.0% | 3.1% | 2.3% | 3.9% |
| Average level of risk | 9.3% | 6.5% | 6.9% | 6.4% | 6.1% | 5.6% | 3.5% | 3.2% | 4.1% |
| % of "C", "D" and "E" in total credit exposure, if the effects of the writing-off of claims are exempted | 14.7% | 9.3% | 8.4% | 11.7% | 8.0% | 7.3% | 4.2% | 2.6% | 3.9% |

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

Figure 73
Absolute changes in the credit exposure in C, D and E, by group of banks

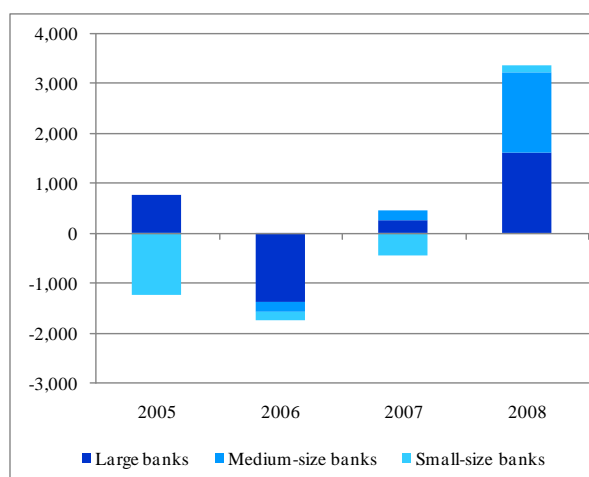
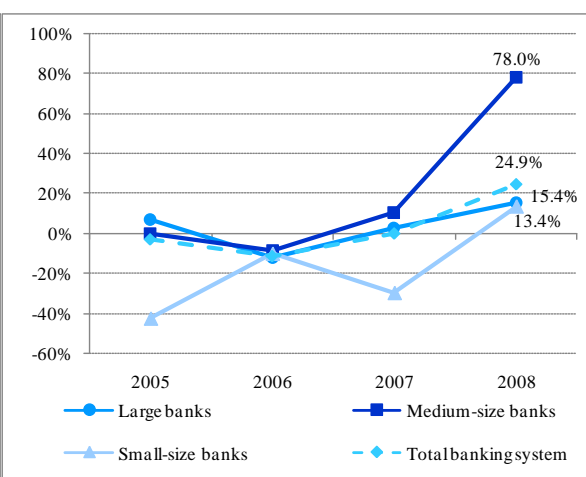


Figure 74
Relative changes in the credit exposure in C, D and E, by group of banks



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

The relatively significant growth of credit exposure with higher risk degree registered in the groups of banks, in environment of slower growth of their total credit exposure, led to deterioration of most of the credit portfolio quality indicators of all groups of banks. While the group of medium-size banks reported the greatest deterioration of the credit portfolio quality, most credit risk indicators of this group are still at the lowest level. Thus the credit exposure with higher risk degree in the group of large, medium- and small-size banks registered an annual growth rate of 15.4%, 78% and 13.4%, respectively, which is by 5.4, 62.1 and 5.3 percentage points, respectively, more compared to the annual growth rates of the total credit exposure of each group of banks. Such developments contributed to increasing the average risk level and the share of credit exposure classified in C, D and E risk category in the total credit exposure, in all groups of banks. In addition, in the group of medium-size banks, the annual growth of allocated provisions (39.7%) and the own funds (rise of 8.5%) does not correspond with the increase in the exposure with higher risk level (78%). The latter triggered, in the medium-size banks, an annual deterioration of the indicator for coverage of the exposure classified in C, D and E risk categories with the allocated loan loss provisions and of the indicator for the share of the non-provisioned amount of exposure with lower quality degree in the own funds by 19.8 and 10.3 percentage points, respectively. In the group of large

banks, these two indicators improve on an annual basis as a result of the relatively higher growth rates of the own funds (34.5%) and the allocated loan loss provisions (17.8%) relative to the growth in the credit exposure with higher risk level (15.4%). In the group of small-size banks, the indicator for the coverage of the credit exposure classified in C, D and E risk categories with allocated loan loss provisions registered a minimum improvement, whereas the share of the non-provisioned amount of credit exposure with lower quality degree in the own funds went up, taking into account the higher annual growth rate of the credit exposure classified in C, D and E risk categories (13.4%), compared to the increase in the own funds (9.8%), of this group of banks.

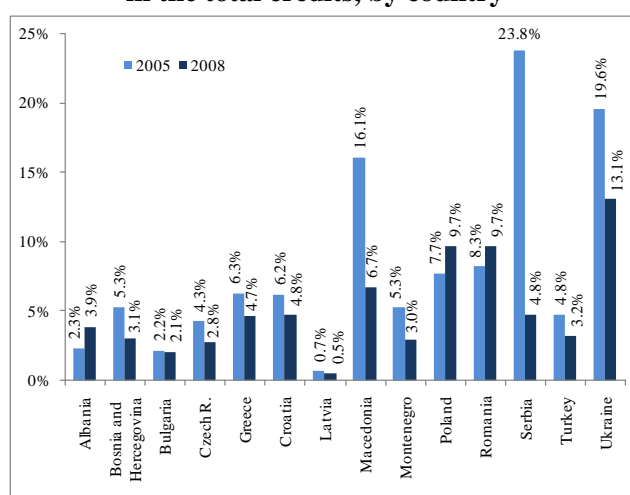
Table 16
Credit exposure quality indicators, by group of banks

| Credit risk indicators | Large banks | | | Medium-size banks | | | Small-size banks | | |
|--|-------------|------------|------------|-------------------|------------|------------|------------------|------------|------------|
| | 31.12.2006 | 31.12.2007 | 31.12.2008 | 31.12.2006 | 31.12.2007 | 31.12.2008 | 31.12.2006 | 31.12.2007 | 31.12.2008 |
| Average level of risk | 7.1% | 5.8% | 6.3% | 3.8% | 3.3% | 3.9% | 10.6% | 8.8% | 9.2% |
| % of "C", "D" and "E" in total credit exposure | 8.2% | 6.2% | 6.5% | 4.4% | 3.6% | 5.5% | 12.0% | 9.3% | 9.8% |
| Coverage of "C", "D" and "E" by the allocated loan loss reserves | 87.3% | 94.6% | 96.5% | 84.9% | 91.8% | 72.0% | 85.5% | 94.7% | 94.8% |
| % of net "C", "D" and "E" in own funds | 31.1% | 26.3% | 23.7% | 11.6% | 11.1% | 21.4% | 5.0% | 3.5% | 4.1% |

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

The risk of the credit portfolio of the banking system in the Republic of Macedonia is relatively high compared to other analyzed countries³³. Thus, according to the share of nonperforming credits in the total credits, Republic of Macedonia with 6.7% ranks at the top of the list of analyzed countries. This indicator is higher only for the banking system of Poland (9.7%), Romania (9.7%) and Ukraine (13.1%). Yet, in the last three years (December 31, 2005 - December 31, 2008) this indicator of the banking system of the Republic of Macedonia registers significant improvement of 9.4 percentage points.

Figure 75
Share of nonperforming credits in the total credits, by country



Source: Global Financial Stability Report, IMF and NBRM.

³³ Source: Global Financial Stability Report, Financial Stress and Deleveraging - Macrofinancial Implications and Policy, October 2008, International Monetary Fund. The indicators for Romania and Poland are as of April 30, 2008. The indicator for Turkey is as of October 31, 2008. The indicator for Macedonia is as of December 31, 2008. The indicators for all other countries are as of March 31, 2008. When drawing conclusions as a part of the comparative analyses by country, the definition of nonperforming credits does not take into account the methodological differences, and the (non)existence of regulatory requirements or practices of the banks for regular write-off of nonperforming claims from their balance sheets.

Stress-test analysis of the resilience of the banking system to credit risk

The stress-test analysis for the banking system, which is based on the assessment of the maximum possible growth of the credit activity without jeopardizing the legally defined minimum banks' solvency, indicates that the possible growth of gross-credits at the level of the banking system (taking the amount of credit exposure as of December 31, 2008 as a starting point) would be equal to 59.6% (with the rate of maximum possible growth of gross-credits by individual bank ranging from 14% to 1,099.6%). With seven banks, credits could go up by more than 100%, without endangering the minimum legally prescribed capital adequacy ratio. The rapid growth of lending in the past few years has contributed to a continuous decline in the possible gross-credits growth rate, which is most evident with the group of medium banks. In 2008, however, the maximum possible growth rate of the credit activity with the group of large and the group of small banks went up, which is primarily a result of the twice higher annual growth rates of own funds with these groups of banks, compared with the annual growth of their total gross-credits.

Table 17
Dynamics of the possible growth rates of gross-credits without jeopardizing the minimum legally prescribed solvency ratio by group of banks

| Date | Overall banking system | Large banks | Medium-size banks | Small-size banks |
|------------|------------------------|-------------|-------------------|------------------|
| 31.12.2005 | 77,6% | 35,1% | 138,2% | 357,2% |
| 31.12.2006 | 63,2% | 29,4% | 103,0% | 361,5% |
| 31.12.2007 | 60,5% | 34,2% | 83,2% | 457,7% |
| 31.12.2008 | 59,6% | 43,5% | 61,1% | 476,7% |

On the other hand, the percentage of transfer of regular to non-performing loans (without endangering banks' solvency) ranges between 2% and 237.7%, by individual bank. The solvency ratio of eight banks would not be jeopardized also if more than 20% of the regular credits are transferred into non-performing.

This stress-test analysis starts from the assumptions that the macroeconomic environment remains stable and that the structure of the newly-extended credits, from a viewpoint of their risk level and currency, is the same as in 2008. At the same time, when performing the stress-test, the measures undertaken by the NBRM aimed at limiting the risks from credit expansion, have not been taken into consideration.

3.1.3. Risk level and indicators for the quality of credit exposure to the corporations and other clients sector

In 2008, almost all indicators for the quality of credit exposure to corporations and other clients sector and to each relevant activity registered positive developments. However, the upward trend of the risk level which started in the second half of 2008, created the need of more considerate monitoring of the future developments of this type of exposure. On the other hand, the expected further decrease in the export demand, the negative effect of the fall in the metal prices and the demand for metals on the output and the export of the domestic facilities, as well as the expectations for slowdown in the overall economic growth in the country, could bring about rapid decrease in the quality of credit exposure to the companies, and generally in the total banks' credit exposure.

On annual basis (December 31, 2007 - December 31, 2008), the quality of credit exposure to the corporations and other clients sector improves, particularly due to the significant increase in the quality degree of this kind of exposure in the first half of 2008 which witnessed writing off of relatively high amount of claims on companies. In 2008, the indicators for the average risk level and for the share of credit exposure classified in C, D and E risk categories in the total credit exposure improved by 0.6 and 0.7 percentage points, respectively. In addition, the total credit exposure to the corporations and other clients sector registered higher annual growth rate³⁴ (25.2%), compared to the annual growth rate of the credit exposure with lower quality degree (16.8%). However, if the effects of the writing-off of claims on this sector are exempted (assume that in 2008, the banks did not write-off claims on corporations and other clients), on December 31, 2008, the indicator for the share of credit exposure with lower quality degree in the total credit exposure would equal 10.1%, and compared to December 31, 2007 it would be by 0.3 percentage points higher. On the other hand, the second half of 2008 (when the banks wrote off relatively low amount of claims on this sector) witnessed lower quality of credit exposure to corporations and other clients. For illustration, in the second half of 2008, the share of credit exposure with higher risk degree in the total credit exposure to the corporations and other clients sector went up by 0.9 percentage points.

Almost all indicators for the quality of credit exposure to the relevant activities³⁵ register positive developments. An exception is the credit exposure to transport, storage and communications, which registered an annual increase of its risk level. In 2008, the improvement of the credit exposure quality indicators in the construction activity was the most evident. On the other hand, in the exposure to the activity of transport, storage and communications, the indicators for the average risk level and for the share of credit exposure with lower quality degree in the total credit exposure register an annual growth of 0.1 and 2.6 percentage points, respectively.

³⁴ Source: NBRM Credit Registry; Report on Credit Exposure by Activity - KAD by risk category, by bank.

³⁵ The indicators for the credit risk exposure have been estimated for five activities which make up 89.7% of the total credit risk exposure to the corporations and other clients sector. Moreover, the contribution of these activities to the creation of GDP for 2008, according to the data of the State Statistical Offices, equals 60.5%.

Table 17
Indicators for the degree of quality and concentration of the credit exposure to the corporations and other clients sector

| Indicators for the degree of quality and concentration of the credit exposure | Date | Industry | Agriculture, hunting and forestry | Construction | Wholesale and retail trade | Transport, storage and communication | Total credit exposure to corporations and other clients |
|---|------------|----------|-----------------------------------|--------------|----------------------------|--------------------------------------|---|
| Average level of risk | 31.12.2008 | 10.7% | 17.3% | 7.6% | 6.8% | 6.0% | 8.6% |
| | 31.12.2007 | 11.1% | 18.1% | 7.9% | 7.9% | 5.9% | 9.2% |
| | 31.12.2006 | 15.1% | 19.3% | 8.5% | 11.4% | 8.2% | 12.5% |
| % of "C", "D" and "E" in total credit exposure | 31.12.2008 | 11.7% | 18.1% | 9.1% | 7.1% | 7.1% | 9.1% |
| | 31.12.2007 | 13.0% | 18.7% | 11.3% | 6.5% | 4.5% | 9.8% |
| | 31.12.2006 | 18.3% | 20.7% | 14.9% | 11.9% | 6.9% | 14.5% |
| Coverage of "C", "D" and "E" by the allocated loan loss reserves | 31.12.2008 | 91.9% | 95.7% | 83.5% | 96.2% | 85.5% | 94.1% |
| | 31.12.2007 | 85.0% | 96.8% | 69.8% | 121.5% | 130.6% | 94.8% |
| | 31.12.2006 | 82.5% | 93.2% | 56.9% | 95.8% | 118.5% | 86.5% |
| Herfindahl index | 31.12.2008 | 2,349 | 1,704 | 2,160 | 1,986 | 1,442 | 1,981 |
| | 31.12.2007 | 2,359 | 1,875 | 2,222 | 1,903 | 1,731 | 2,013 |
| | 31.12.2006 | 2,157 | 1,685 | 2,032 | 1,773 | 2,178 | 1,868 |
| CR5 ratio | 31.12.2008 | 86.2% | 79.5% | 85.3% | 81.6% | 70.7% | 80.7% |
| | 31.12.2007 | 87.3% | 82.8% | 85.0% | 79.6% | 73.5% | 81.5% |
| | 31.12.2006 | 85.5% | 79.2% | 87.8% | 77.6% | 77.8% | 80.2% |

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

The concentration of the credit exposure to the corporations and other clients sector is relatively high, in spite of the annual decrease (December 31, 2007 - December 31, 2008). On December 31, 2008, only the Herfindahl index in the exposure to the transport, storage and communications activity and the agriculture, hunting and forestry activity, is acceptable. The concentration degree of the exposures to the industry and construction is particularly high, where the Herfindahl index exceeds 2,000 index points, and the CR5 indicator exceeds 85%.

Additional factor for the future developments of the quality of credit exposure to the corporations and other clients sector is the significant presence of the so-called indirect credit risk. This indirect credit risk mostly does not arise from the direct deterioration of the client's creditworthiness, but rather from the impossibility to absorb the increase in the credit-based liabilities, which would result from the developments of certain macroeconomic variables. Sources of indirect credit risk includes lending with currency component to borrowers that show a mismatch between the cash flows or the currency position, or the use of contractual clauses for adjustable interest rates³⁶, allowing the banks to transfer the currency and interest rate to their clients. Thus, on December 31, 2008, the currency structure of the exposure to the corporations and other clients sector is dominated by the exposure with currency component, constituting 58.5%. On the other hand, the share of credits with currency components approved to corporations and other clients which are more surely considered to be with covered currency risk (net-exporters and borrowers the prices of which depends on the price developments on the foreign markets), constitute only 11% of the total credits with currency component approved to this sector³⁷. Additionally, on December 31, 2008, 62.7% of the total credits to nonfinancial legal entities are credits with so-called adjustable interest rates, implying a transfer of interest rate risk from the bank to the nonfinancial legal entities³⁸.

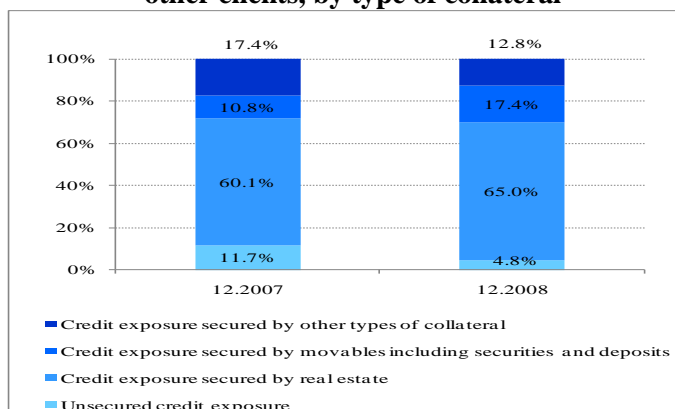
³⁶ Adjustable interest rates include interest rates changeable with a decision of the bank's management bodies.

³⁷ Source: DK-2 and KDK-2 Reports (on foreign currency credits and Denar credits with foreign currency clause approved to residents), the banks submit to NBRM on a monthly basis.

³⁸ Source: Report on the credit structure according to the type of interest rates, the banks submit to NBRM, as a part of the set of reports with general data on the banks.

In 2008, the structural share of the uncollateralized part of the credit exposure to the corporations and other clients sector dropped by 6.9 percentage points³⁹ and on December 31, 2008 reduced to 4.8%. Also, the share of credit exposure collateralized with real estate and of the exposure collateralized with movables (including securities and deposits) increased by 4.9 and 6.6 percentage points, respectively.

Figure 76
Structure of credit exposure to corporations and other clients, by type of collateral



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

3.1.4. Risk level and indicators for the quality of credit exposure to the household sector

On annual basis (December 31, 2007 - December 31, 2008), the indicators for the quality of credit exposure to the household sector deteriorated, mostly due to the drastic growth of the exposure with poorer quality. Such developments were expected to a certain extent, especially if we consider that it is relatively "young" portfolio and that the income and the household creditworthiness are particularly sensitive to the potential negative changes in the economic surrounding.

In 2008, the indicators for the quality of credit exposure to the household sector deteriorated. On December 31, 2008, the share of exposure classified in C, D and E risk categories in the total credit risk exposure to the household sector equaled 6.1%, and compared to the end of 2007, it increased by 1 percentage point⁴⁰. Moreover, in 2008, the average risk level also increased by 0.4 percentage points (on December 31, 2008, this indicator equaled 4.8%).

In 2008, the risk level of the exposure based on consumer credits, current account overdrafts, credit cards and other credits rose. On the other hand, the trend of improving the exposure quality based on credits for purchase and renovation of residential property and business premises and car credits continued. The most significant deterioration of the credit exposure quality indicators were registered in the exposure based on other credits category.

³⁹ Source: Report on the structure of credit exposure to corporations and other clients, according to the type of collateral, the banks submit to NBRM, as a part of the set of reports with general data on the banks. Credit exposure collateralized with real estate and other type of collateral is included in the exposure collateralized with real estate (this is the case in only one bank).

⁴⁰ Source: NBRM Credit Registry; Report on Credit Exposure by Activity - KAD by risk category, by bank.

Table 18
Indicators for the degree of quality and concentration of the credit exposure to the household sector

| Indicators for the degree of quality and concentration of the credit exposure | Date | Residential and commercial real estate credits | Consumer credits | Overdrafts | Credit cards | Car credits | Other credits | Total credit exposure to households |
|---|------------|--|------------------|------------|--------------|-------------|---------------|-------------------------------------|
| % of "C", "D" and "E" in total credit exposure | 31.12.2008 | 2.9% | 10.1% | 6.0% | 4.6% | 2.9% | 8.1% | 6.1% |
| | 31.12.2007 | 4.5% | 7.1% | 6.0% | 3.5% | 3.6% | 5.0% | 5.1% |
| | 31.12.2006 | 5.3% | 6.6% | 5.1% | 3.2% | n.a. | 6.5% | 5.4% |
| Average level of risk | 31.12.2008 | 3.7% | 6.0% | 4.7% | 3.9% | 3.3% | 7.8% | 4.8% |
| | 31.12.2007 | 4.8% | 5.3% | 4.4% | 3.2% | 4.1% | 5.3% | 4.4% |
| | 31.12.2006 | 5.7% | 5.0% | 3.8% | 2.4% | n.a. | 6.7% | 4.6% |
| Coverage of "C", "D" and "E" by the allocated loan loss reserves | 31.12.2008 | 129.3% | 59.7% | 77.8% | 83.7% | 114.8% | 96.8% | 78.4% |
| | 31.12.2007 | 106.3% | 73.7% | 74.1% | 90.4% | 113.5% | 106.1% | 85.7% |
| | 31.12.2006 | 107.2% | 75.6% | 74.3% | 75.8% | n.a. | 104.0% | 84.9% |
| Herfindahl index | 31.12.2008 | 2,185 | 1,469 | 3,135 | 5,343 | 2,260 | 5,940 | 2,286 |
| | 31.12.2007 | 2,155 | 1,778 | 3,122 | 5,210 | 2,597 | 2,494 | 2,420 |
| | 31.12.2006 | 2,954 | 1,721 | 2,613 | 5,485 | n.a. | 2,393 | 2,146 |
| CR5 ratio | 31.12.2008 | 87.9% | 91.7% | 94.0% | 89.2% | 95.1% | 97.5% | 84.3% |
| | 31.12.2007 | 88.1% | 82.5% | 97.3% | 93.8% | 93.8% | 90.0% | 85.3% |
| | 31.12.2006 | 96.3% | 76.4% | 93.5% | 99.1% | n.a. | 84.3% | 80.7% |

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

*Note: The banks started reporting to the NBRM on the credits for business premises and on automobile credits on March 31, 2007.

The decrease in the household credit portfolio quality, as a whole, and by credit products, is especially evident in the analysis of the developments of the amount of exposure classified in C, D and E risk categories. On annual basis, the amount of exposure with higher risk to the household sector went up by Denar 1,745 million, i.e. by 58.3%. More than 54% of this annual growth, i.e. Denar 947 million, arises from the growth in the exposure classified in C, D and E in the consumer credits. Fast annual growth in the exposure with higher risk degree of Denar 430 million, i.e. 65.3%, was also registered in the exposure based on credit cards. Yet, the highest relative growth in the exposures in C, D and E risk categories of 124.2% (or Denar 267 million) was reported for the category of other credits⁴¹.

Table 19
Change in the exposure to the household sector classified in C, D and E risk categories

| Credit exposure to household sector, by type of credit product | Credit exposure classified in "C", "D" and "E" (in millions of Denars) | | | Absolute annual change (in millions of Denars) | | Relative annual change (in %) | |
|--|--|--------------|--------------|--|-----------------------|-------------------------------|-----------------------|
| | 31.12.2006 | 31.12.2007 | 31.12.2008 | 31.12.2008-31.12.2007 | 31.12.2007-31.12.2006 | 31.12.2008-31.12.2007 | 31.12.2007-31.12.2006 |
| Residential and commercial real estate credits | 310 | 428 | 388 | -40 | 119 | -9.4% | 38.2% |
| Consumer credits | 981 | 1,260 | 2,207 | 947 | 279 | 75.2% | 28.5% |
| Overdrafts | 204 | 333 | 433 | 100 | 129 | 30.1% | 62.9% |
| Credit cards | 295 | 659 | 1,089 | 430 | 364 | 65.3% | 123.2% |
| Car credits | n.a. | 98 | 138 | 40 | n.a. | 41.1% | n.a. |
| Other credits | 374 | 215 | 482 | 267 | -159 | 124.2% | -42.6% |
| Total credit exposure to households | 2,164 | 2,993 | 4,738 | 1,745 | 731 | 58.3% | 33.8% |

Source: NBRM, based on data submitted by the banks

There is a relatively high level of concentration in some banks from the aspect of the type of credit products offered to the household sector. The Herfindahl index is within the acceptable level only in the exposure based on consumer credits. The high level of concentration of

⁴¹ As much as 76.4% of the total credit exposure in the other credits category belongs to one bank. 51.3% of the credit exposure based on other credits of this bank is a long-term consumer credit that the bank reported in the category of other credits.

other credits, credit cards and current account overdrafts is an additional signal for the higher credit risk some banks are exposed to as a result of these bank activities.

The credit risk exposure to the household sector is characterized with substantial presence of indirect credit risk to the banks. Thus, at the end of 2008, 45.5% of the household credits embedded currency component (foreign currency credits or Denar credits with foreign currency clause), resulting in a presence of potential indirect credit risk from the household exposure to currency risk. In addition, on December 31, 2008, 87.3% of the total household credits are with the so-called adjustable interest rates⁴², implying transfer of interest rate from the banks to the households, and consequently, an indirect credit risk which could arise in the case of increasing the interest rates.

Table 20
Structure of exposure to the household sector, by collateral

| Type of collateral | Residential and commercial real estate credits | Consumer credits | Overdrafts | Credit cards | Car credits | Other credits* |
|---|--|------------------|------------|--------------|-------------|----------------|
| Unsecured credit exposure | 0.0% | 43.2% | 81.7% | 46.2% | 0.0% | 5.7% |
| Credit exposure secured by real estate | 90.4% | 11.0% | 0.1% | 0.0% | 0.8% | 73.4% |
| Credit exposure secured by movables (including deposits and securities) | 1.1% | 4.6% | 0.4% | 0.3% | 94.9% | 8.4% |
| Credit exposure secured by bills of exchange, endorsers, guarantees and other types of collateral | 8.5% | 41.2% | 17.7% | 53.5% | 4.3% | 12.5% |

*Other credits include all credits which are not included in the other five categories.

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

On annual basis (December 31, 2007 - December 31, 2008), the structure of credit exposure to the household sector, according to the type of collateral, suffered no significant changes⁴³. Relatively significant portion of the credit exposure to this sector (35.7%) is still uncollateralized, with the highest degree of non-collateralization being registered in the exposure based on credit cards, current account overdrafts and consumer credits, illustrating a high risk level typical for the exposure based on these credit products.

Table 21
Structure of credit exposure to households, by monthly income on all bases

| Level of monthly income, on all bases | Residential and commercial real estate credits | | Car credits | | Overdrafts and credit cards | | Consumer credits | | Other credits | | Total credit exposure to households | |
|---------------------------------------|--|-------|--------------------------------|-------|--------------------------------|-------|--------------------------------|-------|--------------------------------|-------|-------------------------------------|-------|
| | Amount (in millions of Denars) | In % | Amount (in millions of Denars) | In % | Amount (in millions of Denars) | In % | Amount (in millions of Denars) | In % | Amount (in millions of Denars) | In % | Amount (in millions of Denars) | In % |
| to Denar 7,000 | 514 | 3.9% | 407 | 9.5% | 1,500 | 8.8% | 1,769 | 4.9% | 218 | 11.2% | 4,408 | 6.1% |
| from Denar 7,000 to 15,000 | 456 | 3.5% | 296 | 6.9% | 4,578 | 26.8% | 12,460 | 34.8% | 202 | 10.3% | 17,992 | 24.9% |
| from Denar 15,000 to | 1,954 | 15.0% | 1,315 | 30.8% | 6,832 | 40.0% | 14,358 | 40.1% | 297 | 15.2% | 24,756 | 34.3% |
| from Denar 30,000 to | 3,714 | 28.5% | 1,308 | 30.6% | 2,424 | 14.2% | 3,625 | 10.1% | 344 | 17.6% | 11,416 | 15.8% |
| over Denar 50,000 | 6,412 | 49.1% | 947 | 22.2% | 1,752 | 10.3% | 3,562 | 10.0% | 892 | 45.7% | 13,565 | 18.8% |

*Note: Borrower's monthly income also includes the monthly income of the co-borrower.

Source: NBRM, based on data submitted by the banks

The largest portion of the banks' credit portfolio encompasses borrowers with monthly income from Denar 7,000 to 30,000⁴⁴. The exposure to households is dominated by the exposure to

⁴² Source: Report on the credit structure according to the type of interest rates, the banks submit to NBRM, as a part of the set of reports with general data on the banks.

⁴³ Source: Report on the structure of credit exposure to households, according to the type of collateral, the banks submit to NBRM, as a part of the set of reports with general data on the banks.

⁴⁴ The analysis has been made on the basis of data obtained by sixteen of seventeen banks with credit exposure to the household sector. Within this structure, one bank reported "no wage" category, which accounts for roughly 10% of its total credit exposure to households. The data shows that most of the banks are not ready to

borrowers with monthly income, on all bases, from Denar 7,000 to 30,000 (59.2%). Analyzing by credit product offered to households, most unfavorable credit exposure structure is registered in the consumer credits, where 75% of the total exposure is to borrowers with monthly income from Denar 7,000 to 30,000. Similar structure was registered in the exposure based on credit cards and current account overdrafts, emphasizing even more the banks' credit risk exposure to these placements.

Stress-test analysis of the banking system sensitivity to the deterioration of the credit exposure quality, to the corporations and other client sector and/or to the household sector

The stress-test analysis of the banking system sensitivity to the potential deterioration of the quality of credit exposure to nonfinancial entities is based on the presumption on migration of a certain percentage of credit exposure of each risk category, to the two next categories with higher risk degree, where it is distributed at equal amount (e.g. a certain percentage of the exposure in A risk category migrates and is equally distributed to the B and C risk category; a certain percentage of the exposure in B risk category migrates and is equally distributed to the C and D risk category, etc.). Such developments in the structure of credit exposure to activities and/or based on credit products offered to the households triggered the deterioration of the credit exposure quality indicators. The credit exposure quality deterioration, in turn, led to allocation of additional loan loss provisions, thus decreasing the banking system's own funds, i.e. reducing the capital adequacy ratio.

The stress-test analysis was conducted for two scenarios: 1) migration of 10% of the credit exposure of each risk category to the next two risk categories with higher risk degree, and its distribution in equal amount and 2) redistribution of 30% of the credit exposure of each risk category to the next two higher risk categories. Both scenarios have been conducted for each activity within the corporations and other client sector and to each credit product offered to the households.

Table 22
Initial condition and results from the possible deterioration of the quality of credit exposure to activities of the corporations and other client sector

| Indicators | | Industry | Agriculture, hunting and forestry | Construction | Wholesale and retail trade | Transport, storage and communication | Credit exposure to corporations and other clients |
|--------------------|---|----------|-----------------------------------|--------------|----------------------------|--------------------------------------|---|
| Initial conditions | Capital adequacy ratio at the level of banking system | 16.2% | | | | | |
| | % of "C", "D" and "E" in total credit exposure | 11.7% | 18.1% | 9.1% | 7.1% | 7.1% | 9.1% |
| | Average level of risk | 10.7% | 17.3% | 7.6% | 6.8% | 6.0% | 8.6% |
| I scenario | Capital adequacy ratio at the level of banking system | 15.7% | 16.1% | 16.0% | 15.8% | 16.1% | 15.0% |
| | % of "C", "D" and "E" in total credit exposure | 17.1% | 23.8% | 14.6% | 12.6% | 12.4% | 14.6% |
| | Average level of risk | 12.7% | 19.4% | 9.7% | 8.7% | 7.9% | 10.5% |
| II scenario | Capital adequacy ratio at the level of banking system | 14.8% | 16.0% | 15.8% | 15.1% | 15.9% | 12.7% |
| | % of "C", "D" and "E" in total credit exposure | 27.9% | 35.3% | 25.6% | 23.7% | 23.0% | 25.6% |
| | Average level of risk | 16.6% | 23.6% | 13.8% | 12.6% | 11.7% | 14.4% |

Source: NBRM, internal calculations.

Note: Assumes an insulated deterioration of the quality of credit exposure to individual activities, and deterioration of the quality of the total credit exposure to corporations and other clients.

The deterioration, if any, of the quality of credit risk exposure to the corporations and other client sector as a result of the redistribution of the credit exposure from the lower credit risk categories to the higher credit risk categories would reduce the capital adequacy ratio by 1.2 percentage points in the case of first scenario, i.e. by 3.5 percentage points in the case of the

prepare the obtained data precisely, which points to weaknesses of the banks' systems for monitoring the credit risk of considerably dispersed number of clients.

second scenario. Simultaneously, the average risk level of the credit exposure to the corporations and other clients would rise from the initial 8.6%, to 10.5% (in the case of the first scenario), i.e. would reach 14.4%, (in the case of the second scenario). Analyzing by activity, the potential deterioration of the exposure quality to the industry activity would cause the fastest decrease in the capital adequacy of the banking system. On the other hand, the largest deterioration of the credit portfolio quality indicators would be noticed in the exposure to the activity of agriculture, hunting and forestry.

Table 23

Initial condition and results from the possible deterioration of the quality of credit exposure to the household sector, by credit product

| Indicators | | Residential and commercial real estate credits | Consumer credits | Overdrafts | Credit cards | Car credits | Other credits | Credit exposure to households |
|--------------------|---|--|------------------|------------|--------------|-------------|---------------|-------------------------------|
| initial conditions | Capital adequacy ratio at the level of banking system | 16.2% | | | | | | |
| | % of "C", "D" and "E" in total credit exposure | 2.8% | 10.1% | 6.0% | 4.6% | 2.9% | 8.1% | 6.1% |
| | Average level of risk | 3.8% | 6.0% | 4.7% | 3.9% | 3.3% | 7.8% | 4.8% |
| I scenario | Capital adequacy ratio at the level of banking system | 16.0% | 15.9% | 16.1% | 16.0% | 16.1% | 16.1% | 15.5% |
| | % of "C", "D" and "E" in total credit exposure | 8.4% | 15.0% | 11.1% | 9.6% | 8.1% | 14.1% | 11.3% |
| | Average level of risk | 5.6% | 8.0% | 6.6% | 5.6% | 5.1% | 9.9% | 6.7% |
| II scenario | Capital adequacy ratio at the level of banking system | 15.8% | 15.5% | 16.0% | 15.6% | 16.0% | 16.0% | 14.1% |
| | % of "C", "D" and "E" in total credit exposure | 19.7% | 25.0% | 21.3% | 19.6% | 18.6% | 26.1% | 21.7% |
| | Average level of risk | 9.4% | 12.1% | 10.3% | 9.2% | 8.7% | 14.1% | 10.5% |

Source: NBRM, internal calculations.

Note: Assumes an insulated deterioration of the quality of credit exposure to activities based on credit products, and deterioration of the quality of the total credit exposure to households.

If we assume deterioration of the quality of credit exposure to the household sector, the capital adequacy ratio would reduce from the initial 16.2%, to 15.5%, in the case of the first scenario, i.e. would reduce to 14.1%, in the case of the second scenario. On the other hand, the average risk level of the household exposure would go down by 1.9 percentage points, in the case of the first scenario, i.e. this indicator would decline by 5.7 percentage points in the case of the second scenario. Observing by credit products offered to the households, the largest deterioration of the capital adequacy ratio would be triggered by the potential reduction of the credit exposure quality degree based on consumer credits. On the other hand, the household exposure based on other credits would registered the highest deterioration of the credit risk exposure quality indicators, due to the redistribution of the credit exposure of the lower risk categories to the higher risk categories.

If we assume simultaneous deterioration of the quality of credit exposure to the overall nonfinancial entities sector (to corporations and other clients and to households), the capital adequacy of the banking system would fall by 1.9 percentage points in the case of the first scenario, i.e. by 5.6 percentage points, in the case of the second more extreme scenario. Simultaneously, the redistribution of the credit exposure to nonfinancial entities, from the lower risk categories to the higher risk categories, would induce deterioration of the indicator for the average risk level of the credit exposure across the banking system by 1.5, i.e. by 4.4 percentage points, respectively, by scenario.

Table 24

Initial condition and results from the possible deterioration of the quality of credit exposure to the corporations and other clients and to the household sectors

| Indicators | | Credit exposure to corporations and other clients and to households | Credit exposure to banking system* |
|--------------------|---|---|------------------------------------|
| initial conditions | Capital adequacy ratio at the level of banking system | 16.2% | |
| | % of "C", "D" and "E" in total credit exposure | 8.0% | 6.4% |
| | Average level of risk | 7.1% | 5.8% |
| I scenario | Capital adequacy ratio at the level of banking system | 14.3% | |
| | % of "C", "D" and "E" in total credit exposure | 13.4% | 10.5% |
| | Average level of risk | 9.1% | 7.3% |
| II scenario | Capital adequacy ratio at the level of banking system | 10.6% | |
| | % of "C", "D" and "E" in total credit exposure | 24.2% | 18.8% |
| | Average level of risk | 12.9% | 10.2% |

*Note: Assumes deterioration of the quality of credit exposure to corporations and other clients and to the household sectors, and examines its effect on the quality of the total credit exposure of the banking system and on the capital adequacy ratio. Source: NBRM internal calculations.

The results from the stress-test analysis indicate satisfactory resilience of the banking system in the Republic of Macedonia to possible credit shock, considering that neither of the stress -test scenario reduces the capital adequacy ratio below the minimum requirement of 8% specified by law. Yet, the general conclusion remains that it is necessary to monitor the developments in the credit exposure to nonfinancial entities in due care, considering the high negative correction of the indicators for the credit exposure quality, in the case of both scenarios.

*The stress-test analysis has been made using the data from the Credit Registry, from the Report on credit exposure by activity - KAD by risk category, as of December 31, 2008.

3.2. Liquidity risk

In 2008, sufficient level of liquid assets was available for the banks in the Republic of Macedonia, thus maintaining stable liquidity position. They have serviced their liabilities to depositors smoothly and timely and they had no need in either case to use liquidity support from the NBRM in form of Lombard credit or short-term liquidity credit in last resort. The turbulences on the global financial markets, the problems the banking systems of the developed countries faced with and the recessive movements in the economies of the most significant trading partners of the Republic of Macedonia, in contrast to the real sector, initially caused no negative consequences. Also, the banks in the Republic of Macedonia have been using the deposits of the domestic households and legal entities as main source of financing of their operating. The external financing and the domestic interbank indebtedness are not present in the scope that could cause negative systemic effects. However, in 2008, the trend of deepening of the maturity mismatch between assets and liabilities of the banks continued. Its main carrier was the strong several year increase in the crediting, which in one hand, caused decrease in most of the liquidity indicators. This occurrence, in conditions of tightening of the interbank capital flows, deteriorated position of the export sector and the presence of growing imbalances in the domestic economy, influence towards requiring larger consideration of liquidity management.

3.2.1. Liquid and highly liquid assets and sources of financing of the banking system

In 2008, the average amount⁴⁵ of the liquid assets⁴⁶ equals Denar 65,576 million, while the highly liquid assets⁴⁷ Denar 40,939 million. However, in 2008, the conversion of the foreign exchange placements with foreign banks into placements with the domestic economy (credits and placements in liquid domestic securities) continued to intensify, thus emphasizing the divergent movement of the liquid and highly liquid assets. Thus, annually, the average amount of liquid assets reduced by Denar 4,074 million, or 6.0%, while the highly liquid assets went up by Denar 3,142 million, or 8.3%. This occurrence contributed the share of the highly liquid assets in the liquid assets to surge from 54.3% in 2007 to 62.6% in 2008. The decrease in the liquid assets was the most apparent in the second half of the year, and especially in the last quarter of 2008, when it registered a decline of roughly 26%. The downward movements in the volume of the liquid assets with the banks, by their part, are important signal imposing a need of higher cautious and causes certain restriction of the further growth in the crediting.

The increase in the total assets followed by the decrease in the liquid assets, in 2008, resulted in a decrease in the share of the average liquid assets in the total average assets of the banking system of 8.1 percentage points. Thus in 2008 the share of the liquid assets in the total assets equaled 27.2%, which is also the lowest level registered in the last four years. The share of the highly liquid assets in the total assets registered more moderate annual decline of 2.1 percentage point.

Figure 77
Relative significance of the liquid and highly liquid assets

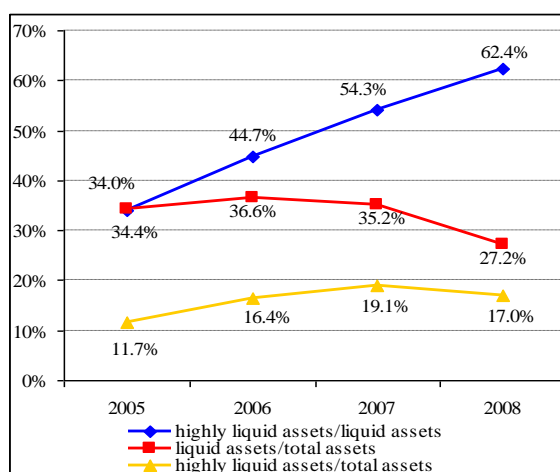
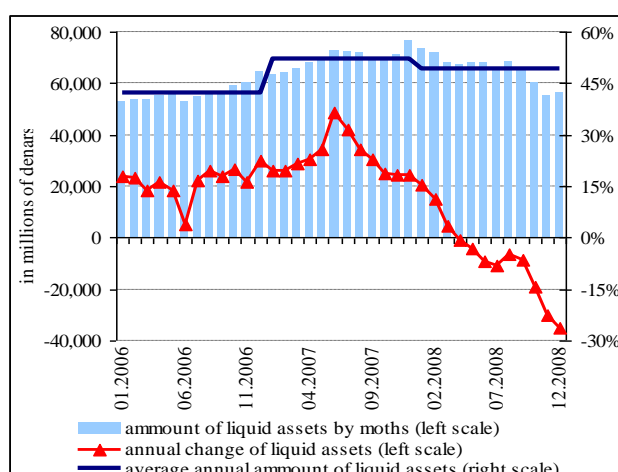


Figure 78
Movement and annual change in the average annual and monthly amount of liquid assets



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

⁴⁵ The liquidity risk analysis is based on the average amounts of all categories of the banking system's balance sheet.

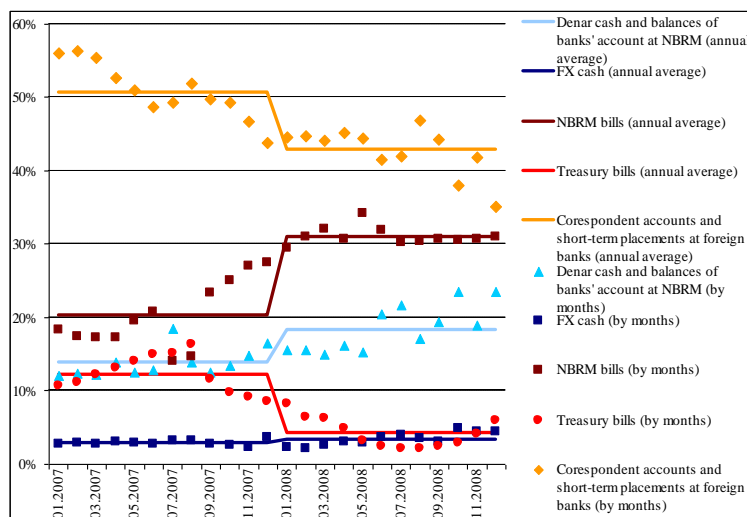
⁴⁶ The liquid assets, in wider sense, encompass the highly liquid assets, the short-term placed assets with foreign banks and placements in other short-term debt securities.

⁴⁷ The highly liquid assets encompass the cash and the balances with the NBRM, the CB bills, the correspondent accounts with foreign banks and short-term placements in government securities.

The short-term placements in foreign banks and the CB bills maintained the dominant position in the banks' liquid assets.

In 2008, the assets placed with foreign banks encompassed, on average, 42.9%, while the CB bills 31.1% of the liquid assets. The downward trend of the average amount of liquid assets during 2008 was followed by significant movements in its structure. Namely, the share of the assets in foreign banks in the structure of the average amount of liquid assets in 2008 continued with the downward trend, registering annual fall of 7.8 percentage points. Oppositely, the share of the CB bills in the structure of the average amount of liquid assets went up by 10.8 percentage points. However, in the second half of 2008, the amount of the CB bills declined, although with more moderate pace than the decrease in the total volume of liquid assets. Thus at the end of 2008, the CB bills plunged by Denar 3,562 million compared to the end of 2007. Also in the second half of 2008 rise in the structural share of both Denar and foreign exchange cash with the banks is registered. It is a reflection of the banks' necessity for timely response to the psychological reactions of part of the depositors, primarily households, to the developments the banks from the developed countries face with.

Figure 79
Structure of the liquid assets according to its items - annual average and monthly balances

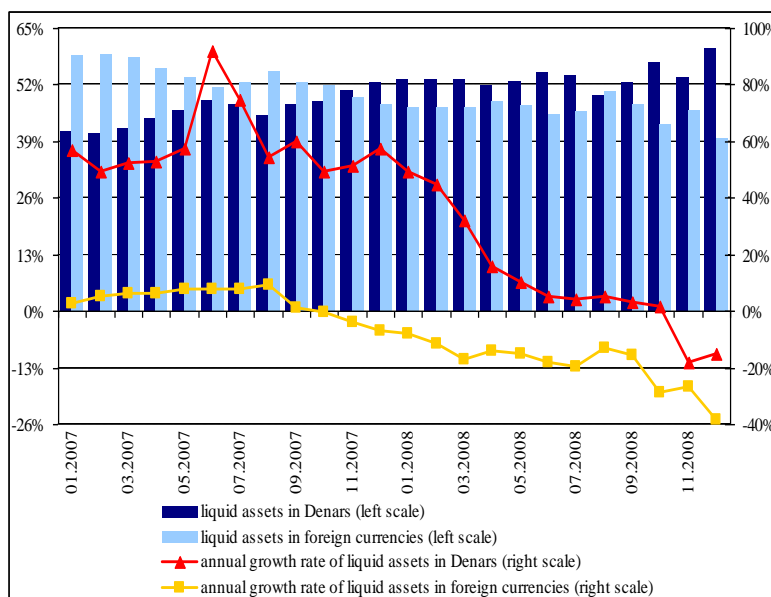


Source: NBRM, on the basis of data submitted by the banks

The trend of decrease in the domestic banks' assets placed with foreign banks, influenced also in direction of continuous decrease in the foreign currency component of the liquid assets. Thus in the entire 2008, the foreign liquid assets registered negative rate of change.

Additionally, the Denar liquid assets registered significantly smaller growth in 2008 compared to 2007, and in the last quarter of the year, their annual rate of change obtained negative values. These movements caused changes also in the liquid assets' currency structure. Namely, in 2008, the share of the foreign exchange liquid assets in the total liquid assets continued to decline and at the end of the year it reduced to 39.6% (on December 31, 2007 it equaled 47.5%). On the other hand, since the end of 2007 and during 2008, the share of the Denar component in the liquid assets has been constantly increasing. The changes in the liquid assets' currency structure, in context of relatively high degree of currency substitution and fall in the

Figure 80
Currency structure of the liquid assets' and annual rates of change

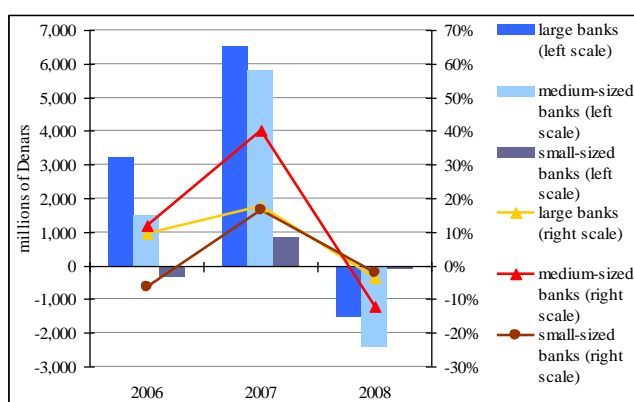


Source: NBRM, on the basis of data submitted by the banks

foreign exchange inflows in the domestic economy, are significant and limiting factor, not only for the maintenance of the macroeconomic stability, but for safeguarding the stability of the banking system, as well. These movements are the best illustration of the necessity for strengthening of the banks' liquidity position, and thus for the increase in the level of caution regarding the liquidity management.

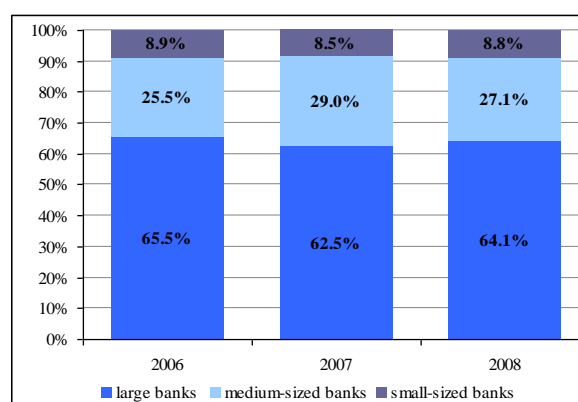
Decrease in the average amount of liquid assets in 2008 was registered also with individual groups of banks. The largest drop in the average liquid assets in the amount of the Denar 2,429 million, i.e. 12.0% was registered with the group of medium-size banks. The group of large banks registered a decrease in the average liquid assets of Denar 1,533 million, i.e. 3.5%, while the group of small-size banks registered a decline of Denar 112 million, i.e. 1.9%. However, in 2008, the largest share in the average liquid assets of the banking system of 64.1% accounted for the group of large banks and in comparison with 2007, it registered an increment of 1.6 percentage points.

Figure 81
Absolute and relative change in the liquid assets of individual groups of banks



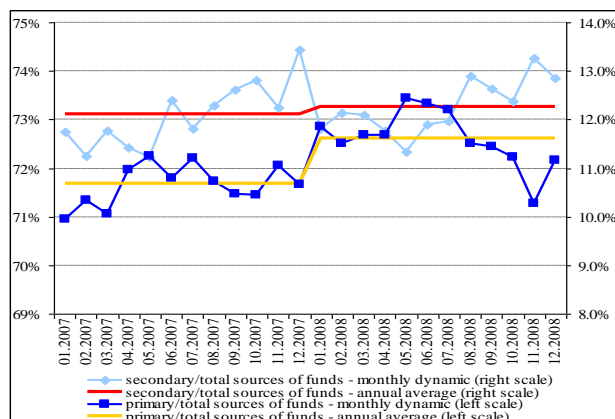
Source: NBRM, on the basis of data submitted by the banks

Figure 82
Distribution of liquid assets by group of banks



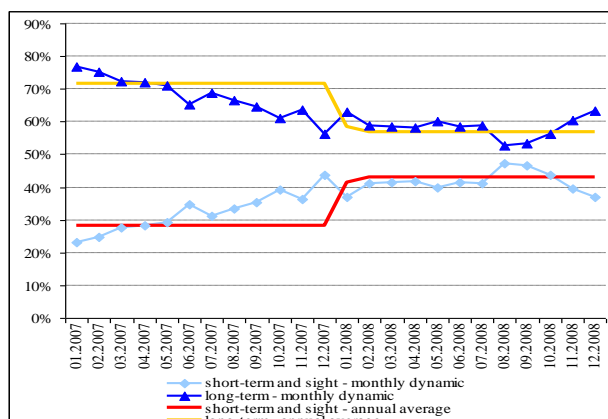
The deposits of the domestic households and legal entities retained the primacy in the financing of the banks' activities. The primary sources of funds encompassing the deposits of the non-financial entities with all maturities, in 2008, covered 72.6% of the total sources of funds and registered annual growth of 23.3%, i.e. Denar 33.104 million. Oppositely, in 2008 the average secondary sources of funds participated with 12.3% in the total sources of funds, and they registered annual rise of Denar 5,567 million, i.e. 23.2%.

Figure 83
Relative significance of the primary and the secondary sources of funds - annual average and monthly dynamics



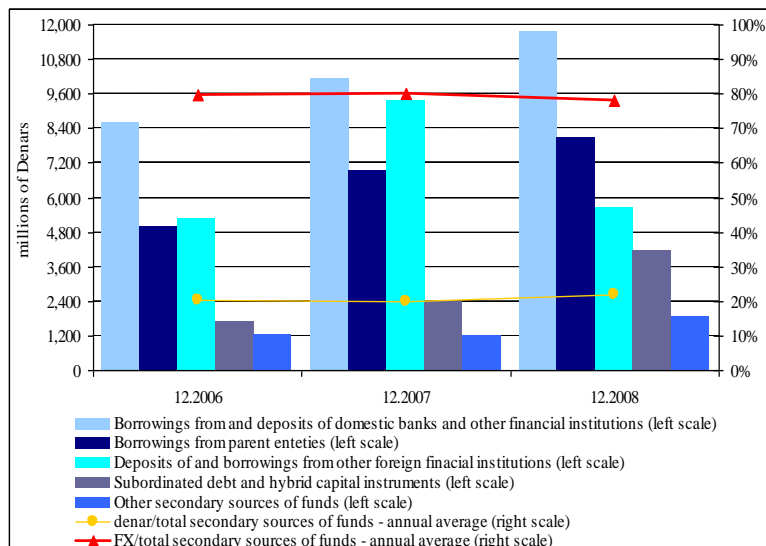
Source: NBRM, on the basis of data submitted by the banks

Figure 84
Maturity structure of the secondary sources of funds - annual average and monthly dynamics



In 2008, certain structural movements with the secondary sources of funds were registered. From the aspect of the maturity structure, in 2008, the average share of the long-term in the total secondary sources of funds equaled 56.9% and showed decrease of 14.8 percentage points compared to 2007. According to the type of the items the secondary sources of funds consist of, in 2008, the highest increase of Denar 1,759 million was registered with the subordinated deposits and hybrid capital instruments the banks use as an instrument for the purpose of maintenance of the capital adequacy. The average amount of the deposits and the borrowings from the domestic banks and other financial institutions registered annual increase of Denar 1,607 million, while the borrowings from the parent entities of Denar 1,103 million. The rise in these components of the secondary sources of funds completely negates the decrease in the average amount of deposits and borrowings from foreign banks and financial institutions, which equaled Denar 3,717 million, annually. The currency structure of the secondary sources of funds registered no larger movements in 2008. As well as in the previous years, in 2008 the average amount of the secondary sources of funds denominated in foreign currency had dominant share of 78.2% in the total secondary sources of funds.

Figure 85
Currency structure of the secondary sources of funds and amount of their individual items



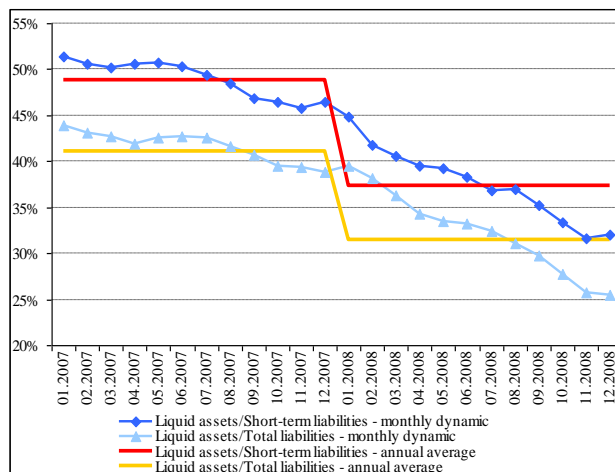
Source: NBRM, on the basis of data submitted by the banks

3.2.2. Liquidity indicators

The decrease in the scope of the banks' liquid assets inevitably reflected on the decrease in the liquidity indicators at the level of the banking system. Namely, most of the liquidity indicators were constantly registering a decrease in 2008, with the intensity being especially high in the second half of the year. The main driving force of this trend was the enhanced crediting of the private sector, followed by the process of conversion of the banks' foreign exchange placements with the foreign banks into Denar placements in the country. In the last quarter of 2008, the payment of dividend by one large company also influenced, as well as the households' psychological reactions to the news for deterioration in the international financial system, which reflected on the change in the propensity to save in foreign currency and larger variability of the deposits.

In 2008, the average level of the coverage of the short-term liabilities of the banking system with liquid assets equaled 37.4% and in comparison with the 2007, it registered a decline of 11.4 percentage points. Also, compared to 2007, also the average level of the coverage of the households' deposits and sight deposits with liquid assets went down by 19.1 and 17.1 percentage points, thus reducing to 64.6% and 93.9%, respectively in 2008. The decrease in these indicators was especially evident in the second half of 2008 and on December 31, 2008 they reduced to the lowest monthly values in the last two years.

Figure 86
Coverage of the short-term and the total liabilities with liquid assets - annual average and monthly dynamics



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

The decrease in the indicators pertaining to the foreign exchange liquidity is especially evident, observed as an annual average and through the monthly dynamics. Namely, in 2008, the average coverage of the foreign exchange short-term liabilities and the foreign exchange total liabilities with the liquid assets in foreign exchange equaled 36.4% and 29.0%. In comparison with 2007, these indicators registered a decline of 16.6 and 13.4 percentage points, respectively. The change in the currency preferences of the depositors and the decrease in the inflows of foreign assets in the second half of 2008, resulted in maintenance of the level of the foreign exchange liquidity below their annual average at the end of 2008, which is especially evident with the indicator of

coverage of the households' foreign currency deposits with liquid assets in foreign exchange. Thus on December 31, 2008 this indicator equaled 34.8% while its average value in 2008 equaled 52.5%.

Figure 87
Indicators for coverage of the deposits with liquid assets - monthly dynamics and annual average

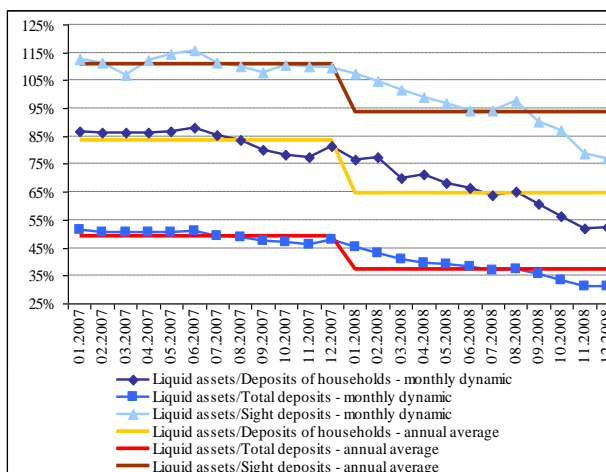
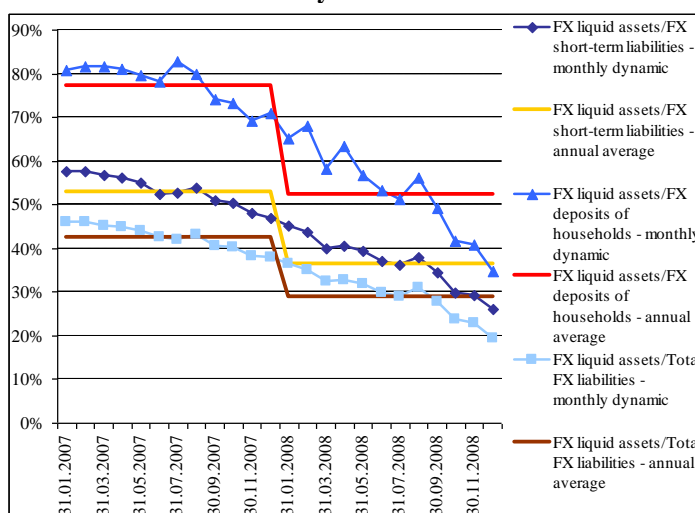


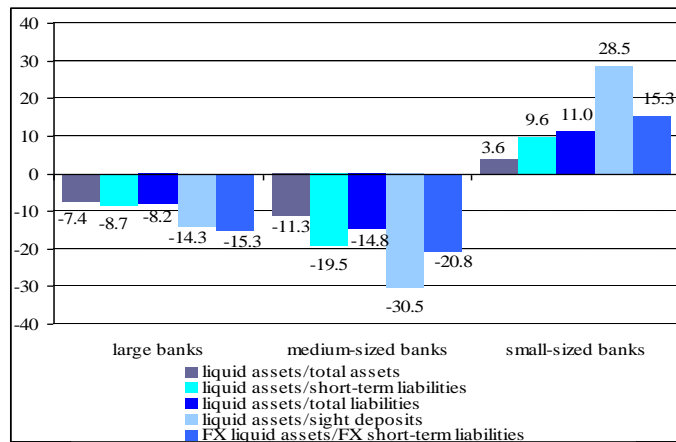
Figure 88
Dynamics of the indicators of the banks' foreign exchange liquidity - annual average and monthly dynamics



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

The decrease in the liquidity indicators in 2008 was present also with the groups of large and medium-size banks (Annex 11 -Liquidity indicators of the banking system and by group of banks). The liquidity indicators in these groups registered a fall, annually, which primarily results from the persistence to maintain market share of the group of large banks, i.e. the preference for fast increase in the market share of the group of medium-size banks. Oppositely, the group of small-size banks registered annual rise in the liquidity indicators. The increase in the indicators with the group of small-size banks primarily arises from their moderate role in the process of financial intermediation, as well as due to the ownership and management changes certain banks from this group have been through. Larger values of the liquidity indicators with the group of small-size banks, given changes in the environment, create room for future increase in their role in the banking system.

Figure 89
Annual change of selected average liquidity indicators with individual groups of banks

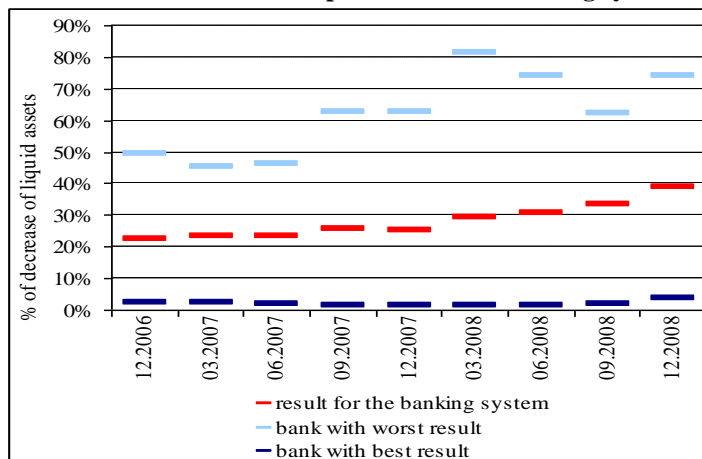


Source: NBRM, on the basis of data submitted by the banks

Stress-test analysis of the resistance of the banking system to liquidity shocks

The stress-test analysis of the resistance of the banking system to liquidity shocks for December 31, 2008 shows that the banks in the Republic of Macedonia, despite the decrease in the volume of the liquid assets, and thus the liquidity indicators, are still resistant to the possible unfavorable and unexpected liquidity shocks. The amount of the liquid assets the banks have on their disposal on December 31, 2008 is sufficient to cover the hypothetical liquidity shock in form of instant withdrawal of 20% of the total households' deposits from the banking system. Possible practical realization of this external shock, would reduce the liquid assets of the banking system, by 39.0%, while the highly liquid assets by 52.3%. The decline in the liquid assets by individual banks would range within 3.5% - 74.1% interval.

Figure 90
Results of the stress-scenario for instant withdrawal of 20% of the households' deposits from the banking system



Source : Internal calculations of NBRM

Compared to the risk of mass non-confidence in the system, and consequently large outflow of deposits covered with the previous simulation, it seems that the risk of concentration of deposits and sources of funds is more evident with the banks in the Republic of Macedonia. Namely, the negative influence on the banks' liquidity became more apparent when simulating hypothetical withdrawal of deposits of the largest twenty depositors of each bank. In case of this extreme scenario, five banks will register lack of liquid assets for covering the outflow of deposits of the largest twenty depositors. However, at the level of the banking system, the decrease in the liquid assets in case of

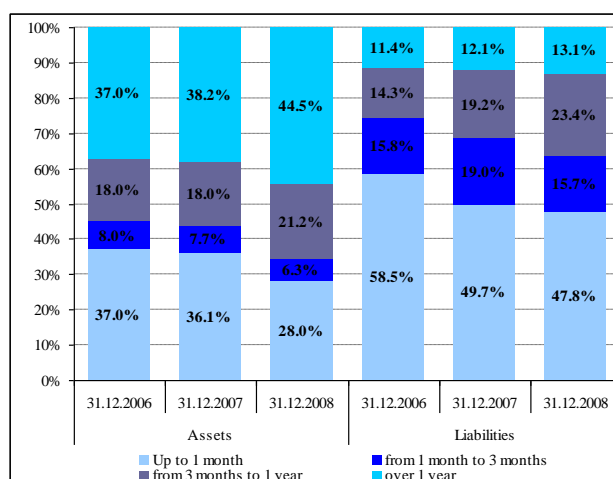
this highly extreme scenario would equal 82.0%, which indicates on certain possibility for lessening and controlling the spill over effects of this extreme shock from one bank in the entire banking system.

3.2.3. Assets and liabilities' maturity structure

The heavy increase in the credit activity of the banks in the last several years, given dominant presence of the short-term sources of financing, resulted in acceleration in the maturity transformation the banks perform. Thus the share of the assets with residual contractual maturity longer than one year in the total assets, on December 31, 2008 equaled 44.5% and in comparison with the end of 2007 it augmented by 6.3 percentage points. On the other hand, on December 31, 2008 the share of the liabilities with residual maturity longer than one year in the structure of the total liabilities of the banks equaled only 13.1% and it surged by 1.0 percentage point, annually. Oppositely, the bank's liabilities with residual contractual maturity shorter than one month represent 47.8% of their total liabilities.

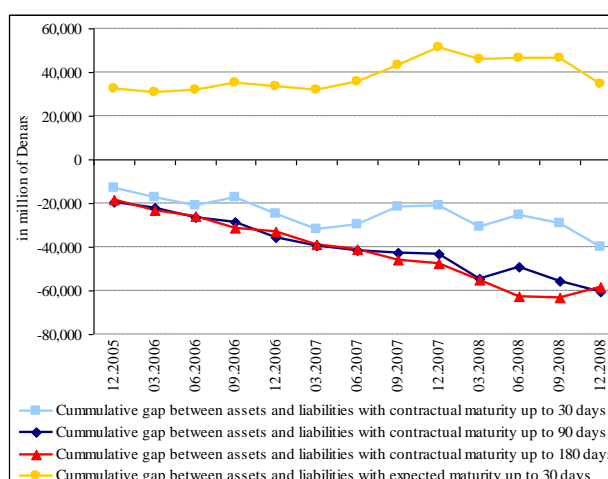
The intensification of the tempo of the maturity transformation the banks perform resulted in significant deepening of the gap in the residual contractual maturity of the assets and liabilities. The cumulative maturity mismatch of the banks' assets and liabilities is the biggest and especially evident within the maturity segment of up to 90 days. On the other hand, the residual maturity of the assets and the liabilities according to the banks' expectations⁴⁸ points to overall coverage of the anticipated outflows with the anticipated inflow of funds. However, in the second half of 2008, gradual decrease in the cumulative gap between the anticipated maturity of the assets and liabilities up to 30 days is registered, which points to anticipation for larger variability with the current, but also reduced inflow of new sources of funds in the banking system.

Figure 91
Assets and liabilities' structure according to contractual residual maturity



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

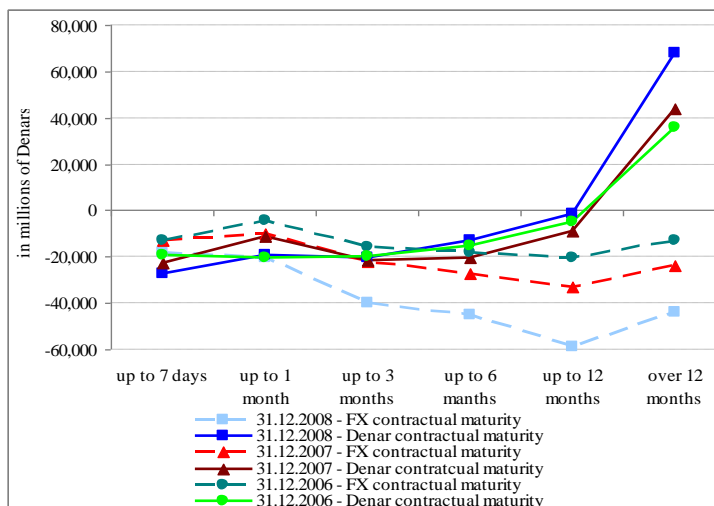
Figure 92
Dynamics of the cumulative gap in the contractual and anticipated maturity of the assets and liabilities for different maturity segments



⁴⁸ The anticipated residual maturity of individual lending (assets) and deposit items (liabilities) represents the residual period from the end of the reporting period until their anticipated maturity, i.e. the maturity in which the bank estimates that inflows based on its claims and outflows based on its liabilities will occur.

The trend of increase in the difference between the contractual maturity of assets and liabilities is more apparent with assets and liabilities denominated in foreign currency, especially with the longer maturities. On the other hand, significantly lower movement in the cumulative contractual maturity mismatch is registered with the Denar assets and liabilities, annually. The cumulative maturity mismatch between the foreign assets and liabilities has not been overcome also in the last maturity segment, i.e. over 12 months. This occurrence is due to the foreign exchange placements in foreign banks in Denar placements and placements with FX clause in the domestic economy, as well as to the higher presence of the subordinated deposits and borrowings from the parent entities with some of the banks in the Republic of Macedonia. Also this situation indicates that in conditions of harder or more expensive access to funds on the international financial markets, and in case of possible serious disturbances in the macroeconomic balance in the domestic economy, the banks can find themselves in unfavorable position from the aspect of the availability of the foreign assets.

Figure 93
Cumulative of residual contractual maturity structure of the assets and liabilities for the banking system by currency structure



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

expensive access to funds on the international financial markets, and in case of possible serious disturbances in the macroeconomic balance in the domestic economy, the banks can find themselves in unfavorable position from the aspect of the availability of the foreign assets.

The increased variability of the deposits and the decrease in the possibilities for access to new sources of financing reflected also by lowering the banks' expectations regarding the stability in the sight deposits. In the first half of 2009, the anticipated percentage of stability of the sight deposits registered an upward trend, but in the second half of 2008 it dropped, thus reflecting the change in the banks' expectations, caused by the developments on the global financial markets. On December 31, 2008, according to the banks' expectations, the percentage of stable sight deposits at the level of the banking system, equaled 84.3%, and compared to December 31, 2007 it went up by 2.0 percentage points. Also, on December 31, 2008 according to the bank' expectations, 15.5% of the total sight deposits would outflow within seven days, which is an increase of 1.7 percentage points compared to the banks' expectations at the end of 2007. However, besides the registered revision of the banks' expectations in the second half of 2008, the sight deposits characterizes with relatively high anticipated stability.

According to the deposits' currency structure, at the end of 2008, the banks expect better stability of the foreign currency deposits. Thus on December 31, 2008, the banks expect that 5.3% of the foreign currency deposits will outflow within seven days, which is a decrease of 4.1 percentage points compared to December 31, 2007. On the other hand, the anticipated outflow of the Denar deposits within seven days increases, from 6.6% at the end of 2007 to 8.7% on December 31, 2008.

New prudent framework for liquidity risk management

The identified changes in the banks' liquidity inevitably imposed the NBRM necessity to make certain adjustments and changes in the prudent regulatory framework for managing the liquidity risk with the banks. The latest developments on the international money markets, the liquidity problems in the banking systems of the European countries in 2008 and the velocity they spread from one country to another, verifies the validity of the defining and the establishment of

adequate systems for managing the liquidity risks and the maintenance of suitable liquidity level. In that direction, at the end of 2008, the NBRM adopted new Decision on managing banks liquidity risk. This Decision, inter alia, imposed the requirement for the banks to maintain certain minimal level of liquidity ratio, defined as a ratio between the on-balance sheet assets and liabilities maturing within the maturity segments up to 30 and 180 days, especially for the Denar and foreign currency assets and liabilities. Also, when calculating the liquidity ratio, the deposits concentration, as a factor that can influence on the level of the liquidity risk with banks is taken into consideration.

The basic expected effect of prescribing minimal liquidity ratio is gradual increase in the liquidity potential of the banks and the banking system in general, and consequently, better protection of the depositors and other fiduciaries of the banks. Additional anticipated effect is improvement in the maturity harmonization between assets and liabilities of the banking system and cessation of the further deepening of the gap in the contractual maturity of assets and liabilities. This measure is expected to represent an additional challenge for the banks for more active approach in the liabilities management, in direction of attracting longer-term sources of funds. Also, this measure is expected to provide an impulse for further development of the domestic short-terms securities market, having in mind the necessity for decreasing the maturity of the banks' assets. Last, but not least, the process of restructuring of the banks' assets, will certainly enable strengthening of their solvent position, and consequently, larger capacity for loss absorption in case of possible materialization of the risks from the credit portfolio.

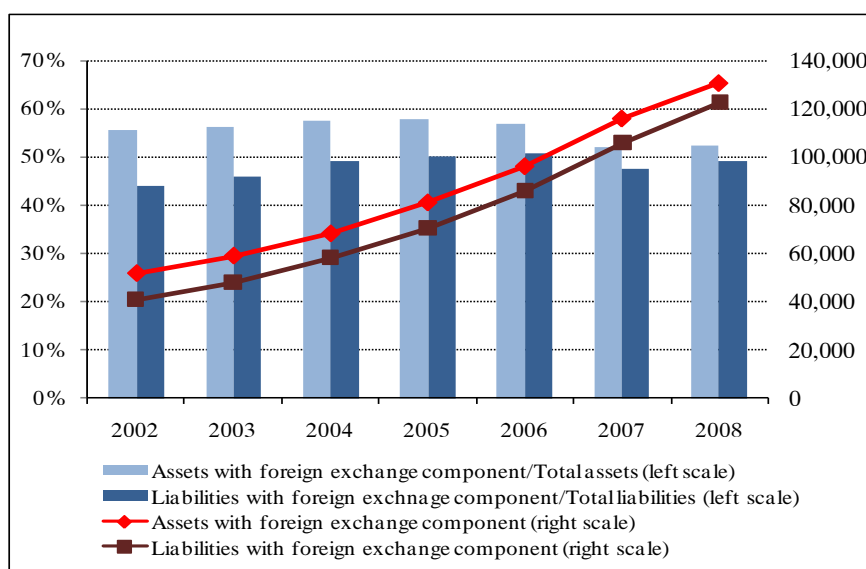
3.3. Currency risk⁴⁹

The high share of the currency component⁵⁰ in the total assets and liabilities of the banks in the Republic of Macedonia maintained also in 2008. The evident psychological pressures arising from the uncertainty caused by the international financial crisis and the expectations for possible effects on the domestic economy, resulted in additional strengthening of the currency component with the deposit base.

At the end of 2008, the assets with currency component equaled Denar 131,028 million, which is an annual increase of Denar 14,798 million, or 12.7%. On the side of the liabilities, the currency component amounted to Denar 122,817 million and registered more significant rise of Denar 16,757 million, or by 15.8%. The share of the items with currency component on the side of the assets equaled 52.3% (increase of 0.3 percentage points compared to 2007), while the share of the currency component on the side of the liabilities equaled 49.0% (increase of 1.6 percentage points in comparison with 2007).

Although the annual growth rates of assets and liabilities with FX component registered on December 31, 2008 are the lowest in the last four years, however, these movements ceased the trend of gradual decrease in the share of the currency component in the banks' balance sheets, which commenced in 2006. At the end of 2008, further narrowing of the gap between the currency component on the side of the assets and on the side of the liabilities at the level of the banking system was registered. This is primarily due to the more significant rise in the share of the liabilities with currency component, followed by relatively insignificant rise in the share of the assets with currency component.

Figure 94
Share of the assets and the liabilities with currency component in the total assets and the total liabilities at the level of the banking system



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

⁴⁹ This analysis is made on the basis of the banks' reports on the average monthly open currency position (monthly average from the ten-day balances).

⁵⁰ The assets and the liabilities with currency component encompass assets and liabilities items in foreign exchange and in Denars with FX clause.

Figure 95
Currency structure of the banks' assets

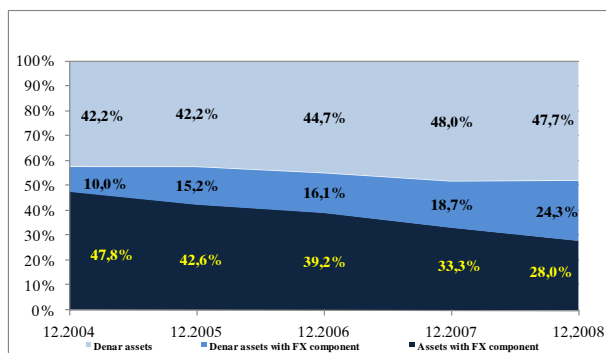
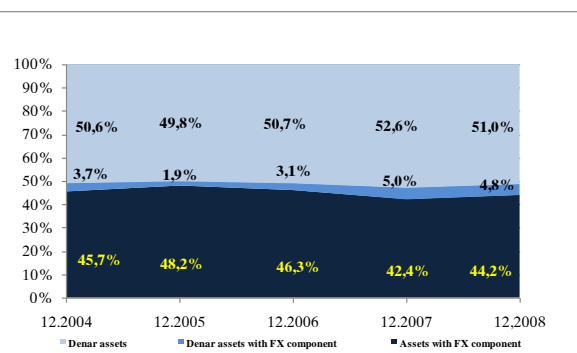


Figure 96
Currency structure of the banks' liabilities



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

In 2008, certain structural movements with both assets and liabilities with currency component were registered. On the side of the assets, the share of the items in Denars with FX clause registered an annual increase of 5.6 percentage points, which was followed by almost identical decrease in the share of the items in foreign exchange of 5.3 percentage points. The main cause for such structural developments was the annual growth in Denar claims with FX clause of Denar 19,104 million, or 45.7%, which is almost completely due to the rise in the crediting with FX clause. Oppositely, the foreign assets placed with domestic and foreign banks went down by Denar 10,816 million, or 25.3%, thus completely neutralizing the effect of increase in the foreign exchange loans and other claims of Denar 7,727 million, or 25% (Annex 14 - Structure of the assets with currency component at the level of the banking system). These movements prove the banks' tendency for

Figure 97
Structure of the assets with currency component at the level of the banking system

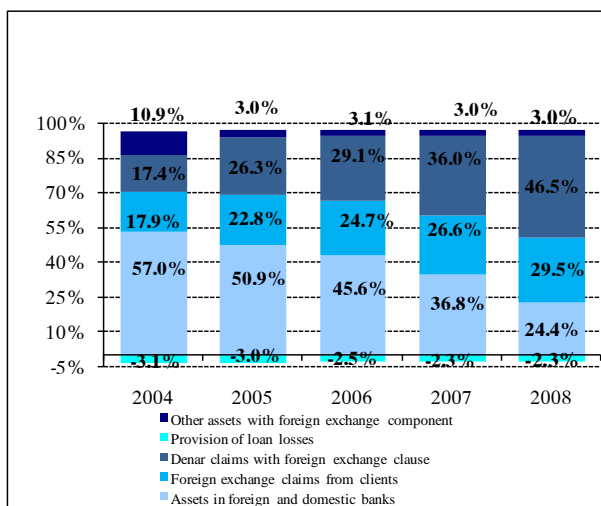
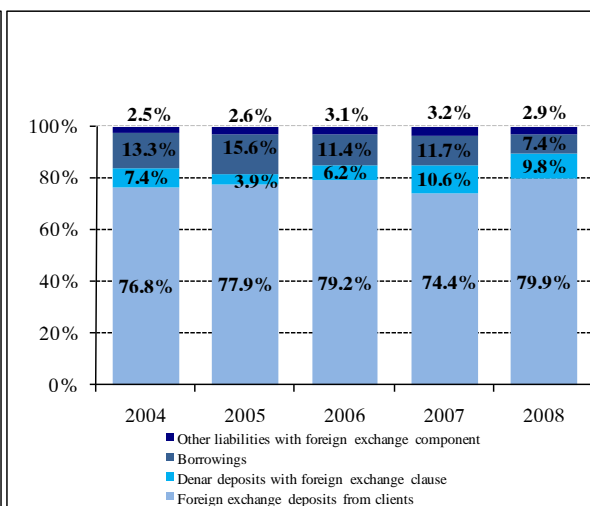


Figure 98
Structure of the liabilities with currency component at the level of the banking system



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

structural transformation of the assets shown through the increase in the domestic crediting, at the expense of the decrease in the foreign currency deposits abroad. Within the liabilities, the share of the items in foreign exchange registered annual growth of 1.8 percentage points, while the share of the items in Denars with FX clause insignificantly declined (by 0.2 percentage points). Such movements were primarily a reflection of the currency transformation of the non-financial entities' deposits, primarily deposits of the "households" sector. Annually, the households' foreign currency deposits augmented by 25.4% and maintained the dominant share of 51.6% in the liabilities with currency

component (Annex 14 - Structure of the foreign exchange liabilities at the level of the banking system).

Figure 99

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

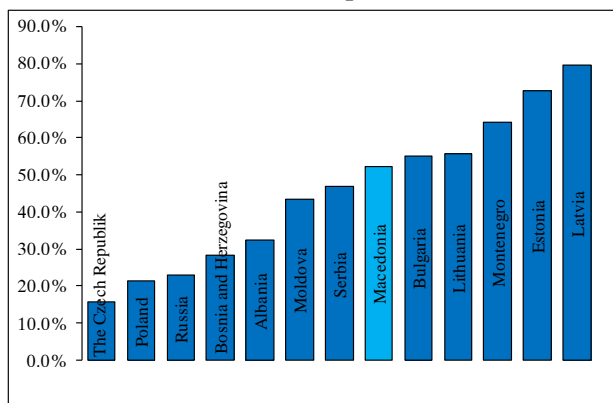
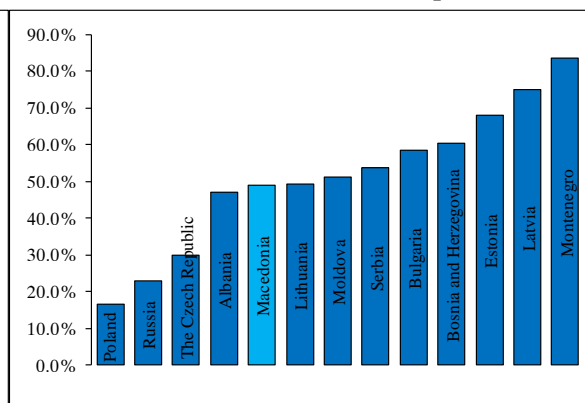


Figure 100

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



Source: NBRM and BSCEE Review 2007

The comparison analysis of the share of the assets and the liabilities with currency component in the total assets and liabilities of the banking systems of certain countries of Eastern and Central Europe shows relatively high degree of currency substitution in the Macedonian economy. The indicator of the share of the assets with currency component in the total assets of the banking system of the Republic of Macedonia (52.3%) is lower compared to the appropriate share with only three of the analyzed countries: Latvia, Estonia and Lithuania, where this indicator ranges from 67.6% to 79.7%. On the other hand, the share of the liabilities with currency component in the total liabilities of the banking system of the Republic of Macedonia (49%) is higher than in Albania, Romania, the Czech Republic, Austria, Poland and Slovenia. Higher share of the liabilities with currency component in the total liabilities is present in the banking system of nine of the analyzed countries, with the highest level being characteristic for Latvia (81.6%). One of the possible reasons for the relatively high share in the foreign currency component in the balance sheets of the banking systems of the Baltic countries is the process of accession to the European Monetary Union.

Observed by individual groups of banks, the share of the currency component in the total assets is the highest with the group of large banks, while on the side of the liabilities, the highest share of the currency component is evident with the group of medium-size banks. Annually, the presence of the currency component in the total assets registers an increase only with the group of medium-size banks. On the other hand, only the group of small-size banks fails to register rise in the share of the currency component on the side of the liabilities.

Figure 101

Share of the assets with currency component in the total assets, by group of banks

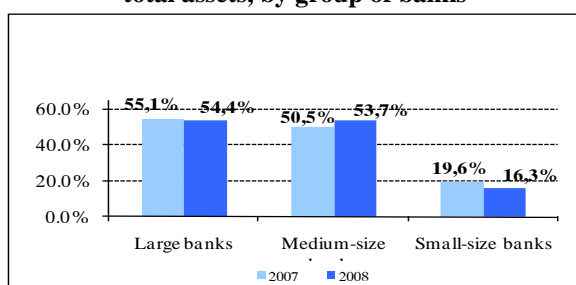
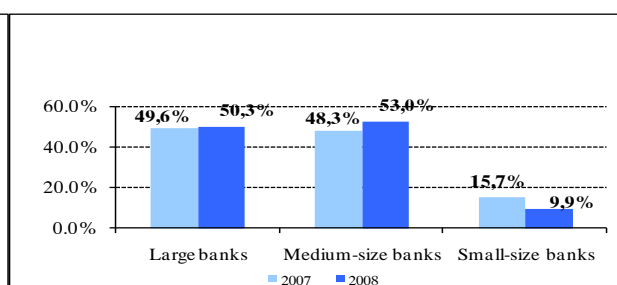


Figure 102

Share of the liabilities with currency component in the total liabilities, by group of banks



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

In 2008, the currency structure of assets and liabilities with currency component, as well as the gap between them, registered minor changes compared to 2007. The Euro strengthened its dominance in the currency structure of the total foreign exchange liabilities and claims. Oppositely, a decrease in the share of this currency in the structure of the gap between assets and liabilities with currency component is registered. Such a situation points to rise in the degree of compliance of the banks' assets and liabilities with currency component. On December 31, 2008, the assets and liabilities denominated in Euro went up by 15% and 20.6%, respectively, on annual basis. The second most frequent currency in the structure of assets and liabilities with currency component in the Macedonian banking system is the US Dollar, the structural share of which in the assets and the liabilities with currency component registers minor decline compared to 2007. The Swiss Frank, as the third most significant currency, strengthened its share in the currency structure of the gap between assets and liabilities with currency component and augmented by 2.6 percentage points.

Table 25
Currency structure of assets and liabilities with currency component

| Currencies | 31.12.2007 | | | 31.12.2008 | | |
|--------------|--|---|--|--|---|--|
| | Currency structure of the assets with FX component | Currency structure of the liabilities with FX component | Currency structure of the gap between assets and liabilities with FX component | Currency structure of the assets with FX component | Currency structure of the liabilities with FX component | Currency structure of the gap between assets and liabilities with FX component |
| Euro | 86,8% | 87,0% | 85,8% | 88,4% | 88,8% | 83,5% |
| USD Dollar | 8,2% | 9,0% | 0,9% | 7,5% | 8,0% | 0,1% |
| Swiss franc | 2,7% | 2,2% | 7,0% | 2,2% | 1,6% | 9,6% |
| Other | 2,3% | 1,8% | 6,3% | 1,9% | 1,6% | 6,8% |
| Total | 100% | 100% | 100% | 100% | 100% | 100% |

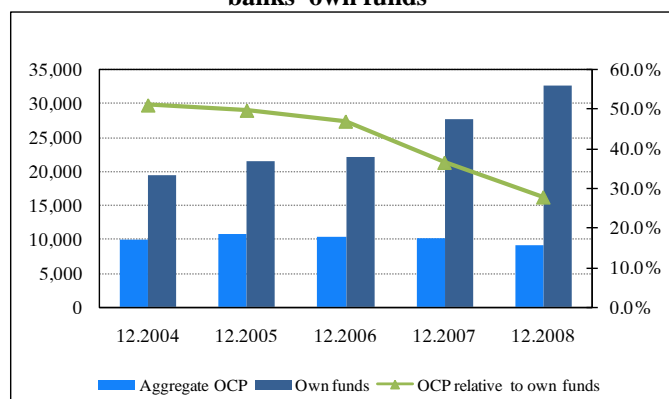
Source: NBRM, on the basis of data submitted by the banks

3.3.1. Open currency position

At the end of 2008, the decrease in the aggregate open currency position⁵¹ of the banking system, as a trend that began in 2005, continued. On December 31, 2008, the open aggregate currency position of the banking system, in the whole, is long at it equals Denar 9,157 million, which is a decline of Denar 1,012 million, or 10% compared to 2007.

The decrease in the aggregate open currency position, parallel to the increase in the banks' own funds, caused constant downward trend of their correlation. On December 31, 2008, the aggregate open currency position equaled 27.9% of the own funds at the level of the banking system. Annually, this ratio declined by 8.7 percentage points.

Figure 103
Movement of the open currency position relative to the banks' own funds



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

⁵¹ The aggregate open currency position of the banking system is calculated as a difference between the amounts of the total foreign exchange assets and liabilities at the level of the banking system. Besides the positions in foreign currency, the positions in Denars with FX clause are also included in the calculation.

At the end of 2008, three banks of the group of medium-size banks have short open aggregate currency position, while all other banks are characterized with long open aggregate currency position.

In line with the regulatory requirements⁵², the banks, mainly, are managing the currency risk within the prescribed limits for open currency position by currencies and the aggregate open currency position. With the largest portion of the banks the ratio between the aggregate open currency position and the own funds ranges up to 30%.

Table no. 26
Aggregate OCP / own funds

| Aggregate OCP/Own funds | Number of banks | |
|-------------------------|-----------------|-------|
| | Long | Short |
| under 5% | 3 | 2 |
| from 5% to 15% | 3 | 1 |
| from 15% to 30% | 5 | |
| from 30% to 50% | 2 | |
| over 50% | 1 | |

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

Table no. 27
Open currency position/own funds

| Open currency position by currencies/Own funds | Number of banks | | | | | | | |
|--|-----------------|-------|------------|-------|-------------|-------|-------|-------|
| | Euro | | USD Dollar | | Swiss franc | | Other | |
| | Long | Short | Long | Short | Long | Short | Long | Short |
| under 5% | 3 | 2 | 10 | 6 | 11 | 2 | 11 | 2 |
| from 5% to 10% | 3 | 1 | | | | | 3 | |
| from 10% to 20% | 3 | | | | 1 | | | |
| from 20% to 30% | 4 | | | | | | | |
| over 30% | 1 | | | | | | | |

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

⁵² Pursuant to the regulations, the banks are obliged to adhere to the limits for the open currency position by currencies, as well as the aggregate open currency position, calculated relative to the own funds. However, the open long currency position by currencies may equal maximum 20% of the banks' own funds, except to the long open currency position in Euro currency that can equal maximum 30% of the own funds of the bank. The open long aggregate currency position can equal maximum 50% of the banks' own funds. The open short currency position by currencies and the short aggregate open currency position can equal up to 10% of the bank's own funds.

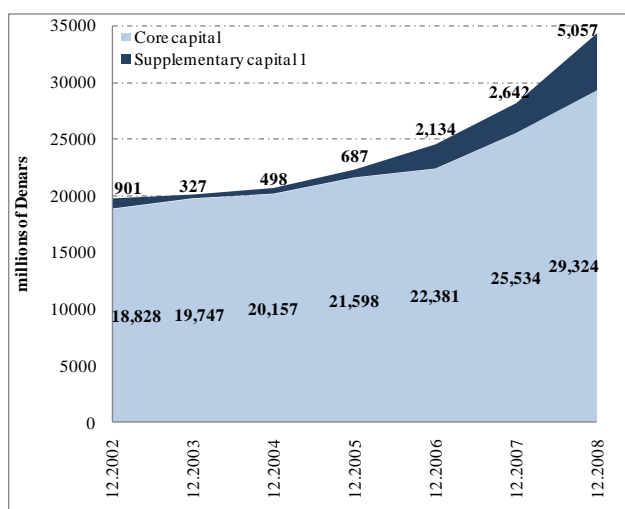
3.4. Insolvency risk

The crisis affecting the global financial system, as well as the consequent reaction of a large number of national regulatory and supervisory bodies, once more proved the importance of the banks' capital position for their safety and stability. The banks in the Republic of Macedonia, at the end of 2008, managed enough capital for covering the identified risks and maintained relatively high solvency position. The decrease in the capital adequacy continued also in 2008, but in conditions of slower growth in the banks' credit and total activity, this decline was with slower pace in comparison with the previous years. The capital adequacy at the level of the banking system still exceeds by twice the legally prescribed minimum of 8%.

3.4.1. Own funds

In 2008, the banks' own funds continued their upward trend, primarily as a result of the reinvestment of part of the registered gain, as well as the increased utilization of subordinated and hybrid liabilities (supplementary capital 1). Despite the higher share of the supplementary capital, the own funds characterizes with a relatively simple structure and dominance of the core capital. At the end of 2008, the banks' own funds amounted to Denar 33,912 million, and in comparison with 2007 they augmented by Denar 6,191 million, or 22.3%. This growth rate is the highest in the last six years, which can indicate the banks' perceptions for the need of strengthening of the level of capitalization, in order to maintain their safety and stability, especially in conditions of serious turbulences on the international financial markets and squeezing of the international capital flows. The largest part of the rise in the own funds (69.1%) is due to the increase in the components of the core capital of 14.8%. However, two thirds of this increase are due to the reinvestment of part of the registered gain (in reserves and retained gain), while the other third is a result of the rise in the banks' equity.

Figure 104
Movement of the core capital and supplementary capital 1



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

In 2008, the supplementary capital 1 registered a significant annual rise of 91.4%. This increase is almost completely (92.9%) conditioned by the increased utilization of the subordinated liabilities as a source of financing of the banking activities. Additionally, in 2008 within the supplementary capital 1, for the first time a utilization of hybrid capital instruments (with one medium-size bank) is registered. The rise in the supplementary capital 1 at the end of 2008 contributed to an increase and its share in the own funds by 5.4 percentage points, to the level of 14.9% (Annex 15 - Structure of the banks' own funds).

Figure 105
Distribution of own funds by individual risks at the level of the banking system

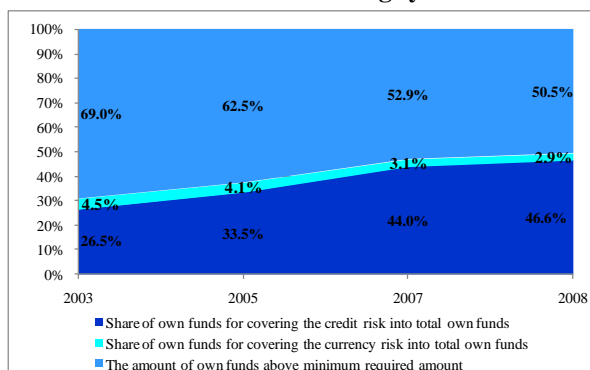
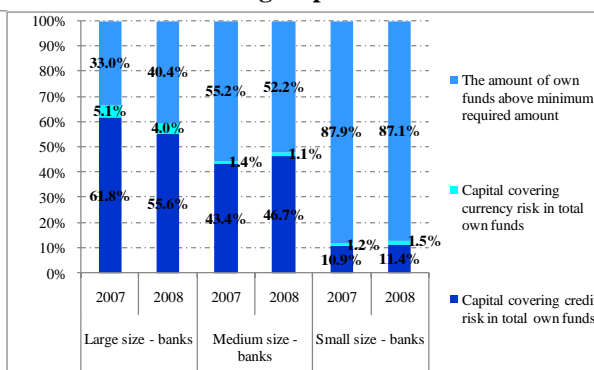


Figure 106
Distribution of own funds by individual risks by group of banks

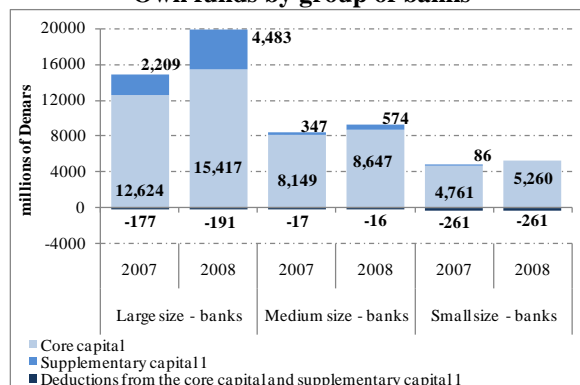


Source: NBRM, on the basis of data submitted by the banks

In 2008, the share of the capital for covering the credit risk in the own funds went up at the expense of the decrease in the part of the own funds which exceeds the minimum required level⁵³. Despite the higher capitalization level of the group of large banks, however, the increased credit activity, especially with the group of medium-size banks, conditioned the growth of the part of the own funds for covering the credit risk. The group of small-size banks registered no significant changes in the distribution of own funds for covering certain risks.

The group of large banks preserved the dominant position in the structure of the own funds and it was the main driving force of their rise. On December 31, 2008 this group created 58.1% of the total own funds of the banks, compared to the share of the groups of medium-size and small-size banks of 27.2% and 14.7%, respectively. Also, the group of large banks registered the highest annual rise in the own funds. The core capital of this group of banks augmented by 22.1%, compared to the increase in the groups of medium-size and small-size banks, of 6.1% and 10.5%, respectively. Simultaneously, with an annual increase in the supplementary capital 1 of 102.9%, the group of large banks almost completely conditioned its rise at the level of all banks. Regarding the large banks, there is the relatively highest degree of "dependence" on the supplementary capital 1 in the financing of the total activities. Oppositely, in 2008, the small-size banks did not use the supplementary capital 1 as a source of financing at all (Annex 16 - Structure of the own funds by groups of banks.⁵⁴

Figure 107
Own funds by group of banks



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

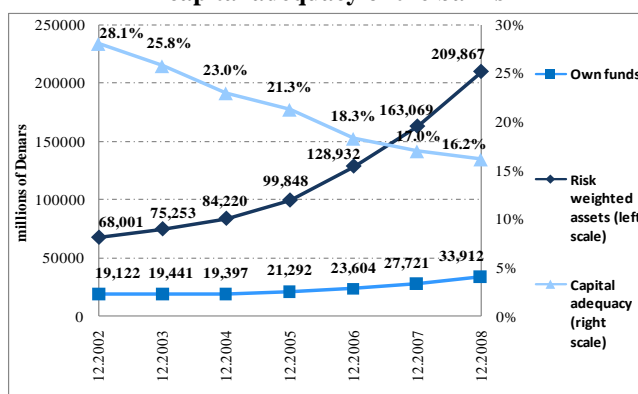
⁵³ The amount of the own funds over the minimum required level is calculated as a difference between the total amount of own funds and the amount of own funds necessary for covering individual risks. The necessary level for covering the credit risk is calculated as 8% of the credit risk weighted assets, while the required level for covering the currency risk is calculated as 7% of the currency risk weighted assets.

⁵⁴ In 2007, only one small-size bank used subordinated instruments, which were converted into common shares in 2008.

3.4.2. Capital adequacy and banks' capitalization level

The decrease in the capital adequacy continued also in 2008, although with slower pace compared to the previous year. Despite such decrease, the banks' capital adequacy is higher by double than the legal minimum of 8%. At the end of 2008, the capital adequacy of the banks equaled 16.2%, which is a decrease of 0.8 percentage points compared to December 31, 2007. Deceleration of the downward trend of the capital adequacy in comparison with the preceding years was registered. The slowing down is conditioned, to great extent, by the more dynamic rise in the banks' capital base, shown through the highest annual increase in the own funds in the last several years.

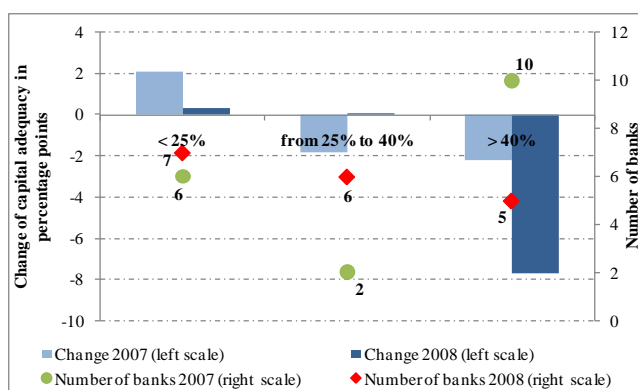
Figure 108
Dynamics of the own funds, risks weighted assets and capital adequacy of the banks



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

The decrease in the capital adequacy is mostly resulting from the consequence of the constant increase in the credit activity, which represents assets with higher risk weight, for the expense of the decrease in the share of the placements with banks, with low risk weight. At the end of 2008, the total risk weighted assets went up by 28.7%, annually. This increase was almost completely (96.8%) due to the rise in the credit risk weighted assets, which augmented by Denar 45,305 million, or 29.7% compared to December 31, 2007. Within the credit risk weighted assets the largest rise was registered with the risk weight items from 100% and 125%, contrary to the decrease, primarily of the risk weight items of 20%⁵⁵. These movements prove the statement for transformation of lower interest bearing assets (and at the same time less risky), into higher interest bearing assets, but with higher risk, as well.

Figure 109
Influence of the credit activity dynamics on the capital adequacy of the banks



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

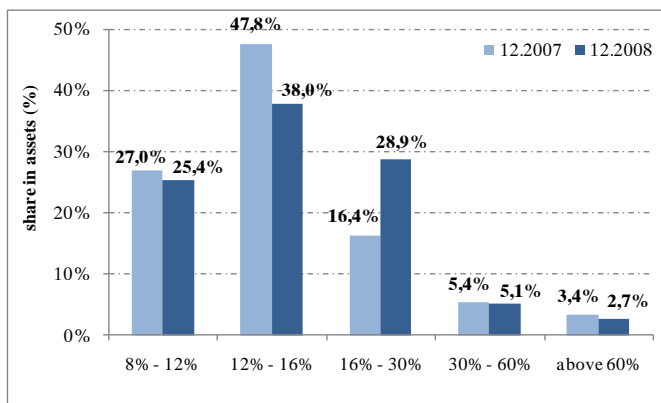
The analysis at the level of individual banks confirms the influence of the credit activity dynamics on the decrease in the banks' capital adequacy. Namely, the decrease in the capital adequacy ratio is present with the banks registering more dynamic credit activity. The banks which increased their crediting in 2008 for more than 40% register also decrease in the capital adequacy. With these banks, the average capital adequacy ratio went down by 7.7 percentage points, annually. Oppositely, the banks the credit activity of which augmented with annual rates lower than 40% had almost unchanged level of capital adequacy compared to the preceding year. In 2008, the number of banks with credit activity growth rate higher than 40% lowered, which is in conformity with the general deceleration of the credit activity at the level of the banking system, as well as decelerated decrease in the capital adequacy. In 2008, the decline in the capital adequacy was influenced by the

⁵⁵ The risk weight items of 20% mostly refer to the assets placed with other domestic and foreign banks on short-term basis, the items with risk weight of 100% refer to the banks' credit activity, while the items with risk weight of 125% refer to the exposure to natural persons on this basis and overdrafts on current accounts (allowed and non-allowed) and debiting based on credit cards.

introduction of new, higher risk weight of 125% for the exposure to natural persons on the basis of overdrafts on current accounts (allowed and non-allowed) and credit cards. This tightening of the regulatory treatment of these types of exposure influenced independently from the dynamics of the banks' credit activity.

At the end of 2008, the distribution of the banks' assets from the aspect of the amount of the capital adequacy ratio, still points to the dominant position of the banks with capital adequacy ratio within 12% - 16% interval. However, decline in their share in the total assets of the banking system, at the expense of higher share of the banks' assets with capital adequacy ratio within 16% - 30% interval is recorded. Such a redistribution of the assets is mainly a result of the higher capital adequacy ratio with one large bank.

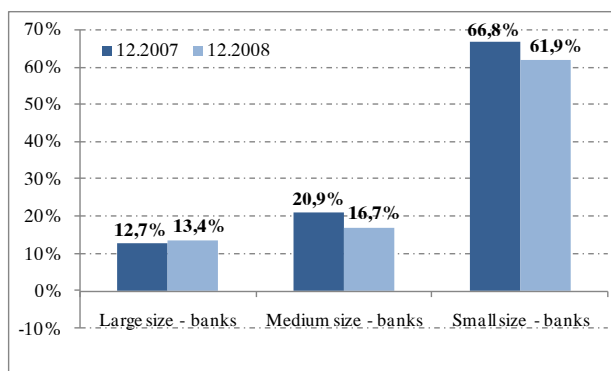
Figure 110
Distribution of the banks' assets by the capital adequacy ratio



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

In 2008, no changes of higher significance relative to the level of capital adequacy with individual groups of banks were registered. Despite the severest drop in the capital adequacy of 4.9 percentage points with the group of the small-size banks, they still register the highest solvent position. The capital adequacy ratio fell also with the group of medium-size banks, primarily as a reflection of their intensified credit activity. Oppositely, despite the rise compared to the preceding year, the lowest capital adequacy ratio was still registered with the group of large banks. The increase in the capital adequacy ratio, compared to 2007 is a result of the performed capitalization with two banks belonging to this group.

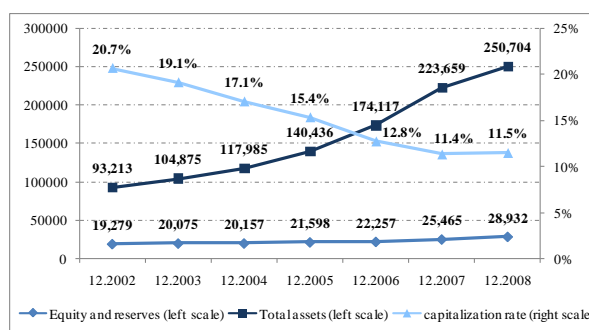
Figure 111
Capital adequacy ratio by group of banks



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

In conditions of more dynamic rise in the capital, compared to the decelerated growth in the banks' activities, at the end of 2008, for the first time in the last six years, although minimal, increase in the capitalization rate of the banking system was recorded. Thus the annual increment in the capital and the reserves of the banks of 13.6%, whereas to the increase in the total assets of 12.1% contributed to upward movement of the banks' capitalization rate by 0.1 percentage point.

Figure 112
Dynamics of the banks' capitalization rate



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

The comparison with the banking systems of certain countries shows that the banking system of the Republic of Macedonia characterizes with relatively high level of capitalization and small dependence on external sources of financing. Such characteristics of the sources of financing of the banks in the Republic of Macedonia point to their large safety and stability. The destructive influence of the international financial crisis on the banking systems in the world, proved the significance of the banks' capital position for their stability and safety. The process of deleveraging and capitalization of the banks from the developed countries is underway and it is hard to envisage in which volume and when it will end. The EU banks characterizes with high leverage and lower capitalization level compared to the banks in the USA. The banking system in the Republic of Macedonia, as well as the banking systems from the countries in the region, lean on own sources of funds in their operating, than to utilization of external sources of financing, which resulted in relatively higher levels of the capital adequacy ratio.

Figure 113

Capitalization rate of the banks in the Republic of Macedonia and some countries in the region and the

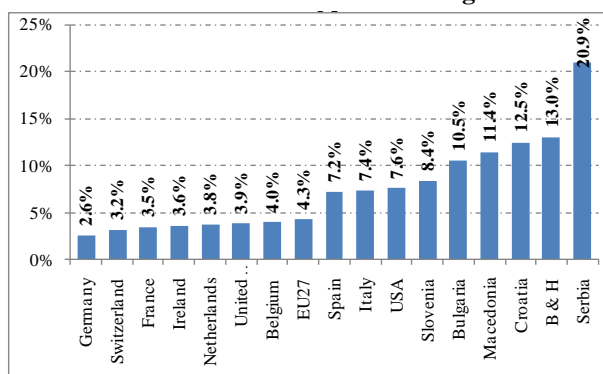
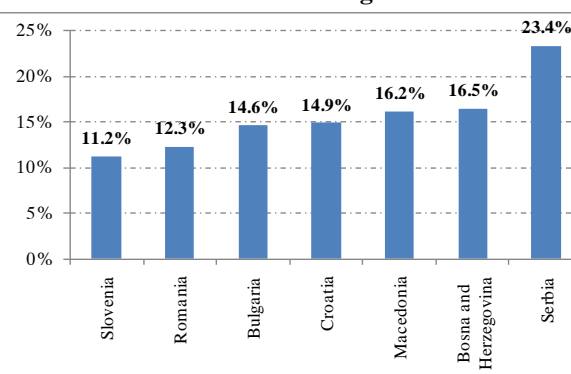


Figure 114

Capital adequacy ratio in the Republic of Macedonia and in some regional countries



Source: for the Republic of Macedonia - NBRM, for the regional countries - the web sites of the central banks of the respective countries. The data on Croatia and Serbia are given as of September 30, 2008, while for Bulgaria and Bosnia and Herzegovina as of June 30, 2008, datum as of December 31, 2008 is used for Romania, while the datum for Slovenia is as of December 31, 2007.

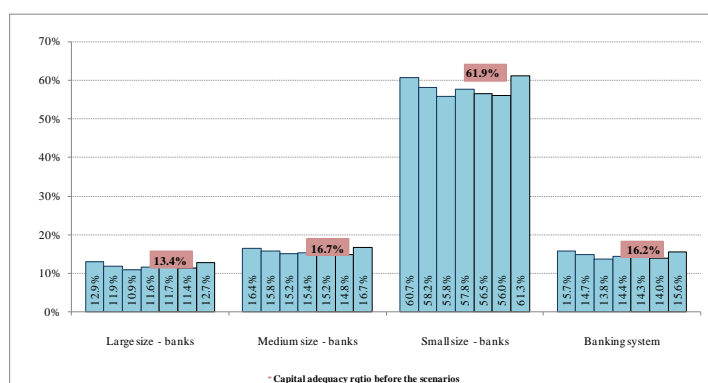
Source: for the Republic of Macedonia - NBRM, for the regional countries - the web sites of the central banks of the respective countries, while for the USA and the EU countries - CEPS Task Force Report, Concrete Steps towards More Integrated Financial Oversight, December 2008. The data for the USA and the EU countries refer to the five largest banks of the respective country.

Stress - test analysis of the stability of the banking system to hypothetical shocks - as of December 31, 2008

The banking system of the Republic of Macedonia is relatively resistant to different hypothetical shocks, with sufficient capacity to absorb the negative influences of those shocks. The stress test analysis shows that even in case of materialization of extreme credit, currency and interest rate risk, the capital adequacy at the level of the banking system and the individual groups of banks is not decreasing below the legal minimum of 8%.

Figure 115

Interval of the capital adequacy ratio after the conducted stress test analysis



Source: Internal calculations of NBRM

However, as in the previous period, the banking system is mostly exposed to the credit risk, which is proved by the lowest level of the capital adequacy ratio, after the implementation of the third scenario of isolated credit shock.

At the level of individual groups of banks, the most apparent decrease in the capital adequacy with the groups of large and small-size banks was registered after the implementation of the third case scenario, while the group of medium-size banks registered the most negative effect after the implementation of the sixth case scenario, which is a combination of shocks on the side of the credit risk, foreign exchange risk and the interest rate risk.

- ¹ The basic stress test analysis is based on the application of seven hypothetical scenarios, of which:
- three scenarios for isolated credit shock (increase in the credit exposure classified in the risk categories C, D and E of: 10%, 30% and 50%),
 - fourth scenario, as a combination of credit and interest rate shock (increase in the credit exposure in the risk categories C, D and E of 30% and increase in the domestic interest rates of 5 percentage points),
 - fifth scenario as a combination of the credit and the foreign exchange rate shock (increase in the credit 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 scenario as a combination of the shocks on the side of the credit risk, foreign exchange risk and interest rate risk (increase in the credit exposure in the risk categories C, D and E of 50%, depreciation in the Denar exchange rate relative to the Euro, US Dollar of 20% and rise in the domestic interest rates of 5 percentage points) and
 - appreciation of the Denar foreign exchange rate relative to the Euro and the US Dollar in the amount of 20%.

3.5. Profitability

In conditions of serious turbulences in the international financial markets and large shocks in the banking systems of the developed countries, but in the countries from the region as well, in 2008, the banks in the Republic of Macedonia continued to make profit. However, several years lasting trend of continuous improvement of their profitability and efficiency was terminated in 2008. The interest policy of the banks had two different features: first, the increase in the deposit interest rates in order to keep the existing and to attract new sources of funding, and second, slowing down in the downward trend in the lending interest rates, characteristic for the last four years. Such interest policy determined further narrowing in the spread between the weighted lending and deposit interest rates.

In 2008, the total profit (after taxation) of the banking system of the Republic of Macedonia equaled Denar 3.410 million, which represented drop of Denar 240 million, i.e. by 6.6% relative to 2007. The decrease in the profit was due to the growth in the operational costs and to the interest expenditures, as well as to the lower growth in the net income from fees. The growth in the interest income was the main generator for the profitable operating of banks. Out of total 18 banks, 6 showed loss, the participation of which in the total assets at the level of the banking system amounted to 9.4%. For comparison, in 2007, four banks realized loss, and their participation in the assets at the level of the banking system amounted to 2.6%.

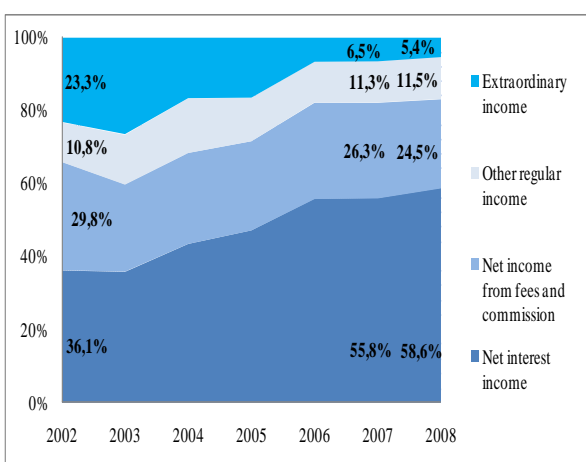
The lower profit in the group of medium banks was the main reason for the drop of the total profit at the level of the banking system. Over 99% of the total profit at the level of the banking system resulted from the realized profit of the group of large banks. Relative to 2007, the profit of the group of large banks rose by Denar 718 million, or by 26.9%. The realized profit of this group of banks was mainly determined by the growth in the interest income, to the almost unchanged amount of provisions, as well as to the growth in the income from other reasons. Different from the other banks, at the end of 2008 the group of medium banks realized lower profit by about

Denar 860 million, or by 89.2%, relative to the end of 2007. This came as a result of the twice lower dynamics of growth in the net interest income, the increment in the loan loss provisions, the negative trend in the net income from fees, as well as the drop in the income based on net capital income. The rise of the operating expenses of this group of banks was apparent, and it mainly reflected through the growth in the wage costs⁵⁶ and service costs. In 2008, the group of small banks showed loss of Denar 82 million, relative to the profitable operating in the previous four years (Annex No. 2 - Income statement at the level of the banking system).

3.5.1. Structure of the income and expenditure of the banking system of the Republic of Macedonia

In 2008, the total income of the banking system of the Republic of Macedonia, although with lower dynamics, continued to grow and reached the level of Denar 15.532 million. Relative to 2007, they registered rise of Denar 1.984 million (or by 14.6%). This growth was by Denar 347.8 million lower relative to the annual growth in the total income in 2007. All components of the total income showed lower growth. **The net interest income maintained the dominant position in the structure of the income of banks and it contributed to the rise of the total income with 77.4%.** The net fees and commission income, although with lower participation, was the second income by significance in the structure of the total income. However, in 2008, this income registered twice lower absolute growth, i.e. lower annual growth rate by three times (from 19.9% in 2007, to 6.8% at the end of 2008), which caused their contribution to the annual growth of the total income to reduce from 25.3% (in 2007) to 12.3% (in 2008). The other regular income maintained almost the same structural participation in the total income as in 2007. On annual level, they registered increase by 16.8%, which was by 5.4 percentage points lower rate than the rate in 2007.

Figure 116
Structure of the total income of banks



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

The structure of the total income indicated to further strengthening of the role of the net interest income, which represented the main generator for profitable operating of banks. The higher significance of the net interest income in the structure of the total income of banks resulted from the growth in the credit activity of banks, which although with lower dynamics, continued in 2008 as well. The growth in the credit activity, represented rise in the high interest bearing assets, as basis for creating regular income and contributed to further deepening in the financial intermediation.

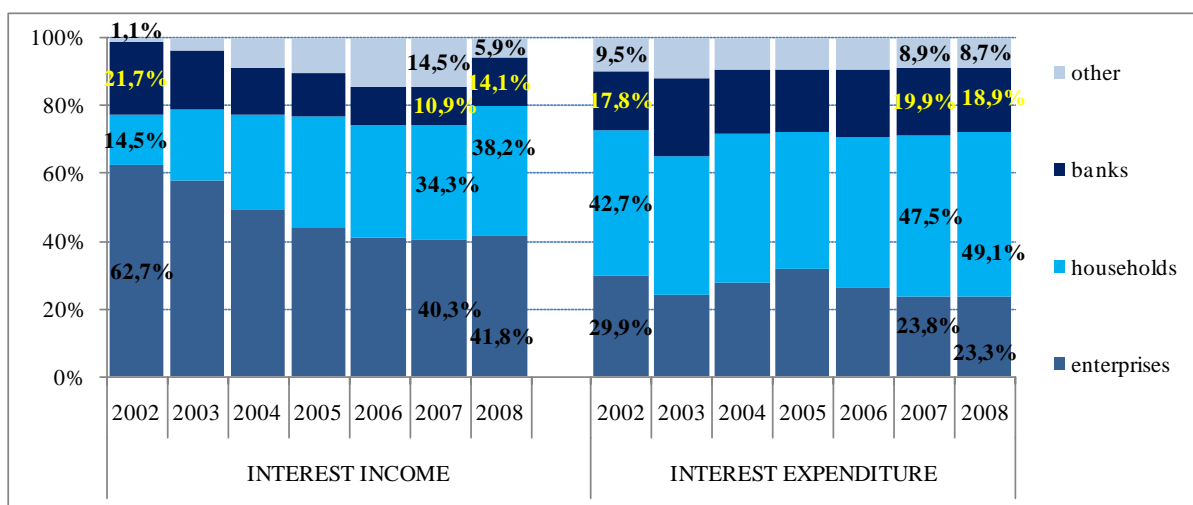
In the creating of the net interest income, the interest expenditures of banks registered more dynamic increment than the interest income. The interest income went up by 31.2%, on annual basis, which was insignificantly less than the growth rate realized in 2007 (32.8%). Opposite of them, the interest expenditures registered growth of 47.2%, which was lower dynamics relative to 2007, when the growth rate equaled 54.8%. The lower dynamics of growth of the interest expenditures was due to more factors: 1/ the lower deposit activity, especially in the last quarter of the year; 2/ the changes in the currency structure of the deposits, acting towards considerable fall in the interest for Denar saving, opposite to the continuous growth in the saving in foreign currency; 3/ the lower growth in the liabilities to non-residents in 2008, relative to the rise in 2007, as well as the downward trend of the reference interest rates in the international financial markets in the last months of 2008. On the other hand, the growth in the deposit interest rates in the domestic market in order to

⁵⁶ Half of the newly employed during 2008 are employed in the group of medium banks.

keep the existing and to attract new deposits, especially in the second half of 2008, influenced on the growth in the interest expenditures, but not to such extent as the stated factors.

According to the sector segregation, the income and the expenditures of the households and the enterprises had the leading role in the creating of the interest income and expenditures. In the structure of the interest income they participated with 80%, and with 72.4% in the structure of the interest expenditure. On the side of the income constant narrowing in the differences between the participation of the interest income from the enterprises and the participation of the interest income from the households was registered, which was due to the more intensive growth in the crediting to households than to enterprises. The higher interest rate of the credits extended to households than the

Figure 117
Sector structure of the interest income and interest expenditure

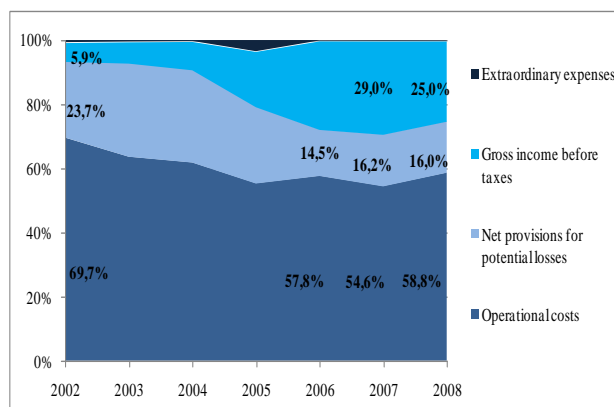


Source: NBRM, based on the data submitted by the banks.

one of the credits to enterprises represented and additional factor which contributed to the growth in the participation of the interest income from households. The increase in the participation of the interest income from banks by 3.2 percentage points was due to the higher average amount of purchased CB bills in 2008, relative to 2007, as well as to the higher average weighted interest rate from 5.0 % (in 2007) to 6.4% (average for 2008). The lower structural participation of the interest income from "other" was due to the lower investment of the banks in Treasury bills. On the side of the interest expenditures, the largest part belonged to the expenditures from households and enterprises, which was due to the dominant participation of the deposits from non-financial entities in the structure of the sources of funds.

The operational costs continued to absorb the largest share (58.8%) of the total income of banks. In 2008, the operational costs of banks rose by Denar 1.739 million (or by 23.5%) relative to 2007, which resulted in absorbing of high percent (87.7%) of the growth in the total income. This percent of "consumption" of the growth in the total income for growth in the operational costs was drastically higher relative to 2007, when it amounted to 39.1%. The growth in the operational costs determined fall in the coverage spread with the total regular income from 171.1% (in 2007) to 160.8% (in 2008). In the structure of the operational costs, the costs

Figure 118
Utilisation of the total income of banks



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

for employees and costs for services remained the dominant items with participation of 39.5% and 22.1%, respectively, and they contributed with 30.8% and 32.1%, respectively, to the total growth in the operational costs. Relative to 2007, drop in the part of the income which remains as pretax profit was registered, which was mainly due to the increased level of operational costs.

3.5.2. Indicators on the profitability and efficiency of banks

In 2008, the trend of improvement in the profitability and efficiency of the banks in the Republic of Macedonia was interrupted.

Table No. 28

Indicators on the profitability and efficiency in the operating of banks

| Indicator | Banking system | | Large banks | | Medium-sized banks | | Small-sized banks | |
|--|----------------|-------|-------------|--------|--------------------|-------|-------------------|--------|
| | 2007 | 2008 | 2007 | 2008 | 2007 | 2008 | 2007 | 2008 |
| Rate of return of average assets (ROAA) | 1.8% | 1.4% | 2.0% | 2.1% | 1.8% | 0.2% | 0.1% | -0.7% |
| Rate of return of average equity (ROAE) | 15.2% | 12.5% | 24.5% | 25.8% | 12.1% | 1.2% | 0.3% | -1.5% |
| Cost-to-income ratio * | 58.4% | 62.2% | 52.3% | 50.6% | 68.3% | 82.3% | 74.3% | 99.6% |
| Non-interest expenses/Total regular income* | 63.2% | 67.2% | 56.1% | 54.0% | 73.7% | 89.7% | 85.9% | 112.6% |
| Labour costs/Total regular income* | 24.3% | 24.6% | 22.2% | 19.9% | 26.9% | 32.3% | 33.9% | 41.3% |
| Loan loss provisions/Net interest income | 29.0% | 27.4% | 31.2% | 27.1% | 18.7% | 26.1% | 62.7% | 37.3% |
| Net interest income/Average assets | 3.8% | 3.8% | 3.7% | 3.7% | 4.3% | 4.1% | 3.3% | 3.8% |
| Net interest income/Total regular income* | 59.7% | 61.9% | 60.6% | 60.6% | 59.8% | 64.4% | 50.1% | 65.3% |
| Net interest income/Non-interest expenses | 94.5% | 92.1% | 107.9% | 112.1% | 81.1% | 71.8% | 58.3% | 58.0% |
| Financial result/Total regular income* | 28.8% | 23.2% | 33.0% | 34.9% | 25.2% | 2.4% | 2.0% | -11.3% |
| Number of employees | 5,390 | 6,111 | 2,831 | 3,106 | 2,142 | 2,504 | 417 | 501 |
| Assets per employee (milions denars) | 41.50 | 41.02 | 53.03 | 53.38 | 28.74 | 28.81 | 28.69 | 25.49 |
| Financial result per employee (milions denars) | 0.68 | 0.56 | 0.94 | 1.09 | 0.45 | 0.04 | 0.04 | - 0.16 |

*Note: Total regular income are calculated as a sum of net interest income, net income from fees and commissions, other net financial income and other regular income.

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

The reduced total profit and the decelerated growth in the activities of the banks, contributed to decrease in the profitability indicators at the level of the banking system. In 2008, the rate of return on assets (ROAA) registered annual decrease of 0.4 percentage points, while the rate of return on equity (ROAE), of 2.7 percentage points.

The more intensive annual rise in the operational costs (23.5%) than the increase in the total regular income (16.1%) resulted in decline on the operational efficiency of the banking system. Thus, the cost-to-income indicator augmented from 58.4% (in 2007) to 62.2% (in 2008). The deterioration of the operational efficiency is proved also through the reduced coverage spread of non-interest bearing expenditures with net interest income by 2.4 percentage points.

The reduced profitability and efficiency in the banks' operation in 2008, was mostly conditioned by the worsened profitability and efficiency in the operating of the groups of medium-size and small-size banks. Oppositely, the group of large banks registered an improvement in profitability and efficiency indicators. The decrease of the profit and slowed down assets growth on annual basis resulted in lower profitability of the group of medium size banks which can be seen through significant decrease in the rates of return of both, assets and equity. Simultaneously, the aggressive performance of the group of medium-size banks in order to strengthen their position on the market in the last years caused more dynamic rise in the operational costs compared to the income growth, which finally had negative effects on the operational efficiency of this group of banks. The non-profitable operating of the group of small-size banks was due primarily to the lower scope of activities, as well as to the more dynamic increase in the operational costs, compared to the negative growth rates of the total regular income.

According to the value of the indicator for return on equity, the banking system of the Republic of Macedonia is tending to the middle of the list of analyzed states⁵⁷. Among the countries from the area, the banking system of the Republic of Macedonia registered higher rate of return on equity than the banking systems of Montenegro, Bosnia and Herzegovina, Romania, Greece, Serbia and Croatia. Relative to the countries from West Europe, the banking system of the Republic of Macedonia had higher rate from Italy, France and Malta.

Figure br. 119
Comparison of ROE, by individual countries

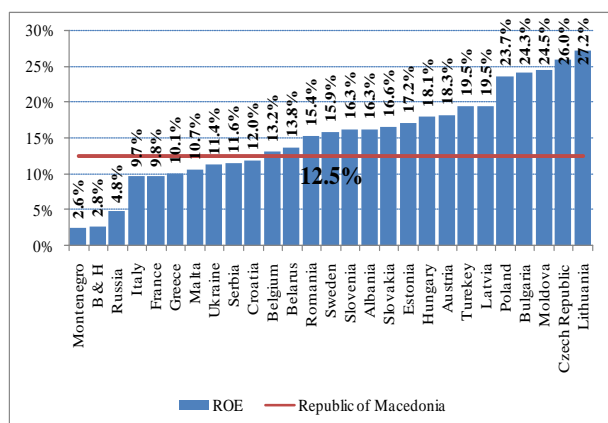
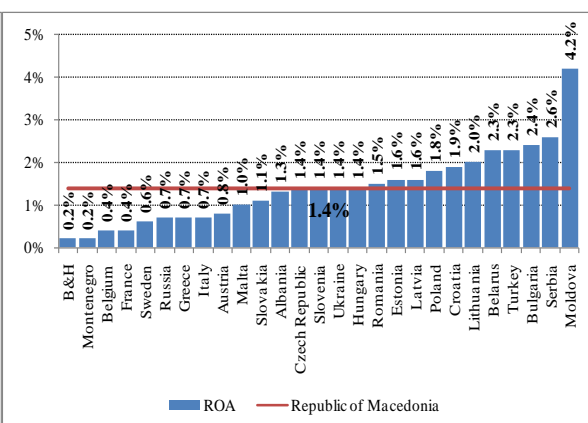


Figure br. 120
Comparison of ROA, by individual countries

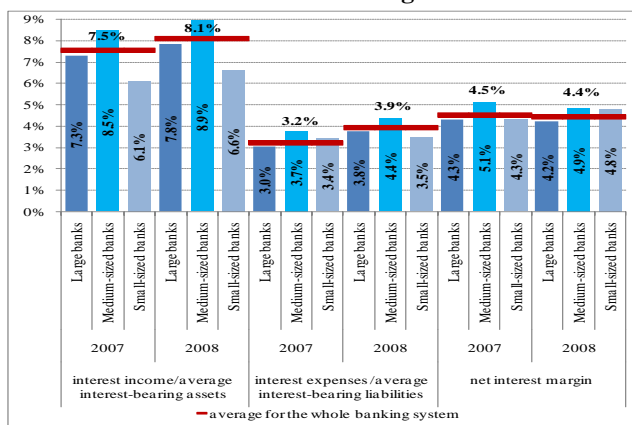


Source: NBRM, based on the data submitted by the banks, Global Financial Stability Report, IMF, October 2008 and the web-pages of the national central banks.

According to the value of the indicator on return on assets, the banking system of the Republic of Macedonia was positioned in the middle of the list of analyzed countries. Among the region wide countries, the banking system of the Republic of Macedonia registered higher rate of return on assets from the banking systems of Bosnia and Herzegovina, Montenegro, Greece, and identical rate with Czech Republic, Slovenia, Ukraine and Hungary. Relative to the countries from the West Europe, the banking system of the Republic of Macedonia had higher rate than Belgium, France, Sweden, Italy, Austria and Malta.

The rise in the interest bearing assets as a result of the constant process of restructuring of the assets in the last five years, although with lower dynamics, continued in 2008 as well. At the end of 2008, the interest bearing assets were by Denar 12.348 million higher than the interest bearing liabilities, which enables creating an adequate amount of interest coverage spread for the non interest bearing expenditures of banks. On annual level, the income from interest per interest bearing asset unit registered growth. Simultaneously, growth in the interest expenditures per interest bearing expenditure unit was registered, which in conditions of considerable slowing down in

Figure 121
Net interest margin



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

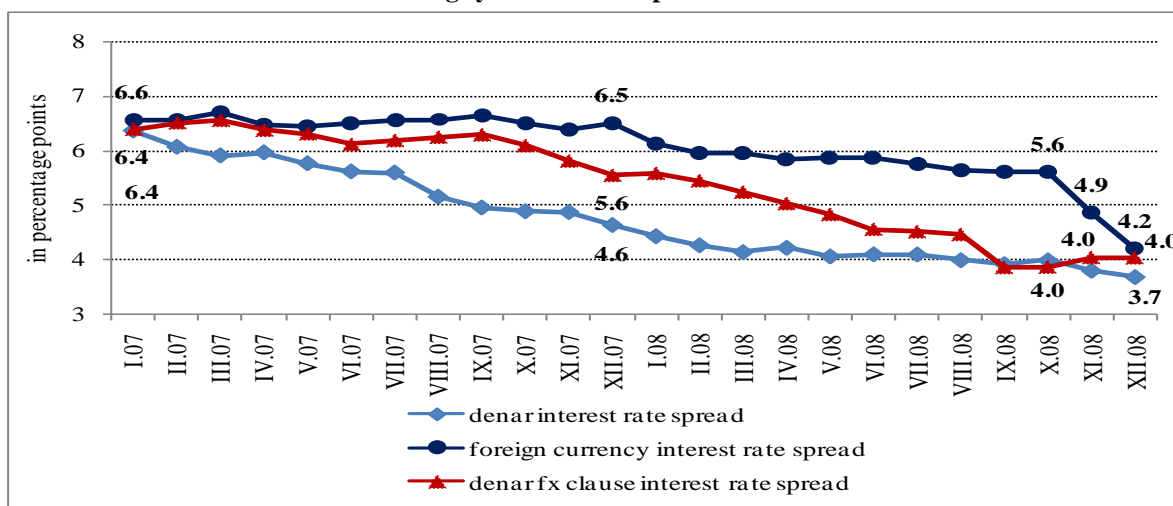
⁵⁷ The indicators on the return on equity and on assets for the Republic of Macedonia and Greece were calculated as of December 31, 2008, for Estonia as of September 30, 2008, for Bulgaria, Serbia, Bosnia and Herzegovina, Croatia and Turkey as of June 30, 2008, and for the rest of the countries were calculated for June 31, 2008, March 31, 2008, December 31, 2007 and September 30, 2007.

the deposit growth, was mainly due to the higher deposit interest rates. The net interest rate spread, at the level of the banking system, amounted to 4.4% in 2008 and it was almost unchanged relative to 2007. The group of medium-size banks and small-size banks realized highest net interest rate spread, which was in the same time above the average rate for the total banking system. The interest bearing assets of the group of medium-size banks created relatively highest income, but in the same time the interest bearing liabilities of this group are with the highest price, which was mainly due to the stimulatory interest policy in 2008, in order to keep the existing and to attract new depositors.

3.5.3. Development in the interest rates and in the interest rate spread

In 2008, the trend of narrowing in the spread between the weighted lending and deposit interest rate (interest rate spread) continued. Such trend was mainly determined by the growth in the deposit interest rates in order to keep the existing and to attract new sources of funding, as well as by the slowing down in the several years lasting downward trend in the lending interest rates.

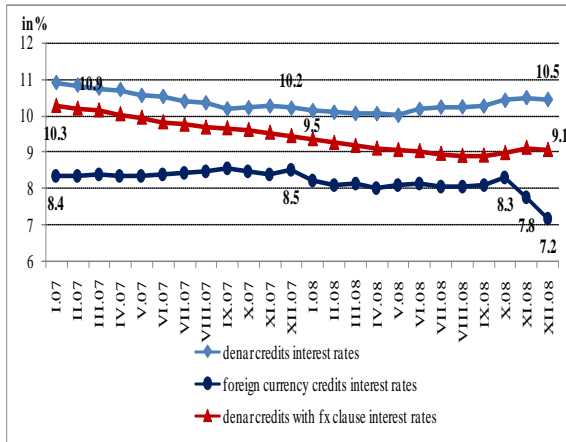
Figure no. 122
Development in the interest rate spread in
the banking system of the Republic of Macedonia



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

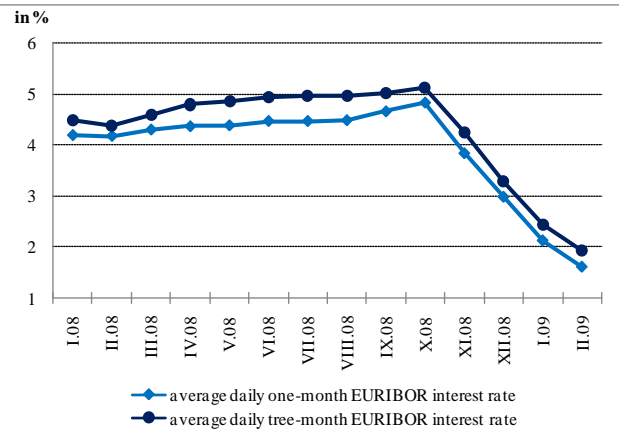
In 2008, the interest rates of the foreign currency credits registered more evident fall, relative to the interest rates of the Denar credits with FX clause. Oppositely, the interest rates of the Denar credits insignificantly increased. The drop in the interest rates of the foreign currency credits was especially evident in the last months of 2008, which determined annual drop in the interest rate of the foreign currency credits by 1.3 percentage points. Such dynamics of the interest rate of the foreign currency credits was under large influence of the development in the international interest rates, the rapid decrease of which was evident in the last quarter of 2008.

Figure no. 123
Development in the lending interest rates



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

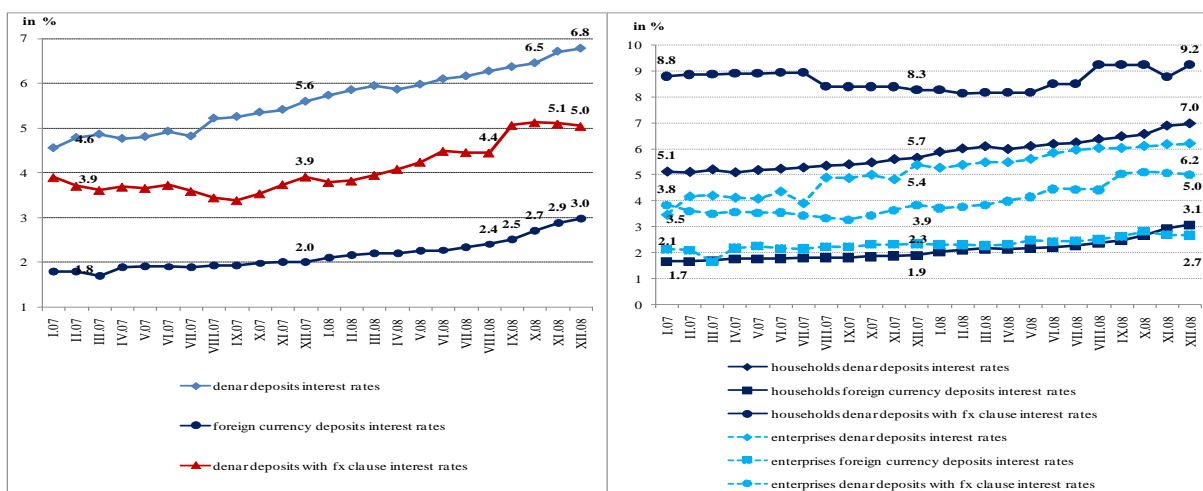
Figure no. 124
Development in the EURIBOR



Source: www.euribor.org

In 2008, the deposit interest rates registered constant growth, mainly in order to keep the existing and to attract new sources of funding. In conditions of more dynamic growth in the credits than in the deposits in 2008, as well as in global uncertainty, the banks, especially in the second half of 2008, started to increase the deposit interest rates. The reason for such action was to obtain additional sources of funding for their own activities in 2009. The interest of the Denar deposits rose by 1.2 percentage points, on annual level, and by 1 percentage point to the foreign currency deposits. The rise in the interest rates was additional determined by the fact that in conditions of relatively high annual inflation rates, the real deposit interest rates were negative. The banks, through promoting new products with attractive interest rates, were trying to prevent the eventual converting of the deposits in another type of assets of the depositors.

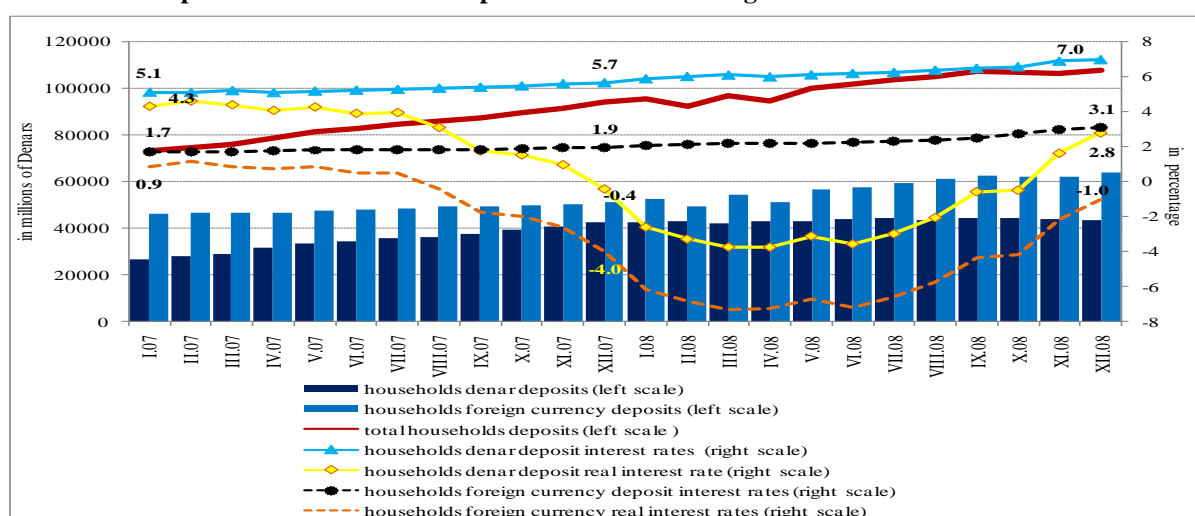
Figure no. 125
Development in the deposit interest rates



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

Such interest policy of the banks was totally expected with respect to the fact that the deposits from non-financial entities (with their participation of 72.2% in the total deposits) represented the most significant and relatively cheap source of funds. More significant annual changes were registered in the deposit interest rates in the sector "households" relative to those in the sector "enterprises". Thus, on annual level, the Denar deposit interest rates of the households grew up by 1.3 percentage points, and by 0.8 percentage points with the enterprises. The foreign currency interest rates of the households registered growth of 1.2 percentage points, and of the enterprises by 0.3 percentage points. The more intensive dynamics of growth in the interest rates of the households was due to the fact that the deposits of households represented the most significant source of funding (considering the dominant participation of 59.2% in the total deposits) and more vulnerable category to the economic developments, which determined for the banks to lead more aggressive interest policy to this sector.

Figure 126
Development in the household deposits and in the lending interest rates of the households



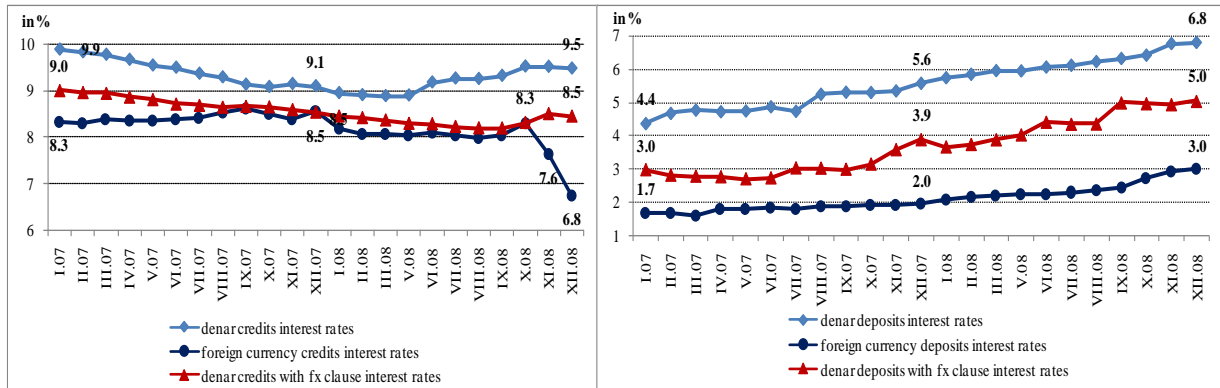
Source: NBRM, based on the data submitted by the banks.

However, despite the higher deposit interest rates, the deposits of banks, at the end of 2008, registered the lowest growth rate in the previous six years. Simultaneously, under the influence of the psychological factors and the uncertainty caused by the international financial crises, process of currency transformation of the deposits was registered, which was especially evident in the last quarter of 2008. In order to keep the existing and to attract new depositors, the interest rate of the Denar deposits of the households reached the highest level ever of 7% annually, but the real rate was lower equaling 2.8%. The interest rate of the foreign currency deposits went up to 3.1% (which was the highest level for the last 4 years), whereas the real interest rate of the foreign currency deposits was negative⁵⁸.

In 2008, the lending interest rates in the groups of large and medium-size banks insignificantly increased, whereas in the group of small-size banks it registered fall. The deposit interest rates in all groups of banks were registering continuous growth, thus determining the trend at the level of the banking system for 2008. The group of medium banks registered highest

⁵⁸ In the calculation of the real interest rates (Denar and foreign currency) the annual inflation rate in the Republic of Macedonia was used, calculated at the end of every month relative to the same month of the previous year.

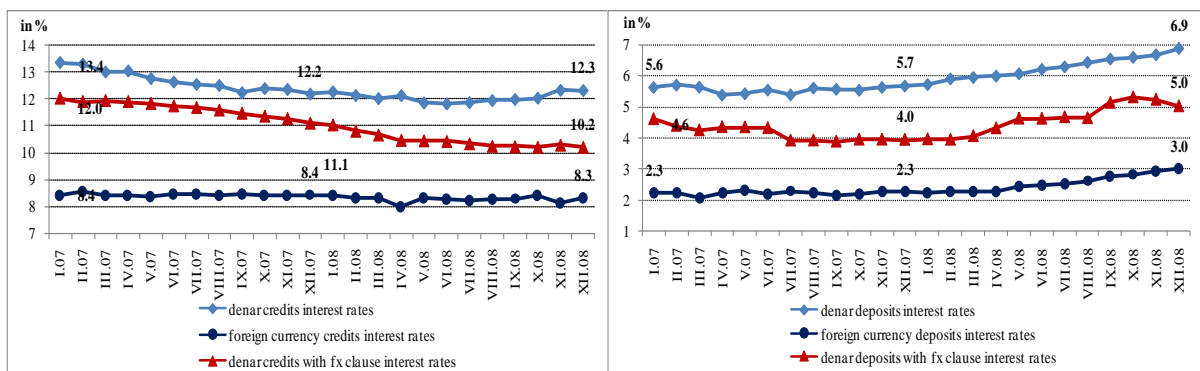
Figure no. 127
Lending and deposit interest rates of the group of large banks



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

lending and deposit interest rates, relative to the other two groups of banks. The lending interest rates of the Denar credits, with the groups of large and medium-size banks registered annual rise of 0.4 and 0.1 percentage points, respectively. This, to a large extent, represented a reaction to the measures undertaken by NBRM pertaining to the credit expansion, and partially it was a result of the compensation of the increased expenditures from the higher deposit interest rates. Opposite to them, within the group of small-size banks, the interest rate of the Denar credits registered fall by 0.5 percentage points, which was largely under the influence of the competition pressures to attract clients. Most apparent change was registered in the interest rate of the foreign currency credits in the group of large banks. On annual basis, it dropped by 1.8 percentage points registering downward trend in the last months of 2008. The deposit interest rates increased in all three groups of banks, so at the end of 2008, they reached the highest level for the last four years. The largest changes in the policy of the deposit interest rates were made by the large and medium-size banks. The interest rates

Figure no. 128
Lending and deposit interest rates of the group of medium banks

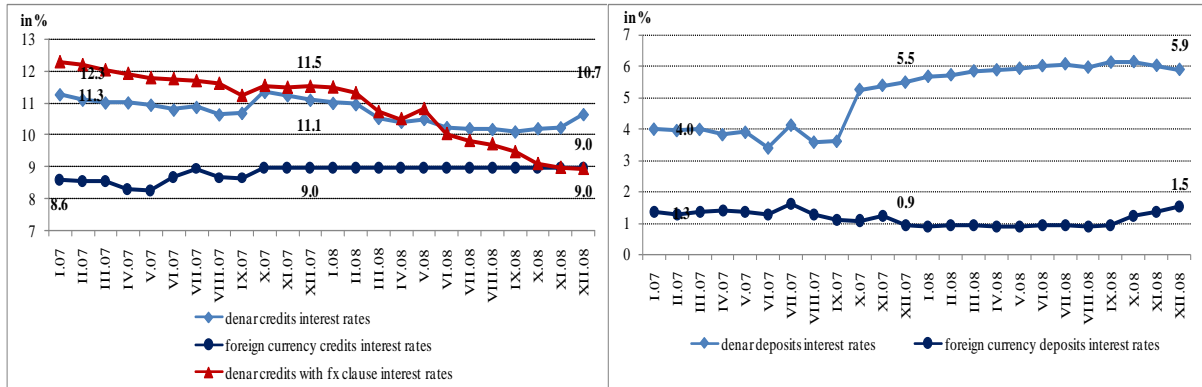


Source: NBRM, based on the data submitted by the banks.

of the Denar deposits grew up by 1.2 percentage points, on annual basis, equally in the groups of large and medium-size banks, and with the small-size banks the growth amounted to 0.4 percentage points. The rise in the interest rates of the foreign currency deposits amounted to 1, 0.8 and 0.6 percentage points, respectively for the group of large, medium and small-size banks. The more aggressive interest rate policy by the group of large and medium-size banks resulted from the fact that they are mainly funded by the deposits of the non-financial entities, different from the small-size banks which lean on its own capital and reserves. Additionally, the more apparent credit expansion by the large and

medium-size banks in the last few years and the slower growth in the deposits in 2008 imposed the need of stimulating and attracting new sources of funds with these two groups of banks.

Figure 129
Lending and deposit interest rates of the group of small banks



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

II) BANKING SUPERVISION IN 2008

1. Legal framework of the banking supervision

Pursuant to the banking Law⁵⁹ until the end of February 2008, the NBRM adopted the entire banking regulations thereof. In 2008, amendments to the current regulations were made, for the purpose of their further strengthening and improvement. Thus in 2008 the following bylaws of higher importance were adopted:

- Decision on managing the interest rate risk in the banking book;
- Decision on the contents and the manner of functioning of the Credit Registry and Instructions for the implementation of the Decision on the contents and the manner of functioning of the Credit Registry;
- Decision on managing the banks' liquidity risk and the Instructions for implementation of the Decision on the banks' liquidity management;
- Decision on amending the Decision on the methodology for determining the capital adequacy and Instructions for amending the Instructions for implementation of the Decision for determining capital adequacy;
- Decision on amending the Decision on the bank's information system security.

Also the NBRM continued with the activities for gradual implementation of the New Capital Accord - Basel 2.

1.1. Activities for introducing the New Capital Accord - Basel 2

The NBRM decided on gradual transfer to the New Basel Capital Accord. At the end of 2007, Decision on reports and data disclosure by the bank was adopted, thus creating conditions for the implementation of the Pillar 3 of the new Capital Accord (market discipline). Also, with the introduction of the new approach for the risk-oriented supervision in the beginning of 2008, preconditions for implementation also of a part of the elements set forth with Pillar 2 of Basel 2 were created. The adoption of the Decision on the interest rate risk in the banking book in 2008 was the following step of the NBRM for introduction and implementation of these complex regulations. In 2009, the regulations pertaining to the determining the capital requirement for coverage of operational risk (Basic Indicator Approach and Standardized Approach) and credit risk (Standardized Approach) will be finalized. Regarding the implementation of the advanced approaches for determining the level of capital requirement for covering credit, i.e. operational risk, i.e. Internal Ratings-based Approaches) and the Advanced Measurement Approaches, the NBRM finds that there are no preconditions in the banking system of the Republic of Macedonia for their prescribing and implementation yet.

1.1.1. Managing the interest rate risk in the banking book

The interest rate risk in the banking book is an integral part of the second pillar of the Accord, referring to the supervisor's role in providing adequate level of the banks' capital adequacy. However, the Accord does not provide for compulsory allocation of capital for covering the interest rate risk in the banking book, but recommends monitoring of the bank's exposure to this risk. The **Decision on managing the interest rates risk in the banking book** sets forth the minimum elements of the system for managing the interest rate risk in the banking book and the manner of determining the change in the economic value of the banking book. When identifying the change in the economic

⁵⁹ "Official Gazette of RM" no. 67/2007

value of the banking book, the positions with adjustable interest rates and the positions where the maturity date i.e. the period to the next change in the interest rate is either absent or cannot be determined with certainty (for example: transaction accounts, sight deposits, positions with option for early repayment or withdrawal, etc.) will have a special treatment.

If the identified change in the economic value of the banking book is equal to or larger than 20% of the own funds, the bank will be obliged to submit draft measures for decreasing this proportion to the NBRM. The NBRM can accept the measures proposed by the bank, and/or order the bank different measures, including a requirement for allocation of appropriate amount of capital for covering the interest rate risk in the banking book. Regarding the fact that this Decision requires fulfillment of variety of presumptions (data base, policies, procedures etc.), its implementation will commence on January 1, 2010.

1.2. Functioning of the Credit Registry

In 2008, activities related to the implementation of the project for promotion of the Credit Registry of the NBRM, were completely carried out by the NBRM. The final stage of the implementation of this project was the adoption of the **Decision on the contents and the manner of functioning of the Credit Registry and the Instructions for enforcing the Decision on the contents and the manner of functioning of the Credit Registry**. The Decision defines the legal framework of the improved Credit Registry. This Registry represents a data and information base on the credit exposure of the banks and the savings houses in the Republic of Macedonia to legal entities and natural persons.

By improving the Credit Registry, the following is achieved:

- widening of the type and the scope of data it maintains (reporting based on credit, compared to the previous reporting based on client, inclusion of additional data, such as: date of the credit approval, the amount of the credit when approved, the amount and the type of the interest rate, the data on the due claims, the days of delay, the manner of credit repayment (balloon or annuity payment), credit status (restructured, prolonged), complied client's currency position, the type and the value of the collateral etc.);
- reduction of the reported individual exposure threshold (from Denar 500 thousand for the exposure to individual non-financial legal entity to Denar 300 thousand, and from Denar 150 thousand for exposure to individual natural person to Denar 5 thousand);
- shortening of the deadlines for submission and processing of data;
- transfer to a reporting on a monthly basis (compared to the reporting to the old Credit Registry, where the data were submitted on a quarterly basis) and
- improvement of the reporting forms of the registry.

These improvements are expected to achieve better efficiency in the utilization of the Credit Registry when estimating the credit risk the banks are exposed to, as well as performing the supervisory function by the NBRM.

1.3. Liquidity risk management

At the end of 2008, the NBRM adopted a Decision on managing banks' liquidity risk, which not only strengthened the provisions for the necessary liquidity risk management system, but prescribed the methodology for maintaining the minimum liquidity level by the banks, as well. This segment of the Decision is something new compared to the preceding bylaw which defines the manner of managing the liquidity risk and envisages determining the quantity of the required liquidity the banks in the Republic of Macedonia should have on their disposal. The adoption of this Decision is part of the

NBRM measures aimed at restriction of the negative influence of the latest developments on the international markets and the current liquidity problems in the banking systems of the countries from West Europe. The velocity the problems spread from one country to another only proves the importance for defining and establishing adequate systems for liquidity risk managing and maintenance of suitable liquidity level.

1.4. Amendments to the Methodology for determining the capital adequacy

The amendments to the **Decision on the methodology for determining the capital adequacy**, as well as the amendments to the **Instructions for implementation of the Decision for determining capital adequacy** are adopted in order to introduce new higher risk weight for the banks' claims on natural persons occurred on the basis of approved and used overdrafts based on transaction accounts (allowed and non-allowed) and approved and used credits based on credit cards. The purpose of such a measure of the NBRM is to determine the size of the credit risk of the banking sector, which arises from the credit products extended to the sector "households" at acceptable level.

1.5. Decision on amending the Decision on the bank's information system security

The **Decision on amending the Decision on the bank's information system security** precisely defines the manner and the conditions under which one bank can use services from outsourcing companies the main office of which is outside the territory of the Republic of Macedonia. With the additional criteria, and in conditions of financial globalization, decrease in the risk the bank can be exposed to when concludes agreement for utilization of these services from outsourcing companies with main office situated in other countries, is achieved.

2. Activities of the banking supervision

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

In 2008, the NBRM rounded the process of licensing of the banks in order to comply with the provisions of the new Banking Law, referring to the statute, the amount of the initial capital, the financial activities and the bank's bodies. Also, the current shareholders with qualified holding in a bank were required to comply with the tightened criteria for a shareholder with a qualified holding in a bank, envisaged in the new Law. On the basis of such a legal requirement, as well as a result of the regular activities of the NBRM within the banks' licensing domain, in 2008 the following licenses and approvals were issued:

| Type of license/approval (banks) | Issued | Refused | Stopped |
|---|---------------|----------------|----------------|
| Approval for the Information System Security Policy | 12 | / | 1 |
| Harmonization of the current shareholders with qualified holding with the provisions of the Banking Law | 6 | 1 | 3 |
| Approval for amendments to the statute | 17 | / | |
| Approval for change in the name of the bank | 1 | / | 1 |
| Approval for appointing members of the Board of Directors | 27 | / | 1 |
| Approval for appointing members of the Supervisory Board | 97 | 1 | 12 |

| | | | |
|---|------------|----------|-----------|
| Harmonization of the financial activities the banks perform with the new Banking Law | 18 | / | 4 |
| Approval for conducting new financial activities | 4 | / | 1 |
| Allowing a look at the Examination Report | 6 | / | / |
| Approval for acquiring shares in a bank the nominal amount of which exceeds 5%, 10%, 20%, 33%, 50%, 50% and 75% of the total number of issued voting shares | 1 | 1 | / |
| Change in the founding and operating license | 4 | 1 | / |
| Total | 193 | 6 | 23 |

| Type of license/approval (savings houses) | Issued | Refused | Stopped |
|--|---------------|----------------|----------------|
| Amendments to the Statute/Company Agreement | 5 | / | / |
| Termination of operating of a saving house | 1 | / | / |
| Previous approval for manager | 3 | | |
| Total | 9 | / | / |

2.2. Supervision on the operating of banks and saving houses

At the beginning of 2008, NBRM started using the concept of risk-based supervision. In the process of planning and implementing of the supervision on the banks' operating, this approach focuses on the material risks they are exposed to. In determining the risk profile of the bank, its risk exposure and method of risk management is assessed, so the aggregate risk profile is determined on the basis of previously defined risk matrices.

In 2008, total 10 on-site supervisions on the operating of banks and saving houses in the Republic of Macedonia were performed. Out of the performed supervisions, 7 pertain to the total operating of 5 banks and 2 saving houses, whereas 3 supervisions were partial. The regular monthly supervision on the saving houses, pertaining to the display of the updated lists of savings deposits, were performed during 2008 as well.

In conditions of constant growth in the banks' activities in the Republic of Macedonia, in 2008, during the on-site supervision, the primary focus was on the assessment of the system of internal controls and the adequacy of the established risk management systems, with respect to the support of such realized growth. NBRM continued to monitor the manner of the banks for credit risk management with due care, especially in the area of crediting to natural persons, crediting in denars with FX clause and long-term crediting. The credit growth in these segments implies higher exposure to other risks, as the operational risk, interest rate risk, liquidity risk and the exchange rate risk, that were also in the focus of the on-site supervisions of the operating of banks.

The changes in the regulatory framework which were made during 2007 when the Banking Law and bylaws adopted by the National Bank became effective, significantly influenced the operating of banks. The new standards on organization and management of banks which resulted from the changes in the regulatory framework were also in the focus of the on-site supervision.

From the performed on-site supervisions conclusion can be made that the solvency and the liquidity of the supervised banks are not endangered. With part of the supervised banks and saving houses weaknesses in the method of functioning of the system of internal controls, risk management and corporative management were registered. Also, the supervisions determined weaknesses in the banks' systems for prevention from money laundering and financing terrorism, especially in the part pertaining to identification and monitoring of suspicious transactions.

2.3. Corrective measures to banks and saving houses

Within the process of undertaking corrective measures to banks and saving houses, in the period from January 1, 2008 to December 31, 2008, NBRM imposed 16 written warnings to 7 banks and 5 saving houses, as well as 5 written recommendations to 2 banks and 3 saving houses. Also, on the basis of the provisions from the Banking Law for initiating misdemeanor procedure, in this period 11 procedures for intermediation were initiated to 6 banks and to the responsible persons in those banks and to 5 saving houses and the responsible persons of those saving houses. As a result of the non-acceptance of the procedure for intermediation by the responsible person in one banks and 4 persons with special rights and responsibilities in other bank, these persons were imposed Application for initiating misdemeanor procedure.

In the Annex no. 19 of this Report a detailed review of the written warnings and recommendations imposed by NBRM during 2008 is given.

2.4. Other activities

Besides the regular activities of the banking supervision of NBRM, in 2008 several additional activities were implemented:

- participation in the implementation of the FSAP mission of IMF and the World Bank,
- strengthening in the cooperation with the other supervisory bodies in the region and
- organization of trainings for improvement of the supervisory capacity of NBRM.

In March 2008, the joint mission of the International Monetary Fund and the World Bank conducted the second Financial Sector Assessment Program in the Republic of Macedonia, the main goal of which was analysis and assessment of the stability, efficiency and the level of development of the financial system in the country, as well as identification of the basic problems and weaknesses in its operating. An analyses and assessment of the progress concerning the compliance of the NBRM's supervisory function with the Basel principles for efficient banking supervision was conducted. The general assessment is that the Banking Law from 2007 and the new regulation adopted on the basis of this Law, considerable improvement was accomplished in the strengthening of the legal framework and the supervisory policies, procedures and practices⁶⁰.

Within the analyses of the banking system of the Republic of Macedonia, the IMF's and the World Bank's team also performed a stress test analyses of the stability and vulnerability of the banking system to credit risk, currency risk, liquidity risk, indirect credit risk and interest rate risk. The analyses confirmed the ascertainment for credit risk domination in the operating of banks.

In accordance with the concluded Memorandum for Corporation and Coordination between the banks' supervisory bodies of the South-East Europe⁶¹, in January 2008 in Thessaloniki a meeting was held and a working group was formed for analyses of the regional supervisory practices and regulations in the area of: treatment of the non-performing credits and allocation of provisions; stress testing; liquidity risk management etc. The purpose of this working group is to create conditions for convergence of the supervisory practices of the countries from the region and appliance of the best

⁶⁰ For detailed review of the compliance of the banking supervision and the regulation of the Republic of Macedonia with the Basel principles, see in the Financial Stability Report of the Republic of Macedonia for 2007.

⁶¹ As part of the regional efforts for strengthening of the banking supervision, in July 2007, NBRM together with the supervisory bodies of Albania, Greece, Bulgaria, Cyprus, Romania, Serbia, Bosnia and Herzegovina, Republic of Srpska and Montenegro, signed a Memorandum for Understanding with the principles for cooperation and coordination. The goal of the memorandum is to promote the organized cooperation in the area of the banking supervision for the purpose of strengthening the financial stability of South East Europe, as well as for strengthening of the efficiency of the supervisory measures.

practices, the recommendations of the Basel Committee of Banking Supervision and the respective European directives and the instructions given by the Committee of European Banking Supervisors.

In the first half of 2008, bilateral Memorandum for Understanding was concluded with the National Bank of Serbia, in the area of the supervisory and regulatory function.

Within the Supervision Development Plan of the NBRM, in 2008 the process of training of supervisors continued. In that direction, the training conducted as part of the donation from the Kingdom of the Netherlands was with great significance⁶². With this donation, during 2008 training of supervisors of NBRM were organized in various spheres: improvement of the communication skills, corporate governance of banks and the role of the internal audit, management of the operational risk and the information technology risk, legal risk management and credit risk management.

⁶² The donation is part of the technical assistance for the institutions of the Republic of Macedonia for fulfilling the terms from the PDPL 2 and 3 arrangements concluded with the World Bank. The donation is intended for ensuring funds for support of the reforms by the Macedonian Government, improvement of the investment climate and strengthening of the management of the public sector.

A N N E X

Balance sheet

Annex 1

in millions of denars

| ASSETS | 31.12.2007 | | | | 31.12.2008 | | | |
|--|----------------------|----------------------------|---------------------------|----------------|----------------------|----------------------------|---------------------------|----------------|
| | Group of large banks | Group of medium-size banks | Group of small-size banks | Total | Group of large banks | Group of medium-size banks | Group of small-size banks | Total |
| CASH AND BALANCE WITH NBRM | 10.171 | 4.320 | 844 | 15.335 | 18.034 | 7.904 | 1.041 | 26.979 |
| Denar cash | 8.189 | 3.599 | 743 | 12.532 | 8.669 | 3.710 | 833 | 13.212 |
| Foreign currency cash | 1.982 | 719 | 100 | 2.801 | 1.681 | 686 | 101 | 2.468 |
| Precious metals and other kind of cash | 0 | 2 | 1 | 3 | 0 | 1 | 0 | 2 |
| Other balances with NBRM | 0 | 0 | 0 | 0 | 627 | 882 | 20 | 1.528 |
| Compulsory reserves in FX | 5.206 | 1.884 | 186 | 7.277 | 7.057 | 2.625 | 87 | 9.769 |
| CB BILLS | 14.151 | 5.031 | 1.817 | 20.999 | 12.147 | 2.907 | 2.382 | 17.437 |
| DEBT SECURITIES | 9.542 | 2.896 | 645 | 13.082 | 7.057 | 2.278 | 718 | 10.053 |
| Checks and bills of exchange | 42 | 27 | 4 | 73 | 30 | 20 | 1 | 52 |
| Government securities denar nominated | 5.390 | 1 | 19 | 5.410 | 4.997 | 1 | 25 | 5.022 |
| Other debt securities | 4.110 | 2.867 | 622 | 7.599 | 2.030 | 2.257 | 692 | 4.979 |
| PLACEMENTS TO OTHER BANKS | 29.524 | 12.349 | 4.969 | 46.842 | 14.967 | 7.988 | 4.213 | 27.168 |
| Accounts with domestic banks | 5.239 | 2.093 | 250 | 7.582 | 15 | 718 | 89 | 823 |
| Accounts with foreign banks | 23.309 | 9.518 | 2.256 | 35.083 | 12.432 | 6.763 | 1.772 | 20.967 |
| Short-term loans and other claims on domestic banks and other financial institutions | 69 | 186 | 209 | 465 | 647 | 24 | 43 | 715 |
| Short-term loans and other claims on foreign and domestic banks in foreign exchange | 215 | 530 | 187 | 932 | 572 | 461 | 16 | 1.049 |
| Past due loans and claims on banks | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 6 |
| Long-term loans and other claims on domestic banks and other financial institutions | 616 | 1 | 928 | 1.545 | 1.221 | 0 | 1.161 | 2.382 |
| Long-term loans and other claims on foreign banks and other financial institutions | 0 | 0 | 1.015 | 1.016 | 0 | 0 | 1.019 | 1.019 |
| Non-performing loans on banks | 76 | 21 | 124 | 221 | 76 | 21 | 110 | 207 |
| PLACEMENTS TO CLIENTS | 79.186 | 32.575 | 2.146 | 113.907 | 105.527 | 45.952 | 2.793 | 154.272 |
| Enterprises | 49.111 | 18.751 | 1.020 | 68.881 | 65.905 | 25.834 | 1.552 | 93.292 |
| Other customers | 436 | 19 | 5 | 460 | 498 | 64 | 4 | 566 |
| Households | 30.710 | 14.192 | 1.263 | 46.165 | 41.356 | 19.952 | 1.408 | 62.716 |
| Non-performing loans to clients | 7.517 | 1.121 | 760 | 9.398 | 8.068 | 2.400 | 867 | 11.335 |
| Reserves for potential loan losses | -8.588 | -1.507 | -902 | -10.997 | -10.299 | -2.299 | -1.039 | -13.636 |
| ACCRUED INTEREST AND OTHER ASSETS | 3.098 | 1.581 | 234 | 4.913 | 3.369 | 1.716 | 175 | 5.260 |
| Accrued interest | 646 | 341 | 41 | 1.029 | 722 | 438 | 56 | 1.216 |
| Non-accrual interest and other claims | 3.422 | 206 | 198 | 3.826 | 3.397 | 309 | 249 | 3.955 |
| Reserves for potential losses for interest | -3.446 | -221 | -200 | -3.867 | -3.438 | -328 | -251 | -4.017 |
| Other claims | 762 | 520 | 7 | 1.289 | 1.211 | 452 | 8 | 1.671 |
| Foreclosures | 1.665 | 620 | 427 | 2.712 | 1.444 | 701 | 395 | 2.541 |
| Net commission relations | -41 | -4 | -265 | -310 | -31 | -9 | -319 | -359 |
| Net internal relations | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other assets | 89 | 118 | 26 | 234 | 64 | 152 | 36 | 253 |
| SECURITIES INVESTMENTS | 747 | 311 | 358 | 1.415 | 726 | 273 | 369 | 1.368 |
| Securities in foreign currency available for sale | 183 | 2 | 64 | 249 | 179 | 6 | 64 | 250 |
| Securities in foreign currency held up to maturity | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Equity investments in domestic currency | 563 | 309 | 294 | 1.167 | 547 | 267 | 304 | 1.118 |
| Reserves for purchased owned shares | 0 | 0 | 0 | 0 | 547 | 267 | 304 | 1.118 |
| FIXED ASSETS | 3.704 | 2.510 | 952 | 7.166 | 3.969 | 3.119 | 1.080 | 8.168 |
| Buildings | 3.232 | 1.694 | 890 | 5.817 | 3.248 | 1.796 | 886 | 5.931 |
| Equipment | 2.746 | 1.225 | 353 | 4.323 | 3.032 | 1.625 | 415 | 5.072 |
| Intangible investments | 225 | 221 | 37 | 483 | 353 | 356 | 65 | 774 |
| Other means of operation | 150 | 22 | 5 | 177 | 103 | 28 | 5 | 136 |
| Means of operation in preparation | 163 | 229 | 5 | 397 | 267 | 399 | 81 | 746 |
| Correction of value of fixed assets | -2.812 | -880 | -338 | -4.031 | -3.034 | -1.086 | -372 | -4.492 |
| Non-allocated reserves for potential losses | 0 | -1 | 0 | -1 | 0 | 0 | 0 | 0 |
| TOTAL ASSETS | 150.122 | 61.571 | 11.966 | 223.659 | 165.798 | 72.136 | 12.770 | 250.704 |

Balance sheet

Annex 1

in millions of denars

| LIABILITIES | 31.12.2007 | | | | 31.12.2008 | | | |
|--|----------------------|----------------------------|---------------------------|----------------|----------------------|----------------------------|---------------------------|----------------|
| | Group of large banks | Group of medium-size banks | Group of small size banks | Total | Group of large banks | Group of medium-size banks | Group of small size banks | Total |
| DEPOSITS OF BANKS | 5.851 | 3.685 | 946 | 10.482 | 4.400 | 7.176 | 430 | 12.006 |
| Denar sight deposits | 151 | 9 | 11 | 171 | 103 | 99 | 1 | 203 |
| Foreign currency sight deposits of domestic banks | 241 | 214 | 0 | 456 | 296 | 30 | 0 | 326 |
| Foreign currency sight deposits of foreign banks | 216 | 309 | 590 | 1.115 | 282 | 299 | 4 | 586 |
| Short-term denar deposits | 1.285 | 1.155 | 202 | 2.642 | 1.539 | 964 | 278 | 2.781 |
| Short-term foreign currency deposits | 260 | 855 | 0 | 1.115 | 768 | 908 | 0 | 1.676 |
| Short-term foreign currency deposits of foreign banks | 3.698 | 1.142 | 0 | 4.840 | 798 | 4.875 | 0 | 5.673 |
| Long-term denar deposits | 0 | 1 | 143 | 144 | 307 | 1 | 146 | 454 |
| Long-term foreign currency deposits | 0 | 0 | 0 | 0 | 307 | 0 | 0 | 307 |
| SIGHT DEPOSITS | 51.187 | 16.220 | 2.447 | 69.853 | 53.908 | 16.365 | 2.773 | 73.046 |
| Denar sight deposits of enterprises | 14.556 | 4.552 | 703 | 19.812 | 16.489 | 4.978 | 1.138 | 22.605 |
| Denar sight deposits of public sector | 561 | 116 | 79 | 756 | 1.112 | 41 | 140 | 1.293 |
| Denar sight deposits of other customers | 1.774 | 540 | 208 | 2.522 | 2.146 | 849 | 145 | 3.139 |
| Denar sight deposits of citizens | 10.144 | 3.544 | 483 | 14.172 | 10.512 | 3.129 | 552 | 14.194 |
| Restricted denar deposits | 398 | 356 | 2 | 755 | 305 | 148 | 8 | 461 |
| Foreign currency sight deposits of enterprises | 6.786 | 1.999 | 411 | 9.196 | 7.961 | 2.393 | 307 | 10.660 |
| Foreign currency sight deposits of citizens | 16.553 | 4.880 | 555 | 21.988 | 15.084 | 4.686 | 469 | 20.239 |
| Restricted foreign currency deposits | 416 | 232 | 4 | 653 | 299 | 142 | 14 | 455 |
| SHORT TERM DEPOSITS UP TO 1 YEAR | 61.158 | 19.624 | 1.056 | 81.839 | 66.219 | 23.121 | 1.830 | 91.170 |
| Denar short term deposits of enterprises | 12.078 | 6.379 | 120 | 18.577 | 8.446 | 8.198 | 807 | 17.451 |
| Denar short term deposits of public sector | 386 | 5 | 16 | 408 | 711 | 116 | 49 | 876 |
| Denar short term deposits of other customers | 1.358 | 106 | 26 | 1.490 | 655 | 220 | 80 | 955 |
| Denar short term deposits of citizens | 19.490 | 5.516 | 683 | 25.689 | 19.719 | 4.665 | 635 | 25.019 |
| Foreign currency short term deposits of enterprises | 6.944 | 2.484 | 4 | 9.432 | 7.672 | 3.106 | 8 | 10.786 |
| Foreign currency short term deposits of other customers | 80 | 273 | 18 | 371 | 174 | 111 | 17 | 302 |
| Foreign currency short term deposits of citizens | 20.821 | 4.861 | 189 | 25.871 | 28.842 | 6.705 | 233 | 35.780 |
| SHORT TERM BORROWINGS UP TO 1 YEAR AND ISSUED DEBT SECURITIES | 2.624 | 182 | 2 | 2.808 | 37 | 592 | 1 | 631 |
| Short-term denar borrowings of domestic banks | 0 | 182 | 2 | 184 | 0 | 592 | 1 | 593 |
| Short-term borrowings of foreign banks | 2.615 | 0 | 0 | 2.615 | 0 | 0 | 0 | 0 |
| Short-term denar borrowings of other customers | 9 | 0 | 0 | 9 | 37 | 0 | 0 | 37 |
| OTHER LIABILITIES | 2.038 | 1.047 | 110 | 3.194 | 2.255 | 1.314 | 170 | 3.739 |
| Payable interest | 457 | 278 | 35 | 771 | 699 | 451 | 53 | 1.203 |
| Other liabilities in denars | 690 | 399 | 50 | 1.139 | 745 | 388 | 79 | 1.213 |
| Other liabilities in foreign currency | 427 | 146 | 10 | 583 | 273 | 171 | 24 | 468 |
| Temporary accounts | 464 | 223 | 14 | 702 | 538 | 303 | 14 | 855 |
| LONG TERM DEPOSITS OVER 1 YEAR | 3.454 | 4.594 | 642 | 8.690 | 9.782 | 6.454 | 461 | 16.697 |
| Denar long term deposits of enterprises | 399 | 432 | 0 | 830 | 906 | 595 | 3 | 1.504 |
| Denar long term deposits of public sector | 0 | 113 | 0 | 113 | 0 | 90 | 0 | 90 |
| Denar long term deposits of other customers | 363 | 325 | 261 | 949 | 868 | 756 | 70 | 1.694 |
| Denar long term deposits of citizens | 1.320 | 1.385 | 302 | 3.007 | 2.610 | 1.655 | 294 | 4.559 |
| Foreign currency long term deposits of enterprises | 0 | 43 | 0 | 44 | 76 | 94 | 0 | 170 |
| Foreign currency long term deposits of other customers | 248 | 38 | 1 | 288 | 562 | 93 | 1 | 656 |
| Foreign currency long term deposits of citizens | 1.124 | 2.257 | 78 | 3.460 | 4.761 | 3.171 | 93 | 8.025 |
| LONG TERM BORROWINGS OVER 1 YEAR | 8.440 | 6.824 | 1.406 | 16.671 | 10.616 | 7.776 | 1.216 | 19.608 |
| Long term borrowings of NBRM | 916 | 638 | 5 | 1.560 | 286 | 551 | 5 | 843 |
| Long term denar borrowings of domestic banks | 589 | 584 | 5 | 1.179 | 310 | 837 | 5 | 1.151 |
| Long term foreign currency borrowings of domestic banks and other financial institutions | 752 | 1.687 | 0 | 2.440 | 592 | 1.681 | 0 | 2.273 |
| Long term borrowings of foreign banks | 3.801 | 2.273 | 1.344 | 7.418 | 3.574 | 2.702 | 1.159 | 7.436 |
| Long term borrowings of others customers | 374 | 546 | 51 | 971 | 826 | 722 | 47 | 1.595 |
| Long term foreign currency borrowings of other customers | 0 | 490 | 0 | 490 | 0 | 461 | 0 | 461 |
| Long term borrowings of enterprises | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Long term issued securities, subordinated deposits and hybrid capital instruments | 2.007 | 606 | 0 | 2.613 | 5.027 | 822 | 0 | 5.850 |
| PROVISIONS FOR OFF BALANCE SHEET LIABILITIES | 769 | 87 | 15 | 872 | 821 | 91 | 15 | 926 |
| EQUITY AND RESERVES | 11.931 | 8.343 | 5.191 | 25.465 | 14.371 | 8.800 | 5.762 | 28.932 |
| Equity capital | 8.452 | 7.142 | 4.798 | 20.393 | 9.113 | 7.149 | 5.270 | 21.532 |
| Reserve fund | 2.604 | 1.126 | 273 | 4.004 | 3.581 | 1.232 | 336 | 5.149 |
| Revaluation reserves | 121 | 0 | 0 | 121 | 117 | 0 | 0 | 118 |
| Unallocated profit from previous years | 752 | 566 | 32 | 1.350 | 1.559 | 1.149 | 88 | 2.796 |
| Other funds | 1 | 0 | 410 | 411 | 1 | 0 | 423 | 424 |
| Loss | 0 | -491 | -185 | -677 | 0 | -387 | -160 | -547 |
| Current loss | 0 | 0 | -137 | -137 | 0 | -343 | -195 | -539 |
| NET INCOME AFTER TAXES | 2.672 | 963 | 152 | 3.787 | 3.389 | 447 | 113 | 3.949 |
| TOTAL LIABILITIES, EQUITY AND RESERVES | 150.122 | 61.571 | 11.966 | 223.659 | 165.798 | 72.136 | 12.770 | 250.704 |

INCOME STATEMENT

in millions of denars

| Income statement | 31.12.2007 | | | | 31.12.2008 | | | |
|--|----------------------|----------------------------|---------------------------|---------------|----------------------|----------------------------|---------------------------|---------------|
| | Group of large banks | Group of medium-size banks | Group of small-size banks | Total | Group of large banks | Group of medium-size banks | Group of small-size banks | Total |
| INTEREST INCOME | 8.363 | 3.793 | 532 | 12.688 | 10.965 | 5.025 | 652 | 16.642 |
| Banks | 665 | 550 | 172 | 1.386 | 1.505 | 547 | 302 | 2.354 |
| Enterprises | 3.397 | 1.605 | 108 | 5.110 | 4.666 | 2.165 | 125 | 6.956 |
| Citizens | 2.754 | 1.437 | 166 | 4.356 | 3.953 | 2.255 | 144 | 6.352 |
| Other | 1.708 | 335 | 134 | 2.177 | 1.083 | 217 | 103 | 1.403 |
| Reversed interest | -160 | -134 | -48 | -342 | -241 | -160 | -22 | -423 |
| INTEREST EXPENSE | -3.461 | -1.504 | -159 | -5.125 | -5.077 | -2.288 | -177 | -7.542 |
| Banks | -772 | -236 | -10 | -1.018 | -978 | -388 | -57 | -1.423 |
| Enterprises | -835 | -374 | -10 | -1.219 | -1.083 | -657 | -20 | -1.760 |
| Citizens | -1.720 | -636 | -78 | -2.433 | -2.801 | -827 | -74 | -3.702 |
| Other | -135 | -259 | -61 | -455 | -216 | -415 | -26 | -656 |
| NET INTEREST INCOME | 4.902 | 2.288 | 373 | 7.563 | 5.888 | 2.737 | 474 | 9.099 |
| NET PROVISIONS | -1.528 | -428 | -234 | -2.190 | -1.598 | -714 | -177 | -2.489 |
| Provisions | -2.145 | -579 | -301 | -3.024 | -2.337 | -905 | -218 | -3.460 |
| Recovery, regarding provisions | 617 | 151 | 67 | 836 | 739 | 191 | 41 | 971 |
| Nonallocated provisions for potential losses | 0 | -1 | 0 | -1 | 0 | 0 | 0 | 0 |
| NET INTEREST INCOME AFTER PROVISIONS | 3.374 | 1.860 | 139 | 5.374 | 4.290 | 2.023 | 297 | 6.610 |
| NET FEES AND COMMISSION INCOME | 2.461 | 899 | 208 | 3.568 | 2.734 | 888 | 189 | 3.811 |
| Fees and commission income | 2.768 | 1.107 | 294 | 4.170 | 3.068 | 1.204 | 283 | 4.555 |
| Fees and commission expenses | -307 | -208 | -86 | -602 | -333 | -316 | -95 | -744 |
| DIVIDENDS | 18 | 32 | 7 | 57 | 39 | 71 | 19 | 130 |
| NET INCOME, REGARDING THE SECURITIES | 108 | 0 | 0 | 108 | 49 | 12 | 0 | 61 |
| NET CAPITAL INCOME | 22 | 319 | -13 | 328 | 119 | 112 | -3 | 228 |
| NET FX INCOME | 362 | 175 | 4 | 541 | 437 | 201 | 9 | 647 |
| OTHER INCOME | 713 | 410 | 260 | 1.383 | 1.049 | 361 | 145 | 1.555 |
| Other income | 220 | 111 | 166 | 497 | 455 | 230 | 37 | 722 |
| Extraordinary income | 493 | 298 | 94 | 886 | 594 | 132 | 107 | 833 |
| OPERATING EXPENSES | -3.946 | -2.360 | -530 | -6.837 | -4.458 | -3.257 | -630 | -8.345 |
| Salary | -1.794 | -1.028 | -252 | -3.074 | -1.938 | -1.372 | -300 | -3.610 |
| Depreciation | -503 | -239 | -46 | -788 | -493 | -340 | -64 | -898 |
| Material expenses | -254 | -153 | -55 | -462 | -282 | -200 | -53 | -535 |
| Services | -714 | -620 | -130 | -1.464 | -889 | -964 | -170 | -2.022 |
| Business trip expenses | -37 | -26 | -7 | -70 | -37 | -31 | -8 | -76 |
| Representation expenses | -231 | -166 | -26 | -422 | -288 | -192 | -20 | -500 |
| Insurance premium | -414 | -127 | -15 | -556 | -531 | -158 | -15 | -703 |
| OTHER EXPENSES | -297 | -254 | -37 | -588 | -469 | -254 | -94 | -817 |
| Other expenses | -289 | -252 | -23 | -563 | -462 | -238 | -94 | -794 |
| Extraordinary expenses | -8 | -2 | -14 | -25 | -7 | -15 | 0 | -23 |
| GROSS INCOME / LOSS | 2.815 | 1.081 | 38 | 3.934 | 3.791 | 156 | -67 | 3.880 |
| TAXES | 143 | 118 | 23 | 284 | -403 | -52 | -15 | -470 |
| NET INCOME AFTER TAXES | 2.672 | 963 | 15 | 3.650 | 3.388 | 104 | -82 | 3.410 |

Credit structure of non-financial entities

in millions of Denars

| Date | Description | Total | Total | | Enterprises | | Households | | Other clients | |
|---------------------------------------|----------------------------------|----------------|----------------|---------------|---------------|---------------|---------------|--------------|---------------|------------|
| | | | Denar | FX | Denar | FX | Denar | FX | Denar | FX |
| 31.12.2007 | Due loans | 1,270 | 956 | 314 | 614 | 293 | 341 | 16 | 1 | 5 |
| | Short-term loans | 37,270 | 30,842 | 6,427 | 19,226 | 6,397 | 11,602 | 21 | 15 | 9 |
| | Long-term loans | 76,966 | 54,235 | 22,731 | 22,105 | 20,247 | 31,972 | 2,212 | 158 | 272 |
| | Non-performing loans | 9,398 | 8,125 | 1,273 | 5,934 | 1,108 | 1,950 | 93 | 242 | 72 |
| | Total gross loans | 124,904 | 94,158 | 30,745 | 47,878 | 28,045 | 45,865 | 2,342 | 415 | 358 |
| | Reserves for potential losses | -10,997 | | | | | | | | |
| | Total net loans | 113,907 | | | | | | | | |
| 31.12.2008 | Due loans | 1,907 | 1,403 | 504 | 1,025 | 470 | 377 | 34 | 1 | 1 |
| | Short-term loans | 52,165 | 42,827 | 9,337 | 26,954 | 9,288 | 15,798 | 13 | 76 | 37 |
| | Long-term loans | 102,501 | 75,400 | 27,101 | 32,810 | 22,745 | 42,458 | 4,036 | 131 | 320 |
| | Non-performing loans | 11,335 | 9,848 | 1,487 | 6,280 | 1,237 | 3,295 | 245 | 272 | 5 |
| | Total gross loans | 167,908 | 129,478 | 38,430 | 67,069 | 33,739 | 61,928 | 4,328 | 480 | 363 |
| | Reserves for potential losses | -13,636 | | | | | | | | |
| | Total net loans | 154,272 | | | | | | | | |
| Increase 31.12.2008/ 31.12.2007 | Absolute increase in gross loans | 43,004 | 35,320 | 7,685 | 19,191 | 5,694 | 16,063 | 1,986 | 65 | 5 |
| | Increase in % | 34.4% | 37.5% | 25.0% | 40.1% | 20.3% | 35.0% | 84.8% | 15.7% | 1.3% |
| | Growth structure | | 82.1% | 17.9% | 77.1% | 22.9% | 89.0% | 11.0% | 93.3% | 6.7% |

Currency structure of the credit exposure to households, by credit product

| Description | Date | Denar credit exposure | Denar credit exposure with FX clause | Foreign exchange credit exposure |
|--|---------|-----------------------|--------------------------------------|----------------------------------|
| residential and commercial real estate loans | 12.2006 | 15.2% | 74.9% | 9.9% |
| | 12.2007 | 14.7% | 72.3% | 13.0% |
| | 12.2008 | 11.4% | 75.5% | 13.1% |
| consumer loans | 12.2006 | 66.0% | 29.1% | 4.9% |
| | 12.2007 | 56.2% | 41.8% | 2.0% |
| | 12.2008 | 60.2% | 34.2% | 5.6% |
| overdrafts | 12.2006 | 100.0% | 0.0% | 0.0% |
| | 12.2007 | 100.0% | 0.0% | 0.0% |
| | 12.2008 | 100.0% | 0.0% | 0.0% |
| credit cards | 12.2006 | 98.5% | 0.0% | 1.5% |
| | 12.2007 | 99.3% | 0.0% | 0.7% |
| | 12.2008 | 99.6% | 0.0% | 0.4% |
| car loans | 12.2006 | 0% | 0% | 0% |
| | 12.2007 | 11.0% | 71.6% | 17.4% |
| | 12.2008 | 4.2% | 79.6% | 16.2% |
| other loans | 12.2006 | 40.6% | 51.7% | 7.7% |
| | 12.2007 | 65.4% | 32.0% | 2.6% |
| | 12.2008 | 62.5% | 33.2% | 4.3% |

Currency structure of the credit exposure to corporations and other clients, by activity

| Description | Date | Denar credit exposure | Denar credit exposure with FX clause | Foreign exchange credit exposure |
|--------------------------------------|---------|-----------------------|--------------------------------------|----------------------------------|
| agriculture, hunting and forestry | 12.2006 | 50.2% | 13.2% | 36.6% |
| | 12.2007 | 42.8% | 17.4% | 39.8% |
| | 12.2008 | 36.1% | 26.1% | 37.8% |
| processing industry | 12.2006 | 48.5% | 10.2% | 41.3% |
| | 12.2007 | 40.0% | 14.8% | 45.2% |
| | 12.2008 | 38.8% | 19.3% | 42.0% |
| wholesale and retail trade | 12.2006 | 49.0% | 15.2% | 35.8% |
| | 12.2007 | 48.1% | 17.3% | 34.6% |
| | 12.2008 | 44.6% | 25.4% | 30.0% |
| transport, storage and communication | 12.2006 | 59.2% | 15.8% | 24.9% |
| | 12.2007 | 54.6% | 18.3% | 27.1% |
| | 12.2008 | 44.3% | 27.1% | 28.6% |
| Other activities | 12.2006 | 39.4% | 16.3% | 44.3% |
| | 12.2007 | 44.0% | 20.3% | 35.7% |
| | 12.2008 | 42.2% | 26.7% | 31.1% |

Securities portfolio structure

| No. | Securities portfolio | Amount (in millions of denars) | | Structure | | Annual change 31.12.08/31.12.07 | | |
|----------|--|--------------------------------|---------------|---------------|---------------|---------------------------------|---------------|-------------------------|
| | | 31.12.2007 | 31.12.2008 | 31.12.2007 | 31.12.2008 | Absolute change | In percent | Participation in change |
| 1 | Debt securities (1.1+1.2+1.3) | 34.139 | 27.548 | 96,2% | 95,5% | -6.591 | -23,9% | 99,3% |
| 1.1 | NBRM bills | 20.999 | 17.437 | 61,5% | 63,3% | -3.562 | -20,4% | 53,6% |
| 1.2 | Government securities (1.2.a+1.2.b+1.2.v+1.2.g) | 12.700 | 9.165 | 37,2% | 33,3% | -3.535 | -38,6% | 53,2% |
| 1.2.a | - Bond for privatisation of Stopanska banka AD Skopje | 3.676 | 3.162 | 10,8% | 11,5% | -514 | -16,3% | 7,7% |
| 1.2.b | - Bond for frozen foreign currency savings and denationalization | 1.734 | 1.860 | 5,1% | 6,8% | 126 | 6,8% | -1,9% |
| 1.2.v | - Treasury bills | 6.530 | 3.362 | 19,1% | 12,2% | -3.168 | -94,2% | 47,7% |
| 1.2.g | - Treasury bonds (continuous government securities) | 760 | 781 | 2,2% | 2,8% | 21 | 2,7% | -0,3% |
| 1.3 | Other debt securities | 440 | 946 | 1,3% | 3,4% | 506 | 53,5% | -7,6% |
| 2 | Equity securities (2.1+2.2+2.3) | 1.358 | 1.309 | 3,8% | 4,5% | -49 | -3,7% | 0,7% |
| 2.1 | Equities in domestic non-financial legal entities | 436 | 357 | 32,1% | 27,3% | -79 | -22,1% | 1,2% |
| 2.2 | Equities in domestic banks and other financial organizations | 731 | 761 | 53,8% | 58,1% | 30 | 3,9% | -0,5% |
| 2.3 | Other equity securities | 191 | 191 | 14,1% | 14,6% | 0 | 0,0% | 0,0% |
| 3 | Total securities portfolio (1+2) | 35.497 | 28.857 | 100,0% | 100,0% | -6.640 | -23,0% | 100,0% |

Structure of banks deposits

in millions of denars

| Date | Descriptions | Total | Total | | Enterprises | | Households | | Public sector | | Other clients | |
|-------------------------------------|---|----------------|---------------|------------------|---------------|------------------|---------------|------------------|---------------|------------------|---------------|------------------|
| | | | Denar | Foreign currency | Denar | Foreign currency | Denar | Foreign currency | Denar | Foreign currency | Denar | Foreign currency |
| 31.12.2007 | Sight deposits | 68.445 | 37.261 | 31.184 | 19.812 | 7.043 | 14.172 | 21.988 | 756 | 1 | 2.522 | 2.151 |
| | Restricted deposits | 1.409 | 755 | 653 | 571 | 653 | 0 | 0 | 176 | 0 | 8 | 0 |
| | Short-term time deposits up to one year | 81.839 | 46.164 | 35.675 | 18.577 | 9.432 | 25.689 | 25.871 | 408 | 0 | 1.490 | 371 |
| | Long term time deposits over one year | 8.690 | 4.899 | 3.791 | 830 | 44 | 3.007 | 3.460 | 113 | 0 | 949 | 288 |
| | Total | 160.381 | 89.079 | 71.303 | 39.791 | 17.172 | 42.867 | 51.319 | 1.452 | 1 | 4.969 | 2.810 |
| Change 31.12.2007/ 31.12.2006 | Absolute change of deposits | 37.254 | 29.683 | 7.572 | 11.444 | 2.085 | 16.964 | 5.802 | -310 | 1 | 1.585 | -317 |
| | In % | 30,3% | 50,0% | 11,9% | 40,4% | 13,8% | 65,5% | 12,7% | -17,6% | - | 46,8% | - |
| | Participation in change | 100,0% | 79,7% | 20,3% | 30,7% | 5,6% | 45,5% | 15,6% | -0,8% | 0,0% | 4,3% | -0,9% |
| 31.12.2008 | Sight deposits | 72.131 | 41.232 | 30.899 | 22.605 | 8.293 | 14.194 | 19.573 | 1.293 | 2 | 3.139 | 3.032 |
| | Restricted deposits | 916 | 461 | 455 | 448 | 455 | - | - | 8 | - | 5 | - |
| | Short-term time deposits up to one year | 91.170 | 44.302 | 46.868 | 17.451 | 10.786 | 25.019 | 35.780 | 876 | - | 955 | 302 |
| | Long term time deposits over one year | 16.697 | 7.846 | 8.851 | 1.504 | 170 | 4.559 | 8.025 | 90 | - | 1.694 | 656 |
| | Total | 180.913 | 93.840 | 87.073 | 42.008 | 19.703 | 43.772 | 63.378 | 2.267 | 2 | 5.793 | 3.989 |
| Change 31.12.2008/ 31.12.2007 | Absolute change of deposits | 20.530 | 4.761 | 15.770 | 2.218 | 2.531 | 904 | 12.059 | 814 | 1 | 824 | 1.179 |
| | In % | 12,8% | 5,3% | 22,1% | 5,6% | 14,7% | 2,1% | 23,5% | 56,0% | 131,7% | 16,6% | 42,0% |
| | Participation in change | - | 23,2% | 76,8% | 46,7% | 53,3% | 7,0% | 93,0% | 99,8% | 0,2% | 41,1% | 58,9% |

Indicators for the credit exposure quality

in millions of Denars

| Items | 31.12.2002 | 31.12.2003 | 31.12.2004 | 31.12.2005 | 31.12.2006 | 31.12.2007 | 31.12.2008 |
|--|------------|------------|------------|------------|------------|------------|------------|
| A | 67,337 | 77,686 | 91,394 | 108,913 | 143,707 | 198,617 | 215,279 |
| B | 11,018 | 10,871 | 12,025 | 16,487 | 21,931 | 25,484 | 32,467 |
| C | 6,269 | 4,602 | 4,826 | 4,473 | 3,807 | 4,469 | 6,531 |
| D | 6,497 | 5,735 | 4,191 | 4,420 | 3,435 | 3,219 | 3,884 |
| E | 2,094 | 5,413 | 6,744 | 6,403 | 6,308 | 5,867 | 6,517 |
| Total credit exposure | 93,214 | 104,306 | 119,179 | 140,696 | 179,188 | 237,656 | 264,677 |
| Potential losses | 8,166 | 10,719 | 11,591 | 11,753 | 11,762 | 12,690 | 15,410 |
| Total C, D and E | 14,860 | 15,749 | 15,761 | 15,296 | 13,550 | 13,555 | 16,932 |
| Total D and E | 8,591 | 11,148 | 10,935 | 10,823 | 9,743 | 9,086 | 10,401 |
| Total C and D | 12,766 | 10,336 | 9,017 | 8,893 | 7,242 | 7,688 | 10,415 |
| % of C, D, E in the total credit exposure | 15.9 | 15.1 | 13.2 | 10.8 | 7.6 | 5.7 | 6.4 |
| % of D, E in the total credit exposure | 9.2 | 10.7 | 9.2 | 7.7 | 5.4 | 3.8 | 3.9 |
| % of C, D in the total credit exposure | 13.7 | 9.9 | 7.6 | 6.3 | 4.0 | 3.2 | 3.9 |
| % of D in the total credit exposure | 7.0 | 5.5 | 3.5 | 3.1 | 1.9 | 1.4 | 1.5 |
| % of E in the total credit exposure | 2.3 | 5.2 | 5.7 | 4.6 | 3.5 | 2.5 | 2.5 |
| % of C in the total credit exposure | 6.7 | 4.4 | 4.1 | 3.2 | 2.2 | 1.9 | 2.5 |
| % of risk (potential loss/total exposure) | 8.8 | 10.3 | 9.7 | 8.4 | 6.6 | 5.3 | 5.8 |
| Net positions in C, D and E (less adequate provisions) | 7,950 | 6,318 | 5,715 | 5,565 | 4,573 | 4,961 | 6,840 |
| Own funds | 19,122 | 19,441 | 19,397 | 21,292 | 23,604 | 27,721 | 33,912 |
| % of C, D, E in own funds | 77.7 | 81.0 | 81.3 | 71.8 | 57.4 | 48.9 | 49.9 |
| % of D, E in own funds | 44.9 | 57.3 | 56.4 | 50.8 | 41.3 | 32.8 | 30.7 |
| % of C, D in own funds | 66.8 | 53.2 | 46.5 | 41.8 | 30.7 | 27.7 | 30.7 |
| % of D in own funds | 34.0 | 29.5 | 21.6 | 20.8 | 14.6 | 11.6 | 11.5 |
| % of E in own funds | 11.0 | 27.8 | 34.8 | 30.1 | 26.7 | 21.2 | 19.2 |
| % of C in own funds | 32.8 | 23.7 | 24.9 | 21.0 | 16.1 | 16.1 | 19.3 |
| % of net C, D and E in own funds | 41.6 | 32.5 | 29.5 | 26.1 | 19.4 | 17.9 | 20.2 |
| Capital adequacy | 28.1 | 25.8 | 23.0 | 21.3 | 18.3 | 17.0 | 16.2 |
| Total country risk exposure (net) | 29,438 | 31,195 | 35,278 | 35,589 | 37,235 | 36,109 | 21,640 |
| Potential country risk losses | 8 | 12 | 13 | 42 | 45 | 60 | 69 |
| % of potential country risk losses/total country risk exposure | 0.03 | 0.04 | 0.04 | 0.1 | 0.1 | 0.2 | 0.3 |

Structure of the exposure to households by type of collateral as of December 31, 2008

| Type of collateral | | Uncollateralized part of the exposure to credit risk | Movables | Securities | Apartments | Business premises | Other real estate | Guarantees from banks and other entities | Money deposit | Endorses/bill of exchange | Other type of collateral | Total collateralized part of the exposure to credit risk (in thousands of Denars) | % share of the collateralized part of the exposure to credit risk |
|--|----------------------------------|--|-----------|------------|------------|-------------------|-------------------|--|---------------|---------------------------|--------------------------|---|---|
| Type of exposure to credit risk | | | | | | | | | | | | | |
| Exposure based on residential and commercial real estate credits | Denar exposure | 4,840 | 9,627 | 0 | 1,033,572 | 2,211 | 0 | 0 | 37,128 | 491,939 | 0 | 1,574,477 | 99.7% |
| | Exposure with currency component | 1,299 | 45,686 | 5,799 | 10,075,517 | 1,405,799 | 19,330 | 2,967 | 57,356 | 668,875 | 11,897 | 12,293,226 | 100.0% |
| Exposure based on consumer credits | Denar exposure | 14,773,085 | 12,613 | 181,262 | 1,703,946 | 799 | 1,846 | 1,544 | 495,834 | 10,922,826 | 43,960 | 13,364,630 | 47.5% |
| | Exposure with currency component | 1,452,577 | 13,439 | 26,187 | 2,115,042 | 295,650 | 4,221 | 22,706 | 1,012,319 | 4,480,961 | 2,387 | 7,972,912 | 84.6% |
| Exposure based on overdrafts | Denar exposure | 5,882,004 | 0 | 0 | 10,507 | 0 | 0 | 0 | 29,200 | 882,774 | 393,193 | 1,315,674 | 18.3% |
| | Exposure with currency component | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Exposure based on issued credit cards | Denar exposure | 4,977,385 | 0 | 400 | 0 | 0 | 0 | 0 | 26,697 | 5,842,988 | 0 | 5,870,085 | 54.1% |
| | Exposure with currency component | 85,182 | 0 | 0 | 0 | 0 | 0 | 0 | 7,463 | 12,611 | 0 | 20,074 | 19.1% |
| Exposure based on car credits | Denar exposure | 0 | 166,231 | 0 | 6,418 | 961 | 0 | 0 | 0 | 38,911 | 53 | 212,574 | 100.0% |
| | Exposure with currency component | 1,471 | 4,445,035 | 0 | 21,825 | 8,568 | 0 | 0 | 4,812 | 170,913 | 0 | 4,651,153 | 100.0% |
| Other exposure | Denar exposure | 85,111 | 385 | 0 | 34,335 | 7,776 | 0 | 0 | 28,568 | 77,235 | 5,919 | 154,218 | 64.4% |
| | Exposure with currency component | 34,471 | 30,590 | 112,002 | 1,108,009 | 352,295 | 33,624 | 4,952 | 3,842 | 174,017 | 145 | 1,819,476 | 98.1% |
| Total: | Denar exposure | 25,722,425 | 188,856 | 181,662 | 2,788,778 | 11,747 | 1,846 | 1,544 | 617,427 | 18,256,673 | 443,125 | 22,491,658 | 46.6% |
| | Exposure with currency component | 1,575,000 | 4,534,750 | 143,988 | 13,320,393 | 2,062,312 | 57,175 | 30,625 | 1,085,792 | 5,507,377 | 14,429 | 26,756,841 | 94.4% |

Note 1: Exposure with currency component encompasses the foreign currency exposure and FX indexed exposure.

Note 2: The collateralized part of the exposure to credit risk pertains to the amount of the exposure to the amount of the value of the collateral. The remaining is the uncollateralized part of the exposure to credit risk.

Note 3: Exposure by individual types of credits encompasses: principle, interest and other claims and off-balance sheet items.

**Structure of the exposure to nonfinancial legal entities according to the type of collateral as of
December 31, 2008**

| Type of exposure to credit risk Type of collateral | Exposure to legal entities | | | |
|---|----------------------------|----------------------------------|--------------------------------|--|
| | Denar exposure | Exposure with currency component | Total (in thousands of Denars) | Structure of the collateralized part of the exposure according to the type of collateral |
| Uncollateralized part of the credit exposure | 1,317,664 | 203,659 | 5,565,924 | |
| Movables | 3,872,581 | 10,393,902 | 16,507,950 | 14.9% |
| Securities | 493,968 | 357,475 | 851,443 | 0.8% |
| Mortgage on real estate loans with other type of collateral | 159,818 | 2,550,950 | 35,950,275 | 32.4% |
| Apartments | 5,344,261 | 8,136,324 | 13,480,585 | 12.2% |
| Business premises and storages | 6,257,893 | 13,726,747 | 19,984,640 | 18.0% |
| Production facilities | 322,973 | 2,055,924 | 2,378,897 | 2.1% |
| Other real estate | 2,051,353 | 1,886,554 | 3,937,907 | 3.6% |
| Guarantees from banks and other entities | 442,334 | 1,869,349 | 2,311,683 | 2.1% |
| Money deposits | 538,957 | 1,652,996 | 2,905,547 | 2.6% |
| Other type of collateral | 5,403,729 | 5,977,406 | 12,593,735 | 11.4% |
| Total collateralized part of the credit exposure (in thousands of Denars) | 24,887,867 | 48,607,627 | 110,902,662 | 100.0% |
| Percentage share of the collateralized part of the exposure to credit risk | 95.0% | 99.6% | 95.2% | |

Note 1: The exposure with currency component encompasses the foreign currency exposure and FX indexed exposure.

Note 2: The collateralized part of the exposure to credit risk pertains to the exposure amount to the amount of the collateral value. The rest is the uncollateralized part of the exposure to credit risk

Note 3: One of the banks could not determine the currency structure of its credit exposure, according to the type of collateral i.e. this bank submitted only data on the total credit exposure by type of collateral. According to this, in certain rows, the sum of Denar exposure and Exposure with currency component does not match with the amounts presented in the column Total (in thousands of Denars).

Indicators for the quality of the exposure to credit risk by sole proprietors, natural persons not considered as proprietors and natural persons that perform small scale commercial activity as of December 31, 2008

| Economic activity | Average level of risk | | % of "C", "D" and "E" in total credit exposure | | Coverage of "C", "D" and "E" by the allocated loan loss reserves | |
|---|-----------------------|-------------|--|-------------|--|---------------|
| | 31.12.2007 | 31.12.2008 | 31.12.2007 | 31.12.2008 | 31.12.2007 | 31.12.2008 |
| Agriculture | 4.6% | 4.0% | 5.4% | 4.7% | 85.0% | 85.0% |
| Trade | 6.7% | 3.6% | 6.6% | 2.7% | 100.9% | 134.8% |
| Other service activities | 3.7% | 4.5% | 2.3% | 4.4% | 163.7% | 101.7% |
| Other activities | 4.3% | 7.8% | 3.8% | 7.0% | 112.6% | 112.7% |
| Total exposure to sole proprietors | 5.1% | 5.1% | 5.0% | 4.7% | 102.1% | 107.2% |

Liquidity indicators for banking system and group of banks

| Indicators | Average 2007 | Average 2008 | Change (in percentage points) | Value as of 31.12.2007 | Value as of 31.12.2008 | Change (in percentage points) |
|---|---------------|--------------|-------------------------------|------------------------|------------------------|-------------------------------|
| Total loans / Total deposits (non-financial entities) | 75.5% | 85.8% | 10.3 | 77.9% | 92.8% | 14.9 |
| - Large banks | 74.5% | 82.4% | 7.9 | 75.8% | 89.2% | 13.4 |
| - Medium-sized banks | 80.2% | 97.1% | 16.9 | 84.3% | 105.0% | 20.7 |
| - Small-sized banks | 64.1% | 71.3% | 7.2 | 75.1% | 75.7% | 0.6 |
| Liquid assets / Total assets | 35.2% | 27.2% | -8.0 | 34.2% | 22.5% | -11.7 |
| - Large banks | 33.5% | 26.1% | -7.4 | 33.3% | 20.8% | -12.5 |
| - Medium-sized banks | 37.5% | 26.2% | -11.3 | 35.0% | 22.2% | -12.8 |
| - Small-sized banks | 42.1% | 45.7% | 3.6 | 41.7% | 45.1% | 3.4 |
| Highly liquid assets / Total assets | 19.1% | 17.0% | -2.1 | 20.5% | 16.6% | -3.9 |
| - Large banks | 16.1% | 15.5% | -0.6 | 19.1% | 15.7% | -3.4 |
| - Medium-sized banks | 23.7% | 17.1% | -6.6 | 22.2% | 15.7% | -6.5 |
| - Small-sized banks | 29.7% | 35.1% | 5.4 | 29.9% | 33.6% | 3.7 |
| Liquid assets / Total liabilities | 41.2% | 31.4% | -9.8 | 39.5% | 25.5% | -14.0 |
| - Large banks | 37.5% | 29.3% | -8.2 | 37.1% | 22.9% | -14.2 |
| - Medium-sized banks | 45.2% | 30.4% | -14.8 | 41.3% | 25.3% | -16.0 |
| - Small-sized banks | 72.4% | 83.4% | 11.0 | 75.5% | 82.3% | 6.8 |
| Liquid FX assets / Total FX liabilities | 42.4% | 29.0% | -13.4 | 37.9% | 19.3% | -18.6 |
| - Large banks | 40.3% | 27.0% | -13.3 | 35.9% | 16.2% | -19.7 |
| - Medium-sized banks | 44.7% | 30.5% | -14.2 | 40.9% | 22.5% | -18.4 |
| - Small-sized banks | 65.0% | 66.6% | 1.6 | 54.9% | 75.7% | 20.8 |
| Liquid assets / Short-term liabilities | 48.8% | 37.4% | -11.4 | 46.4% | 32.0% | -14.4 |
| - Large banks | 42.2% | 33.5% | -8.7 | 41.3% | 27.8% | -13.5 |
| - Medium-sized banks | 59.2% | 39.7% | -19.5 | 54.2% | 33.9% | -20.3 |
| - Small-sized banks | 109.4% | 119.0% | 9.6 | 115.8% | 117.8% | 2.0 |
| Highly liquid assets / Short-term liabilities | 26.5% | 23.4% | -3.1 | 27.9% | 23.6% | -4.3 |
| - Large banks | 20.2% | 19.8% | -0.4 | 23.8% | 21.0% | -2.8 |
| - Medium-sized banks | 37.4% | 25.9% | -11.5 | 34.4% | 24.0% | -10.4 |
| - Small-sized banks | 77.1% | 91.2% | 14.1 | 83.1% | 87.9% | 4.8 |
| Liquid FX assets / Short-term FX liabilities | 53.0% | 36.4% | -16.6 | 46.9% | 25.9% | -21.0 |
| - Large banks | 47.4% | 32.1% | -15.3 | 41.5% | 21.0% | -20.5 |
| - Medium-sized banks | 64.1% | 43.3% | -20.8 | 59.4% | 32.0% | -27.4 |
| - Small-sized banks | 117.1% | 132.4% | 15.3 | 102.0% | 204.2% | 102.2 |
| Liquid assets / Total deposits of non-financial entities | 49.1% | 37.5% | -11.6 | 47.7% | 31.1% | -16.6 |
| - Large banks | 43.2% | 33.4% | -9.8 | 43.1% | 26.6% | -16.5 |
| - Medium-sized banks | 57.7% | 40.0% | -17.7 | 53.3% | 34.9% | -18.4 |
| - Small-sized banks | 96.7% | 121.4% | 24.7 | 122.9% | 113.7% | -9.2 |
| Liquid assets / Deposits of households | 83.6% | 64.6% | -19.0 | 81.2% | 52.2% | -29.0 |
| - Large banks | 71.8% | 54.8% | -17.0 | 71.9% | 42.3% | -29.6 |
| - Medium-sized banks | 104.8% | 78.0% | -26.8 | 96.0% | 66.8% | -29.2 |
| - Small-sized banks | 174.3% | 269.2% | 94.9 | 217.9% | 253.0% | 35.1 |
| Liquid FX assets / FX Deposits of households | 77.2% | 52.5% | -24.7 | 70.9% | 34.8% | -36.1 |
| - Large banks | 68.8% | 44.9% | -23.9 | 63.2% | 26.7% | -36.5 |
| - Medium-sized banks | 94.1% | 67.6% | -26.5 | 85.5% | 51.1% | -34.4 |
| - Small-sized banks | 172.9% | 254.1% | 81.2 | 219.9% | 233.0% | 13.1 |
| Liquid assets / Sight deposits | 111.0% | 93.9% | -17.1 | 109.5% | 77.1% | -32.4 |
| - Large banks | 96.1% | 81.8% | -14.3 | 97.5% | 64.0% | -33.5 |
| - Medium-sized banks | 144.2% | 113.7% | -30.5 | 132.8% | 98.0% | -34.8 |
| - Small-sized banks | 170.8% | 199.3% | 28.5 | 203.9% | 207.6% | 3.7 |
| Highly liquid assets / Sight deposits | 60.2% | 58.6% | -1.6 | 48.8% | 38.6% | -10.2 |
| - Large banks | 46.1% | 48.5% | 2.4 | 41.4% | 31.9% | -9.5 |
| - Medium-sized banks | 91.0% | 74.3% | -16.7 | 60.8% | 47.2% | -13.6 |
| - Small-sized banks | 120.4% | 152.8% | 32.4 | 156.3% | 188.8% | 32.5 |

Contractual maturity structure of assets and liabilities as of 31.12.2008

in thousands of Denars

| No. | Description | up to 7 days | from 7 days to 1 month | from 1 month to 3 months | 3 - 6 months | 6 - 12 months | over 12 months | Total |
|-----------|--|-------------------|------------------------|--------------------------|-------------------|-------------------|--------------------|--------------------|
| 1 | Cash and balances at NBRM | 13,776,487 | 1,439,970 | - | - | 235,595 | 11,525,443 | 26,977,495 |
| 2 | Securities issued by NBRM and Republic of Macedonia | 2,583,153 | 15,726,138 | 2,076,699 | 1,103,632 | 799,965 | 4,312,283 | 26,601,870 |
| 3 | Debt securities and other payment instruments | 67,139 | 228,481 | - | - | - | 672,629 | 968,249 |
| 4 | Placements at other banks | 13,004,919 | 7,279,333 | 972,809 | 811,750 | 439,920 | 4,659,756 | 27,168,487 |
| 5 | Loans to customers | 6,622,326 | 7,924,582 | 12,932,475 | 21,849,137 | 29,451,915 | 88,883,881 | 167,664,316 |
| 6 | Accrued interest | 904,409 | 422,688 | 19,684 | 30,674 | 6,376 | 3,782,939 | 5,166,770 |
| 7 | Other assets | 1,631,208 | 610,122 | 429,887 | 92,863 | 69,384 | 462,219 | 3,295,683 |
| 8 | Placements at equity instruments and capital investments | 16,059 | 251,606 | - | - | - | 998,051 | 1,265,716 |
| 9 | Total assets (1+2+3+4+5+6+7+8) | 38,605,700 | 33,882,920 | 16,431,554 | 23,888,056 | 31,003,155 | 115,297,201 | 259,108,586 |
| 10 | Deposits of banks | 1,577,528 | 1,722,295 | 1,043,150 | 674,193 | 730,695 | 770,785 | 6,518,646 |
| 11 | Sight deposits | 71,535,785 | 57,932 | 153,549 | 123,846 | 307,779 | 678,719 | 72,857,610 |
| 12 | Short-term deposits up to one year | 5,237,415 | 23,511,167 | 32,156,419 | 15,393,753 | 20,540,609 | 3,632 | 96,842,995 |
| 13 | Short-term borrowings up to 1 year | 104,325 | 480,000 | 21,404 | 18,948 | 4,209 | - | 628,886 |
| 14 | Issued debt securities | - | - | - | - | - | 954,839 | 954,839 |
| 15 | Other liabilities | 1,476,754 | 1,229,874 | 583,589 | 72,446 | 92,015 | 111,448 | 3,566,126 |
| 16 | Long-term deposits over one year | 236,387 | 222,065 | 658,891 | 966,838 | 5,532,661 | 13,974,368 | 21,591,210 |
| 17 | Long-term borrowings over 1 year | 14,325 | 206,914 | 460,156 | 1,475,396 | 1,925,709 | 9,680,652 | 13,763,152 |
| 18 | Off-balance sheet positions | 4,259,174 | 619,372 | 1,775,643 | 3,123,983 | 4,087,159 | 4,677,617 | 18,542,948 |
| 19 | Total liabilities (10+11+12+13+14+15+16+17+18) | 84,441,693 | 28,049,619 | 36,852,801 | 21,849,403 | 33,220,836 | 30,852,060 | 235,266,412 |
| 20 | Gap (9-19) | -45,835,993 | 5,833,301 | -20,421,247 | 2,038,653 | -2,217,681 | 84,445,141 | 23,842,174 |
| 21 | Cummulative gap | -45,835,993 | -40,002,692 | -60,423,939 | -58,385,286 | -60,602,967 | 23,842,174 | |

Expected maturity structure of assets and liabilities as of 31.12.2008

in thousands of Denars

| No. | Description | up to 7 days | from 7 days to 1 month | from 1 month to 3 months | Total |
|-----------|--|-------------------|------------------------|--------------------------|-------------------|
| 1 | Cash and balances at NBRM | 13,001,877 | 1,541,579 | 16,003 | 14,559,459 |
| 2 | Securities issued by NBRM and Republic of Macedonia | 2,779,153 | 15,326,975 | 1,918,700 | 20,024,828 |
| 3 | Debt securities and other payment instruments | 67,141 | 228,481 | - | 295,622 |
| 4 | Placements at other banks | 11,666,218 | 6,998,487 | 1,555,313 | 20,220,018 |
| 5 | Loans to customers | 4,121,607 | 7,627,477 | 11,489,504 | 23,238,588 |
| 6 | Accrued interest | 757,211 | 353,064 | 191,150 | 1,301,426 |
| 7 | Other assets | 1,530,469 | 559,768 | 433,585 | 2,523,822 |
| 8 | Placements at equity instruments and capital investments | 16,066 | - | - | 16,066 |
| 9 | Total assets (1+2+3+4+5+6+7+8) | 33,939,743 | 32,635,831 | 15,604,255 | 82,179,829 |
| 10 | Deposits of banks | 1,202,972 | 1,307,322 | 733,977 | 3,244,271 |
| 11 | Sight deposits | 11,265,367 | 2,926,698 | 703,784 | 14,895,849 |
| 12 | Short-term deposits up to one year | 1,906,123 | 9,551,682 | 14,293,371 | 25,751,175 |
| 13 | Short-term borrowings up to 1 year | 68,326 | 480,000 | 21,404 | 569,730 |
| 14 | Issued debt securities | - | - | - | - |
| 15 | Other liabilities | 1,062,576 | 889,841 | 589,047 | 2,541,464 |
| 16 | Long-term deposits over one year | 115,088 | 121,817 | 416,225 | 653,130 |
| 17 | Long-term borrowings over 1 year | 14,222 | 192,873 | 354,214 | 561,309 |
| 18 | Off-balance sheet positions | 456,444 | 200,770 | 678,117 | 1,335,331 |
| 19 | Total liabilities (10+11+12+13+14+15+16+17+18) | 16,091,119 | 15,671,002 | 17,790,138 | 49,552,259 |
| 20 | Gap (9-19) | 17,848,624 | 16,964,829 | (2,185,883) | 32,627,570 |
| 21 | Cummulative gap | 17,848,624 | 34,813,453 | 32,627,570 | |

Structure of foreign assets and foreign liabilities

Annex 14

| Foreign assets | Amount (in millions of Denars) | | | | Structure of foreign assets | | | | Change rate 2005-2006 | Change rate 2006-2007 | Change rate 2007-2008 |
|--|--------------------------------|---------------|----------------|----------------|-----------------------------|---------------|---------------|---------------|--------------------------|--------------------------|--------------------------|
| | 31.12.2005 | 31.12.2006 | 31.12.2007 | 31.12.2008 | 31.12.2005 | 31.12.2006 | 31.12.2007 | 31.12.2008 | | | |
| Cash and checks and debt market securities | 2.026 | 2.439 | 2.887 | 2.519 | 2,5% | 2,5% | 2,5% | 1,9% | 20,4% | 18,4% | -12,7% |
| Assets in foreign and domestic banks | 41.348 | 43.949 | 42.757 | 31.941 | 50,9% | 45,6% | 36,8% | 24,4% | 6,3% | -2,7% | -25,3% |
| Foreign currency claims | 18.480 | 23.813 | 30.939 | 38.666 | 22,8% | 24,7% | 26,6% | 29,5% | 28,9% | 29,9% | 25,0% |
| Foreign currency indexed claims in Denars | 21.384 | 27.975 | 41.830 | 60.934 | 26,3% | 29,1% | 36,0% | 46,5% | 30,8% | 49,5% | 45,7% |
| Value correction | -2.457 | -2.396 | -2.730 | -3.631 | -3,0% | -2,5% | -2,3% | -2,8% | -2,5% | 13,9% | 33,0% |
| Securities for sale | 59 | 74 | 58 | 58 | 0,1% | 0,1% | 0,0% | 0,0% | 25,4% | -21,6% | 0,0% |
| Other assets - other accounts | 349 | 432 | 488 | 540 | 0,4% | 0,4% | 0,4% | 0,4% | 23,8% | 13,0% | 10,7% |
| Total foreign assets | 81.189 | 96.285 | 116.229 | 131.027 | 100,0% | 100,0% | 100,0% | 100,0% | 18,6% | 20,7% | 12,7% |

| Foreign liabilities | Amount (in millions of Denars) | | | | Structure of foreign liabilities | | | | Change rate 2005-2006 | Change rate 2006-2007 | Change rate 2007-2008 |
|---|--------------------------------|---------------|----------------|----------------|----------------------------------|---------------|---------------|---------------|--------------------------|--------------------------|--------------------------|
| | 31.12.2005 | 31.12.2006 | 31.12.2007 | 31.12.2008 | 31.12.2005 | 31.12.2006 | 31.12.2007 | 31.12.2008 | | | |
| Foreign currency deposits of banks | 1.437 | 2.147 | 2.680 | 2.885 | 2,0% | 2,5% | 2,5% | 2,3% | 49,4% | 24,8% | 7,6% |
| Foreign currency deposits of households | 39.305 | 44.905 | 50.542 | 63.377 | 55,8% | 52,3% | 47,7% | 51,6% | 14,2% | 12,6% | 25,4% |
| Foreign currency deposits of enterprises, public sector and other clients | 11.688 | 15.373 | 17.454 | 20.275 | 16,6% | 17,9% | 16,5% | 16,5% | 31,5% | 13,5% | 16,2% |
| Foreign assets of foreign entities | 3.881 | 7.752 | 10.955 | 14.457 | 5,5% | 9,0% | 10,3% | 11,8% | 99,7% | 41,3% | 32,0% |
| Foreign currency indexed deposits in Denars | 2.731 | 5.333 | 11.267 | 11.993 | 3,9% | 6,2% | 10,6% | 9,8% | 95,3% | 111,3% | 6,4% |
| Foreign currency loans of banks | 11.017 | 9.825 | 12.441 | 9.146 | 15,6% | 11,4% | 11,7% | 7,4% | -10,8% | 26,6% | -26,5% |
| Other liabilities-other accounts | 385 | 551 | 721 | 684 | 0,5% | 0,6% | 0,7% | 0,6% | 43,1% | 30,9% | -5,1% |
| Total foreign liabilities | 70.444 | 85.885 | 106.060 | 122.817 | 100,0% | 100,0% | 100,0% | 100,0% | 21,9% | 23,5% | 15,8% |

Own funds as of 31.12.2008

in millions of denars

| No. | Description | TOTAL |
|---|---|---------------|
| CORE CAPITAL | | |
| 1 | Paid in and subscribed common and non-cumulative preference shares and premiums based on these shares | 21.371 |
| 1,1 | Face value | 17.445 |
| 1.1.1 | Face value of common shares | 17.408 |
| 1.1.2 | Face value of non-cumulative preference share | 38 |
| 1.2 | Premium | 3.925 |
| 1.2.1 | Premium based on common shares | 3.925 |
| 1.2.2 | Premium based on non-cumulative preference shares | 0 |
| 2 | Reserve and retained profit/loss | 8.624 |
| 2.1 | Reserve fund | 5.149 |
| 2.2 | Retained profit | 2.687 |
| 2.3 | Accumulated loss from previous years | 547 |
| 2.4 | Current profit | 1.334 |
| 3 | Positions as a result of consolidation (positive items) | 0 |
| 3.1 | Minority share | 0 |
| 3.2 | Reserves based on exchange rate differentials | 0 |
| 3.3 | Other differences | 0 |
| 4 | Deductions | 671 |
| 4.1 | Loss at the end of the year, or current loss | 538 |
| 4.2 | Intangible assets | 132 |
| 4.3 | Own common and non-cumulative preference shares | 0 |
| 4.4 | Difference between the amount for the required special reserves for potential losses and the allocated special reserves | 0 |
| 5 | Common shares, retained gain and deductions | 29.286 |
| 6 | Amount of other positions that can not be included in the core capital | 38 |
| I | Core capital | 29.324 |
| SUPPLEMENTARY CAPITAL 1 | | |
| 7 | Paid in and subscribed cumulative preference shares and premiums for these shares | 230 |
| 7.1 | Face value of the cumulative preference shares | 123 |
| 7.2 | Premium based on cumulative preference shares | 106 |
| 7.3 | Own cumulative preference shares | 0 |
| 8 | Hybrid capital instruments | 184 |
| 9 | Subordinated instruments | 4.643 |
| 10 | Amount of subordinated instruments that can be part of the supplementary capital 1 | 4.643 |
| II | Supplementary capital 1 | 5.057 |
| DEDUCTIONS FROM THE CORE CAPITAL AND SUPPLEMENTARY CAPITAL 1 | | |
| 11 | Investments in capital of other banks or financial institutions exceeding 10% of the capital of those institutions except to the institutions under no.14 | 284 |
| 12 | Investments in subordinated and hybrid capital instruments in other instruments of the institutions under no.11 | 20 |
| 13 | Aggregate amount of capital investments, subordinated and hybrid instruments and other instruments exceeding 10% of (I+II) | 0 |
| 14 | Direct investments in the capital of other insurance and reinsurance companies and pension funds management companies | 73 |
| 15 | Investments in financial instruments issued by companies under no 14 included in their capital | 91 |
| 16 | Amount of exceeding the limits for investments in non-financial institutions | 0 |
| 17 | Positions resulting from consolidation (negative items) | 0 |
| III | Deductions from the core capital and supplementary capital 1 | 468 |
| IV | OWN FUNDS | 33.912 |

Own funds of the banking system as of 31.12.2008

| | Amount in millions of Denars | | Structure | | Change 31.12.2008/31.12.2007 | | | |
|---|------------------------------|---------------|--------------|--------------|------------------------------|--------------|--------------------------|---------------------|
| | 31.12.2007 | 31.12.2008 | 31.12.2007 | 31.12.2008 | in millions of Denars | in % | in the structure in p.p. | share in the change |
| Own funds | 27.721 | 33.912 | 100% | 100% | 6.191 | 22,3% | 0,0% | 100,0% |
| Core capital | 25.534 | 29.324 | 92,1% | 86,5% | 3.790 | 14,8% | -5,6% | 61,2% |
| Paid in and subscribed common and non-cumulative preference shares and premiums based on these shares | 20.237 | 21.371 | 73,0% | 63,0% | 1.134 | 5,6% | -10,0% | 18,3% |
| Reserve fund | 3.950 | 5.149 | 14,2% | 15,2% | 1.199 | 30,4% | 0,9% | 19,4% |
| -Profit/Loss, * | 1.645 | 3.475 | 5,9% | 10,2% | 1.830 | 111,3% | 4,3% | 29,6% |
| Supplementary capital 1 | 2.642 | 5.057 | 9,5% | 14,9% | 2.415 | 91,4% | 5,4% | 39,0% |
| -Subordinated instruments | 2.399 | 4.643 | 8,7% | 13,7% | 2.244 | 93,5% | 5,0% | 36,2% |
| Deductions from the core capital and supplementary capital 1 | 455 | 468 | 1,6% | 1,4% | 13 | 2,9% | -0,3% | 0,2% |

*The Profit/Loss refers to the current profit/loss and the retained profit reduced by the accumulated loss from the previous years

Structure and change of the own funds by group of banks as of 31.12.2008

| | Large size - banks | | | Medium size - banks | | | Small size - banks | | |
|---|------------------------------|------------------------------|----------------|------------------------------|------------------------------|----------------|------------------------------|------------------------------|----------------|
| | 31.12.2008 | | | 31.12.2008 | | | 31.12.2008 | | |
| | Amount in millions of Denars | Change in millions of Denars | Structure in % | Amount in millions of Denars | Change in millions of Denars | Structure in % | Amount in millions of Denars | Change in millions of Denars | Structure in % |
| Own funds | 19.709 | 5.053 | 100,0% | 9.204 | 725 | 100,0% | 4.999 | 413 | 100,0% |
| Core capital | 15.417 | 2.793 | 78,2% | 8.647 | 498 | 93,9% | 5.260 | 499 | 105,2% |
| Paid in and subscribed common and non-cumulative preference shares and premiums based on these shares | 9.004 | 665 | 45,7% | 7.097 | -4 | 77,1% | 5.270 | 472 | 105,4% |
| Reserve fund | 3.581 | 977 | 18,2% | 1.232 | 159 | 13,4% | 336 | 64 | 6,7% |
| -Profit/Loss, * | 2.893 | 1.156 | 14,7% | 725 | 659 | 7,9% | -143 | 15 | -2,9% |
| Supplementary capital 1 | 4.483 | 2.274 | 22,7% | 574 | 226 | 6,2% | 0 | -86 | 0,0% |
| -Subordinated instruments | 4.305 | 2.298 | 21,8% | 338 | 32 | 3,7% | 0 | -86 | 0,0% |
| Deductions from the core capital and supplementary capital 1 | 191 | 14 | 1,0% | 16 | -1 | 0,2% | 261 | 0 | 5,2% |

*The Profit/Loss refers to the current profit/loss and the retained profit reduced by the accumulated loss from the previous years

Capital adequacy ratio as of 31.12.2008

in millions of denars

| No. | Description | TOTAL |
|------------|---|----------------|
| I | CREDIT RISK WEIGHTED ASSETS | |
| 1 | On-balance sheet assets weighted by credit risk | 172.486 |
| 2 | Off-balance sheet assets weighted by credit risk | 25.194 |
| 3 | Credit risk weighted assets (1+2) | 197.680 |
| 4 | Capital requirement for credit risk coverage (8% of no. 3) | 15.814 |
| II | CURRENCY RISK WEIGHTED ASSETS | |
| 5 | Aggregate foreign currency position | 12.187 |
| 6 | Net-position in gold | 0 |
| 7 | Currency risk weighted assets (5+6) | 12.187 |
| 8 | Capital requirement for currency risk coverage (8% of no.7) | 975 |
| III | RISK WEIGHTED ASSETS (3+7) | 209.867 |
| 9 | Capital requirement for risk coverage (4+8) | 16.789 |
| IV | OWN FUNDS | 33.912 |
| V | CAPITAL ADEQUACY RATIO | 16,16% |

Review by group of banks

| | Large banks (asset over 15 billion denars) | | Medium banks (asset between 4.5 - 15 billion denars) | | Small banks (asset lower than 4.5 billion denars) |
|---|---|---|---|---|--|
| 1 | Komercijalna banka AD Skopje | 1 | Alfa banka AD Skopje | 1 | Eurostandard banka AD Skopje |
| 2 | NLB Tutunska banka AD Skopje | 2 | Investbanka AD Skopje | 2 | Kapital banka AD Skopje |
| 3 | Stopanska banka AD Skopje | 3 | Izvozna i kreditna banka AD Skopje | 3 | Komercijalno investiciona banka AD Kumanovo |
| | | 4 | Ohridska banka AD Ohrid | 4 | Macedonian Bank for Development Promotion AD Skopje |
| | | 5 | Prokredit banka AD Skopje | 5 | Postenska banka AD Skopje |
| | | 6 | Stopanska banka AD Bitola | 6 | Sileks banka AD Skopje |
| | | 7 | TTK banka AD Skopje | 7 | Ziraat bankasi AD Skopje |
| | | 8 | UNI banka AD Skopje | | |

* Banks are in alphabetical order

Measures imposed by NBRM in 2008
Annex 19

| Type of measure | Number of banks | Number of saving houses |
|---|------------------------|--------------------------------|
| Written warning | | |
| Adoption of Strategic Plan by the Banks' General Meeting of Shareholders | 1 | |
| Achievement and maintenance of capital adequacy rate above the legally prescribed minimum | 2 | |
| Commencement of a procedure for amending the Statute on regulating the possibility for holding sessions of the supervisory board through conference call, in accordance with the provisions of the Law on Trade Companies | 1 | |
| Establishment of record system of unused, unconditionally callable lines of credits | 2 | |
| Establishment of adequate records which will show the contents and the time of submitting data and information to the Money Laundering Prevention and Financing Terrorism Directorate | 2 | |
| Development of system for identification and monitoring of client connection | 1 | |
| Analysis and identification of the reasons for growth of the non-performing loans with certain credit products granted to households and development of plan with activities and dynamics for overcoming the reasons for growth in the non-performing loans | 2 | |
| Development of the system for monitoring the currency induced credit risk the clients are exposed to | 3 | |
| Revision of the credit policy in order to overcome the weaknesses determined with the targeted examination | 1 | |
| Development of the information system in order to overcome the weaknesses in the credit risk management and providing of up-to-date and accurate reporting to the bank's bodies and the National bank | 1 | |
| Change in the organizational structure of the households' crediting through segregation of duties among the employees in the front office and in the back office | 3 | |
| Development of the system for identification and monitoring of the credit risk and compliance with the regulation on classification of the credit risk exposure and keeping of credit files | 1 | 2 |
| Development of the credit risk management system, through improvement of the credit risk management policy and corporate crediting and establishment of procedures for analysis of the client's credit capability | 1 | |
| Establishment of adequate system for quantifying and monitoring the credit risk exposures and allocation of impairment and special reserve requirement on a manner and in amount as specified in the methodology on credit risk management | | 1 |
| Complying of the exposure to share-holder and the persons connected thereto with the legally prescribed limit of 10% of the bank's own funds | 1 | |
| Submission to NBRM of the statements of the persons with special rights and responsibilities indicating the bank's clients connected thereto | 1 | |
| Compliance with the Banking Law pertaining to the limitation for establishing control in non-financial institution | 1 | |

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| Assessment of the efficiency of the credit risk and liquidity risk management system by the Risk Management Board | 1 | |
| Strengthening of the liquidity risk management system | 2 | |
| Performance of stress testing of the liquidity in various conditions (stress scenarios) | 1 | |
| Enhancement of the liquidity risk management policy through determination of liquidity risk exposure limits, exceptions related with the determined indicators for monitoring the liquidity position and responsibilities for making decisions on appliance of such exceptions | 1 | |
| Employment of at least one person in the Internal Audit Department that owns an audit certificate | 1 | 1 |
| The plan of activities of the Internal Audit Department shall include also the following: <ul style="list-style-type: none"> - audit of the credit risk management which pertains to the crediting of household, including the operations with credit cards - audit of the legal and reputational risk management - audit of the management of the strategic, legal and reputational risk - audit of the efficiency of the systems for internal control for money laundering prevention | 1 1 2 2 | |
| Staffing of the Internal Audit Department, in order to increase the scope and the quality of the audit of bank' activities and systems for risk management | 2 | |
| Adoption of an internal act for the responsibilities of the Supervisory Board, Board of Directors and other persons with special rights and responsibilities that perform management function, for undertaking measures for implementation of the recommendations given by the Internal Audit Department | 1 | |
| Preparing of plan of activities for the Internal Audit Department | | 1 |
| Development and functional establishment of the policies and procedures for money laundering prevention and financing of terrorism | 5 | |
| Centralization of the data which pertains to the clients' features, in order to achieve adequate implementation of the indicators on suspicious transactions | 4 | |
| Adoption of an internal act for the manner of operating and work assignments of the persons employed in the unit for money laundering prevention and other proceeds from criminal operations and financing of terrorism and for reporting to the bank's bodies | 2 | |
| Adoption of a plan for training of the responsible persons and other employees in the area of money laundering prevention and financing of terrorism | 2 | |
| Establishment of system which shall enable claim transfer from the accounts for regular claims to the accounts for non-performing claims automatically and promptly | 1 | 2 |
| Staffing of the IT organizational part | 1 | |
| Restriction of the access of the users to the bank's head office network | 1 | |
| Full appliance of the documented system for information security | 1 | |

| | | |
|--|------------------------|--------------------------------|
| management system (ISMS) | | |
| Improvement of the IT risk management | 1 | |
| Development of plan of activities and dynamics for improvement of the software solution applied by the bank, in order to decrease the operational risk | 1 | |
| Establishment of efficient strategic risk management system, through adopting a policy for strategic risk management, approved by the Supervisory Board and through establishment of the reporting system that will enable more realistic strategic planning | 2 | |
| Establishment of efficient strategic, management and legal risk management system | 1 | |
| Approving and appliance of a policy for legal risk management | 1 | |
| Establishment of efficient reputational risk management system, through establishing and implementing procedures for prevention of undertaking actions which violate legal acts, as well as for acting on clients' complaints | 1 | |
| Informing on the status of the activities for overcoming certain weaknesses determined in the Report | 1 | |
| Compliance of the operations with the provisions of the Law on Contractual Obligations | 2 | |
| Establishment of procedure for opening an account in a bank, procedure for treasury operations and procedure for cash management operations approved by the bank's Supervisory Board | 1 | |
| Adhering to the provisions of the Banking Law pertaining to presence of conflict of interests | 1 | |
| Justification of the Contract for lease of business premises, including the amount of the monthly fee | 1 | |
| Ensuring regular accounting record and financial reporting of the monthly calculation of the credit interest | | 1 |
| Compliance with the supervisory standards concerning the timely analysis of the reasons that caused the prolongation of the maturity date | | 2 |
| Undertaking of activities for compliance of the Funding act with the provisions of the Banking Law and Law on Trade Companies | | 1 |
| Written recommendation | Number of banks | Number of saving houses |
| Preparing of plan of activities for overcoming of the determined irregularities and for implementation of the recommendations given in the Examination Report | 2 | 3 |
| Preparing of written credit policy | | 1 |
| Decreasing of the limits of concentration envisaged in the Credit Risk Policy | | 1 |
| Compliance of the manner of calculations of the interest of the placements with natural persons with the provisions form the credit contract | | 1 |
| Defining of the credit products and criteria and procedures for crediting of legal entities in the adequate internal acts, including internal limits of exposure depending on the collateral | | 1 |
| Preparing of plan of activities for elimination of all determined irregularities, through compliance of the accounting policies, procedures and practices with the accounting regulations and through improvement of the management system, internal audit system and internal policies and procedures | | 1 |

