## National Bank of the Republic of Macedonia

Division of Supervision, Banking Regulations and Financial Stability Financial Stability, Banking Regulations and Methodology Department



## Financial Stability Report for the Republic of Macedonia in 2007

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#### INTRODUCTION

Promoting of a healthy and sound financial system is one of the main priorities of the National Bank of the Republic of Macedonia. The safe financial system leads to greater prosperity and economic wellbeing in the economy. Stable financial institutions and financial markets, as well as the presence of efficient payment systems are the main precondition for an efficient allocation of resources among the economic agents. This, on its part, creates an impetus for stable business expectations and strengthening of the trust of the economic agents in the financial system.

Simultaneously with the price stability which, without an exception, is the primary goal of the majority of the central banks, maintaining financial stability becomes increasingly important. We are witnessing complex financial crises, with major losses for the economic agents. The evaluation of the level of financial system resilience and the timely identification of the potential shocks, as well as the undertaking of adequate preventive measures, have been the main challenges for the central banks in the past decade.

Taking these challenges and tasks as a starting point, during the recent years the National Bank of the Republic of Macedonia has been conducting comprehensive analyses and estimations of the financial stability in the Republic of Macedonia. Result of those activities is, inter alia, the second *Report on the Financial Stability in the Republic of Macedonia*, pertaining to year 2007. The main objective of this Report is to provide an assessment of the resilience level of the financial system and primarily of the banking system of the Republic of Macedonia, identifying at the same time the main systemic risks which could cause serious disturbances in its functioning.

For the purpose of this Report, financial stability is a state of smooth functioning of all financial system segments (financial institutions, financial markets, payment systems), with each of them providing the highest possible level of flexibility for absorption of possible shocks.

Following this definition, the Financial Stability Report has been structured in such a manner that it should provide answers at least to the following questions:

- what are the potential systemic risks for the financial stability in the Republic of Macedonia?

- what is the resilience of the financial system to the external shocks and what is its capacity to manage potential risks?

- what is the influence of the domestic and the global macroeconomic environment on the movements and the performances of the financial system?

- what are the transmission mechanisms for transfer of the risks among the individual financial system segments and the channels for transmissions of the risks among the other sectors in the economy including the corporate and household sectors?

The answers to these questions are elaborated in the individual sections of the Report. Section I provides a summary of the macroeconomic developments domestically and internationally, identifying the most important factors which influence the financial stability in the Republic of Macedonia. The second section pertains to the developments and performances of the two main non-financial sectors in the domestic economy - household and corporate sectors, identifying the main risks they create for the financial system stability. The third section refers to the structure, developments and performances of the financial system of the Republic of Macedonia, with special emphasis on the individual types of deposit and non-deposit financial institutions. The fast growth of the domestic financial markets throughout the past two years, deserves special attention. The features, movements and performances of the financial markets, primarily the capital market, as well as the risks they create, are analyzed in a special segment within the section pertaining to the financial system of the Republic of Macedonia. The last part of the Report, however not the least, refers to the financial infrastructure in the Republic of Macedonia, with special emphasis on the main features of the payment systems and the potential risks for the financial stability in the Republic of Macedonia. The last part outlines the most important events related to the Deposit Insurance Fund, as well as the most important legislation from the financial sphere adopted or amended during 2007 and in the first half of 2008.

## Governor's foreword

In 2007, the financial stability in the Republic of Macedonia could be evaluated as satisfactory. Certain risks show an upward trend, but in a short run they are not expected to disturb the functioning of the financial system. Compared with 2006, the macroeconomic risks and other external risks arising primarily from the household sector, have become increasingly important. The risks arising directly from the individual segments of the financial system are mainly within controlled framework.

The global financial crisis which hit the developed countries in 2007 did not have direct impact on the domestic economy and the financial system. However, the continuation of the financial crisis and its further spreading on the European territory, accompanied by a slowdown in the economic activity, could act toward deterioration of the external position of the Republic of Macedonia. The additional potential risk the Macedonian economy is exposed to, arises from the possible future global reassessment of the risks by the investors and tightening of the terms for foreign borrowing of the domestic economic agents, especially in conditions of growing interest rates on the international financial markets.

The favorable domestic macroeconomic environment in 2007 mainly gave positive contribution for enhancing the stability of the financial system in the Republic of Macedonia. However, since the beginning of the last quarter of 2007, the level of macroeconomic risks has increased. As it was the case with most of the economies throughout the world, in the second half of 2007, the Republic of Macedonia faced with higher inflationary pressures, primarily as a reflection of the increased global inflationary pressures caused by the rise in the prices of energy products and food. In 2007, there was a certain deterioration also in the external position of the Republic of Macedonia, primarily as a result of the deepening of the trade deficit. On the other hand, the increased inflation expectations, combined with other factors, including those of non-economic nature, contributed to the slowdown of the inflows through private transfers, which traditionally cover the largest part of the trade deficit of the Republic of Macedonia.

Having in mind the significance of the favorable and stable macroeconomic conditions for economic growth in the country, the National Bank of the Republic of Macedonia undertook a series of measures towards limiting the intensification of the inflationary pressures. In fact, undertaking by the monetary authorities of measures that are within its competence, is necessary and the only possible reaction supporting the maintenance of the macroeconomic stability and financial stability as a whole. Price stability and sustainable external position of the Republic of Macedonia are its key pillars.

The main risks for the financial stability created by the household sector register an upward trend. However, they are within a controlled framework and are not expected to cause more serious negative consequences for the financial stability in a short run. The main potential risk created by the households arises from the possibility for its excessive borrowing. However, according to all standards, and relative to the other EU countries, the debt of the household sector in the Republic of Macedonia is low on aggregate level. Nevertheless, the level of household debt should be closely monitored, having in mind that in circumstances of eased terms of lending and absence of precise data, one may assume that the debt of the less wealthy segments of the household sector increases. As a matter of fact, one of the main risks the financial institutions, primarily banks, face with is the lack of sufficient information about the level and form of the risks concentrated with the less wealthy segments of the household sector. Another potential risk related to the households is the growing trend of its indebtedness with currency component and adjustable interest rate, which results in an increased exposure, primarily of banks, to an "indirect credit risk". Having in mind that this sector has smaller capacity for identifying the financial risks it is exposed to, especially in a favorable economic environment, it is necessary to strengthen the application of the mechanisms

for protection of the consumers of financial services, enabling them to be better informed and educated about using the financial services and about the possible risks arising thereof. The materialization of the market risk as a consequence of the downward price movements of the securities, and of the interest rate risk as a consequence of the recently increased interest rates on certain credit products by some of the banks, was felt by individual segments of the households.

During 2007, the favorable macroeconomic environment for the most part positively affected the financial condition of the corporate sector. The corporate sector continued to grow both according to its assets size and according to the increased number of newly established companies. Profitability indicators registered significant improvement, while the other achievements were almost unchanged relative to 2006. Indebtedness of the corporate sector has increased, but compared with the other countries, it is on a relatively low level. However, the main risks for the stability of the financial system created by this sector arise primarily from the structure of its indebtedness. The dominance of the currency component in the debt structure of the companies increases their exposure to a potential exchange rate risk, which results in an increased indirect exposure of the banks and other creditors to additional credit risk. Another potential risk created by the corporate sector is the continuous growth of its external debt, especially having in mind the fact that larger portion of its debt is characterized with a variable interest rate. In conditions of growing interest rates, this potentially increases the burden for servicing of this debt, and at the same time it may have negative consequences for the general capability of the corporate sector for servicing of all its liabilities. This potential risk is evident, especially if one has in mind that except for profitability, the other performances of the corporate sector, including liquidity, did not register improvement.

The relatively simple structure, with emphasized dominance of the banks, remained the main feature of the financial system of the Republic of Macedonia. However, the increment of the foreign capital in almost all segments of the financial system, the increment of the number and the type of the financial institutions and broadening of the variety of financial services, are the basis for increasing the competition among the financial institutions, larger degree of inter-sector links and further deepening of the financial intermediation. During 2007, leasing companies, pension funds and brokerage houses were the segments of the financial system which registered the fastest growth.

According to the features, our financial system belongs to the group of so-called "bankcentered systems" due to the fact that the banking system stability plays the most important role for the stability of the financial system, as a whole. In 2007, the banking system of the Republic of Macedonia continued to develop intensively, managing to maintain the stability and resilience to external factors. The trend of improvement of the profitability and efficiency of banks' operations present in the past few years, continued also in 2007. Banks' solvency remains relatively high, despite the continuous trend of its decline, as a consequence of the increased volume of their activities.

Along with the increase in the banks' activities, the risk profile did not register any deterioration. Credit risk remained dominant in their operations. By using protective clauses (currency clause and adjustable interest rates clause), the so-called indirect component of the banks' credit risk increases. In 2007, the credit risk arising from the significant credit growth with the households floated up, especially in the part of issuing credit cards and permitted overdrafts on current accounts. It is exactly this segment of banks' credit portfolio in which the first signs of deterioration were noticed. Contrary to the credit risk, other risks have a relatively smaller significance in the structure of the banks' exposure to risks.

The increased activities on the domestic capital market during the past few years, continued in 2007 at a faster pace. During the last year, there was a significant increase in the turnover on the Stock Exchange, significant growth of market capitalization, establishment of new brokerage houses and establishment of the first investment funds as resident portfolio investors.

However, the capital market in the Republic of Macedonia still has an undeveloped primary market, limited liquidity of the secondary market, high concentration and high sensitivity of the investors' decisions to the regional and international economic and non-economic events. Exactly these features of the capital market became evident towards the end of 2007 and the beginning of 2008, when a significant decline in the turnover was registered, as well as downward price adjustment and additional decline in the liquidity of the Macedonian Stock Exchange.

Contrary to all expectations for an increase in the relative significance of the insurance sector, especially in the area of life insurance, in 2007, this segment of the financial system registered smaller contribution in the financial intermediation. One of the main risks in this sector arises from the still unestablished supervisory function. The absence of continuous on-site and off-site supervisory controls of the insurance companies creates uncertainty regarding the adequate compliance with the regulations and standards from the insurance area. This makes it difficult to identify and measure the risks present in this segment of the financial system.

Developments in the world economy in 2007 and the slight deterioration of the macroeconomic environment in the Republic of Macedonia towards the end of 2007, caused certain tightening of the economic conditions of certain financial system segments. Thus, in circumstances of increased inflation dynamics, which is a threat for the yield, in real terms, realized by the pension funds, they are faced with the challenge to protect the value of their assets, in real terms. Under such conditions, pension fund management companies put efforts to increase the level of diversification of the assets of the pension funds.

Safe and efficient payment systems are precondition for a stable and efficient financial system. The reform of the payment systems in the Republic of Macedonia, which was completed at the end of 2001, together with the changes in the regulations in 2007, contributed to the creation of a modern payment system in line with the international standards for safety, stability and efficiency. One of the main challenges for the National Bank of the Republic of Macedonia is strengthening of its capacity in the area of the oversight function, especially over the payment systems which are not operated by the central bank, as well as completion of the activities for establishing a remote alternate location.

Ladies and Gentlemen,

I hope that this short review of the most significant factors which influence the financial stability in the Republic of Macedonia, will boost your interest in reading this Report. At the same time, I hope that with this Report, the National Bank of the Republic of Macedonia will give its modest contribution to the promotion of a more stable and more efficient financial system.

Petar Goshev, Msc. Governor and President of the NBRM Council

## I. Macroeconomic environment

## 1. International conditions

The global economic environment during 2007 was marked with the events related to the crisis on the mortgage market and on the structured products market in the USA. Consequently, there was a certain slowdown in the global economic growth, primarily due to the slower economic activity in the developed countries. This trend is expected to continue also during the following two years when it is expected the negative effects to be especially common for the economy of the USA. However, it is expected the negative effects to be offset with the realization of higher rates of economic growth in the emerging economies. Global imbalances, i.e. their sustainability and the growing and notably volatile oil price are still one of the most significant risk factors for the global macroeconomic environment. As it was the case in the previous period, one of the main challenges for maintaining the financial stability in the Euro area is the continuous upward trend in the indebtedness level of the corporate sector and the households.

The Macedonian economy was not directly hit by the turbulences on the international financial markets, common for 2007. However, the continuation of the financial crisis and its further spreading on the European territory, accompanied by a slowdown in the economic activity of the traditional economic partners, could act toward deterioration of the external position of the Republic of Macedonia. The risks from the global conditions became more prominent through the increased global inflationary pressures caused by the growing prices of the energy products and food. The increase in the oil price on the world markets had a negative effect on the Macedonian economy, while the favorable situation on the market of metals positively affected, especially the domestic exporters. The possible further global risk reassessment by the investors and tightening of the financing terms are an additional risk to which the Macedonian economy is exposed. The negative effects could be visible through the reduction or facing more expensive external sources of financing, especially in conditions of growing interest rates on the international financial markets. Also, as an epilogue of the global financial crisis, international investors increase the risk aversion and face deteriorated liquidity, which could lead to a reduction of their inclination to invest in the Republic of Macedonia.

## 1.1. Risks of the global conditions<sup>1</sup>

During 2007, the global economic environment was marked with the events that preceded or came as a consequence of the crisis on the financial markets. This crisis was caused primarily by the crisis on the mortgage market and on the structural products market in the USA. The initial effects were evident through a significant increase in the rate of uncollectible mortgage loans and undertaken claims, with a simultaneous decline in the value of the provided collateral, which brought to subsequent reduction of the credit supply, i.e. lowering of the level of financial intermediation. The negative effects, which in the beginning were considered to be reduced to short-term liquidity problems, spread to a large portion of the financial system and caused a wave of significant downward adjustments of the ratings and several subsequent rises in the presented losses of the banks in the USA and Europe.

The consequent slowdown of the global economic activity is expected to be even more emphasized during the next two years, when economic growth rates of 3.7% and 3.8%, respectively are projected. It is expected that the negative effects will be especially common for the US economy, where during certain quarters of 2008 negative economic growth rates are

<sup>&</sup>lt;sup>1</sup> Source: The analysis is based on data from the IMF World Economic Outlook, April 2008, ECB Financial Stability Review December 2007, IMF Global Financial Stability Report, Containing Systemic Risks and Restoring Financial Soundness, April 2008.

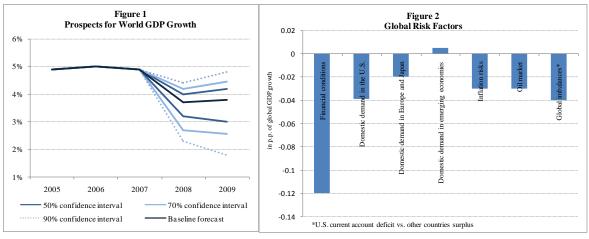
envisaged. Accomplishing lower rates of global economic growth is directly related to the more moderate slowdown of the economic growth in a major part of the remaining developed countries, and the higher growth rates of the emerging economies. Hence, it is expected that exactly the emerging

Table 1	
Annual rates of economic growth (in	%)

nagions and states	2004	2005	2006	2007	current projections		
regions and states	2004	2005	2000	2007	2008	2009	
Global	5.3	4.9	5.0	4.9	3.7	3.8	
Euro zone	2.1	1.4	2.7	2.6	1.4	1.2	
Central and Eastern Europe	6.5	5.5	6.6	5.8	4.4	4.3	
US	3.9	3.2	2.9	2.2	0.5	0.6	
Japan	2.3	1.9	2.4	2.1	1.4	1.5	
Russia	7.2	6.4	7.4	8.1	6.8	6.3	
China	10.1	10.4	10.4	11.1	11.4	9.3	
India	8	9.2	9.2	9.7	9.2	7.9	

Source: IMF, World Economic Outlook, April 2008

economies will positively rebalance the global economic growth (the so-called theory of "decoupling"). The strong domestic consumption is expected to continue in the emerging economies, in conditions of its relatively small dependence on crediting, relatively undervalued levels of the domestic currencies, lower levels of budget deficits compared with the developed countries, high level of saving and improved public finance management.



Source: IMF, World Economic Outlook, April 2007. IMF projections and expectations imply a more intense effect of the negative factors, that can lead to a substantial deceleration of global economic growth. For more information please IMF, World Economic Outlook, April 2006 (Box 1.3.) and IMF, World Economic Outlook, April 2007.

The negative effects from the crisis on the mortgage market in the USA are considered to be the dominant factor which could have further negative influence on the global economy. This is clearly presented in Figure 2, which shows the main risk factors for the global economic activity, which could, inter alia, put at stake the accomplishment of the expected global economic growth. In that sense, continuation is expected in the downward adjustment of the prices on the real estate market, deterioration in the quality of mortgage loans, increase in the risk premia, slowdown of the positive achievements of the corporate sector, uncertainty on the capital markets and ultimately, slowdown of the global economic growth. Central banks could, to a certain extent, offset these negative expectations through reducing the interest rates, but the possibilities for undertaking such steps are expected to be restricted by the continuous inflationary pressures.

## "Lessons" from the crisis on the financial markets

During the crisis on the financial markets, several main weaknesses in the functioning of the global financial system became evident, which create significant risks for the global financial stability, such as:

- **credit risk management.** As a result of the transfer of a large portion of the credit risk exposure to other entities, in the process of credit securitization, the banks become no longer interested in further monitoring of the quality of the transferred credit portfolio. On the other hand, excessive dependence was identified of the non-banking investors on the ratings of the credit rating agencies, instead of carrying out their own credit analyses when making investment decisions on the structural credit products market.

- **liquidity risk management.** In the securitization process, banks transformed the mortgage loans portfolios into Asset Backed Commercial Papers issued on the basis of these portfolios. The issued securities were undertaken by the Asset Backed Commercial Paper Conduits (ABCP conduits)<sup>2</sup>, which had low capital base and "guarantee" for using liquidity credits from banks. The undertaking of the issued long-term instruments is financed by issuing Collateralized Debt Obligations (CDOs). In conditions of a liquid market, financing was uninterrupted and the maturity mismatch on the side of the assets and liabilities of the ABCP conduits was not apparent. The problems which appeared on the mortgage loans market and the subsequent risk reassessment by the investors implied a decline in the liquidity and inability to refinance the previously issued short-term securities. On the other hand, for the banks this denoted activation of the implicit obligation for approving liquidity credits to the ABCP conduits. In this process, it became apparent that a large number of the banks do not have a contingency plan for liquidity management, in the event of covering the increased need for liquidity of the ABCP conduits, and in the event of general illiquidity of the markets.

- regarding the **counterparty risk**, a significant feature of the crisis was the low transparency, i.e. uncertainty regarding the ultimate risks carriers. This led to a significant increase in the uncertainty regarding the credit worthiness, even of the financial institutions with high credit rating, and contributed to a significant postponement of the adverse effects on the global financial markets.

The events on the financial markets emphasized the need for further strengthening of the control over the financials sector, performed by the respective regulatory bodies, as well as the need for promoting the risk management process by the financial institutions. The main future activities of the regulatory bodies and market participants could be summarized in the following few areas:

- strengthening of the prudential regulations for capital, liquidity and risk management. It is estimated that timely implementation of Basel II will play a major role. The implementation will be followed by a supervisory assessment for possible need for additional capital. At the same time, it is expected to raise the required level of capital for certain complex structural products, for the trading portfolio, as well as for the implicit obligation of the banks for the liquidity credits to the ABCP conduits. Regarding the liquidity management, basically there are three areas is which improvement is needed: 1) strengthening of banks' internal liquidity management mechanism; 2) strengthening of the stress-tests and 3) establishing efficient contingency work plans.

- **improvement of the transparency and valuation.** Financial institutions should improve the transparency and disclosure of data on risk exposure, and supervisors should strengthen the requirements for disclosing information envisaged under the third pillar of Basel II. Regarding the structured products, it is necessary to establish clear and precisely defined standards for their valuation in different market conditions.

- **change of the role and the significance of the credit ratings.** It is necessary for the credit rating agencies to improve the quality of the credit ratings, and to manage efficiently the issue of conflict of interests when determining the credit rating for the structured credit products<sup>3</sup>. On the other hand, investors should reduce the excessive dependence on the credit ratings of the agencies, when adopting own investment decisions.

<sup>&</sup>lt;sup>2</sup> Despite the fact that the basic features of these entities are the same, as a result of certain specific features they appear in various forms and with various names, such as Single or Multi Seller Conduits, Special Purpose Vehicles, Structured Investment Vehicles, etc. For the needs of this analysis we use the name Asset Backed Commercial Paper conduits.

<sup>&</sup>lt;sup>3</sup> Conflict of interests appears because credit rating agencies are involved in the creation of structured credit products, as well as in the subsequent determining of a credit rating to the products in their further trading.

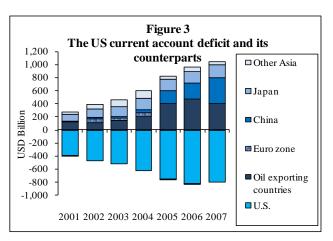
Regulatory bodies should revise the use of the credit ratings of the agencies in the regulatory and supervisory framework.

- strengthening of the supervisory and regulatory "response" to risks. In other words, it is necessary to "translate" the risk analysis into supervisory activities which would mean reduction of the exposure to those risks. Supervisors should have a capacity to monitor the risks related to the financial innovations and their attitudes regarding the risks exposure level and the needed activities for their better management, they should communicate with the banks and other institutions in a timely manner.

- establishing efficient plans and procedures of the regulatory bodies for solving problems in the financial system. In that sense, central banks should have clearly set procedures for contingency functioning. At the same time, it is necessary to strengthen the cooperation among the national regulatory bodies, as well as the cooperation between the national and foreign supervisory and regulatory bodies, with clear definition of the tasks, functions, rights and responsibilities of the individual entities, especially in the area of crisis management.

Source: The analysis is based on data from: Report of the Financial stability Forum on Enhancing Market and Institutional Resilience, April 2008; ECB, Financial Stability Review, December 2007; IMF, Global Financial Stability Report, Containing Systemic Risks and Restoring Financial Soundness, April 2008.

Global imbalances, i.e. their sustainability are still one of the main risks and challenges in global terms. Their most emphasized aspect is the USA current account deficit, as opposed to the surplus on the current accounts of certain Asian countries and countries oil-exporters. For 2007, the USA current account deficit is estimated at 5.7% of GDP, which is a decline relative to 2006, when it equaled 6.2% of GDP.<sup>4</sup> During the first half of 2007, i.e. before the beginning of the financial crisis, the financing of this deficit was uninterrupted, supported by the inflow of the funds of the largest oil producers, through Great Britain and the financial offshore centers.



Source: ECB, Financial Stability Review, December 2007. The data for 2007 are IMF's estimates.

The sensitivity of the US economy to the possible changes in the inflow of capital for financing of this deficit is one of the key aspects of the global financial stability. Confirmation of this are the net-outflows of capital from the US economy, which were common after the commencement of the crisis on the financial markets and the subsequent risk reassessment by the investors. The possible sudden drop in the capital inflow would increase the pressure for raising the long-term interest rates, which could have negative consequences for the accomplishment of the expected economic growth rates, and could lead to a further slowdown of the global economic activity. On the other hand, it is expected sovereign wealth funds - SWFs<sup>5</sup> to have a significant positive influence in the capital flows toward the USA.

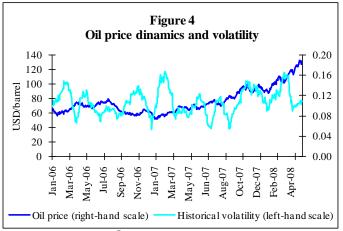
<sup>&</sup>lt;sup>4</sup> Source: ECB, Financial Stability Review, December 2007.

<sup>&</sup>lt;sup>5</sup> These are government funds managing part or total government assets. They are a supplement or even substitute for the traditional accumulation and management of foreign reserves. These institutions strive for better risk diversification and creating higher yields relative to the traditional reserves, which are usually invested in low-yield government securities. Such funds are established in two groups of countries: countries rich in natural resources which benefit greatly from the increase in their prices and countries (mainly from Asia), which establish the funds in the events of balance of payment surpluses.

One of the main risks which the global economy faced during 2007, were the emphasized inflationary pressures as a reflection of the rise in the prices of crude oil and primary products, which equaled 10.7% and 14%, respectively, on annual level<sup>6</sup>.

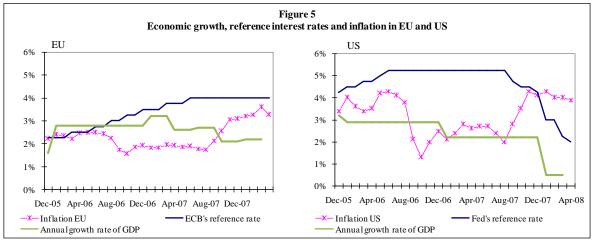
The growing and notably volatile oil price was common for the entire 2007, as well

**as for the first half of 2008.** At the end of 2007 it reached the level of US Dollar 96 per barrel<sup>7</sup>, while in May 2008, the oil price reached the historically highest level of over US Dollar 130 per barrel. The main reasons for such movements were the weak US Dollar, growing geo-political tensions, high demand for oil (for objective and speculative reasons), low level of reserves, as well as disturbances on the side of the supply. Additional negative effect for the global economy was created by the significant changes of the



oil price in the past period, i.e. the high historical volatility<sup>8</sup>, which creates uncertainty with the market participants about its future movement.

Due to the significant inflationary pressures during the past year, the central banks of a number of developed economies tightened the monetary policy. Such a trend was evident in the rise of the reference interest rates on several occassions, and as a result of that, at the end of



2007, the reference interest rate of the Bank of England equaled 5.5%, and of the Bank of Japan - 0.75%. After the several increments of the reference interest rate of the ECB in the first half of 2007, in the second half of the year and in the first quarter of 2008 it was stabilized at the level of 4%.

## On the other hand, as a response to the slowed economic growth and the expectations for its further slowdown, the Federal Reserves relaxed the monetary policy. Thus, starting

<sup>&</sup>lt;sup>6</sup> Source: IMF World Economic Outlook, April 2008. Spot price of the crude oil is used, which represents weighted average of the following types of oil: West Texas Intermediate, Brent and the prices of Dubai-crude oil.

<sup>&</sup>lt;sup>7</sup> Source: Bloomberg. Analyzed data are as of May 2008.

<sup>&</sup>lt;sup>8</sup> Historical volatility is a standard deviation of the daily changes in the oil price, for the values of one calendar month, reduced to an annual level. This indicator is used to show the maximum change in the oil price in one day, but also the possibility of an extreme market shock, which is larger in conditions of a higher value of the indicator.

from September 2007, FED lowered the reference interest rate on three occasions, so that at the end of the year it equaled 4.25%. Such a policy continued also during 2008, when there was further downward adjustment of the interest rate to the level of 2% (as of end April 2008).

### 1.2. Risks typical for the Euro area

As it was the case in the previous period, one of the main challenges for maintaining the financial stability in the Euro area was the continuous upward trend in the indebtedness level of the corporate sector and the households. Under such conditions, current tightening of the credit policies of the financial institutions, the increase in the interest rates, the rise in the costs of financing and the credit repayment costs could have an adverse effect on the credit worthiness of these two sectors and could lead to larger loan losses for the banks.

In spite of the strong profitability of the corporate sector, the rise in indebtedness increases its exposure to the negative influences from the possible further deterioration of the financing terms. In circumstances of rising levels of indebtedness and interest rates, the burden of the corporate sector for debt repayment increases. However, the companies protect themselves against the adverse movements of the interest rates through increased orientation towards using interest rate swaps, as hedging instruments against the interest rate risk. On the other hand, the increased volume of financial assets (which generally have higher level of liquidity) has a positive effect on the debt repayment ability of the corporate sector (downward trend in the debt-tofinancial assets ratio).

In circumstances of positive expectations about the income level and the employment rate, no deterioration is expected in the credit worthiness of the households in the Euro area. Despite the continuous increase in the debt, it is still under the levels typical for the other developed economies.<sup>9</sup> At the same time, the growing interest rates are not expected to have an adverse effect on the households debt repayment ability, despite the high share of the debt with variable interest rates (70% in July 2007)<sup>10</sup>. The positive movements in the households' income and the employment rate are expected to offset the negative effects of the growing interest rates.

On the other hand, the value of the total assets of the households in the Euro area is exposed to higher risks. Larger portion of the households' assets comprises of residential property (around 60% at the end of 2006). One of the risks pertains to the possible drop in the prices of residential property, despite the current upward trend in the Euro area<sup>11</sup>. The presence of downward adjustments of the residential property prices in some countries of the Euro area, points to the possibility for potential negative effects in the event of further sudden drops of these prices. However, the adjustments are expected to occur gradually, with the growing income playing a crucial role in the assessment of the overall condition of the household sector. On the other hand, the structure of the households' financial property (still the largest portion of this property is kept in the form of deposits and insurance products) points to a relatively restricted exposure to the risk of change in the securities prices. Households' investments in securities are mostly concentrated with the households with higher value of the net-assets and income, which by the rule have higher ability to bear the possible losses from this exposure.

<sup>&</sup>lt;sup>9</sup> Source: ECB, Financial Stability Review, December 2007. At the end of the first half of 2007, households debt relative to GDP in the Euro area equaled 60.1%, as opposed to 95% in the USA and over 100% in Denmark, Australia and the United Kingdom.

<sup>&</sup>lt;sup>10</sup> Source: ECB, Financial Stability Review, December 2007.

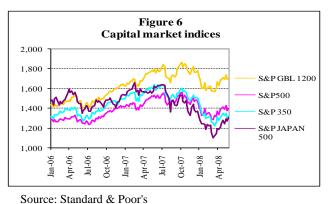
<sup>&</sup>lt;sup>11</sup> Source: ECB, Financial Stability Review, December 2007 - contains data on the movement in the residential property prices in the Euro area, until end 2006.

### **1.3. International markets**

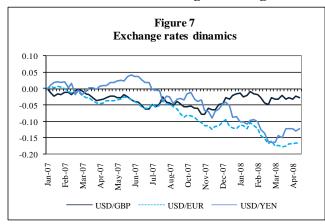
The strong economic growth in the previous few years, accompanied by the positive developments on the financial markets, the high level of savings as opposed to the relatively lower return from the investment in traditional saving products, had a significant positive impulse for boosting the investors in search of higher yields on the financial markets.

The first signals that undertaking risks could not take place without certain price adjustment and risk reassessment by the investors, appeared toward end-February 2007. There was a certain downward price adjustment on the global capital markets, as a result of the short-term increased sell-off of the shares. Such movements were caused by the initial signals which announced the emergence of a financial crisis, and pertained to the increasing uncollectability of the high-risk mortgage loans, as well as the announced slowdown of the growth of the corporate sector in the USA and the global geo-political tensions.

During the second half of 2007, more than obvious were the negative effects from the crisis on the mortgage market on the global capital markets. As a result of the global risk assessment by the and the generally investors present uncertainty about the reliability of the process of setting the prices of financial products, there was a significant and continuous fall of the shares prices on the global capital markets. All global indices on the capital market give clear indication of this.



During 2007, the depreciation of the US Dollar on the foreign exchange market continued. The depreciation of the Dollar was primarily a result of the slowdown of the economic growth, accompanied by a decline in the reference interest rate, as well as the uncertainty regarding the future development of the economic activity in the USA. The indebtedness of the US economy, expressed through the high levels of fiscal deficit and current account deficit even more severely emphasize the uncertainty about the further movement of the value of the US Dollar and the potential negative effect, in the sense of increased instability of the global financial markets.



Source: Bloomberg.

On the other hand, there was an increase in the prices on the commodities market, which according to the experience so far, is common in conditions of weak US Dollar, growing inflation and geo-political uncertainty, which typically have an adverse effect on the various types of financial assets (for example, shares, bonds). During 2007, the Reuters/Jefferies Commodity Research Bureau (CRB) Index went up by 17% relative to the end of 2006. The prices of precious metals registered new, record high levels and at the end of 2007 they registered annual growth of 15% (gold), 14% (platinum) and 11% (palladium). The rise in the prices of precious metals is expected to continue. Main driving force of this process, in conditions of turbulent financial markets, is the rising "popularity" of the precious metals as an investment possibility for portfolio diversification.

## 2. Macroeconomic environment in the Republic of Macedonia

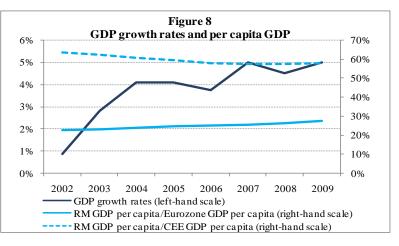
The macroeconomic environment in the Republic of Macedonia during 2007, generally created a positive climate for maintaining the financial stability. The positive trend of the economic growth and the low average annual inflation, typical for the previous years, continued during this year, too. The Macedonian economy was not directly hit by the turbulences on the international financial markets.

However, since the beginning of the last quarter of 2007, there has been an increased level of macroeconomic risks and risks of non-economic nature, which could have consequences for the financial stability of the Republic of Macedonia in a medium run. Further prospects of the domestic economy are exposed to several risk factors and restrictions. Starting from August 2007, the inflationary pressures have increased, expressed through the higher annual inflation rates. Additional risk factor is the deterioration of the external position of the Republic of Macedonia, primarily as a result of the deepening of the trade deficit and slower growth of the inflows from private transfers, which covered a significant portion of this deficit in the past years. The continuation of the financial crisis in the world and its further spreading on the European territory, accompanied by a slowdown in the economic activity of the traditional economic partners, could act toward deterioration of the foreign trade of the Republic of Macedonia. Maintaining a stable Denar exchange rate relative to the Euro is of key importance for maintaining the financial stability.

Having in mind the contribution of the stable macroeconomic environment for the financial stability of the country, NBRM has undertaken certain measures with respect to the restriction of these risks.

In 2007, the trend of growth of the economic activity in the Republic of Macedonia, common for the past six years, was intensified. In 2007, rate of economic growth of 5.1% was accomplished, which was by 1.1 percentage point higher relative to the previous year. Except for the agriculture, all other economic sectors registered an increase during the previous year and positively influenced the intensification of the GDP growth. The main generator of the growth, with participation of over 70% is still the increased economic activity of the services.

However, there is a additional need of intensification of the economic growth in the Republic of Macedonia, in order reduce the to differences in the income level with that of the developed countries and with the economies of **Central and Eastern Europe.** In 2007, the average GDP per capita in the Republic of Macedonia represented 25.7% of the average at the level of the Euro area, and 57.6% of the average at the level of the



Source: WEO Database, April 2008. The data for 2008 and 2009 are IMF's projections.

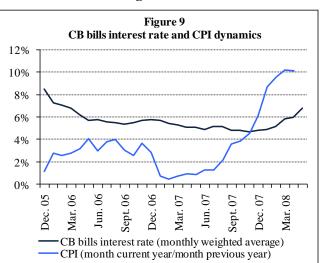
countries of Central and Eastern Europe<sup>12</sup>. During the past years, minimal reduction of the differences in the level of development with that in the Euro area, was registered. On the other hand, there is a certain increase in the differences with the economies of the countries of Central and Eastern Europe. The main factor which could contribute to the reduction of these risks is the further intensification of the economic activity in the country, wherefore the increase of the competitiveness of the Macedonian economy, the increase of the domestic saving and the level of domestic and foreign investments, is extremely important.

**During 2007, the average inflation**<sup>13</sup> in the Republic of Macedonia equaled 2.3%, which is a decline of 0.9 percentage point relative to the preceding year. This rate was mostly a result of the rise in the prices of food and energy, which caused 60.9% and 21.7% of the annual growth of consumer prices, respectively. As a result of such movements, the level of core inflation, which excludes the influence of the prices of food and energy, was low in 2007, and averaged 0.7%.

Starting from August 2007, the inflationary pressures have increased, expressed through the higher annual inflation rates. Thus, in December 2007, relative to December 2006, the annual inflation rate equaled 6.1%. The inflation continued to accelerate in 2008, reaching 10.1% in March. However, starting from April, inflationary pressures show signs of stabilization.<sup>14</sup>

Having in mind the significance of the favorable and stable macroeconomic conditions for economic growth in the country, the National Bank of the Republic of Macedonia undertook a series of measures towards limiting the intensification of the

inflationary pressures. Despite the fact that at the end of 2007 the interest rate on CB bills started to grow, starting from February 2008, NBRM made upward adjustments on several occasions, and at the beginning of May this interest rate was set at a level of 7%. Also, in February 2008, the interest rate tender was replaced by a volume tender (with fixed interest rate and unlimited amount of CB bills). Inflationary pressures were to a large extent caused by the increase in the prices of food as a global trend, with this growth causing around 3/4 of the total inflation. However, the acceleration of the so-called core inflation<sup>15</sup>, which excludes the effects



of the prices of food and energy, points to inflationary pressures present on the side of the demand. Such movements were to a large extent related to the higher growth of the wages compared with

<sup>&</sup>lt;sup>12</sup> At purchasing power parity. Source: WEO Database, April 2008. The countries of Central and Eastern Europe include Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Lithuania, Latvia, Macedonia, Poland, Romania, Serbia, Slovakia and Turkey. Data about 2008 and 2009 are IMF projections.

<sup>&</sup>lt;sup>13</sup> Source: State Statistical Office. The data pertains to the average annual inflation rate measured according to the consumer price index.

<sup>&</sup>lt;sup>14</sup> Source: State Statistical Office. The inflation rates referred to in this part of the analysis are annual inflation rates expressed through change in the level of the consumer price index for the month in the current year, relative to the same month in the previous year.
<sup>15</sup> Source: State Statistical Office and NBRM calculations. The core inflation in December (annual rate,

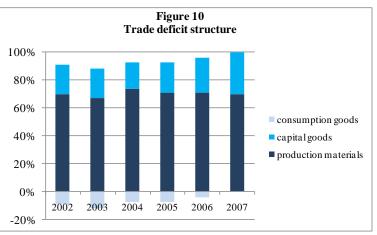
<sup>&</sup>lt;sup>15</sup> Source: State Statistical Office and NBRM calculations. The core inflation in December (annual rate, month current year/month preceding year) equaled 1.2%. During 2008 it was intensified and reached the level of 2.6% in January, 3.2% in February and 2.7% in March.

productivity<sup>16</sup>, in almost all sectors, as well as the fast growth of the credit support for the households, which directly reflected on the level of personal consumption and ultimately on the aggregate domestic demand. In that sense, NBRM undertook certain measures for slowing down households' credit growth, which should act toward easing of the pressures on the side of the demand. In June 2008, a Decision on a compulsory deposit with the NBRM was adopted, according to which the banks and the savings houses are obliged to allocate a compulsory deposit if, at the end of the month, relative to May 31, 2008, households' credit growth exceeds the prescribed growth rate. The deposit is allocated on a monthly basis, in the amount for which banks and savings houses would exceed the determined monthly growth rate of these credits.

In 2007, there was a certain deterioration in the external position of the Republic of Macedonia, primarily as a result of the deepening of the trade deficit and slowing down of the growth of private transfers. During 2007, the current account deficit equaled 3.1% of GDP, which is an increase of 2.2. percentage points relative to the preceding year. One of the main factors which contributed to such movements, was the further deepening of the high trade deficit. In 2007, the deficit in the foreign trade registered a significant increase of 24.7% relative to 2006 and reached a level of 21.2% of GDP. On the other hand, towards end 2007, slowdown in the growth of the inflows from private transfers was registered, which as in the previous years, covered a significant portion of the trade deficit. Thus, in 2007 the inflows on the basis of private transfers went up by 6.8%, which is a significant slowdown of the faster positive trend registered in 2006, and especially in 2005, when private transfers grew at rates of 15.4% and 39.7%, respectively.

The trade deficit is mostly a result of the deficit in the foreign trade of production goods<sup>17</sup>. In 2007, this deficit, which includes also the foreign trade in energy products, had a share of 70.4% in the total trade deficit of the Republic of Macedonia. The deficit in the foreign trade in

means of production caused 30.2% of the trade deficit. Despite the fact that the largest portion of the trade deficit is a result of the balance of the external trade of these two categories of products, it to a large extent reflects the increase in the import of consumption goods. During 2006, and especially in 2007, the import of consumption goods registered faster growth, relative to the export of these goods. Thus,



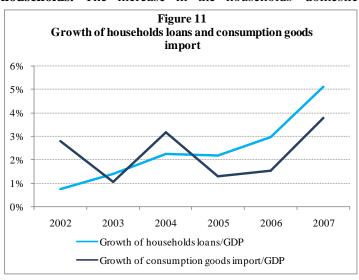
during 2006 and 2007, the import of consumption goods grew at annual rates of 13.1% and 34.7% respectively, as opposed to the growth rates of the export in this area of 7.1% and 26.6%, respectively. As a result of such movements, the positive trade balance of the Republic of Macedonia in the foreign trade of consumption goods, present in the past years dropped, i.e. it almost disappeared. Unlike the previous years, when the import/export ratio of consumption goods went up to 88%, at the end of 2007 it reached the level of 98.8%, which denoted almost complete elimination of the foreign trade surplus in this segment of trade.

<sup>&</sup>lt;sup>16</sup> The average gross-wage per employee registered nominal annual growth of 4.8, i.e. annual growth in real terms of 2.5%, as opposed to labor productivity, which was by 1.6% higher in 2007.

<sup>&</sup>lt;sup>17</sup> Source: State Statistical Office. The analysis was made on the basis of the data about the structure of import and export according to the economic use of the products, in accordance with the methodology which was applicable by end 2007. Starting from 2008, amended methodology for classification of the structure of foreign trade is being applied.

The increased import of consumption goods, to a large extent corresponded with the stronger credit support for the households. The increase in the households' domestic

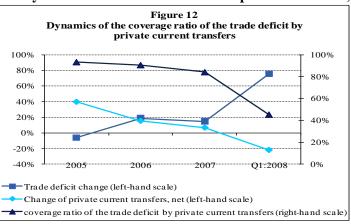
consumption was greatly supported by the fast growth of the household credits, which in 2007 exceeded 50% annual basis. on The continuation of the unstable movements of the prices on the world food markets<sup>18</sup> could lead to a significant increase of the negative consequences for the domestic economy, including deterioration of the external position of the Republic of Macedonia. In that sense, and having in mind the positive effects of the stable macroeconomic environment and the significance of (im)balances the external for maintaining macroeconomic



stability, NBRM has undertaken certain measures for slowing down the households credit growth. The undertaken measures should act toward slowing down of the credit support of the personal consumption and implicitly toward reducing the negative effects on the external position of the Republic of Macedonia.

During 2007, the unfavorable structure of the sources for covering the trade deficit, i.e. the exposure to risk from the volatility of the inflows on the basis of private transfers,

**became evident.** In circumstances when the largest part of the trade deficit is traditionally financed with the inflows from private transfers, the slowdown of their growth in 2007 resulted in lower coverage of the trade deficit. Unlike like the previous two years when over 90% of the trade deficit was financed with the inflows from private transfers, in 2007 this part was reduced down to 84.1%. The risk from such a structure of trade deficit financing

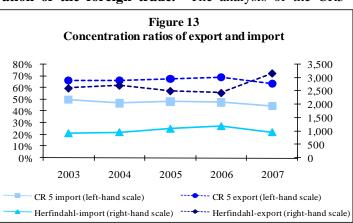


<sup>&</sup>lt;sup>18</sup> According to FAO (Food and Agriculture Organization), the global prices of wheat in February 2008, relative to February 2007, were higher by 80%, of maize by 25%, while the world cereal stocks were the smallest since 1982. Significant is the increase in the prices of meat and milk products. FAO identifies the following reasons for such movements on the world food markets: world population growth, change in the feed habits in the developing countries, especially in China and India, extremely poor crop in 2007, rise in the prices of the resources in the agricultural production (oil, other energy products, fertilizers, agrochemicals, etc.), but it is estimated that the largest is the influence of the production of biofuels and the absorption of significant quantities of cereals for that purpose. For illustration, only in the USA, where there are government subsidies for the production of raw materials for biofuels, around 15% of the total crop of maize in 2006 was used for production of biofuels, and the estimations are that in 2010, around 30% will be used for that purpose. Similar are the movements in the other industrially developed countries. In order to cushion the rise in the prices of cereals, and hence of all food products, some countries that are large producers of wheat (Russia, Kazakhstan, India) introduced export restrictions for the cereals in the second half of 2007. Despite the global increase in the cereals production, these processes, according to FAO, will contribute their prices to follow an upward trend in 2008, and probably also in a medium run. Source: FAO World Situation Report, February, 2008.

was even more emphasized during the first quarter of 2008, when private transfers fell by 21.8% relative to the first quarter of 2007. As a result of that, the coverage of the trade deficit was only 45.4%. The instability of the inflows on the basis of private transfers, i.e. their high sensitivity to the political developments in the region are still one of the key risk factors for the sustainability of the external position and for the stability of the macroeconomic environment in the Republic of Macedonia. The expected deceleration of the economic growth in the developed countries is a factor which could additionally have and adverse effect on the level of inflows on the basis of private transfers.

## The high level of trade deficit is accompanied with another unfavorable structural feature - the high level of concentration of the foreign trade. The analysis of the CR5<sup>19</sup>

indicator and the Herfindahl index<sup>20</sup> points to the presence of a high level of concentration of the foreign trade, which continued to increase in 2007. This unfavorable structural feature is especially present on the export side, both from the viewpoint of the geographical and from the viewpoint of the production component. The low level of geographical diversification of the export makes the Macedonian economy sensitive to the negative



movements in the economies of the countries that are largest importers. Potential negative effects are somewhat mitigated with the favorable rating and stable, i.e. positive prospect of the countries that are dominant in the foreign trade of the Republic of Macedonia. Except for Serbia, which was under large influence of the political developments, none of those countries registered a deteriorated rating relative to the preceding year.

Importing countries	Share of RM's total export for 2007	S&P rating (April 2008)	S&P rating (April 2007)	Exporting countries	Share of RM's total import for 2007	S&P rating (April 2008)	S&P rating (April 2007)
Serbia	19.1%***	BB- Negative	<b>BB-</b> Positive*	Russia	12.3%	A- Positive	A- Stable*
Serbia	19.170	BB- Negative	BB+ Stable**		Kussia	12.3%	<b>BBB+</b> Positive
Germany	14.4%	AAA Stable	AAA Stable	Germany	10.0%	AAA Stable	AAA Stable
Greece	12.5%	A Stable	A Stable	Serbia	8.6%***	BB- Negative	<b>BB-</b> Positive*
Greece	12.3%	A Stable	A Stable	Serbia	0.070	BB- Negative	BB+ Stable**
Italy	10.3%	A+ Stable	A+ Stable	Greece	7.9%	A Stable	A Stable
Bulgaria	7.2%	BBB+ Stable	BBB+ Stable	Italy	5.8%	A+ Stable	A+ Stable

Rating of the l	argest foreign t	rade partners of	the Rep	ublic of Macedonia <sup>2</sup>	21
maning of the f	ai gest tot eight t	auc parencis of	the hep	ublic of maccuolina	

\* domestic currency; \*\* foreign currency;

\*\*\* including Kosovo

Table 2

On the other hand, the low level of production diversification of the export is a factor which could have far more emphasized adverse effects on the domestic economy. Traditionally, the largest portion of the export of the Republic of Macedonia (over 50%) is divided between two groups of products: iron, i.e. steel and textiles. In 2007, the share of these products in the total export equaled 58%, which points to an extremely undiversified structure, sensitive to

<sup>&</sup>lt;sup>19</sup> The CR5 indicator represents the share of the import/export of the five countries largest importers/exporters in the total import/export of the Republic of Macedonia.

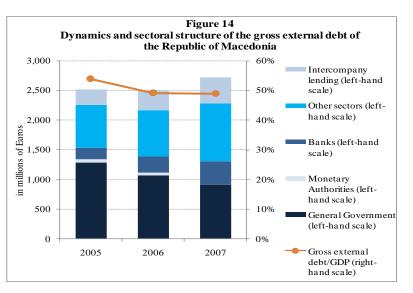
<sup>&</sup>lt;sup>20</sup> The Herfindahl index is calculated as a sum of the squares of the shares of the individual types of products in the total import/export of the country.

<sup>&</sup>lt;sup>21</sup> Source: The web site of "Standard & Poor's".

external shocks. During 2007, as a result of the favorable conditions on the world metal markets, the amount of the export increased. In other words, the increase in the export was a result of the rise in the prices of metals, rather than restructuring of the Macedonian export towards increasing the share of the products or services with higher value added. Such an export structure, based on products with low level of processing, dependent on the world market conditions, can not be a solid base for improving the external trade of the domestic economy. As a matter of fact, the key question is the sustainability of the export increase, when in conditions of globalization, the restriction on the import is virtually impossible. Hence, the positive development of the foreign trade of the country is directly related to the increase in the exports. The sustainable export growth is on its part directly related to the improvement of its structure in the sense of introducing products with higher level of processing, for which the Republic of Macedonia would have comparative advantages. In that sense, the improvement of the level of technical and technological equipment of the economic entities and the improvement of the educational profile of the Macedonian labor force, is of utmost importance.

At the end of 2007, the gross external debt of the Republic of Macedonia totaled Euro 2,711.5 million and went up by 8.7% relative to the preceding year. In circumstances of continued strategy for reducing and restructuring the public debt, the gross external debt of the country and of the monetary authorities registered a decline. However, the upward trend of the external debt of the other sectors (banks, other financial institutions, corporate sector and households), completely eliminated the positive effect from the reduction in the public external debt and contributed to its maintaining at a relatively stable level of around 50% relative to GDP.

in The rise the private external debt, in conditions higher of interest rates on the international financial markets means an additional increase of the burden. i.e. the costs for repayment of the credits to nonresidents. Here, 58% of the total external private debt, which amounted to Euro 880.82 million, are with volatile interest rate, i.e. they are sensitive to the changes in the international interest rates<sup>22</sup>.



**During 2007, the activities of the fiscal policy were aimed toward supporting the economic activity.** The legal changes made in the personal income tax and profit tax<sup>23</sup>, were directed toward improvement of the conditions of the economic activity in the country, through reducing the tax burden of the economic agents. Ultimately, the expected effects from these measures are boosting of the domestic supply (production) by reducing the costs of the factors of production and incurring the creation of new jobs. At the same time, the positive effects from these measures are expected also in the form of reducing the grey economy and improving the government tax collection. On the other hand, in conditions of increased public consumption,

<sup>&</sup>lt;sup>22</sup> The structure pertains to the principal of the private external debt, as of March 31, 2008.

 $<sup>^{23}</sup>$  In December 2006, changes in the legislation were adopted whereby the existing rates of the personal income tax of 15%, 18% and 24% were replaced by a single rate of 12% in 2007 and 10% in 2008. At the same time, the rate of 15% for the profit tax was replaced with 12% in 2007 and 10% in 2008, and tax exemption for the amount of the reinvested profit was envisaged.

especially during the last quarter of 2007 and support of the investment consumption, the fiscal policy acted also toward increasing the domestic demand, which had a positive effect on the economic activity in the country.

In 2007, prudential fiscal policy in the Republic of Macedonia was reflected also in the relatively balanced level of government revenues and expenditures, expressed through the budget surplus. Thus, in 2007 budget surplus of 0.6% relative to GDP was registered, which was a continuation of the policy of low government budget balance, present in the past four years. The monetary policy would be additionally supported by more even dynamics in the realization of the budget expenditures.

## 2.1. Country risk

**Despite the continuous improvement of the credit rating, the Republic of Macedonia is not yet classified in the group of countries with an investment rating.** At this moment, the Republic of Macedonia has been rated by three international agencies. The Republic of Macedonia received its last credit rating by the Japanese credit rating agency (JCR), on September 13, 2007. The elimination of the obstacles for entering NATO and EU would positively influence the credit rating of the Republic of Macedonia.

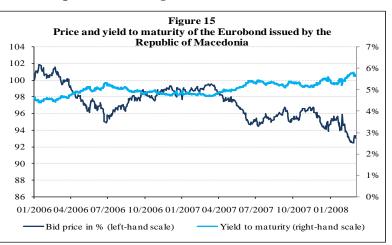
real rating of the Republic of Macedonia								
		2004	2005	2006	2007			
	£:	BB positive	BB+ stable	BB+ stable	BB+ stable			
S&P	foreign currency	outlook	outlook	outlook	outlook			
S&F	domastia aumonari	BB+ positive	BBB- stable	BBB- stable	BBB- stable			
	domestic currency	outlook	outlook	outlook	outlook			
Fitch	formion animanan		BB positive	BB+ stable	BB+ positive			
	foreign currency		outlook	outlook	outlook			
Fitch	1		<b>BB</b> positive	BB+ stable	BB+ positive			
	domestic currency		outlook	outlook	outlook			
	formion animonati				BB+ stable			
Japan credit rating agency (JCR)	foreign currency				outlook			
	domastia aumonary				BBB- stable			
	domestic currency				outlook			

 Table 3

 Credit rating of the Republic of Macedonia<sup>24</sup>

Under the influence of the developments on the global financial markets, as well as

the political events in the country, the price of the **Eurobond**<sup>25</sup> issued by the Republic of Macedonia registered a decline. As a result of the developments on the global financial markets and the consequent reassessment of the risks and inclinations of the investors, during the second half of 2007, the price of the Eurobond, generally, was on a lower level relative to the preceding period.



<sup>&</sup>lt;sup>24</sup> Source: Ministry of Finance of the Republic of Macedonia and the web sites of "Standard & Poor's" and "Fitch".

<sup>&</sup>lt;sup>25</sup> In December 2005, the Republic of Macedonia issued the first Eurobond in the total amount of Euro 150 million, with maturity of 10 years (December 2015) and coupon rate of 4.625%.

## **II. Non-financial sector**

## 1. Household sector

The assessment of the exposure level of the household sector to the individual risks and its ability to manage those risks is complex, but it is a very important aspect in the assessment of the financial stability. The risks for the financial stability created by the household sector register an upward trend during the recent years. However, these risks are within controlled frames and do not have more significant systemic influence. The most significant potential risk for the financial stability arises from the possibility for excessive increase in the households' indebtedness. The unfavorable effects would be intensified in the event of possible negative shocks related with the movement of the interest rates, exchange rate and the movement of the households' disposable income, which would lead to inability to service the liabilities to the financial institutions on a regular basis.

## 1.1. Financial assets and disposable income of the household sector

In 2007, the financial assets of the household sector continued to grow<sup>26</sup>. As of December 31, 2007, the total financial assets of the households amounted to Denar 163,764 million, and registered an annual increment of Denar 20,425 million, or 14.2%.

## Table 4 Financial assets of the households

	31.12	31.12.2006		31.12.2007		Annual change			
Type of assets	Amount (in millions of Denars)	Structure (in %)	Amount (in millions of Denars)	Structure (in %)	In millions of Denars	In %	In the structure (in p.p.)	Share in the change	
Deposits in banks and saving houses	72,009	50.2%	94,872	57.9%	22,863	31.8%	7.7	111.9%	
Cash in circulation <sup>1)</sup>	11,344	7.9%	12,555	7.7%	1,211	10.7%	-0.2	5.9%	
Shares <sup>2)</sup>	41,782	29.1%	39,487	24.1%	-2,295	-5.5%	-5.0	-11.2%	
Bonds	16,719	11.7%	13,504	8.2%	-3,215	-19.2%	-3.4	-15.7%	
Treasury notes	127	0.1%	10	0.01%	-117	-92.1%	-0.1	-0.6%	
Holdings in open investment funds			45	0.03%					
Pension funds' assets	1,242	0.9%	3,120	1.9%	1,878	151.2%	1.0	9.2%	
Life insurance	116	0.1%	171	0.1%	55	47.4%	0.0	0.3%	
TOTAL	143,339	100.0%	163,764	100.0%	20,425	14.2%		100.0%	

\*Note: 1) For the purpose of the analysis, according to NBRM's estimate, 70% of the cash in circulation (outside of banks) are included in the financial assets of households, 2) Quoted and unquoted shares on the Stock Exchange, 3) Refers to gross-premiums for life insurance.

**Deposits in banks and savings houses have a dominant share of 57.9% in the financial assets of the household sector.** At the same time, this item registered the highest annual increase, contributing with more than 100% in the growth of the households' financial assets. One of the factors which caused the rise in this part of the financial assets was the households' net sale of securities<sup>27</sup> on the Stock Exchange, during 2007. The increase in the private transfers from abroad is another factor which also influences the rise in the deposits in banks and savings houses during 2007. However, in the last months of 2007 and in the beginning of 2008 there was a certain slowdown in the private transfers from abroad, which may reflect on the amount of this part of the households' financial assets.

<sup>&</sup>lt;sup>26</sup> Households' financial assets comprise of the financial assets owned by the households. Those are: deposits with the banks in the Republic of Macedonia, bonds and other debt securities (bills, certificates, etc.), stakes and shares, amount of the gross-premia for life insurance, amount of the stakes in the private pension funds. In the future, with the development of the financial markets and instruments , there will be a modification of the scope and the structure of the financial structure of the household sector.

<sup>&</sup>lt;sup>27</sup> Households appear as net-sellers of securities. The net-sale is calculated on the basis of the realized value (not the number) of sold and purchased securities in a certain period.

In 2007, a decline in the households' investments in shares<sup>28</sup> and bonds was registered. The decline in the investment in shares of 5.5% is expected, taking into account the increased sale of this financial instrument by the households as a result of the movement of the market prices of shares in 2007. The decline in the investments in bonds of 19.2% is expected to continue, having in mind that they are almost entirely related to structural bonds for old foreign currency savings and denationalization, for which the government makes repayments throughout the year. All this is under the assumption that in the forthcoming period the households' interest in investment in continuous bonds will not change and it will remain small. Despite the decline in the households' investments in shares and in bonds, these two categories maintained the highest share in the households' financial assets, following the deposits in banks and savings houses.

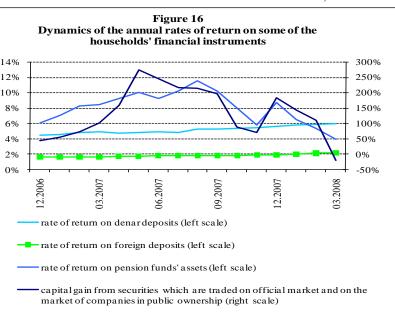
Currency in circulation has a relatively stable share in the total households' financial assets. At the end of 2007, this share equaled 7.7%, which is an annual fall of 0.2 percentage points. During 2007, they went up by 10.7%, contributing with 5.9% in the total growth of households' financial assets.

At the end of the second year of the functioning of the capital funded pension insurance, households' funds in the private pension funds registered the highest annual relative growth of 151.2% with great certainty about further growth of both their value and their significance for the households' financial assets.

All other types of financial assets have an individual share smaller than 1% of the households' total financial assets. Although with a share of only 0.03% in the total financial assets, households' funds in the investment funds deserve attention. The expected development of the financial markets and financial instruments should have a larger effect on the scope and the structure of the households' financial assets in the future.

The comparison of the accomplished annual rates of return on some of the instruments of the financial assets indicates that in 2007, securities<sup>29</sup> were mainly the most yielding segment of the households' financial assets. In certain months of 2007, the annual

rates<sup>30</sup> of realized capital from securities gain reached as much as 274%. Such high annual rates of capital gain from securities are primarily a result of the high annual growth rates of market capitalization of the shares (which are traded on the official market and on the market of companies in public ownership). This type of financial assets exposes the households to a market risk, i.e. risk from volatility of the prices on the capital market. Certain segments of the experienced households

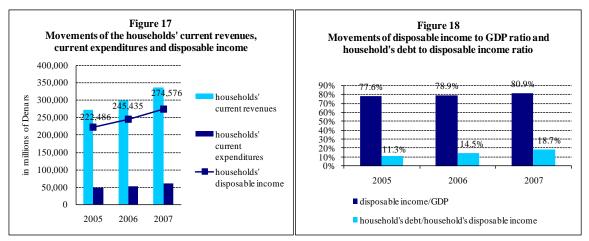


<sup>&</sup>lt;sup>28</sup> Source: Central Securities Depository. The nominal value of the shares is used in the calculations.

<sup>&</sup>lt;sup>29</sup> For the needs of this analysis, securities pertain to bonds and shares traded on the official market and shares traded on the market of companies in public ownership.

<sup>&</sup>lt;sup>30</sup> The annual rates of capital gain are calculated on the basis of the annual change of the market capitalization of the securities. Paid dividends and paid coupon interest are not taken into consideration.

the materialization of this risk in the third month of 2008, when the annual rate of capital gain from securities<sup>31</sup> had a negative value (at the end of March 2008 it was minus 18.8%). The annual rates of return on the other analyzed financial instruments from the households' assets were significantly lower. Thus, during 2007, the rate of return on the assets in the pension funds ranged between 4% and 11.5%, while regarding the deposits, it ranged between 1.7% and 2.2% for the foreign currency deposits and between 4.5% and 5.9% for Denar deposits.



**Source:** State Statistical Office and NBRM calculations. The data pertaining to 2006 is not final (changes in the part of the taxes are expected). The data pertaining to 2007 is estimated (estimations of the amounts of gross-wages, the tax on property and on buying and selling real estate).

**Source:** State Statistical Office and NBRM calculations. The data pertaining to 2006 is not final (changes in the part of the taxes are expected). The data pertaining to 2007 is estimated (estimations of the amounts of gross-wages, the tax on property and on buying and selling real estate).

Besides on the volume of the financial assets, the households' debt repayment ability depends, to a large extent, on the households' disposable income, which in 2007<sup>32</sup> was by **Denar 29 billion higher relative to 2006.** The increase in the disposable income<sup>33</sup> is primarily a result of the higher households' current income by Denar 38 billion relative to 2006. In the structure of the households' current revenues, the largest growth in absolute amounts was registered in the current revenues on the basis of gross-wages (increase of Denar 22 billion). Such movements caused an increment in the households' disposable income to GDP ratio of 2 percentage points, so that in 2007 it reached 80.9%. Accelerated credit growth in the household sector caused a rise in the households' total debt to disposable income ratio. In 2007, this ratio went up by 4.2 percentage points and equaled 18.7%. Households' debt registered an annual increase of 44.2%, as opposed to the rise in the disposable income of 11.9%. The share of the households' debt in the total disposable income in the Republic of Macedonia is still relatively low relative to the developed countries<sup>34</sup>, which could point to the conclusion that, on aggregate level, there is a room for further deepening of the credit support for the households' sector. However, the eased lending terms in the past few years contributed to the increase in the indebtedness of the less wealthy part of the households (the segment which is assumed to hold smaller portion of the total disposable income), which could mean a potential risk of its over indebtedness.

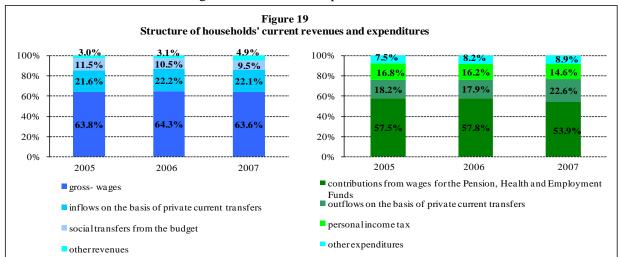
<sup>&</sup>lt;sup>31</sup> For the needs of this analysis, securities pertain to bonds and shares traded on the official market and shares traded on the market of companies in public ownership.

<sup>&</sup>lt;sup>32</sup> Source: NBRM calculations. The data pertaining to 2006 is not final (changes in the part of the taxes are expected). The data pertaining to 2007 is estimated (estimations of the amounts of gross-wages, the tax on property and on buying and selling real estate).

<sup>&</sup>lt;sup>33</sup> Households' disposable income for a certain period is calculated as a difference between the households' current revenues and expenditures in that period.

<sup>&</sup>lt;sup>34</sup> At the end of 2006, the households' debt to disposable income ratio by individual country equaled: 126.5% in Canada, 89.6% in France, 104.8% in Germany, 57.7% in Italy, 131.6% in Japan, 163.8% in the United Kingdom, 138.1% in the USA, 110% in Spain. In the EU this ratio equaled 110.6%. Source: data base on the web site of OECD and the Global Financial Stability Report, IMF, October 2007.

Dominant in the structure of the households' current revenues are the revenues on the basis of gross wages, which had a share of 63.6% in the current revenues in 2007. The largest share in the household's expenditures is that of the contributions from wages for the Pension, Health and Employment Funds, so that in 2007 they accounted for 53.9% of the households' expenditures. In 2007, the structure of households' current revenues registered higher share of the other revenues, at the expense of the fall in the share of the revenues on the basis of gross-wages and social transfers from the budget. On the other hand, in the structure of current expenditures, there is a growing share of the outflows on the basis of private current transfers and other expenditures, at the expense of the decline in the share of the wage contributions for the Pension, Health and Employment Funds and the expenditures on the basis of the personal income tax. Reduced share of the wage contributions and personal income tax in the households' total



Source: State Statistical Office and NBRM calculations. The data pertaining to 2006 is not final (changes in the part of the taxes are expected). The data pertaining to 2007 is estimated (estimations of the amounts of gross-wages, the tax on property and on buying and selling real estate). Note: Other revenues include: collected interests on deposits, revenues on the basis of dividends, copyrights, property and property rights, capital gain, households' inflows on the basis of frozen foreign currency deposits and for denationalization, collected interests on treasury notes. Other expenditures include: payments on the basis of loans' interests and other placements to households, tax on property and on buying and selling real estate.

current expenditures has no influence on the increase in the households' disposable income, given

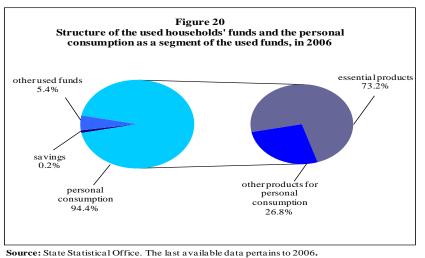
the application of the net-wage concept when remunerating labor in the Republic of Macedonia. Nevertheless, the income on the basis of net-wages (calculated as a difference between gross-wages on the one hand and contributions from wages and personal income tax on the other) has a dominant share of over 60% in the structure of the households' disposable income (calculated as a difference between households' current revenues and expenditures).

In 2006, extremely large portion of the households' disposable income (or 94.4%) was used<sup>35</sup> for personal consumption, while the share of saving fell below 1%. Within the structure of the personal consumption, more than 73% pertain to the expenses for essential<sup>36</sup> products, almost half of which are expenses for food and beverages. All these products, especially food and beverages, are characterized with low price elasticity. At the same time, in 2007 the average value of the consumer's basket for food and beverages equaled 72.9% of the average net wage in the same period. It represents a decline of 3.1 percentage points relative to 2006. Having this in mind, as well as the fact that in 2007, the changes in the food prices caused around 60% of the average inflation, each rise in the prices of the essential products in the future will denote an increase in the

<sup>&</sup>lt;sup>35</sup> According to the SSO, households' used funds encompass all costs for procurement of products and services for personal consumption, as well as the repaid portion of consumption credits and loans. For the agricultural and mixed households, apart from the costs for personal consumption, the amount of the natural consumption is included. The last available data pertains to 2006.

<sup>&</sup>lt;sup>36</sup> Calculations are based on the data for 2006. Essential products include: food, beverages, clothing and wearing apparel, housing, heating and lighting, and hygiene and health care.

households' personal consumption costs. This could have negative effects for the low level the households' of disposable income intended for saving. Possible more significant decline in the saving could, on its part, have an adverse effect on the level of the financial potential and the liquidity position of the financial system, especially banks which finance а significant part of their assets (42.1%)with households' deposits, at the end of 2007.



Note: Other used funds include: membership fees, taxes, custom duties, losses, gifts, contributions, repayment of loans and debt servicing and flat, house and property expenditures. Essential products include: food, beverages, clothing and wearing apparel, housing, heating and lighting, and hygiene and health care. Other products for personal consumption: transport, communications, recreation and culture, education, restaurants and hotels and miscellaneous goods and services.

## 1.2. Households' debt

**Households' debt continued to grow at a faster pace in 2007.** As of December 31, 2007, the total debt of the households stood at Denar 51,368 million, which is an increase of Denar 15,376 million, or 44.2% relative to the end of 2006. The relative growth rate of households' debt in 2007 was by 2.4 percentage points higher relative to 2006.

Debt to banks is dominant in the total households' debt. At the same time, the debt to this sector registered the highest annual growth (45.2% or Denar 14,252 million). Such an increase is a result primarily of the banks' strong credit support of the households, which, as it was the case at the end of 2006, are the largest creditor of the household sector.

# Table 5Total households' debt<sup>37</sup>

	31.12.2006		31.12.2007		Annual change			
Type of debt	Amount (in millions of Denars)	Structure (in %)	Amount (in millions of Denars)	Structure (in %)	In millions of Denars	In %	In the structure (in p.p.)	Share in the change
Banks	31,540	88.5%	45,792	89.1%	14,252	45.2%	0.6	90.6%
Saving houses	1,566	4.4%	2,012	3.9%	446	28.5%	-0.5	2.8%
Leasing	2,526	7.1%	3,564	6.9%	1,038	41.1%	-0.2	6.6%
TOTAL	35,632	100.0%	51,368	100.0%	15,736	44.2%		100.0%

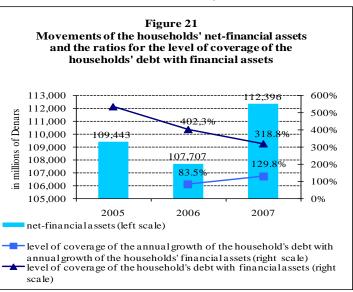
Although they are the second largest creditor, leasing companies participate with only **6.9% in the total households' debt.** Despite the rise in the value of the leasing contracts from 41.1% in 2007, the share of this type of debt registered a decline of 0.2 percentage points in the total households' debt relative to 2006, which is mainly a result of the faster growth of the debt to banks. However, with the growth and development of the leasing market (primarily the emergence

<sup>&</sup>lt;sup>37</sup> Source of data: National Bank of the Republic of Macedonia (for the banks and savings houses) and Ministry of Finance (for the leasing companies). For the needs of this analysis, the total debt of the household sector consists of: the total debt from credits, interest and other liabilities to banks, debt on the basis of credits and interest to the savings houses and the value of the active leasing agreements.

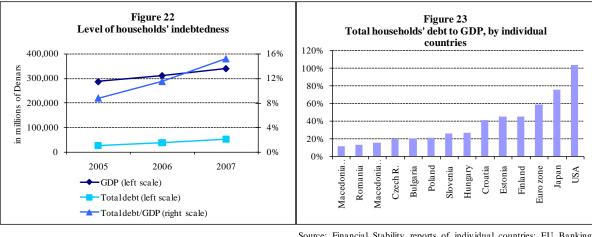
of new agents and new types of leasing) this kind of households' debt is expected to become increasingly important in the future.

Despite the significant increase in the households' debt in 2007, the debt accumulation

did not exceed the accumulation of households' financial assets. In 2007, the ratio of the annual growth of the debt to the financial assets was 77%. This means that the accumulation of financial assets provided "coverage" of the debt increase of 129.8%. At the end of 2007, the level of coverage of the total households' debt with financial assets equaled 318.8%. At the end of 2007, households' net financial assets, calculated as the difference between the total financial assets and the total households' debt stood at Denar 112,396 million and registered an annual increase of 4.4%. All this



points to the conclusion that on aggregate level, households, as an economic sector, are generally capable of servicing their debt, even in case of possible decline of their total income, or increase in the indebtedness. However, one should have in mind that in most cases there is a mismatch between the owners of the assets and the borrowers from the household sector. Thus, the largest portion of the financial assets is usually concentrated with the wealthier segments of the population, while credits have become available for all segments of the household sector. In the absence of precise data, one may assume that the indebtedness of the less wealthy segments of the household sector is growing, which may undermine the financial stability as a whole.



Source: Financial Stability reports of individual countries; EU Banking Structures, ECB, October 2007; data base on the OECD web site; research of UNI Credit Group.

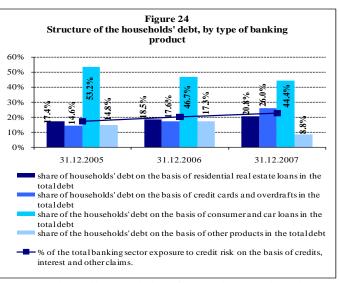
At the end of 2007, the ratio of the total households' debt to GDP in the Republic of Macedonia equaled 15.1% (11.5% for 2006). Despite the rise of 3.7 percentage points relative to 2006, this indicator still points to a relatively low level of indebtedness in comparison with the Euro area (58.5% for 2006), USA (104% for 2006) and Japan (75.6% for 2006). In the other analyzed countries, this indicator ranges between 12.9% in Romania and 45.3% in Finland. This suggests that on aggregate level the households in the Republic of Macedonia may sustain even

higher level of indebtedness. However, this low level of households' debt may be a potential risk for the financial stability, especially if there is a concentration of the debt with a smaller portion of the households.

### 1.2.1. Debt to the banking sector

In 2007, the households' debt to the banking sector continued to grow. As of December 31, 2007, the total households' debt to the banking sector equaled Denar 39,792 million, which is an annual increase of Denar 45,252 million or 45.2%. The largest portion of the households' debt is on the basis of principal (97.7%), while the debt on the basis of interest is 0.6% of the households' total debt<sup>38</sup>.

The fastest growth was registered in the households' debt on the basis of credit cards and overdrafts on current accounts (of Denar 6,380 million or 115.1%), which reached a share of 26% in the total households' debt. However, households' debt on basis of classical the consumption credits still has the highest share in the total households' debt of 44.4%. households' Hence. the debt intended for consumption purposes (consumer loans, automobile loans, current accounts and credit cards) had a high share of 70.4% in the total households' debt.



**Note:** The total households' debt on the basis of particular banking product includes the debt on the basis of credits, interest and other claims.

**Households' debt on the basis of housing loans began to increase,** and the annual growth rate for 2007 reached 63.8%. This led to a rise in the share of the debt on the basis of housing loans in the total households' debt to the banking sector by 2.3 percentage points. Despite the longer maturity, housing loans bear smaller risk for the banks, having in mind the relatively better quality of the collateral. At the moment these loans are extended, the ratio of the amount of the loan extended to the value of the placed collateral is usually 1:1.5.

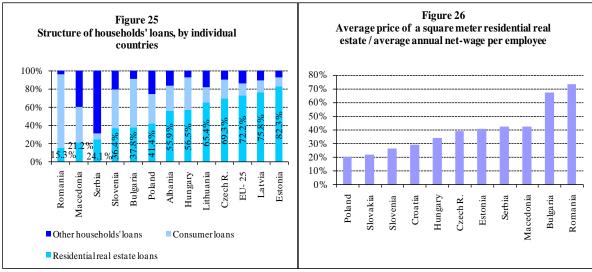
The highest risk for the banking sector coming from the activities with the household sector, arises from the consumer loans, especially from credit cards and overdrafts on current accounts, which are mainly not secured. At the same time, banks should be better equipped with appropriate systems for monitoring the credit risk in a significantly dispersed number of clients<sup>39</sup>.

The comparative analysis indicates significant differences in the structure of the household credits in the Republic of Macedonia and in the other countries. In the European Union, more than 70% of the total household sector loans belong to the housing loans. On the other hand, the share of the housing loans in the total loans in the Republic of Macedonia is far lower and at the end of 2007 it equaled 21.2%. Only the banking sector of Romania has a lower share of the housing loans in the total household loans. Despite the fact that in the last three years housing loans

<sup>&</sup>lt;sup>38</sup> The remaining 1.7% of the households' debt pertain to the indebtedness based on other claims (fees, charges, etc.).

<sup>&</sup>lt;sup>39</sup> Large number of banks do not provide data pertaining to the structure and the distribution of the credit exposure to the households from a viewpoint of the amount of the average monthly income of the borrowers.

in the Republic of Macedonia increased, still there are certain restrictions to its more expansive growth. Housing loans, which are normally extended with longer maturity, as opposed to the short-term character of the banks' deposit potential, reflect the maturity transformation of the banks' assets. This on its part, increases the financial risks to which the banks are exposed, which has an effect on the conditions under which housing loans are extended (especially on the value of the collateral relative to the loan). Restrictive factor for the growth of the housing loans is also the relatively low purchasing power of the households in the Republic of Macedonia, the absence of an active real property market, the growing prices of homes, high costs for the banks in the event of

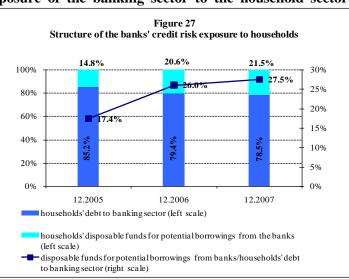


**Source:** Global Property Guide and State Statistical Offices in individual countries; **Note:** The average price of a square meter residential real estate located in the center of the capitalcity.

selling the property taken as a collateral, etc. According to the ratio of the average price of a square meter (located in the center of the capital) to the average annual net-wage is in the lower half of the list of analyzed countries (the indicator for the Republic of Macedonia is 42.7%). However, the housing prices register an upward trend, which inevitably implies an increased pressure on the financial condition of the household sector.

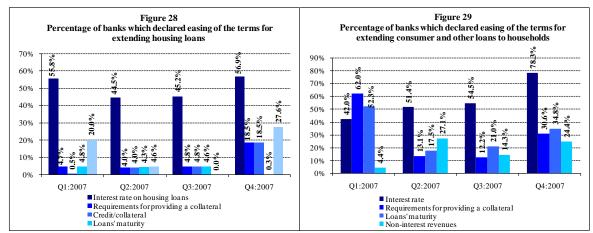
The competition among banks for increasing the market share led to a significant increase in the off-balance sheet exposure of the banking sector to the household sector,

which actually represents the households' disposable funds for potential borrowing from the banks in the future. Thus, in 2007, potential (off-balance sheet) claims of the banks from the household sector went up by 53.3% by Denar 4.372 (or million), so that their share in the total exposure of the banking sector to the households reached the level of 21.5%. As of December 31, 2007, households' disposable funds for potential borrowing represented 27.5% of the total households' debt to the banking sector. This means that if



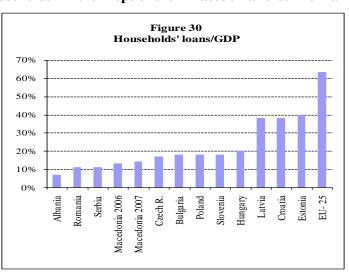
needed, households' debt to the banks could increase significantly in a very short time, by using the disposable credit limits. Almost 98% of the disposable funds for future potential borrowing belong to the unused permitted overdrafts on current accounts and unused permitted limits on credit cards.

The increased competition among banks is accompanied by easing of the terms of lending to the households. In 2007, the largest number of the banks reduced the interest rate on housing loans, consumer loans and other types of loans to the households<sup>40</sup>. Relatively high percentage of the banks which participated in the Survey reduced the amount of the fees when extending housing loans, and eased the conditions pertaining to the requirements for providing a collateral when extending consumer and other types of credits to households. However, in accordance with the results of the Survey on the banks' credit activity, which pertains to the last quarter of 2007, in the following period (in the first quarter of 2008) banks expect unchanged terms of lending to the households, but also further increase in the demand for credits.



Source: Survey on the banks' credit activity

The credit support for the households in the Republic of Macedonia is still on a relatively low level compared with the other European countries. At the end of 2006 and in 2007, financial intermediation, expressed as a ratio of the total households' credits to GDP, equaled 13.1% and 14.2%. respectively. This indicator is not much lower than those in the Czech Bulgaria, Republic, Poland and Slovenia where they range between 17% and 18.1%, unlike the EU Member States (EU-25), where at the end of 2006 this indicator equaled 63.3%. Smaller share of the total households' credits in GDP was registered in Albania (7%), Romania (11%) and Serbia (11%).

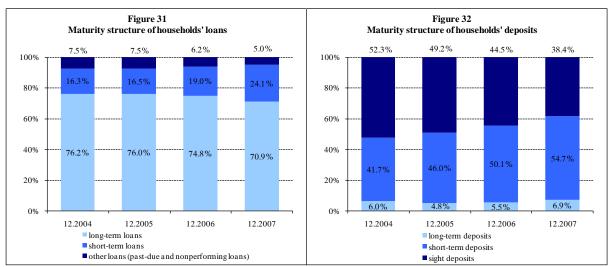




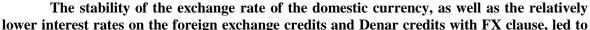
From a viewpoint of the maturity and currency structure of the households' debt, two main features are evident: dominance of the long-term debt and growing trend of the debt with currency component. The high share of the long-term in the total loans to households is a source of potential risks for the banks and the households. The risk for the banks is in the form of a liquidity risk due to the significant maturity mismatch of the credits and deposits. This risk contains the stable deposit portion. i.e. its continuous renewal. On the part of the households, there is a risk of further increasing of the debt level in a short run. This is a result of the dispersion of the debt repayment within a longer period, for the long-term credits, whereby the amount of the

<sup>&</sup>lt;sup>40</sup> In accordance with the results of the Surveys on banks' credit activity in the four quarters of 2007.

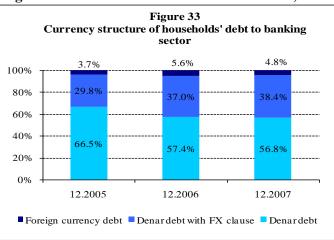
individual periodical repayments is reduced, which creates room for short-term borrowing. Another risk to which the households are exposed is the interest rate risk, in circumstances when dominant part of the loans are extended with the so-called "adjustable" interest rates<sup>41</sup>. The long-term character of the loans even further emphasizes the sensitivity of the households to this risk, which indirectly implies greater credit risk for the banks. The increase in the interest rates would imply



increasing of the households' expenses for debt servicing, which could have an adverse effect on its creditworthiness. The materialization of this risk was felt by certain segments of the households in May 2008, when some of the larger banks increased their interest rates for part of their credit products intended for the households, primarily the consumer credits and credits on the basis of overdrafts on credit accounts and used limits on credit cards.



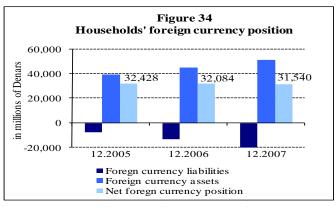
an increase in the share of the households' debt with currency component in the past few years. As of December 31, 2007, households' debt with currency component to the banking sector stood at Denar 19,778 million, which is 43.2% of the total households' debt. During 2007, the total households' debt with currency component went up by 47.2% (or by Denar 6,345 million), which was mostly a reflection of the increase in the Denar exposure with currency clause (by Denar 5,889 million, or by 50.4%). From a viewpoint of the



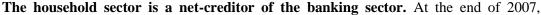
households, the debt with currency component indicates increased sensitivity to the foreign exchange risk, which directly implies higher credit risk for the banks.

<sup>&</sup>lt;sup>41</sup> They have features of both fixed and variable interest rates. They vary depending rather on the bank's policy than on the change in some key interest rate to which the risk premium would be added when setting the interest rate on the loan.

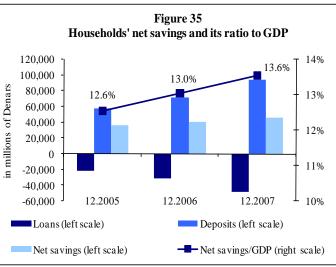
On aggregate level, households net foreign exchange have long position<sup>42</sup>, which reflects the continuously higher amount of the claims (deposits) relative to the liabilities (debt with the banking sector) with currency component. Such a position, on aggregate level, implies risk for the households from possible appreciation of the domestic currency. Due to the probability that the depositors are not simultaneously borrowers in foreign



currency and in Denars with FX clause, the general conclusion prevails that most of the borrowers are additionally exposed to a foreign exchange risk due to the lower possibility for hedging against that risk. The lack of data on the distribution of the claims and liabilities with currency component by individual segments of the households sector is the main restrictive factor for a deeper analysis of this aspect of the households' debt.



households' net savings, calculated as a difference between the total claims (deposits) and total liabilities (credits) of the households stood at Denar 45,979 million, which is an increase of Denar 5,413 million, or 13.3% relative to 2006. This increment positively reflected also on the relative significance of the households' netsavings for the total economic activity in the country. Thus, at the end of 2007, the ratio of the households' net savings to GDP equaled 13.6%, which is an increase of 0.6 percentage points relative to 2006. In spite of the increase, this share is still on a



relatively low level compared with other countries<sup>43</sup>. The faster relative annual growth of credits relative to the deposits in the past few years reflected with a reduced level of coverage of the households' credits with deposits. Despite such a trend, at the end of 2007, the indicator of the ratio of households' deposits to households' credits equaled 51.2%. This points to the conclusion that on aggregate level, there is a room for further deepening of the banks' credit support for the households.

## 2. Corporate sector

In conditions of a favorable macroeconomic environment, during 2007 the corporate sector continued to grow. The growth was accompanied by an improvement of the indicators for profitability of this sector. However, it is believed that the improvement of the profitability of the enterprises is, to a large extent, a result of the greater profitability shown, as a reflection of the legal changes in the tax area, which encouraged reduction of the tax

<sup>&</sup>lt;sup>42</sup> For the needs of this analysis, households' net foreign exchange position is calculated as the difference between the total claims (deposits) and liabilities (debt to the banking sector) of the households in foreign exchange and in Denars with FX clause.

<sup>&</sup>lt;sup>43</sup> For comparison, in 2006 in Slovenia and in the Czech Republic, the share of the households' net-savings in the GDP equaled 21.1% and 20.7%, respectively.

evasion<sup>44</sup>. On the other hand, the unchanged and relatively low level of the indicators for liquidity, for the level of funds utilization, i.e. for the average inventory periods, periods of collection of claims and payment of liabilities, point to the fact that the improved profitability is very little or not at all a result of the qualitative improvements in the enterprises' operations.

The overall activities of the corporate sector directly reflect on the operations of the financial institutions, primarily banks, as dominant domestic creditors of the corporate sector. Despite the upward trend in the enterprises' indebtedness, it is still on a relatively lower level, compared with the other countries. However, in the overall assessment of the exposure of the corporate sector to risks, the structure of the total debt should not be neglected. The dominance of the debt with currency component increases the exposure of the corporate sector to the foreign exchange risk, and hence the exposure of the corporate sector creditors to the so-called "indirect credit risk". On the other hand, the increase and the high share of the external debt, in circumstances of growing interest rates on the global financial markets, increase the burden on the corporate sector for servicing of this debt. Such movements could indirectly have adverse effects on the general ability of the corporate sector for servicing its liabilities.

#### 2.1. Analysis of the developments in the corporate sector

The increase in the total activities of the corporate sector continued in 2007. Thus, at the end of 2007, the total assets of the corporate sector stood at Denar 921,770 million, which is an annual increase of  $11.7\%^{45}$ .

BALANCE SHEET	E SHEET Amount (in millions of Denars) Structure		ture	Annual change			
ASSETS:	2006	2007	2006	2007	absolute ammount	in %	share in the change
Subscribed, but not paid-up capital	296	268	0.0%	0.0%	-28	-9.5%	0.0%
Fixed assets, of which:	432,614	480,485	52.4%	52.1%	47,871	11.1%	49.5%
Tangible assets	12,091	13,690	2.8%	2.8%	1,599	13.2%	3.3%
Non-material investments	349,655	392,920	80.8%	81.8%	43,264	12.4%	90.4%
Long-term financial investments	70,868	73,876	16.4%	15.4%	3,008	4.2%	6.3%
Current assets, of which:	392,068	441,016	47.5%	47.8%	48,948	12.5%	50.6%
Inventories	110,884	127,071	28.3%	28.8%	16,187	14.6%	33.1%
Short-term receivables	215,917	237,081	55.1%	53.8%	21,164	9.8%	43.2%
Short-term financial investments	39,371	40,434	10.0%	9.2%	1,063	2.7%	2.2%
Cash and securities	25,896	36,431	6.6%	8.3%	10,534	40.7%	21.5%
TOTAL ASSETS	824,979	921,770	100%	100%	96,791	11.7%	100%
LIABILITIES							
Capital and reserves	420,798	456,648	51.0%	49.5%	35,850	8.5%	37.0%
Long term provisions for risks and expences	4,354	3,346	0.5%	0.4%	-1,008	-23.2%	-1.0%
Liabilities to creditors, of which:	380,931	439,748	46.2%	47.7%	58,817	15.4%	60.8%
Liabilities on the basis of credits	62,965	75,238	16.5%	17.1%	12,273	19.5%	20.9%
Accounts payable	71,279	74,766	18.7%	17.0%	3,486	4.9%	5.9%
Other liabilities	246,686	289,744	64.8%	65.9%	43,058	17.5%	73.2%
Accrued expences and deffered revenue	18,895	22,027	2.3%	2.4%	3,132	16.6%	3.2%
TOTAL LIABILITIES	824,979	921,770	100.0%	100.0%	96,791	11.7%	100.0%

#### Table 6

## Balance sheet of the corporate sector

Source: NBRM calculations on the basis of data from the Central Registry of RM

The growth of the corporate sector is evident also through the analysis of the establishment of new enterprises on the domestic market<sup>46</sup>. During 2007, 12,889 new enterprises were established, which is 15.6% of the total number of enterprises at the end of 2007. Such a dynamics reflects the increased interest of the economic entities in starting a business,

<sup>&</sup>lt;sup>44</sup> In December 2006 legal changes were adopted whereby the existing rate of profit tax of 15% was replaced with 12% in 2007 and 10% in 2008, and tax exemption for the amount of the reinvested profit was envisaged. <sup>45</sup> Source: Central Registry of the Republic of Macedonia (CRM). The analysis was made on the basis of the

data from the annual statements for 2006.

<sup>&</sup>lt;sup>46</sup> Source: CRM.

which could point to improved business conditions<sup>47</sup> and increased entrepreneurship ambition, in circumstances of a stable macroeconomic environment. On the other hand, the number of enterprises which reported bankruptcy during 2007 was only 1.9% of the active enterprises at the end of the year. At the end of 2007, the number of depositors with blocked accounts<sup>48</sup> was 16,042, which represents 16.3% of the total number of depositors with registered accounts. Relative to the end of 2006, the number of depositors with blocked accounts went up by 28.7%.

The growth of the corporate sector was not accompanied by change in the structure of the balance sheet. Enterprises have a relatively simple structure of assets and liabilities. At the end of 2007, fixed and current assets had almost identical share and comprised almost half of the total funds of the corporate sector. At the same time, fixed and current assets caused about one half of the annual increment in the enterprises' total assets. Dominant within fixed assets were the tangible assets (with a share of 81.8%). The low presence of non-material investments (research and development, patents, licenses, trade marks, etc.) of only 2.8% in the total assets indicates a low level of interest or willingness of the enterprises to invest in assets which could significantly contribute to a qualitative improvement of their activities and, ultimately, the results from their operations. On the other hand, short-term claims (primarily claims on buyers) had the largest share of 53.8% in the structure of current assets.

The high share of capital and reserves in the total sources of funds is the main feature of the enterprises' balance sheets. At the end of 2007, enterprises financed around 50% of their activities with own funds. The high level of capitalization provides higher degree of financial security of the corporate sector. At the same time, this contributes to a relatively lower sensitivity of the corporate sector to external shocks which could reduce its payment ability and profitability and reflect indirectly by deteriorating its creditworthiness. This is especially important for the financial stability, as the deteriorated creditworthiness of the corporate sector, on its part, would imply an increased level of credit risk the financial institutions, primarily banks (as the most important domestic creditor of the enterprises) are exposed to. On the other hand the share of the total credits in the total sources of funds and in the total liabilities of the corporate sector is relatively low and at the end of 2007 it equaled 8.2%, i.e. 16.2%, respectively<sup>49</sup>. The relatively low level of indebtedness, leaves room for increasing the credit support for the corporate sector, on aggregate level. The increased credit support should contribute to the improvement of the structure of the sources of funds and implicitly enable better liquidity management by the companies.

At the end of 2007, the liquidity indicators of the corporate sector remained unchanged relatively to the previous year and still remain low. The current liquidity ratio is 1, while the quick ratio (acid test) is  $0.7^{50}$ . The low liquidity position of the corporate sector is in direct correlation with the low degree of funds utilization, expressed through turnover indicators,

<sup>&</sup>lt;sup>47</sup> In 2007, reforms were undertaken for creating more favorable institutional, regulatory and administrative framework aimed at improvement of the business conditions. Changes were made in the tax area, in the sense of reducing the tax burden and simplification of the tax procedures. Additionally, the implementation of the so-called regulatory guillotine significantly simplified the regulation and the procedure for starting a business. In 2007, by establishing the European Information and Innovation Centre, the Republic of Macedonia joined the Enterprise Europe Network, whose key instrument is the Competition and Innovation Program, which supports the activities of the small and medium enterprises. Joining this Program means access of the domestic enterprises to funds (Euro 2.17 billion are allocated under the Program), as well as making contacts with over 400,000 enterprises from EU and possibility to gather more information, possibility for transfer of know-how, technology and innovations and encouraging of the scientific, research and development component.

<sup>&</sup>lt;sup>48</sup> Although it includes all legal entities (from all sectors), the data is mostly related to the legal entities from the corporate sector.

<sup>&</sup>lt;sup>49</sup> The data are calculated on the basis of the aggregated annual statements of the enterprises, submitted to the Central Registry of RM.

<sup>&</sup>lt;sup>50</sup> Generally accepted satisfactory level of the indicators for current i.e. quick ratio is 2, i.e. 1, respectively.

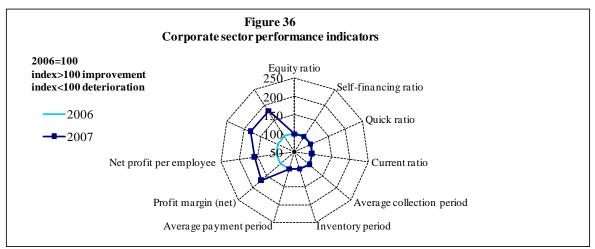
i.e. through the average inventory period, period of collection of claims and period of payment of liabilities of the corporate sector.

Ratio	2006	2007
Equity ratio: ( equity and reserves) / total liabilities	51.0%	49.5%
Self- financing ratio: (capital and reserves+ long-term provisions) / (fixed assets+inventories)	78.2%	75.7%
Quick ratio (acid test)	0.7	0.7
Current ratio	1.0	1.0
Average collection period	223	214
Average inventory period	114	115
Average payment period	325	324
Profit margin (net)	1.3%	2.2%
Net profit per employee (in 000 denars)	32.6	52.0
Return on equity (ROAE)	1.0%	1.8%
Return on assets (ROAA)	0.5%	0.9%

## Table 7

Indicators of the operations of the corporate sector<sup>51</sup>

The degree of utilization of companies' funds is on a low level and remained almost unchanged relative to the preceding year. Thus, at the end of 2007, the average period of collection of claims was around seven months, of inventories - around four months, and the average period of settlement of the liabilities was almost one year. Such indicators come as a result of: the low level of liquidity of the corporate sector; the low level of using credit support; the lack of interest in using alternative sources of financing (e.g. debt securities) and the still absent financial discipline of the domestic economic agents.



Source: NBRM calculations on the basis of data from the Central Registry of RM.

Despite the almost unchanged level of all previously analyzed segments of the operations, in 2007 the profitability of the corporate sector registered an improvement. However, these indicators of success of the enterprises' operations are still on a low level. Thus, at the end of 2007, the indicators of the return on assets (ROA) and the return on equity and reserves (ROE) equaled 0.9% and 1.8% respectively, which is an increase of 0.4 and 0.8 percentage points relative to 2006. The decomposition<sup>52</sup> of ROE points to the conclusion that the improved

<sup>52</sup> ROAE indicator may be presented as follows:

$$ROAE = \frac{P}{CR} * \frac{S}{S} * \frac{A}{A} = \frac{P}{S} * \frac{S}{S} * \frac{A}{CR} = PM * OA * L$$

<sup>&</sup>lt;sup>51</sup> Source: Central Registry of RM and NBRM calculations.

where P=profit, CR=average capital and reserves, S=sale (income from sale), A=average assets, PM=profit margin, OA=assets turnover and L=leverage or debt.

profitability of the corporate sector was almost entirely a result of the improved profitability margin, which on its part was mainly a result of the increased profit shown by the enterprises. In 2007, the profit margin went up by 65.7%. On the other hand, the increase in the level of indebtedness and the turnover of funds was minimal and equaled 3% and 2.5%, respectively.

The unchanged and relatively low level of all other indicators of the enterprises' operations points to the conclusion that the improved profitability is very little or not at all a result of the qualitative improvements in the enterprises' operations. In that respect, one may conclude that the higher profit shown by the enterprises is mostly a result of the changes in the tax area, which acted towards reducing the level of tax evasion of the corporate sector. On the other hand, further improvement of the enterprises' profitability is possible only by their improvement in financial terms and operationally, i.e. by strengthening their competitiveness and successfulness, which would have a positive influence on the overall economy.

#### Analysis of the performances of the corporate sector by individual types of activities

The comparative analysis of the performance indicators for the enterprises' engaged in different activities indicates certain differences in the enterprises' performances, both among the individual activities and in comparison with the corporate sector as a whole, which to a certain extent, could arise from the different nature of their activities.

At the end of 2007, enterprises of almost all types of activities registered certain decline in the share of the capital and reserves in the total sources of funds. In most of the activities this share was almost equal with the level typical for the corporate sector as a whole (around 50%). The highest degree of financing of the total activities with own funds was registered in the enterprises engaged in "agriculture, hunting and forestry". On the other hand, the enterprises engaged in "construction" and "wholesale and retail trade" whose level of financing the activities with capital and reserves is below average (in comparison with the corporate sector as a whole), registered an increase in its level in 2007.

The liquidity indicators of the enterprises of almost all activities are on a low level and at the end of 2007 they did not register any significant changes relative to the preceding year. Certain improvement in the liquidity was noticed only in the "real estate activities". The lowest level of liquidity was registered in the enterprises engaged in "agriculture, hunting and forestry", and "fishing", where the liquidity indicators are much lower, both relative to the average level in the corporate sector and relative to the generally accepted satisfactory level. The low level of liquidity is, to a large extent, a result of the nature of the business activities of the enterprises engaged in these activities. The relatively more satisfactory level of the liquidity indicators was registered in "transport, storage and communication", despite their decline in comparison with 2006.

-	-				-				-											
Ratio	hunti	ulture, ng and estry	Fisl	ing		ng and rying		essing 1stry		y, gas and supply		ls and ırants	Const	ruction	Wholesale	and retail	•	t, storage nunication	Real e	state
	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007
Equity ratio: ( equity and reserves) / total liabilities	85.9%	83.8%	57.4%	52.1%	55.1%	52.4%	45.8%	44.9%	58.9%	55.0%	52.8%	51.1%	26.7%	31.9%	33.2%	33.7%	63.0%	59.4%	58.5%	57.5%
Self- financing ratio: (capital and reserves+ long-term provisions) / (fixed assets+inventories)	91.3%	89.7%	66.1%	61.7%	73.4%	69.3%	69.2%	67.1%	93.2%	83.1%	66.8%	65.1%	59.5%	62.4%	58.1%	58.6%	112.2%	105.5%	81.4%	87.7%
Ouick ratio (acid test)	0.4	0.4	0.3	0.3	0.6	0.5	0.6	0.6	0.9	0.7	0.4	0.4	0.7	0.7	0.6	0.6	1.2	1.1	0.7	0.8
Current ratio	0.7	0.7	0.8	0.7	0.8	0.7	1.0	1.0	1.3	1.1	0.6	0.6	1.1	1.1	1.0	1.0	1.3	1.2	0.8	0.9
Average collection period	229	238	n.a.	n.a.	232	186	149	145	293	250	373	411	585	509	214	221	158	174	805	1,103
Inventory period	178	203	n.a.	n.a.	104	90	109	105	29	25	242	230	242	269	158	169	25	25	257	238
Average payment period	506	578	n.a.	n.a.	361	310	254	242	151	162	1,321	1,369	762	679	369	378	279	288	1,423	1,755
Profit margin (net)	-1.7%	0.5%	n.a.	n.a.	-1.4%	1.6%	0.8%	0.7%	-0.2%	-0.1%	-14.4%	0.8%	4.0%	8.1%	2.3%	4.5%	1.8%	-1.1%	7.8%	29.1%
Return on equity (ROAE)	-0.1%	0.04%	n.a.	n.a.	-0.9%	1.2%	1.0%	1.0%	-0.1%	-0.1%	-2.9%	0.2%	4.3%	6.8%	4.1%	7.3%	1.1%	-0.7%	0.8%	3.0%
Return on assets (ROAA)	-0.1%	0.03%	n.a.	n.a.	-0.5%	0.6%	0.5%	0.4%	-0.1%	-0.1%	-1.5%	0.1%	1.2%	2.2%	1.4%	2.5%	0.7%	-0.4%	0.5%	1.7%
* Source: Central Securities Depositary and NBR	M calcul	lations. Ca	lculations a	re on the h	asis of the a	nnual state	ments for	r 2007.												

## Table 8 Indicators of the operations of the corporate sector by individual activities\*

The unsatisfactory level of the indicators of the turnover of funds and liabilities was present in the enterprises of all activities, except " electricity, gas, steam and hot water supply" and "transport, storage and communication" where somewhat shorter periods of collection of claims and settlement of liabilities and significantly shorter inventory periods were registered, which is directly related to the nature of the business activities of the enterprises engaged in these activities. At the same time, these indicators did not register a significant improvement relative to the previous year. Relatively longer periods of collection of claims and

settlement of liabilities are typical for the enterprises engaged in "hotels and restaurants" and "real estate activities", where at the end of 2007 significant deterioration was registered.

Especially positive profitability indicators were present with the enterprises engaged in "construction", "wholesale and retail trade" and "real estate activities", whose profit margin and ROA and ROE indicators at the end of 2007 were above the average for the whole corporate sector. In general, and on the level of the overall corporate sector, from the viewpoint of making profit, 2007 was a rather successful year for the enterprises of almost all types of activities (improved profitability was registered in the enterprises engaged in all activities, except "transport, storage and communication", where a deterioration was registered and "processing industry" where profitability indicators were almost unchanged).

## 2.2. Debt of the corporate sector

The indebtedness of the corporate sector continued to grow in 2007. Non-residents are still the largest creditor of the corporate sector. As of December 31, 2007, the total debt of the corporate sector stood at Denar 161,771 million which was an annual increase of Denar 35,423 million, or 28%. Enterprises' total liabilities to non-residents retained the dominant share in the structure of debt of the corporate sector (as of December 31, 2007, this share equaled 50.4%). However, compared with the other sources of financing, external debt grew at a lower rate (24.6%), which led to a decline in its structural share in the total debt of the corporate sector by 1.4 percentage points.

Banks were the second largest creditor of the corporate sector, with a share of 46.8% in the total debt of the enterprises. In 2007, enterprises' debt to the domestic banks, on the basis of credits, interests and other claims, went up by Denar 17,174 million (or 29.3%), which was the largest contribution to the total increase in the debt of the corporate sector (48.5% of the increment of the total debt of the corporate sector is increment of the debt to domestic banks).

	31.12.2006			2007	Annual change						
Type of debt	Amount (in millions of Denars)	Structure (in %)	Amount (in millions of Denars)	Structure (in %)	Amount (in millions of Denars)	In %	In the structure (in p.p.)	Share in the change			
Banks	58,603	46.4%	75,777	46.8%	17,174	29.3%	0.5	48.5%			
Leasing	2,276	1.8%	4,401	2.7%	2,125	93.4%	0.9	6.0%			
External debt	65,469	51.8%	81,593	50.4%	16,124	24.6%	-1.4	45.5%			
Total:	126,348	100.0%	161,771	100.0%	35,423	28.0%		100.0%			

# Table 9 Total debt of the corporate sector<sup>53</sup>

In spite of the highest relative increase of 93.4% in the value of the active leasing agreements, at the end of 2007, the share of this source of financing in the total corporate debt was only 2.7% (increase of 0.9 percentage points relative to the end of 2006).

## Table 10 Currency structure of the corporate debt<sup>54</sup>

	31.12.2	006	31.12.	2007	Annual change						
Type of debt	Amount (in millions of Denars)	Structure (in %)	Amount (in millions of Denars)	Structure (in %)	Amount (in millions of Denars)	In %	In the structure (in p.p.)	Share in the change			
Denar debt	27,906	22.5%	32,613	20.7%	4,707	16.9%	-1.8	14.1%			
Foreign currency debt	86,801	70.0%	109,085	69.3%	22,284	25.7%	-0.6	66.9%			
Denar debt with FX clause	9,365	7.5%	15,672	10.0%	6,307	67.4%	2.4	18.9%			
Total:	124,072	100.0%	157,370	100.0%	33,299	26.8%		100.0%			

<sup>&</sup>lt;sup>53</sup> For the needs of this analysis, the total debt of the corporate sector encompasses the debt on the basis of credits, interests and other liabilities to domestic banks, the total borrowings from abroad (from non-residents) and debt on the basis of active leasing contracts.

<sup>&</sup>lt;sup>54</sup> The calculations do not include debt on the basis of leasing, as there are no data on its currency structure.

**Debt with currency component (in foreign exchange and in Denars with FX clause) prevails in the currency structure of the total corporate debt with a share of around 80%.** During 2007, this debt registered an annual increase of Denar 28,592 million or 29.7%, which caused 85.9% of the increase in the total debt of the enterprises. The high share of the debt with currency component implies an increased exposure of the corporate sector to the foreign exchange risk. The negative effects from the materialization of this risk would be rather serious for the enterprises, whose foreign exchange liabilities exceed the foreign exchange claims<sup>55</sup>.

	31.12.	2006	31.12.	2007	Annual change						
Type of debt	Amount (in millions of Denars)	Structure (in %)	Amount (in millions of Denars)	Structure (in %)	Amount (in millions of Denars)	In %	In the structure (in p.p.)	Share in the change			
Short-term loans	55,915	45.2%	78,521	49.8%	22,606	40.4%	4.7	67.0%			
Long-term loans	58,339	47.1%	71,046	45.1%	12,707	21.8%	-2.0	37.6%			
Other loans (past-due and nonperforming)	9,501	7.7%	7,949	5.0%	-1,552	-16.3%	-2.6	-4.6%			
Total:	123,755	100.0%	157,517	100.0%	33,762	27.3%		100.0%			

## Maturity structure of the debt of the corporate sector<sup>56</sup>

Table 11

Short-term and long-term credits have almost the same share in the maturity structure of the total debt of the corporate sector. At the end of 2007, the share of short-term credits was 49.8% of the total indebtedness, which is an increase of 4.6 percentage points relative to the end of 2006. At the same time, short-term credits show the highest growth rate of 40.4%. On the other hand, long-term credits went up by 21.8% and as of December 31, 2007 they represented 45.1% of the total debt of the corporate sector. The relatively high share of the debt with long-term character increases the sensitivity of the corporate sector to changes in interest rates (exposure to interest rate risk). The exposure to the interest rate risk is especially emphasized in the cases when most of the credits from the domestic banks are extended at interest rates that may vary depending on the autonomous decision of the creditor (around half of the corporate sector to the non-residents was characterized with variable interest rates, contingent upon the movements of the interest rates on the foreign markets. In circumstances of growing interest rates on the international markets, this type of interest rate clauses implies increasing of the expenses for debt servicing, which could have an adverse effect on enterprises' creditworthiness.

<sup>&</sup>lt;sup>55</sup> As of December 31, 2007, within the total debt of the corporate sector to domestic banks, the share of the credits with currency component extended to enterprises which are with higher certainty considered to have their foreign exchange risk covered (net-exporters and borrowers whose product prices depend on the movement of the prices on the world markets) in the total credits with currency component, extended to this sector, equaled 21.9%.

<sup>&</sup>lt;sup>56</sup> Total debt includes: borrowings from the banking sector on the basis of credits and the total debt to non-residents.

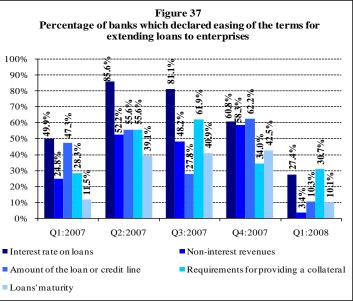
<sup>&</sup>lt;sup>57</sup> According to the data obtained from three banks, whose market share in the total credits exceeds 70%.

<sup>&</sup>lt;sup>58</sup> The calculation was made only on the basis of the external liabilities of the corporate sector on the basis of principal.

#### 2.2.1. Debt to the banking sector

In 2007, the debt of the sector<sup>59</sup> corporate to the domestic banks continued to grow. Thus, as of December 31, 2007, the total enterprises debt to the banking sector equaled Denar 75,777 million, which is an annual increase of Denar 17,174 million or 29.3%. The largest portion of the debt of the corporate sector is on the basis of credits (97.8%), while the debt on the basis of interest is 0.6% of the total debt of the corporate sector $^{60}$ .

The main factors which contributed to the increased lending to enterprises were: the eased lending terms, increased



Source: Survey on the banks' credit activity.

credit demand, the need of the corporate sector for increased investments in fixed assets, reserves and working capital, as well as the increased competition among banks for gaining a larger portion of this segment of the market. With respect to the eased terms of lending to enterprises, in 2007 most of the banks reduced<sup>61</sup> the interest rate on credits. However, in accordance with the results of the Surveys on the banks' credit activity in the last quarter of 2007 and in the first quarter of 2008, banks expect unchanged terms of lending to the corporate sector (both to large and to small and medium enterprises). Thus, in accordance with the last Survey on the credit activity (in the first quarter of 2008) there is a significant decline in the number of banks which declared to have eased the terms of lending to the corporate sector. However, banks still expect an increase in the demand for credits by this sector.

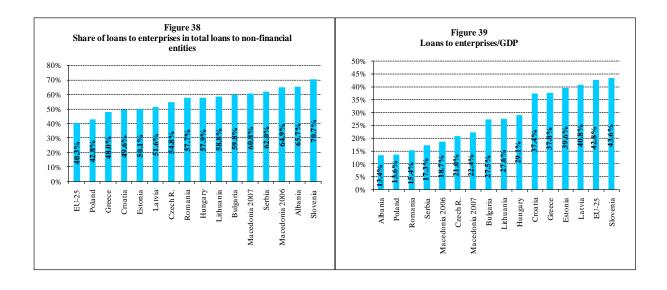
Banks' credit support for the corporate sector is on a relatively lower level compared with the other European countries<sup>62</sup>. Financial intermediation in the Republic of Macedonia, as a ratio of total corporate credits to GDP equaled 22.4% (18.7% for 2006). For comparison, the average level of financial intermediation measured according to this indicator, for the countries of the European Union (EU-25) equaled 42.8% at the end of 2006.

<sup>&</sup>lt;sup>59</sup> The debt of the corporate sector to the banking sector includes the debt on the basis of credits, interests and other claims.

<sup>&</sup>lt;sup>60</sup> The remaining 1.6% of the debt of the corporate sector pertain to the indebtedness based on other claims (fees, charges, etc.).

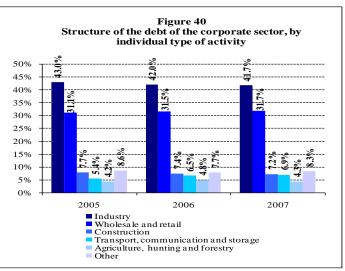
<sup>&</sup>lt;sup>61</sup> In accordance with the results of the Surveys on banks' credit activity in the four quarters of 2007.

<sup>&</sup>lt;sup>62</sup> Source: EU Banking Structures, ECB, October 2007), reports of the national central banks on the banking sector and financial stability. The data pertain to 2006 (except for the Republic of Macedonia).



The share of the credits to the corporate sector in the total credits to the non-financial entities is relatively high relative to the other European countries<sup>63</sup>. Thus, this share in the Republic of Macedonia equaled 60.8% (64.9% for 2006) and it is lower only compared with Albania, Serbia and Slovenia. On the other hand, at the end of 2006, the ratio of the corporate credits to the total credits to non-financial entities equaled 40.3% in the EU Member States (EU-25). The relatively higher share of the corporate credits in the total credits to non-financial entities is mostly explained with the restricted use of alternative ways of financing the activities by the companies in the Republic of Macedonia. However, the emphasized orientation of the banks toward lending to households in the past few years, led to a decline in the share of the credit exposure to the corporate sector in the banks' total credit exposure to non-financial entities (during 2007, this share dropped by 4.1 percentage points).

The structure of the debt of the corporate sector by individual type of activity is relatively stable. The highest indebtedness was registered with the clients from "industry", which covers 41.7% of the total indebtedness of the corporate sector. During 2007, the debt of the enterprises engaged in "industry" registered the highest growth in the indebtedness in absolute terms (by Denar 6,936 million, or 28.2%), while the largest growth in percent was registered in the indebtedness of the enterprises engaged in "other activities" (increase of 38.4% or Denar 1,735 million)<sup>64</sup>.



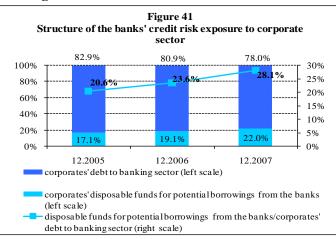
Note: The total corporates' debt by individual type of activity includes the debt on the basis of credits, interest and other claims.

<sup>&</sup>lt;sup>63</sup> Source: EU Banking Structures, ECB, October 2007), reports of the national central banks on the banking sector and financial stability. The data pertain to 2006 (except for the Republic of Macedonia).

<sup>&</sup>lt;sup>64</sup> More than 73% of the increase in the debt of "other activities" was concentrated in the "real estate, renting and business activities".

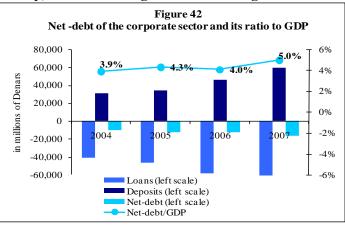
In the past period, significant increase in the off-balance sheet exposure of the banking system to the corporate sector was registered. In 2007, off-balance sheet claims of the

banks from the corporate sector went up by 54.3% (or by Denar 7,507 million), so that their share in the total exposure of the banking sector to the enterprises reached the level of 22%. Thus, as of December 31, 2007, the potential increase of the debt of corporate sector equaled 28.1% of the total enterprises' debt to the banking sector. Almost 90% of the potential to clients debt pertains from "industry", "wholesale and retail trade" and "construction" (as a result of the used guarantees and letters of credit).



The corporate sector is, traditionally, a net-debtor against the banking sector. At the

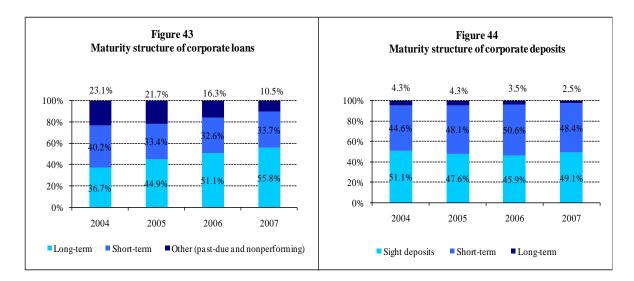
end of 2007, the net debt of the corporate sector, calculated as a difference between the total liabilities (credits) and total claims (deposits) of the corporate sector on the banks stood at Denar 16,809 million, which is an increase of Denar 4,228 million, or 33.6% relative to 2006. At the end of 2007, the ratio of the net debt of the corporate sector to the GDP was 5%, which is an increase of 1 percentage point relative to end-2006. The comparison of the indicator with the indicators of the other countries<sup>65</sup>



leads to the conclusion that the net credit support for the corporate sector is on an exceptionally low level and there is room for its further increase. The faster growth of the credits relative to that of the deposits during 2007, caused a decline in the level of coverage of the credits with deposits of the corporate sector by 0.5 percentage points, relative to the end of 2006. At the end of 2007, the ratio of the deposits to the credits of the corporate sector was 77.9%. Despite the decline in the level of this indicator, the comparison with other countries<sup>66</sup> leads to the conclusion that the collected deposit potential from companies is a significant source of further increasing of the credit support from the banks.

<sup>&</sup>lt;sup>65</sup> For comparison, at the end of 2006, the share of the net lending to the corporate sector in the GDP by individual country equaled as follows: 27.5% in Slovenia, 20.3% in Hungary, 20% in Estonia.

<sup>&</sup>lt;sup>66</sup> For comparison, at the end of 2006, this indicator equaled 36.9% in Slovenia, 30.2% in Hungary and 49.4% in Estonia.



The corporate sector registers maturity mismatch between credits and deposits (longer maturity of their liabilities on the basis of credits and shorter maturity of their claims on the basis of deposits and transaction accounts), which is a source of potential liquidity risk for the banks. However, companies' deposits, although with short contractual maturity, in line with banks' recommendations, represent a source for the banks, which on aggregate level, is characterized with relatively high level of stability.

## **III. Financial sector**

**1.** Structure and degree of concentration in the financial system of the Republic of Macedonia

In 2007, the financial system of the Republic of Macedonia registered faster changes, not only regarding the size, but in the qualitative features, as well. However, its structure remained relatively simple with emphasized dominance of the banks. The enrichment of the variety of financial institutions and the higher presence of foreign capital in the ownership structure of particular institutions, are the starting point for increased competitiveness, services' quality, improved intersection correlation and further deepening of the financial intermediation. The relatively small degree of integration of the financial system of the Republic of Macedonia in the global financial flows, the prevailing orientation to operations with domestic entities and absence of complex structural products in the domestic financial institutions activities, were the main factors that contributed the financial system of the Republic of Macedonia not to experience negative consequences of higher importance as a result of apparent turbulences on the international financial markets in 2007. However, the movements in the world economy in the second half of 2007 and in the beginning of 2008 had negative influence on the movement of certain domestic macroeconomic variables, which, in conditions of enhanced competitiveness, tightened the conditions in the business environment of particular segments of the financial system. This, in combination with the intensively enhanced activities, imposes challenges to certain institutions for finding alternatives for possible different market positioning and appropriate improvement of the processes and risk identification and management systems.

#### Table 12

Structure of the total assets of the financial s	system of the Republic of Macedonia
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Type of financial institutions	Total as millions o	Structur	re (in %)	Number of institutions		
	2006	2007	2006	2007	2006	2007
Depository financial institutions	176,444	226,546	90.10%	91.67%	31	30
Banks	174,117	223,659	88.91%	90.50%	19	18
Saving houses	2,327	2,887	1.19%	1.17%	12	12
Nondepository financial institutions	19,396	20,593	9.90%	8.33%	27	45
Insurance companies	14,608	11,075	7.46%	4.48%	10	12
Leasing companies	2,735	4,980	1.40%	2.02%	2	4
Pension funds	1,242	3,124	0.63%	1.26%	2	2
Pension fund management companies	196	202	0.10%	0.08%	2	2
Brokerage houses	615	1,088	0.31%	0.44%	11	16
Investment funds	0	66	0.00%	0.03%	0	3
Investment fund management companies	0	15	0.00%	0.01%	0	2
Private equity management companies	0	43	0.00%	0.02%	0	4
Total	195,840	247,139	100.00%	100.00%	58	75

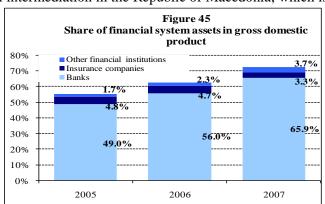
At the end of 2007, the total assets of the financial system amounted Denar 247,139 million, which is an increase of Denar 51,299 million, or 26.2% compared to 2006. The banks, as dominant segment in the financial system encompass 90.5% of the total assets. For a comparison, in the EU countries, the banks participate with about 70%, on average, in the total funds in the financial system. The insurance companies remained to be the second important segment in the financial system, with a share of 4.5%, despite the decrease in their assets of Denar 3,533 million, annually.

The rise in the financial system's total assets in 2007 resulted in significant increase in the relative significance of the financial system for the total economic activity of the country. Namely, at the end of 2007, the total assets of the financial system equaled 72.9% relative to the gross domestic product<sup>67</sup>, which is an increase of 9.9 percentage points compared to 2006. The

<sup>&</sup>lt;sup>67</sup> Estimated data on the GDP for 2007 is used.

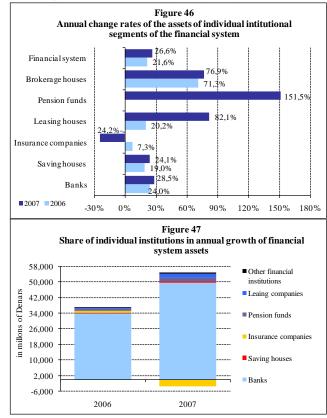
banks played the largest role in the financial intermediation in the Republic of Macedonia, which is

a reflection of their dominant position in the total assets of the financial system. The inflow of foreign direct investments in the insurance sector and in the sector "leasing", the larger interest for stock exchange trading and emergence of the first investment funds, will contribute to future more dynamic development of the non-deposit financial institutions, which should reflect in increase in their role in the process of financial intermediation and in the entire economy.



The expectations for increasing the importance of the non-deposit financial institutions in the financial system structure are proved also through higher growth rates of

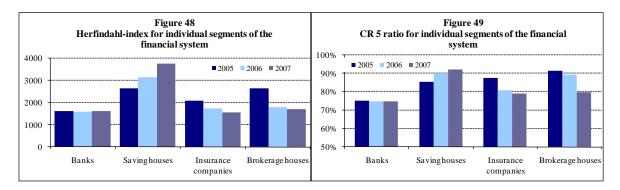
their assets. Namely, in 2007 as fastgrowing segments of the financial system, pension funds, brokerage houses and leasing companies are promoted. The assets of these segments registered a significantly higher annual growth rates than the growth rate of the total assets of the financial system. The fact that it is one of the relatively new segments of the financial system, which are in their developing stage, is one of the reasons for the high growth rates. Another reason is the establishment of new institutions mainly by foreign founders, especially in the leasing companies and brokerage houses segment. Further more, the increase in the role of the non-deposit financial institutions is a reflection of the capital market development, i.e. bigger interest of the public for stock exchange trading, in conditions of favorable price movements on the stock exchange in most of 2007. It influences positively on the value of the pension funds' investments in financial instruments traded on the stock exchange,



simultaneously enabling widening of both clients' base and possibility for increasing the activities of the brokerage houses. The rise in the non-deposit financial institutions' assets would have been more apparent, if the total assets of the insurance companies did not register significant decrease in 2007. Opposite to this, the banks, despite the relatively lower annual growth rate of their assets, still have the largest contribution in the total absolute increase in the assets in the financial system of 96.6%. This once more proves that the financial system of the Republic of Macedonia belongs to the group of the so-called bank-based systems with the stability of the banking system playing the most important role for the stability of the entire financial system.

In 2007, different movement of the concentration of the assets with individual institutional segments in the financial system is registered. Namely, on annual basis, the

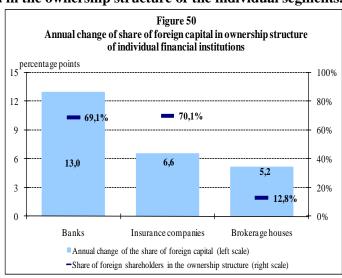
concentration measured through the Herfindahl index<sup>68</sup> and the CR5<sup>69</sup> indicator registers a decrease with the insurance companies and the brokerage houses, in case of banks it preserved almost the same level as in 2006, while with the savings houses, a segment registering the highest concentration level, the indicators for the concentration level registers a significant increase.



The emergence of new institutions, the entering of the strategic foreign investors and the increase in the volume of the activities were the main reasons for lowering the concentration in the non-deposit financial institutions segments, although in certain domains, it remains high (life insurance, reinsurance, savings houses, etc.).

In 2007, the most significant structural changes in the financial system of the Republic of Macedonia were registered in the ownership structure of the individual segments.

The taking over of several financial institutions by the strategic investors and the establishment of new financial institutions by foreign entities, enabled the foreign capital to increase its role and significance in the ownership structure of the individual institutions within the financial system. At the end of 2007, the foreign capital takes 69.1% and 70.1% in the banks and insurance companies' ownership structure, respectively. Compared to the end of 2006, the largest increase in the share of the foreign capital is registered with the banks' ownership structure. The cross ownership among individual



financial institutions in the Republic of Macedonia is on a relatively low level, except with the ownership structure of the company for managing pension funds and brokerage houses, where the banks' ownership shares dominate.

<sup>68</sup> The Herfindahl index is calculated according to the formula  $HI = \sum_{i=1}^{n} (S)_{j}^{2}$ , where S is the share of each

bank in the total amount of the analyzed category (for example: total assets, total deposits, etc.), and n is the total number of banks in the system. When the index varies in the interval of 1,000 to 1,800 units, the concentration level in the banking system is deemed acceptable.

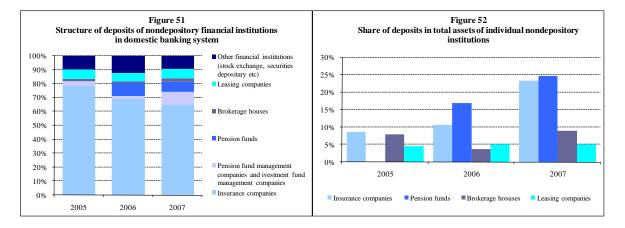
<sup>&</sup>lt;sup>69</sup> The CP5 indicator represents the share of the assets (i.e. the analyzed category) of the five financial institutions with the largest assets (i.e. the analyzed category) in the total assets (i.e. the analyzed category) of the suitable institutional segment the analyzed institutions belong to.

Owners	Banks	Insurance companies	Brokerage houses	Leasing companies	Pension fund management companies	Investment fund management companies
Domestic shareholders	30,9%	29,9%	87,2%	3,9%	49,0%	19,9%
Nonfinancial legal enteties	13,2%	5,8%	23,5%	3,9%	0,0%	19,9%
Banks	2,4%	3,2%	30,2%	0,0%	49,0%	0,0%
Insurance companiees	0,3%	0,6%	1,0%	0,0%	0,0%	0,0%
Other financial institutions	0,5%	0,1%	2,0%	0,0%	0,0%	0,0%
Fizi~ki lica	7,9%	11,6%	30,5%	0,0%	0,0%	0,0%
Public sector	6,6%	8,6%	0,0%	0,0%	0,0%	0,0%
Foreign shareholders	69,1%	70,1%	12,8%	96,1%	51,0%	80,1%
Natural persons	3,2%	0,5%	6,1%	0,0%	0,0%	30,1%
Legal enteties	65,9%	69,6%	6,7%	96,1%	51,0%	50,0%
Total	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

Table 13Ownership structure of individual financial institutions

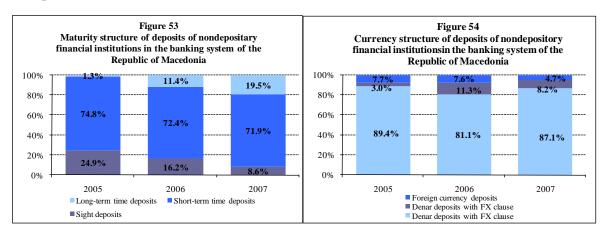
The relatively low level of intersector integration and the limited cross ownership among the financial institutions remains to be the basic feature of the financial system of the **Republic of Macedonia.** It creates simple market structure, without complex financial groups, the services of which would simultaneously cover all segments of the financial system, thus resulting in lower degree of financial intermediation than the potential one. On the other hand, the low level of integration among the different segments of the financial system reduces the possibility for risk spill over from one institutional segment to another.

The business correlation between banks and non-deposit financial institutions mainly originated from the assets depositing by the non-deposit financial institutions in the banks. At the end of 2007, the total deposits deposited by the non-deposit financial institutions in the banking system of the Republic of Macedonia amounted to Denar 3,987 million, which is 2.3% of the total deposit base at the level of the banking system. On the other hand, from the aspect of the non-deposit financial institutions, the significance of these deposits is far larger, since they take 18.6% of the total assets. In comparison with the end of 2006, these deposits increased by Denar 1,735 million, i.e. by 77.1%, with the largest contribution in the total rise of about 60%, accounting for the deposits of the insurance companies.



In the last two years, the share of the insurance companies' deposits (as non-deposit financial institutions) in the total deposits of the non-deposit financial institutions with banks registers slight decrease, for the account of the increase in the share of the deposits of the other non-deposit financial institutions. This is due to their more dynamic growth compared to the rise in the insurance sector, the propensity to invest funds in the country and the relatively restricted investment alternatives on the domestic financial markets. However, despite the downward trend, the deposits of the insurance companies take high 65% of the total deposits of the relative importance of the bank deposits in the assets of the individual non-deposit financial institutions in the domestic banking system. In 2007, the upward trend of the relative importance of the bank deposits in the assets of the individual non-deposit financial institutions continued. The largest presence of the bank deposits in the total assets structure of

individual financial institutions is evident with both pension funds (a share of 24.8%) and insurance companies (share of 23.4%).



In 2007, the trend of improving the maturity structure of the funds deposited by the non-deposit financial institutions in the banking system continued. The share of the long-term time deposits in the maturity structure of the deposits of the non-deposit financial institutions went up by 8.1 percentage point, annually. In 2007, the currency structure of the bank deposits of the non-deposit financial institutions with the banks suffered no significant changes. The Denar deposits retained the dominant position, with a share of 87.1% in the total deposits of the non-deposit financial institutions. The currency structure of the bank deposits of the non-deposit financial institutions. The currency structure of the bank deposits of the non-deposit financial institutions faced no significant changes, with the Denar deposits preserving the dominant position.

## **2. Domestic financial markets**

## 2.1. Money and Short-term Securities Market

In 2007, as in the several previous years, the significance of the Money Market in the Republic of Macedonia for the financial system remained moderate. Namely, the small supply of instruments, the low volume of the secondary trading, the excess liquidity in the banking system and the small-scale integration in the world financial flows, and thus limited sensitivity to the shocks on the international money markets, remained to be the main features of the domestic Money Market in 2007. These characteristics of the Money Market in the Republic of Macedonia conditioned its limited effect on price setting and financing terms, as well as its insignificant role in allocating excess liquidity of different sectors in the domestic economy.

The largest issuers of the short-term securities in the Republic of Macedonia were the NBRM (by holding auctions of CB bills intended for banks, as a monetary policy instrument) and the Ministry of Finance (by holding Treasury bills auctions). In 2007, the NBRM made no change in the monetary instruments layout. Total of Denar 11,539 million were sterilized through CB bills<sup>70</sup>, in 2007. The total amount of Treasury bills<sup>71</sup> issued in 2007 amounted to Denar 5,334 million, i.e. 20.5% more compared to 2006. From the aspect of maturity, the three-month Treasury bills have dominant share of 86.2% in the total amount of Treasury bills, i.e. 79.4% account for the three-month Treasury bills for monetary purposes, the issuance of which in the second half of 2007 registered continuous decrease, and since the beginning of March 2008, its use as a monetary instrument ceased. The secondary trading with Treasury bills is performed through the over the

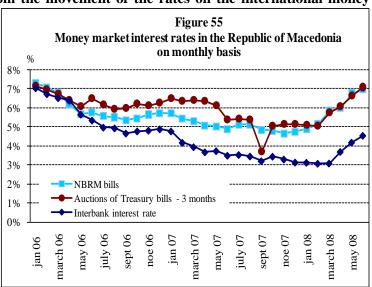
<sup>&</sup>lt;sup>70</sup> The CB bills are monetary instrument used for sterilizing the effects from the NBRM transactions, thus indirectly influencing on the banking system liquidity regulation.

<sup>&</sup>lt;sup>71</sup> The Treasury bills are issued with a maturity of three, six and twelve months.

counter market, which is characterized by relatively small liquidity. The total turnover with Treasury bills on the market totaled Denar 507 million, and 85.8% of which are realized with Treasury bills with residual maturity of one to three months. Also, in 2007 the Money Market remained unattractive for the corporate sector's entities, which did not satisfy their needs for short-term financial assets by issuing short-term securities at all.

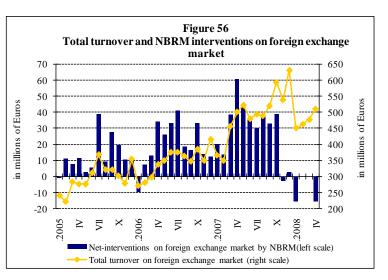
### The trend of moderate decrease in the interest rates on the domestic money markets and their divergent movement from the movement of the rates on the international money

markets, continued in 2007, as well. Namely, despite the fact that the reference rates on the international financial markets (EURIBOR and LIBOR) mainly registered increase in 2007, the interest rates registered on the auctions of the central bank bills and the Treasury bills issued by the Ministry of Finance, registered, mainly, a downward trend. This indicates that the movement of the interest rates on the domestic money market was mainly under the influence of the domestic factors, primarily of the structural excess liquidity in the



banking system, which conditioned the banks not to experience negative consequences from the crises on the international financial markets. The interest rate reduction was registered also with the interest rates on the interbank deposit market. In 2007, the turnover on the interbank deposit market equaled Denar 20,549 million and in comparison with 2006, it went up by Denar 10,902 million, i.e. 113%. The increase in the turnover on the interbank deposits market resulted in higher significance for the economic activity, which is illustrated through the rise in the share of the turnover in the domestic product from 3.1% in 2006 to 6.1% in 2007. In 2008, the interest rates on the domestic markets began to increase. This rise in the interest rates on the CB bills has started at the end of 2007. Additionally, the changes in the manner in which the CB bills auctions are held in the beginning of 2008, influenced on the change in the trend of movement of the short-term interest rates. However, the interest rate on the CB bills, indicating that the banks' primary motive when purchase CB bills is the fact that they, as a non-risk-bearing instrument, enable realization of certain and relatively high yield.

In 2007, the trend of increase in the turnover and net purchase of foreign exchange by the NBRM on the foreign exchange market continued, thus facilitating the conditions for applying the strategy of targeting the Denar nominal foreign exchange rate to the Euro. The total turnover on the foreign exchange market in 2007 amounted to Euro 5,995 million, and in comparison with 2006 it augmented by Euro 1,793 million, i.e. 43.1%. Also, in 2007 the share



of the turnover on the foreign exchange market in gross domestic product equals 107.4%, which is rise of 25.5 percentage points compared to 2006. This share shows that the foreign exchange market is the most important financial markets' segment for the entire economy. The favorable movements of some of the balance of payments categories (private transfers, inflow of foreign direct and portfolio investments) resulted in a net purchase by the NBRM in the amount of Euro 354 million in 2007 and thus an increase of Euro 113 million compared to 2006. However, in the last two months of 2007 and in the beginning of 2008, a downward trend of the turnover, enhanced pressure on the foreign exchange market and a need of NBRM interventions towards a net sale of foreign exchange was registered. The main reasons for these movements were the augmented demand for foreign currency, as a result of the upward movements of the prices of certain products for which the domestic economy is highly import depended and the decrease in the foreign exchange market shows signs of stabilization.

The maintenance of de facto fixed nominal foreign exchange rate of the Denar relative to the Euro denotes that the changes in the inter-currency relations between the Euro and other currency are made in direct dependence on the movements of the value of the Euro on the international foreign exchange markets. The trend of appreciation of the Euro against the US Dollar and the Swiss Frank, in the largest part of 2007, caused increase in the value of the Denar against these currencies.

#### 2.2. Capital market

The movements on the domestic capital market, evidenced in the previous several years were present also in 2007. Namely, in 2007 significant increase in the turnover on the stock exchange, higher interest of the public for developments on the stock exchange, rise in the activities of the brokerage houses and establishment of the first investment funds as resident portfolio-investors were registered. Yet, the capital market in the Republic of Macedonia is characterized by its undeveloped primary market, limited liquidity of the investors and their decisions on the economic or non-economic developments on regional and international plan. Additionally, influenced by variety of external and internal factors, the end of 2007 and the beginning of 2008 were marked by downward trend of the turnover and significant price correction on the capital market. These developments, together with the higher interest of the public for investment in securities impose a need for increase in the level of education about the risks characteristic for the investment in securities.

In 2007, the most active issuer of the long-term securities, as well as in the previous years, was the Ministry of Finance. In 2007, the Ministry of Finance, on the behalf of the Republic of Macedonia issued four continuous government bonds, three of which in the amount of Denar 699 million were with a contractual maturity of two years, and one bond in the amount of Denar 216 million was with a contractual maturity of three years. Besides the continuous bonds, in 2007 the Ministry of Finance realized the sixth issue of the denationalization bond in the amount of Euro 18 million. It, as well the previously issued denationalization bonds, quoted on the official market of the Macedonian Stock Exchange and instantly became one of the more liquid quoted securities. The structural bonds issuance in the last years, was a significant impulse for the development of the domestic financial market and revitalization of the stock exchange trading. At the end of 2007, for the first time a financial institution issued long-term bond in the amount of Denar 300 million<sup>72</sup> by private offer, while there is announcement for realization of new issuance of corporate bonds also in 2008.

The weak interest of the private sector for realization of new issuance of shares or other financial instruments was a characteristic of the primary capital market also in 2007. In

<sup>&</sup>lt;sup>72</sup> The bond's issuer is Prokredit Bank AD Skopje, the coupon interest rate is 8.4%, and with a maturity of three years.

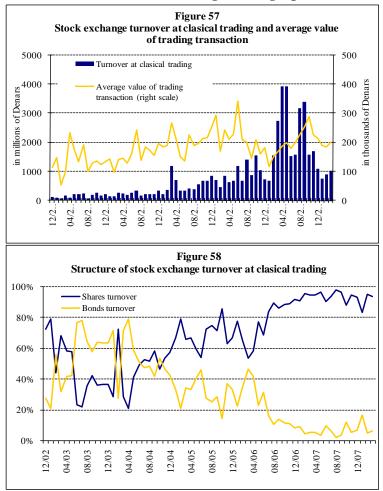
2007, nine issuances of shares were conducted on the primary capital market, and all of them were conducted through private offer. The total value of these issuances of shares equaled Denar 1,728 million, which is a decline of Denar 2,152 million, or 55.5% compared to the value of these issuances in 2006. There were no public offers of shares besides the variety of favorable circumstances, such as net inflow of foreign portfolio investments, increase in the interest of the domestic public for stock exchange trading and the intensive growth of the prices in the first half of 2007. The indifference of the private sector to finance its activities through the capital market can be a signal for weakness and non-inventiveness of the manager structures in the domestic joint stock companies.

Contrary to the weak activity on the primary capital market, in 2007, the stock exchange trading in the Republic of Macedonia intensified. Namely, the favorable macroeconomic environment in the last few years, followed by continuous improvement of the real sector performances, a variety of amendments to the legal framework and increase in the number of market participants, influenced to enhancement of the positive expectations and continuation of the upward trend of the market capitalization of the listed companies on the stock exchange. However, starting from the last quarter of 2007, there was a switch in the stock exchange movements and the beginning of the process of the prolonged correction of the price levels, turnover reduction and higher restrain of the international investors. These developments were a consequence of the simultaneous influence of several factors, primarily of the effects of the global correction on the international financial markets, the indirect effects of the development on the stock exchanges in the region, higher political risk in the region, and also a consequence of the limited transparency of some of the listed companies.

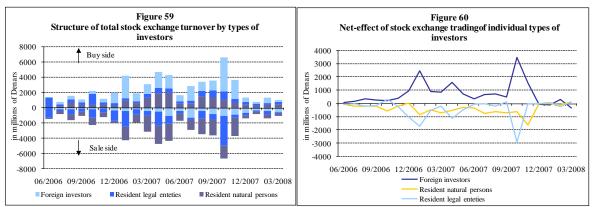


28,846 million, which is a rise of 2.3 times compared to 2006. The increase in the turnover was mainly conditioned by the trade with shares. simultaneously having dominant position in the turnover structure. Namely, in 2007, the portion of the shares turnover equaled more than 90% of the total stock exchange turnover registered in case of classical trading. However, the growth dynamics of the stock exchange turnover was different in

2007. The increase in the turnover was exclusively intensive during the spring months (March - May) and at the end of the summer period (August -September), while at the end of the year significant drop in the turnover was registered. Simultaneously, the trend of increase in the number of transactions continued, as well, which was due to the enhanced interest for participation in the stock exchange trading not only bv the foreign institutional investors, but by the domestic



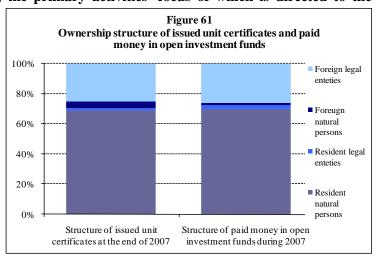
public, especially natural persons, as well. In 2007, the domestic households acted as net seller of securities. However, various strata of households behaved differently, which can be proven by the significant participation of the domestic natural persons on the purchase side of the stock exchange turnover. Namely, the average monthly share of the domestic natural persons on the turnover' both purchase and sale sides in 2007 equaled 32.8% and 50.5%, respectively. The larger participation of the natural persons as investors on the capital market, influence on the increase in the dispersal of the companies' shareholders structures, but it can stir bigger oscillations of the price levels, especially as a result of the characteristics of the natural persons, which are known as "panic-



stricken" investors with dominant speculative investment motive. On the other hand, the higher attendance of both natural persons and foreign portfolio investors inevitably imposes a need of companies' higher transparency in disclosing information, as well as general improvement of the corporate governance. Thus possibility for increasing the effectiveness of the necessary protection of the minority investor is made, although it is also acted in direction of increasing the integrity of both listed companies and market in general, which is especially important for attracting portfolio investors outside the Balkan region.

The increase in the turnover on the capital market caused developments also in the segments of the financial system, the primary activities' focus of which is directed to the

capital market. In 2007, several new brokerage houses were founded, as well as the first managing companies for investment funds and open funds. In investment 2007, amendments to the Law on Investment Funds were adopted, which enabled founding of private funds. At the end of 2007, nine private funds were established. In this manner, the positive dynamics on the stock exchange in 2007 had direct positive effects on enrichment of the institutional



infrastructure of the domestic financial system and widening of the supply of investment alternatives that can contribute to amortize the possible liquidity turbulence on the market. Additionally, the role of the open investment funds is especially important from the aspect of collecting funds from the small-scale investors, efforts of which in achieving satisfactory diversification level of its individual portfolio, most frequently, are limited. Actually, at the end of 2007, almost two months after the establishment of the open investment funds, the domestic natural persons participated with 68.9% in the number of issued stakes, i.e. 69.9% in the total amount of the inflow of funds in the open investment funds.

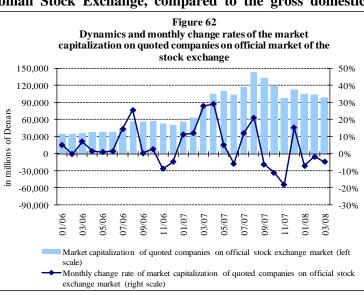
The establishment of new brokerage houses, together with the increase in both trading and market capitalization on the official stock exchange market, contributed to reduced concentration, not only from the aspect of the value of the realized trading of the individual stock exchange members, but from the aspect of the total stock exchange turnover and market capitalization, as well. In 2007, all indicators depicting the concentration on the secondary capital market, or in the brokerage houses' operations, registered a decline. However, despite the reduced participation by 5.4 percentage points, the turnover with the ten most liquid shares in 2007 encompassed 74.3% of the total turnover, which in terms of growth of the stock exchange trading represents an indicator for the small supply of attractive investment alternatives on the domestic capital market. The main reason for the decrease in the concentration in the brokerage houses sector is the increase in their number, because of which significant increase in the competitiveness in this segment of the financial system was evidenced. However, the trend of correction of the price levels in the second half of 2007, followed by the reduction in the total turnover on the stock exchange, in terms of higher competitiveness among the brokerage houses, eroded the foundation for registering income, thus jeopardizing their capability to maintain the profitability on a long-term basis, thus endangering also the market. Additional challenge the brokerage houses face with, and which influence on the amount of the operating costs, is the need of establishing own risk management system, especially with those brokerage houses authorized for trading in their behalf and for their account.

Table 14											
<b>Indicators</b> for	the	concentration	level	on	the	secondary	capital	market	in th	e Republic	e of
Macedonia											

	2004	2005	2006	2007
Number of stock exchange members	14	15	17	22
CR3 for total stock exchange member turnover	70,8%	60,5%	47,8%	41,9%
CR5 for stock exchange member total turnover	80,3%	75,3%	62,2%	58,9%
CR5 for clasical trading turnover	67,4%	72,1%	62,4%	54,8%
Turnover with five most traded securities/Total turnover	56,0%	72,0%	61,4%	54,3%
Turnover with ten most traded securities/Total turnover	70,2%	87,5%	79,7%	74,3%
Participation of the market capitalization of five shares with biggest market capitalization in the total market capitalization	49,7%	71,8%	78,5%	52,2%
Participation of the market capitalization of ten shares with biggest market capitalization in the total market capitalization	70,2%	87,5%	79,7%	72,8%

At the end of 2007, the market capitalization of the financial instruments traded on the official market of the Macedonian Stock Exchange, compared to the gross domestic

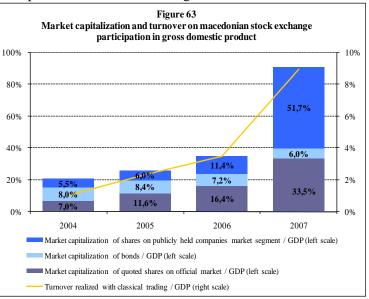
product<sup>73</sup>, on the official market equaled 39.5%, which is growth of significant 15.9 percentage points compared to 2006. However, the growth trend of the market capitalization of the listed companies was registered also in 2007, while in the last quarter of 2007 and in the beginning of 2008, the correction of the price levels caused decrease in the market capitalization. Thus in the last quarter of 2007, the market capitalization of the listed companies on the official market on the stock exchange reduced by 15.7%. The shares which are



<sup>&</sup>lt;sup>73</sup> The GDP for 2007 is estimated data.

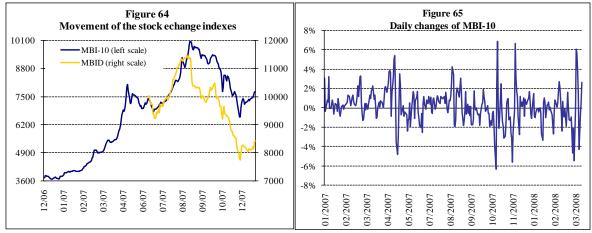
quoted on the Macedonian Stock Exchange represent the dominant portion of the total market capitalization on the official market, with its share being equal to 84.8% at the end of 2007. The trade with shares and the growth in their prices was the main driving force for the rise in the market

capitalization and its correlation with the gross domestic product. This is verified also with the increase in the market capitalization of the companies traded on the publicly owned market, companies which augmented bv 3.9 times compared to 2007. The intensive growth market in the of capitalization the listed companies on the publicly owned companies market, in 2007 is due to the fact that the shares of several larger joint stock companies are traded on this market segment, which were not subjected to trade in the previous



period. The market capitalization on the publicly owned companies market equaled 51.7% of the gross domestic product at the end of 2007.

As a result of the increase in the turnover, the inflow of portfolio investors, as well as the enhanced trading, which sometimes showed elements of illogical behavior, by the domestic natural persons, in 2007 was marked by intensive increase in both market capitalization and values of the stock exchange indices. Namely, the stock exchange index on the Macedonian Stock Exchange MBI-10, as main the representative of the price level of the most liquid listed companies on the official market, at the end of 2007 equaled 7,740.79 points and annually it went up by 109.1%. Almost all increase in the index was realized until September 2007.

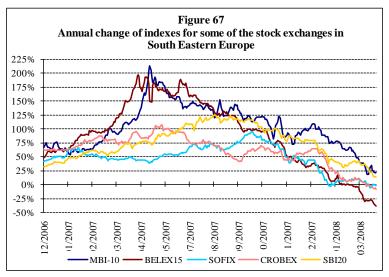


In the second half of the year, the MBI-10 registered downward trend and in the September - December 2007 period it reduced its value by 23.0%, by manifesting the significantly higher volatility, which is characteristic of the markets having no consensus between investors about the real value and the prices of the financial instruments. However, the economic growth of the stock exchange index in the first half of the year, made the Macedonian capital market to be the fastest growing in the region in 2007. In 2007, the stock exchange introduced new index - MBID, representing the movements of the most liquid companies of the segment of the regular market for publicly owned companies. This index was introduced in June 18, 2007, with a base of 10,000 points and until the end of 2007 it went down by 15.9%, originating from the downward movements dominating also on this market segment in the second half of 2007.

The increase in the market capitalization on the Macedonian Stock Exchange in terms of increase in the turnover was the key element for improving the liquidity and the depth of the secondary market of securities in 2007.

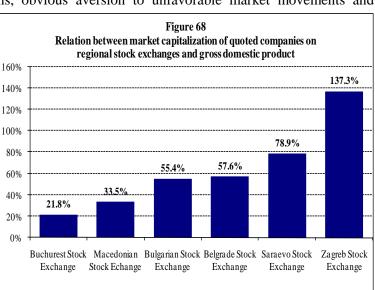
However, the trend of downward continuous correction, that commenced in the second half of 2007, inevitably caused negative consequences on the liquidity, not only to the individual shares, but to the market as a whole. It is confirmed also by the decrease in the turnover ratio of individual market segments at the end of 2007 and the beginning of 2008. The turnover ratio of the listed companies on the official stock exchange market reached its peak values in the second quarter of 2007, when it exceeded 30%. The combined influence of the uncertainty related to the developments on the international financial markets and the internal and regional factors of political nature. culminated in the beginning of 2008 and it manifested with

Figure 66 Turnover ratios for the securities traded on stock exchange 35% 30% 25% 20% 15% 10% 5% 0% /2008 /2005 5/2005 /2006 5/2006 9/2005 9/2006 /2007 2007 //2007 Turnover ratio for quoted shares on official market segment Turnover ratio for shares traded on publicly held companies market segment Turnover ratio for quoted bonds on official market segment



additional liquidity reduction on the market, shown through the decrease in the turnover ratio values. The limited liquidity, from one side prevents the "easy" exit from the market, and thus reflecting negatively on the value of the financial assets of the domestic investors. This especially refers to the domestic natural persons, who in most of the cases have no investment strategy, have relatively short investment horizons, obvious aversion to unfavorable market movements and

insufficient level of financial education. Additional factor influencing the liquidity reduction, thus the and to decrease in the market of the capitalization listed companies, is the restraint of the existing portfolio-investors which are characteristic for significant geographic concentration, since the largest portion of them originate from the Balkan region, especially from the ex-SFRY countries. The behavior of most of the investors from this region is similar, which results from the



apparent correlation of the price levels movement on the stock exchanges in the region, which can reflect on the duration of the price stagnation. The correlation in the movement on the regional stock exchanges can be perceived also in the similar dynamics of the annual yield on their main indices, with the decrease in the price levels and the annual yields on all stock exchanges being apparent, starting from the second half of 2007. This indicates that the effect of the price correction and stagnation is characteristic for all stock exchanges in the region and more or less, the reasons for that are the same. However, it can be perceived that on the stock exchanges in the region registering higher liquidity and bigger presence of the international investors, the price correction happened faster. This indicates that parallel to the enrichment of the investment possibilities palette, the attraction of investors outside the Balkan region will be the key challenge for further development of the capital market.

## 3. Banking system of the Republic of Macedonia<sup>74</sup>

In 2007, the development of the banking system in the Republic of Macedonia continued dynamically, succeeding to preserve the stability and the resistance to the external factors. The continuous strengthening of the confidence in the banking system and the enhanced propensity for saving, resulted in increase in the banks' deposit base. These sources of funds were mostly used by the banks for strengthening the credit support of the private sector, and finally, support of the economic growth in the country.

In 2007, higher interest of the foreign investors for investments in the banking sector was registered. It contributed for a significant increase in the share of the foreign capital in the total capital, at the level of the banking system.

The trend of improvement in both profitability and efficiency in the banks' operating experienced in the last several years, continued in 2007, as well. The remarkable rise in the banks' profit for 2007 ensured increase in the return for their shareholders through payment of dividends, and to the increase in the capital, which gave basis for further dynamic growth and higher level of safety and stability in the banks operating.

Together with the increase in the activities of the banks, the risk profile registers no serious signs of deterioration. The credit risk is the dominant risk the banks are exposed to in their operations. The other risks have relatively small significance in the banks' risk structure. By using the protection clauses, such as foreign exchange clause and the adjustable interest rates, the banks actually, transfer the exchange risk and the interest rate risk to the real sector.

The current level of the banks' capital position completely covers the identified risks. The banks' solvent position remains relatively high despite the current downward trend of the capital adequacy, as a result of the increased volume of their activities.

#### 3.1. Structural characteristics of the banking system

The banking system remained dominant and the most developed segment of the financial system of the Republic of Macedonia also in 2007. Its sound functioning and performances have the largest influence on the stability and the performances of the financial system as a whole. At the end of 2007, the total assets of the banking system reached Denar 226,545 million, which is 91.7% of the total assets of the financial system. Compared to the end of 2006, it augmented by 28.4%, which influenced on the increase in its share in the total assets of the financial system of 1.6 percentage points.

<sup>&</sup>lt;sup>74</sup> More precised data on the banking system can be found in the "Report on the banking system and the banking supervison in 2007".

The enlarged size of the banking system and its relative significance for the financial system in 2007 was followed by the decrease in the number of banks <sup>75</sup>. Thus on December 31, 2007, the banking system of the Republic of Macedonia consisted of 18 banks and 12 savings houses.

## Table 15

Structural indicators for the banking system of the Republic of Macedonia

			Year		
Structural indicators for deposit financial institutions	2003	2004	2005	2006	2007
Number of deposit institutions	36	36	34	31	30
banks	21	21	20	19	18
saving houses	15	15	14	12	12
Total assets of deposit institutions (in millions of Denars)	106,139	119,539	142,370	176,444	226,545
banks	104,875	117,985	140,436	174,117	223,659
saving houses	1,264	1,554	1,934	2,327	2,886
Structure of assets of deposit institutions (%)	100,0%	100,0%	100,0%	100,0%	100,0%
banks	98,8%	98,7%	98,6%	98,7%	98,7%
saving houses	1,2%	1,3%	1,4%	1,3%	1,3%
Number of banks in which foreign capital is present in their ownership strucutre	15	15	17	17	16
Number of banks in dominant ownership of foreign shareholders	8	8	8	8	11
of which: foreign bank subsidiaries	4	4	4	4	5
Assets of banks in ownership of foreign shareholders / total assets (%)	44,0%	47,3%	51,3%	53,2%	85,9%
of which: foreign bank subsidiaries	43,1%	42,1%	43,7%	45,0%	52,5%
Equity and reserves of banks in dominant ownership of foreign shareholders / total equity and reserves (%)	44,6%	47,6%	49,1%	50,0%	71,1%
of which: foreign bank subsidiaries	38,1%	36,8%	36,7%	37,6%	39,5%

The share of the savings houses in the whole financial system remained minor in 2007, and thus in the total financial system at the end of 2007. Total of Denar 686 million, or 0.4% of the total deposits in the banking systems were deposited in the savings houses. Their position in the banking system, the basic achievements and the risks they face with are elaborated as separate theme, given below.

## Characteristics, activities and risk profile of the savings houses in the Republic of Macedonia

The savings houses, as the second segment of the banking system of the Republic of Macedonia, represent relatively small financial institutions, which are authorized for collecting Denar deposits, extending credits to natural persons and in limited volume to the legal entities. They have relatively small role in the financial intermediation in the Republic of Macedonia with limited capacity for continuous growth. The bigger competitiveness in the banking system, the enhanced widening of the business network by the banks, the benefits of the economy of scale, capability for attracting qualified staff and larger capacity for utilization of information technology, and thus following the contemporary trends in financial operations, represent obvious competitive advantages of the banks, and simultaneously, factors which are limiting the possibilities of the savings houses for larger market penetration.

In 2007, the savings houses' assets registered slower growth compared to the banks. The main driving force of this growth was the used long-term borrowings from banks. At the end of 2007, the total assets of the savings houses amounted to Denar 2,887 million and it went up by Denar 560 million, or 24.0% compared to the end of 2006. However, the savings houses' assets equals 1.2% of the total assets at the financial system level, simultaneously participating with only 0.85% compared to the gross domestic product. The increase in the assets of the savings houses was mainly financed through the increase in the long-term borrowings from domestic banks by Denar 338 million, i.e. 51.9%, as well as to the households' deposits by Denar 97 million, i.e. 16.4%. On the side of the assets, the increase in these sources of funds reflected on the increased crediting by Denar 561 million, i.e. 27.7%. However, the households' credits went up by 29.5% and created 84.8% of the total annual increase in the households' credits.

<sup>&</sup>lt;sup>75</sup> In the second half of 2007, the founding and operating license of Makedonska Banka AD Skopje was revoked.

The small volume of financial activities performed by the savings houses imposed a relatively simple structure of their assets and sources of funds. Thus at the end of 2007, the credits, with a share of 84.3%, are the dominant item in the total assets of the savings houses. The dominant position in the sector credit structure accounts for the credits to households. The share of the own sources of funds in the savings houses' sources of funds equal 34.2%. Beside that, a relatively high portion of the borrowings from the domestic banks in the total liabilities of 34.6% is evident, while the share of the households' deposits in the total sources of funds equals 23.8%.

The remarkable participation of both capital and reserves in the structure of the savings houses' sources of funds resulted in relatively high rate of the savings houses' capital adequacy ratio, which at the end of 2007 equaled 41.1%.

The fundamental source of the savings houses' profit is the relatively high net interest spread. In 2007, the savings houses registered profit resulting from their operating in the total amount of Denar 129 million, which is growth of 32.8% compared to 2006. At the end of 2007, the indicators for return on assets (ROAA) and return on equity and reserves (ROAE) equaled 5.0% and 13.6% registering annual rise of 0.9 and 3.3 percentage points, respectively. The high share of the equity and reserves in the households' sources of funds structure enabled high values of the return on assets (ROAA). At the end of 2007, the net interest rate spread equals 10.6% and it is higher by twice from the net interest rate spread for banks. The high net interest rate spreads are result of the competitive pressure on the savings houses by other financial institutions, primarily banks, which launching aggressive marketing campaigns in order to promote its products and services, significantly increased their financial potential lately. The strong competitiveness imposes the need for the savings house to accept higher costs for the collected deposits, but on the other hand, it conditions higher lending interest rates on credit products, which can cause "negative section" problem.

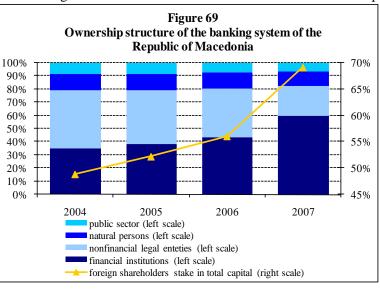
The savings houses risk profile is conditioned by the credit risk, operational risk and the strategic risk. At the end of 2007, the exposure to credit risk classified in the risk categories C, D and E participate with 7.2% in the total credit exposure and registered decline of 0.9 percentage points compared to the end of 2006. At the end of 2007, the share of the exposure to credit risk classified in the risk categories C, D and E and non-provisioned amount of this kind of exposure equaled 18.6% and 9.6% of the savings houses' own funds, respectively. For comparison, these indicators of the banks equal 48.9% and 17.9%, respectively. The main reason for the moderate level of the credit risk with the savings houses is their high capital position and the fact that larger part of the credit exposure of the savings houses to the households is secured with quality collateral (solo-bills of exchange, monetary deposits, funds in depot, gold, jewelry). On the other hand, the savings houses, to great extent, face with the operational risk, originating from the significant concentration of the functions with one or several persons, lack of information systems and weak internal control systems.

Having in mind the characteristics and the performances of the savings houses as part of the financial system, the general conclusion is that they have small chances to significantly change their minor contribution in the financial intermediation. One of the limiting factors is the incomplete legal framework. Namely, the savings houses' operations are regulated, to certain extent, by the Law on Banks and Savings Houses from 1996 and 2000. On the other hand, they are obliged to comply with variety of provisions from the Banking Law, including those referring to the risk management, maintenance of the accounting, the audit and their operating, etc. In conditions of strong competitiveness from the banks and other institutions in the banking system, and with regard to the apparent operational, strategic and reputational risk with the savings houses, the dilemma for the capacity and the resources of most savings houses for compliance with the regulations. Hence, providing legal alternative for their transformation, inter alia in form of non-deposit financial institutions, which within their financial activities (the crediting) would credit only from their own funds or non-deposit sources of funds, is of significant importance for the further development of the savings houses. In absence of suitable legal treatment of this segment of the financial system, other real option for the savings houses is their integration with other financial institutions, primarily with banks. Otherwise, the growing competiveness pressure on the savings houses, the small volume of activities permitting no increase in their income basis, the lack of organizational capacity limiting their specialization capacity, will objectively hamper the conditions for their existence as financial institutions.

Having in mind the insignificant influence of the savings houses on the movements in the banking system of the Republic of Macedonia, the further analysis of this segment of the financial system is focused exclusively to the banks.

In 2007, the changes in the banks' ownership structure in the Republic of Macedonia intensified. The financial institutions strengthen their dominant role in the banks' ownership

structure, with a share of 60.0%. Parallel to this changes, in 2007 the share of the foreign shareholders also significantly increased. Thus in 2007 the share of the foreign capital in the total banks' capital went up by 13.0 percentage points, and December 31,2007 on it 69.1%. reached These and qualitative quantitative changes are due to the undertaking of the ownership control in several banks by foreign strategic investors, capitalization of some banks by their dominant foreign owners,



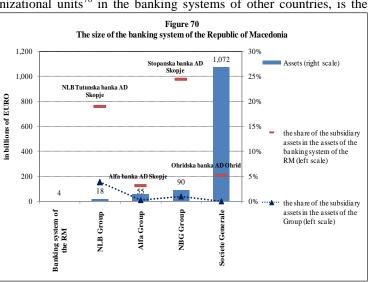
as well as enhanced interest and increase in the stock exchange trading with shares of the banks by foreign portfolio-investors.

## Entry of foreing capital in the banking system - advantages and challenges

The entry of foreign capital in the banking system is necessary and inevitable event in conditions of globalization and integration of the financial flows. This occurrence failed to avoid the banking system of the Republic of Macedonia, as well. However, the increased participation of the foreign capital and the increase in the market share of the banks in dominant foreign ownership is stimulation for additional strengthening of the competitiveness in the banking system and its further consolidation. The entry of renowned foreign banks gave special positive impetus for corporate governance promotion, risk management by the banks, a well as broadening of the spectrum and the quality of the financial services, thus jointly contributing to the improved efficiency of the banking system of the Republic of Macedonia.

However one of the largest challenges originating from the presence of complex banking groups and financial conglomerates with their organizational units<sup>76</sup> in the banking systems of other countries, is the

cooperation among the supervisory bodies, within the exchange of data, controlling and undertaking measures domain. The cooperation problem can be larger for a country with small-scale economy and small banking systems, such as Macedonian. where the organizational units in most of the cases are small compared to the size of the parent entities and the banking groups, but they can have significant influence on the safety and soundness of the banking system in the country they are founded in. Hence, the interest of the parent supervisory body for the operating of the appropriate organizational unit



<sup>&</sup>lt;sup>76</sup> For the purposes of this analysis, the phrase "organizational units" denotes subsidiaries and branch offices of foreign banks.

abroad can be relatively small, which can hamper the cooperation between the supervisory bodies, especially relative to the exchange of appropriate data and information on the parent entity operations.

These are the challenges the banking system in the Republic of Macedonia faces with. Thus the assets of the banking system of the Republic of Macedonia are far lower than the assets of the groups of parent banks owning six banks in the Republic of Macedonia<sup>77</sup>. Namely, the assets of the banking system is by five times, i.e. 293 times smaller than the group of the parent bank with the lowest, i.e. highest assets. Also, the share of individual subsidiaries in the appropriate groups of the parent banks according to the assets is minimal and it reaches up to 4%, at most. On the other hand, the individual share of the assets of the subsidiaries in the total assets of the banking system of the Republic of Macedonia (of at least 5% to 24.5%, at most), as well as their joint share of 51.8%, point to the fact that those banks are systemically important for our country.

In direction of more efficient cooperation with the supervisory bodies of other countries, the NBRM has signed, so far, seven bilateral memorandums for cooperation with Russia, Albania, Bulgaria, Slovenia, Greece, Montenegro and Serbia. In July 2007, a regional Memorandum for cooperation among the supervisory bodies from the region was signed. This Memorandum's objective is to promote the cooperation in the banking supervision area and strengthening of the financial stability in South-East Europe, as well as to increase the efficiency of the supervisory measures.

However, regardless of these challenges, although small, the banking system of the Republic of Macedonia is stable. The unfavorable movements on the international financial markets avoided the banking system of the Republic of Macedonia, leaving almost no negative consequences. This is due to the fact that it is relatively high "closure" relative to the global financial flows, non-utilization of structured products and conducting complex financial activities by the banks.

Dynamics of the concentration indicators in the banking system of the Republic of Macedonia

<b>Concentration ratios</b>	2002	2003	2004	2005	2006	2007
	- 7	Total assets				
Herfindahl -index	1.667	1.842	1.685	1.607	1.595	1.625
CR 3	64,0%	66,9%	66,8%	66,1%	66,1%	67,1%
CR 5	73,6%	76,1%	76,2%	75,0%	74,7%	76,6%
7	otal gross-loar	ns to nonfind	incial entetie	?S		
Herfindahl -index	1574	1614	1606	1734	1726	1793
CR 3	63,5%	66,1%	66,2%	69,3%	69,2%	70,3%
CR 5	76,4%	77,1%	76,1%	77,8%	77,9%	79,7%
	Total deposits	of nonfinan	cial enteties			
Herfindahl -index	2.332	2.374	2.212	2.049	1.928	1.903
CR 3	73,5%	75,5%	75,5%	73,1%	71,8%	72,2%
CR 5	82,4%	84,7%	84,4%	81,7%	80,2%	81,8%

## Table 16

The concentration in the banking system of the Republic of Macedonia remained relatively high in 2007, with the highest level being registered within the operations with households' domain. In 2007, higher concentration level was registered, especially relative to the total assets of the banks, thus interrupting the several year trend of its decline. The increased concentration is due to the unequal growth distribution of the activities among individual banks, as well as the exclusion of one bank from the banking system. In 2007, the large and the medium-size banks<sup>78</sup> registered more intensive annual growth in the assets and crediting, compared to the small-size banks. It contributed to increase the relative meaning of their role in the process of the financial intermediation, compared to the further marginalization of the role of the small-size banks.

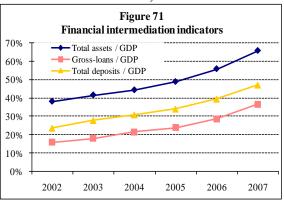
<sup>&</sup>lt;sup>77</sup> The analysis encompasses only four subsidiaries of foreign banks.

<sup>&</sup>lt;sup>78</sup> The group of large banks encompasses the banks the assets of which exceeds Denar 15 billion, the group of medium-size banks with assets between Denar 4.4 and 15 billion, while the banks having assets below Denar 4.5 billion comprise the group of small-size banks.

#### 3.2. Bank activities

The continuous upward trend of the banks' total sources of funds, in the conditions of

higher demand for credits, was a sound basis for further intensification of the growth of the banks' total activities, and consequently, larger support of the economic growth in the country. These movements represent basis for enhanced and deepened role of the banks in the process of efficient channelizing of the financial flows, clearly pointing to the basic indicators for measuring the financial intermediation level. Namely, at the end of 2007, the level of financial intermediation in the banking system, measured as share of the total assets, the gross credits and



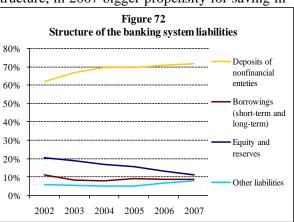
the total deposit potential in the GDP reached 66.2%, 37% and 47.4%, respectively<sup>79</sup>.

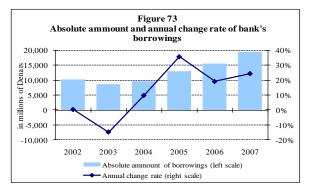
#### 3.2.1. Banks' liabilities structure

In the liabilities structure at the level of the banking system, the deposit potential continues to be the most significant source for financing the banking activities, simultaneously strengthening its relative importance. In 2007, the deposits of the non-financial entities augmented by 30.3% on annual basis. The households' deposits registered the most intensive increase with an annual rate of 31.9%, thus strengthening the dominant position in the total deposits with a share of 58.7%. From the aspect of the deposits' currency structure, in 2007 bigger propensity for saving in

Denars was registered, which is verified with the annual growth rate of 11.9%. The Denar deposits preserved the dominant share of 48.9% in the total deposit base of the banks, whereas the share of the foreign currency deposits and the foreign currency indexed deposits. The unfavorable maturity structure remains to be one of the basic features of the banks' deposits. Thus, at the end of 2007, the deposits with maturity of up to one year comprise 94.6% of the total deposit base. However, the long-term deposits registered annual growth rate of 70.5%, compared to the growth rates of the short-term deposits and sight deposits<sup>80</sup> of 34.4% and 22.3%.

The borrowings, as the second important item of the third party's sources of funds, registered more intensive growth in 2007, still preserving almost the same structural share in the banks' liabilities, as in the last few years. Thus these sources of funds increased annually by 24.1%, while their share in the total liabilities remained on about 9% at the end of 2007.





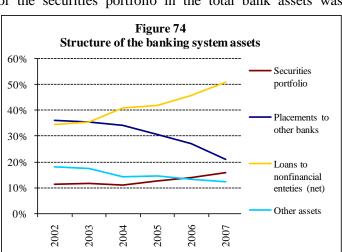
<sup>&</sup>lt;sup>79</sup>During the calculation of the financial intermediation indicators, the data on the GDP for 2006 is preliminary, while the data for 2007 is estimated.

<sup>&</sup>lt;sup>80</sup> For the needs of the analyses given in the Financial Stability Report in the Republic of Macedonia, the sight deposits include the demand deposits, as well.

#### **3.2.2. Banks' assets structure**

In 2007, the trend of change in the assets structure of the banking system towards increase in the share of the credits and decrease in the share if the placements in domestic and foreign banks and non-interest bearing on-balance sheet items, continued. At the end of 2007, the credits of the non-financial entities encompass more than one half of the total assets of the banking system. These structural changes in the assets of the banking system arise from the strengthening of the credit activity in the last few years, and thus to the process of transforming the low profitable assets (mostly in form of deposits in other banks) into highly profitable assets. Beside that, constant rise in the role of the securities portfolio in the total bank assets was

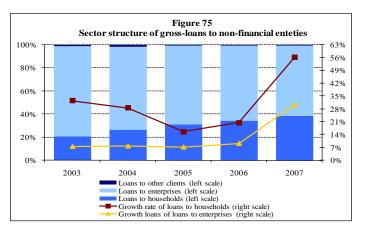
registered. However, the fact that 95% of the securities portfolio are CB bills and government securities (Treasury bills, continuous government bonds and structural government bonds), having the largest contribution to the total increase in the securities should be portfolio, taken into consideration. Also, the characteristics of the securities dominating in the banks' portfolio (without credit risk, short maturity and mainly kept up to maturity) point to a conclusion that there is an absence of elements of the so-called investment portfolio, i.e. the

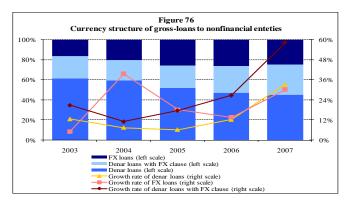


portfolio has primarily a liquidity character and it creates limited risks for the banking system.

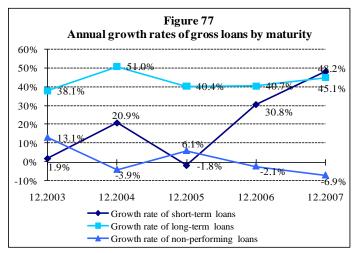
In 2007, the banks showed tendency larger for extending credits to the sector "households". The households' credits registered a relatively high annual increase of 56.2%, thus creating 49.6% of the total increase in the gross credits of the nonentities. financial However, the enterprises' credits, with an annual growth rate of 30.3% retained the dominant position in the sector's credit structure with a share of 60.8%.

The trend of increase in the share of the foreign currency indexed loans in the currency structure of the gross loans continued also in 2007. Namely, in 2007 these credits registered very high growth of 58.2%. As a contrary, the relative share of the Denar loans decreased, but nevertheless, they remained to be the most significant component in the credits' currency structure with a share of 45.3%.





In 2007, the trend of faster rise in the long-term crediting compared to the short-term one was terminated. Thus the short-term credits registered annual growth rate of 48.2%, thus elevating its share in the credits' maturity structure by 1.8 percentage points. The intensive increment in the short-term credits is characteristic especially for the households and arises primarily from the increase in the credits based on credit cards and negative balances based on current accounts. On the other hand, although they had slower



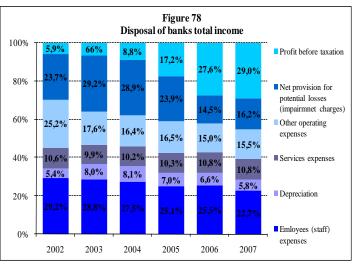
increase of 45.1%, they still preserved the dominant share in the credits' maturity structure of 61.6%.

### 3.3. Profitability of the banking system

The trend of improvement in the profitability and efficiency of the banks operations registered in the last few years continued also in 2007. Thus at the end of 2007, the total profit of the banks amounted to Denar 3,650 million, which is a rise of 30.4% compared to 2006. However, four banks presented loss in their operating, but their joint share in the total assets of the banking system equaled 2.6%.

The income originating from the regular banking activities acted as the main driving force of the banks' profitable operations. In 2007, the net interest income registered annual growth rate of 21.2% and it created 60.2% of the annual increase in the total regular income. Net income from commissions is the second biggest category, which incremented by 20.0% in 2007. The enlargement of the importance of the income based on regular bank activities is reflection of the significant increase in the credit activity of the banks, followed by conversion of low profitable assets into highly profitable ones, although with the relative decline in the credit portfolio's risk profile.

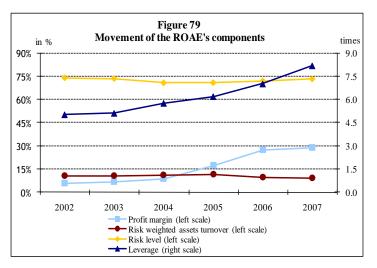
The improvement in the banks profitability in 2007 is proved by the continuous decrease in the part of their total income used for covering their expenditures, and for the account of the income that remains as pretaxation profit. In 2007, 71.0% of the total income of the banks are sufficient for covering the expenditures, and 29.0% remain as profit prior to taxation. However, the expenses for salaries remain to be the largest expenditures item in the banks operations, with 22.7% of the



total banks' income being used for their covering.

The increase in the banks' income and the suitable rise in the absolute amount of the registered gain in 2007, in conditions of more moderate increment in the banks' capital and reserve, mostly contributed to **the continuing increase in the return on equity indicator (ROAE) at the** 

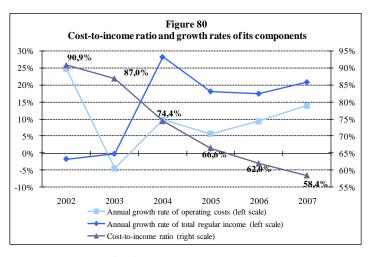
level of the banking system. Namely, at the end of 2007, this indicator equaled 15.2%, which is an increase of 2.9 percentage points compared to the end of 2006. On the other hand, the rate of return on assets (ROAA) equaled 1.8% at the end of 2007, which is almost the identical level as in 2006, primarily due to the intensive increase in the activities in 2007. In the last several years, the largest contribution to the creation of the return on capital and reserves (ROAE)<sup>81</sup> accounted for the



dynamic increase in the profit margin. Conversely, in 2007, the increase in the ROAE was mostly influenced by the indebtedness ratio<sup>82</sup>, which showed annual rise of 16.7%. This is primarily a reflection of the higher growth rates of the deposits and borrowings, as sources of funds, compared to the moderate increment in both capital and reserves. In 2007, the profit margin equaled 29.0% and it surged by 1.4% percentage points, compared to 2006, while the remaining components resulting from the decomposition of the indicator for return on equity and reserves register relative stable movement in the past several years.

In 2007, the trend of improvement in the operational efficiency of the banks operating continued in conditions of narrowing the interest rates spreads and intensive widening of the banking network of several banks. The improvement of the operational efficiency of the banking system of the Republic of Macedonia was evident through the decline in the costs' component shown as a percentage of the average assets. Despite the increase in the annual growth rate of the operational costs, it remained more moderate compared to the increase in the income categories. It resulted in an improvement in the so called cost-to-income indicator, which reduced by 1.6 percentage points, annually, and at the end of 2007 it equaled 58.4%.

Despite the continuing trend of improved profitability and efficiency of the banks, they still face with a serious challenge how to maintain the achieved performance level. The present uncertainty about the dynamics of certain macroeconomic variables, including also the strengthen inflation pressures, increases the risks in banks' business the environment. Namely, in conditions of larger competence, primarily in



81 The rate on return on the average (ROAE) own funds can be presented as follows:

 $ROAE = \frac{P}{CR} * \frac{S}{S} * \frac{A}{A} * \frac{RWA}{RWA} = \frac{P}{S} * \frac{S}{RWA} * \frac{A}{CR} * \frac{RWA}{A} = PM * RWA turnov e^* L * RBA ratio$ 

where: P=profit after taxation; CR=average own funds; S=total regular income; A=average assets, RWA=risk weighted assets; PM=profit margin; RWAturnover=turnover of risk weighted assets; L=leverage or indebtedness and RBAratio=indicator for the level of undertaken risk.

 $^{82}$  The indebtedness ratio is calculated as a correlation between the average assets and the average equity at the level of the banking system.

the "retail banking" segment, the banks can face with the need of significant and fast narrowing of the net interest margins. It can cause decrease in the relative significance of the net interest income, which can have negative reflection on the entire profit potential. Additionally, the present growth trend of the domestic and international interest rates can influence in direction of credit activity deceleration. As a result, there is a chance of deterioration of the credit portfolio quality and increase in the relative meaning of the loan loss provisions. Namely, the credit products of the banks in the Republic of Macedonia mainly contain clauses enabling the banks' management bodies to change the interest rates. Thus, actually, the interest risk transfers to the credit users, i.e. essential transformation from the interest rate risk into credit risk is performed. In conditions of increase in the prices of food products and energy sources, the application of these clauses would influence towards increasing the financial encumbrance as a result of credits repayment. It, by one hand, raises the probability of credit risk materialization, especially with the exposure to the sector "households" and creates additional pressure on the sustainability of the banks' profitability.

#### Decomposition of the interest rate spread

The decomposition of the interest rate spread, i.e. its itemization on its composite costs components in order to measure their relative contribution for the extensiveness of the interest rate spread:

$$i^{l} - i^{d} = o + l + i^{d} r / (1 - r) + d + p + \tau p - o - l - i^{d} r / (1 - r) - d$$

where,

 $i^L$  is the lending interest rate;

 $i^{D}$  is the deposit interest rate;

*o* is the correlation between the costs and the total gross loans (operating costs are weighted with the share of the total gross loans in the total assets);

*l* correlation between the loan loss provisions and the total gross loans;

*r* reserve requirement rate;

*d* correlation between the insurance premiums on deposits and the gross loans;

au profit tax rate;

p profit margin of the banks' credit activity (it is calculated as a residual based on the calculation of the remaining components).

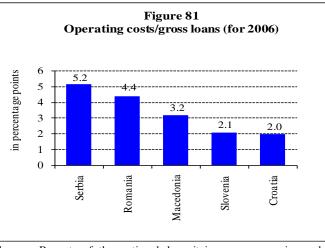
Table 17Decomposition of the interest rate spreads in Macedonia, for 2006 and 2007

		2006		2007
Decomposition of the interest rate spread	in percentage points	Percentage share of the components in the interest rate spread	in percentage points	Percentage share of the components in the interest rate spread
Interest rate spread	7.00	100.0%	5.72	100.0%
Cost components (factors)	5.82	83.1%	5.40	94.4%
Operating costs	3.21	45.9%	2.81	49.1%
Loan loss provisions	1.81	25.8%	1.75	30.6%
Deposit insurance premiums	0.49	7.0%	0.44	7.7%
Reserve requirements	0.31	4.5%	0.40	7.0%
Profit margin of the banks' credit activity, before taxes	1.18	16.9%	0.32	5.6%
Profit taxes	0.18	2.6%	0.04	0.6%
Profit margin of the banks' credit activity	1.00	14.3%	0.28	5.0%

Source: part of the research article titled "Panel assessment of the lending interest rates and the interest rate spreads in Macedonia" (still unpublished), prepared by (according to alphabetical order Mihajlo Vaskov, Ljupka Georgievska, Rilind Kabashi, MA, Nora Manova - Trajkovska, Ana Mitreska, MA.

The decomposition of the interest rate spreads for 2006 and 2007 indicates that the largest part of the interest rate spread, in the amount of about 80%, is conditioned by the operating costs and loan loss provisions. The share of the operating costs, encompassing 49.3% of the interest rate spread (or 2.81 percentage points given interest rate spread of 5.4 percentage points) is especially high. The possible continuation of the trend of high

increase in the total gross credits and rationalization of the operating costs at the level of the banking system should result in a decline in the relative influence of the operating costs on the extent of the interest rate spread. The reduced participation of these costs in the creation of the interest rate spread in 2007, compared to 2006, is exactly a result of the more intensive growth in the total gross credits compared to the increase in the total operating costs (higher annual growth rate by three times). The comparison of the contribution of the operating costs in the creation of the interest rate spread with particular countries in the region shows that, within this domain, the Republic of Macedonia is listed in the middle.



**Source:** Reports of the national deposit insurance agencies and reports of the national central banks for the banking sector and financialstability

The share of the allocated provisions for loan loss provisions in the interest rate spread equals 30.6% (they take 1.75 percentage points of the interest rate spread), which is relatively high share compared to the remaining countries in the region.

In 2007, the effect of the deposit insurance premiums and the reserve requirement expenses on the interest rate spread equals 0.45 and 0.40 percentage points of the registered interest rate spread, respectively. The comparison with part of the countries in the region shows that the amount of the premiums the banks pay based on deposit insurance is relatively high in the Republic of Macedonia. From the aspect of the reserve requirement, the Republic of Macedonia belongs to the group of countries with relatively higher reserve requirement rate, although the influence of this costs component on the extensiveness of the interest rate spread is partially relative, due to the compensation of 2% the NBRM pays on the allocated amount of reserve requirement in Denars.

#### Table 18

## Deposit insurance premiums and the reserve requirement as costs components of the interest rate spread, by countries (for 2006)

Country	Deposit insurance premiums/loans	Country	Reserve requirement rate- r	Deposit interest rate- i <sup>D</sup>	i <sup>D</sup> *r/(1-r)
Albania	0.4	Poland	3.5	3.1	0.1
Bulgaria	0.4	Czech R.	2.0	1.3	0.03
Croatia	0.2	Croatia	17.0	3.0	0.6
Czech R.	0.1	Bulgaria	12.0	3.1	0.4
Macedonia	0.5	Macedonia	10.0	2.8	0.3

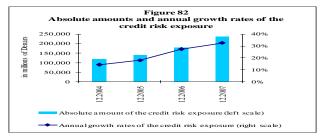
**Source:** Reports of the national deposit insurance agencies and reports of the national central banks for the banking sector and financial stability

Total of 0.28% of the registered interest rates spread in 2007 accounted for the profit margin (residual resulting from the calculation of the remaining components of the formula), which compared to 2006 represents a decrease by almost three times. The relatively low level of registered profit spread of the banks' credit activity is due to the relatively high share of the costs components in the registered interest rate spread. Namely, 5.4 percentage points of the realized interest rate spread in 2007 (or 94.8% of the interest rate spread), i.e. 5.82 percentage points of the realized interest rate spread in 2006 (or 83.1% of the interest rate spread) were necessary for covering the costs components.

### 3.4. Credit risk

## 3.4.1. Level and quality of the credit exposure at the level of the banking system

The trend of increase in the total exposure to credit risk of the banking sector, present in the previous years, especially enhanced in 2007. Thus at the end of 2007, the exposure to credit risk registered the highest annual growth rate in the last four years (32.6%).



**Despite the strengthen credit growth, the credit exposure quality, generally observed, shows no signs of deterioration.** In 2007, the level of risk of the banking systems' credit portfolio, observed statically, not only it does not show deterioration signs, but it reduces, as well. Thus, on December 31, 2007, the share of the exposure classified in the risk categories C, D and E in the total credit risk exposure equaled 5.7%, which is by 1.9 percentage points lower compared to December 31, 2006. However, if in 2007 the banks failed to perform write-offs of the claims based on credits and interest rates, on December 31, 2007, the share of the exposure to credit risk would have equaled 6.8%, which is a reduction of this share only by 0.8 percentage points compared to December 31, 2006. The average level of risk of exposure to credit risk equaled 5.3% on December 31, 2007, which is annual drop of 1.3 percentage points. However, from the aspect of the risk, the decrease in the credits with one-time repayment of principal is positive thing, and at the end of 2007 their participation in the total gross credits equaled 14.9%. This type of credit product the banks mostly use with the enterprises.<sup>83</sup>

#### Table 19

Indicators for the quality and the level of risk of exposure to credit risk
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Indicator	31.12.2005	31.12.2006	31.12.2007
Average level of risk	8.4%	6.6%	5.3%
% of C, D and E in total credit risk exposure	10.9%	7.6%	5.7%
% of annual change of non-performing loans in annual change of total credit risk exposure	-0.8%	-0.5%	-1.3%
% of net C, D and E in own funds	26.1%	19.4%	17.9%
Coverage ratio of C, D and E by provisions	76.4%	86.8%	94.1%
% of bullet loans in total gross-loans to nonfinancial entities	n.a.	15.1%	14.9%
% of net written-off claims during current year in total credit risk exposure at the end of previous year*	1.4%	3.7%	1.6%

\*Note: The amount of the realized write-offs of the claims in the current year is obtained as a difference between the amount of the performed write-offs of the claims and the amount of collected written-off claims in the current year. The indicator for 2005 is calculated only on the basis of the amount of the written-off claims.

The quality of the credit exposure registers improvement and from the aspect of its currency structure, as well. The most apparent is the improvement of the indicators for the quality of the Denar exposure to credit risk. Having in mind that in the last two years, the credit activity towards households registered higher increase, mainly based on credit cards and negative balances on current accounts, the primary effect of the improvement is completely expected. The lowest level of risk is still recorded with the foreign exchange exposure to credit risk, which is mostly due to the regulatory limitation of crediting in foreign exchange and foreign currency

<sup>&</sup>lt;sup>83</sup> Over 96% of the total amount of credits with one-time payment is approved to enterprises and other clients. This type of credits participates with 23.4% in the total gross credits of the enterprises and other clients.

indexed loans of clients classified in the risk category groups A and B, as well as to the fact that a relatively small credit portfolio<sup>84</sup> is in question.

Table 20

Indicators for the quality of the exposure to credit risk, by the currency structure

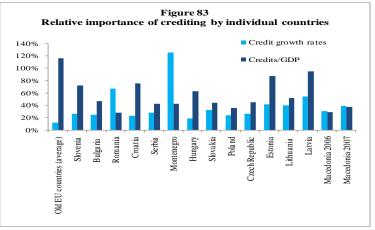
Indicator		ar credit exposure		expos	r credit ure wit clause		FX credit risk exposure		
	2005	2006	2007	2005	2006	2007	2005	2006	2007
% of C, D and E in total credit risk exposure	17.3%	11.2%	7.3%	11.3%	8.2%	7.8%	4.5%	3.1%	2.3%
% of non-performing loans in total credit risk exposure	12.7%	8.5%	5.1%	8.2%	7.6%	5.4%	2.2%	1.9%	1.7%
% of net written-off claims during current year in total credit risk exposure at the end of previous year*	2.5%	5.6%	2.2%	2.0%	5.4%	0.2%	0.5%	1.3%	0.3%

\*Note: The indicator for 2005 is calculated by using only the amount of written-off claims (not by using the amount of net written-off claims).

## Credit growth compared to the credit bum, potential risks and macro prudent measures for its deceleration<sup>85</sup>

In the last period, the enhanced credit growth, as in most of the Central and East European countries was registered in the Republic of Macedonia, too. The high increase in the credits was primarily a result of the

favorable macroeconomic environment, the relaxation of the terms for crediting and the optimistic expectations. The intensive credit growth in these countries can be perceived through the high annual growth rates of the credits extended to the private sector. Such a dynamics in these countries in most of the cases is explained as a standard catching-up process to the European level, i.e. compensating the lowest starting point from the beginning of the transition (low base effect) by strengthening the financial deepening by the banking systems. On the other hand, the credit expansion is identified as credit bum resulting



Source: ECB, EU Banking Structures, October 2007 and the web sites of the central banks of the countries. The data for all countries pertain for 2006, except for the Republic of Macedonia, for which data for 2006 and 2007 are included.

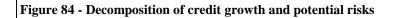
in overheating of the economy and usually implies occurrence of financial crisis. Hence, with regard to the strong correlation between the enhanced credit growth and the financial crises, the need of identification of

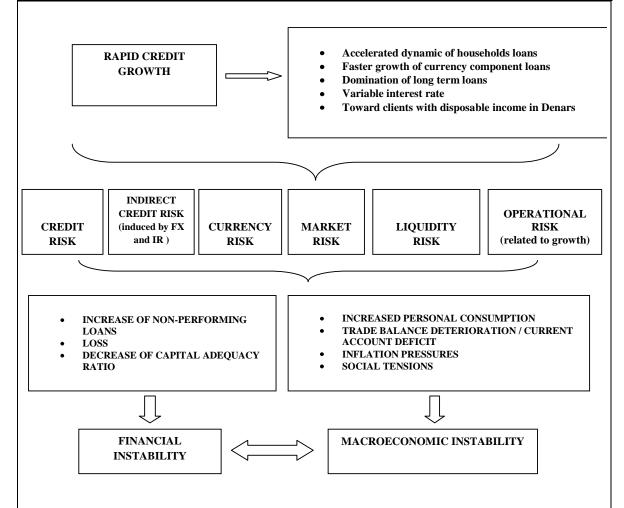
<sup>&</sup>lt;sup>84</sup> Foreign exchange crediting of residents liberalizes in 2003.

<sup>&</sup>lt;sup>85</sup> Source: Accessing and Managing Rapid Credit Growth and the Role of Supervisory and Prudential Policies, WP/05/151, P. Hilbers, I. Otker-Robe, C. Pazarbasioglu, and G.Johnsen, IMF; Credit Growth in Emerging Europe: A cause for stability concerns, S. Sirtaine and I. Skamnelos, Finance and Private Sector Development Europe and Central Asia Region World Bank; Rapid Credit Growth in Serbia, National Bank of Serbia, Mira Eric Jovic, Vice Governor, Belgrade, April 10<sup>th</sup>, 2008; Web sites of the central banks of Montenegro, Croatia, Serbia, Bulgaria and Romania, Global Financial Stability Report, IMF, October, 2007.

the potential risks, as well as bigger caution and constant monitoring by the carriers of the economic policy, imposes.

The over crediting of the private sector can have both macroeconomic and microeconomic consequences. The first denotes potential disturbance of the macroeconomic stability through stimulating the aggregate demand by making pressure on the inflation and/or balance of payments equilibrium. The second denotes potential disturbance of the financial stability as a result of the following reasons: 1/ procyclic nature of the banking crediting, where the risk can be underestimated in the phases of expansion of the economic cycle; 2/ inadequate capacity of the banks for credit risk management and monitoring (in terms of fast increase in the credits, relaxation of the crediting standards and lowering of the average credit users quality occurs), resulting in worsening of the banks' credit portfolio quality.





Certainly, the mutual correlation and dependence between macroeconomic and microeconomic consequences from the intensive credit growth should not be forgotten. The timely prevention of the possible consequences from the fast credit growth on the macroeconomic and the financial stability imposes a need for measures. They can be macroeconomic (fiscal, monetary and foreign exchange rate policy), prudent, supervisory, administrative, market, promotion intended for better understanding of risks, as well as their combination. The undertaking of rightly chosen measures imposes the need of more detailed analysis of credit activity in the previous period, as well as identification of risks related to the fast credit transfer.

The existence of these serious risks imposes a need of undertaking preventive measures. Central banks of several countries undertook different measures for timely limitation of the intensive credit growth.<sup>86</sup>

<sup>&</sup>lt;sup>86</sup> For example: Montenegro - if the credit growth (credits + leasing) exceeds 60% annually, then the capital adequacy ratio should equal minimum 10%, if this growth goes beyond 100% annually, then the capital

Despite the fact that the faster credit growth is usually connected to possible financial crisis, however, the financial indicators indicate that in most of the countries it is a normal process of further financial deepening. The current position of the banks, the largest portion of which is highly capitalized and profitable, hides the possible deterioration risks. The indicators show no serious signs of deterioration of the banking system performances. However, some countries show initial signs of slight decrease in the capital adequacy ratio and increase in the credit risk.

Financial	Capital adequacy ratio (CAR)						Non-performing loans /Total Loans						
indicators	2002	2003	2004	2005	2006	2007	2002	2003	2004	2005	2006	2007	
Albania	n.a.	28.5%	21.6%	18.6%	18.1%	n.a.	n.a.	4.6%	4.2%	2.3%	3.1%	n.a.	
Bulgaria	25.2%	22.0%	16.1%	15.2%	14.5%	n.a.	2.6%	3.2%	2.0%	2.2%	2.2%	n.a.	
Croatia	17.4%	16.5%	16.0%	15.2%	13.6%	15.9%	10.2%	8.9%	7.5%	6.2%	5.2%	4.9%	
Czech Republic	14.3%	14.5%	12.6%	11.9%	11.4%	11.8%	8.1%	4.9%	4.1%	4.3%	4.1%	n.a.	
Estonia	15.3%	14.5%	13.4%	11.7%	13.2%	13.7%	0.8%	0.4%	0.3%	0.2%	0.2%	0.2%	
Hungary	13.0%	11.8%	12.4%	11.6%	11.3%	n.p.	2.9%	2.6%	2.7%	2.5%	2.5%	n.a.	
Latvia	13.1%	11.7%	11.7%	10.1%	10.2%	10.4%	2.0%	1.4%	1.1%	0.7%	0.4%	0.4%	
Lithuania <sup>1</sup>	14.8%	13.3%	12.4%	10.3%	10.8%	n.a.	5.3%	2.4%	2.2%	0.6%	1.0%	n.a.	
Montenegro	n.a.	n.a.	31.3%	27.8%	21.3%	18.5%	n.a.	n.a.	5.2%	5.3%	2.9%	2.0%	
Poland	13.8%	13.7%	15.5%	14.5%	14.0%	n.a.	21.1%	21.2%	14.9%	11.0%	9.4%	n.a.	
Romania <sup>2</sup>	25.0%	20.0%	18.8%	20.2%	17.8%	n.a.	n.a.	8.3%	8.1%	8.3%	8.4%	n.a.	
Serbia <sup>3</sup>	25.6%	31.1%	27.9%	26.0%	24.7%	25.9%	21.6%	24.1%	22.8%	23.2%	21.4%	n.a.	
Slovakia	21.3%	22.4%	18.7%	14.8%	13.0%	n.a.	7.9%	3.7%	2.6%	5.0%	3.7%	3.2%	
Macedonia	28.1%	25.8%	23.0%	21.3%	18.3%	17.0%	23.1%	22.4%	17.0%	15.0%	11.2%	7.5%	

<sup>1</sup>The data do not encompass the foreign banks' branch offices.

<sup>2</sup> Statistics cessation of data in 2003.

<sup>3</sup> The data before 2006 refer to Serbia and Montenegro.

<sup>4</sup> Since 2005, non-performing loans are those with due payment over 60 days.

Although, generally observed, the credit exposure quality has not worsen, certain segments of the total credit portfolio contain elements pointing to potential worsening of the quality in future. The credit portfolio of the banks should be monitored with special attention. It is relatively new, so the initial good quality effect is expected. The need of detailed and more comprehensive monitoring of the credit quality is related, inter alia, with the procyclic nature of bank crediting, where the risk can be underestimated in the economic cycle expansion stages. Other important aspect is the banks' capacity for credit risk monitoring. In terms of fast credit growth, lessening of the credit standards occur and lowering of the average level of creditworthiness of the credit users. Such a tendency of lessening the crediting conditions, for the purpose of enhanced

adequacy ratio should equal at least 12%. Additionally, the banks registering net credits in the amount bigger than Euro 200 million, are allowed to have annual increase in the credits up to 30%, at most, the banks with net credits in the amount of Euro 100 million, an increase up to 40%, while the banks with net credits are allowed to register annual increase in the credits up to 60%. Croatia - if the credit growth exceeds 12% annually, or 1% monthly, purchase of mandatory CB bills is ordered. Besides this monetary measure, prudent measures are also envisaged: the capital adequacy ratio should equal minimum 10%, and inter alia, restriction of the growth of the secondary sources of funds in the credit activity financing is envisaged. Serbia - higher risk weights for claims with currency component from clients with unhedged foreign currency position and mortgage credits is envisaged; increase in the obligatory deposits for foreign currency credits also with currency component, contrary to the revocation of the obligatory deposits for the Dinar credits; other supervisory measures (off-site monitoring of the credit activity, partial controls of banks with more aggressive credit policy, regular communication, stimulating higher transparency of the banks, communication with the supervisory bodies of the parent entity); stress tests, educating the clients. Bulgaria -(monetary measures) - the reserve requirement calculation basis was broadened, they reduced the cash amount the banks may maintain, and introduced marginal reserve requirement; (prudent measures) - holding more frequent meetings with banks having aggressive credit policy, strengthening of the supervision on banks, tightening the regulations for credit classification, increase in the number and frequency of controls, restricting the terms and conditions under which the current profit may be included in determining of the capital. Romania - the monetary measure pertains to the introduction of foreign currency reserve requirement in the amount of 40% of the foreign currency liabilities. The prudent measures include: limitation of the crediting with currency clause to clients with unhedged foreign currency position up to 300% of the banks' capital; setting: maximal credit amount to natural person, monthly rate - available income correlation, the type of collateral and introduction of regulations for non-banking financial institutions. Since March 2007, all limitations for households crediting are revoked.

competitiveness, was also registered by the banks in the Republic of Macedonia, especially within the issuance of credit cards domain.

## 3.4.2. Quality and level of risk of exposure to credit risk towards the sector "enterprises and other clients<sup>87</sup>"

The level of risk of the credit exposure of the sector "enterprises and other clients" showed a trend of improvement, which is verified also in the analysis of the level of risk with the exposure to individual activities of this sector.<sup>88</sup>

In 2007, the most obvious is the improvement of the indicators for the quality of the exposure to credit risk with the activity "industry", which had dominant participation of 41.5% in the exposure to this sector. For illustration, this activity participated with 22.4%<sup>89</sup> registered in 2007.

Table 21           Indicators for the quality of the exposure to credit risk towards enterprises and other clients										
Indicators on the quality of the credit risk exposure	Date	Industry	Agriculture, hunting and forestry	Construction	Wholesale and retail trade	Transport, storage and communication	Total credit risk exposure to enterprises and other clients			
	31.12.2007	11.1%	18.1%	7.9%	7.9%	5.9%	9.2%			
Average level of risk	31.12.2006	15.1%	19.3%	8.5%	11.4%	8.2%	12.5%			
	31.12.2005	21.5%	25.2%	9.7%	14.3%	10.7%	16.5%			
Share of "C", "D" and "E" in	31.12.2007	13.0%	18.7%	11.3%	6.5%	4.5%	9.8%			
total credit risk exposure	31.12.2006	18.3%	20.7%	14.9%	11.9%	6.9%	14.5%			
total ci cuti fisk exposure	31.12.2005	28.8%	36.5%	23.8%	14.8%	11.5%	21.7%			
	31.12.2007	9.0%	11.3%	8.5%	5.5%	4.0%	7.1%			
Share of non-performing loans in	31 12 2006	15.0%	12.8%	10.2%	0.5%	6.4%	11.5%			

12.8%

18.0%

96.8%

93.2%

69.1%

10.2%

2.7%

69.8%

56.9%

40.9%

9.5%

11.7%

121.5%

95.8%

96.9%

6.4%

10.0%

130.6%

118.5%

93.1%

11.5%

15.0%

94.8%

86.5%

76.4%

31.12.2006

31.12.2005

31.12.2007

31.12.2006

31.12.2005

total credit risk exposure

provisions

Coverage ratio of C, D and E by

15.0%

22.0%

85.0%

82.5%

74.5%

The improvement of the quality of the banks' exposure to credit risk towards enterprises and other clients can be perceived also through the analysis of the quality of the so-called "old credit portfolio", i.e. taking out the effect of the newly approved credits in this sector in 2007. On the basis of the transitional matrix for the non-financial legal entities<sup>90</sup>, in the December 31, 2006 - December 31, 2007 period, the exposure towards the non-financial legal entities registers improvement. The share of the exposure classified in the categories C, D and E in the total exposure to credit risk of 11% at the end of 2006, reduced to 10.6% at the end of 2007.

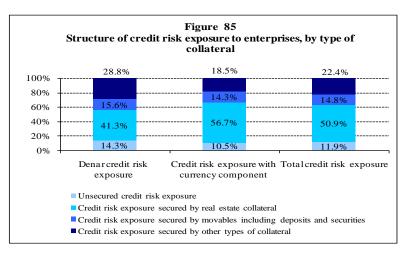
<sup>&</sup>lt;sup>87</sup> Other clients include: non-profit organizations, non-government organizations, healthcare and social insurance funds, exterritorial organizations and bodies, etc.

<sup>&</sup>lt;sup>88</sup> The indicators for quality of the exposure to individual activities are calculated for five activities, comprising 90% of the total exposure to the sector "enterprises and other clients".

<sup>&</sup>lt;sup>89</sup> Source: State Statistical Office, Short-term macroeconomic indicators" Latest release no. 3.1.8.03 dated March 21, 2008.

<sup>&</sup>lt;sup>90</sup> The transitional matrix for clients - non-financial legal entities (enterprises) pertains only to the nonfinancial legal entities - residents, the banks are obliged to report individually to the Credit Registry of NBRM, in line with the Decision on the contents and the manner of functioning of the Credit Registry". Hence, during the preparation of the transitional matrix the bank's exposure towards other domestic banks is not taken into consideration, nor to the legal entities - non-residents (including also foreign banks) and legal entities with total exposure lower than Denar 500,000.

The largest portion (88.1%) of the total exposure towards the enterprises is covered by collateral. Half (50.9%) of the total exposure is secured with real estate, within which the largest share (55.6%)accounts for the business and storage premises, followed by the apartments with a share of 37.6%. The percentage of unsecured claims is almost with both equal Denar exposure and exposure with currency component.



The indirect credit risk caused by the exposure of the bank clients to currency and interest rate risk is the largest potential risk to banks. This risk is due to the very common crediting with currency component to clients with unhedged foreign currency position, as well as the massive application of contracted clauses for the so-called adjustable interest rates, which can be altered according to a decision of bank's body. At the end of 2007, more than 55% of the exposure with currency clause are towards the sector "enterprises and other clients". The fact that about 78% of the total credits with currency clause are approved to enterprises having unhedged foreign currency position thus being potentially exposed to currency risk, means exposure of banks to indirect credit risk. However, the fact that about 90% of the exposure with currency component towards enterprises is secured, to certain extent it lowers the banks' exposure to risk of deterioration of the creditworthiness of the clients with unhedged foreign currency position. High share of the credits with adjustable interest rate (about half of the total credits of the enterprises and other clients at the level of the banking system are with interest rate that can be changed with a decision of the banks' management  $body^{91}$ ) means exposure of the banks to indirect credit risk, due to the fact that the largest part of the risk of change of interest rates have been transferred to the credit users.

#### Table 22

Activity	Date	Herfindahl- index	CR3	CR5
Industry	31.12.2007	2,359	80.7%	87.3%
Industry	31.12.2006	2,157		85.5%
Agriculture, hunting and	31.12.2007	1,875	68.0%	82.8%
forestry	31.12.2006	1,685	62.7%	79.2%
Construction	31.12.2007	2,222	75.8%	85.0%
Construction	31.12.2006	2,032	72.5%	87.8%
Wholesale and retail trade	31.12.2007	1,903	71.0%	79.6%
wholesale and retail trade	31.12.2006	1,773	69.4%	77.6%
Transport, storage and	31.12.2007	1,731	58.3%	73.5%
communication	31.12.2006	2,178	64.0%	77.8%

Level of concentration of the exposure to credit risk towards individual activities from the sector "enterprises and other clients"

The banks' exposure to risks of relatively higher concentration of the exposure to credit risk towards the sector "enterprises and other clients" should not be neglected. Namely, the undertaken credit risk of the exposure towards individual activities is concentrated

<sup>&</sup>lt;sup>91</sup> The analysis encompasses credits with adjustable interest rate of the three largest banks having dominant market share of 67.1% on December 31,2007.

with several banks within the banking system. The level of concentration with the exposure towards the activities "industry" and "construction", where the Herfindahl index is bigger than 2,000 index points, while the CR indicators exceed 75%, is especially high.

# 3.4.3. Quality and level of risk of the credit risk exposure towards the sector households<sup>92</sup>

In 2007, the improvement of the credit exposure quality towards the sector "households" slowed down, registering even the first signs of its deterioration, as a result of the so-called "maturation" of the households' credit portfolio. Actually, as a result of this, the first signs of the consequences from the competitive battle among banks by relaxing the conditions for credit approval showed. Thus in 2007 the reduction of the difference between the growth rate of the total credits and the households' non-performing loans are registered, as a result of the sudden increase in the annual growth rate of the exposure classified in the risk categories C, D and E. Namely, at the end of 2007, the annual growth rate to households equal 46.9%, while the annual growth rate of the exposure classified in the risk categories C, D and E equal 38.3%, which is more by significant 25.4 percentage points compared to the rate at the end of 2006. The constant increase in the exposure to credit risk classified in the risk categories C, D and E, towards "households" sector resulted in a holding up of the improvement of the credit exposure quality towards this sector. Thus in 2007, the annual decrease in the risk level towards households, measured through the share of the exposure classified in the risk categories C, D and E in the total exposure quality towards this sector. Thus in 2007, the annual decrease in the risk level towards households, measured through the share of the exposure classified in the risk categories C, D and E in the total exposure) equals only 0.3 percentage points, while for 2006 it equaled 2 percentage points.

Indicators on the quality of the credit Date risk exposure		Residential and commercial real estate loans	Consumer loans	Overdrafts	Credit cards	Car loans	Other loans	Total credit risk exposure to households
Share of "C", "D" and	31.12.2007	4.5%	7.1%	6.0%	3.5%	3.6%	5.0%	5.1%
"E" in total credit risk	31.12.2006	5.3%	6.6%	5.1%	3.2%	n.a.	6.5%	5.4%
exposure	31.12.2005	6.5%	5.2%	24.4%	3.8%	n.a.	7.4%	7.4%
	31.12.2007	4.8%	5.3%	4.4%	3.2%	4.1%	5.3%	4.4%
Average level of risk	31.12.2006	5.7%	5.0%	3.8%	2.4%	n.a.	6.7%	4.6%
	31.12.2005	5.3%	4.3%	13.4%	2.9%	n.a.	6.5%	5.5%
Share of non-	31.12.2007	3.6%	5.0%	3.0%	1.9%	2.8%	2.2%	3.3%
performing loans in	31.12.2006	4.7%	4.8%	3.3%	1.4%	n.a.	4.8%	3.9%
total credit risk	31.12.2005	5.8%	4.4%	17.0%	1.1%	n.a.	5.5%	5.5%
Coverage ratio of "C",	31.12.2007	106.3%	73.7%	74.1%	90.4%	113.5%	106.1%	85.7%
"D" and "E" by	31.12.2006	107.2%	75.6%	74.3%	75.8%	n.a.	104.0%	84.9%
provisions	31.12.2005	81.9%	82.7%	54.9%	77.7%	n.a.	88.8%	73.8%

 Table 23

 Indicators for the credit risk exposure quality towards households

\* Note: Banks have started reporting NBRM on commercial real estate loans and car loans since 31.03.2007.

The worsening of the households' credit portfolio quality is verified also through the analysis of the quality of the so-called "old credit portfolio", i.e. elimination of the effect of the newly extended credits of this sector during 2007. On the basis of the transitional matrices for natural persons<sup>93</sup> for the December 31,2006 - December 31,2007 period, the exposure towards natural persons worsened, measured through the share of the exposure classified in C, D and E categories in the total exposure to credit risk towards households. Namely, this indicator went up from 5.4% on December 31, 2006 to 7.9% on December 31, 2007.

 <sup>&</sup>lt;sup>92</sup> The indicators of the quality of the exposure to credit risk towards households do not encompass the data on the sole proprietors, natural persons not considered as traders and natural persons conducting retail trade since December 31, 2007.
 <sup>93</sup> Transitional matrix for natural persons is prepared taking into consideration only the natural persons -

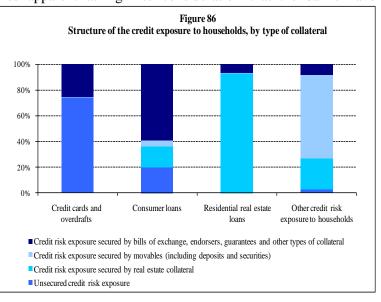
<sup>&</sup>lt;sup>93</sup> Transitional matrix for natural persons is prepared taking into consideration only the natural persons - residents with exposure bigger than Denar 150,000, the banks are obliged to report to the Credit Registry of the NBRM, in accordance with the Decision on the contents and the manner of functioning of the Credit Register.

Regarding the sector "households", the fastest deterioration of the credit exposure quality was evidenced with the exposure based on credit cards and negative balances on current accounts. On the other hand, decline in the level of risk is witnesed with the exposure based on credits for purchase and restoration of residential and business premises and exposure based on other credits. The credit exposure classified in the categories with higher risk level on the basis of credit cards and negative balances on current accounts registered the highest annual growth rate of 98.6%, thus having the largest contribution (59.4% in the annual increase in the exposure to households classified in the risk categories C, D and E. Despite such movements, at the end of 2007, the level of risk measured through the share of the credit exposure classified in the risk categories C, D and E in the total credit exposure on the basis of these credit products, shows no significant deterioration, nor deviation compared to other types of credit exposure towards households. Such an occurrence can be explained by massive approval of these types of credit products by the banks, with the primary exposure on this basis showing low level of risk.

The relatively low and stable level of the indicators for risk of credit risk exposure towards the sector "households", should be interpreted carefully, having in mind that there are certain factors of risk than can easily result in increase in the risk profile, and consequently the financial losses for the banks and deterioration of their capital position. This especially becomes important taking into consideration the fact that the banks' focus relative to their credit activity in the last few years was directed exactly towards the sector "households". The fact that the banks' capacity for monitoring the credit risk with a remarkably dispersed number of clients from the aspect of the operational and information systems, is still in developing stage should not be forgotten.

Additionally, a factor that becomes important is the potential negative influence of macroeconomic movements and global factors can have on the economic strength of the sector "households". This becomes apparent taking into consideration that the banks have

transferred, to large extent, the currency risk and the risk of change in the interest rates on the credit users through utilization of currency clauses and clauses with adjustable interest rates is taken into regard (on December 31. 2007. 58.3%<sup>94</sup> and 39.4% of the total households' indebtedness accounts for credits with variable interest rate, i.e. currency clause). The total exposure of the banks towards households could have been better secured. Thus at the end of 2007, 36.4% of the total exposure to credit risk towards



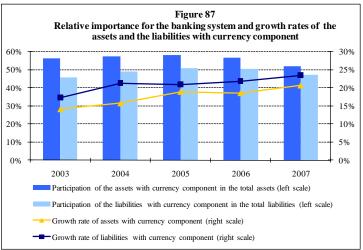
households are not collateralized. The largest part (93.8%) of the exposure with currency component and 54% of the Denar exposure is secured.

<sup>&</sup>lt;sup>94</sup> The analysis encompasses the households' credits with adjustable interest rate of the three largest banks having market share of 67.1% on December 31, 2007.

## 3.5. Currency risk

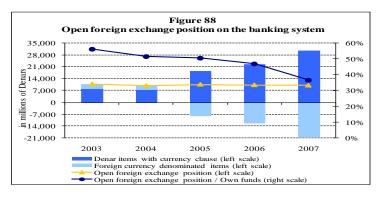
Banking system of the Republic of Macedonia is characteristic for the relatively high share of the foreign exchange component in the total assets and in the total liabilities of the

banks. In 2007, the relative importance of the assets and the liabilities with foreign currency component, presented as a share in the total assets and total liabilities, registered decrease. However, as a result of the larger increase in the share of the liabilities with foreign exchange component in the 2003 -2005 period, as well more intensive decrease in the share of the foreign assets, in the last two years, starting from 2004 the "gap" between the participation of the foreign exchange component in the



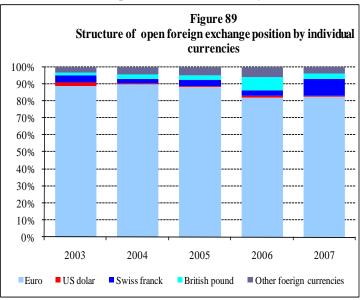
total assets and the total liabilities at the level of the banking system started to narrow, , thus elevating the level of their mutual harmonization.

At the end of 2007, the banking system had long open currency position which equaled Denar 10,169 million, representing approximately the same level as in the previous few years. It represents 36.7% of the own funds, which is a decrease by significant 10.4 percentage points, compared to the end of 2006.



As expected, the dominant part of the open currency position of the banking system originates from the Euro, having in mind the dominant position of this currency in the structure

of assets and liabilities with currency clause (86.8% and 87%. respectively and the determinacy of the monetary policy for maintenance of de facto fixed nominal foreign exchange rate. The long foreign currency positions in Euros point that the banks are exposed to risk of possible revaluation of the Denar compared to Euro. Besides the Euro, the banking sector registered long open currency positions with remaining currencies. In 2007, the significance of the open currency position in US Dollars was minor besides the fact that the US Dollar was the second currency according to its share in



both foreign assets and foreign liabilities structure. The mostly harmonized foreign currency positions of the banks in US Dollars, in terms of continuing US Dollar depreciation compared to

Euro in 2007, was intended to protect from materialization of the exchange rate risk and create negative net exchange rate differentials. As a contrary, in 2007, parallel to the increased significance of the Swiss Frank in the foreign assets and the foreign liabilities structure, an annual increase in the long open currency position of banks in this currency was registered. It was primarily a result of the enhanced crediting in Swiss Franks, supported by the rise in the borrowings and the subordinated deposits nominated in Swiss Franks.

## 3.6. Liquidity risk

The liquidity position, analyzed through the liquidity indicators, showed that the banks mainly maintain satisfactory level of liquid funds to respond to due liabilities.

## Table 24

### **Basic liquidity indicators**

Indicators	2001	2002	2003	2004	2005	2006	2007
Liquid assets /Total assets	45.8%	40.3%	38.5%	38.1%	37.6%	37.1%	34.2%
Highly liquid assets/Total assets	31.9%	14.1%	12.9%	12.0%	14.9%	17.7%	20.6%
Liquid assets/Short-term liabilities	69.1%	66.4%	59.4%	56.2%	55.6%	53.5%	47.7%
Highly liquid assets /Short-term liabilities	48.2%	23.2%	19.8%	17.8%	22.0%	25.6%	28.7%
Liquid assets /Total liabilities	56.5%	51.2%	47.9%	46.1%	44.9%	43.9%	39.5%
Highly liquid assets /Total liabilities	39.4%	17.9%	16.0%	14.6%	17.8%	20.9%	23.8%
Highly liquid assets / Sight deposits	73.5%	36.2%	31.4%	32.4%	43.2%	54.0%	65.8%
Liquid assets / Total liabilities (due within 30 days according expected residual maturity structure)	n.a.	n.a.	n.a.	195.0%	232.4%	231.5%	297.9%
Highly liquid assets / Total liabilities (due within 30 days according expected residual maturity structure)	n.a.	n.a.	n.a.	61.7%	91.9%	110.5%	179.2%

The share of the liquid assets<sup>95</sup> in the total banks' assets continued to decrease in **2007.** It resulted in decline in the level of coverage of short-term liabilities with liquid assets. At the end of 2007, the share of the liquid assets in the total assets reduced to 34.2%, which is the lowest level registered so far. Despite the drop, this level of liquid funds enabled coverage of the short-term liabilities of 47.7%, i.e. they were bigger by almost three times than the total liabilities that should mature for thirty days, according to the expectations and the empirical analyses made by banks under stable and favorable macroeconomic conditions.

**Opposite to the liquid assets, the share of the highly liquid asset<sup>96</sup> in the total assets continued to grow** and at the end of 2007, it equaled 20.6%. The largest contribution for the increase in the highly liquid assets accounts for the CB bills<sup>97</sup> with a share of 76.2%. Also they registered the highest annual growth rate of 122.1%, enabling them to have the dominant share of 45.7% (30.6% on December 31, 2006) in the structure of the highly liquid assets. The withdrawal of the additional liquidity through the CB bills was in function of pressure reduction on the demand for foreign currency on the foreign exchange market in the last quarter of the year. This level of highly liquid assets covers 28.7% of the short-term liabilities and 65.8% of the sight deposits<sup>98</sup>.

<sup>&</sup>lt;sup>95</sup> Liquidity assets encompass the highly liquid assets, the short-term placed funds with foreign banks and placements in other short-term debt securities.

 $<sup>^{56}</sup>$  The highly liquid assets encompass the funds and the balances with the NBRM, the CB bills, the correspondent accounts with foreign banks and short-term placements in securities issued by the Government.

<sup>&</sup>lt;sup>97</sup> The renewed orientation of the banks towards the CB bills auctions in the second half of 2007 is due to the reduced interest of the banks to invest in Treasury bills for monetary purposes due to the reduction of the maximum interest rate by the Ministry of Finance and introduction of the limited participation rule and speculative percentage point set at 0.02 for the three-month Treasury bills.

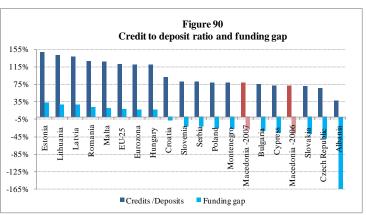
<sup>&</sup>lt;sup>98</sup> It includes also the demand deposits.

Table 25 **Other liquidity indicatiors** 

Indicators	2001	2002	2003	2004	2005	2006	2007
Credits / Deposits	54.7%	67.0%	64.4%	69.7%	70.3%	72.9%	77.9%
Deposits/Total sources of financing	66.3%	62.1%	66.9%	69.7%	69.7%	70.7%	71.7%
Secondary sources of financing / Total sources of financing	12.0%	14.2%	10.5%	9.5%	11.3%	12.5%	13.4%
Secondary sources of financing / Total liabilities	14.8%	18.0%	13.0%	11.5%	13.5%	14.7%	15.5%
Funding gap	-82.7%	-49.4%	-55.3%	-43.4%	-42.3%	-37.1%	-28.3%

The credit expansion in the Republic of Macedonia in the last years contributed for enhanced financing of the credits with deposits and decrease in the "negative"<sup>99</sup> gap of

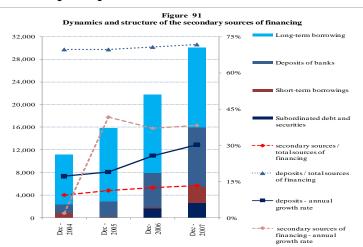
credits financing. The indicator for credits relative to deposits registers a continuing trend of increase and at the end of 2007, it equals 77.9%, which is far below the level of most of the EU member-states  $^{100}$ . The credits funding gap<sup>101</sup> in our country is "negative" (with negative value) indicating that deposits still fail to play the role of dominant sources of funds. But in years, it is reducing, which would potentially



mean approximation to some of the EU member states, where the gap is "positive<sup>102</sup>. This points that the financing of credit in the EU member states, besides the deposits, has been more and more leaning on the interbank and additional sources of funds.

## In 2007, the non-financial entities' deposits preserved the role as dominant sources of

funds in the structure of the sources of financing activities. However, in the last two years, higher utilization of the secondary sources of funds by the banks in the Republic of Macedonia was registered, especially the long-term borrowings and deposits of the parent entities of the banks. The deposits of the non-financial entities, with their average share of about 70% in the total sources of funds in the last four years retained the role as dominant sources of



funds. The average share of the secondary sources of funds of 11.7% in the total sources of funds in the last four years point to a relatively lower level of banks " dependence" on this source of funds.

<sup>&</sup>lt;sup>99</sup> The "negative" financing gap denotes smaller amount of credits compared to deposits.

<sup>&</sup>lt;sup>100</sup> Source: Report on the banking sector structure of EU (ECB), October 2007 and the web sites of the central banks of appropriate countries. The data on individual countries pertain to 2006, except for the Republic of Macedonia, where datum on 2007 is also stated, while in case of Croatia, the data refer to June 2007.

<sup>&</sup>lt;sup>101</sup> The gap for activities financing is calculated through the difference between the non-financial entities and deposits divided with the value of the credits of the non-financial entities. The positive gap shows the percentage of the credits not being financed by the deposit potential. <sup>102</sup> "Positive" funding gap means larger amount of credits compared the deposits.

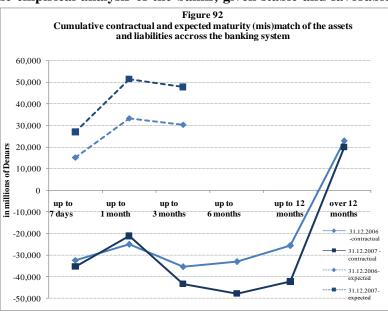
However, the higher annual growth rates of the secondary compared to the primary sources of funds indicate that the banks are more focused to the additional sources of financing besides the "negative gap" of financing of credits with deposits. At the end of 2007 the dominant category in the structure of the secondary sources of funds at the level of the banking system accounts for the long-term borrowings (46.8%) and banks' deposits (34.9%).

In 2007, enhanced utilization of funds from the parent entities of the banks is registered. These funds equal 31% of the total secondary sources of funds and went up by Denar 2,674 million, or 40.2% compared to the end of 2006. Half of the financing by the banks'parent entities is conducted through short-term deposits, and rest is almost equally referring to the long-term borrowings, or subordinated instruments.

## 3.6.1. Assets and liabilities' maturity structure

At the end of 2007, the cumulative contractual maturity incompliance between assets and liabilities, as well as in the previous years, is overcome in the maturity block beyond twelve months. According to the empirical analysis of the banks, given stable and favorable

conditions macroeconomic there is harmonization the anticipated between maturity of the assets and the liabilities in all maturity blocks, which is due to the high stability of the sight deposits<sup>103</sup>. The contractual maturity incompliance is due, to great extent, to the maturity incompliance between both dominant on-balance sheet categories, i.e. due to the bigger representation of the credits with longer maturity relative to the deposits with shorter maturity. At the end of 2007, the long-term credits took 80.7% of the time



deposits<sup>104</sup>, i.e. they are larger by 8.9 times than the long-term deposits. On the other hand, despite the cumulative contractual maturity incompliance, according to the empirical analyses of the banks, there is harmonization between the anticipated outflows and inflows in all maturity blocks, which is due to the high stability of the sight deposits. At the end of 2007, in line with the banks' indications, the percentage of stable sight deposits reached the level of 86.2%.

<sup>&</sup>lt;sup>103</sup> Sight deposits include demand deposits, as well.

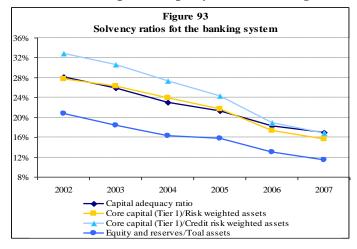
<sup>&</sup>lt;sup>104</sup> Deposits with one-year maturity and long-term deposits.

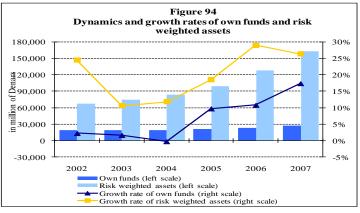
# **3.7. Insolvency risk**<sup>105</sup>

The continuing downward trend of the banks' capital adequacy went on during 2007,

as well. At the end of 2007, the capital adequacy ratio at the level of the banking system equaled 17.0% and it doped by 1.3 percentage points annually. Main driving force for the decrease in the capital adequacy ratio as well as in the last several years, was the intensive growth of the on-balance sheet and off-balance sheet activities, especially with the crediting. Apart from the capital adequacy ratio, the remaining indicators for the capital position of the banking system continued to decline and the end of 2007 they registered their historically lowest levels.

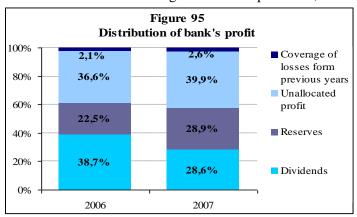
In 2007, the own funds at the level of the banking system augmented by Denar 4,117 million, i.e. by 17.4% compared to the end of 2006. In 2007, the core capital with annual growth rate of 14.1% generated more than three quarters of the increase in the own funds at the level of the banking system.





The registered profit from the banks' operating remains to be the significant source for incrementing the capital position. Thus 28.6% out of the total profit after taxation was intended for payment of dividend, while 71.4% served for increasing the banks' capital base, as an

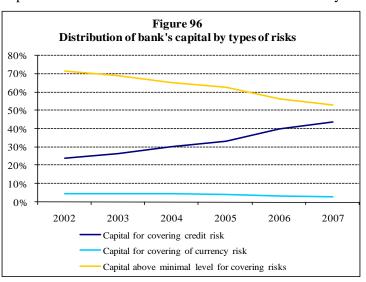
increment of the reserve fund, unallocated gain, or for covering the loses registered in the previous years. Also, the share of the amount of the paid dividends given the profit distribution went down annually by 10.1 percentage point. This verifies the significance of the positive trends in the profitability of the banking system as a source for increasing the capital base, and thus as a basis for potential rise in both volume and cope of the future activities.



<sup>&</sup>lt;sup>105</sup> In December 2007, with the adoption of the Decision on the Methodology for determining the capital adequacy ("Official Gazette of RM" no. 159/2007 and 32/2008) qualitative change in the method of calculating own funds and the risk weighted assets, and thus on the capital adequacy ratio. However, the influence of this qualitative change in calculation of the solvency indicators and their comparability in the previous years, at the level of the banking system is marginal.

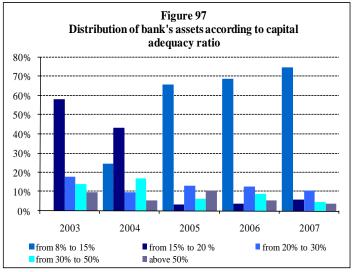
In 2007, the trend of increase in the amount of own funds, necessary for credit risk coverage, continued. This trend corresponds to the intensive rise in the banks' credit activity. A

continuous decrease in the level and share of the own funds, which are beyond the minimum level of requirement capital for risk coverage, is registered. At the end of 2007, 43.9% of the own funds serve for credit risk coverage, while the own funds necessary for covering the currency risk take 3.1% of the total own funds. However. the funds own distribution for covering individual risks show significant differences with individual banks. The necessity of possible capitalization, in direction of strengthening of the capital base, and thus increasing the



resistance of possible negative shocks, is most apparent with the banks with bigger credit activity, which have taken also a higher level of credit risk.

The capital adequacy reduction, mainly due to the intensive increase in the credit activity, contributed to the increase in their relative meaning of the banks' assets having the capital adequacy ratio within the interval of 8% and 15%. Namely, at the end of 2007, 74.8% of the total assets of the banking system accounted for the banks with capital adequacy ratio within the interval between 8 and 15%, which is annual increase of 5.8 percentage points. For comparison, the EU countries, the banks with capital adequacy within the interval

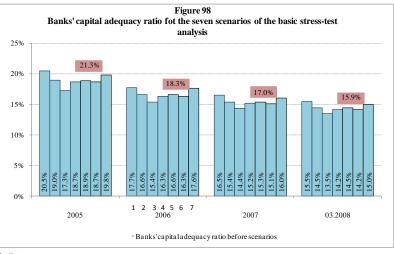


from 9% to 13% encompass, on average, about 92% of the total risk weighted assets at the level of their banking systems.

## Estimation of the banking system resistance through the performed stress tests

The results from the stress tests analyses indicate satisfactory resistance of the banking system of the Republic of Macedonia to various hypothetical shocks. As of March 31, 2008, the hypothetic scenarios used so far<sup>1</sup> were implemented, simultaneously supplementing the analysis with two new scenarios. Thus the basic stress test analyses was supplemented by a scenario pertaining to an analysis of the effects on the banking system from possible appreciation of the foreign exchange rate of the Denar relative to the Euro and the US Dollar of 20%. With regard to the evident credit activity of the banking system, the stress test analysis was supplemented by a new scenario of isolated credit shock, through deteriorating the credit exposure quality towards the biggest ten credit users with several banks, with obvious credit activity.

None of the basic stress test analysis scenarios caused decrease in the capital adequacy ratio below the legally determined minimum of 8%. The results point to a conclusion that the banking system is mostly exposed to the credit risk. Namely, the most significant decrease in the capital adequacy ratio occurs in case of implementation of the third scenario (hypothetical rise in the credit exposure classified in the risk categories C, D and E of 505), when it reduces by 2.5

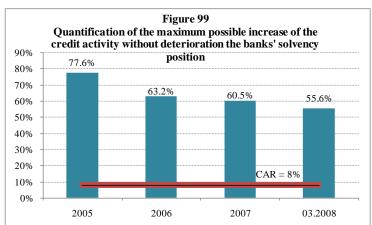


percentage points and it reduces to 13.5%.

This statement is verified also with the results from the newly introduced scenario for reclassification of the credit exposure of the largest ten credit users with several banks (these banks cover approximately 2/3 of the total assets of the banking system) in the risk category E. The implementation of this scenario stresses the sensitivity of the banks to credit risk, putting into question the solvent position of individual banks, especially those with more evident credit activity. However, the own funds failed to reduce to negative value only with one bank, i.e. the capital adequacy failed to drop below 0%. Such results point to high level of sensitiveness not only to the credit risk, but to the concentration risk, as well. Because of that, all banks are required to pay regular special attention to the implementation of internal stress tests to the sensitiveness to credit risk.

The advanced stress test analysis point to a satisfactory level of resistance of the banking

system to credit risk. The maximum possible increase in the gross credits at the level of the banking system, not jeopardizing the solvency of individual banks, equals 55.5% (the simulation is made on the basis of the amount and the quality of the gross credits as of March 31, 2008). As a result of the apparent dynamics of the credit activity of the banks in the previous period, a downward trend of the maximal possible increase in the credit activity is registered. The results from this scenario should be monitored very

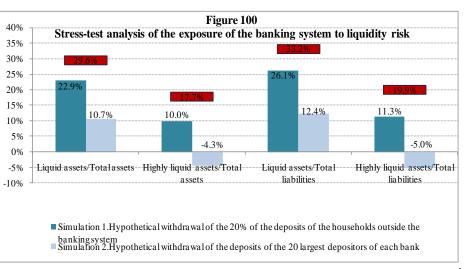


carefully, having in mind that the registered growth rate of the gross credits (March 2008 compared to March 2007) equal 42.1%.

The next scenario shows that 8.4%, at most, of the regular credits of the banks can be reclassified in the risk category E (9.2% for 2007) without causing decrease in the capital adequacy ratio below the legally set minimum of 8%. On the other hand, the hypothetical worsening of the quality of the ten largest credit users at the level of the banking system (reclassification in the risk categories C, D and E), the capital adequacy ratio would reduce to 14.55, 13% and 10.1%, respectively.

The advanced stress test analysis of the banking system of the Republic of Macedonia point to a conclusion that the liquidity risk at the level of the entire banking system, is relatively low. Namely, the banks mainly manage a sufficient amount of liquid and highly liquid assets for covering the hypothetic withdrawal of 20% of the total deposits of households outside the banking system. The level of coverage of the liabilities with liquid and highly liquid assets reduces from 33.2% to 26.1%, i.e. from 19.9% to 11.3%, respectively. On the other hand, the simulation of the hypothetical withdrawal of the deposits of the twenty largest depositors of each bank individually, showed more apparent influence on the banks' liquidity,

pointing to the banks' exposure and the concentration risk on the side of the sources of funds. Such a withdrawal would condition a lack of highly liquid assets with 10 banks, while with other banks, the reduction of the highly liquid assets can be compensated from the amount of the liquid assets. while in case of five banks, no liquid



assets would be sufficient to cover the outflow of the deposits of the twenty largest depositors.

<sup>1</sup>The basic stress test analysis is based on the application of seven hypothetic scenarios, of which

- three scenarios for isolated credit shock (increase in the credit exposure classified in the risk categories C, D and E by 10%, 30% and 50%);
- fourth scenario as a combination of credit and interest rate shock (increase in the credit exposure in the risk category C, D and E of 30% and increase in the domestic interest rates of 5 percentage points
- fifth scenario as a combination of credit and foreign exchange shock (rise in the credit exposure in the risk categories C, D and E of 50% and depreciation of the foreign exchange rate of the Denar relative to the Euro and the US Dollar of 20%); and
- sixth scenario as a combination of the shocks on the side of the credit risk, the foreign exchange risk and the interest rate risk (increase in the credit exposure in the risk categories C, D and E of 50%, depreciation of the Denar exchange rate compared to Euro and the US Dollar of 20% and increase in the domestic interest rates of 5 percentage points).
- seventh (new) scenario for possible appreciation of the Denar exchange rate relative to the Euro and the US Dollar in the amount of 20%.

The advanced stress test analyses include five simulations:

- setting the maximal possible increase in the credit activity without jeopardizing the minimum legally prescribed level of solvency by the banks;
- setting the maximal level of endangering the credit portfolio which will not result in reducing the banks solvency below the minimal legally prescribed level;
- hypothetical worsening of the credit exposure quality towards the ten largest credit users at the level of the banking system;
- hypothetical one-time withdrawal of the 20% of the deposits of the households outside the banking system;
- hypothetical withdrawal of the deposits of the twenty largest depositors of each bank.

### 4. Non-deposit financial institutions

#### **4.1. Insurance sector**

In 2007, the share of the insurance sector in the total assets of the financial system went down, and because of which this segment gave a relatively small contribution to the total financial intermediation in the Republic of Macedonia. However, the development of the insurance sector, especially in the life insurance segment is in its early stage. The better informing of the households with the characteristics and the significance of the life insurance, the wider secondary application of the life insurance policies while using bank credits, the emergence of new life insurance companies, the broadening of the offered insurance products palette, are part of the factors that can contribute to increase in the significance of the life insurance and, generally, of the insurance in the Republic of Macedonia.

One of the basic risks with the insurance sector is the weakness of the supervisory function. Namely, the Insurance Supervision Agency, as an independent supervisory body, regulated with the amendments to the Law on Insurance Supervision dating from September 2007, has not been established, yet. Additionally, the absence of effective on-site and off-site

supervision over the insurance companies creates uncertainty about the appropriate application of the regulations from the insurance area, the structure and the application of the internal systems and risk management policies of individual insurance companies. All of this hampers the risk identification and measurement evident in this segment of the financial system. The institutional strengthening of the supervisory function (on-site and off-site) should obligatory be followed by strengthening of prudent bylaws, especially within the risk management domain.

In 2007, the restructuring of the ownership structure of the insurance companies continued by enabling entry of several foreign strategic investors.

## 4.1.1. Size and the structure of the insurance sector

In 2007, the number of insurance companies increased with the establishment of new two companies. Life insurance services are offered by two companies (compared to 2006 when these services were offered only by one company), compared to ten companies<sup>106</sup> active in the non-life insurance (nine companies in 2006). As well as in the previous year, the level of representation of the re-insurance, with only one company being registered for providing such services, is very low. There are six active insurance - brokerage houses (increase of one, compared to the previous year).

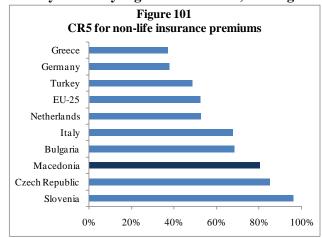
Despite the increase in the number of insurance companies, this sector is the only segment of the financial system of the Republic of Macedonia, the assets of which at the end of 2007 registers decrease compared to the previous year. It caused a decline in the share of the insurance sector in the total assets of the financial system. Thus at the end of 2007, the insurance sector participated with 4.5% in the total assets of the financial system, which is a decrease of 3 percentage points compared to the previous year. Simultaneously, the share of the insurance sector in the total assets of the non-deposit institutions dropped by 75.3% and 53.8%, which is a significantly smaller dominance within this segment of the financial system. At the end of 2007, the insurance sector assets amounted to Denar 11,075 million, which is a decline of 24.2% compared to the end of 2006. This decrease is mainly due to the drop in the total assets with one of the insurance companies (as a result of the interventions in the balances-items settlement) in 2007. However, compared to the lower share in the assets of the financial system, the insurance sector plays very important role for the significance of the financial stability of the country, mainly because of the nature of this type of activity and its influence on the safety of living and operating of the economic entities in the country. The enlarged representation of the life insurance on the insurance market in the Republic of Macedonia should be an additional alarm for the regulatory bodies for faster development of the supervisory function, which despite the fact that it exists for several years, its form is still underdeveloped.

In 2007, the interest of the foreign investors to enter in the insurance sector continued. As a result of that, the restructuring of the insurance companies' ownership continued in direction of increase in the share of the foreign shareholders. At the end of 2007, the share of the foreign capital in the total capital of the insurance companies equaled 70.1%, which is up by 3.7 percentage points compared to December 31,2006. Eleven insurance companies are in dominant ownership of foreign investors, where 90.7% of the gross premiums of the insurance sector based on policies are concentrated in. Four of these companies are in the total ownership of foreign shareholders. The trend of enhanced access of foreign capital in the insurance sector is expected to result in improvement in the supply of services, decrease in the prices of insurance services, and consequently, to the increase in the competitiveness and the significance of the insurance sector in the financial system of the country.

<sup>&</sup>lt;sup>106</sup> One of these ten companies still carries out servicing of the life insurance contracts, concluded in the previous years, when that company provided also non-life insurance services. This company prepares special financial reports on both life and non-life insurance.

The insurance sector is still characteristic by relatively high concentration, although it

is reduced due to the higher number of insurance companies. The concentration is especially high with the life insurance and re-insurance, because of the small number of companies offering these services. Relatively high level of concentration, but within acceptable frames, is present in the non-life insurance domain, where the Herfindahl index, calculated for gross premiums, equals 1,607 index points. The indicator. calculated CR5 for gross premiums for non-life insurance equals 80.5% (2006, 81.4%), which despite the decrease compared to the previous year, is

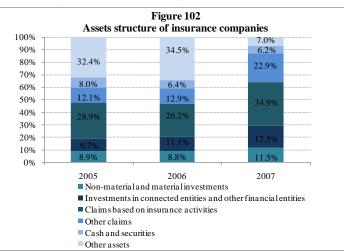


among higher ones, in comparison with some European countries.

## 4.1.2. Insurance sector activities

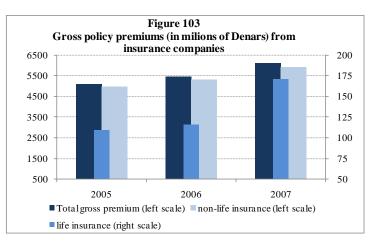
Parallel to the decrease in the total assets of the insurance companies, as a result of a clearing of claims and liabilities performed by one of the companies, in 2007, an assets

restructuring towards rise in the share of the claims based on "insurance operations" (claims for insurance premiums) was carried out. Thus compared to the previous years, when the category "other nonmentioned assets" dominated the assets of the insurance sector, at the end of 2007, the largest share in the total assets of the insurance sector of 34.9% accounts for the "claims based on insurance activities". The increase in the share of this item in the total assets is due exclusively to the lower amount on the item "other assets"



and the total assets, although its absolute amount declines (the decline in the absolute amount of the item "claims based on insurance operations" is smaller than the decrease in the amount of the total assets). The supervisory body and the insurance companies should provide methods for reducing the amount of the claims based on uncollected insurance premiums.

The enlarged volume of activities of the insurance sector can be perceived also through the increase in the gross premiums based on policies of 12.2% in 2007, compared to 2006. Thus in 2007 the total gross premiums on the basis of insurance policies amounts to Denar 6,109 million. The basic factor for the increase in the gross premiums based on policies is the growth of the non-life insurance premiums, which remains to be the



main driving force of the Macedonian insurance sector. These premiums went up by Denar 608 million, annually, i.e. 10.2%. Simultaneously, they remained to be the dominant segment of the insurance activities, registering a share of 97.2%.

The insurance of the motor car owners from the responsibility for damages caused by third parties (motor third party liability insurance) continue to be the main generator of the income with the insurance companies. Half of the gross premiums for non-life insurance (52%) originate from this class of insurance, and half of the total gross premiums in the insurance sector (50.5%) in 2007. Simultaneously, the rise in the gross premiums for non-life insurance (including the re-insurance, as well) is mostly due to the augmented

Table 26Structure of gross premiums by classes of insurance

Classes of Insurance	31.12.2005	31.12.2006	31.12.2007
Accident insurance	10.6%	9.3%	9.0%
Motor-vehicle insurance (casco)	11.8%	11.1%	11.4%
Property insurance against fire and natural disasters	6.7%	6.2%	7.0%
Property insurance against damage or loss of property due to hail or frost, and other damages	19.0%	18.6%	14.3%
Motor-vehicle responsibility	44.8%	47.5%	50.5%
Travel insurance	1.9%	2.0%	1.6%
Other non-life insurance	3.0%	3.3%	3.4%
Life insurance	2.1%	2.1%	2.8%
Total	100.0%	100.0%	100.0%

volume of motor third party liability insurance, contributing with 84.1% to the total increase. This type of insurance is legally binding and it is not a reflection of the habit for insurance utilization, nor indicator for the level of development of the insurance activity.

The revival of the life insurance activities can be perceived through the entry of the second life insurance company and the increase in the gross premiums on the basis of policies for this type of insurance. However, the share of the premiums based on life insurance in the total gross premiums registers no significant changes. Namely, in 2007, their share in the total gross premiums on the basis of policies equaled 2.8%, which is an increase of 0.7 percentage points compared to 2006. On the other hand, the gross premiums on the basis of life insurance went up by Denar 55.5 million, i.e. 48% compared to 2006. The emergence of new life insurance companies, the widening of the insurance products palette, the increase in the level of knowledge of the households with the nature and the significance of the life insurance, the application of the life insurance policies given the utilization of the banking credits, are part of the factors that can contribute to higher significance of the life insurance. Besides the weak supply of life insurance services so far, the other main reason for poor development of the life insurance in the Republic of Macedonia is the low living standard of the households.

## Table 27

Country	Share of the	gross premium (in %)	s in GDP	Premiums per capita (in Euros)			
	Non-life insurance	Life insurance	Total	Non-life insurance	Life insurance	Total	
England	3.4	13.1	16.5	1,193	3,036	4,229	
EU (25)	3.3	5.5	8.8	756	1,222	1,978	
Germany	3.6	3.1	6.7	1,054	906	1,960	
Slovenia	4	1.8	5.8	592	271	862	
Czech Republic	2.3	1.5	3.8	251	162	413	
Poland	1.6	2.0	3.6	110	142	252	
Croatia	2.5	0.9	3.3	185	67	252	
Bulgaria	2.0	0.3	2.3	63	11	74	
Estonia	1.5	0.3	1.8	149	27	175	
Macedonia-2007	1.7	0.04	1.8	47	1	48	
Serbia	1.6	0.2	1.8	n.a.	n.a.	65	
Greece	0.8	0.9	1.8	185	204	390	
Romania	1.4	0.3	1.7	47	12	59	
Turkey	1.4	0.2	1.6	68	11	79	

Share of the gross premiums based on policies in the GDP (in %) and the amount of premiums per capita (in Euros)

Source: Swiss Re, Sigma No 4/2007 and CEA Statistice Ng 21/2007

The data for Macedonia are for 2007 and for the other countries are for 2006. Premiums per capita for EU(25) are for 2005.

According to the share of the gross premiums based on policies in the GDP, the contribution of the insurance sector remains insignificant. Namely, the share of the gross premiums based on policies in the GDP in 2007 equaled 1.8%, which is unchanged compared to 2006. According to this indicator, the insurance sector in the Republic of Macedonia hinders compared to more developed European countries, while it is almost on the same level with the regional countries (except Bulgaria and Croatia). Law development level is especially characteristic for the life insurance, where the share of the gross premiums on the basis of policies in the GDP is on the lowest level, compared to the selected countries.

The minimal utilization of the insurance services in the Republic of Macedonia can be perceived also from the amount of the gross placed insurance premiums per capita (Euro 47 gross insurance premiums per capita, i.e. Euro 1.4 life insurance premiums per capita). For EU-25, these ratios are far higher (Euro 1,978 and Euro1,222, respectively, per capita for 2005).

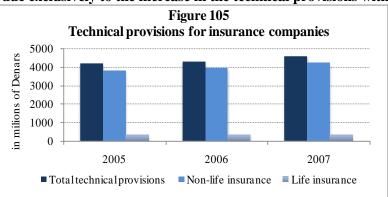
# 4.1.3. Insurance sector achievements

The enlarged volume of the insurance operations reflected also on the structure of the liabilities, with the largest portion of the sources of funds of the insurance companies at the end of 2007 being referred to the technical provisions (allocation of larger amount of reserves due to the enhanced activities and premiums based on policies).

Figure 104 Liabilities structure of insurance companies 100% 90% 28.0% 80% 50.5% 52.0% 70% 60% 41.7% 50% 40% 30.9% 29.7% 30% 20% 10% 0% 2005 2006 2007 Capital and provisions Technical provisions Other liabilities

On December 31, 2007, the total technical provisions<sup>107</sup> of the insurance companies registered an increase, which is due exclusively to the increase in the technical provisions with

the non-life insurance. Thus, at the end of 2007, the technical provisions equaled Denar 4,619 million, which is an increase of 6.6% compared to December 31, 2006. This increase was completely due to the rise in the technical provisions with non-life insurance of 7.1% (at the end of 2007, the technical provisions of the non-life



insurance companies amounted to Denar 4.256 million). The premiums carried forward dominate in the structure of the technical provisions with the non-life insurance with a share of 52.6%. The technical provisions for the life insurance companies went up minimally by 1.1%, and at the end of 2007 it reached the level of Denar 363 million. Regarding the life insurance, the mathematical provisions took the largest portion (88.1%) of the technical provisions.

<sup>&</sup>lt;sup>107</sup> For the purpose of permanent fulfillment of the obligations prescribed in the insurance contracts, the insurance company is required to establish technical provisions, consisting of the following: transferable premiums reserves, reserves for bonuses and discounts, reserves for damages and other technical provisions.

	Life in	surance	Non-life ir	surance	
	2006	2007	2006	2007	
Total technical provisions					
(milions of Denars)	359	363	3975	4256	
Provisions in respect of premiums					
carried forward (milions of Denars)	0,2	37	1904	2239	
Mathematical provisions					
(milions of Denars)	358	320			
Technical provisions / GDP	0.12%	0.11%	1.28%	1.25%	
Provisions in respect of premiums					
carried forward /GDP	0.00%	0.01%	0.61%	0.66%	
Mathematical provisions / GDP	0.12%	0.09%			

 Table 28

 Technical provisions and mathematical provisions<sup>108</sup> of the insurance companies

The structure of the assets covering the technical provisions shows that the insurance companies mainly show no propensity for undertaking risks when they invest. Namely, the assets that cover the technical provisions, as well as in 2006, are mostly invested in form of deposits with banks, with a small portion being invested in other financial instruments. This can be interpreted as a reflection of the aversion of the insurance companies to undertake risks and, i.e. the tendency towards conducting conservative investment policy. In conditions of poorly developed prudent and supervisory framework for the insurance sector, the conservativeness of the insurance companies goes in favor of maintenance of the stability of this sector. The dominance of the investment of assets in bank deposits is present in all insurance classes. Thus within the non-life insurance group, 73% of the total assets covered by the technical provisions (or Denar 1,695 million) are invested in bank deposits, while regarding the life insurance, this percentage equals high 91.8% of the mathematical provisions (or Denar 321 million). The investments in other instruments, except the bank deposits are registered with the non-life insurance, where the assets invested in securities issued or guaranteed by the Government participate with 7.5%, while the shares issued by domestic issuers - with 19.5% in the total assets for technical provisions.

**On December 31,2007, the total capital of the insurance companies equaled Denar 3,358 million and registered annual rise by Denar 670 million, i.e. 24.9%.** The share of the capital in the total sources of finance of the insurance sector equals 30.3%, which is a growth by 11.9 percentage points compared to the end of 2006. The increase in the capital is due to the entry of the new companies on the market, as well as to the capitalization of part of the current companies. The high share of the capital in the total assets of the insurance companies creates their high solvent position. Namely, the capital of the insurance sector is significantly higher than the solvency margin, which is especially apparent with the life insurance. The solvency margin of the insurance sector, as key indicator for assessment of its stability, totaled Denar 967 million for 2007, which is a rise of 11% annually. The excess of capital over the minimum required amount of capital equaled Denar 1,493 million, or 2.58 times ( Denar 1,292 million, or 1.4 times with the life insurance<sup>109</sup>, according to the premium rate<sup>110</sup> and Denar 201 million, or 11 times with the life insurance<sup>111</sup>). However, all insurance companies manage capital beyond the necessary level of the solvency margin.

<sup>&</sup>lt;sup>108</sup> The mathematical provision is allocated in the amount of the current value of the estimated future liabilities of the insurance companies, arising from the insurance contracts, reduced by the current value of the future premiums that should be collected on the basis of those contracts. The mathematical provision is calculated by applying appropriate actuarial evaluation.

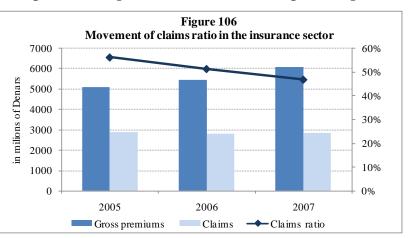
<sup>&</sup>lt;sup>109</sup> The solvency margin with the non-life insurance on December 31, 2007 equaled Denar 947 million - according to the premium rate method (2006 - Denar 856 million).

<sup>&</sup>lt;sup>110</sup> The capital of the non-life insurance company should always be at least equal to the necessary level of the solvency margin, which is calculated by applying the premium rate method, or damages rate method, depending on that which of these methods will give higher result.

<sup>&</sup>lt;sup>111</sup> The solvency margin with the life insurance equaled Denar 20 million on December 31,2007 (Denar 15 million in 2006).

In 2007, the number of reported damages with the insurance companies registers a

growth compared to 2006. Thus in 2007 the number of reported cases for indemnification equaled 54,010, 96.5% of which refer to non-life insurance, and 3.5% to life insurance. The number of liquidated damages equaled 46,158 in the same period, the dominant share of which (96%) is in the non-life insurance. The gross amount of the liquidated



damages for 2007 amounted to Denar 2,862 million, 95.3% of which pertain the non-life insurance. The total gross amount of the liquidated damages went up by 2.3% relative to 2006, in comparison with the higher increase in the gross premiums of 12.2%, thus causing a decrease in the damage ratio of 4.5 percentage points, compared to the previous year.

The downward trend the claims ratio has been registering in the previous years continued also in 2007. Thus on December 31, 2007 the claims ratio equaled 46.9% (in 2006,

51.4%). Regarding the companies providing non-life insurance, this ratio equaled 45.9%, compared to the higher value with the life insurance of 79.2% (94.3% in 2006). The high claims ratio with the insurance is mainly a result of one of the non-life insurance companies, which terminated its life insurance activities and provides exclusively servicing of previously concluded life insurance contracts. On the other hand, the claims ratio reduction is primarily due to ' the establishment and operating of the new life insurance companies.

Table 29	
Claims ratio by classes of insurance in R.Macedonia	

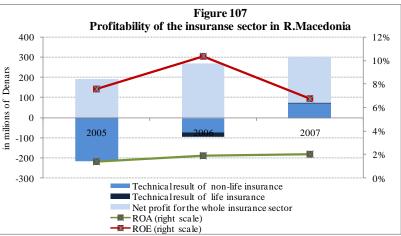
Claims ratio	31.12.2005	31.12.2006	31.12.2007
Accident insurance	61.9%	62.3%	61.2%
Motor-vehicle insurance (casco)	62.7%	66.4%	59.1%
Property insurance against fire and natural disasters	22.9%	18.4%	12.5%
Property insurance against damage or loss of property due to hail or frost, and other damages	52.2%	33.4%	35.7%
Motor-vehicle responsibility	63.7%	57.9%	50.9%
Travel insurance	10.6%	48.2%	10.1%
Other non-life insurance	21.5%	13.8%	16.9%
Life insurance	66.0%	94.3%	79.2%
Total	56.2%	51.4%	46.9%

In 2007, the insurance sector registered positive technical result<sup>112</sup>, compared to 2006, when the realized technical result was negative. The technical result for non-life insurance, in the amount of Denar 73 million (2006: minus Denar 73 million) is primarily a result of the increase in the gross policed premium in 2007. The technical result of the life insurance group totals Denar 4 million (in 2006 minus Denar 21 million). In 2007, four companies for non-life insurance showed negative technical result, while within the life insurance, the technical result is negative only with the company providing servicing of previously concluded life insurance contracts (this company prepares special financial reports for life and non-life insurance and except servicing of previously concluded contracts, provides no new life insurance services).

<sup>&</sup>lt;sup>112</sup> The technical result means a result from conducting the basic activity - insurance.

Despite the improved performances from the aspect of the technical result, the profitability of the insurance sector globally deteriorates . The net profit for 2007 amounted to

Denar 227 million, and plunged by 16.4% compared to 2006. The decrease in the total profit was caused by the non-life insurance companies, the profit of which in 2007 in the amount of Denar 222 million went down by 22.4% compared to 2006. Such decrease in the profit with the non-life insurance was mainly a of result one of the companies (although the



negative result was evidenced with two companies). Owing to the newly opened life insurance companies, this insurance segment registered net profit of Denar 5 million, which is significant improvement compared to 2006.

As a result of the movements of the profit, capital and the total assets, at the end of 2007 the return on assets (ROA) and the return on equity ROE) of the insurance sector equals 2.1%, i.e. 6.8%, respectively. With respect to the previous year, the return on assets dropped minimally by 0.2 percentage points, which is due to the larger decrease in the assets compared to the profit of the insurance companies. On the other hand, the decline in the return on equity of 3.6 percentage points is a result of the downwards trend of the registered profit compared to the accumulated capital with the insurance companies.

## 4.1.4. Connection of the "insurance" sector with the banking sector

The connection between the insurance and the banking sector in the Republic of Macedonia on the basis cross ownership, transfer of the credit risk from the banking to the insurance sector, as well as from the sale of insurance policies remained very low also in 2007.

From the aspect of interownership connection, the banks own 3.2% (in 2006, 41.1%) of the total issued shares of the insurance companies. The insurance companies own 0.3% (in 2006, 0.8%) of the total issued shares of the banks.

The utilization of credit insurance by the banking sector is extremely low also in conditions of faster credit growth, relaxed crediting conditions and increased exposure to credit risk. Namely, the banks practically use no insurance on the extended credits with the insurance companies. Thus in 2007, only one bank practiced insurance of part of the extended credits with the insurance companies (one bank less compared to 2006). At the end of 2007, only 0.05% (0.1%, in 2006) out of the total credits of the banking sector were "covered" by insurance policies. The life insurance has not been applied yet in case of long-term crediting by banks. The credit insurance premiums were minimal 0.1% (0.07% in 2006) of the total gross premiums with the insurance. However, deterioration in the loss ratio of credit insurance is evident, which in 2007 equaled 94.6% compared to the previous year, when it equaled 61.5%.

The mutual connection of the banks and the insurance companies through sale of insurance policies remained low also in 2007. Thus only 2.2% of the insurance policies were sold through banks, which is by 1.8 percentage points less compared to the preceding year.

Simultaneously, the share of the collected premiums through banks in the total premiums in the insurance sector decreases, as well, and in 2007 it reduces to the minimal 0.1% (0.2% in 2006).

The poor connection between the banks and the insurance companies from all aspects, basically minimizes the risks of undermining the stability of one or both segments, as a result of the spill over of the risks they face with. Exactly this, as well as the absence of complex credit products, contributed these segments to stay aside from the crisis developments on the international financial markets.

## 4.2. Mandatory fully funded pension insurance

The role of the pension funds from the mandatory fully funded pension insurance (hereinafter referred to as: pension funds) augmented within the financial system of the Republic of Macedonia. Compared to the remaining segments of the financial system, the significance of these financial institutions is still relatively small. But, the characteristics of the activity they belong to<sup>113</sup>, enable the pension funds to have the largest growth potential, thus elevating their significance in the financial system. The expectations for accelerating the credit growth also influenced in this direction, followed by gradual increase in the employment. In environment of enhanced inflation dynamics, which is real threat to the real amount of yield the pension fund realizes, and thus the real value of the future pensions they would pay, the pension funds' challenge to protect the real value of their assets remains.

**During the second year of their functioning, the pension funds, continued registering increase in the assets, primarily due to the surge in the number of insured,** i.e. members of the pension funds of 27.0%, annually. Thus, the coverage of the active households and employees in the system of the mandatory fully funded pension insurance rose annually by 3.7 and 5.3 percentage points, respectively. However, the level of coverage with the system of mandatory fully funded pension insurance, is still relatively low. The relatively high unemployment with the younger population, limited flexibility of the labor market, the significant share of the informal economy in the Republic of Macedonia and the irregular payment of the pension insurance contributions by employers are some of the factors which influence restrictively for more dynamic increase in the scope of the active households with the fully funded pension insurance. As a result, the potential risks for long-term economic and social safety of the households also increment.

Table 30

Indicator	December 2006	December 2007	Annual change
Number of members	128,031	162.653	34.622
Members of second pilar of pension system/Labour force	14,2%	17,9%	3,7 p.p.
Members of second pillar of pension sustem/Number of employed persons	22,1%	27,4%	5,3 p.p
Total assets of second pillar pension funds (in milions of Denars)	1,246	3,124	1.878
Total net assets f pension funds as % of GDP	0,40%	0,92%	0,52 p. p.
Share of pension funds in total market capitalization of stocks quoted on official market of Macedonian Stock Exchange	0,09%	0,52%	0,43 p.p.
Share of pension funds deposits in total deposits of the banking system	0,16%	0,34%	0,18 p.p.

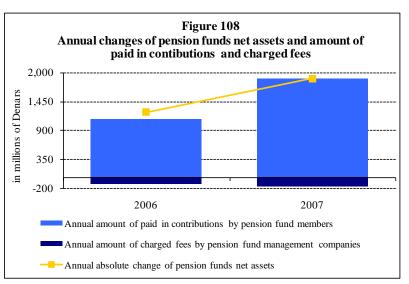
Indicators for the significance of the fully funded pension insurance

The net assets of the pension funds registered an intensive increase during 2007. At the end of 2007, they amounted to Denar 3,124 million, which is annual increment of Denar 1,882 million, or 151%. The intensive growth of the pension fund assets is a result of the rise in their membership and the increase in the paid in contributions. Also, during the first years of functioning of the mandatory fully funded pension insurance, the outflows of funds from the pension funds for

<sup>&</sup>lt;sup>113</sup> These features refer to the regular monthly inflow of contributions, constant increase in the membership due to the requirement for insurance for the persons getting employed for the first time and the marginal amount of liabilities for payment of pensions in the first few years from their functioning, having in mind that only about 1% of the funds' members are older that 46.

the payment of pensions are minimal, which results from the characteristics of the age structure of the members, who are dominantly younger population. The increase in the pension funds' assets enabled increase in their role in the financial system of the Republic of Macedonia. At the end of 2007, the share of the pension funds equaled 1.3% in the total assets of the financial system and of about 0.9% of the GDP. The announced establishment of the so-called "voluntary third pillar" of the pension system - voluntary fully funded pension insurance<sup>114</sup>, will additionally contribute to the increase in both assets and significance of the pension funds as financial institutions, and depending on the investment performances in case of managing their funds, the pension funds can contribute to elevate the long-term financial potential of the households.

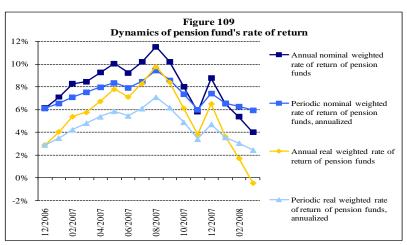
In 2007, significant increase in the amount of the paid in contributions by the pension funds members was registered. The total amount of the paid in contributions on this basis in 2007 equaled Denar 1,883 million, which, compared to the amount of the paid in contributions in 2006 is a growth of Denar 768 million, i.e. 68.9%. Simultaneously, 2007 collected the in compensations from the pension funds management



companies totaled Denar 166.7 million, or annual rise of Denar 51 million, or 44.0%.



in the last quarter of 2007 and in the beginning of **2008.** At the end of 2007, the annual weighted nominal yield<sup>115</sup> registered by the pension funds equaled 8.75%, corresponding to the level of the interest rates on the Denar deposits. On the other hand, the weighted nominal yield for the entire two-year period of pension funds functioning equals 7.43%. However, starting from the last quarter of 2007,



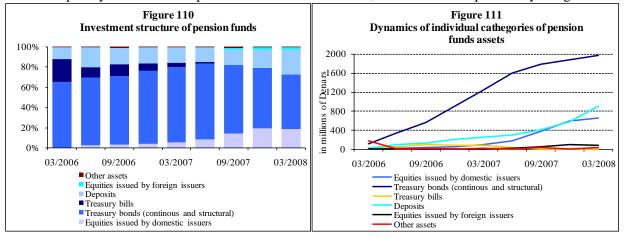
a trend of decline in the realized nominal yield of the pension funds is registered, which is primarily resulting from the price corrections of the domestic and international capital markets,

<sup>&</sup>lt;sup>114</sup> In January 2008, the Assembly of the Republic of Macedonia adopted the Law on Voluntary Fully Funded Pension Insurance ("Official Gazette of the Republic of Macedonia" no. 7/2008), thus enabling the establishment of the legal framework for the so-called third pillar of the pension system.

<sup>&</sup>lt;sup>115</sup> The net assets of individual pension funds are used as a weight in the calculation of the annual and periodical nominal yield rates. Commonly, the pension funds' yields are presented for a three-year period. However, having in mind that the pension funds in the Republic of Macedonia have been established only two years ago, the periodical yield rate represent the yields registered within a period from the beginning of their functioning (January 01, 2006), until each respective quarter date. The real annual or periodical yield rate is obtained by lowering the nominal yield rate with the respective (annual or periodical) inflation rate.

thus decreasing the value of the ownership instruments owned by the pension funds. The enhancement of the inflation pressures at the end of 2007 and the beginning of 2008 is strong threat for the real dimension of the yield the pension funds realize, and thus the real value of the future pensions to be paid. Namely, in the last quarter of 2007, the real yield registered by the pension funds started to decline with higher intensity that the decrease in the nominal yield, and in the first quarter of 2008 it registered even negative value on an annual basis. Hence, the strengthening of the inflation dynamics, finally, influenced on the decline in the long-term income potential of the households as end-user of the pension funds' assets. This represents an additional challenge for the pension funds management companies, to structure the pension funds' assets in a manner that will enable, besides creating a certain nominal yield, protection of their real value.

The pension funds management companies continued to mange with pension funds mainly through application of conservative investment strategies, which are in line with the legal limitations for investment of assets by individual instruments or issuers<sup>116</sup>. However, in conditions of increased turbulence and instability on the international financial markets and strengthening of the inflation pressures in the domestic economy, the pension funds management companies put efforts for increasing the diversification level of the pension funds' assets. Contrary to the preceding year, the role of the pension funds on the domestic capital market increased in 2007, and in the second half of 2007 they emerged as investors also on the international capital market, purchasing ownership securities (shares and stakes in foreign investment funds). In 2007, certain movements in the pension funds' investment tendencies were registered. The pension funds' investments in shares quoted on the Macedonian stock exchange constantly increase. At the end of 2007, the shares of the domestic issuers encompass 18.9% of the pension funds' assets and in comparison with the end of 2006, their share in the total pension funds' assets went up by 15.8 percentage points. The pension funds demonstrated that they can have influential role as resident portfolio investors on the domestic capital market. However, the fact that the rise in the investments in ownership instruments is accompanied with higher risk to the value of the pension funds' net assets should also be taken into consideration, which becomes apparent especially in conditions of downward market movements, not only at the end of 2007, but in the beginning of 2008, as well. On the other hand, in the second half of 2007, the government bonds are completely left out of the pension funds' asset structure, which can be explained by the growth

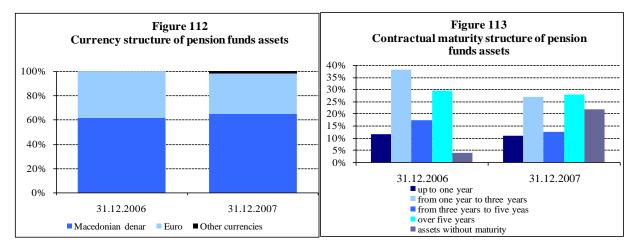


<sup>&</sup>lt;sup>116</sup> As legal restrictions to pension funds investments, directly determining the more conservative approach in the assets management, the following can be stated: maximum 305 of the value of the pension funds' assets may be invested in shares issued by domestic joint stock companies, under the condition they are listed on the stock exchange's official market; investments in foreign instruments are limited to instruments issued by companies the main office of which is in EU, USA or Japan, with recommendable investments rating according to international credit rating agencies, and which are traded on regulated secondary markets, with these investments may equal maximum 20% of the value of the pension funds' assets; the pension funds' assets may be invested in securities of same issuer up to 10%, at most, of the face value of each security, and maximum 5% of the value of the pension funds' assets may be invested in securities.

of the inflation rate, making the yield of these financial instruments unattractive. Opposite to that, the investments in the Treasury bills and the long-term time deposits are the most significant instruments in the pension funds' assets structure. Annually, the government bonds and the bank deposits augmented by Denar 966.6 and 365.8 million, or by 107.2% and 173.2%, respectively. They jointly created 71.1% of the annual increase in the total pension funds' assets.

However, there is still a enough space for further diversification, not only of the total assets, but of the portfolio segments referring to certain instruments, as well. In addition, the further diversification of the assets will impose larger need of strengthening the capacity of the companies for pension funds management for estimation and managing market risks.

The currency structure of the investments of the pension funds is dominated by the Denar investments. Thus the Denar assets encompass approximately 65% of the total assets, followed by the assets denominated in Euro, with a share of 33%. The dominant position of the Denar and the Euro in the currency structure of the pension funds' assets is due, from one side, to the more attractive nominal yields these assets provide, compared to the assets denominated in other currencies, and from the other side, to the fact that in the last two years the pension funds were mainly oriented towards investment on the domestic financial market. This currency structure of the pension funds' assets, with regard to the character of the Denar against Euro, so far represents no significant exposure to exchange rate risk. On the other hand, the larger involvement of the pension funds on the international financial markets will inevitably impose a need of following and estimating the local and global macroeconomic movements and cross-currency relations, in direction of more attractive acting and minimization of the negative consequences for the assets value, especially in case of more enhanced unfavorable movements.



The investment tendencies of the pension funds moved in direction of increase in the structural share of the government bonds and bank deposits, for the account of the Treasury bills and bigger propensity for investment in ownership instruments, contributed to increase in the maturity of the pension funds' assets. Namely, in 2007, the relative significance of the assets without set maturity (ownership instruments), compared to the decrease in the relative significance of the assets with contractual maturity from one to three years and assets with contractual maturity of three to five years. The movements in the maturity structure of the pension funds' assets in direction of increase in the long-term assets, can be deemed anticipated, having in mind the character of the pension funds as financial instruments with long-term investment horizon.

The effects of the pension funds operating on the financial system stability are relatively restricted. Namely, the method the pension system is structured (as so-called defined contributions system), in combination with the legal limitations for assets investment, the

restrictions pertaining to the potential indebtedness, or pledging the pension funds property, reduces the possibility for negative consequences on the financial institutions from the functioning of the fully funded pension insurance.

The pension funds can have positive role for the financial system development through transparency promotion and corporate governance in the domestic companies where they emerge as shareholders. The dispersion of the invested funds and the establishment of appropriate risk management systems, would additionally increase the long-term financial potential of the pension funds, and finally, of the households. Also, the enhancement of the mutual business connection of the pension funds with the other segments of the financial system can act towards improvement of the financial stability.

However, the interaction between the pension funds and the remaining segments of the financial system creates larger possibility for risk spill over from one into another institutional segment of the financial system. This is especially refers to the banking system, not only because of the capital connection, but due to the fact that in conditions of poor supply of longterm financial instruments on the domestic financial market, the pension funds are directed to maintain a significant portion of the assets in form of bank deposits. Hence, the banking system stability has the largest importance for the safety of the pension funds' assets.

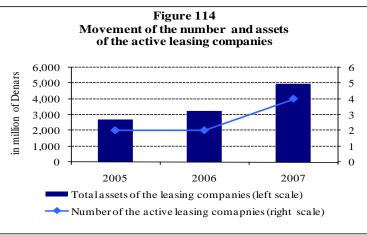
# 4.3. Sector "leasing"

In 2007, the sector "leasing" represented one of the fastest growing components of the financial system, according to both, number of newly established active entities on the market and the volume of their activities. However, according to the relatively small-scale development and the significance of this segment in the structure of the financial system of the Republic of Macedonia, its contribution to the advancement of the national economy is far smaller than that offered by the developed leasing markets in the world. In 2007, the leasing contracts with the legal entities registered an increase by double than the leasing contracts with the households, while the leasing contracts for movables still dominate, with their share being equal to 99%. On the other hand, the profitability of the sector "leasing" registered certain worsening, which is a result of the shown loss in the operating of one of the newly established leasing companies.

## 4.3.1. Depth and activities of the leasing market

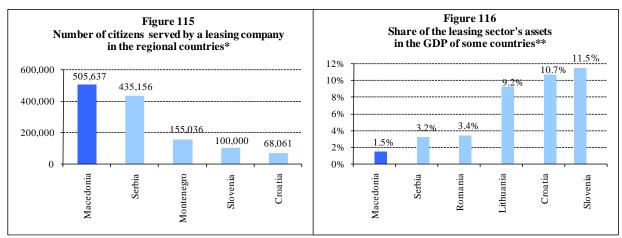
In 2007, the leasing companies registered intensive growth, although their significance inancial system structure

in the financial system structure and in the total economic activity remained minor. The leasing companies' total assets equaled Denar 4,980 million on December 31, 2007, which is a rise of 82.1% compared to the preceding year. Simultaneously, the number of the active leasing companies went up by twice: from two companies at the end of 2006, to four at the end of 2007. The increase in the leasing companies in 2007 contributed also to the increase in the relative



meaning of this sector in the financial system. Thus, on December 31, 2007, the share of the assets of this sector in the total assets of the financial system and the assets of the non-deposit financial institutions reached 2% and 24.2%, respectively, which is an increment of 0.6 and 10.1 percentage

points, respectively compared to the end of 2006. In 2007, the assets of these financial institutions represented 1.5% of the GDP<sup>117</sup> (unchanged share relative to 2006). The increase in the supply and the quality of the services offered by the leasing companies and the intensification of the marketing is expected to boost their competitive position relative to the remaining non-banking financial institutions, and regarding the retail banking, as one segment of the banks' financial activities. This anticipation imposes also as a result of the bigger tightening the regulatory requirements for the banks, especially within the households crediting domain. However, the possibility for further growth of the leasing companies depends, to large extent, also on their capacity to provide additional financial potential with which they will finance their activities.



\* Source: Central Bank of Serbia, Financial Leasing Supervision, Report for Q1 2008; Financial report for Srbija; Central Bank of Croatia, Estimation of the financial stability content; State Statistical Office of Macedonia; Statistical Office of the Republic of Serbia; State Statistical Office of Croatia.

The Data for all countries except for Slovenia pertain to 2007. The data for Slovenia pertain to 2006.

\*\* The data for all countries except for Slovenia pertain to 2006. The data for Slovenia pertain to 2005.

The relatively small role of the leasing companies in the Republic of Macedonia is perceived also through the comparison analysis of their size by individual countries. Namely, compared to the regional countries and to individual EU countries, the leasing companies in the Republic of Macedonia have the smallest significance with respect to both number of inhabitants per one company and the amount of their total assets relative to the GDP.

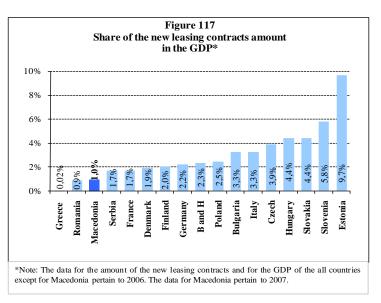
**Dominant portion of the leasing companies' capital is owned by foreign entities.** In addition, three out of the total of four leasing companies are in full foreign ownership, while equal share of foreign and domestic entities is registered with ownership structure of one company. From the aspect of the type of institutions, the largest part of the capital of the leasing companies is owned by foreign financial institutions.

## 4.3.2. Structure of the financial leasing contracts

In 2007, the number and the value of the leasing contracts continued to increase, but it caused no significant deviations in the structure of services the financial institutions provide. Thus, on December 31, 2007 the number of active leasing contracts equaled 7,472 in the total amount of Denar 7,965 million. Compared to 2006, significant increase in the number (of 48.4%) and the value (of Denar 3,159 million, or 65.7%) of the active leasing contracts was registered. Contemporaneously, a remarkable rise in the value (79.1%) and the number of concluded contracts (of 25.5%) was evidenced. Despite the apparent enhanced activity of the four leasing companies functioning on the financial leasing market, on December 31,2007, the indicator for the share of the value of the concluded leasing contracts in the gross domestic product equals

<sup>&</sup>lt;sup>117</sup> Source of data on the total assets, capital and net profit: Ministry of Finance.

insignificant 1%. Among the analyzed countries in Europe, this indicator registers lower value only in Greece and Romania, while in other countries subjected to this analysis, this indicator ranges from 1.7% (in Serbia) to 9.7% (in Estonia). The correlation between the value of the concluded leasing contracts and the value of the newly extended credits by the banks, which equaled only 2.9% in 2007 (in 2006 this share equaled 2.5%), is another indicator for the minimal role of the leasing within the financial system of the Republic of Macedonia.



In 2007, the indebtedness based on leasing contracts with the legal entities grew faster than that with the natural persons, thus resulting in the appropriate change in the sector structure of the leasing services. Thus in 2007, the indebtedness of the legal entities on the basis of active leasing contracts went up by Denar 2,125 million (or 93.3%), which is increase by double compared to the increase in the indebtedness of the natural persons based on active leasing contracts in the same period. Such movements were conditioned by the twice larger value of the concluded leasing contracts in 2007 with the legal entities, compared to the value of the concluded leasing contracts resulted in rise in the share of the value of the active contracts of 7.9 percentage points. Thus on December 31, 2007, this share equaled 55%.

Year	leasing c	of the active ontracts (in of Denars)	Structure of leasing of	of the active contracts	active leasing	Change in the amount of active leasing contracts of legal entities		natural persons	
	Legal entities	Natural persons	Legal entities	Natural persons	in million of Denars	in %	in million of Denars	in %	
2006	2.276	2.526	47,4%	52,6%	/	/	/	/	
2007	4.401	3.564	55,3%	44,7%	2.125	93,3%	1.038	41,1%	

 Table 31

 Structure and change in the value of the active leasing contracts, by sectors

**From the aspect of the type of the object leased, the leasing contracts on movables dominate.** Despite the surge in the value of the leasing contracts for immovable objects (of Denar 55 million<sup>118</sup>), however, the leasing contracts on movable objects remained dominant in the structure of the total leasing contracts, with a share of 98.8%.

# Table 32 Structure and change in the value of the active leasing contracts by object leased

Year	Amount of the active leasing contracts (in million of Denars)		Structure of the active leasing contracts		active leas	e in the amount of ing contrcts for able objects	Yearly change in the amount of active leasing contrcts for movable objects		
	Immovable objects	Movable objects	Immovable objects	Movable objects	In millions of Denars	In %	In millions of Denars	In %	
2006	40	4.766	0,8%	99,2%	/	/	/	/	
2007	95	7.870	1,2%	98,8%	55	137,5%	3.104	65,1%	

<sup>118</sup> This increase results from two concluded contracts for immovable objects during 2007.

From the aspect of the type of the movable object, the leasing contracts for motor cars<sup>119</sup> dominate in the structure of the leasing contracts for movables. The leasing contracts for motor cars take 80.2% of the total number of concluded contracts, and 82% of the total number of active contracts. In 2007, 15.5% out of the total of 13,937 sold vehicles are sold on the basis of leasing, which is almost unchanged situation compared to 2006, when the percentage of the vehicles sold on the basis of leasing contracts equaled 15.4%.

Type of the leasing contract	Equipment		Freight transport vehicle		Light vehicle		Other	
	2006	2007	2006	2007	2006	2007	2006	2007
Number of new leasing contracts	43	109	216	248	1.878	2.162	10	176
Number of outstanding leasing contracts	337	225	515	695	4.158	6.123	24	426

# Table 33Structure of the leasing contracts for movable objects

# **4.3.3.** Structure of the balances and the basic indicators for the leasing companies' performances in 2007

At the end of 2007, the structure of the total assets and sources of funds of the leasing companies remained almost unchanged compared to 2006. Namely, the largest portion of the assets of the leasing companies accounts for the claims based on leasing contracts, while most of the activities are financed through foreign borrowings. The share of the bank deposits in the total assets of the leasing companies is still minor (of about 5%). Simultaneously, on December 31, 2007, less than 1% of the total sources of funds are credits the leasing companies debit to the domestic banks. According to this, there is small connection between the banks and the leasing companies.

At the end of 2007, the net profit of the leasing companies significantly reduced, resulting also to the decrease in the core indicators for their profitability. At the end of 2007, the leasing companies' profit totaled Denar 74 million, which is drop of 35.2% compared to 2006. The decline in the profit emerges as a result of the operating loss of one of the newly established companies. The rate on return on equity equaled high 34.3%, while the rate on return on assets plunged by 3.1 percentage points and equaled 1.5%.

<sup>&</sup>lt;sup>119</sup> According to the number of both concluded and active leasing contracts, not according to the value of the leasing contracts. Namely, no data on the value of both active and concluded leasing contracts on movable objects, according to the type of the movable object are available.

# **IV. Financial infrastructure**

# 1. Payment system

The payment systems are the most important component of the financial infrastructure. The inefficient payments systems can result in significant losses for the participants and loss of confidence in the financial system, with significant consequences to the entire economy. The reform of the payments systems of the Republic of Macedonia, completed at the end of 2001, together with the amendments to the regulations in 2007, contributed to the creation of a modern payment system in line with the international safety, soundness and efficiency standards. Strengthening of the oversight of the payment systems, the operator of which is the central bank (KIBS, CaSys), as well as to the securities settlement systems should be achieved in the following period. Remarkable improvement with regard to the management and the transparency of the entire payment system in the Republic of Macedonia was accomplished, with the activities for establishing distant reserve location going to be completed until the end of 2008.

#### **1.1. Exposure to risks**

The structure of the payment systems of the Republic of Macedonia enables to minimize the risks the participants are exposed to. Namely, for the purpose of risks minimization, "small" payments (up to Denar 1 million) are carried out through the deferred net settlement system - KIBS AD<sup>120</sup> Skopje, while all payments exceeding this value are obligatory carried out through the MIPS<sup>121</sup> of the NBRM. In this system, there is almost no exposure of the participants to credit risk, due to the real time gross settlement principle. The MIPS of the NBRM applies SWIFT standards for the type of the payment messages and ISO 9362 for bank identification codes.

The liquidity risk management instruments in the MIPS include: payment of orders according to queuing, as well as possibility of the banks to use non-interest intraday credit from the NBRM, on the basis of appropriate security stipulated by the NBRM, in form of repo agreements. In 2007, the average monthly amount of used intraday credits amounted Denar 642 million. Also, the framework of instruments for managing liquidity and credit risks, encompasses the possibility of the banks for timely and clear inspection in the balance on their account in MIPS through direct (on-line) access. With the constant development of the payment systems, especially with the application of the new Decision on the payment systems oversight (which enables accomplishment of all ten basic principles for the systemically significant payment systems), strengthening of the financial risks management instruments is expected.

The risk management within KIBS should be promoted towards introduction of approriate instruments for managing these risks (introduction of loss division agreement in KIBS), instead of the current solution of the so-called unwiding<sup>122</sup> of payment transactions

<sup>&</sup>lt;sup>120</sup> "KIBS - Clearing Interbank Systems" AD Skopje, or "Clearing house" is a system for multilateral deferred net settlement of the payments in the amount smaller than Denar 1 million. This system is owned by 15 private commercial banks. The largest portion of the payments are conducted for the account of the bank clients, with the balances based on executed clearing being settled in MIPS, with which the payments become final and irrevocable. Within KIBS, own standards for the form and the contents of the payment messages have been developed, which is not based on SWIFT standards.

<sup>&</sup>lt;sup>121</sup> "MIPS - Macedonian Interbank Payment System of the NBRM", through which large payments (over Denar 1 million) are processed, as well as urgent payments in the domestic payment operations and government payments. The transactions settlement is carried out in real time. Also the settlement of the securities transactions concluded on the Macedonian Stock Exchange, Treasury bills and bonds, as well as CB bills is performed through MIPS.

<sup>&</sup>lt;sup>122</sup> As an instrument for liquidity risk reduction within KIBS, there is a procedure of the so-called unwinding of processed orders, for the participant which can not realize its negative net liability. In this manner, in case

participating in the multilateral settlement. Namely, this instrument, but itself, is insufficient for liquidity risk management, since it can provoke a variety of financial consequences for the bank's clients, which can not realize its negative net liability, and for the clients of other banks, as well. Namely, in case of inability to conduct settlement of the participant with largest individual liability that should be settled, the roll over procedure can cause lack of liquidity, i.e. spreading of the liquidity problems also with other participants (the so called domino effect). Actually, the risks in KIBS are managed through the provided possibility for the bank to have access (in real time) to their net position during the day, expecting that the bank will cover the lack of funds through borrowings.

Promotion within the clearing and settlement of the payment cards (both credit and debit) is necessary, through appropriate organization of the procedure for clearing and settlement of the payments with cards in domestic currency in the Republic of Macedonia. This will enable to reduce the costs arising from the clearing and settlement process of the transactions based on payment cards, carried out through the master card and visa mechanisms (since for these transactions domestic settlement is not established).

The overall functionality of the distant secondary location, as well as additional strengthening of the overall security and operativeness of the MIPS in order to minimize both operational and systemic risk, will be accomplished by completing the revision of the business continuity procedures (which is underway). In 2007, MIPS availability equaled 99.8% of the envisaged operating time during the whole year, indicating high level of minimization of the operating risk, and thus contributing to the decrease in the systemic risk as the most significant one.

## 1.2. Oversight

**The NBRM is the authorized oversight body of the payment systems in the Republic of Macedonia.** The NBRM activities in the following period should be directed towards oversight of systems the operator of which is not the central bank (KIBS AD Skopje, CaSys AD Skopje<sup>123</sup>), as well as oversight of banks, as carriers of the payment operations. For the purpose of total implementation of the provisions of the new Payment Operations Law, regulating the objectives and responsibilities of the NBRM as supervisory and regulatory body for the payment systems, further strengthening of the operational and technical expertise of the oversight, appropriate staffing, as well as tightening of the by-laws is required.

Strengthening of the oversight also within the securities settlement domain is also necessary.

The insisting of the NBRM on constant reconciliation with the Core principles for systemically important payment systems, adopted by the Payment System Committee and Settlement Systems (CPSS) in the Bank for International Settlement, are directed towards maintenance of safe and sound payment system and minimization of the risks it is exposed to. There is a relatively high level of compliance of the payment systems of the Republic of Macedonia with these principles. Also, the NBRM constantly supplements the own experience of introduction of modern technologies and standards for the payment system functioning and application of the rules and the procedures of the payment system of the European Central Bank. In

of negative net position of any of the participants, KIBS revokes the prepared calculation and prepares new one, which excludes the orders of the participant failing to fulfill its requirement. In accordance with the KIBS operating rules, this procedure can be repeated until the completion of the settlement among banks.

<sup>&</sup>lt;sup>123</sup> "Kasis" AD Skopje is private payment cards processing center, performing authorization and clearing of payment cards transactions. "Kasis" is connected to MIPS for the purpose of definite settlement transactions.

2007, the National Council for the payment systems of the Republic of Macedonia<sup>124</sup>, adopted a Development Strategy of the Payment System in the Republic of Macedonia until 2011.

# **1.3.** Payment operations volume

The volume and the value of the transactions realized through the payment systems in the Republic of Macedonia are constantly increasing. In 2007, total of 2.8 million transactions were realized through MIPS, compared to 12.5 million realized through the Clearing House.

Item	Value of total operations (in million of denars)	Number of transactions	Structure		Change 2007/2006	
			value	number	value	number
MIPS	1,452,746	2,831,339	55.8%	10.3%	43.5%	15.4%
KIBS	166,803	12,528,630	6.4%	45.7%	12.8%	19.6%
Internal banking payment						
operations	985,250	12,058,263	37.8%	44.0%	31.8%	18.0%
Total	2,604,799	27,418,232	100.0%	100.0%	36.5%	18.4%

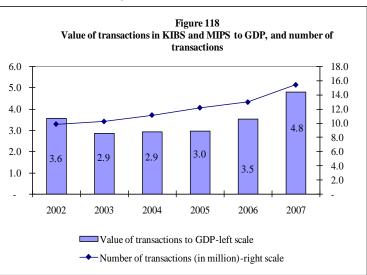
Table 34Value and the number of transactions in the payment operations in 2007

From the aspect of the transactions value, the transactions realized through MIPS retained their dominance also in 2007, with a share of 89.7% in the total value of the transactions in the payment system of the country (through MIPSA and KIBS). The KIBS dominance (81.6%) is still evident with respect to the number of transactions.

In 2007, approximately 97 thousands of settlement transactions were realized through the processing center CaSys AD Skopje, the value of which equals Denar 293 million. About 35 million transactions, on average, are realized through "CaSys" on a monthly basis.

The upward trend of the value of the Denar transactions realized through domestic payment systems (KIBS and MIPS) is also verified through the increase in the rate of their share in

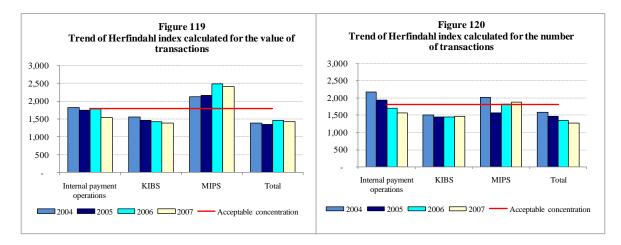
the GDP of the Republic of Macedonia. The increase in the number and in the value of the Denar transactions is indicator for the enlarged economic activity in the country, which is manifested also through the larger increase in the GDP in 2007. This statement is verified also through the analysis of the connection between the value of the transactions and the GDP. Namely, the quarterly changes of these two variables bear high degree of correlation (in 2007 the correlation degree equals 0.8), indicating that the volume of the



transactions in the payment operations can be used as an indicator for the movement of the nominal GDP.

<sup>&</sup>lt;sup>124</sup> The National Payment System Council of the Republic of Macedonia is founded on the basis of the agreement between the Ministry of Finance, the Governor of the NBRM and the President of the Banking and Insurance Association of the Economic Chamber of the Republic of Macedonia.

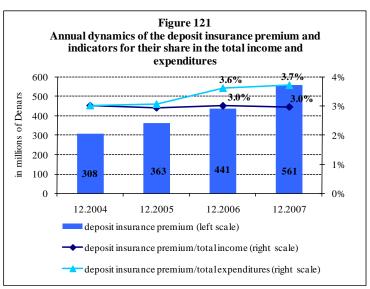
The concentration within the payment systems (KIBS, internal payment operations, as well as for the entire system), measured according to the Herfindahl index is relatively high, although within the acceptable limits. High concentration of the transactions value exceeding the general set ceiling of 1,800 index points was registered only with the payment operations through MIPS (Herfindahl index for the value and the number of transactions through MIPS equals 2,403 and 1,888 index points, respectively). During the past few years, the Herfindahl index shows stable downward movements, except to the index for the value and the number of transactions through MIPS. If these transactions are excluded from the analysis, in that case, the concentration in MIPS is also within the acceptable limits (it equals 1,346 and 1,479 index points for the value and the number of transactions through MIPS).



## 2. Deposit insurance system

The deposit insurance in the banks and the savings houses in the Republic of Macedonia is regulated by the Law on Deposit Insurance Funds. In the previous years, the paid in deposit insurance premiums increase as a result of the constant upward trend of the households' deposits. In 2007, a risky event occurred (initiation of a liquidation procedure against one bank). However, the timely and smooth reimbursement of the depositors of the bank under liquidation meant that the risks of minimization of risks of negative effects spill over to other segments of the banking and the financial system reduced to minimum.

The deposit insurance premiums, paid by the banks and the savings houses, register constant and significant increase, as a result of the permanent upward trend of the households' deposits. Thus in 2007, the amount of the deposit insurance premiums augmented by Denar 120 million (or by 27.2%) compared to 2006 (in 2007, Denar 561 million were paid as deposit insurance premiums by banks and savings houses). The share of the deposit insurance premiums in the total banks' expenditures surged by 0.1 percentage point (in 2007, it equaled 3.7%).



Note: The saving houses are also included in the calculations.

In 2007, and in the first half of 2008 (precisely as of June 16 2008<sup>125</sup>), the Deposit Insurance Fund realized reimbursement in the amount of Denar 994 million. Thus the total amount of realized reimbursement within the period since the establishment of the Fund until June 16, 2008, reached the level of Denar 1.2 billion. In 2007, the funds being paid from the bankruptcy, or liquidation estate of banks and savings houses in favor of the Fund, equaled Denar 761 million, with the total amount of collected funds since the establishment of the Fund until December 31,2007<sup>126</sup>, increased to approximately Denar 771 million.

In the last quarter of 2007, the number of deposits institutions being members of the Deposit Insurance Fund of the Republic of Macedonia, decreased by one bank (on December 31, 2007, the Fund covered 17 banks and 12 savings houses). Namely, on October 16, 2007, the Governor of the NBRM adopted a Decision on revocation of the founding and operating license of "Makedonska Banka" AD Skopje, thus fulfilling the legal conditions for activating the Funds' guarantee. The reimbursement of the bank's depositors (natural persons)<sup>127</sup> from the Funds assets commenced within the legally prescribed deadline<sup>128</sup> (exactly, from December 04, 2007). On December 31, 2007, the level of coverage of the total households' deposits<sup>129</sup> deposited in the bank under liquidation procedure with the current assets<sup>130</sup> of the Fund equaled 175.1%. As of mid-June 2008, over 75% of the calculated reimbursement of the depositors of the bank under liquidation was paid. The highest degree of payment was registered with the larger savings deposits (the reimbursement degree of the deposits ranging from Denar 612 thousand to Denar 1,223 thousand equaled 84.7%).

## 3. Legal solutions of higher importance adopted in 2007 and in the first half of 2008

Within the activities of the Republic of Macedonia for harmonizing of the domestic legal framework with the European one, numerous new legal solutions and by-laws were adopted in the previous years. As legal solutions with larger significance, from the aspect of the financial system, adopted in 2007 and in the first half of 2008, the following can be emphasized: Banking Law, Payment Operations Law, Law on Consumer Protection in Case of Consumer Loans Agreements, Law on Money Laundering Prevention and Other Proceeds from Crime and Financing Terrorism, as well as amendments to the Law on Investment Funds, Securities Law, Law on Insurance Supervision, Law on Contractual Mortgage, Law on Taking Over Joint Stock Companies.

## 3.1. Banking Law

The new Banking Law (adopted in June 2007), provided significant qualitative promotion of the banking regulations and supervision in the Republic of Macedonia. This

<sup>&</sup>lt;sup>125</sup> Last available data.

<sup>&</sup>lt;sup>126</sup> Last available data.

<sup>&</sup>lt;sup>127</sup> In line with the Law on Deposit Insurance Fund, the Fund insures the natural persons' deposits in the banks and the savings houses which are founded and operating in the Republic of Macedonia, as follows:

<sup>- 100%</sup> of the total deposits of natural person in one bank or savings house in the amount up to Euro 10,000 (in Denar denomination); and

<sup>- 90%</sup> of the total deposits of a natural person in one bank or savings house in the amount varying between Euro 10,000 and Euro 20,000, but not over Euro 20,000 (in Denar denomination).

The legal entities' deposits are not insured.

<sup>&</sup>lt;sup>128</sup> Within three months from the day the decision of the Governor of the National Bank on the revocation of the founding and operating license of a bank or savings houses becomes final.

<sup>&</sup>lt;sup>129</sup> The insurance premium calculation basis represents the total amount of the households' deposits. The amount of the households' deposits in the calculation of the coverage degree is given as of September 30, 2007.

<sup>&</sup>lt;sup>130</sup> Source: Audit Report of the Deposit Insurance Fund for 2007. The amount of the current assets of the Fund in the calculation of the coverage degree is given as of December 30, 2007.

Law is based on the provisions and the standards stipulated in the EU Directive 2006/48 for founding and operating of credit institutions and the EU Directive 2006/49 for the capital adequacy of the investment firms and credit institutions. The most significant improvements in the Banking Law refer to the following:

- tightening the criteria for shareholder with qualified holding in a bank<sup>131</sup>, as well as for a member of both Supervisory and Board of Directors of a bank;
- strengthening of the corporate governance in the banks;
- establishing bases for the application of the new Basel Capital Agreement (BASEL II);
- improvement and strengthening of the banks' risk management systems (especially credit, liquidity, currency, market and the IT risk);
- improvement of the manner of supervision and oversight conduct;
- reconciliation of the banks' accounting standards and rules with the International Accounting Standards and the International Standards for Financial Reporting;
- stipulating the contents of the audit on banks;
- strenghtening of the corrective measures the central bank may undertake against a bank and better efficiency of the procedure for excluding a bank from the banking system;
- defining the manner of openning and operating of a foreign bank's branch office.

These aspects are more precisely regulated with the appropriate bylaws<sup>132</sup> adopted by the NBRM on the basis of the Banking Law, thus finalizing the regal framework for the banking system and the banking supervision.

## Harmonization of the banking supervision of the NBRM with the Basel Principles for Efficient Banking Supervision

The banking supervision and the NBRM regulations registered a significant progress, especially with the adoption of the Banking Law in June 2007 and the appropriate bylaws. The new regulation framework, parallel to the realization of the Supervision development Plan (transition towards risk assessment oriented supervision with simultaneous tightening of the supervisory policies, procedures and practices) provided significant harmonization with the Core Basel Principles for Efficient Banking Supervision.

With regard to the enormous amendments to the new legal framework, larger part of this framework has delayed implementation, (from the beginning of 2009), thus enabling the banks to undertake systemic, organizational and technical activities for appropriate adherence to the new regulations.

The strengthening of the banking supervision capacity of the NBRM was a result of several activities: (a) adoption and realization of the Supervision Development Plan (risk assessment oriented supervision), (b) tests, adoption, publishing and application of supervisory procedures and methodologies; (c) training of supervisors; (d) preparatory activities for establishing information system for management with documents; (e) introduction of the concept of portfolio manager and specialists in certain risks; (f) promotion of the communication with the banking industry and the public.

Short review of the adherence to the Basel Principles for Efficient Banking Supervision is given below.

## **Objectivity, independence, competencies, transparency and cooperation (principle no. 1)**

The rights, competencies and the responsibilities of the NBRM, as sole banking supervisory body, are defined in details in the basic legal framework consisting of the Law on the National Bank of the

<sup>&</sup>lt;sup>131</sup> Pursuant to the Banking Law, qualified holding in a bank represents direct, or indirect possession of at least 5% of the total number of shares, or issued voting shares in a bank, or shares enabling significant influence on the management in the bank.

<sup>&</sup>lt;sup>132</sup> Within June 2007 - February 2008 period, the NBRM Council adopted 23 bylaws on the basis of the Banking Law.

Republic of Macedonia and the Banking Law. Hence, the NBRM is responsible for the licensing and supervision of banks, savings houses and the foreign banks' branch offices in the Republic of Macedonia<sup>133</sup> and undertaking corrective measures, including also revocation of previously issued licenses and approvals. The basic legal framework, bylaws and the appropriate instructions and internal procedures clearly define the supervisory function and the responsibilities of the central bank.

The NBRM is independent in the execution of its functions, including also the supervisory function. During the accomplishment of its functions, the NBRM and the members of its bodies require and obtain no instructions from the Government and government administration bodies. The independence of the Central Bank is provided also through its financial independence. The Central Bank submits regular reports for its operating, to the Assembly of the Republic of Macedonia. The members of the NBRM Council and the Governor of the NBRM are appointed for a fixed seven-year period and they can be revoked only in instances prescribed with the law.

The personnel of the NBRM, i.e. Supervision, Banking Regulations and Financial Stability Sector is qualified and highly professional. During execution of their tasks and competencies, the NBRM and its supervisors are protected from court procedures, if they perform their operations in line with the authorizations.

For the purpose of implementation of efficient supervision, the NBRM has the legal possibility to exchange data with domestic and foreign supervisory bodies. The legal possibility is formally realized through signing of cooperation memorandums and through regular contacts with other domestic and foreign supervisory bodies.

## Licensing and structure (principles no. 2-5)

The utilization of the word "bank", or the words derived from it, is limited only to legal entities being licensed by Governor of the NBRM for founding and operating of a bank. Only those institutions being licensed by the Governor of the NBRM may collect deposits from the public.

The Banking Law defines a detailed list of criteria that should be fulfilled for obtaining founding and operating license of a bank. The licensing includes analysis of the suitability of the shareholders with qualified holding in the bank and the members of the bank's Board of Directors and Supervisory Board, the corporate governance, the strategic and operational plan, the policies and the procedures for risk management and internal control systems of the bank. The same criteria are applied also in case of licensing of the change in the ownership or managing structure of the bank.

The financial activities the bank can perform are prescribed in the Banking Law. Part of these activities can be conducted only in case of fulfillment of the criteria stipulated in the Law and the bylaws, for which prior approval from the Governor of the NBRM is required.

## Prudent regulations and requirements (principles no. 6-18)

The new Banking Law enables promotion and strengthening of the supervisory standards and risk management. The methodology for determining capital adequacy is fully harmonized with the Basel Capital Agreement (BASEL I). Despite the fact that the Methodology covers only the credit and the market risk, it enables appropriate inclusion of all other material risks the banks are exposed to. The regulations provide solid ground for suitable implementation of the internal approaches of the banks for estimating the capital adequacy (application of the second pillar of the New Capital Agreement). In that direction, the adoption of the bylaws regulating the risk management system and individual risks management (credit, liquidity and currency risk) is of great importance.

The estimation of the risk management efficiency is integral and the most important part of both onsite and off-site supervision of the NBRM. The manner in which this estimation is performed is defined in the Instructions for Supervisory Policies and Procedures, which contains detailed procedures for the analysis of the entire risk management system, as well as for the analysis of the individual risks management (credit risk, liquidity risk, operational risk, market risk, legal risk, strategic risk and IT risk). The estimation of the risk management system is the most significant element in the creation of the risk profile of each bank.

<sup>&</sup>lt;sup>133</sup> Hereinafter, the term "bank" covers also the savings houses and the foreign banks' branch offices.

#### Permanent banking supervision methods (principles no. 19-21)

The NBRM conducts both on-site and off-site supervision, stipulating and obtaining detailed regulatory reports on the individual aspects of the banks' operations, on individual and consolidated basis. The supervisory approach includes also regular contacts with the banks' bodies, as well as with the authorized audit company.

As part of promotion of the NBRM supervisory practices, Instructions for supervisory policies and procedures were adopted in 2007. These Instructions define the on-site and off-site supervision method and provides development and application of the supervisory approach based on risk assessments. On the basis of such an approach, risk profile for each bank was created, as a foundation to monitor its operations and exposure to risks. On the basis of the banks' risk profiles, approach of gradual transition from full scope on-site examinations towards partial controls on certain sensible areas of the banks' operations is developed.

#### Accounting and disclosure (principle no. 22)

The banks are required to prepare financial statements in line with the accounting framework stipulated by the NBRM. This accounting framework is prepared on the basis of the International Accounting Standards (IAS) and its implementation will commence on January 01, 2009.

The annual financial statements and the banks' operations are subject to a revision by an audit company. The Banking Law regulates the competencies and the responsibilities of the audit company, especially within the banks' risk analysis domain, adherence to the supervisory standards, establishment of the internal control systems and harmonization with the regulations. The Law also defines the criteria for the suitability of the audit company for conducting audit on a bank, simultaneously limiting the maximal number of audits the company may perform with one bank.

In direction of enhancement of the transparency in the banks operating, the NBRM has stipulated the following reports and data the banks are obliged to disclose on individual and consolidated basis. Within this domain, the directions incorporated in the third pillar of the New Capital Agreement were completely accepted, with which the NBRM officially signaled the beginning of its gradual introduction.

#### Supervisors' rights to undertake corrective measures (principle no. 23)

The NBRM has variety of measures that it may undertake in case of violation of the regulations pertaining to the banks operations, or violation of the banks' internal procedures. The type of the undertaken measure depends primarily on the safety and the soundness of the bank, its depositors and the banking system, as a whole. The measures the NBRM may undertake include and possibility for revocation of the previously issued approval, as well as the possibility for revocation of the founding and operations of bank.

The Banking Law and the bylaws define the procedure for undertaking corrective measures, which enables better transparency of the NBRM in conducting its supervisory function.

#### Consolidated banking supervision and exchange of data (principle no. 24 and 25)

The banking system of the Republic Macedonia is characteristic with a relatively low level of bank investments in another banks, or non-bank financial institutions. On December 31, 2007, there is only one banking group<sup>134</sup> in the Republic of Macedonia with a share of 1.6% in the total assets of the banking system. The banks in the Republic of Macedonia still fail to register investments abroad, which would mean establishment of a banking group subjected to the NBRM supervision. Hence, in all instances when the domestic bank is a member of a banking group, the NBRM emerges as a host supervisor.

Despite such features of the banking system of the National Bank, the regulations enable complete application of the consolidated supervisory approach. The Banking Law and the respective bylaw defines all basic aspects of the consolidated supervision: the definition of the banking group, the role and the responsibilities of the parent entity and the subordinated entities in the banking group, adherence to the supervisory standards on consolidated basis, preparation of financial statements and supervisory reports, the

<sup>&</sup>lt;sup>134</sup> One domestic bank acquires control in another domestic bank.

role and the competencies of the NBRM, the exchange of data and information between the competent supervisory bodies.

The cooperation with the foreign supervisory bodies is regulated with the concluded memorandums of understanding. Thus in the last ten years, the NBRM has concluded memorandums of understanding with the supervisory bodies of seven countries. Beside the bilateral cooperation, the NBRM is signatory of the multilateral Memorandum of Understanding<sup>135</sup> signed by the banking supervisory bodies of the South and Eastern European countries.

#### 3.2. Payment Operations Law

In September 2007, new Payment Operations Law was adopted. These Law enabled precise definition of certain provisions in function of more efficient execution of the payment operations in the country, as well as organizing the operations and oversight of the payment systems. The new Law is prepared in line with the European regulations and standards within this domain (Directive 98/26/EC for the finality of the settlement and settlement system, Directive 97/9/EC for cross boarder credit transfer and the Core Principles for Systemically Important Payment Systems, BIS, Basel).

The new Payment Operations Law introduces the term "transaction account", as unique unrepeatable numeric data used for identification of the participant in the payment operations, through which payments are carried out. Regulating the manner of forced payments from the transaction accounts of the participants in the payment operations (including also the natural persons), this Law is a significant step towards enhancement of the financial discipline of both legal entities and natural persons, in the settlement of their liabilities.

This Law regulates both founding and operating of new type of financial institutions, i.e. companies for issuing electronic money. The issuance of e-money, as financial activity can be carried out by banks in the Republic of Macedonia, foreign banks' branch offices and e-money issue companies, having obtained founding and operating license by the NBRM. Thus including the bylaw of the NBRM pertaining to the terms and the manner of operating of a e-money issuance company<sup>136</sup>, full harmonization with the EU Directive 2000/46 for founding, operating and prudent supervision of e-money issuance was achieved.

### 3.3. Law on Consumer Protection in Case of Consumer Credit Agreements

Within the activities for harmonizing the domestic legislation with the European directives within the protection of the credit users of unjust credit conditions area (Directive 87/102/ EEC<sup>137</sup>, amended with the Directives 90/88/EEC<sup>138</sup> and 98/7/EC<sup>139</sup>), Law on Consumer Protection in Case of Consumer Credits Agreements was adopted in 2007. This Law is especially important in

<sup>&</sup>lt;sup>135</sup> Memorandum of understanding on High-level Principles of Co-operation and Co-ordination among the Banking Supervisors of South Eastern Europe.

<sup>&</sup>lt;sup>136</sup> This Decision (adopted in December 2007) sets forth the implementation of the provisions of the Banking Law pertaining to e-money issuance companies, referring to: own funds, founding, shareholders, approvals, bodies, accounting, audit, internal audit, measures, etc.), such as: the type of assets in which the e-money issuer may invest (only in liquid and low risk assets), the volume of the investments, methodology for assets evaluation, methodology for risk management arising from the e-money issuance and investments, as well as the contents of the reports and the manner of their submission to the NBRM.

<sup>&</sup>lt;sup>137</sup> Council Directive 87/102/EEC of 22 December 1986 for the approximation of the laws, regulations and administrative provisions of the Member States concerning consumer credit.

<sup>&</sup>lt;sup>138</sup> Council Directive 90/88/EEC of 22 February 1990 amending Directive 87/102/EEC for the approximation of the laws, regulations and administrative provisions of the Member States concerning consumer credit.

<sup>&</sup>lt;sup>139</sup> Directive 98/7/EC of the European Parliament and of the Council of 16 February 1998 amending Directive 87/102/EEC for the approximation of the laws, regulations and administrative provisions of the Member States concerning consumer credit.

conditions of significant rise in the credit activity especially with the households. The Law provides protection of the rights and the interest of the consumer credit users, by:

- providing larger transparency and information in case of advertizing, offering and extending consumer credits;
- strengthening of the provisions concerning the contents of the consumer credits agreements;
- equalization of the manner of calculation of the total costs through the introduction of the so-called total costs rate and defining unique method of its calculation.

On the basis of the Payment Operations Law, in 2007, the NBRM adopted the Decision on the methodology for calculating the annual rate on the total costs and the Decision on the manner and the procedure for conducting oversight on banks and savings houses within the domain of consumer protection in case of consumer loans agreements.

# **3.4.** Law on Money Laundering Prevention and Other Proceeds from Crime and Financing of Terrorism

The adoption of the Law on Money Laundering Prevention and Other Proceeds from Crime and Financing of Terrorism imposed as priority, with regard to the need of regulation of certain issues that were not regulated with the Law from 2004, as well as to provide adherence and harmonization with the international experiences and standards in this area. In that regard, the reconciliation with the third EU Directive for prevention of utilization of the financial system for money laundering and financing terrorism from 2005 (2005/60/EC), as well as the forty basic recommendations and nine special recommendations of FATF (Financial Action Task Force) pertaining to prevention of financing of terrorism is of great importance.

The novelties of higher importance introduced in this Law refer to precise definition of larger number of terms, such as: financing of terrorism, beneficial owner, politically exposed persons, entities responsible for undertaking measures and activities for money laundering prevention and financing of terrorism. The Law provides double access to identification and analysis of the clients of the financial institutions, from the aspect of the determined level of risk related to each client or business relation. The Law provides strengthening of the system of corrective and misdemeanor measures that can be undertaken in case of non-adherence to its provisions.

Such amendments to the legal framework enable better efficiency in the battle against the money laundering and financing the terrorism.

## **3.5.** Law on Amendments to the Law on Investment Funds

The Law on Investments Funds has been adopted in January 2000. However, beside the fact this regulation was adopted several years ago, the first investment fund in the Republic of Macedonia was established in November 2007. One of the reasons for this was the high core principal necessary for establishment of the investment funds (open and closed) Thus, with the amendments to the Law in 2007, the amount of the required assets for founding the investment funds (open and closed) reduces, simultaneously enabling founding of new type of investment funds - private funds<sup>140</sup>.

<sup>&</sup>lt;sup>140</sup> The collection of the assets in the private funds is conducted through private supply intended for prior targeted group of investors. In line with the international practice, well informed investors, mostly institutional investors (banks, pension funds, insurance companies, etc.), are investing in these private funds, For the purpose of founding private investment fund, no prior approval from the Securities Exchange Commission is required. Also, the private fund can be founded on a temporary basis, no less than eight years, and the minimal amount of each investor should not be below Euro 50,000 in Denar denomination.

## 3.6. Law on Amendments to the Law on Securities

With the amendments to the Law on Securities, the issuance of shares through private offer is primarily intended for new investors, while the current supervisors may participate only if they are institutional investors (bank, insurance company, investment fund, or pension fund).

## 3.7. Law on Amendments to the Law on Insurance Supervision

The amendments to the Insurance Supervision dated 2007 contribute to approximate the legal framework from the insurance area to the EU Directives and principles and standards of the International Association of Insurance Supervisors (IAIS). These amendments provided significant promotion of the legal framework<sup>141</sup> pertaining to the insurance, although its implementation is on a very low level, especially in the supervisory function domain.

## 3.8. Law on Amendments to the Law on Contractual Mortgage

The Law on Contractual Mortgage sets forth the method, the conditions and the procedure for the creation, existence, realization and termination of the contractual right of pledge on movables, securities, claims and other rights, as well as on no-movables. The amendments were, mainly, directed towards terminological reconciliation with other laws, precise defining of certain provisions, as well as eliminating misunderstandings, difficulties in the practical implementation of the Law. The amendments provided more efficient protection of the creditors' claims and increased the safety of the potential investors' investments. Also, the amendments to the Law enable efficient measures for enforcement of the pledged object, carried out through a notary.

# 3.9. Law on Amendments to the Law on Taking Over Joint Stock Companies

The Law on Taking Over Joint Stock Companies, adopted in 2002, sets forth the core principles on the basis of which the protection of the shareholders and basis for implementation of the legal process for taking over joint stock companies is provided. The implementation of this Law was limited only to the companies listed on the stock exchange. However, with regard to the relatively small number of these companies, small number of takeovers of the joint stock companies from the adoption of this Law in 2002 was registered. Hence, the amendments to the Law enable widening of the scope by including the companies with special reporting requirements, contemporaneously enabling harmonization with the EU Directive 2004/25 pertaining to takeover offers.

<sup>&</sup>lt;sup>141</sup> The most significant amendments to the Law primarily refer to the strengthening of the prudent and oversight standards in the insurance sector, adherence to the capital requirements for founding and operating of the insurance company with the European capital requirements, regulating the insurance representatives and mediators, tightening of the criteria for the persons that may be shareholders and members of the management body of the insurance company, strengthening of the measures of the supervision and establishment of efficient and independent supervisory body in the insurance area - an independent Insurance Supervision Agency.