Periodical Part

Financial stability report for the Republic of North Macedonia in ... ; 2009

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 2009

July 2010

CONTENTS

EXECUTIVE SUMMARY

Financial stability of the Republic of Macedonia remained on a satisfactory level. In spite of the fact that the first signs of overcoming the strong global recession were noticed in 2009, the risks for the financial stability of the Republic of Macedonia have increased. Macedonian economy is still very vulnerable to the internal and external factors. It was caught by the crisis in a relatively good condition, however, under the influence of international events related to the crisis, it was not able to avoid the strong adverse effect from the decline of export demands, the decrease of capital inflow and deteriorated expectation of economic entities, and consequently the decline of activities in the real economy, strengthened tendencies for accumulating foreign currency, reduced scope of capital inflow from abroad and the pressure for depreciation of the domestic currency. This is the reason why the Macedonian economy is so dependent on the events taking place on international level, particularly on the economic movements taking pale in our main trade partners and our neighboring countries. The optimistic forecasts concerning the future flows in the global and domestic economy should be accepted with certain reserve, mostly as a result of the increased uncertainty in relation to the debt crises in our southern neighbor, its impact on the economic policies of other EU countries and the effects it might have both on the domestic real sector and the financial system.

The high level of connection of the Macedonian economy with the EU, which has been additionally strengthened during the crisis conditions over the past two years, distinguishes the stability of the foreign exchange rate of the Denar as the crucial pillar which the entire financial stability of the country relies upon. Namely, the greatest risks for the domestic financial stability stem from eventual unfavorable movements on the foreign currency market and the foreign exchange rate of the Denar. To that end, the National Bank as always stays prepared to undertake all the necessary measures and activities to preserve the macroeconomic stability and to appropriately apply the accepted strategy of the de facto fixed foreign exchange rate of the Denar in relation to the Euro.

The stability of the financial system of the Republic of Macedonia depends largely on the stability of the banking system, which is its dominant segment. The banking system did not felt the impact of the world economic crisis directly; however, it was not able to avoid the indirect effects of the global economic shocks that spilled over through the domestic sector. The stable position of the domestic banking system was mostly a result of its high "closeness" in relation to international financial markets, the non-existence of exposure to the so called "toxic products", its relatively strong capital and liquid position, the prudency in taking risks, as well as the macro-prudent measures undertaken by the National Bank. This created prerequisites for the banks to deal with the increased risks that stemmed from the recession movements in 2009, as well as to sustain the possible slow pace of recovery of the economy during 2010.

During the first half of 2009, under the influence of the negative expectations caused by the uncertain economic environment, the growing trade deficit and the decline of capital inflows, the growth of the banking system developed at a slower pace compared to the previous years. For the first time over the past several years, the credits, deposits and overall activities of banks registered moderate, one-digit annual growth rates, whereas the profitability registered an obvious deterioration,

mainly as a consequence of the decreased quality of credit portfolios. This emphasizes the importance of the performance of the real sector, especially from the aspect of its ability to service its debts towards banks. Furthermore, the embedded protective clauses by banks in regard to the currency and interest rate risk by which they transfer these risks to their clients (who are usually less informed about the economic events and the nature and character of risks), cause the indirect credit risk in the Republic of Macedonia to be also extremely important for preserving the stability of the banking system, and consequently the overall financial stability in the country. In conditions where a large portion of the overall debt of companies and population is in foreign currency, their capability for servicing the debts to a large extent depends on the stability of the foreign exchange rate of the Denar. Additionally, the domination of the debt (long-term) with the de facto variable interest rate increases the sensitivity of these sectors on the interest rate risk, too, should the economy stay longer in condition of crisis. The high exposure of the real sector to the interest rate and foreign currency risks shows that they remain the risk sources that might have impact on the capability for servicing their debts, and consequently on the stability of their creditors.

In spite of the decreased activities and the decline of profitability, the Macedonian banking system characterizes with satisfactory level of solvency and sufficient capital for covering the undertaken risks. Additionally, the conservative management of liquidity and macro-prudent measures of the National Bank (for maintaining the minimum rates of liquidity), allowed the banks to accumulate sufficient level of liquid assets, which had direct impact on maintaining the stability and overcoming the deteriorated market conditions. The movements on international financial markets in 2010, including also the value changes of the Euro in relation to other currencies, predominantly in relation to the American Dollar, could have impact on the value of assets and liabilities of banks with foreign currency component, but with a mild intensity, due to "de facto" fixed exchange rate of the Macedonian Denar in relation to the Euro, as well as to the insignificant presence of other currencies in the foreign currency positions of banks.

Risks for the financial stability that arise from the corporate sector register increase. The recession tendencies in the world economy as well as the slowdown of the domestic growth had negative impact on the financial capacity of companies and their capability for regular servicing their liabilities (in 2009, the number of companies with blocked accounts and bankrupted companies increased, as well as the delays in settlement of claims and payment of liabilities). Unfavorable movements in the corporate sector and the more difficult access to financial resources might also have negative impact on the capability for servicing the debts not only in the corporate sector, but also in the household sector (usually, the problems present in the corporate sector spillover to the household sector with a certain delay), which will indirectly impact the stability of their creditors.

Risks related to the "household sector" remained in the controlled zone. The growth of available income of households on the one hand and the present difficulties in servicing the debt on the other hand represent an indicator for increased socio-economic multi-layering among population, i.e. concentration of indebtedness in segments of population with lower income. At the same time, the high level of uncertainty is still present in the area of servicing future liabilities of the "household" sector, which is in relation with the time and pace of recovery of the corporate sector.

Other segments of the financial system in 2009 functioned under the influence of the effects caused by global economic disturbances on the domestic economy, thus facing with worsened conditions for growth of activities and more rigorous conditions for ensuring solvency and financing of operations. However, other segments had moderate influence on the overall financial stability of the domestic economy as they still dispose with less assets compared to the banks.

The establishment of the Agency for Insurance Supervision, as a regulatory and supervisory body for the insurance sector means a lot in the process of completing the system for regulation and supervision of this segment of the financial system, with expectations for better identification of risks to which it is exposed. This imposes challenges related to the necessary completion of regulatory framework and further larger implementation of international standards for operation of the insurance sector. Bearing in mind the potential insufficient capitalization of some companies for non-life insurance due to the lack of assets for covering the technical reserves, there is a need for greater implementation of standards referring to the solvency of insurance companies and risk management. The biggest risks in the capital market in the Republic of Macedonia arise from the increased variability of price movements and possibilities for exceptions because of the events taking place in the real sector. The decline of the overall trade on the stock exchange undermined the grounds of brokerage houses for earning income, endangered their ability for long-term preservation of the profitability, while in some cases they brought into question their survival on the market. In 2009, accomplishments of mandatory pension funds registered improvement, as well as positive trends of the realized income. The start-up of operation of voluntary fully funded pension insurance in 2009 is expected to stimulate the further development of this segment of the financial system, however, in order to increase the knowledge about the pension schemes, there is a need for increasing the public awareness, particularly the awareness of employers. The leasing sector in the Republic of Macedonia is still small and underdeveloped and consequently, the risks for the financial stability arising from it are insignificant. Yet, in 2009, this segment of the financial system also faced with decline of the activities, materialization of credit risk and worse operation results.

In the forthcoming period, the main risks for the financial stability are related to the recovery of the economies, predominantly the economies of our main trade partners. Risks are also related to the debt crises in public finances of some more developed economies, their recovery that is going on at a slower pace than the expected one and the consequent continual contracted domestic economic activity. The possible spillover of the lower turnover and reduced liquidity of domestic economic entities on the labor market is also important as it may cause additional growth of the unemployment rate, reduced creditworthiness of households and materialization of the credit risk in the banking system in wider frames. Bearing in mind the basic risks and potential channels for spillover of the negative effects among separate segments in the Macedonian economy, including the financial system as a whole, the preservation of macroeconomic stability is the crucial precondition for maintaining the financial stability. To that end, the National Bank will follow the movements in the domestic economy with due care and will continue to apply the policies that are most favorable and contribute the most to preserving the financial stability.

I. Macroeconomic Environment

In the second half of 2009, the first signs of recovery of the real economy were registered, which implied that the risks relating to the global financial stability have started to decrease. However, the financial system and the economy are still vulnerable. The depleted effects of stimulating monetary and fiscal policies, projections for further deterioration of conditions in the labor market, as well as the problems with the fiscal sustainability are considered as main risks for the global economic growth and financial stability in the forthcoming period.

The spillover of the global crisis in the Macedonian economy meant rise of risk in regard to the macroeconomic and financial stability on a higher level. The initial effects of the world crisis in the Macedonian economy have been materialized through the decline of export demand, decreased expectations of economic entities and decreased capital inflows. The activities in the real economy started to slow down, whereas the vulnerability of the external sector (due to the chronically high trade deficit and reliance on unstable sources for its financing in the form of private transfers) appeared on the surface. As a response to the growing risks, in the first half of 2009 measures were introduced in the domain of the monetary policy, supported by the behavior of banks that also produced significant effects in terms of minimizing the risks for the financial system. Namely, in conditions of tightening the financial resources and unfavorable perceptions, the banks reduced their credit offer.

The first "wave" of effects from the crises involved serious pressures on the domestic currency value. Bearing in mind the high level of euroization of financial liabilities in the country, these pressures created serious risks for the stability of the financial system. As of the beginning of the year, in conditions of growing deficit on the trade account (in conditions of decline of export and slower adjustment of the import component), increased psychological pressure on households for conversion of the domestic into foreign currency, increased tendency of banks for accumulation of foreign currency reserves and decreased volume of capital inflows from abroad, the imbalance on the foreign currency market has increased significantly, generating strong pressures for depreciation of the domestic currency. In the light of maintaining the stability of the foreign exchange rate, NBRM during the first five months of the year intervened with significant net-sales of foreign currency on the foreign exchange market (approximately 5% of GDP). Also, in March 2009, the basic interest rate was increased from 7% to 9%, whereas additional tightening of the monetary policy was made in May by increasing the rate for allocation of mandatory reserve of banks' liabilities in foreign currency.

During the second half of 2009, conditions in the macroeconomic environment of the domestic financial system showed a tendency of stabilization. The undertaken monetary measures have stabilized the expectations, thus stimulating extremely favorable trends in the area of private transfers, decreased tendency among banks for accumulation of foreign currency[1], and decreased tendency among households for conversion of their deposits from domestic into foreign currency, Such changes in the behavior of economic entities, along with the

[1] The decreased tendency of banks for accumulation of foreign currency assets during the second half of the years may be partially explained by the changes in the Decision on liquidity risk management (of May 2009), which gave the banks an opportunity to include their placements/sales in NBRM's instruments, except for the mandatory reserve in Euros, in meeting the required minimum level of Denar and foreign currency liquidity.

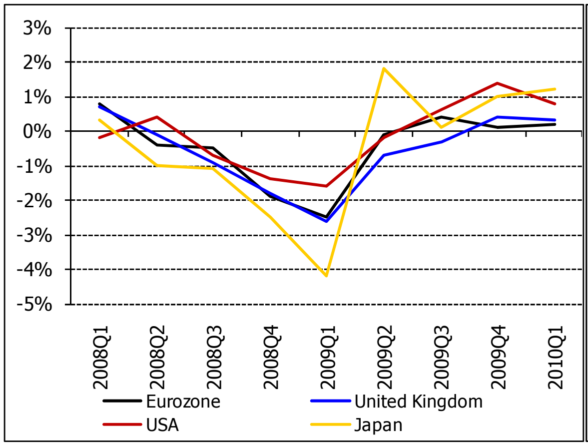
emphasized downward adjustment of import demand and improved forecasts about the perspectives of the global economy have opened a new "phase" in the foreign currency market. Thus, starting as of the middle of June until the end of the year, NBRM has been continuously intervening in the foreign currency market by net-purchase of foreign currency assets. The position of foreign currency reserves was additionally strengthened with the realization of inflows from the Euro bond in July, which strengthened the capacity of the crucial bumper for absorption of potential shocks in the future. These movements in the second half of the year, along with the assessments for more favorable macroeconomic environment in 2010 have opened room for loosing the monetary policy. Thus, at the end of November 2009, the basic interest rate of NBRM was reduced by 50 basic points, whereas at the beginning of 2010, there was additional reduction five times in row, which resulted in 5% basic interest rate in June 2010.

Compared to the reduced pressure on the foreign currency exchange rate, which subsequently results with reduction of probability for effectuating the indirect credit risk through this channel, the credit risk generated by the position in the real economy is still present. In spite of the expectation for a more favorable macroeconomic environment and slight improvement of the economy in the course of 2010, risks are still present in the area of debt servicing. This potential problem has been additionally emphasized by the fact that the period before the crisis was characterized by dynamic credit activity and growing expansion of exposure to credit risk in the banks' balance sheets. The first signs of materialization of the credit risks were visible in 2009 through the moderate deterioration of the quality of banks' credit portfolio. Risks for the financial stability in the forthcoming period arise from the still uncertain tempo of recovery of the global and subsequently of the domestic economic activity, as well as from the hardly predictable volume of capital inflows from abroad. Namely, the eventual slower improvement of the economic growth than the expected one and the failure in regard to the planned capital inflows from abroad would again have negative impact on the macroeconomic environment. This could mean repeated pressure on the foreign currency rate, and repeated negative shock on the quality of the credit demand. Such developments in the second half of the year, along with the assessments for more favorable macroeconomic environment in 2010, opened a room for relaxation of the monetary policy.

1. International conditions

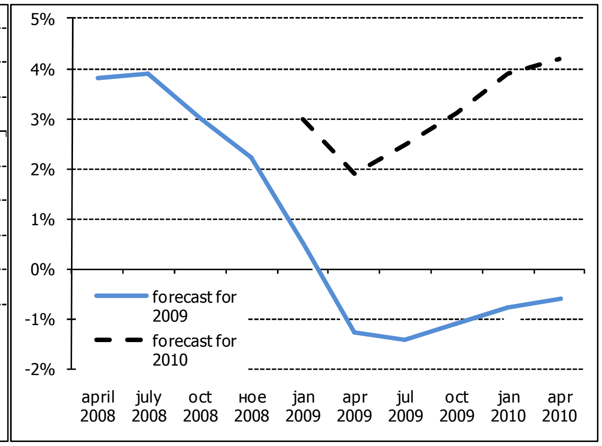
The signs of recovery of the global economy and getting out of the greatest recession during the past eighty years appeared in 2009. The sharp decline in the industrial production, employment, aggregate demand and the indices of trust at the beginning of 2009 increased the risk for development of negative returning force between the real and financial sector. However, in the second half of the year, economic indicators have started to rise, where the trends in most of the economies have been better than the projections thereof. During this period, the reassessments of forecasts regarding the economic growth had an upward trend, which indicated a faster tempo of recovery of the economies compared to the previous assessments.

Figure 1.1.1
Quarterly rates of real growth (deseasoned)



Source: Eurostat

Figure 1.1.2
Revision of global GDP growth



Source: IMF - World economic outlook, April 2010

During the first half of 2009, developed countries were still in the zone of negative growth rates, whereas the economic growth of developing countries was continually slowing down. The high rate of unemployment and uncertain prospects in the labor market, especially in developed economies, urged the households to increase their savings, which delayed the personal consumption. On the other hand, the high inventories, decrease possibilities for sale of companies' products and slowdown of the international trade acted as limiting factors for the investments Thus, the access to credits for the private sector was still limited. In the second half of the year, the conditions in developed countries stabilized and the first positive rates of quarterly growth were registered, which signaled the end of the recession. In USA, the recovery was under the influence of the real estate market and moderate growth of investments. In the Euro zone, the demand for investments, fiscal spending and exports registered positive rates in conditions where the anemic labor market limits the growth of the personal consumption.

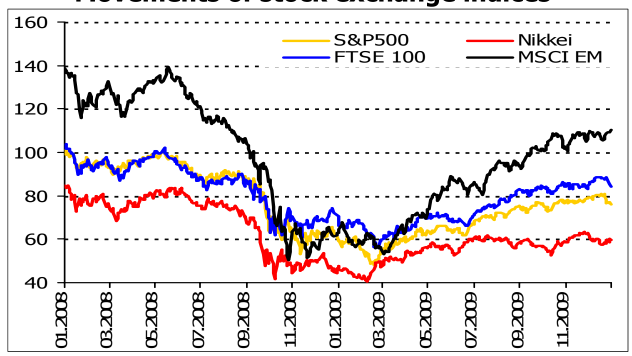
The numerous monetary and fiscal interventions contributed to the stabilization of the financial system, stimulation of investments and consumption and returning the trust among economic entities. At the beginning, the monetary reaction was introduced through traditional monetary measures, including constant reduction of interest rates, by which the central banks were resolving the liquidity insufficiency in financial markets. Escalation of financial crisis into global recession with unseen dimensions exhausted the possibilities of traditional monetary instruments, where the central banks of developed economies, faced with the so called "zero" limit of nominal interest rates, started to use unconventional measures[2] for preventing the systematic financial collapse and helping the economies. **The significant monetary and fiscal interventions contributed to the stabilization of the financial system, stimulation of investments and consumption and restoring the confidence of the economic agents.** Monetary interventions were supplemented by coordinated fiscal incentives focused on direct financial support to the real economy, stimulation of consumption, increase of liquidity of the financial system through state

[2] Central banks of leading economies introduced programs thorugh which they made direct buy-out of state securities, corporate bonds, commercial bills and bank debt securities, as well as buy-out of the so-called toxic assets of financial institutions.

guarantees and measures for final capitalization of problematic banks, including their nationalization.

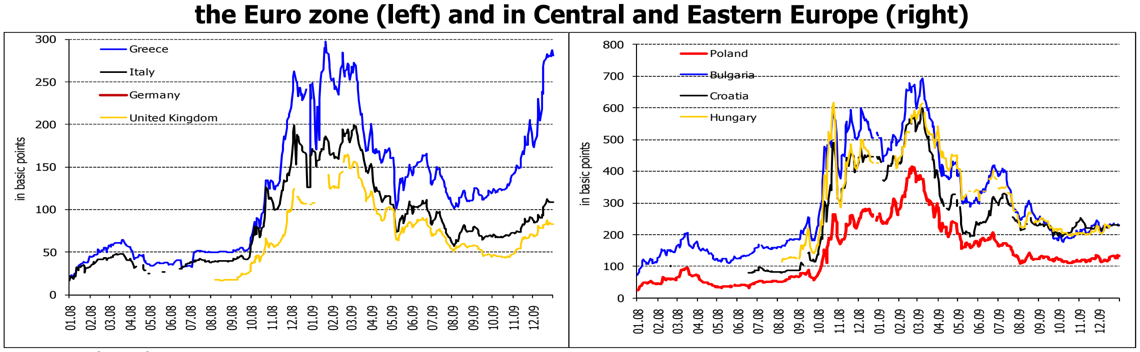
Results from the aforementioned measures were visible in the global markets already in March 2009, followed by moderate movement in the global capital markets and decrease of the then high aversion to risks among investors. The successful effect from the monetary and fiscal expansion on financial markets, along with the signals for recovery of developed economies caused decrease of uncertainty, alleviation of fears from extended global depression and gradual return of optimism in regard to the expectation of the investment community. Thus, the global risk indicators, especially the prices of swaps for credit risk[3] (so called Credit Default Swap premiums) started to improve, showing again appetite for undertaking risk among investors and decrease of risk premiums in certain countries, including the countries that are some of the more important trade partners of Macedonia.

Figure 1.1.3
Movements of stock exchange indices



Source: Bloomberg

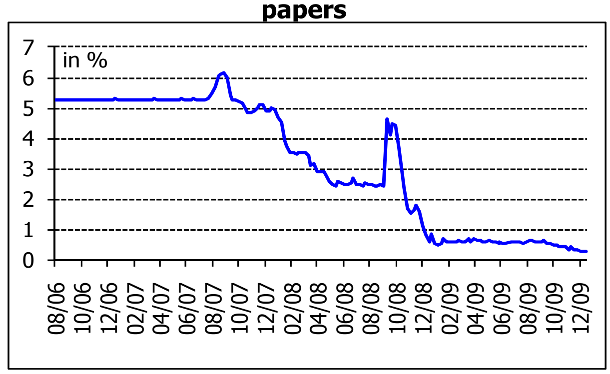
Figure 1.1.4
Prices of swaps for credit risk (Credit Default Swap premiums - CDS) in certain countries of the Euro zone (left) and in Central and Eastern Europe (right)



Source: Bloomberg

The improved investment sentiment had impact on the companies' costs for borrowing, which after the enormously high levels in 2008, started to show a downward trend. At the same time, interest rates on the market of asset-backed commercial papers, as preferred method of borrowing were stable during the whole year. Additionally, commercial and investment banks that were in the epicenter of the crises, with the assistance of state interventions, managed to improve their capital positions and to retrieve the liquidity,

Figure 1.1.5
Interest rates of asset-backed commercial papers



Source: Bloomberg

[3] The credit default swap premiums represent an annual amount of the premium that the buyer pays with the aim of being protected from the credit risk related to certain issuer of securities, which in this case is a certain country. The increase of the credit default swap premiums point to the increased risk from certain entity/country, i.e. rise of the premium that has to be paid for insurance from the credit risk related to the entity.

which contributed to the reduction of the liquidity and credit risks in the inter-banking markets. As a result of the favorable trends, the range between the three-month interest rate LIBOR and the interest rate of three-month treasury bills of USA, the so called TED range[4] significantly declined to 21 basic point in December, compared to the historically highest level of 465 basic points in October 2008.

Figure 1.1.6
TED range

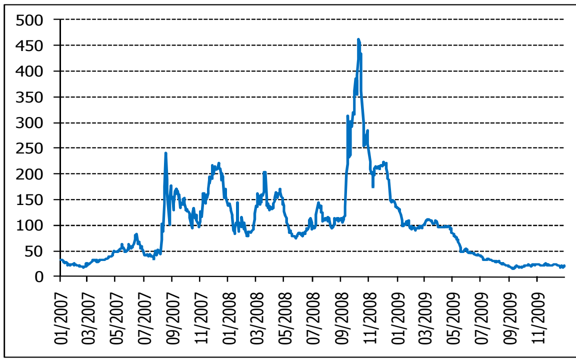


Figure 1.1.7
VIX*

Source: Bloomberg
* VIX represents an index of implicit volatility of securities that create the S&P500 index and shows the expectation on the market concerning the volatility in the following 30 days period.

Despite the process of stabilization of financial markets, the tightened credit conditions and weak credit offer were typical for the financial systems during 2009, as well. The fear from further deterioration of the banks' portfolio quality and reduced profitability were the main reasons for such behavior of banks. Bearing in mind that the labor market adjusts to the economic cycle with a certain delay, the risks from increased crediting of households will probably grow, which represents one of the primary sources of risks for banks in terms of operating with big losses. According to the quarterly lending surveys of FED[5] conducted during 2009, the deteriorated quality of the credit portfolio, the low risk tolerance and the weak credit demand by the households and companies are the main reasons for the weak credit offer and tightened credit conditions. In spite of the progressive improvement of capital adequacy, as a result of the completion of capitalization by the states, it is still uncertain whether the current level of capital would be sufficient to absorb the future credit losses. Therefore, the banks in 2009 continued with the process of deleveraging. Additionally, the trust crises, the roots of which stem from the world recession, forced the large banks to keep higher level of liquid assets and make investments in low-risk securities (flight to safety), which along with the need for consolidation of balance sheets, significantly reduced the interest of banks for crediting.

[4] This range is an indicator of the investors' trust and shows the generally recognized level of credit risk in the economy. Since the non-risk interest of USA treasury bills is taken into account during the calculations and the rate at which commercial banks issue credits, the upward movement of this indicator signalizes an increased liquidity and credit risk. Although this indicator fluctuates in different periods, until the beginning of the financial crises in 2007, it was moving in the interval from 10 to 50 basic points.
[5] Senior Loan Officer Opinion Surveys, FED, January 2009-January 2010.

Table 1.1.1
Rate of unemployment by country

	2008	2009	2010*	2011*
European Union	7	8.9	9.8	9.7
Eurozone	7.5	9.4	10.3	10.4
USA	5.8	9.3	9.7	9.8
Japan	4.0	5.1	5.3	5.3
United Kingdom	5.6	7.6	7.8	7.4
Bulgaria	5.6	6.8	7.9	7.3
Szech Republic	4.4	6.7	8.3	8
Germany	7.3	7.5	7.8	7.8
Greece	7.7	9.5	11.8	13.2
Espana	11.3	18	19.7	19.8
Italy	6.7	7.8	8.8	8.8
Hungary	7.8	10	10.8	10.1
Poland	7.1	8.2	9.2	9.4
Portugal	7.7	9.6	9.9	9.9
Romania	5.8	6.9	8.5	7.9
Slovenia	4.4	5.9	7	7.3
Slovakia	9.5	12	14.1	13.3
Croatia	8.4	10.4	11.5	11
Macedonia	33.8	32.2	31.7	31
Turkey	11	14	13.9	13.4

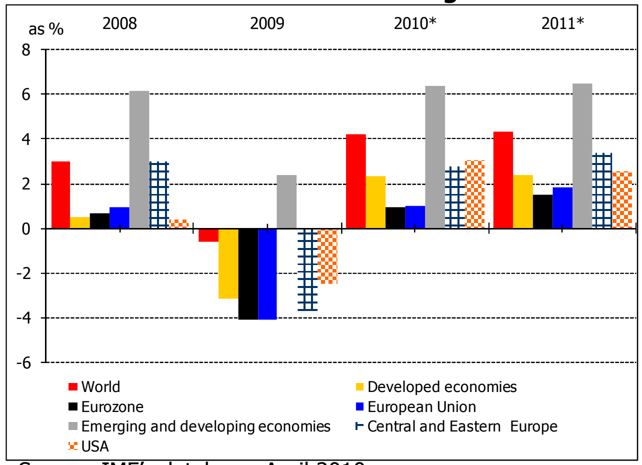
Source: AMESO database, European Commission
*Projection

Stabilization of macroeconomic achievements in 2009, as well as the growing optimism that the worst period of the crisis is already gone, alleviated the risks in regard to the financial stability. The forecasts regarding the global economic growth at the end of the year were reviewed in an upward trend. However, in the forthcoming period, the recovery of the global economy and returning the financial stability to the level prior the crisis will be slow. The labor market and credit markets will continue to be the main risk points. Further rise of unemployment may depress the aggregate demand through the decrease of household consumption. On the other hand, bank institutions are still going through the process of restructuring the balance positions, whereas the financial markets are still not able to function without the additional support. Assessments of IMF concerning the amount of written off non-functional claims of banks as of the beginning of the crisis until the end of 2010 reached the sum of Dollar $2.300 billions[6], most of which are yet to written off. Consequently, the need for additional banking capital and sale of part of assets will probably limit the credit offer in the forthcoming period, as well. Generally speaking, sectors that have limited access to capital markets and difficulties in substituting the bank financing, such as the households and small and medium enterprises, in 2010 will face with tightened credit conditions and weak credit offer. On the other hand, despite the improved situation on the corporate bonds market, the financing of larger companies through this source cannot neutralize the need for financing through credits. Despite the positive signals for decreasing restrictions regarding the credit conditions that were registered in the lending surveys in USA and Europe at the end of 2009, the fear among bank institutions from larger losses had negative impact on their capability to provide loans and credits and limit the efficiency of the credit mechanism. This increases the risks for the sustainability of the positive trend in the consumption and investments, thereby limiting the possibilities for growth of the global economy. Consequently, the state and monetary interventions are still necessary so as to direct the financial flows to the private sector and to support the financial intermediation, where the eventual advanced withdrawal of monetary and fiscal incentives could endanger the economic recovery of the world.

[6] Global Financial Stability Report, January 2010.

Forecasts about the economic recovery of certain countries in the world suggest that the USA economy will experience faster economic growth than the European countries[7], but bearing in mind the mentioned risks, the global recovery will happen slowly an gradually. Economic growth is conditioned by various starting positions of economies prior the crisis, the capacity to deal with the external shocks and reaction of macroeconomic policies. In the Euro zone, the high level of the public debt of some developed countries is one significant problem, which points to the high financial risk of these countries. Taking into consideration the various possible channels for "contamination", the escalation of fiscal problems in these countries might bring new trust crisis and spillover of problems in other countries, too.[8] This might lead to suspension of investment activities and recurrent limitation of capital inflows, which are quite important for most of countries of Central and Eastern Europe. Indicators of investment sentiment at the beginning of 2010 have already shown responsiveness to this information, thus, for risk premiums expressed through the range of Credit Default Swap premiums of countries with high public debt and budget imbalance registered rise, whereas the global indicators of perceived risk have signalized certain deterioration compared to the trend in 2009[9].

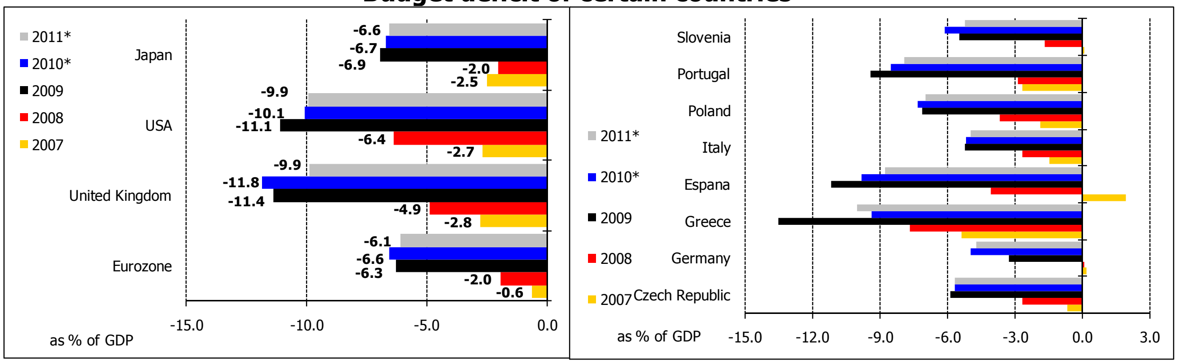
Figure 1.1.8
Annual rates of economic growth



Source: IMF's database, April 2010
*Projection

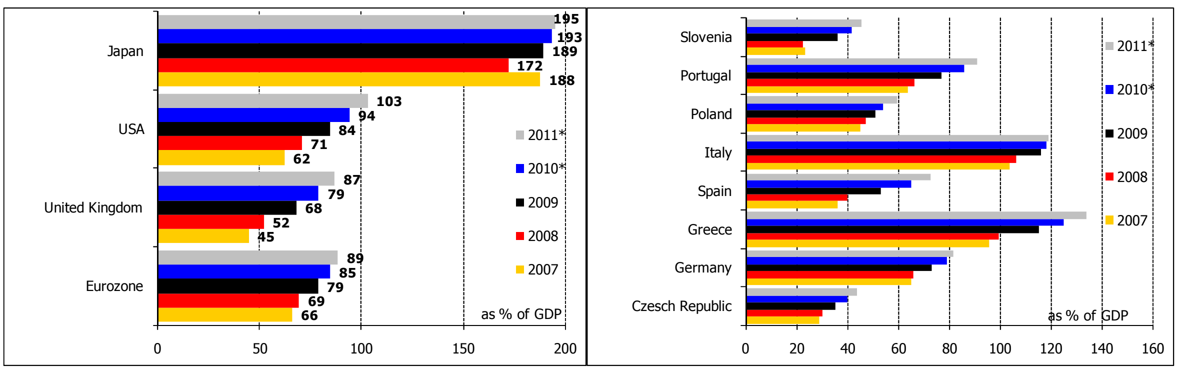
[7] Consensus Forecast, December 2009.
[8] The return of distrust would increase the risk premium and costs of financing of countries with high debts (such as Greece, Portugal, Italy, Ireland and Spain), but indirectly, the adverse effects would also be felt by the banks and other investors who are exposed to these countries. The further borrowing by countries (through issuance of state bonds) might cause rise of yield rate, which may lead to occurrence of debt spiral in the countries with already high debts. Pressing out the private sector from the domestic financial market and relevant implications on the aggregate demand and investment would also cause additional adverse effect.
[9] Upon the continual downward trend during 2009 (up to 20 basic point in December), IX index or the so called "fear index" among investors has increased to 40 basic point in May 2010, but it managed to remain bellow the enormously high level of approximately 80 basic points in October 2008.

Figure 1.1.9
Budget deficit of certain countries



Source: AMESO database, European Commission
*Projection

Figure 1.1.10
Public debt of certain countries



Source: AMESO database, European Commission
*Projection

Also, the fact that the positive trends in the last few months of 2009 to a great extent were conditioned by factors of temporary nature (expansive monetary and fiscal measures), creates additional risk about the pace of recovery of the world economy on the path of sustainable economic growth. Namely, the premature or sudden withdrawal of incentives of certain governments and monetary institutions could prevent the recovery of the financial system and endanger the support to the real economy. On the other hand, the premature stopping of public borrowing represents a risk for the sustainability of fiscal positions for most of the developed countries and for the capability of their further financing. If this happens, there might be serious implications for the global financial stability, first of all through the recurrent distrust in markets and growth of risk premiums, which might increase the level of interest rates. In that case, the effect would extend to the private sector, by forcing out the investments and consumption reduction. Summarized, in the forthcoming period, the creators of macroeconomic policies will face with difficult challenges in dealing with the crisis. At the same time, the consistency of short-term measures aimed at supporting the financial systems, with the long-term goal of strengthening the market discipline and independent functioning of the financial sector is of crucial importance for the sustainable economic growth in the future.

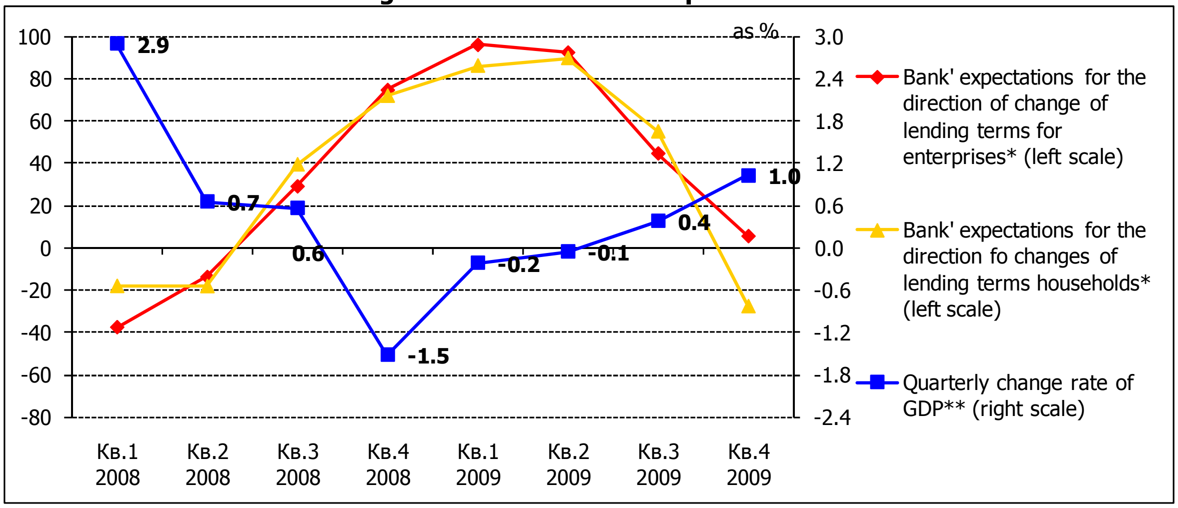
2. Macroeconomic environment in the Republic of Macedonia

The global crisis also meant contraction of domestic economic activity in 2009, and consequently increase of the risk for negative spillover effects from the real into the financial sector. Thus, for he first time after 2001, the gross domestic product (GDP) registered real annual decline by 0.5%[10]. The contracted activity of the real sector was initially caused by the decreased external demand, while in the second quarter a significant downward adjustment of the domestic demand was registered. In conditions of variable investment dynamic and its average increase during 2009, the decreased absorption to a great extent can be explained by the decrease of consumption of the households and the state. Namely, in spite of the slow adjustment of the labor market to the current conditions, the deteriorated expectations about the future events and the significant decrease of the credit support conditioned lower individual consumption. The decline of the domestic consumption was most intensive in the third quarter, where the most significant decline of the overall economic activity was registered (by 1.4% compared to 1.2% and 0.6% respectively in the second and first quarter of the year). The gradual recovery of capital inflows from abroad in the third and fourth quarter of the year, mainly on the basis of financing the debts of the private and public sector and the better forecasts about the pace of the recovery of the economic activity on global and domestic level prevented the further contraction of aggregate economic activity in the last quarter. Thus, in the fourth quarter of 2009, a real growth of the economy by 1.2% was registered.

The contraction of economic activity and the downward reviews of forecasts concerning the economic growth in the first half of the year also meant increased risk for deterioration of the solvency of the private sector in the coming period, and consequently deterioration of the credit portfolio quality. This resulted with pro-cyclic reaction of the banking sector in the light of significant limitation of the credit offer. Thus, with the aim of limiting the exposure to credit risks, banks also started to "rationalize" the credit offer, i.e. to re-direct their credit activities towards the most solvent clients. A decline was also registered in the area of credit demand[11] as a reaction to the tightened conditions for crediting, the high uncertainty regarding the future movements in the labor market and the delay of planned investments by the corporate sector (in conditions of low level of utilization of current facilities and risks in regard to the recovery of the demand in the coming period). The beginning of the process of deterioration of the credit portfolio quality of banks was additional factor for the increased banks' attentiveness in relation to their credit activities. During the second half of the year, simultaneously with the better forecasts about the global economic events, the upward reviews of projections about the change of the domestic GDP and stabilization of expectations of domestic entities, an upward trend was also registered in the credit market. Yet, compared to the previous year, the growth of credits to the private sector registered a slowdown, thus significantly reducing the financial support to the corporate sector and households.

[10] Percentage data about GDP for 2009.
[11] According to the results from Lending Surveys of banks.

Figure 1.2.1
Change of GDP and banks' expectations



Source: NBRM and State Statistical Office Survey on Credit Activity of Banks
*Net percentage, which represents the difference between the sum of percentage of banks which have significant expectations and partial tightening of credit conditions and the sum of percentage of banks which have less expectations and significant relaxation of credit conditions. The downward movement of the net percentage points to increased number of banks which expect relaxation of credit conditions.
**Deseasonned data

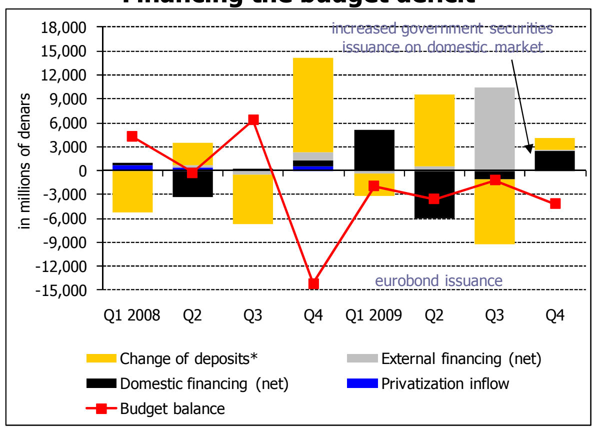
The credit risk caused by the current changes in the real economy and the potential further downward adjustment of the labor market are also expected to have crucial importance for the maintenance of the financial stability in the future. So, even though at the end of 2009 the first signs of the initial revival of banks' credit activity were noticed, the recovery of the credit market is expected to be quite slow, which means that in 2010 the banks will continue to focus on maintaining the stability by accumulation of liquid assets and restrain from undertaking larger risks. This assessment is based on the still present uncertainty regarding the pace of recovery of the domestic economic activity as crucial determinant of changes in the risk of the credit portfolio. Still, the fulfillment of this assumption is also conditioned by the level of conservatism of banks in implementing their business policies and risk assessment. Besides, the fact that no significant adjustments were registered on the labor market in relation to the recession movements in the economy, in 2009, additionally emphasizes the risk from possible delayed adverse effects in 2010 and eventual additional deterioration of banks' balance sheets on such grounds.

Fast disinflation happened in 2009 as a result of the decline of import prices and reduced demand, because of which there was a significant decline of risks for the financial stability created through the channel of inflation. Thus, after the high average inflation from the previous year (by 8.3%), in 2009 the costs of living registered a decline by 0.8%. Simultaneously with the adjustment of the overall inflation, the growth of the basic inflation was also adjusted, which in 2009 on annual grounds was on average higher by 0.3% (2.6% in 2008). **The stable price ambience is expected to be the main feature of the Macedonian economy during 2010, as well, which is in the function of further maintenance of the macroeconomic and financial stability.**

From a standpoint of the fiscal position, the budget deficit expanded in 2009 by 1.7 percentage points and reached 2.6% of the GDP and was in the projected frames. Namely, despite the fact that the contracted activity, along with the newly implemented tax reliefs and other anti-crisis measures[12] had adverse effects on the dynamic of public revenues, in the course of the year an adjustment was made of the level of expenditure through two rebalances (in June and October). Thus, the public expenditure was dimensioned according to the expected adverse effects from the recession on tax revenues.

In 2009, the external debt (issuance of the Euro bonds on the international capital market) had a dominant role in the structure of sources for financing the deficit. However, in the course of the year the sources were changing, where the state played a more important role on the domestic market during the first and the last quarter. This has increased the alternatives of banks for less risky investments, as favorable opportunity in conditions of highly emphasized risk aversion. The new borrowing of the state during 2009 resulted with rise of the public debt, which at the end of 2009 reached 27.1% of the GDP[13] (compared to 24.4% of the GDP in 2008). Despite the growth, the level of indebtedness is still moderate, thus supporting the macroeconomic and financial stability. In any case, the future indebtedness should be dimensioned in compliance with the principles of sustainability of the debt, providing sound public finances and contributing to maintaining the financial stability. This is the method of creating positive transferrable effects in relation to the trust in the domestic banking system. This also increases the opportunities for better credit rating of the country and the probability for additional inflow of quality foreign capital, with positive effects on the real and financial sector.

Figure 1.2.2
Financing the budget deficit



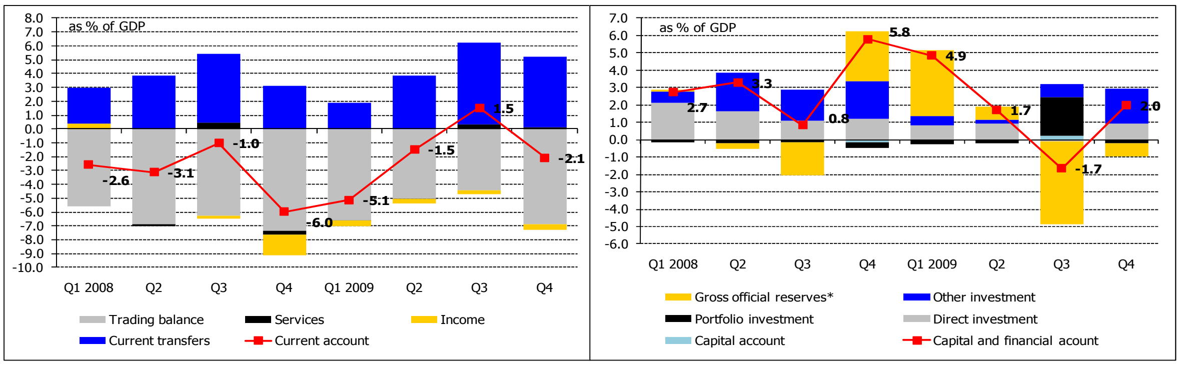
Source: Ministry of Finance of the Republic of Macedonia
*Positive change – deposit withdrawal; negative change – deposit creation.

The first effects of the world crisis meant increase of external imbalances, followed by serious pressures on the macrostability in the domestic economy. However, the decline of absorption and better expectations during the year, lead to significant downward correction of the external imbalance. Thus, the deficit on the current account of the balance of payments registered a decline by 5.5 percentage points on annual grounds, and reached 7.2% of the GDP. The significant tightening of the deficit on the trade account and the growth of inflows based on private transfers were the main driving forces of the positive changes in the external sector in 2009. Still, the adjustment of the external imbalance was happening very slowly during the year, where the risks for the macroeconomic and financial stability in the first quarter were particularly prominent. The deficit on the current account doubled on annual grounds in the first quarter, whereas the realized inflows on the capital and financial account in this period formed only approximately 1/5 of the total necessary foreign currency assets for covering this gap. As of the second quarter, the downward correction of the total import component has started, which in combination with the

[12] Regarding the anti-crisis fiscal measures in 2009, more details are available in the Annual Operational Report of NBRM for 2009, p. 74-75.
[13] As of July 2008 with the amendments to the Law on the Public Debt (Official Gazette of RM no.88/2008) the calculation of the public debt is harmonized with the statistics of government finances of IMF, based on which the overall debt, in addition to the debt of the central state authority, funds, municipalities and public enterprises, also included the debt of NBRM. However, for the purposes of this analysis, the public debt includes only the debt of fiscal, and not of the monetary authorities.

recovery of inflows from private transfers (according to stabilized expectations) contributed to narrow the overall deficit on the current account. Parallel with the improved situation on the current account, the range of inflows on the capital and financial account from the balance of payments increased as well (as of the third quarter), which enabled continual growth of the level of foreign currency reserves in the second half of the year. So, under the influence of the crises, changes in the structure of financing the current account were registered in 2009 compared to 2008. In accordance with the ambience of global lack of liquidity, high uncertainty

Figure 1.2.3
Components of the current account and the capital and financial account

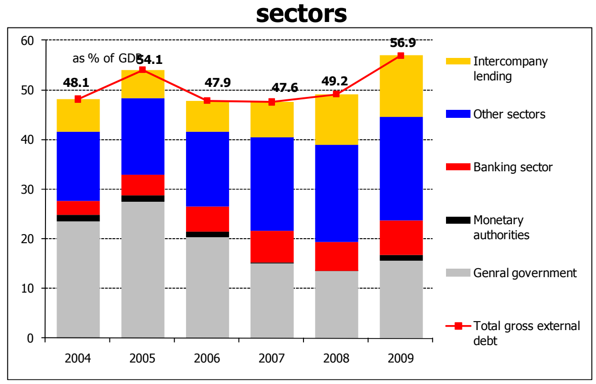


Source: NBRM, on the basis of provided answers to the survey by banks.

as concerns global economic events in the middle run and consequently the refrain of investors to undertake new business ventures, the share of foreign direct investments dropped from 48.1% in 2008 to 36.9% in 2009. A more intensive fall on annual basis (18.1 percentage point) was registered in the share of net-inflows based on financial borrowing abroad, which depicts the difficult access to external financing of domestic economic entities and probably the reduced needs for additional financing in conditions where the economy functions bellow the level of its potential. Still, the reduced net-borrowing abroad to a great extent was compensated with the growth of trade credits, as an alternative form of external crediting in the short-run. At the same time, a significant strengthening of the position in the structure of financing the deficit on the current account in 2009 was registered in the portfolio investment (rise in the share of inflows from portfolio investments on the total capital and financial account of 28.3 percentage points on annual grounds), which was completely enabled by the issued Euro bond by the state. Such movements in the capital and financial account enabled growth of gross foreign currency reserves of Euro 102.6 millions on annual basis compared to the moderate decline during the previous year. Consequently, the gross foreign currency reserves at the end of 2009 reached the amount of Euro 1,597.5 millions. This provided comfortable position and coverage of imports of goods (f.o.b) and services in the following year for 4.3 months which reduced the external vulnerability of the economy.

The total external indebtedness of the Macedonian economy in 2009 registered a growth by 7.7 percentage points of GDP compared to 2008, which represents a significant intensive movement compared to the previous period. At the end of 2009, the gross external debt of the Republic of

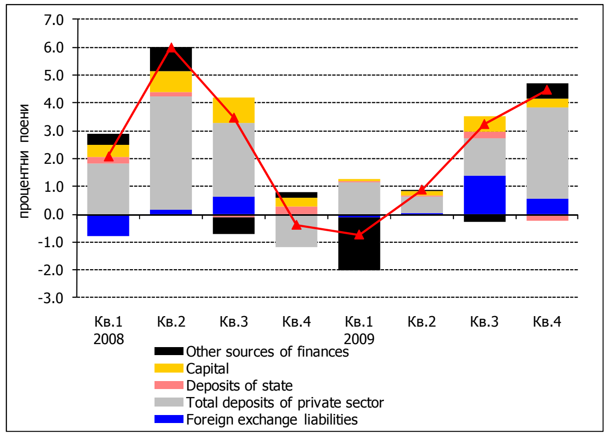
Figure 1.2.4
Structure of the gross-external debt by sectors



Source: NBRM.

Macedonia was Euro 3,839.4 millions or 56.9% of GDP. Although the growth of the external debt increases the vulnerability of the domestic economy to external shocks, it is, however, alleviated with the relatively favorable structure of the new indebtedness. Therefore, approximately 45% of the private debt in 2009 refers to the intercompany debt. At the same time, according to several indicators, the Macedonian economy is still listed in the group of countries with low external indebtedness. This implies limited risks for the financial stability to date, which are related to the external liquidity and solvency of the domestic private and public sector. The growth of the gross external debt contributed for ensuring additional financial means and alleviating the problems related to the external liquidity of domestic entities. External borrowing of the public sector contributed with 40% to the growth of the overall debt, whereas the rest refers to the private borrowing. Thus, the debt of the private sector at the end of 2009 equaled 37.3% of GDP (growth by 4.6 percentage points on annual grounds). After the last year's stagnation on annual grounds, in 2009 the debt of the banking sector towards abroad again registered a growth by 21.8% on annual grounds.

Figure 1.2.5
Sources of banks financing



Source: NBRM.

The short-term credits had the greatest share in the new indebtedness of the banking system, followed by liabilities (short-term and long-term) based on deposits of non-residents, with a share of 29.5%. Despite the growth on annual basis, the relying of the domestic banking sector on foreign source of financing is still on a low level, where the share of the external debt in the GDP was 6.9% in 2009.

Macroeconomic projections for 2010 point to more favorable prospects for the external sector compared to 2009, which could mean lower risks for the macroeconomic and financial stability caused by the trends in the external sector. However, the risks are not exhausted and are related with the dynamics of recovery of the domestic exports and the volume of capital inflows from abroad, which is still quite uncertain. This factor of uncertainty has been additionally emphasized in conditions of still present dilemmas regarding the sustainability of the current recovery of the global economy. This is particularly typical for the EU countries (as an important focus of the foreign trade of Macedonia) where the problems with the soundness and sustainability of public finances are quite big and create adverse spillover effects on the possibilities for faster economic recovery.

As a consequence of the global financial crisis and the present critics on global level concerning the manner of functioning of credit rating agencies, they tightened the criteria for awarding credit ratings and started to apply more conservative assessments of the present and potential risks, including the ratings of individual countries. The potential impact of these changes on the financial markets and costs for borrowing of individual states could be quite large, while their role is also very important in terms of being treated as a signal for international investors to invest in state securities. Furthermore, the rise of criteria of credit rating agencies is under the influence of the announcements for introduction or tightening the regulatory framework and the rules for their operation. This global context, in conditions of numerous pressures on the domestic foreign currency market, deepened imbalance in the balance of payments, tightened conditions for external financing and unfavorable movements in the real sector in 2009 also reflected on the credit rating of the Republic of Macedonia. Thus, **in the first half of 2009, the credit rating of the Republic of Macedonia was deteriorates, and at the same time, the prospects for its further changes obtained a negative status. However, the stabilization of macroeconomic movements in the second half of 2009 had a positive impact on the future prospects concerning the credit rating.**

Credit rating agency		2004	2005	2006	2007	2008	2009 - first half	2009 - second half
Standard & Poor's	foreign currency	BB positive outlook	BB+ stable outlook	BB+ stable outlook	BB+ stable outlook	BB+ negative outlook	BB- negative outlook	BB- stable outlook
	domestic currency	BB+ positive outlook	BBB- stable outlook	BBB- stable outlook	BBB- stable outlook	BBB- negative outlook	BB+ negative outlook	BB+ stable outlook
Fitch	foreign currency		BB positive outlook	BB+ stable outlook	BB+ positive outlook	BB+ stable outlook	BB+ negative outlook	BB+ negative outlook
	domestic currency		BB positive outlook	BB+ stable outlook	BB+ positive outlook	BB+ stable outlook	BB+ negative outlook	BB+ negative outlook
Japan Credit Rating Agency	foreign currency				BB+ stable outlook	BB+ stable outlook	BB+ stable outlook	BB+ stable outlook
	domestic currency				BBB- stable outlook	BBB- stable outlook	BBB- stable outlook	BBB- stable outlook

Table 1.2.1
Credit rating of the Republic of Macedonia and prospects (outlook) for its further changes

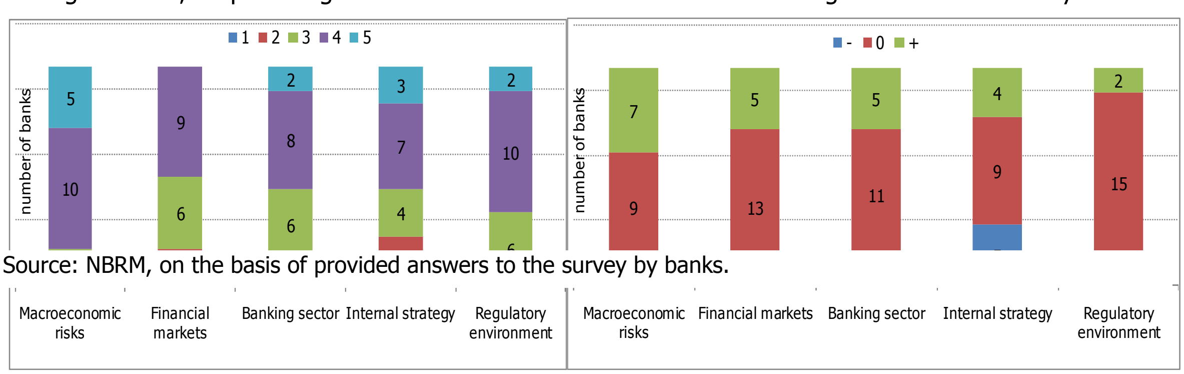
Source: Web sites of individual credit rating agencies

Survey on banks' assumptions concerning the risks during their operation

As of December 2009, according to the example of the European Central Bank, the National Bank of the Republic of Macedonia has started to conduct a Survey on Banks' Assumptions Concerning the Risks during their Operation. All banks participated in the survey. It contains their assumptions concerning the potential risks they face with in their current operation, as well as their expectations for the first half of 2010. The survey covers five risk groups (macroeconomic risks, risks from financial markets, risks from the banking sector, risks form the internal strategy of the banks and risks that arise from the regulatory environment). In each of the give groups of risks, the banks make assessment in the interval between 1 to 5, where 1 means that such group of risks does not exist or is insignificant, whereas 5 means that such group of risks is extremely important for the bank at the moment. In addition to the numerical assessment, banks showed their expectations in terms of whether the risks will grow (=), will remain on the same level (0) or will decline (-) for the first half of 2010.

According to survey's results, the macroeconomic risks were assessed as dominant risks with an average mark 4, emphasizing the related risks which arise from the change of the economic cycle. Risks

Figure 1.2.6
Assumptions of banks concerning the risks during their operation for 2009 (left) and their expectations for the first half of 2010 (right)



Source: NBRM, on the basis of provided answers to the survey by banks.

related to the regulatory environment were also assessed with similar marks (average mark 3.8) and risks from financial markets (average mark 3.3), as a result of the need for harmonization of the regulation for risk from changes of interest rates. Risks arising from the banking sector and the internal strategy according to banks' assessment are generally less important for the banks. In the first half of 2010, most of the banks do not expect any changes in relation to analyzed risks that arise from their operation.

II. Non-financial sector

1. Household sector

Despite expectations that risks arising from the household sector would become increasingly important during 2009, they remained within the controlled framework, and even registered a slight decline. This situation was reflected through most of the indicators for assessment of the financial stability of the household sector, which in 2009 registered slight improvement. The restrain of the households due to the great uncertainty (in regard to the strength and duration of effects from the global crisis) and the significantly reduced credit support by banks contributed to this situation. However, the high exposure of households to the interest rate and currency risks remains to be the primary sources of risks that may have impact on the debts servicing capacity by the household sector, and consequently on the stability of certain segments of the financial system. At the same time, the high level of uncertainty regarding the performance of the household sector is still present as it is related to the pace and time of recovery of the corporate sector. The first signs of reduced financial capability have been manifested through the rise of non-performing loans in total loans of households toward banks, compared to 2008. However, the indicators for assessment of households debt-servicing capacity and interest burden do not show any deterioration. On the contrary, they showed slight improvement, and at the same time they are even on a lower level compared to some of the analyzed countries. Such contradictory movements (the growth of financial assets and disposable income versus the growth of non-performing loans), may, on the other hand, indicate an increased socio-economic layering of population.

1.1. Assessment of financial stability of the household sector and the capability of debt repayment

The significantly slowed dynamic of growth of households' debt compared to the growth of financial assets and disposable income in 2009 conditioned the improvement of most of the indicators for assessment of the financial stability of the household sector. Such slowed dynamic of households' debt was the reason for improvement of indicators of households' debt, which was confirmed through the drop of the share of debt in the GDP, in the disposable income, financial assets and net financial assets which shows the decreased exposure of households to risks.

Figure 2.1.1
Annual growth rate of indebtedness, financial assets, disposable income of households and GDP

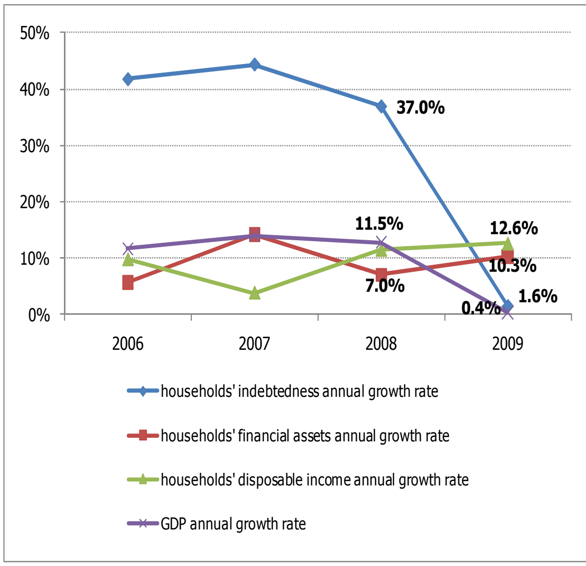
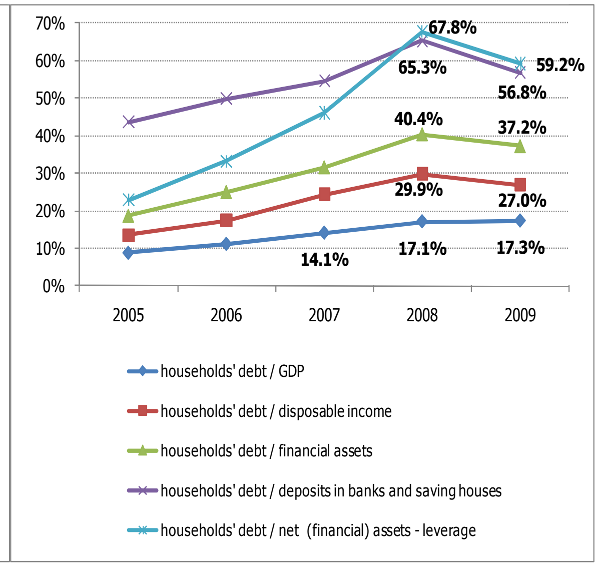
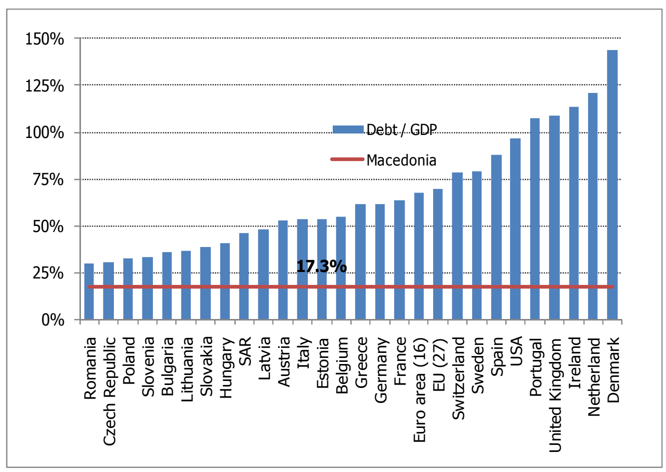


Figure 2.1.2
Indicators of households' indebtedness



Source: NBRM, on the basis of data submitted by banks and saving houses, MF, CDS, MAPAS, CES, ISA.

Figure 2.1.3
Debt to GDP ratio, by individual countries



Source: NBRM, on the basis of data submitted by banks and saving houses, SSO, Eurostat and IMF.

The households' debt in the Republic of Macedonia measured through the share of the debt in GDP is on the lowest level compared to the selected countries. During the analyzed period (2005-2009), the share of total households' debt in the GDP in the Republic of Macedonia was constantly growing. Despite the insignificant increase and the fact that there is still room for increasing the households' debt in the Republic of Macedonia, one must not neglect the risk from eventual high indebtedness of certain households' segments. The slow dynamic of this indicator to a great extent reflects the pro-cyclic nature of the debt, i.e. the sensitivity of factors which determined the business cycle in the economy. The indicator debt/disposable income in the Republic of Macedonia compared to some other countries is still on a low level (Euro area – 94%, Croatia 90%, Czech Republic – 50%)[14]. The indebtedness (leverage) measured through the share of the debt in the net financial assets[15] registered a decline by 8.8 percentage points relative to 2008, which at the end of 2009 reached the level of 59%. This conditioned the increase of the share in the net financial assets in the GDP by 25.3% (2008) to 28.8% (2009). As a comparison, this indicator moves from minus 0.6% in Estonia, to

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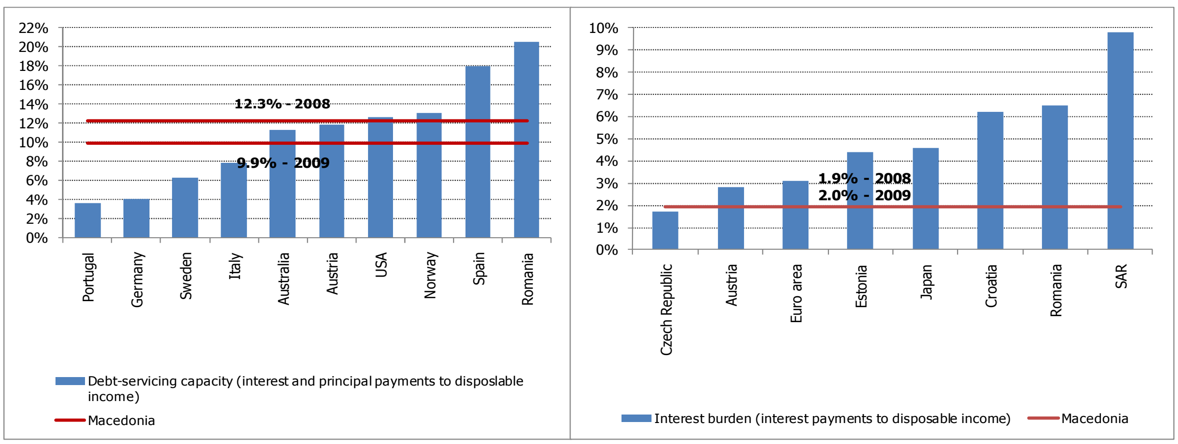
[14] Source: Web sites of central banks and European Central Bank.
[15] Net financial assets of households represent the difference between the total financial assets and total debt of households.

125% in the Euro area, while in the Czech Republic its value is 40% and in Slovenia around 80%[16].

Households' debt-servicing capacity (principal and interest) registered a slight improvement. The improved households' capability of debt repayment is explained with the growth of the disposable income of households contrary to the slowed dynamic of debt growth of households in 2009. However, the growth of non-performing loans of the household sector has made relative the fact that there is improved credit worthiness, since the improvement is mostly a result of the reduced demand for credits in the course of 2009. **On the other hand, the growth of households' income enabled amortization of increased liabilities for interest payment in 2009, which meant that the share of interest payment in the disposable income remained almost unchanged relative to the preceding year.**

Figure 2.1.4
Households' debt-servicing capacity (interest and principal payment to disposable income)



Source: NBRM, on the basis of data submitted by banks and NBRM calculations, SSO, Eurostat and IMF.

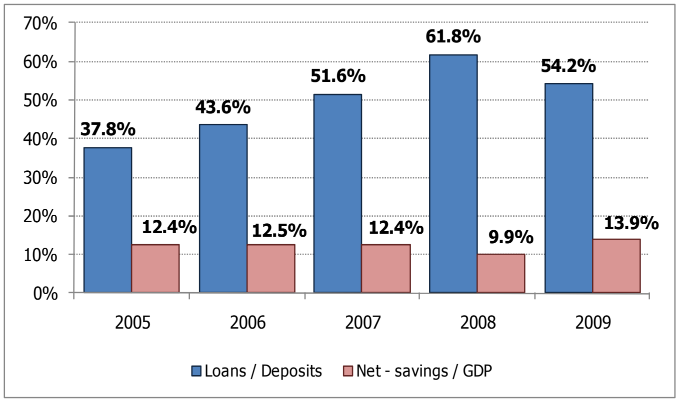
The capability of the households' sector for timely repayment of debt does not depend only on its amount, but also on the source of its repayment. On 31.12.2009, approximately 60% of the total credit exposure towards households referred to the credit users whose monthly income on all grounds move between Denar 7,000 and 30,000, which is almost unchanged situation relative to the end of 2008[17]. This information points to the possibility of occurrence of concentration of indebtedness in the households' segments with lower income.

[16] Source: Web sites of central banks and European Central Bank.

[17] The analysis was made on the basis of data obtained from sixteen out of seventeen banks, which are exposed to the households sector. One of the banks within this structure, reported a "no salary" category whose share is 10% in its total credit exposure to households. Based on the obtained data, the general conclusion is that most of the banks are not prepared for precise preparation of such data, which also shows weaknesses in the banks' systems for following the credit risk in this domain, with significantly dispersed number of clients.

The more intensive growth of deposits than the credits in 2009 conditioned the growth of net-savings of households relative to the preceding year. This resulted with stronger position of the households' sector as net creditor of banks and increased its contribution to the overall economic activity of the country. The decreased share of loans in the deposits at the end of 2009 to a great extent occurred as a consequence of the increased attentiveness of banks in the process of extending new loans, which led to a significant slowdown opposed to the increased interest for saving, conditioned by the attractive interest rates (in the competition to retain the existing and attract new clients, banks increased the interest rates).

Figure 2.1.5
Indicators: Loans/deposits and net savings / GDP

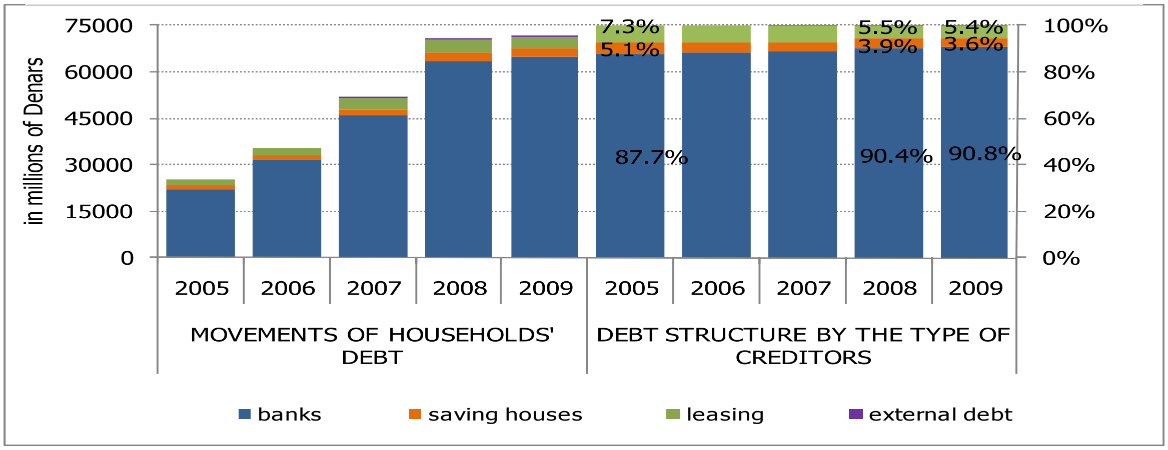


Source: NBRM, on the basis of data provided by banks, SSO, CDS, MAPAS, SEC, ASO.

1.2. Households' debt

The slowed indebtedness of households is mainly a result of the decelerated growth of crediting by banks. However, banks' credits still represent the most important part of the total households' debt and main driving force of its growth. During 2009, all types of credits were growing at a very slow pace[18] relative to the preceding year.

Figure 2.1.6
Total households' debt



Source: NBRM, on the basis of data provided by banks and saving houses, and the Ministry of Finance about leasing companies.

[18] There is a decline of the households' debt on the basis of other products, but this is to a great extent a result of the performed recalculations by banks and relevant presentation of separate types of credit products of households.

Figure 2.1.7
Amount and structure of households' debt, by type of banking product

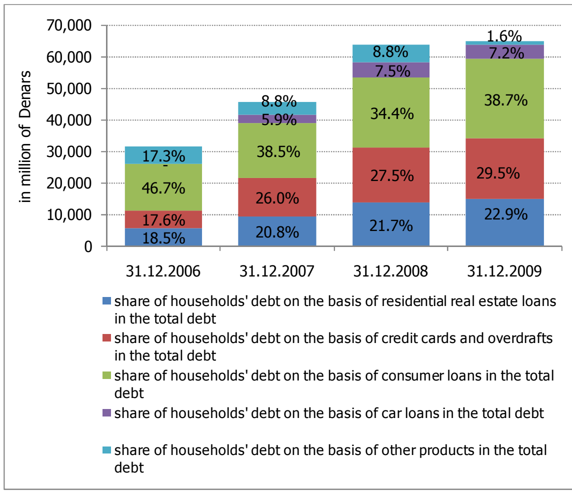
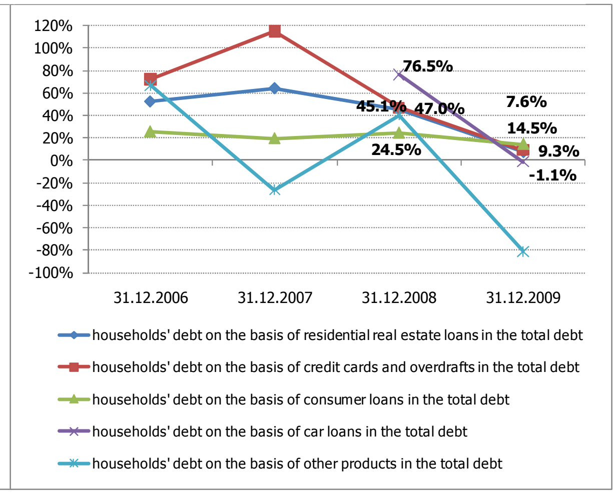


Figure 2.1.8
Annual rates of change of households' debt by type of banking product



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

Figure 2.1.9
Impact of changes in the monetary policy on the interest policy of banks in the last three months

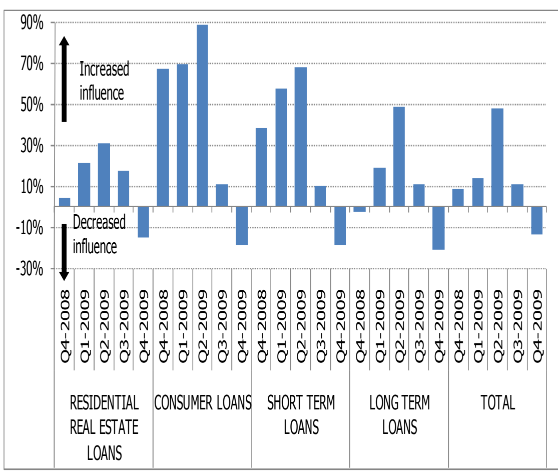
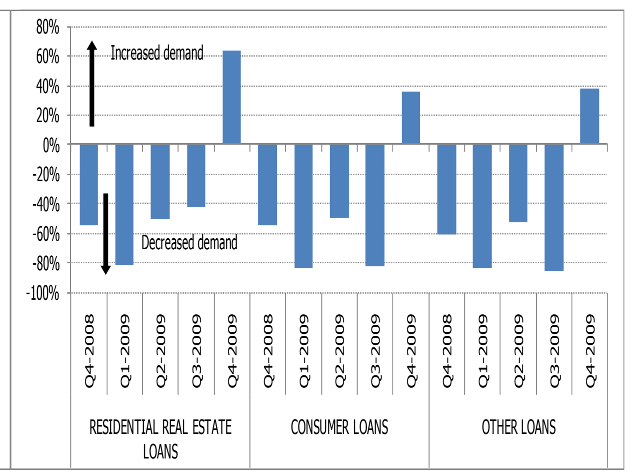


Figure 2.1.10
Changes in the credit demand by households in the last three months



Source: NBRM, Surveys on banks' credit activity.

The households' debt for private consumption (consumers' loans, car loans, current accounts, credit cards and other loans) continued to participate with 77.1% in the total households' debt towards banks. Relative to the end of 2008, the consumers' loans were growing most rapidly (14.5%), relative to the previous two years, when the most rapid growth was registered in the area of households' debt based on credit cards, overdrafts and car loans. The households' debt based on residential real estate loans continued to grow, but at a slower pace compared to the previous years (at the end of 2009, the annual growth rate of households' debt on the basis of this type of bank product was 7.6% compared to the 45.1% at the end of 2008 and 63.8% at the end of 2007).

The decelerated growth of households' credits in 2009 was under the influence of the tightened credit policies of domestic banks and the decreased credit demand by households. The decreased offer of credits by banks represented a prudent response of banks to the deteriorated economic conditions and changed assumptions in regard to undertaking risks. The harmonization with the prudent measures undertaken by the National Bank (in 2008, which continued to be valid in 2009, as well[19]) also had impact on this situation. Along with the trend of tightening the credit policies by banks, a decrease in the demand of credit by households was registered (with the exception of the last quarter of the year), which in addition to the psychological factors (which in conditions of uncertainty regarding the

Figure 2.1.11
Net-percentage of banks* which declared tightening/relaxing of the terms for extending housing loans to households

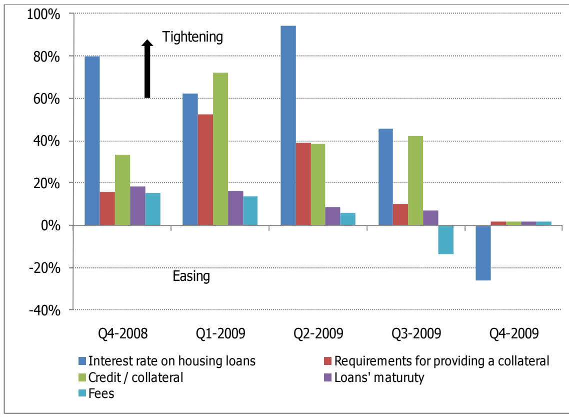
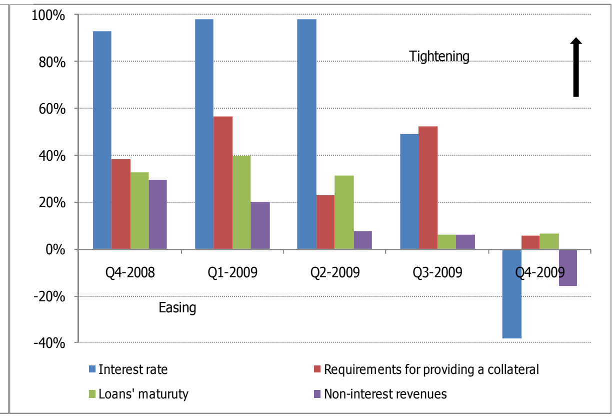


Figure 2.1.12
Net-percentage of banks * which declared tightening/relaxing of the terms for extending consumers' and other loans to households



Source: NBRM, Surveys on the banks' credit activity.
*Note: Net percentage represents the difference between the percentage of banks which declared tightening of the loans terms and percentage of banks which declared easing of the loan terms. The positive net percentage indicates tightening of loan terms on the level of the banking system, while negative net percentage indicates easing of the loans terms on the level of the banking system.

strength and duration of the effects of the global crisis conditioned restrain in terms of the borrowing) is a result of the increased interest rates for credits. The increased interest rates were the response to the increased interest rates of sources of financing and to the more realistic assessment of risks from households' crediting. In the last quarter of 2009, the first signs of stabilization of households crediting were registered, in condition of slight relaxation of credit conditions by banks, following the signals of the Central bank and the relatively more stable economic flows.

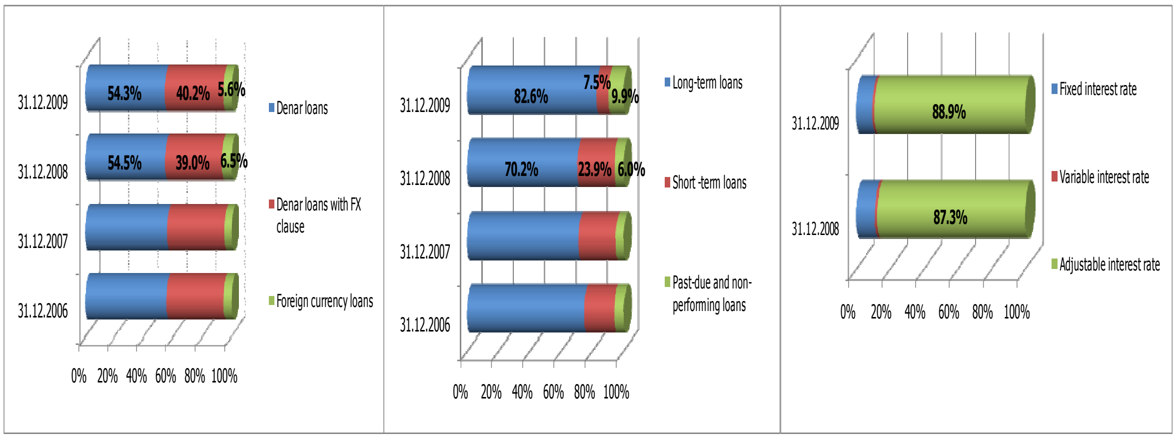
The slower growth of households' debt did not reduce the risks related to its capability of repayment of financial liabilities. The high exposure of households to interest rate and currency risks remain the primary risk sources that could have impact on the capability of repayment of debt by the households' sector and consequently on the stability of its creditors. The households' debt with foreign currency component (foreign currency and Denar debt with foreign currency clause) covers 45.7% of the

[19] In March 2008, the treatment of claims based on credit cards and overdrafts became more rigorous, while calculating capital adequacy ratio of banks. At the end of June 2008, a measure was adopted for allocation of mandatory deposit with NBRM by the banks and saving houses, in case the rate of growth of households' credits at the end of a certain month exceeds the rate of growth defined by NBRM. The measure has continued to apply in 2009, as well, where the allowed rate of growth in 2009 was 11.3%.

total debt towards banks, whereas the credits with the so called "adjustable"[20] interest rates participated with more than 88%.

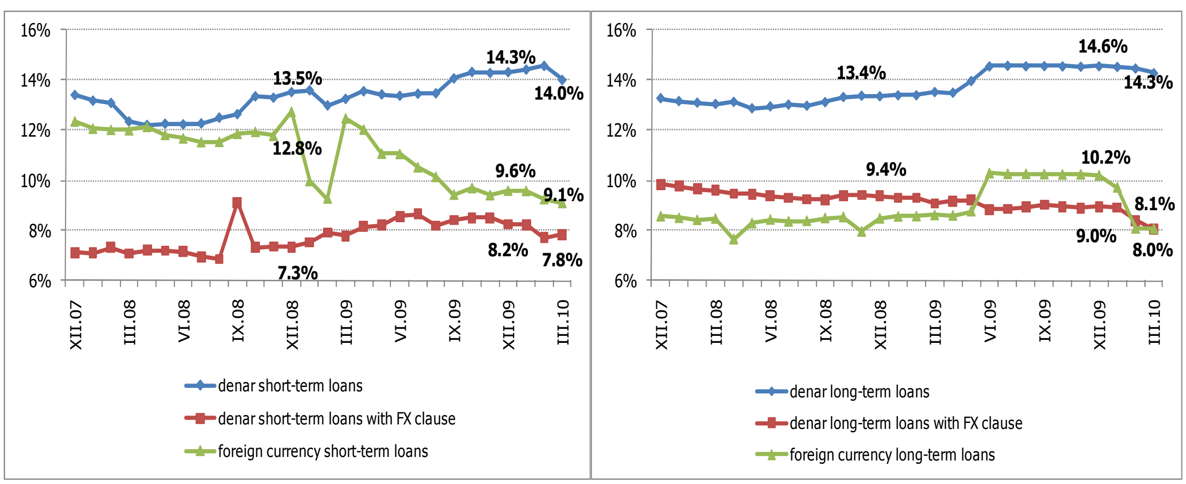
Additionally, the domination of the long term debt even more emphasizes the sensitivity of household sector to the interest rate and currency risk. Contracts with embedded protective interest rate and currency clauses bring higher risks should the economy remain in crisis for a longer time period.

Figure 2.1.13
Currency, term and structure of households loans towards banks by type of interest rate



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

Figure 2.1.14
Movement of interest rates of short-term and long-term households' loans



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

The growth of non-performing households' loans is considered as a signal for the decreased payment capability of credit users. Non-performing households' loans recorded in the banks' balance sheets registered annual growth by 57.7% or by Denar 2,043 millions (the growth of non-performing households' loans grew by Denar 1,498 millions or by 73.4% in 2008). The exposure with higher level of risk towards the households increased by

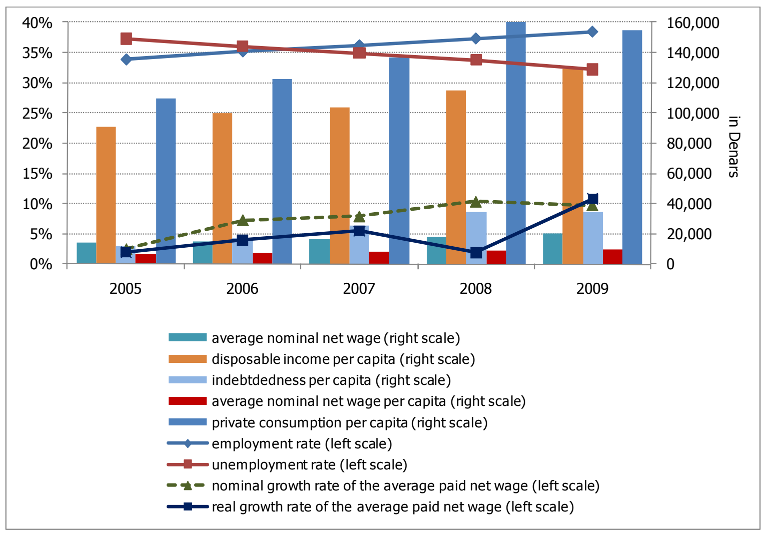
[20] Adjustable rates are the interest whose change is made according to a decision by a bank management competent body.

Denar 1,225 millions or by 25.9%, which represents a deceleration of the growth relative to the preceding year (by Denar 1,745 millions or by 58.3% in 2008).However, the growth of non-performing loans in 2009, the dynamic of which was moving at a slower pace compared to the growth in 2008, also depicts the process of "maturing" of the credit portfolio which is relatively young and established in more relaxed crediting conditions, typical for the period the credit expansion (2005 – 2007). Consequently, this process should be followed with attention, bearing in mind the potential danger from spillover of risks from households' sector to the banking sector. This is particularly important if we take into consideration that such contradictory movements (growth of financial assets and disposable income versus growth of non-performing loans) may indicate an increased socio-economic layering of population[21].

1.3. Disposable income[22] of households' sector

The capability of the households' sector for timely servicing the debt is related to the amount and regularity of the income. Despite the deterioration of the general conditions in the economy, **the disposable income of households continued to grow in 2009[23]** (by Denar 29,799 million or by 12.6% on annual level), which points to the fact that it reacts more slowly to the factors that determine the business cycle in the economy. The movement of the labor force in 2009 had positive impact on the rise of the disposable income of households, presented through the annual growth rate of employment of 1.1 percentage points and nominal growth of net-wages per employee by 9.8%. On the other hand, the slight fall of prices during the year lead to real annual growth of average paid wages (by 10.8%) relative to the nominal, which points to increase of the real purchasing power of households in 2009. In spite of the fall of prices for food, private consumption of households declined (by Denar 13,569 million or by 4.1% relative to 2008) which is due to the restrain of households in conditions of negative expectations regarding the future movement of the income and employment, where the

Figure 2.1.15
Movement and rates of growth of several categories related to the analysis of disposable households' income



Source: NBRM and SSO.
Note: Series about the average nominal net wage is corrected for achieving higher level of inter-annual data comparability, as a result of the methodological change related to the implementation of the gross wage concept, as of January 2009.

[21] Approximately 60% of the total exposure towards population refers to the credit users with monthly wages ranging between the Denar 7,000 and 30,000.
[22] The disposable income represents the difference of inflows (compensation of employees' assets, private transfers, income of individual producers, social transfer, dividends income, interest payments by banks, payments from frozen foreign currency deposits, property income, income from copyrights, capital income, inflow from denationalization, income from lottery and other similar games and treasury bills interest income) and outflows (total social contributions, private transfers, personal income tax and interest payment) to households.
[23] Data about 2009 is according to assessments of NBRM in conditions of still undisclosed data by the State Statistical Office and is subject to revision in compliance with the revision and supplementing of data used for its formation.

tightened credit conditions for additional financing also played an important role. During 2009, 61.4%[24] of the average net wage was used for covering the costs for food and beverages, which means an increase of the part for satisfying other needs compared to the previous year. As a comparison, in 2008, the average value of a consumer's basket for food and beverages was 67.2% of the average net wage for the same period[25].

1.4. Financial assets of households' sector

Financial assets of households continued to grow in 2009 with accelerated dynamics relative to the previous year. Such dynamics conditioned the increase of the share of financial assets in the GDP by 3.4 percentage points relative to 2008, which at the end of 2009 reached the level of 45.8%. However, the comparison of the share of financial assets in the GDP with other countries shows that the Republic of Macedonia is at the beginning of the list of analyzed countries.

Figure 2.1.16
Amount and structure of financial assets of households, by type of assets

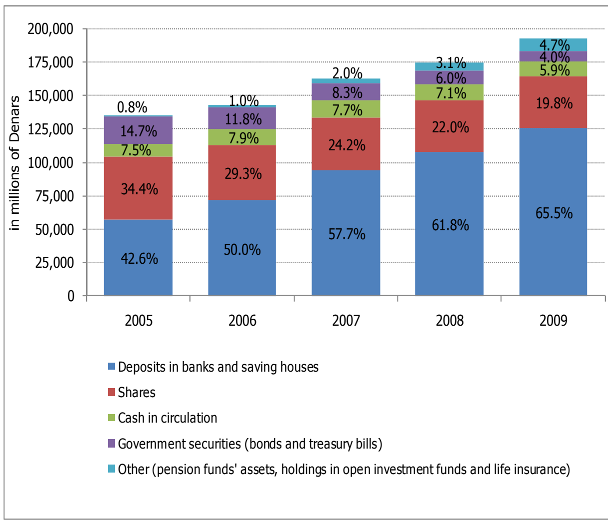
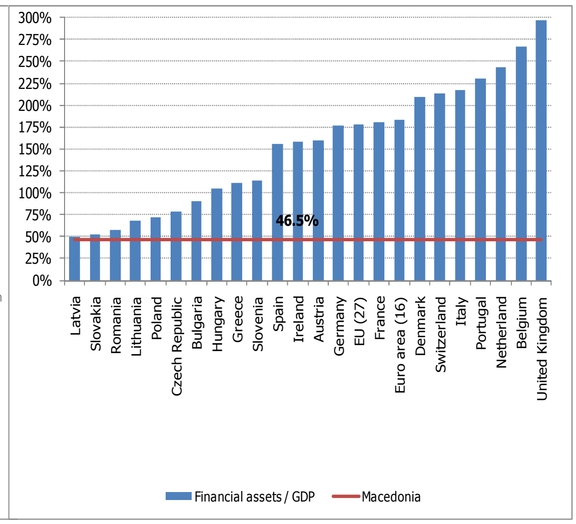


Figure 2.1.17
Share of financial assets of households in the GDP, by individual countries



Source: NBRM, on the basis of data received from banks and saving houses, MF, CSD, MAPAS, ASO, SEC, Eurostat and web sites of central banks.
Note: For the needs of this analysis, according to NBRM's assessment, 70% of cash in circulation (outside of banks) is included in the financial assets of households; Shares – aggregate listed and not listed on the Stock Exchange, at nominal value; Life insurance – refers to gross premium for life insurance).

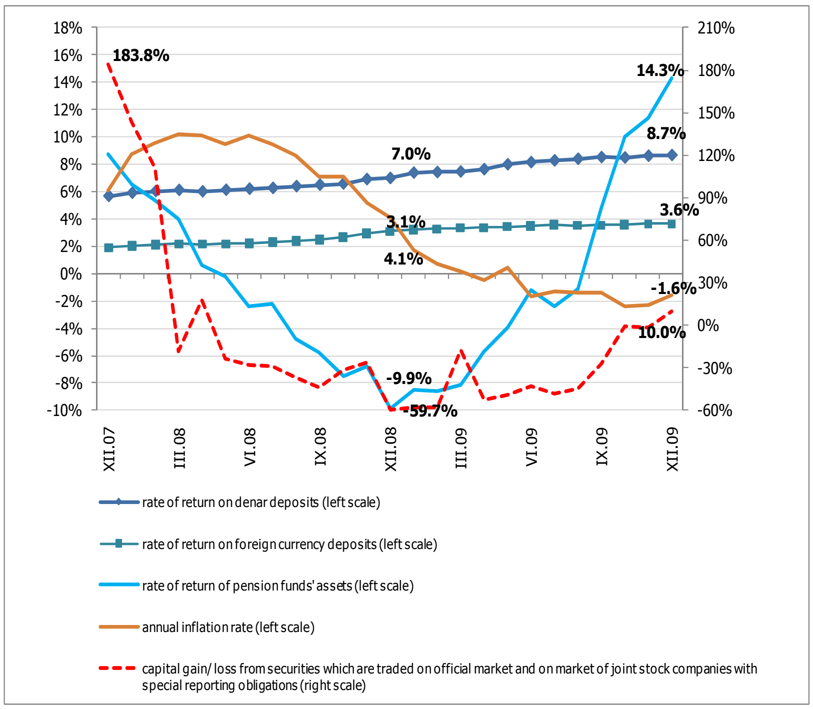
The growth of financial assets of households is almost completely a result of the growth of deposits in banks and saving houses, which still represent the most important part of financial assets of households and were the main driving force of their growth. Despite the slower dynamics of deposits growth during some months in 2009 (due to the uncertainty caused by the international financial crisis) at the end of 2009,

[24] Source: SSO (Announcements for consumer's basket, prices and salaries) and calculations of NBRM.
[25] Source: SSO and calculations of NBRM. The series on the average nominal net salary for 2008 has been corrected for the purpose of achieving higher degree of inter-annual comparability of data, as a consequence of the methodological change introduced with the new concept of gross salary as of January 2009.

households' deposits registered growth (by 16.9% or by Denar 18.208 millions), mainly as a result of the stimulating interest policy of banks directed towards retaining the current and attracting new clients. At the same time, currency transformation of deposits took place, which was particularly prominent during the first half of 2009 and was under the influence of the psychological factors and more favorable interest rates for saving in foreign currency in the long run. In addition to deposits, assets of households in private pension funds registered high relative growth (73.7%) and significantly contributed (with 20.7%) to the growth of households' financial assets. This positive dynamics is the result of the high level of regularity of inflows of pensions funds based on paid contributions, as well as of the fact that they are still relatively "young" financial institutions without current liabilities for payment of assets. Other types of households' assets had negative annual change or positive change that had insignificant impact on the growth of financial assets of households.

Deposits were the only return-generating segment of households' assets during the entire 2009, thus contributing the most to the growth of households' assets. The weighted interest rates of the Denar and foreign currency deposits reached high values, 8.7% and 3.6%, respectively. **Other financial instruments of households' assets generally had negative annual return rates during the entire 2009, with the exception of the end of the year.** Under the influence of the unfavorable conditions on the capital market in the country, the annual rates[26] of capital gain on securities[27] were negative, and only in December 2009 reached a positive value. In September 2009, the annual nominal rate of return[28] of pension funds also reached a positive value. Such positive movements are the result of the recovery and stabilization of global financial markets in 2009, as well as of the deflation movements in the domestic economy, and this was reflected on the dynamics of returns of pension funds.

Figure 2.1.18
Movement of annual rates of return of some of the households' financial assets instruments



Source: NBRM and NBRM calculations based on data obtained from MAPAS (Agency for supervision of the fully funded pension insurance) and SEC (Securities Exchange Commission)

[26] Annual rates of capital gain/loss are calculated on the basis of annual change of market capitalization of securities.
[27] For the purposes of this analysis, bonds and shares traded on the official market and shares traded on the market of joint stock companies with special reporting requirements are considered as securities.
[28] Annual nominal rate of return is calculated on the basis of weighting the rate of return of individual pension funds with their net-assets value (NAS).

2. Corporate sector

The corporate sector of the Republic of Macedonia continued to grow also in 2009, but with slower dynamics. Financial reports of the corporate sector for 2009 do not reflect entirely the deteriorated economic situation in the country and in the world. Namely, indicators of operation of the corporate sector point to contradictory conclusions, to improvement of profitability and capitalization on the one hand, and low liquid position on the other hand. Increased delay in collecting receivables and payment of liabilities make the low liquid position of the corporate sector even worse. Further deterioration of liquidity in this sector may have visible consequences on its capability for servicing its liabilities, which will inevitably lead to materialization of the credit risk undertaken by domestic banks.

The recovery of global economy and change of the business cycle in the domestic economy (as of the fourth quarter of 2009) should have a positive impact on future activities and financial position of enterprises, on their capability for regular servicing of the liabilities and on the quality of the credit demand. This would consequently provide for revival of the credit market and larger growth of the scope of activities of domestic enterprises. However, optimistic prospects regarding the future flows in the global and domestic economy should be accepted with certain reservation, mostly as a consequence of the increased uncertainty in relation to the debt crisis in Greece, possibility for its spillover in other countries of the European Union and the effects it might have on the domestic real sector, primarily.

The domination of long-term loans in total corporate loans, in conditions where most of them are with variable or adjustable interest rate, increases the sensitivity of the corporate sector to changes of interest rates. However, the downward trend of domestic interest rates in the first half of 2010 and the stagnation of interest rates on international financial markets minimize the probability for unfavorable materialization of exposure to interest rate risk, at least in the short run. The short net-foreign currency position makes the corporate sector sensitive to the foreign currency risk. The accepted strategy for targeting the nominal foreign exchange rate of the Denar in relation to the Euro, minimizes the probability for materialization of this risk.

2.1. Analysis of performances of the corporate sector[29]

The total activities of the corporate sector of the Republic of Macedonia continued to expand also in 2009, but with slower dynamic. Compared to the end of 2008, the growth of the corporate sector is almost halved, taking into consideration that the annual growth rate of assets of 12.1% at the end of 2008 was reduced to 7.6% at the end of 2009. The decelerated dynamics can also be confirmed by the reduced number of newly established enterprises, which resulted with their reduced number in the total number of enterprises.

[29] Source: Central Register of RM. Analysis of financial indicators about the corporate sector has been conducted on the basis of final accounts of approximately 52 thousands enterprises, which are obligated to submit final financial statements (other enterprises, up to 124 thousands, represent enterprises from the financial sector, health and social care, public sector, small proprietors, enterprises that have no obligation for submission of final accounts, that did not submitted final account or submitted accounts without amounts.).

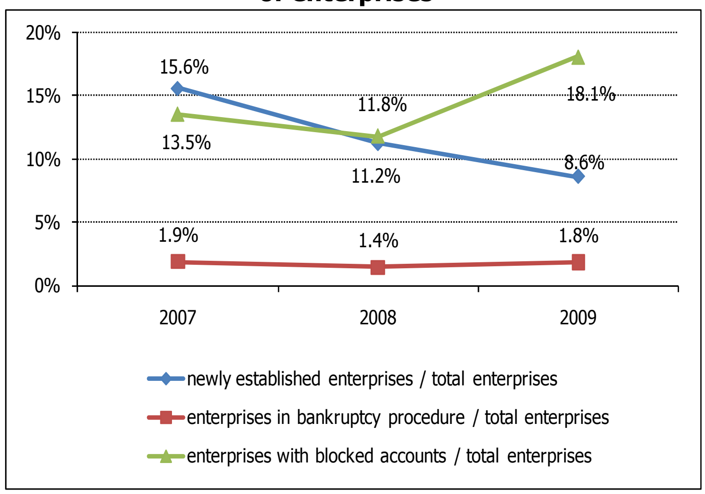
Table 2.2.1
Movement of the number of enterprises in the Republic of Macedonia

Items	2007	2008	2009	Annual change 2008 / 2007		Annual change 2009/ 2008	
				in absolute amount	in %	in absolute amount	in %
enterprises in bankruptcy procedure	1,543	1,737	2,270	194	12.6%	533	30.7%
newly established enterprises	12,889	13,534	10,729	645	5.0%	(2,805)	-20.7%
total enterprises	82,519	120,448	124,559	37,929	46.0%	4,111	3.4%
enterprises with blocked accounts	11,168	14,213	22,518	3,045	27.3%	8,305	58.4%

Source: Calculations of NBRM, on the basis of data from the Central Register of RM.

In 2009, a significant increase of the number of enterprises with blocked accounts has been registered[30] **and those in bankruptcy procedure.** The decreased interest for opening new businesses, compared to the increased number of blocked and bankrupted enterprises is the result of the deteriorated economic conditions in the country, as a consequence of the gradual spillover of the effects of the global crisis in the domestic economy during 2009. In spite of the expectations for more significant negative effects on the enterprise balance sheets during 2009, financial reports of the corporate sector for 2009 did not show deterioration in terms of the profitability and solvency.

Figure 2.2.1
Share of newly established enterprises, enterprises in bankruptcy and with blocked accounts in total number of enterprises



Source: Calculations of NBRM, on the basis of data from the Central Register of RM.

The structure of assets and liabilities of the corporate sector is almost unchanged compared to 2008. As in the previous year, in 2009, enterprises almost equally financed their activities from own and external sources of funds. Fixed and current assets have equal share in the structure of assets of enterprises and almost completely contributed to the growth of the overall activities of enterprises.

[30] Data include all legal entities (of all sectors), but most of them refer to legal entities from the corporate sector. Source: NBRM.

Table 2.2.2.
Balance sheet of the corporate sector

BALANCE SHEET	Amount (in millions of Denars)		Structure		Annual change		
ASSETS:	**2008**	**2009**	**2008**	**2009**	**absolute amount**	**in %**	**share in the change**
Subscribed, but not paid-up capital	382	559	0.0%	0.1%	177	46.4%	0.2%
Fixed assets, of which:	556,372	606,901	54.2%	54.9%	50,528	9.1%	64.5%
Intangible assets	20,779	22,007	3.7%	3.6%	1,228	5.9%	2.4%
Tangible assets	479,642	521,456	86.2%	85.9%	41,814	8.7%	82.8%
Long-term financial investments	55,951	63,438	10.1%	10.5%	7,487	13.4%	14.8%
Current assets, of which:	469,602	497,277	45.8%	45.0%	27,674	5.9%	35.3%
Inventories	142,268	146,778	30.3%	29.5%	4,510	3.2%	16.3%
Short-term receivables	255,171	276,819	54.3%	55.7%	21,649	8.5%	78.2%
Short-term financial investments	35,055	38,097	7.5%	7.7%	3,042	8.7%	11.0%
Cash and securities	37,108	35,582	7.9%	7.2%	-1,526	-4.1%	-5.5%
TOTAL ASSETS	**1,026,357**	**1,104,737**	**100%**	**100%**	**78,380**	**7.6%**	**100%**
LIABILITIES							
Capital and reserves	493,632	548,388	48.1%	49.6%	54,756	11.1%	69.9%
Long-term provisions for risks and expenses	3,630	3,366	0.4%	0.3%	-264	-7.3%	-0.3%
Liabilities of creditors, of which:	503,231	530,357	49.0%	48.0%	27,126	5.4%	34.6%
Liabilities on the basis of credits	104,045	105,504	20.7%	19.9%	1,459	1.4%	5.4%
Accounts payable	78,161	81,152	15.5%	15.3%	2,990	3.8%	11.0%
Other liabilities	321,025	343,702	63.8%	64.8%	22,676	7.1%	83.6%
Accrued expences and deffered revenue	25,864	22,627	2.5%	2.0%	-3,237	-12.5%	-4.1%
TOTAL LIABILITIES	**1,026,357**	**1,104,737**	**100.0%**	**100.0%**	**78,380**	**7.6%**	**100.0%**
ASSETS:	**2006**	**2007**	**2006**	**2007**	**absolute amount**	**in %**	**share in the change**
Subscribed, but not paid-up capital	296	268	0.04%	0.03%	-28	-9.5%	0.0%
Fixed assets, of which:	432,615	480,485	52.4%	52.1%	47,870	11.1%	49.5%
Intangible assets	12,092	13,690	2.8%	2.8%	1,598	13.2%	3.3%
Tangible assets	349,655	392,920	80.8%	81.8%	43,265	12.4%	90.4%
Long-term financial investments	70,868	73,875	16.4%	15.4%	3,007	4.2%	6.3%
Current assets, of which:	392,068	441,017	47.5%	47.8%	48,949	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%	10,535	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 expenses	4,354	3,346	0.5%	0.4%	-1,008	-23.2%	-1.0%
Liabilities of 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%	3,487	4.9%	5.9%
Other liabilities	246,687	289,744	64.8%	65.9%	43,057	17.5%	73.2%
Accrued expences and deffered revenue	18,896	22,028	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%**

Source: Calculations of NBRM, on the basis of data from the Central Register of RM.

Analysis of indicators[31] of operation of the corporate sector points to improved profitable position and capitalization, but also to increased delay in collection of receivables and payment of liabilities, which had additional negative impact on the already low liquid position of the corporate sector. Improved profitable position of the corporate sector to a great extent is a result of the twice higher profit margin (growth of the profit margin is determined by the growth of enterprises' profit – by Denar 9,641 million or 70.5% compared to the decrease of income from sales – by Denar 85,339 million or by 18.6%). The reduction of regular operational costs was the additional factor which stimulated the growth of profit (by Denar 80,356 million or by 17.7%), of which the decrease of material costs contributed the most. This decrease can be explained with the fall of quantities and prices of imported raw materials and the decreased import of consumers' products. Furthermore, the decrease of rates for pension and health contributions contributed as well to

[31] Source: Central Register of RM

this situation (costs for taxes, social and pension insurance decreased by Denar 886 million or by 6.8% on annual level). The overall burden of gross salaries with contributions in 2009 declined from 32.5% in 2008 to 26.6% in 2009.[32] The growth of profit resulted with improvement of indicators on return of assets and capital by 0.8 and 1.5 percentage points, respectively. However, the increased delay of collection of receivables and payment of liabilities, as well as the low liquid position in absence of the amount of impairment on receivables brings into question the reality of value of receivables and consequently of the improved profitable position of the corporate sector.

Table 2.2.3
Indicators for corporate sector operations

INDICATORS	2008	2009
Equity ratio: (capital and reserves) / total liabilities	48.1%	49.6%
Self-financing ratio: (capital and reserves+long-term provisions) / (fixed assets + inventories)	71.2%	73.2%
Quick ratio (acid test)	0.6	0.6
Current ratio	0.9	0.9
Average collection period	195	259
Average inventory period	109	137
Average payment period	304	381
Profit margin (net)	3.0%	6.2%
Net profit per employee (in thousand Denars)	82.6	121.6
Return on equity (ROE)	2.8%	4.3%
Return on assets (ROA)	1.3%	2.1%

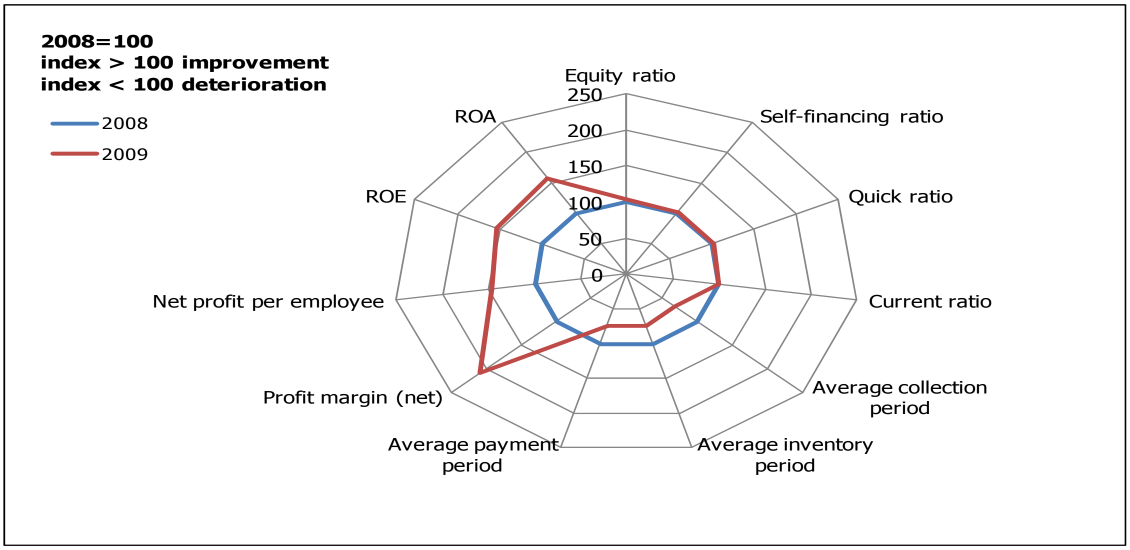
Source: Calculations of NBRM, on the basis of data from the Central Register of RM.

Financial safety of the corporate sector, measured through the share of capital and reserves in the structure of the corporate sector's sources of funds has strengthened. This at the same time implies increased level of self-financing. The amount of increase of capital and reserves is twice higher than the increase of liabilities, which to a great extent can be explained by the decreased interest for borrowing, first of all because of the tightened crediting conditions by banks and negative expectations regarding the future movements of the economic situation in the country and the world. Also, the changes in the tax area[33], in the light of tax exemption on re-invested profit also contributed a lot to the growth of the capital and reserves (accumulated profit participated with 47% in the growth of the capital and reserves). In spite of the decelerated dynamics of external sources of funds, their value exceeds the value of own funds, and at the end of 2009, this ratio equaled 101.5% (118.9% at the end of 2008).

[32] Source: Annual report for 2009, NBRM web site.

[33] During 2009, re-invested profit was exempted from taxation. Source: Web site of the Ministry of Finance - Rulebook on the method of calculation and payment of profit tax and prevention of double exemption or double taxation, revised text ("Official Gazette of RM No. 92/01, 51/02, 54/03, 56/03, 101/06, 58/07, 21/08 and 24/09).

Figure 2.2.2
Indicators for corporate sector performances



Source: Calculations of NBRM, on the basis of data from the Central Register of RM.

In 2009, there was a delay in collection of receivables and payment of liabilities within the corporate sector. Indicators of the quick and current liquidity are still bellow the minimum acceptable levels[34]. The low liquid position of the corporate sector is in direct co-relation with the low level of utilization of assets, which is confirmed by the indicators of turnover, i.e. through the days for collection of assets (receivables and inventories) and the days for payment of liabilities of the corporate sector, where deterioration has been registered. The average period necessary for collection of receivables that was approximately six months at the end of 2008 increased to nine months at the end of 2009. At the end of 2009, approximately five months were necessary for realization of inventories, whereas the average period for payment of liabilities was almost one year. The low liquid position is a consequence of the increased problems related to the settlement of claims and payment of liabilities of the corporate sector, which is confirmed by the growth of the receivables and liabilities, as well as by the decrease of cash on annual level.

2.1.1. Performances of the corporate sector by activity

The contracted domestic economic activity, the diversity of activities of enterprises by individual sectors and the diverse margin of their resistance to deteriorated external and domestic conditions are manifested with significant differences in the indicators for their operation.

Most of the activities characterizes with satisfactory level of capitalization, although with almost unchanged share of capital and reserves in the total sources of funds, with the exception of the activities in the area of the real estate.

In 2009 the liquidity with almost all activities remained low and registered no changes of higher importance compared to the preceding year. Indicators for the quick

[34] Generally accepted satisfactory level of indicators for the quick and current liquidity is 2 and 1, respectively.

and current liquidity of enterprises from the "information and communications" sector were the highest among the enterprises from all activities and were near or bellow the generally accepted minimum levels.

Insufficient level of indicators for assets and liabilities turnover was registered with almost all enterprises from all activities. The longest average inventory period, period of collection of receivables and period of payment of liabilities was registered with the real estate activity, professional, scholar and technical activities and accommodation and food services. The indicators with almost all these activities worsened in 2009.

Table 2.2.4
Indicators for corporate sector operations, by activity

Indicators	Year	Equity ratio: (capital and reserves) / total liabilities	Self-financing ratio: (capital and reserves+long-term provisions) / (fixed assets + inventories)	Quick ratio (acid test)	Current ratio	Average collection period	Average inventory period	Average payment period	Profit margin (net)	Return on equity (ROE)	Return on assets (ROA)
Agriculture, forestry and fishing	2008	83.3%	89.8%	0.4	0.7	184	149	417	0.6%	0.1%	0.1%
	2009	82.1%	89.0%	0.4	0.7	255	184	543	3.7%	0.4%	0.3%
Mining and quarrying	2008	62.3%	96.6%	0.9	1.2	218	54	266	1.2%	1.0%	0.6%
	2009	63.2%	91.8%	0.8	1.1	206	69	251	1.8%	1.3%	0.8%
Processing industry	2008	43.9%	63.7%	0.5	0.9	121	96	219	1.2%	2.0%	0.9%
	2009	44.9%	64.9%	0.5	0.9	194	142	330	2.9%	3.0%	1.3%
Electricity, gas, steam and air-conditioning	2008	46.1%	71.9%	0.6	0.9	281	39	163	-0.1%	-0.1%	0.0%
	2009	44.8%	67.6%	0.6	0.8	286	33	210	0.4%	0.3%	0.2%
Water supply, waste water removal, waste management and environment	2008	63.7%	85.0%	0.7	1.0	498	78	531	0.1%	0.0%	0.0%
	2009	60.0%	79.4%	0.6	0.9	547	81	425	1.0%	0.2%	0.1%
Construction	2008	29.4%	58.0%	0.7	1.1	530	256	710	9.9%	8.9%	2.6%
	2009	33.9%	62.6%	0.7	1.0	503	239	664	17.0%	12.5%	4.2%
Wholesale and retail	2008	34.4%	58.3%	0.6	1.0	186	152	328	4.4%	8.1%	2.8%
	2009	38.1%	65.9%	0.7	1.1	236	181	385	8.8%	11.7%	4.4%
Transport and storage	2008	61.8%	77.0%	0.5	0.6	254	45	435	4.3%	1.4%	0.9%
	2009	65.2%	83.7%	0.6	0.7	390	64	516	14.1%	3.1%	2.0%
Accommodation facilities and catering services	2008	46.1%	59.5%	0.4	0.5	476	226	1,674	-7.3%	-1.4%	-0.7%
	2009	43.8%	56.6%	0.4	0.5	630	298	1,932	-7.2%	-1.2%	-0.5%
Information and communication	2008	64.6%	108.5%	1.1	1.4	104	21	204	2.1%	1.6%	1.0%
	2009	60.5%	99.0%	1.0	1.2	124	26	193	2.1%	1.5%	0.9%
Real estate	2008	42.0%	56.2%	0.4	0.5	1,519	460	2,558	30.4%	2.1%	0.9%
	2009	61.4%	77.9%	0.5	0.7	1,451	494	2,521	26.5%	1.3%	0.8%
Professional, scholar and technical activities	2008	41.1%	87.4%	0.9	1.1	962	194	1,354	53.9%	17.8%	7.3%
	2009	43.9%	93.0%	0.9	1.1	1,470	279	1,509	93.6%	20.0%	8.8%
Administrative and auxiliary services	2008	45.1%	74.7%	0.7	0.8	439	46	681	11.0%	4.9%	2.2%
	2009	41.0%	65.0%	0.6	0.7	450	77	730	9.5%	4.6%	1.9%

Source: CRM and calculations of NBRM, on the basis of annual accounts for 2009.

The profitability indicators of the enterprises from most of the activities improved. The most remarkable improvement was registered with the "construction", "wholesale and retail trade" and with the professional, scholar and technical activities. Such a positive dynamics which is visible through the high rates of return on assets and equity, and the profit margin are in direct co-relation with the real annual growth rates of value added in the construction and trade[35] by 9.2% and 1.2%, respectively. These also significantly contributed to the total rise of the GDP.

[35] Source: Annual Report for 2009, NBRM.

2.2. Indebtedness of the corporate sector

The indebtedness of the corporate sector continued to grow also in 2009, but with remarkably slower dynamics. The slowdown of growth of the indebtedness of the corporate sector is a consequence of several factors: contraction of the domestic economic activity and consequently decrease of the credit demand, reduction of sources of financing to resident creditors of the corporate sector (predominantly the domestic banks) and continuation of the course of tightened monetary policy by the NBRM. The decreased foreign trade also contributed to the deceleration of the indebtedness of the corporate sector, as well as the deterioration of the credit rating of the Republic of Macedonia in the beginning of 2009 (which conditioned greater watchfulness toward non-residents when crediting domestic companies). Non-residents continued to be the largest creditor of the corporate sector. During 2009, the debt of the corporate sector registered 3 times slower growth compared to the growth in 2008 and on 31.12.2009 reached the level of Denar 241,812 million (58,5% of the GDP). The most remarkable slowdown of indebtedness of domestic enterprises (by 6 times) was registered in the debt toward the banking system. On the other hand, despite the twice lower annual growth rate of the debt towards non-residents, this component of the total indebtedness of domestic enterprises contributed the most (70.8%) in the annual increase of the corporate sector's debt and strengthened the dominant share in the total indebtedness of domestic enterprises from 51.7% on 31.12.2008 to 53.4% on 31.12.2009[36].

Table 2.2.5
Total indebtedness of the corporate sector[37]

Type of debt	31.12.2007		31.12.2008		31.12.2009		Annual change (31.12.2007 - 31.12.2008)			Annual change (31.12.2008 - 31.12.2009)		
	Amount (in millions of Denars)	Structure (in %)	Amount (in millions of Denars)	Structure (in %)	Amount (in millions of Denars)	Structure (in %)	Amount (in millions of Denars)	In %	Share in the change	Amount (in millions of Denars)	In %	Share in the change
Residents	**80,178**	**47.2%**	**106,369**	**48.3%**	**112,599**	**46.6%**	**26,191**	**32.7%**	**51.8%**	**6,230**	**5.9%**	**29.2%**
- Banks	75,777	44.6%	100,126	45.4%	104,817	43.3%	24,349	32.1%	48.2%	4,691	4.7%	22.0%
- Leasing	4,401	2.6%	6,243	2.8%	7,782	3.2%	1,842	41.9%	3.6%	1,539	24.7%	7.2%
Non-residents	**89,718**	**52.8%**	**114,081**	**51.7%**	**129,213**	**53.4%**	**24,363**	**27.2%**	**48.2%**	**15,132**	**13.3%**	**70.8%**
Total:	**169,896**	**100.0%**	**220,450**	**100.0%**	**241,812**	**100.0%**	**50,554**	**29.8%**	**100.0%**	**21,362**	**9.7%**	**100.0%**

Source: NBRM and Ministry of Finance
*Note: Data on the external debt of the corporate sector are preliminary.

The debt with currency component (in foreign currency or in Denars with FX clause) dominates in the currency structure of the enterprises' total debt, with a share of about 85%. In spite of the remarkable slowdown of annual growth rate of the debt with currency component (almost 3 times), this indebtedness during 2009 increased by Denar 20,040 million (or by 11.2%). Thus, it completely contributed to the overall growth of the enterprises' debt. The high indebtedness with currency component of the corporate sector implies its higher sensitivity to currency risk. Analyzed by individual currencies, the indebtedness in Euros and Denars with Euro currency clause (approximately 93%) dominate in the debt structure. This is followed by the debt in US Dollars and in Denars with USD currency clause, with a share of around 6% (the share of debt nominated in other currencies is 1%)[38]. Thus, the conclusion is that approximately 7% of the corporate sector's debt with currency component is sensitive to the current depreciation of the value of the Euro on international

[36] Data on the external debt of the corporate sectors are preliminary.
[37] For the purposes of this analysis, the total indebtedness of the corporate sector covers: debting based on credits and other claims towards domestic banks, total liabilities of the corporate sector towards aborad (non-residents) and the value of active leasing contracts.
[38] The calculation is made on the basis of data about the currency structure of liabilities of the corporate sector towards abroad, based on the principal and the exposure of banks towards the corporate sector.

foreign currency markets (downward trend of the value of the Euro started in the beginning of 2010) and to the consequential depreciation of the value of the Denar in relation to other currencies, which increases the burden on domestic enterprises for servicing their debt nominated and indexed in currency other than the Euro.

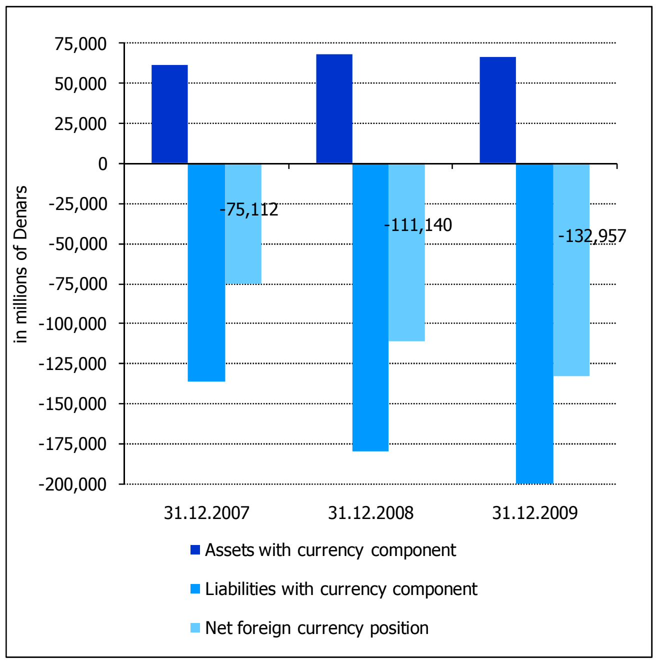
Table 2.2.6
Currency structure of the indebtedness of the corporate sector

Type of debt	31.12.2007		31.12.2008		31.12.2009		Annual change (31.12.2007 - 31.12.2008)			Annual change (31.12.2008 - 31.12.2009)		
	Amount (in millions of Denars)	Structure (in %)	Amount (in millions of Denars)	Structure (in %)	Amount (in millions of Denars)	Structure (in %)	Amount (in millions of Denars)	In %	Share in the change	Amount (in millions of Denars)	In %	Share in the change
Denar debt	29,317	17.7%	35,609	16.6%	35,162	15.0%	6,292	21.5%	12.8%	-447	-1.3%	-2.3%
FX debt	117,763	71.1%	147,820	68.8%	164,483	70.1%	30,057	25.5%	61.0%	16,662	11.3%	85.0%
Denar debt with FX clause	18,561	11.2%	31,461	14.6%	34,838	14.9%	12,899	69.5%	26.2%	3,377	10.7%	17.2%
Total:	**165,642**	**100.0%**	**214,890**	**100.0%**	**234,482**	**100.0%**	**49,248**	**29.7%**	**100.0%**	**19,593**	**9.1%**	**100.0%**

Source: NBRM
*Note: The calculation does not contain the indebtedness based on leasing, since the data on its currency structure are not available. Regarding the debt of domestic banks, the calculation contains only the information on indebtedness based on credits.

On aggregate level, the corporate sector registered short net foreign currency position, which reflects the higher amount of liabilities than the amount of claims with currency component[39]. For the corporate sector, such a position, on aggregate level, means exposure to risk of possible devaluation of the domestic currency. The appropriate implementation of the strategy for targeting the nominal foreign exchange rate of the Denar in relation to the Euro by NBRM minimizes the probability for materialization of this risk. The stagnation of assets with currency component relative to the growth of liabilities with currency component in 2009 resulted with increase of the short net currency position of the corporate sector by Denar 21,817 million (or by 19.6%). Thus, at the end of 2009, the total assets with currency component covered only 33.4% of total liabilities with currency component of the corporate sector, which represents an annual decrease by 4.6 percentage points. In conditions of lack of more detailed information, there is a risk that the coverage of liabilities with claims with currency components will be lower at the level of individual enterprises or economic activities that certain enterprises belong to, if the total claims with currency component of the corporate sector are concentrated in a small number of enterprises[40].

Figure 2.2.3
Currency position of the corporate sector



Source: NBRM

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[39] Positions in foreign currency and in Denars with currency clause.
[40] The net foreign currency position is calculated as a difference between the assets and liabilities with currency component of the corporate sector. The assets with currency component consist of: deposists with currency component, funds on accounts abroad, total claims of residents and non-residents and investments abroad. The liabilities with currency component consist of: credits with currency component from domestic banks and total

Table 2.2.7
Maturity structure of the indebtedness of the corporate sector

Type of debt	31.12.2007		31.12.2008		31.12.2009		Annual change (31.12.2007 - 31.12.2008)			Annual change (31.12.2008 - 31.12.2009)		
	Amount (in millions of Denars)	Structure (in %)	Amount (in millions of Denars)	Structure (in %)	Amount (in millions of Denars)	Structure (in %)	Amount (in millions of Denars)	In %	Share in the change	Amount (in millions of Denars)	In %	Share in the change
Short-term credits	78,259	47.2%	90,866	42.3%	92,475	39.4%	12,607	16.1%	25.6%	1,609	1.8%	8.2%
Long-term credits	79,434	48.0%	115,012	53.5%	130,581	55.7%	35,578	44.8%	72.2%	15,568	13.5%	79.5%
Other credits (past-due and non-performing)	7,949	4.8%	9,012	4.2%	11,426	4.9%	1,063	13.4%	2.2%	2,415	26.8%	12.3%
Total:	**165,642**	**100.0%**	**214,890**	**100.0%**	**234,482**	**100.0%**	**49,248**	**29.7%**	**100.0%**	**19,592**	**9.1%**	**100.0%**

Source: NBRM
*Note: The total indebtedness includes: indebtedness to the banking sector based on credits and the total debt to non-residents. The data on the external debt are preliminary.

The long-term credits registered the highest absolute growth and strengthened the dominant share in the maturity structure of the total debt of the corporate sector. On the other hand, the non-performing and past-due credits registered the highest relative growth, which implies that there are certain problems in enterprises regarding the servicing their liabilities to domestic banks[41]. The indebtedness of enterprises on the long run means longer burdening of the corporate sector with costs for its financing, but also a possibility for allocation of liabilities in a longer time period, which is particularly important in conditions of crisis. On the other hand, the high share of the long-term debt increases the sensitivity of the corporate sector to the risk from changes in the interest rates. The exposure to interest risk is particularly emphasized in conditions where most of the enterprises' credits from domestic banks are approved at interest rates that can be changed with autonomous decision of the creditor – banks (approximately 82% of approved credits are with adjustable interest rate[42]). The upward movement of domestic interest rates during 2009 increased the burden on domestic enterprises for servicing their debt to banks. Contrary to this, the beginning of the downward trend of interest rates in 2010 and expectations for such similar trend in the coming period will cause decrease of the interest component of the debt to domestic banks. In the structure of the external debt of the corporate sector, 64.3% of the debt characterizes with variable interest rates, dependant on the movements of interest rates on the foreign markets. The fact that the interest rates on international financial markets registered downward trend during 2009 and stagnation at the beginning of 2010 could be considered as a facilitating circumstance.

liabilities of residents towards non-residents. Bearing in mind the non-availability of information on investments abroad as of December 31, 2009, the information pertaining to December 31, 2008 has been used. In the calculation of deposits with currecny component, the part referring to Denar deposits with currency clause for 2008 is as of January 31, 2009, whereas for December 31, 2007, the amount of Denar deposits with currency clause of enterprises was estimated (until December 31, 2008 there were no available data on the amount of Denar deposits with currency clause, by sectors).

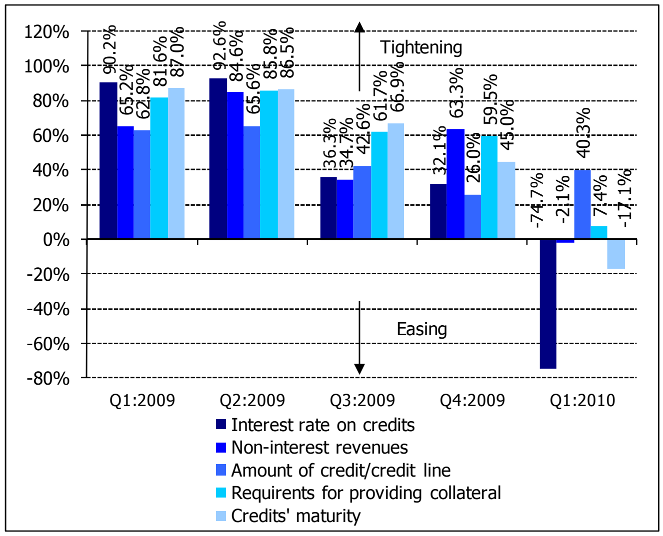
[41] Amount of non-functional and matured credits completely represent the debt towards domestic banks.

[42] According to data provided by banks.

2.2.1. Indebtedness towards domestic banking sector

The indebtedness of the corporate sector towards domestic banks[43], although at a slower pace, continued to increase in 2009, despite the significantly tightened crediting conditions by the banks. The main factors contributing to the tightened crediting conditions were the following: the present uncertainty among banks regarding the duration of consequences from global financial crisis, deteriorated expectations concerning the overall economic activity and prospects of sector that individual enterprises belong to, increased risk during sale of collaterals, tightened monetary policy of NBRM, increased costs and limited access of banks to sources for financing their activities and alike[44]. On December 31, 2009, the total enterprises' debt towards the banking sector equaled Denar 104,817 million which is by Denar 4,691 million (or by 4.7%) higher relative to the end of 2008 (as a comparison, in 2008, the enterprises' debt to the banking sector registered a growth by Denar 24,349 million, or by 32.1%). Significant slowdown of the growth of crediting the corporate sector was a consequence of the contracted activity of the domestic economy, decelerated growth of bank deposits and the more conservative credit policy of banks. The tightened credit policy of banks was a logical consequence of the deteriorated macroeconomic environment, which resulted with estimations of banks for existence of increased risk and deterioration of their expectations concerning the future economic activity. The tightening of conditions for extending credits to enterprises was particularly intensive during the first half of 2009, less intensive in the second half of the year, whereas during the first quarter of 2010, in conditions of less intensive macroeconomic uncertainty and change of the establishment of the monetary policy of NBRM, banks relaxed certain conditions in the process of extending credits. In conformity with the latest Lending Survey of Banks (for the first quarter of 2010), banks expect partial easing of conditions for extending credits to the corporate sector in the following quarter, as well as partial increase of the credit demand.

Figure 2.2.4
Net-percentage* of banks which declared tightening/easing of the terms for extending credits to enterprises

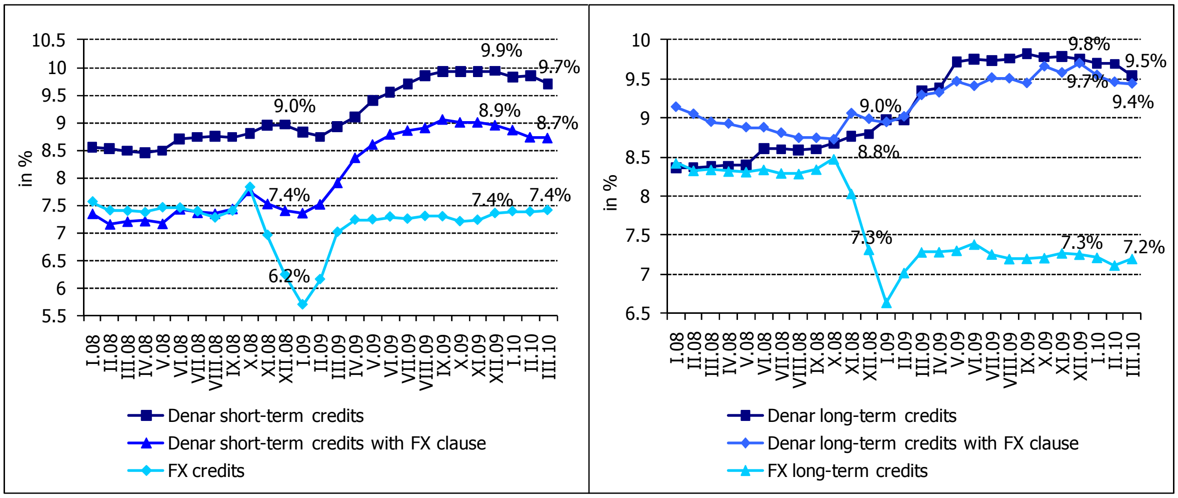


Source: NBRM, Lending Surveys of banks

*Note: Net percentage represents the difference between the percentage of banks which declared tightening of the loan terms and percentage of banks which declared easing of the loan terms. The positive net percentage indicates tightening the loan terms on the level of the banking system, whereas the negative net percentage indicates easing the loan terms on the level of the banking system.

[43] The indebtedness of the corporate sector to the banking system encompasses the debt on the basis of credits, interest and other claims. More than 95% of the total enterprises' debt towards domestic banks are based on credits.
[44] In conformity with the results of the Lending Surveys of the banks in the four quarters of 2009.

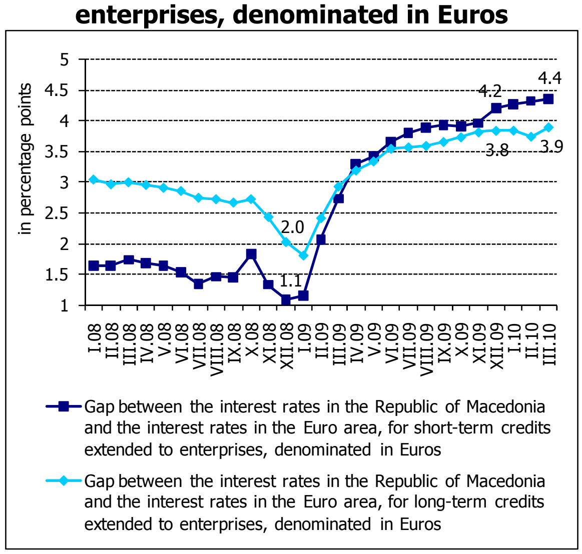
Figure 2.2.5
Movement of interest rates on short-term credits (left) and long-term credits (right) extended to enterprises



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

Contrary to the continual decrease of interest rates on international financial markets, during 2009, banks generally increased the interest rates on credits for the corporate sector, which led to expansion of the gap between interest rates of the Republic of Macedonia and those in the Euro zone, for credits extended to enterprises in Euros. Such movements of interest rates reflect the higher risk premiums (deterioration of perceptions of banks pertaining the risk they undertake), and also the higher costs of the source s of financing of banks. (increase of interest rates on deposits with the aim of preserving the current deposit core, and the higher price of credit lines from abroad, as sources of financing of banks, which is probably a consequence, inter alia, of the deteriorated credit rating of the Republic of Macedonia at the beginning of 2009). Divergent movements of interest rates in the Republic of Macedonia and interest rates in the Euro zone on credits to corporate sector extended in Euros led to increase of the gap between them. The lower level of long-term interest rates compared to the short-term ones (at the end of 2009 and the beginning of 2010) reflect the banks' expectations for further decrease of interest rates on credits extended to the corporate sector. The decrease of interest rates on credits and the general relaxation of the credit policy of banks would have a positive impact on the scope and costs of sources of financing of the corporate sector, which will then give a positive incentive to enterprises to increase their activities to the end of faster recovery of the domestic economy.

Figure 2.2.6
Gap between the interest rates in the Republic of Macedonia and the interest rates in the Euro area for credits extended to enterprises, denominated in Euros



Source: NBRM and Monthly Bulletins from the web site of the ECB

In 2009, the decelerated dynamic of growth of the indebtedness with the banking system is registered in enterprises of all activities. The absolutely highest increase of the debt towards domestic banks was registered with enterprises from the business activity "wholesale and retail trade" (three times less than the increase in 2008), whereas the debt of enterprises from the activity "constructions" registered the highest relative increase, but it is by 20.5 percentage points lower than the increase in 2008. Unlike the movements during the previous years, the enterprises' debt from the activity "industry" registered the lowest annual increase by Denar 74 million, which is almost 130 times less than the increase achieved in 2008[45]. However, the enterprises' indebtedness from the activity "industry" still has the biggest share in the total debt of the corporate sector toward domestic banks (on December 31, 2009, this share equaled 39.3%). The debt of clients from the activity "wholesale and retail trade" accounts for 3.1% in the total debt of the corporate sector, whereas the debt of the clients from the activities "construction", "transport, storage and communications" and "agriculture, hunting and forestry" accounted for 8.6%, 6% and 3.8%, respectively, in the total debt of enterprises.

Figure 2.2.7
Annual absolute growth of indebtedness of the corporate sector, by activity

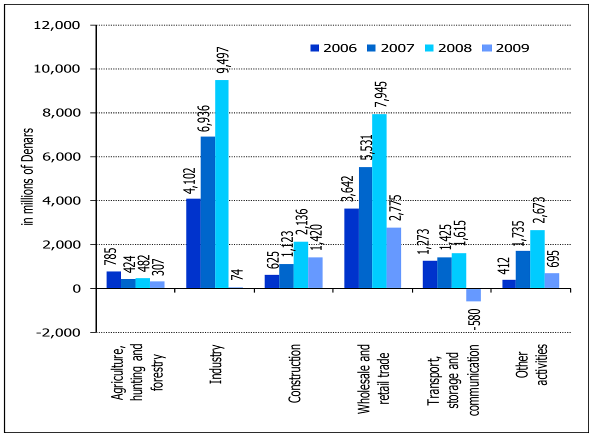
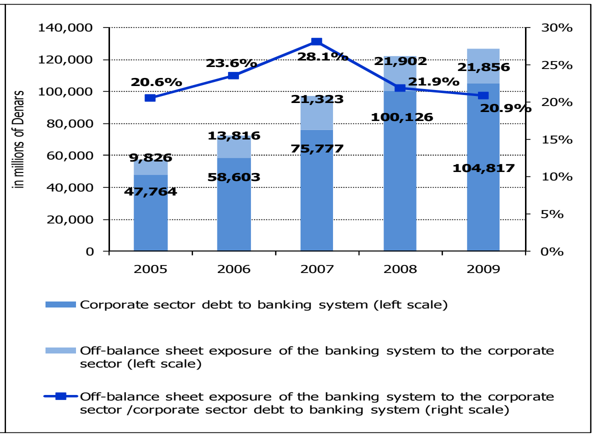


Figure 2.2.8
Dynamic and structure of exposure of banks towards the corporate sector



Source: NBRM

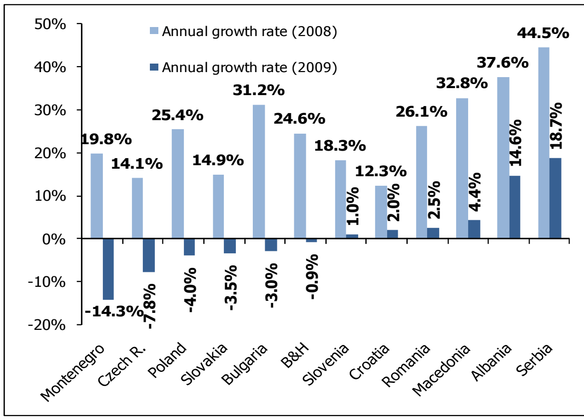
In 2009, the off-balance exposure of the banking system towards the corporate sector registered minimum decline by 0.2%[46]. Almost 90% of the off-balance exposure refers to clients from the activities "industry" (predominantly the manufacturing industry), "wholesale and retail trade" and "construction" (as a result of the used guarantees and letters of credit).

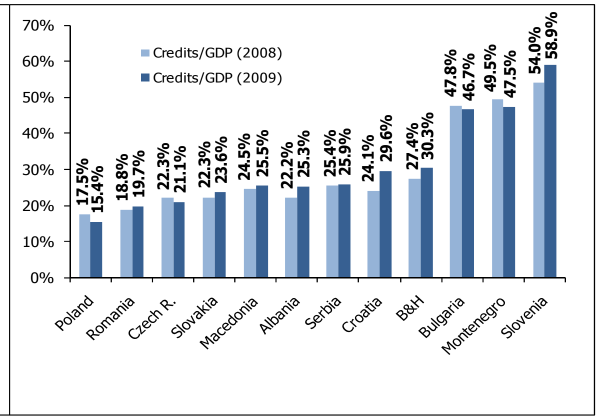
According to the achieved credit growth rate of enterprises, in 2008 and 2009, the Republic of Macedonia is ranked among countries from Central and Southeast Europe with higher annual growth. Contrary to this, according to the indicator for share of total enterprises' credits in the GDP, the Republic of Macedonia is ranked somewhere in the lower half of the list of analyzed countries.

[45] The intensity of annual changes in the enterprises' indebtedness toward the domestic banking system, by activity, corresponds to a certain extent with the movements of the domestic economic activity in 2009, analyzed by individual activity. Namely, the value added in the industry, in 2009 registered real decline by 9.4$ whereas the value added in the activities "agriculture, hunting and forestry", "trade" and "construction" registered a real growth by 4$% 1.5% and 9.6%, respectively. In 2009, the value added in the activity "transport, storage and communications" registered real decline by 4.6%. Source: State Statistical Office of the Republic of Macedonia.

[46] The banks' off-balance sheet exposure, actually denotes the future liabilities of the corporate sector to other creditors or suppliers or potential credit liabilities to banks.

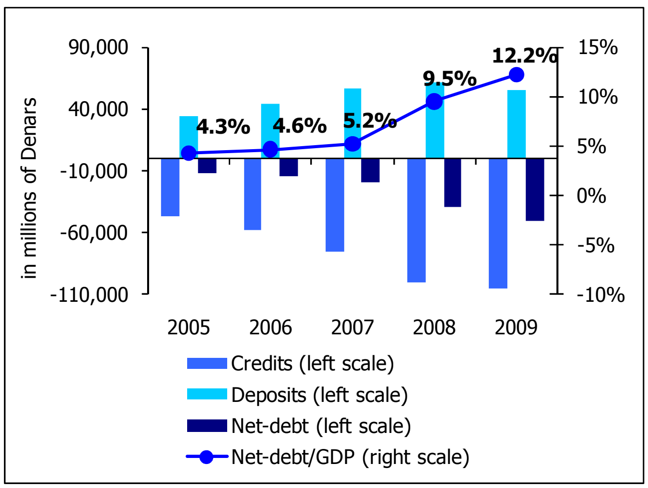
Figure 2.2.9
Annual growth rate of the credits to enterprises (left) and share of credits to enterprises in the GDP for 2008 and 2009, by country (right)





Source: NBRM, web site of individual central banks and IMF

Figure 2.2.10
Net-indebtedness of the corporate sector and its share in the GDP



Source: NBRM

The decrease of the amount of deposits of the corporate sector (by Denar 6,833 million or by 11.2% on annual level), in conditions of growth of credits by banks, caused increase of the net indebtedness of enterprises toward domestic banks and subsequently decrease of the level of coverage of credits with deposits of enterprises. Net-indebtedness of the corporate sector to domestic banks registered annual increase by Denar 11,344 million (or by 22.5%) and on December 31, 2009 it reached the level of Denar 50,441 million. Thus, at the end of 2009, the ratio between the net-indebtedness of the corporate sector and the GDP reached the level of 12% (growth by 2.5 percentage points compared to the end of 2008). On the other hand, on December 12, 2009, the coverage of credits with deposits of the corporate sector decreased on the level of 52.1%, which represents a decline by 9.1 percentage points. According to the level of coverage of credits with deposits of the corporate sector, the Republic of Macedonia is in the upper half of the list of analyzed countries from Central and Southeast Europe[47]. When making a more detailed analysis of the indicator of share of net-indebtedness of the corporate sector in the GDP and the indicator of the coverage of credits with deposits of enterprises in the Republic of Macedonia one should take into consideration the fact that a relatively high amount of deposits of enterprises has been concentrated with only one deponent (which does not have debts in domestic banks). In eventual exclusion of this deponent from the analysis, the indicator on the

[47] On December 31, 2009, the indicator for coverage of enterprises' credits with deposits of the corporate sector, by countries equaled: Albania (32.3%), Slovenia (35.8%), Bulgaria (38.8%), Montenegro (43.2%), Croatia (45.8%), Serbia (46.2%), Bosnia and Herzegovina (47.7%), Macedonia (52.1%), Slovakia (61.3%), Romania (63.5%), Czech Republic (78.1%) and Poland (80.3%). Source: web sites of individual central banks.

share of net-indebtedness of the corporate sector in the GDP would be 15.1%, whereas the indicator on the coverage of credits with deposits of the corporate sector would fall on the level of 40.5%. Also, one should bear in mind that approximately 48% of the deposits of enterprises are assets on transaction accounts and sight deposits.

Liquidity of enterprises is usually pro-cyclic, i.e. it is significantly sensitive and reacts relatively fast on the factors that determine the business cycle in the economy. In crisis conditions, the pro-cyclic nature of the liquidity of the corporate sector had negative impact on the capability for regular servicing the liabilities towards domestic banks. This resulted with deteriorated quality of the credit portfolio of banks. Thus, the non-performing credits of enterprises, recorded in the banks' balance sheets registered annual growth by 34.8%, or by Denar 2,616 million, which is five time greater growth compared to the growth in 2008. The credit exposure with higher level of risk towards the corporate sector increased by Denar 3.605 million (or by 32%), which is twice higher compared to the growth in 2008. Despite all this, during 2009, banks written off claims from the corporate sector in total amount of Denar 2,421 million (around 50% more than the amount of written off claims in 2008), which represents 2.4% of the total debt of enterprises at the end of 2008. Unfavorable movements in the quality of the credit portfolio of banks, supplemented with the worsened quality of the credit demand in conditions of global economic deterioration and unfavorable domestic movements in the economy, justifies the significantly reduced credit support to the corporate sector in 2009, which was considered as a kind of a "bumper" for preventing even bigger spillover of risks from the corporate into the banking sector. Stabilization of the global economy and the change of the business cycle in the domestic economy should positively reflect on the future activities and the financial position of enterprises, on their capability for regular servicing the liabilities to domestic banks and on the quality of the credit demand, which consequently would provide for revival of the credit market and even greater growth of activities of domestic enterprises. However, it is still necessary to be attentive when increasing the crediting of domestic enterprises, having in mind the decline of domestic economic activity in the first quarter of 2010 and particularly, since recently, the increased uncertainty in relation to the possible channels for spillover of the crisis in Greece to the domestic real sector.

III. Financial sector

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

In 2009, the financial sector of the Republic of Macedonia remained with relatively simple structure, with prominent domination by banks. The deceleration of the growth of assets of the financial sector was the main characteristic in the course of 2009. In conditions of a relatively simple market structure, without the presence of complex financial groups and the still limited offer of financial instruments and services, the degree of inter-sectoral relations among individual institutional segments and possibilities for spillover of risks from one to another institutional segment remained on a low level. The dependence of other segments of the financial system on the banking sector is somewhat more prominent characteristic, mostly as result of the invested deposits with banks, which still represent an important item in their assets.

Table 3.1.1
Structure of total assets of the financial sector of the Republic of Macedonia

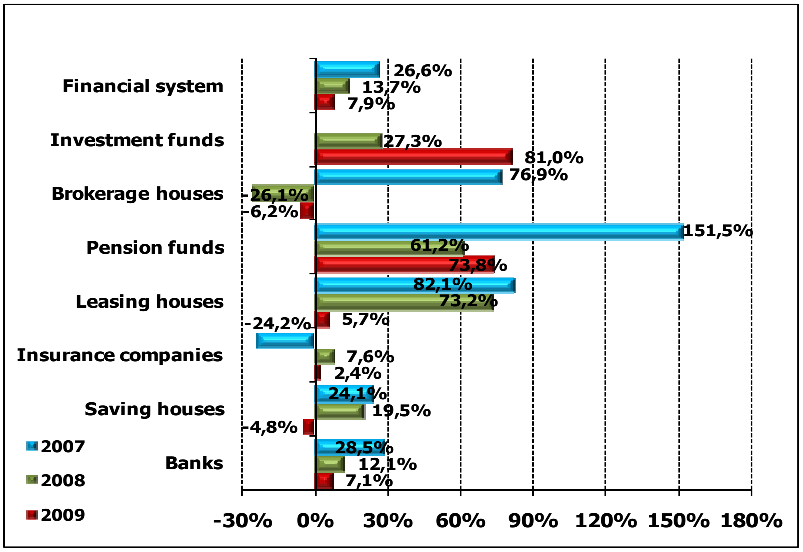
Type of financial institutions	Total assets (in millions of Denars)		Structure (in %)		Number of institutions	
	2008	2009	2008	2009	2008	2009
Depository financial institutions	**254.153**	**271.825**	**90,5%**	**89,7%**	**29**	**28**
Banks	250.704	268.543	89,2%	88,6%	18	18
Saving houses	3.449	3.283	1,2%	1,1%	11	10
Nondepository financial institutions	**26.754**	**31.348**	**9,5%**	**10,3%**	**74**	**74**
Insurance companies	11.920	12.202	4,2%	4,0%	12	13
Insurance brokers	n.a.	n.a.	n.a.	n.a.	8	12
Insurance agents	n.a.	n.a.	n.a.	n.a.	5	5
Leasing companies	8.623	9.115	3,1%	3,0%	8	9
Pension funds	5.037	8.752	1,8%	2,9%	2	2
Pension fund management companies	258	333	0,1%	0,1%	2	2
Brokerage houses	804	754	0,3%	0,2%	20	18
Investment funds	84	152	0,0%	0,1%	8	8
Investment fund management companies	28	40	0,0%	0,0%	5	5
Private equity funds	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Private equity fund management companies	n.a.	n.a.	n.a.	n.a.	4	n.a.
Total	**280.907**	**303.173**	**100,0%**	**100,0%**	**103**	**102**

Source: For each institutional segment, the authorized supervisory body (NBRM, SEC, MAPA and the Ministry of Finance).
Note: In compliance with the legislation, private funds and private funds management companies do not have obligation for submission of data regarding the value of their property and net-property.

The deceleration of the growth of total assets was the main characteristic of the financial sector in the Republic of Macedonia during 2009. No significant changes were registered in the share of certain types of financial institutions in the entire financial sector. Total assets of the financial sector on December 31, 2009 registered annual growth by 7.9%, which is twice lower rate compared to the growth achieved during the preceding year. Banks retained their role as the most important institutional segment, even though their share in total assets of the financial system registered a minimum decline. The financial sector of the Republic of Macedonia belongs to the group of bank-based (bank-centric) systems, with the banks being dominant in the **maintenance of the stability of the entire financial system.** Insurance companies are the second institutional segment in terms of their size, but their share in total assets of the financial sector is still very small. In eventual further decrease of the share of the insurance sector (which was the case in the last three years), parallel with the growth of pension funds (which is expected bearing in mind the systematic establishment and the starting period of its operation), in the near future might bring the pension funds on the second position by size, within the financial sector.

In conformity with the general contraction of the economic activity in 2009, a deceleration of the growth of total assets in all segments of the financial system was registered, with the exception of the pension funds. As in the preceding year, the segment of pension funds was the fastest growing segment of the financial system (growth of assets of investment funds[48] expressed in percentages was higher than the growth of assets of pension funds, but still, the amount of absolute growth in the case of investment funds is very small). High rates of growth of pension funds' assets are based on the features and systematic establishment of the fully funded pension insurance, as well as on the fact that these institutions are relatively "young" and in the initial stage regarding the creation of their funds (inflows based on contributions being mainly regularly realized, whereas the outflows of funds are still minimal due to their relatively young membership structure). At the same time, the upward movement of pension funds' income based on their investment, along with the positive operation results in 2009 also had partial contribution in the annual growth of their total assets. In spite of their modest growth expressed in percentages, the banking system continues to be the carrier of the absolute amount of growth of assets of the entire financial system. In absence of data for individual leasing companies, the increase of assets of this segment is related to the growth of the number of leasing companies. Negative annual rate of change in the assets of saving houses is mainly a result of the decrease of their number[49] relative to the number of brokerage houses[50], where despite the increased number of companies, the unfavorable movements on the capital market in the first half of the year and negative results of their operation caused decrease of their assets.

Figure 3.1.1
Annual growth rates of assets of individual institutional segments of the financial sector



Source: For each institutional segment, the authorized supervisory body (NBRM, SEC, MAPAS and the Ministry of Finance)

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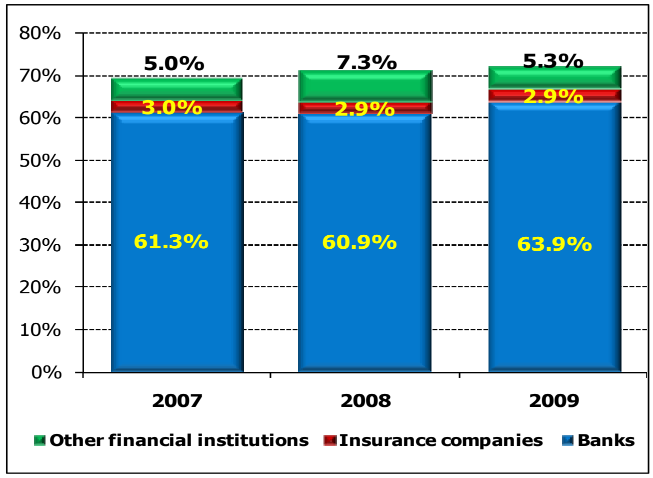
[48] There is no available information about the amount of total assets of investment funds for 2007.
[49] Upon request by owners of the saving house, in August 2009, the Governor of the National Bank adopted a decision for withdrawal of the license for establishment and operation, and implementation of a liquidation procedure for the saving house "Inko" DOO Skopje.
[50] During 2009, the Securities and Exchange Commission withdrew the licenses for performing services related to securities and made a decision for fulfillment of requirements for initiation of a liquidation procedure for the brokerage houses "Dinev Borker AD Skopje and "Publikum" AD Skopje.

Although modest, the annual growth of total asses of the financial sector in 2009 resulted with its increased share in the GDP of the country. At the end of 2009, total assets of the financial sector participated with 74.9% in the gross domestic product [51] (or by 3.4 percentage points more than in 2008). The increased share in the gross domestic product was almost entirely determined by the growth of banks' assets and partially by the growth of pension funds' assets. The dominant role of banks in the financial intermediation was additionally strengthened. The shares of assets of saving houses and non-deposit financial institutions in the gross domestic product are still insignificant, and consequently their role in the financial intermediation.

Figure 3.1.2
Share of assets of the financial sector in the gross domestic product



Source: For each institutional segment, the authorized supervisory body (NBRM, SEC, MAPAS and the Ministry of Finance)

Figure 3.1.3
Value of the Herfindahl index for the banking system of individual countries in Europe

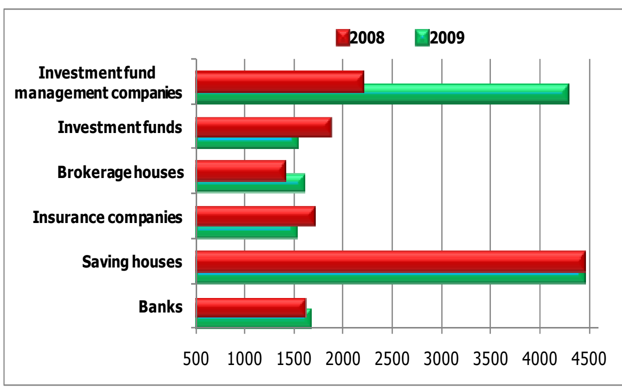
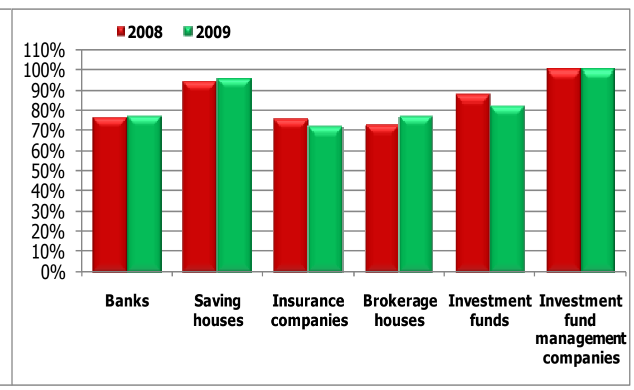


Figure 3.1.4
Values of CR5 indicator for the total assets of individual segments of the financial sector



Source: For each institutional segment, the authorized supervisory body (NBRM, SEC, MAPAS and the Ministry of Finance)

Concentration from the aspect of total assets is high in all analyzed segments of the financial sector and registers further increase (with the exception of insurance companies). Measured through the Herfindahl index, it is near or above the upper end of the acceptable limits. Concentration is enormously high in the case of saving houses and companies for investment funds management, since 84.4% of total assets of saving houses is concentrated in 2 out of total 10 saving houses, whereas 77.6% of total assets of companies for investment funds management is concentrated in 2 out of 5 companies for investment funds management.

[51] Amount of GDP for 2009 is according to estimated data.

Dominant share of foreign shareholders in the ownership structure is typical for most of the individual financial institutions. Thus, foreign shareholders are most present in the ownership structure of banks, despite the decrease of their share as the result of the initiated bankruptcy procedure against the dominant owner of one bank[52]. This year, the leasing companies were the segment with the highest share of foreign capital in the ownership structure, with almost complete foreign capital ownership. In the case of brokerage houses and investment fund management companies, the domestic capital prevails, while the saving houses are the only segment of the financial sector, which are in full ownership of domestic entities[53].

Table 3.1.2
Ownership structure of individual financial institutions

Owners	Banks	Saving houses	Insurance companies	Brokerage houses	Leasing companies	Pension fund management companies	Investment fund management companies
Domestic shareholders	***28,2%***	***100,0%***	***23,2%***	***85,8%***	***0,5%***	***49,0%***	***54,9%***
Nonfinancial legal entities	9,2%	81,6%	3,0%	30,5%	0,0%	0,0%	0,0%
Banks	2,4%	0,0%	2,4%	17,9%	0,3%	49,0%	41,8%
Insurance companies	0,1%	0,0%	0,4%	2,3%	0,0%	0,0%	0,0%
Other financial institutions	0,6%	0,0%	0,1%	0,0%	0,0%	0,0%	13,9%
Natural persons	7,9%	18,4%	11,5%	35,0%	0,2%	0,0%	-0,8%
Public sector	8,0%	0,0%	5,8%	0,0%	0,0%	0,0%	0,0%
Foreign shareholders	***68,6%***	***0,0%***	***76,8%***	***14,2%***	***99,5%***	***51,0%***	***45,1%***
Natural persons	3,0%	0,0%	0,4%	4,9%	0,1%	0,0%	6,5%
Nonfinancial legal entities	10,2%	0,0%	76,4%	9,3%	14,7%	0,0%	8,6%
Other financial institutions	55,4%	0,0%	0,0%	0,0%	84,7%	51,0%	30,0%
Unclassified	***3,2%***	***0,0%***	***0,0%***	***0,0%***	***0,0%***	***0,0%***	***0,0%***
Total	***100,0%***	***100,0%***	***100,0%***	***100,0%***	***100,0%***	***100,0%***	***100,0%***

Source: For each institutional segment, the authorized supervisory body (NBRM, SEC, MAPAS and the Ministry of Finance)

The low level of inter sector integration and the limited cross ownership among individual segments of the financial sector continues to be one of the main features of the financial sector of the Republic of Macedonia. The relatively simple market structure, without the presence of complex groups and the still limited offer of financial instruments and services reduces the possibility for spillover of risks from one into another institutional segment. The size of capital investments is one of the indicators for assessment of the level of "integration" among individual institutional segments of the financial sector. Banks, as a dominant segment of the financial sector, represent the main carrier of "connection" with other financial segments. Capital investments of banks are on the minimum level (their share is 0.2% in the banking sector's assets) and are mostly in domestic financial entities.

[52] In the analyzed period (2009), the shares of "Stater Banka" AD Kumanovo, owned by the shareholder in bankruptcy procedure "Milestone" ehf, Reikiavik, for the purposes of this report are treated as common shares with undefined status. Namely, the term "undefined status" covers the shares owned by entities that cannot be identified, that are in bankruptcy procedure, in liquidation procedure, or whose liquidation procedure was completed. In March 2010, the Governor of NBRM issued a prior consent to the "Central Cooperative Bank" AD Sofia, Republic of Bulgaria for acquiring 100% of the shares of "Stater Banka" AD Kumanovo. .

[53] According to the legislation, a saving house may not have owners who are not citizens of the Republic of Macedonia.

Table 3.1.3
Capital investments of banks as of December 31, 2009

Entities in which the investment was made	Capital investments of banks		No. of capital investments according to the share in capital of the entity in which the investment was made			
	Absolute amount (in thousands of Denars)	Structure (in %)	up to 5% of the capital	5% to 25% of the capital	25% to 50% of the capital	over 50% of the capital
Domestic entities	**905.181**	**89,8%**	**53**	**25**	**4**	**3**
Banks	256.088	25,4%	3	0	0	0
Insurance companies	55.512	5,5%	4	0	0	0
Brokerage houses	35.203	3,5%	0	0	0	2
Pension fund management companies	148.927	14,8%	0	0	3	0
Leasing companies	614	0,1%	0	1	0	0
Other financial institutions (stock exchange, securities depository, clearing houses)	183.872	18,2%	4	13	0	0
Nonfinancial entities	224.965	22,3%	42	11	1	1
Foreign entities	**102.569**	**10,2%**	**7**	**2**	**0**	**0**
Banks	94.231	9,4%	1	1	0	0
Other financial institutions (stock exchange, securities depository, clearing houses)	4.249	0,4%	6	0	0	0
Other financial entities	0	0,0%	0	0	0	0
Nonfinancial entities	4.089	0,4%	0	1	0	0
Total capital investments	**1.007.751**	**100,0%**	**60**	**27**	**4**	**3**

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

According to the share of capital investment of banks into the equity of entities where the investments have been made, the largest portion of total capital investments are bellow 5% of entities' equity in which the investment was made. The highest level of interconnection is present among banks and pension fund management companies, whose ownership structure is dominated by banks. In all other financial institutions, the cross ownership is still on a very low level.

The business connection between banks and non-deposit financial institutions is mainly based on the deposits of non-deposit financial institutions placed with the banks. In 2009, the total assets deposited by non-deposit financial institutions in the banking system of the Republic of Macedonia were growing with a slow pace. Compared to the preceding year, they registered twice lower growth in percentages (which equaled 17.7%) and on December 31, 2009 they equaled Denar 7,640 million. In the deposit structure, deposits invested by insurance companies are the most dominant, although their share year by year declines for the account of the growth of the share of deposits by pension funds, which are inclined to place their assets in domestic banks.

The share of deposits of non-deposit financial institutions in the total deposit base of the banking system is still low (3.7%). However, these investments in the banks are quite important for the non-deposit financial institution, especially in conditions of limited offer of instruments of financial markets in the Republic of Macedonia. Namely, more than 20% of assets of brokerage houses and 30% of assets of pension funds and insurance companies represent assets invested in the form of deposits with banks. This aspect particularly emphasizes the meaning of the banking system for the stability of the other segments of the financial sector.

Figure 3.1.5
Structure of deposits of non-deposit financial institutions

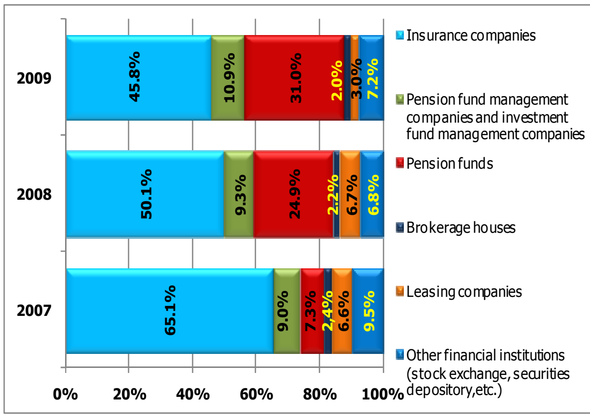
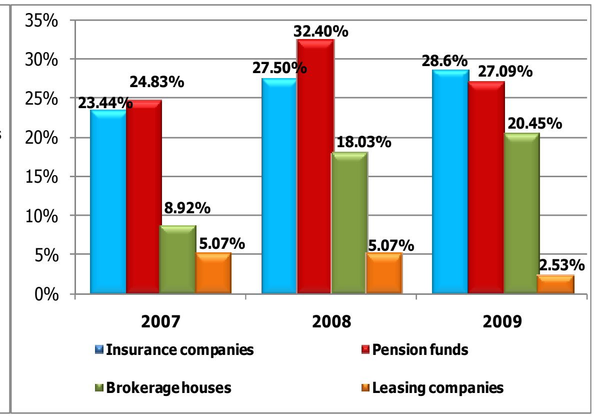


Figure 3.1.6
Share of deposits in the total assets of individual non-deposit financial institutions



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

Analyzed from the aspect of maturity, the growth of short-term deposits (mainly deposits of insurance companies and pension funds) almost completely (91.9%) determined the annual growht of total deposits of non-deposit financial institutions. As a result of this, these deposits strengthened their dominant position in the maturity structure of non-deposit financial institutions. **According to the currency structure, Denar deposits are the most present.**

Figure 3.1.7
Maturity structure of deposits of non-deposits financial institutions

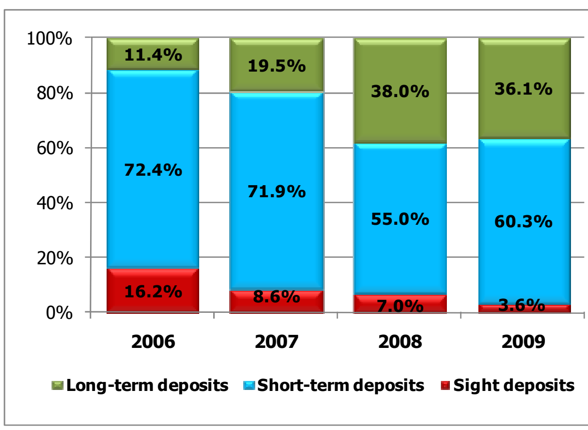
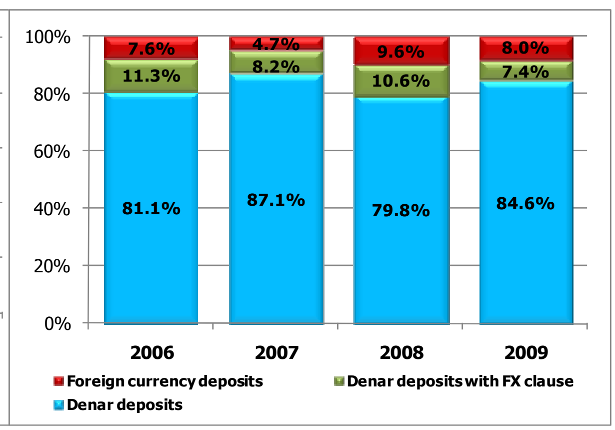


Figure 3.1.8
Currency structure of deposits of non-deposit financial institutions



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

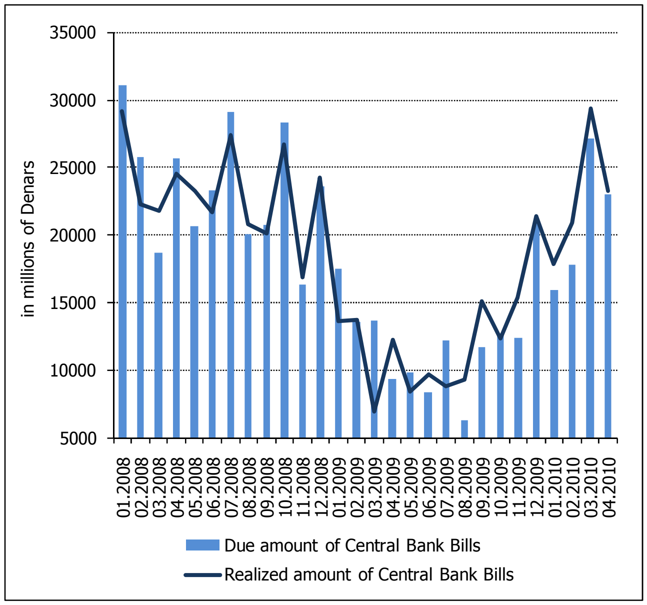
2. Domestic financial markets

2.1. Money market and short-term securities market

The few segments of the primary market and the moderate volume of secondary trading were the reason for the money market's and the short-term securities market's restricted influence on the conditions for financing the non-financial sectors in the Republic of Macedonia. The largest risks for the domestic financial stability arise from the possibly unfavorable movements on the foreign exchange market. Hence the significance of the stable Denar foreign exchange rate for the macroeconomic and the financial stability is extremely high, emphasizing the foreign exchange market as one of the most significant segments of the financial markets in the Republic of Macedonia from the aspect of the financial stability maintenance.

In conditions of apparent negative expectations for the foreign exchange rate, the banks, as single possible investor in the CB bills, showed significantly smaller interest for placement of assets in this Denar denominated monetary instrument. The total amount of CB bills issued in 2009 equaled Denar 147,027 million, which is less by Denar 131,985, or 47.3% in comparison with 2008. The strongest effect of the negative expectations for the foreign exchange rate was evidenced in the first quarter of 2009, when the realized amount of CB bills registered the severest drop (in the first quarter of 2009, the banks showed larger interest for foreign currency, which created a pressure on the foreign exchange market). The increase in the interest rate on the CB bills in March 2009[54] contributed to gradual increase in the demand for this type of securities by the banks and consecutive transmission of the Denar liquidity on the foreign exchange market and thus lessening of the depreciation pressures of the domestic currency value. The gradual increase in the banks' interest to invest in CB bills, in the second half of 2009 and at the beginning of 2010 despite the attractive yield rate of this low risk instrument can be explained, to certain extent, also with the banks' lower inclination for risk taking in conditions of domestic activity reduction and the yet present uncertainty relating the final impact of the international economic crisis, as well as the low yield of foreign assets placed in foreign banks. In 2009, the realized amount of CB bills was just below the level of the total due amount for the same period, with the total of Denar 1,589 million cumulatively being issued through this monetary instrument. On the

Figure 3.2.1
Due and realized amount of CB bills, by months

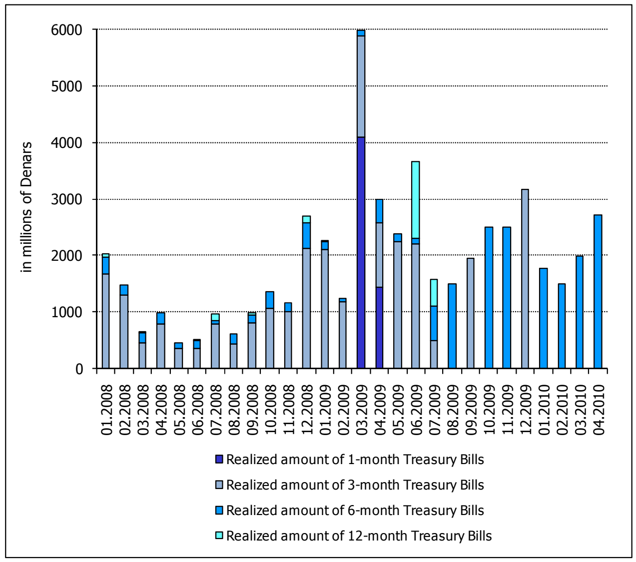


Source: NBRM

[54] On March 26, 2009, NBRM adopted a decision on increasing the interest rate on CB bills from 7% to 9%. The CB bills auctions held in 2009, were organized according to the volume tender principle (unrestricted amount and fixed interest rate).

secondary market (Over the Counter Market), the total traded amount of CB bills equaled Denar 340 million, which is less by Denar 1,325 in comparison with 2008.

Figure 3.2.2
Realized amount of Treasury bills, by months



Source: Ministry of Finance and NBRM calculations

The higher supply and demand for Treasury bills in 2009 resulted in bigger scope of the primary market of Treasury bills. In 2009, the Ministry of Finance issued bills in the total amount of Denar 31,732 million, which is by Denar 17,808 million (or 127.9%) more compared to 2008. The high demand for Treasury bills resulted from the larger financial needs of the Government in 2009 and was fully adjusted to the preferences of the potential investors for this type of securities. Namely, in March 2009 one-month Treasury bills[55] (with relatively attractive yield rate) were introduced on the Treasury bills market. Their maturity was in accordance with the investors' inclination for short-term investment as much as possible in the first half of 2009 having in mind the apparent macroeconomic uncertainty and the larger pressures for reducing the domestic currency value in this period of the year. Despite that, in June 2009 Treasury bills with currency clause[56] were introduced, which besides currency risk hedging, provide also attractive interest rates and high liquidity, which is of especial importance in conditions of crisis. In the second half of 2008, the amount of the issued Treasury bills with longer maturity (six-month and twelve-month Treasury bills) increased, opposite to the trends in the previous years, when the three-month Treasury bills had absolute dominance in the structure of the total issued Treasury bills, with shares exceeding 80% (in 2009, the share of the three-month Treasury bills in the total issued Treasury bills equaled 51.4%, which is annual drop of 28.7 percentage points). The placements in the Treasury bills with longer maturity mean slightly smaller exposure of the investors to reinvestment risk at lower interest rate, with their materialization likelihood becoming especially evident in the second half of 2009, when certain improvement in the conditions and the forecasts for the global and domestic economy stirred expectations for further decrease in the domestic interest rates. In 2009, the total traded amount of Treasury bills on the Over the Counter Market equaled Denar 429 million, which is annual rise of Denar 242.5 million, or by 130%. More than 70% of the total Treasury bills turnover on this market account for the Treasury bills with residual maturity of one to three months.

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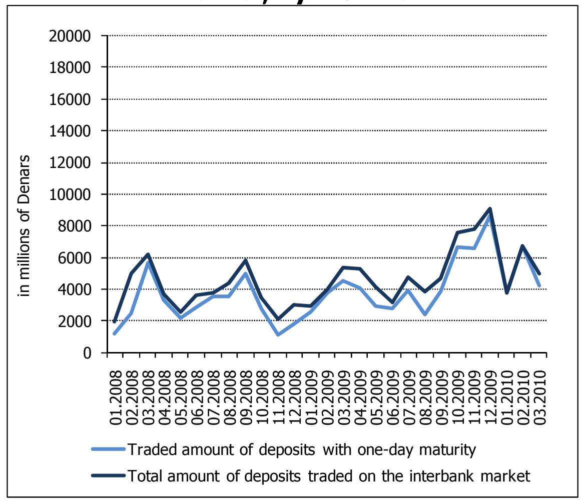
[55] The first auction of one-month Treasury bills on the primary securities market was held on March 10, 2009. In 2009, total of four auctions of one-month Treasury bills with total amount of Denar 5,538 million were held (share of 17.5% in the total amount of realized Treasury bills in 2009).

[56] In 2009, total of ten auctions of Treasury bills with FX clause with total amount of Denar 14,723 million were held (which is 46.4% of the total realized Treasury bills in 2009). About half of the realized amount of the Treasury bills with FX clause refers to the six-month Treasury bills with FX clause. The auctions of Treasury bills with FX clause were organized according to the volume tender principle (price restricted), while the Treasury bills without FX clause were auctioned according to the interest rate principle (US type).

The total amount of deposits traded on the interbank market registered an increase in 2009. However, it is still a shallow market with relatively small amounts of traded deposits and primarily on a short-term basis (one-day), which means small exposure of the banks to contagion risk, i.e. spill-over of the possible liquidity problems from one bank to another. The total traded amount at this market in 2009 equaled Denar 62,606 million[57] and in comparison with 2008 it is higher by Denar 16,848 million, i.e. 36.8%. However, approximately 85% of the traded amount of deposits is with one-day maturity. In the first three quarters of 2009, the interbank trading of deposits was almost at the same level as in the first three quarters of 2008, while the interbank interest rate registered upward movements. Such movements only prove the high uncertainty level with the banks and the necessity for more cautious liquidity management in the first nine months of the year. With the graduals stabilization of the macroeconomic situation and the mounting liquidity of the banking sector in the last quarter of 2009, the interbank interest rate decreased, whereas the interbank trading registered high increase, determining the total annual growth in the traded deposit amount.

Figure 3.2.3
Amount of deposits traded on the interbank market, by months



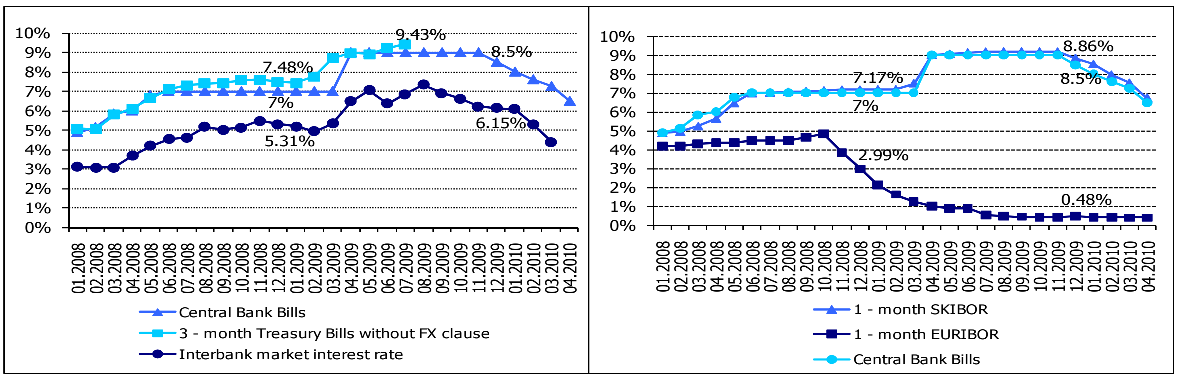
Source: NBRM

The divergent changes in the monetary policies of the NBRM and the European Central Bank in 2009 resulted in deepening of the gap between the interest rates on the domestic money market and the reference rates on the international financial markets. The higher need for Budget financing in 2009 caused increase in the interest rates on the primary Treasury bills market. In conditions of unfavorable movements on the foreign exchange market, and in order to preserve the stability of the domestic currency, the NBRM approached to monetary policy contraction, so in March 2009 it increased the interest rate on CB bills. The rise in the reference interest rate had transmission effect also on the interest rates on the interbank deposits market, stimulating the growth of SKIBOR[58] and the interbank interest rate. Opposite to the monetary policy contraction by the NBRM, the ECB relaxed the monetary policy (in the last quarter of 2008) and in 2009 it lowered the core interest rate in several occasions[59]. The monetary policy relaxation

[57] In 2009, the traded amount of deposits on the interbank market in the Republic of Macedonia represents 15.1% of the GDP. As a comparison, in 2009, the amount of deposits traded on the Bulgarian interbank market equals 113.8% of the GDP, while on the Czech, Italian, and Latvian interbank market, only for one month of 2009 (October for the Czech market, i.e. January for the remaining analyzed interbank deposits markets), turnover representing 33.1%, 7.2% and 23.6%, respectively, of the GDP for 2009 was registered. Source: web sites of the central banks of Bulgaria, Czech Republic and Latvia, web site of IMF and Inter bank market and liquidity distribution during the great financial crisis, the e-MID case"; Gianfranco A. Vento & Pasquale La Ganga; September 04.2009 (data for the Italian inderbank deposits market).
[58] Skopje Interbank Offer Rate- interbank interest rate for selling the Denar deposits, calculated from the quotations of the reference banks.
[59] ECB approached to monetary policy relaxation and consecutive decrease in the core interest rate in order to stimulate the aggregate demand and the total economy (in conditions of recessive movements in the Euro area), ensuring cheap liquidity support to the financial system and easier and cheaper management with the debt crisis in Greece (the last reason was especially evident in April 2010, with the announced package of financial assistance for

had adequate reflection on the interest rates dynamics on the European money market, which in 2009 registered a downward trend. Hence, the gap between the rate of the average one-month SKIBOR and the rate of the average one-month EURIBOR registered an annual increase of 4.2 percentage points. The higher yields from domestic financial instruments contributed to lower preference for conversion of the domestic into foreign currency, and thus stabilization of the movements on the foreign exchange market. However, the widening of the gap between the interest rates on the domestic money market and the reference rates on the international financial markets ceased at the end of 2009 and at the beginning of 2010, when in conditions of almost unchanged rate of the one-month EURIBOR, the interest rates on the domestic money market registered a downward trend, stimulated by the multiple decrease in the interest rate on the CB bills by the NBRM (the first reduction of the interest rate on the CB bills was made by the end of November, 2009 from 9% to 8.5%).

Figure 3.2.4
Movement of the interest rates on the Money Market in the Republic of Macedonia and the one-month EURIBOR

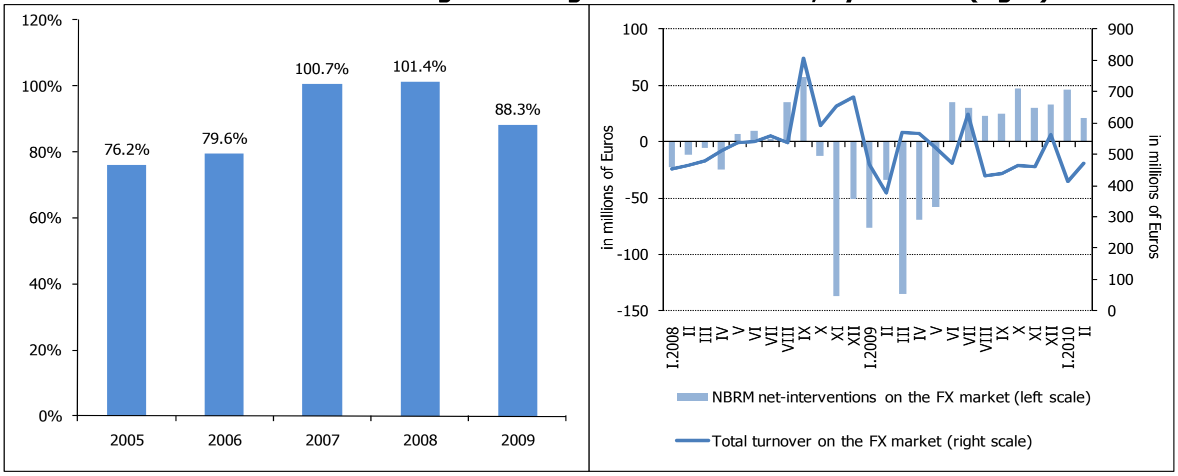


Source: Ministry of Finance and web site for EURIBOR
Note: The last auction of three-month Treasury bills without FX clause was held in July 2009.

The turnover realized on the foreign exchange market in 2009 fell in comparison with the preceding year, which is a result of the lower foreign trade and the smaller volume of financial transactions with other countries. The NBRM interventions on the foreign exchange market, in the first five months of the year were directed towards net sale of foreign exchange, which is one of the key factors that provided consistent implementation of the strategy for targeting of the nominal foreign exchange rate of the Denar against the Euro and thus maintenance of the price stability in the country. The total turnover on the foreign exchange market in 2009 equaled Euro 5,956.7 million and in comparison with 2008 it went down by 854 million, i.e. 12.5%. The unfavorable movements of certain balance of payments categories and intensified psychological pressures related to the stability of the domestic currency (manifested through the higher preference for conversion of the domestic into a foreign currency), produced pressures on the value of the domestic currency and NBRM interventions towards net sale of foreign exchange in the first five months of 2009, in the amount of Euro 372 million. In the second half of 2009 the movements on the foreign exchange market stabilized and NBRM intervened in opposite direction i.e. net purchase of foreign exchange in the amount of Euro 223 million. However, this was not sufficient to exceed the net sale of foreign exchange realized in the first five months of the year, so on annual basis, the NBRM realized net sale of foreign exchange in the amount of Euro 149 million.

Greece, that should be provided by the European Union and IMF, after which the ECB reported unchanged level of the basic interest rate).

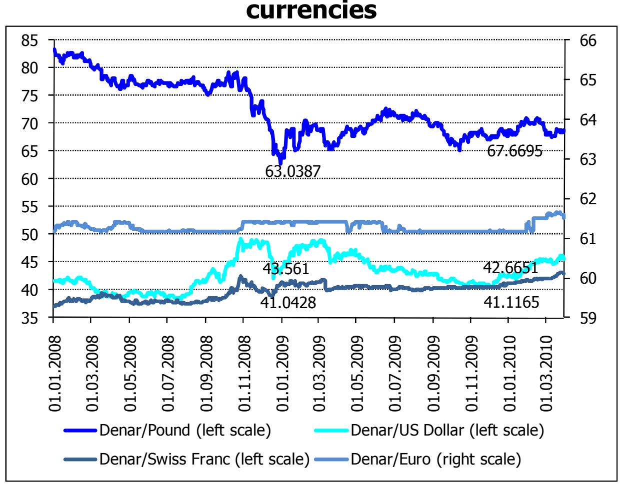
Figure 3.2.5
Share of the total turnover on the foreign exchange market in GDP (left) and net interventions on the foreign exchange market of NBRM, by months (right)



Source: NBRM

The maintenance of de facto fixed nominal foreign exchange rate of the Denar relative to the Euro implies the changes in the cross currency relations of the Denar with other currencies to create a direct dependence on the movements of the value of the Euro on the international foreign exchange markets. Thus annually (December 31,2008 - December 31,2009), in circumstances of appreciation of the value of the Euro relative to the US Dollar, the value of the Denar relative to the US Dollar also increased. In contrast, in 2009 the value of the Denar relative to the British Pound and Swiss Franc fell, which corresponded to the depreciation of the value of the Euro relative to these two currencies. In 2010, a downward trend of the value of the Euro on the international foreign exchange markets began, which respectively caused depreciation of the Denar value relative to other currencies. The depreciation of the Euro value is one of the reactions of the international financial markets to the debt crisis in Greece and the announcements for its possible spillover in Portugal, Italy and Spain[60].

Figure 3.2.6
Movement of the official spot - exchange rate of the Denar relative to certain more important currencies



Source: NBRM

[60] They are economies from the Euro area with similar problems: poor fiscal position, big external debt, poor export and generally, unfavorable balance of payments and low productivity (in comparison with the amount of the wages), which in conditions of strong Euro for several years, as mutual national currency of the Euro area countries, contributed these countries to become quite non-competitive on the world markets. Lately, this group of countries was joined by Ireland and Italy.

2.2. Capital market

2.2.1. Primary capital market

The total value of the new issues of long-term securities in 2009 surged in comparison with the preceding year, mostly as a result of the higher amount of shares issued by non-financial companies. In 2009, 9 new issues of long-term securities in the total amount of Denar 6,818 were realized, which is an increase of Denar 1,153 million (or of 20.4%) in comparison with the value of the new issues of securities in 2008[61]. The non-financial companies were the most active issuer of long-term securities in 2009, which realized 3 new issues of shares in the total amount of Denar 5,170 million. All issues of securities of the non-financial companies were realized through private offer, while the shares were assumed by the Government of the Republic of Macedonia in accordance with the Law on transformation of claims of the Republic of Macedonia based on public duties into capital in the companies AD "Ohis" Skopje, "EMO" AD Ohrid, "Tutunski kombinat" AD Prilep and "11 Oktomvri - Eurokompozit" AD Prilep ("Official Gazette of RM" no. 159/2008).

Table 3.2.1
Amount and structure of the realized issues of long-term securities

in millions of Denars

Realized issues of long-term securities	2007	2008	2009
Amount of realized issues of long-term government securities	**2,016**	**2,284**	**1,423**
1. 2- years continous government bonds	699	390	10
2. 3- years continous government bonds	216	59	0
3. Denationalization bonds	1,101	1,835	1,413
Amount of realized issues of long-term, non-government securities	**1,728**	**3,381**	**5,395**
1. Corporate bonds	300	653	0
2. Shares	1,428	2,728	5,395
- Issued by banks	*1,108*	*1,275*	*0*
- Issued by other financial institutions	*155*	*914*	*226*
- Issued by non-financial legal entities	*164*	*539*	*5,170*
Total amount of realized issues of long-term securities	***3,744***	***5,665***	***6,818***

Source: Securities and Exchange Commission, web site of the Ministry of Finance and NBRM calculations
Note: On the Treasury bills segment, the following issues were realized: 1. On February 24, 2009 the Ministry of Finance organized an auction of two-year continuous bond, and Denar 10.4 million were realized out of the offered Denar 250 million. 2. On April 06, 2009, the eighth issue of the denationalization bond, in the amount of Euro 23 million, was realized.

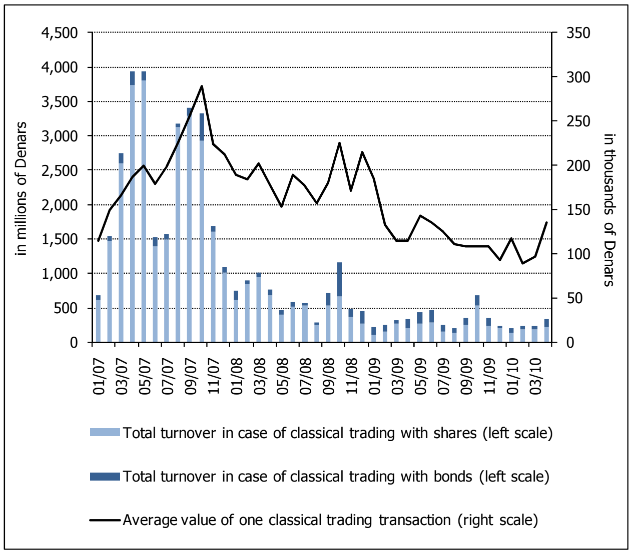
2.2.2. Secondary capital market

The higher variability and unpredictability of the price movements are the main feature of the Macedonian capital market. The relatively high responsiveness of the movements on the global stock exchanges to the information on the debt crisis in Greece and the variable forecasts for its future directions, indirectly through the regional stock exchanges, can reflect unfavorably on the movements on the Macedonian stock exchange. The downward movements of the price levels on the Macedonian stock exchange are potential risk to the value of the financial assets of the investors.

[61] As a comparison, in 2009, only through public offer, shares in the total amount of US dollars 1,201.7 million on the Hungarian capital market were realized, i.e. in the total value of US Dollars 2,791.2 million on the Polish capital market. Source: Global Financial Stability Report, April/2010, IMF

After the big downward correction of the turnover on the Macedonian stock exchange in 2008, the drop in the stock exchange trading continued also in 2009. The significant decrease in the stock exchange turnover is primarily due to the significant fall in the shares turnover. Thus in 2009 the total turnover from the classical stock exchange trading equaled Denar 4,100 million (1% of GDP for 2009[62]), which is a decrease by almost 50% (by Denar 4,029 million) compared to 2008. On the other hand, the average value of one transaction in case of classical trading decreased from Denar 185 thousand in 2008 to Denar 123 thousand in 2009, which is another indicator for the reduced volume of stock exchange trading in the Republic of Macedonia. The trading with shares, as the main cause for the decrease in the stock exchange turnover significantly reduced (the shares turnover registered in 2009 is lower by Denar 3,881 million, or 58.1%, compared to the 2008). Oppositely, the bonds turnover realized in 2009 registered slightly lower decrease (of Denar 148 million, or 10.2%). Such movements point to maintenance of the stock exchange turnover of bonds at slightly more stable level, which as safer and more liquid financial instruments continued to mount their share in the total stock exchange turnover, for the account of the decrease in the share of the shares turnover (the share of the bonds turnover in the total stock exchange turnover in case of classical trading augmented from 17.9% for 2008 to 31.8% for 2009). In conditions of reduced economic activity and deteriorated financial indicators of the domestic enterprises, the reduced turnover on the Macedonian Stock Exchange was fully expected. Also, in circumstances of larger uncertainty, followed by a lot of risks, the potential investors were slightly more cautious and more interested in investing the available assets in less risky instruments. In this context, the attractive yield rates of the Treasury bills and the deposits with the banks in 2009 (that offer investors a possibility for currency risk hedging), additionally stimulated the allocation of the available assets to these investment alternatives. The movements on the stock exchange turnover in 2009 (mostly in the second half of the year) were influenced also by the non-economic factors, which occasionally stirred higher optimism with the potential investors, while some times significantly downsized their expectations. The influence of these factors caused slightly bigger variability in the movements in the stock exchange turnover (in certain periods, the turnover registered an upward trend, followed by a decrease, and vice versa), and generally in the total movements on the Macedonian Stock Exchange.

Figure 3.2.7
Stock exchange trading and average value of one trade transaction



Source: Web site of the Macedonian Stock Exchange and the NBRM calculations

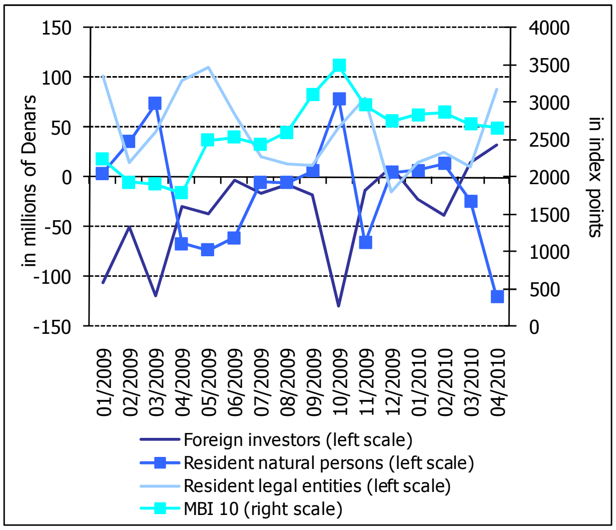
[62] As a comparison, the ratio between the classical stock exchange turnover attained in 2009 and the GDP, by stock exchanges in the region, equaled: 0.9% for the Sarajevo stock exchange, 1.5% for Belgrade stock exchange, 2.1% Bucharest stock exchange, 2.3% for Bulgarian stock exchange and 3.2% for Zagreb stock exchange. Source: Web sites of the Federation of the Euro Asian Stock Exchanges, IMF and the Macedonian Stock Exchange and NBRM calculations.

Table 3.2.2
Structure of the total stock exchange turnover by types of investors

Type of investor	Purchase side of the stock exchange turnover			Sell side of the stock exchange turnover		
	2007	2008	2009	2007	2008	2009
Average share of foreign investors	51.1%	33.8%	15.6%	21.0%	38.8%	26.2%
Average share of resident legal entities	16.1%	31.9%	39.2%	28.4%	25.5%	27.0%
Average share of resident natural persons	32.8%	34.3%	45.3%	50.5%	35.6%	46.9%

Source: Web site of the Macedonian Stock Exchange and the NBRM calculations
Note: The calculation of the percentages does not take into consideration the individual block transactions with the shares of individual companies, in conformity with the announcements on the web site of the Macedonian Stock Exchange.

Figure 3.2.8
Net effect of the total stock exchange trading of individual investors and MBI-10



Source: Web site of the Macedonian Stock Exchange and the NBRM calculations
Note: The calculation of the net effect of the total stock exchange trading does not take into consideration the individual block transactions with the shares of individual companies, in conformity with the announcements on the web site of the Macedonian Stock Exchange.

The analysis of the structure of the stock exchange turnover points to absolute decrease in the stock exchange trading with all types of investors. In 2009, the trend of outflow of foreign investors from the Macedonian Stock Exchange that began in the preceding year, continued, registering also bigger inertness of the foreign investors in the stock exchange trading (their percentage shares drastically reduced, on the side of both purchase and sale in the stock exchange turnover). For the account of the lower share of the foreign investors, in 2009 larger percentage share of the domestic ones, primarily natural persons, in the stock exchange trading was evidenced (the decrease in the stock exchange trading of the domestic investors was smaller in comparison with the decrease in the foreign investors trading). The significant drop in the share of the **foreign investors** on the purchase side of the stock exchange turnover, opposite to the slightly smaller decrease in their share on the side of the sale, determined net sale of securities by foreign investors (primarily foreign institutional investors) in the total amount of Denar 519 million. The emphatic inertness of the foreign investors (i.e. poor interest for bigger inclusion in the stock exchange trading) can be explained also with relatively small liquidity (shallowness) of the Macedonian Stock Exchange, which prevents, in conditions of a crisis, fast "exit" from the market without larger costs. The possible increase in the foreign investors' interest to return on the Macedonian Stock Exchange depends on several factors, such as the accomplishment of the forecast for final recovery of the global stock exchanges and the rapidity of feeling this recovery in our region, the manner in which the governments will manage the future fiscal policy (especially after the period of higher expansiveness of this segment of the macroeconomic policies of the governments), the foreign investors' enthusiasm for risk taking in a post crisis and uncertain period, as well as on the velocity of recovery on the domestic real sector, improvement of the financial position of the domestic enterprises, as well as the yields the domestic securities would provide. The share of the **resident natural persons** in the stock exchange trading registered a significant growth and in 2009, it was just over 45%, on average. On a net basis, in 2009 the domestic natural persons registered a sale of securities in the total amount of Denar 73 million. This type of investors registers almost equal share on the side of both, the purchase and the sale, on the stock exchange turnover. This is a consequence of the diverse behavior of the domestic natural persons in certain months of the year (in certain months, they acted as net buyers of securities whereas other months when they were net sellers), mostly as a result of the shorter investment horizons in the stock exchange trading, i.e. the preferences of the domestic natural persons for realizing yields for a short period[63]. In the largest part of the year (in the first eight months of 2009), the domestic households almost fully adhered to the economical logic when making investment decisions related to the stock exchange trading, i.e. they were purchasing securities when their prices (approximated through MBI-10) registered a decrease, and selling when the securities prices (approximated through MBI-10) were growing. In the last several months of 2009 and at the beginning of 2010, the behavior of the resident natural persons in case of stock exchange trading was not, mainly, in line with the economic logic and it was under strong influence of the non-economic factors, which can often create wrong expectations for the movements on the capital market, opposite to the factual stock exchange movements. The wrong expectations for the future movements on the capital market cause adoption of investment decisions that fail to maximize the yield from the stock exchange trading and it can have negative implications on the value of the financial property (the part of the property that consists of securities traded on the stock exchange). In 2009, the **resident legal entities** incremented the percentage share in the stock exchange trading (on the side of both, purchase and sale), registering net purchase of securities in the total amount of Denar 592 million. The motives for the domestic legal entities for the continuous net purchase of securities in 2009[64] should be searched in the expectations for increase in the price levels on the capital market on a long-term basis and thus realization of the yield from the stock exchange trading.

In 2009, the total turnover with long-term securities (continuous government bonds) on the Over the Counter Market[65] equaled Denar 2 million, which is by Denar 398 million less compared to the previous year. Such movements on the Over the Counter Market are only a proof that the transactions that are realized on this market are more occasional than regular.

Despite the decrease in the number of members of the Macedonian Stock Exchange[66], in 2009 the significant changes in the structure of the stock exchange trading according to individual types of investors (primarily the severe drop in the stock exchange trading of the foreign investors) caused decrease in the concentration degree of the stock exchange turnover by individual members. Oppositely, the indicators for concentration of the stock exchange turnover with the five/ten most traded securities and the indicators for the concentration of the market capitalization of the listed companies registered an increase. In 2009, the number of the Macedonian Stock Exchange members declined by three (from 29 on December 31,2008 to 26 members on December 31,2009). Despite the decrease in the number of stock

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[63] The different behavior of the resident natural persons, in individual months of 2009 can also be due to the different behavior of individual segments of the households, i.e. certain segments of the domestic households were constantly purchasing securities during the year, while other ones were selling.

[64] Exception is the last month of the year, when the domestic legal entities realized, on net basis, slightly lower sale of securities.

[65] The continuous Government bonds, beside on the Macedonian Stock Exchange, can be traded also on the Over the Counter Market.

[66] The trading on the Macedonian Stock Exchange is conducted through the stock exchange members. Pursuant to the Law on Securities, members of the Macedonian Stock Exchange can be brokerage houses, authorized banks and authorized subsidiaries of the foreign brokerage houses that meet the conditions for membership acceptance, in line with the Rules for membership on the Macedonian Stock Exchange.

exchange members, **CR indicators** for the total turnover and the turnover from the classical trading registered a decrease. It is mostly a result of the significant drop in the stock exchange trading by the foreign investors and the consecutive decrease in their percentage share in the total stock exchange turnover (simultaneous increase in the percentage share of the domestic, primarily natural persons in the stock exchange trading), which by one hand, caused bigger dispersal of the stock exchange turnover by individual members. Such movements point to the conclusion that in case of stock exchange trading, the foreign investors in the preceding years (when they were much more active on the Macedonian capital market) have been using the services of the relatively small number of members on the Macedonian stock exchange, where the large part of the stock exchange turnover was concentrated in. The bigger dispersal of the stock exchange turnover with larger number of the stock exchange members results in bigger mutual competitiveness, in order to get more clients, which is expected to result in better operating efficiency of the members and the improvement in the quality of the services that are offered to the clients. Despite that, the smaller concentration of the stock exchange turnover with small number of members on the stock exchange means limited possibility of the individual members (or their clients) to influence on the price levels and in general, on the total movements on the capital market, which from other side means bigger efficiency of the Macedonian Stock Exchange. The indicators for the **share of the turnover with the five/ten most traded securities in the total turnover** registered an increase in 2009, reaching relatively high levels. This is an indicator for the low liquidity on the Macedonian capital market, i.e. its relatively small scope (poor supply of securities with different characteristics). In 2009, **the indicators for the concentration of the market capitalization of the listed companies** registered an increase, which points to the conclusion that the increase in the total market capitalization, on annual basis, was more apparent with the listed companies with higher market capitalization (due to more apparent price growth of their shares).

Table 3.2.3
Indicators for the concentration degree on the secondary capital market in the Republic of Macedonia

Indicators	2007	2008	2009
Number of stock exchange members	22	29	26
CR3 for the total stock exchange members turnover	41.9%	55.4%	39.3%
CR5 for the total stock exchange members turnover	58.9%	66.6%	59.1%
CR5 for the total stock exchange turnover in case of classical trading	54.8%	59.0%	52.1%
Turnover with the five most traded securities/total turnover	54.3%	63.3%	74.3%
Turnover with the ten most traded securities/total turnover	74.3%	86.9%	91.9%
Share of the five shares with the largest market capitalization in the total market capitalization	52.2%	50.2%	56.3%
Share of the ten shares with the largest market capitalization in the total market capitalization	72.8%	70.0%	75.1%

Source: Web site of the Macedonian Stock Exchange and the NBRM calculations

The decrease in the total turnover on the stock exchange undermined the brokerage houses' basis for gain attainment, jeopardized their capability for a long-term profitability maintenance, and with some brokerage houses, it put into question also their survival on the market. In 2009, the total assets of the brokerage houses registered a decrease of Denar 50 million (or 6.2%), while the total realized income of this segment of the financial system is by Denar 113 million less (or 45.4%) in comparison with the realized income in 2008. In 2009, the brokerage houses showed operating loss in the total amount of Denar 23 million (for comparison, in 2008, their profit equaled Denar 59 million)[67]. The possible continuation of the trend of poor stock exchange turnover would additionally jeopardize the existence of some brokerage houses on the market (in 2009, the number of the brokerage houses reduced by two, while at the beginning of 2010 liquidation procedures with 3 more brokerage houses were initiated), which from one hand, could cause lower

[67] Source: Securities and Exchange Commission and NBRM calculations.

competitiveness in this sector of the financial system, worsened quality of the offered services and bigger concentration of the stock exchange turnover.

The higher variability and unpredictability of the price movements were the main feature of the Macedonian capital market in 2009. However, observed on annual basis (December 31, 2008 - December 31, 2009), the three basic stock exchange indices[68] registered an increase. In the first quarter of 2009, the Macedonian Stock Exchange Index **(MBI-10)** and the Publicly held companies index **(MBID)** registered a decrease, mostly as a result of the apparent macroeconomic vagueness in the country and the still uncertain forecasts regarding the announcements for gradual recovery of the global and regional stock exchanges. In the following quarter of the year, MBI-10 and MBID registered certain growth, which is mostly a result of the slightly bigger stock exchange activity of the domestic investors in this period of the year, primarily attracted by the possibility for realization of dividend yields. The rise in the value of the stock exchange indices continued also in the third quarter of 2009, mostly under the influence of the "euphoria" among the domestic investors related to the possible obtaining of a date for recent initiation of the negotiations for acceptance of the Republic of Macedonia in EU, and consequently, the positive expectations for the favorable influence of such events on the political and economic situation in the country (gradual accomplishment of the forecasts for recovery of the global and regional stock exchanges in this period of the year, can be considered as additional cause for the growth in the Macedonian stock exchange indices in the third quarter of 2009). After the annual maximum in October 2009, MBI-10 and MBID began a trend of gradual downward correction in the other months of the year and the beginning of 2010. The decrease in the price levels on the Macedonian Stock Exchange at the end of 2009 and the beginning of 2010, arises from the gradual deflation of the aforementioned optimistic expectations of the Macedonian investors in the third quarter of the year, but it is also a result of the relatively high responsiveness of the movements on the global stock exchanges to the negative information related to the debt crisis in Greece, which had indirect influence (through the regional stock exchanges) also on the developments on the Macedonian capital market. Despite the high variability of the movements of the stock exchange indices, on annual basis (December 31, 2008 - December 31, 2009) MBI-10 and MBID registered an increase of 31.3% and 37.1%, respectively. The Macedonian Stock Exchange Bond index (OMB) showed slightly more stable movements and in 2009 it augmented by 2.3%. Almost during the entire year (except in April, May and July), **OMB index** registered upward movements. The reasons for such movements of the OMB index should be found in the specific characteristics of the bonds traded on the Macedonian stock exchange (the subject of trading is primarily the structural bonds of the Republic of Macedonia, "old foreign exchange saving bond" and "denationalization bond"). The apparent variability and unpredictability of the price movements on the Macedonian Stock Exchange in 2009 are only a proof for the higher risks for the value of the investors' financial property.

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[68] The methodology for calculation of certain indices and information on their structure are available on the web site of the Macedonian Stock Exchange AD Skopje - www.mse.com.mk.

Figure 3.2.9
Movement of the basic stock exchange indices

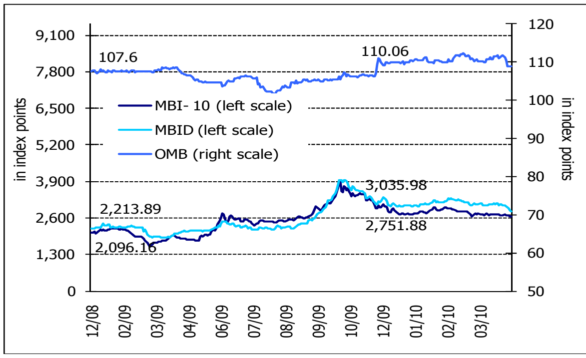
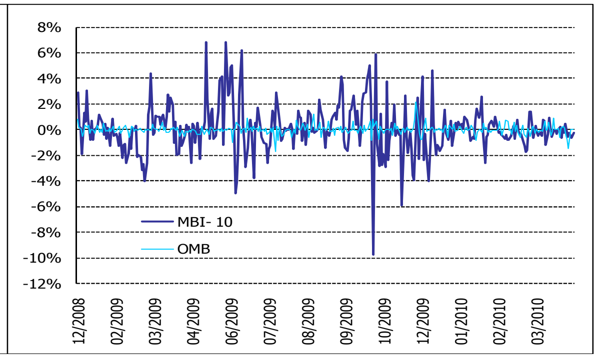


Figure 3.2.10
Daily changes of MBI-10 and OMB



Source: Web site of the Macedonian Stock Exchange and the NBRM calculations

The movements of the market capitalization of the listed companies on the Macedonian Stock Exchange in 2009 corresponds, to large extent, to the movements of the price levels on the capital secondary market. Thus the decrease in the market capitalization of the listed companies in the first quarter of 2009 was followed by the rise in the prices in the following two quarters, but after reaching the maximum in October 2009, a period of a decrease in the market capitalization followed. Annually, the market capitalization of the shares listed on the official market went up by Denar 3,631 million (or 10.3%) and on December 31, 2009 they reached the level of Denar 38,886 million. Relatively high growth of Denar 12,159 million (or 17.1%) was also registered by the market capitalization of the companies having their shares traded on the market segment of the publically owned companies (from September 2009, this market segment was renamed into a market of joint stock companies with special reporting obligations). Such movements caused increase in the relative share of the market capitalization of the listed shares on the official market in GDP from 8.6% on December 31, 2008 to 9.4% on December 31, 2009. The comparison with the remaining stock exchanges in the region points to the relatively low level of the market capitalization of shares on the Macedonian Stock Exchange's official market relative to the GDP[69].

Figure 3.2.11
Dynamics and monthly growth rates of the market capitalization of the listed companies on the official stock exchange market

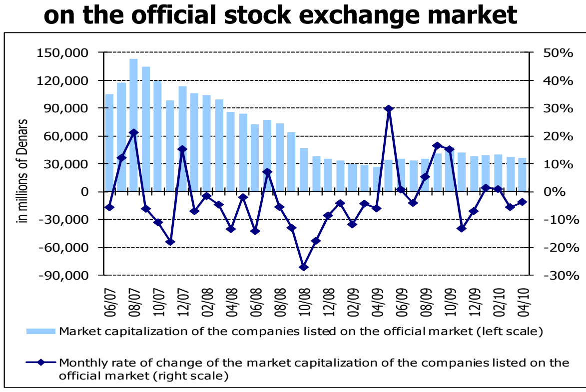
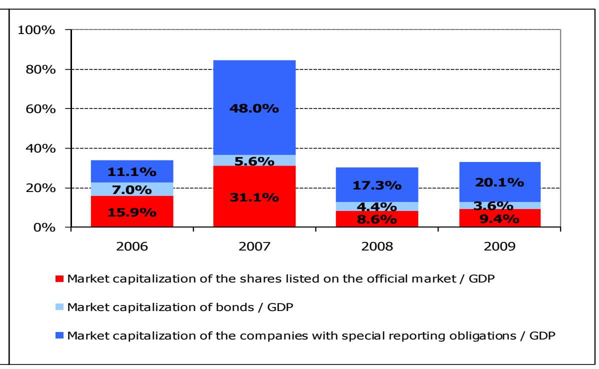


Figure 3.2.12
Market capitalization on the Macedonian stock exchange relative to the GDP



Source: Web site of the Macedonian Stock Exchange and the NBRM calculations
Note: GDP for 2009 is estimated date

[69] On December 31, 2009, the share of the market capitalization of the shares listed on the official market in GDP equaled: 17% for the Bucharest stock exchange, 18.4% for Bulgarian stock exchange, 26.9% for Belgrade stock exchange, 30.7% for the Sarajevo stock exchange, 38.4% for the Istanbul stock exchange and 42.1 % for the Zagreb stock exchange. Source: Web sites of the Federation of the Euro Asian Stock Exchanges, IMF and the Macedonian Stock Exchange and NBRM calculations.

The analysis of the movements on the official market (shares), according to the activity of the listed companies

The movements on the total official market of the Macedonian Stock Exchange are determined, to great extent, by the trading of shares of the listed companies from the "industry" activity. Namely, on December 31, 2009, 14 companies (out of 36 listed companies) from "industry" activity were listed on this market segment, with their market capitalization representing about 40% of the total market capitalization on the official market (analyzed by individual industrial branches, the highest market capitalization accounted for the listed companies from pharmaceutical and metal processing industry). Despite the significant decrease in the total stock exchange turnover in the last two years, the shares of the listed industrial enterprises are among the most traded ones on the Macedonian Stock Exchange and significantly determined the changes in the market capitalization and the price levels on the official market. Thus, the decrease in the market capitalization of Denar 30 billion within December 31,2007 - December 31,2009 of the listed companies from industrial activity, contributed to the total drop of the market capitalization on the official market approximately by 33%. On the other side, the rise in the market capitalization of the listed companies by activities from "industry" determined the total rise in the market capitalization on the official market in 2009. The market capitalization of the listed industrial enterprises in 2009 registered the highest growth (in comparison with other activities) of 49.2%, which in conditions of relatively small number of newly issued shares (relative to the number of the total listed shares) can be considered as approximation for the percentage change of the price level of their shares. Such movements on the official market indicates that the performances (including the influence of the external shocks) and the future development directions of the listed companies engaged in industry represent one of the factors that should have strong influence on the total stock exchange movements on this market segment (also, the still present dilemmas of the experts in our country, how much and whether all movements on the Macedonian Stock Exchange are conditioned by the performances of the companies, the shares of which are subject to stock exchange trading, or they are mostly determined by the developments on the global and regional stock exchanges, by the foreign investors' level of activity on our stock exchange and by accident speculations, primarily from non-economical nature, with domestic investors should also be taken into consideration).

Table 3.2.4
Movements on the official market of the Macedonian Stock Exchange (shares), according to the activity of the listed companies

Activity of the listed companies	Market capitalization (in millions of Denars)			Change in market capitalization (in %)			Turnover (in millions of Denars)			Turnover ratio of the listed shares (total trading)		
	2007	2008	2009	2008/2007	2009/2008	2009/2007	2007	2008	2009	2007	2008	2009
Construction	8,332	2,528	2,952	-69.7%	16.8%	-64.6%	3,131	1,011	277	59.5%	18.6%	10.1%
Personal service activities	501	242	73	-51.6%	-70.0%	-85.5%	103	2	1	28.8%	0.4%	0.5%
Agriculture	3,508	668	947	-81.0%	41.8%	-73.0%	554	165	30	25.7%	7.9%	3.7%
Industry	40,600	10,470	15,625	-74.2%	49.2%	-61.5%	5,766	1,817	1,038	21.5%	7.1%	8.0%
Transport, storage and communication	9,039	1,769	2,154	-80.4%	21.8%	-76.2%	1,382	295	61	24.1%	5.5%	3.1%
Wholesale and retail trade	20,721	6,012	6,446	-71.0%	7.2%	-68.9%	2,171	821	285	15.6%	6.1%	4.6%
Banking	25,869	11,420	8,897	-55.9%	-22.1%	-65.6%	8,956	2,158	923	38.2%	11.6%	9.1%
Hotels and restaurants	4,931	1,893	1,793	-61.6%	-5.3%	-63.6%	520	133	36	15.7%	3.9%	1.9%
Total official market:	**113,499**	**35,003**	**38,886**	**-69.2%**	**11.1%**	**-65.7%**	**22,583**	**6,400**	**2,650**	**27.9%**	**8.6%**	**7.2%**

Source: Web site of the Macedonian Stock Exchange and NBRM calculations

The analysis of the indicators for the market value of the listed companies on the official market points to gradual "deflation" of the speculative price bubbles that emerged before 2008. The analysis by activities of the listed companies, or by individual companies, shows that the shares of certain companies are still overestimated. Namely, at the end of 2009, the weighted ratio of the market price of the shares of the listed companies on the official market to their earnings per share (price-to-earnings per share ratio[70] or just P/E) reduced to the level of 15.52[71] (on

[70] P/E per individual activity, at the level of the official market and MBI-10 shall be calculated as a sum of P/E per adequate individual companies. Thus P/E of each company is weighted with the share of the market capitalization of the company in the total market capitalization at the level of activity, at the level of the official market, i.e. the total market capitalization of the listed shares MBI-10 consists of. The P/E calculations excludes the extreme values (for 2009, "Makstil" AD Skopje is excluded, P/E of which equals 2,933.29 on December 31,2009. If "Maksil" AD Skopje is included in the calculation pertaining to December 31, 2009, P/E at the level of "industry" activity would equal

average, the investors are ready to pay Denar 15.52 per each Denar profit per listed share), which is a decrease of 77.31 compared to December 31, 2007 On the other hand, on December 31,2009 the weighted ratio of the market value of the shares of listed companies on the official market to their book value (price-to-book ratio, or just P/B[72]) equals 1.02[73] which points to the statement that the market price of the shares, on average, is almost equal to their book value (or more precisely, on December 31,2009 the value of the listed shares on the official market is higher by 2% than the value invested by the shareholders).

Table 3.2.5
Weighted indicators for the market value of the listed companies on the official market

Activity of the listed companies	Price/earnings per share (P/E ratio)			Price/book value per share (P/B ratio)		
	31.12.2007	31.12.2008	31.12.2009	31.12.2007	31.12.2008	31.12.2009
Construction	25.17	6.94	13.75	2.23	0.52	0.66
Personal service activities	n/a	n/a	n/a	0.90	0.56	0.18
Agriculture	23.86	2.80	n/a	1.33	0.30	0.46
Industry	58.44	40.99	17.93	3.96	0.85	1.38
Transport, storage and communication	175.16	21.09	50.37	2.11	0.43	0.56
Wholesale and retail trade	85.21	13.51	n/a	3.18	0.91	1.02
Banking	117.46	21.63	9.12	2.50	0.91	0.72
Hotels and restaurants	26.46	9.58	16.38	2.24	0.89	0.74
Total official market:	**92.83**	**31.21**	**15.52**	**3.02**	**0.90**	**1.02**
MBI- 10	**53.37**	**21.84**	**11.16**	**3.48**	**0.80**	**1.12**

Source: Web site of the Macedonian Stock Exchange and NBRM calculations
Note: 1. n/a - non-applicable; it means that the listed companies from the respective activity operate with loss.
2. The weighted indicators for the market value are calculated on the basis of the market price of the shares on the last trade date of the year. The calculation is made weighting the indicators for the respective companies with their shares in the adequate market capitalization.

2.2.3. Investment funds in the Republic of Macedonia[74]

In 2009, there were five companies on the domestic financial market managing with a total of eight investment funds, which is unchanged situation in comparison with December 31,2008. However, during the year, one open investment fund, including also the company it was managed by, was liquidated, but on the other hand new fund and new fund management company were established. At the beginning of 2010, because of the non-compliance with the provisions[75] of the Law on Investment Funds ("Official Gazette of RM" No.12 /2009), the Securities Exchange Committee adopted a decision on permanent

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635.35, at the level of the official market 240.81, while P/E for MBI-10 would equal 322.47. The calculation of P/E for 2007 does not contain "Hoteli Metropol" AD Ohrid, P/E of which on December 31,2007 equaled 25,647.80. If including "Hoteli Metropol" AD Ohrid in the calculation for December 31,2007, P/E at the level of the activity "hotels and restaurants" would equal 5,490.22, while at the level of the official market 329.59 ("Hoteli Metropol" AD Ohrid is not part of MBI-10).

[71] As a comparison, P/E for 2009 for individual stock exchanges equals: 14.2 for the Hungarian stock exchange, 19.3 for the Polish stock exchange and 12.6 for the Turkish stock exchange. Source: Global Financial Stability Report, April/2010, IMF

[72] The same calculation manner as that used for the calculation of P/E.

[73] As a comparison, P/B for 2009 for individual stock exchanges equals: 1.4 for the Hungarian stock exchange, 1.6 for the Polish stock exchange and 1.9 for the Turkish stock exchange. Source: Global Financial Stability Report, April/2010, IMF

[74] Currently, in the Republic of Macedonia there are open and private investment funds and funds management companies. Having in mind that pursuant to the Law on Investment Funds ("Official Gazette of RM" no. 12/2009), there is no competent body in the Republic of Macedonia that would monitor and control the operations of the private funds, i.e. the authorized private funds management companies, the analysis for this part of the report is focused exclusively on the open investment funds and companies responsible for their management. In 2009, there are total 14 companies for private funds management, i.e. total of 8 private funds. The absence of a competent regulatory and supervisory body for this segment of the financial system means undertaking of higher risk by the potential investors of this type of funds.

[75] Source: Web site of the Securities and Exchange Commission.

revocation of the operating license of another authorized company, thus extinguishing both of the funds it was managing (on December 31,2009 the assets of these funds equaled 34.4% of the total assets of the open investment funds in the Republic of Macedonia).

Figure 3.2.12
Structure of the investment funds' property

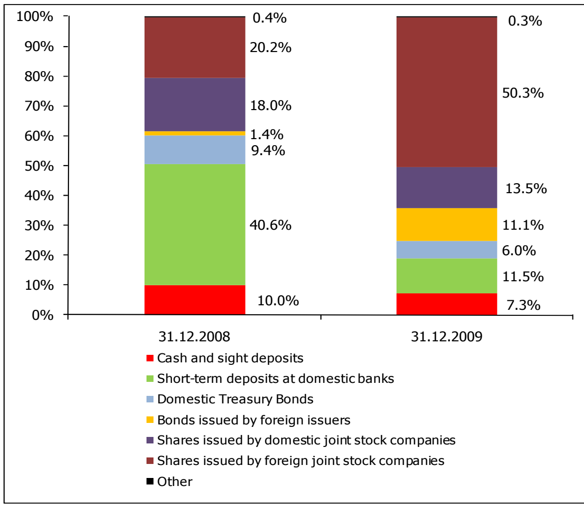
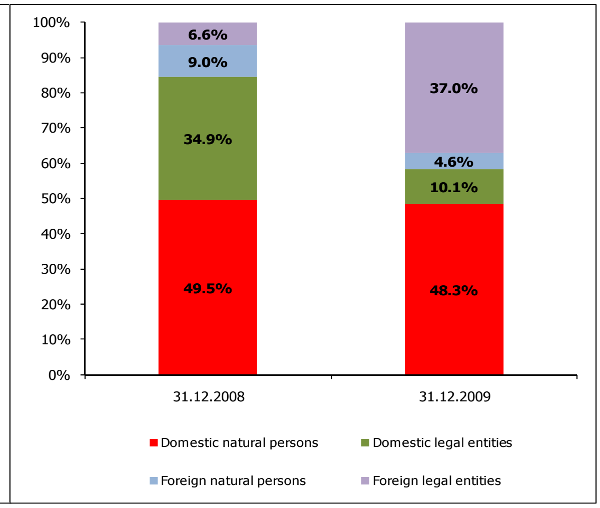


Figure 3.2.13
Ownership structure of the issued stake document



Source: Securities and Exchange Commission and NBRM calculations

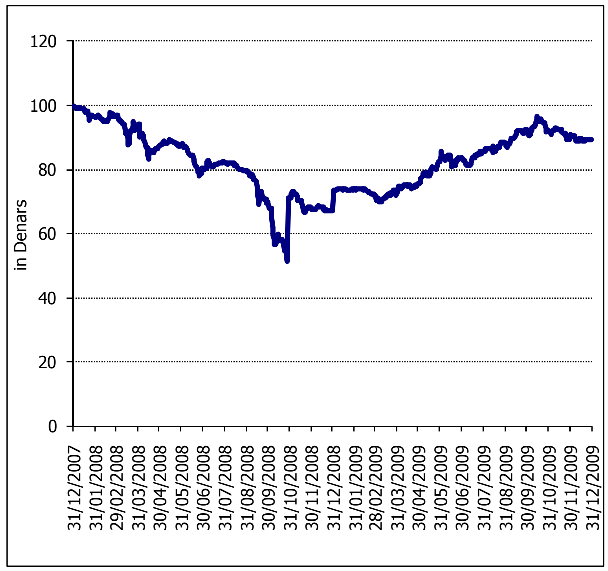
The open investment funds were the fastest growing segment of the financial system in 2009 (according to the percentage growth, although the absolute amount was minor). Having in mind the fact that the first recovery signals of the stock exchange movements were expected and registered on the global stock exchanges (and later to emerge also on the regional stock exchanges), the largest portion of the assets of the investment funds was deposited in shares and bonds of foreign issuers. In 2009, the structure of the investment funds' property severely changed in favor of more risky financial instruments (mostly shares). The domestic natural persons are still the biggest investors in the open investment funds. The total property of the investment funds registered an annual increase of Denar 68 million (or 81%) thus reaching the level of Denar 152 million on December 31,2009. The largest portion of the increase in the funds' assets is due to the rise in placements in shares and bonds of foreign issuers, which at the end of the year represented 61.4% of the total property of the investment funds (increase of 39.8 percentage points compared to December 31,2008). At the end of 2009, the assets structure of the investment funds was dominated (63.8%) by the investments in shares of domestic and foreign joint stock companies, as relatively more risky financial instruments, in comparison with the funds, sight deposits and time deposits with domestic banks with maturity of one year, which were dominant in December 31,2008, with a share of 50.6%. Such investments structure indicates that the open investment funds are mostly exposed to the risk of change in the price of the financial instruments (from the group of market risks), as well as to the liquidity risk (which would materialize primarily in case of possible "freezing" of the foreign stock exchanges[76] and/or the domestic stock exchange). The credit risk exposure is smaller (on December 31,2009, the credit risk exposure encompasses the investments in time deposits with maturity of up to one year with domestic banks, in

[76] Pursuant to the Law on Investment Funds, the funds' assets can be invested in securities traded on regulated capital markets and securities that are received on the official quotation on the respective capital market.

government bonds issued by the Republic of Macedonia and other states and in bonds issued by foreign non-government issuers that encompass a total of 28.6% of the funds' assets), similar to the exposure of the funds to the currency risk (about 60% of the assets are invested in instruments issued by foreign issuers[77]). The possible materialization of these risks would mostly reflect on the value of the financial property of the domestic natural persons, as the largest depositors in the open investment funds (on December 31,2009 the domestic households participated with 48.3% in the ownership structure of the issued stake documents in the investment funds).

The largest portion of the increase in the funds' assets arises from the net realized net inflows of funds based on net sale of stake documents in the open investment funds (the amount of the sold stake documents exceeds the amount of purchased stake documents). The increase in the value of the funds' property is partially due to the increase in the market prices of individual financial instruments the investment funds' assets are invested in. In 2009, the investment funds registered net inflows of funds in the amount of Denar 55 million (i.e. inflows of funds based on sale of stake documents in the total amount of Denar 62 million). The largest portion of the realized net-inflows of funds in 2009 is based on the net investments of the domestic households in stake documents in the investment funds. The increase in the market prices of individual financial instruments in which the investment funds invest their assets was another reason for the mounting value of their property, which was manifested through increase in the selling prices of the stake documents in the investment funds. However, the weighted[78] daily average selling price of the stake documents in the funds is still bellow Denar 100 (given the initial offers of the stakes with the opened funds, all funds management companies set the price of initial issuance of the stakes at the level of Denar 100), which is a result of the severe drop in the selling prices of the stake documents in 2008.

Figure 3.2.14
Movement of the weighted daily average selling price of the stake documents with the open investment funds



Source: Securities and Exchange Commission and NBRM calculations
Note: 1. The weighted daily average selling price of the stake documents in the open funds is calculated by weighting the daily average selling price of the stake documents of individual companies with their shares in the average annual net value of the funds' property; 2. The sudden upward movement of the weighted daily average selling price of the stake documents, in October 2008 is a result of the establishment of new three funds in that period.

Despite the dynamic growth in the assets of the open funds in the last two years (as they emerged on the domestic financial market), the funds 'property is still far below the necessary level for profitable, even solvent operating of some

[77] The data on the currency structure of the funds' property are not available, because of which their exposure to the currency risk can not be precisely analyzed.
[78] The weighted daily average selling price of the stake documents in the open funds is calculated by weighting of the daily average selling price of the stake documents of the individual companies with their shares in the average annual net value of the funds' property.

open investment funds management companies. Thus, although in 2009 the funds management companies registered larger income by 77.1%[79] in comparison with the previous year, however, all companies showed operating loss in the total amount of Denar 27 million. In some companies, the realized loss for 2009 exceeds the amount of the core principal, thus putting into question their solvent operating (one of these companies has its operating license permanently revoked at the beginning of 2010). The reasons for the non-profitable operating of the companies for managing open investment funds should be found in the bad timing for their registration and founding (a part of the funds were created at the end of 2007 when the global financial crisis was at the very beginning, while part of them were established in the second half of 2008 when the crisis culminated and it was felt in the Republic of Macedonia, poor activity of the potential investors (having in mind the deteriorated general financial situation, but also probably the insufficient acquaintance of the investors in the country with these financial institutions), as well as the relatively high competitiveness in this segment of the financial system, because of which the relatively small deposited amounts of the potential investors are dispersed to larger number of funds. Although survival of some of the open funds management companies is jeopardized, however it is a small segment of the financial system that can cause no significant impact on the stability of the total financial system in the country (the total amount of the assets of the open funds management companies and the funds' assets equal 0.05% of the GDP for 2009).

[79] The main income categories of the open funds management companies are: the compensation charged from the open fund, for managing of the management company (on annual basis, it should not exceed 3% of the total value of the fund's property) and the compensations charged from the depositors in the funds, for "entry" in i.e. "exit" from the investment in the fund (these compensations must not exceed 5% of the value of the payment, i.e. disbursement of the stake in/from the open fund). The investors in the open funds are also encumbered with the costs for printing of the forms for registering the stakes and other operating costs stipulated in the statute and the prospectus of the fund (mostly to the amount of the real costs).

3. Banking system of the Republic of Macedonia[80]

The effects of the global crisis with the banking system of the Republic of Macedonia were felt with a delay. They were more apparent with the real sector, and hence indirectly and in combination with obvious uncertainty related to the crisis developments reflected also on the banks' operations. However in 2009 the banking system retained its stability and safety. This was influenced by several factors, such as the higher caution of the banks in to take risk in their operations, the measures of the central bank for reduction of the risk arising from the high credit growth and the measures for the banks liquidity strengthening, big restraint of the banking system and its orientation towards performance of activities with residents (especially on the side of the sources of funds), conducting of traditional banking activities, absence of exposure to the so-called "toxic products".

The crisis mostly influenced on the banks' credit portfolio quality where the largest risks for the stability of the banking system arises from. The credit growth impediment, parallel to the deteriorated economic conditions and expectations in the country resulted in worsen indicators for the credit portfolio quality. Also, for the banks in the Republic of Macedonia, the exposure to the indirect credit risk due to the incorporated safeguard clauses pertaining to both the currency and the interest rate risk is big and especially important from the aspect of the financial stability maintenance.

As a direct consequence of the decrease in the volume of activities and worsening of the credit portfolio quality, the profitability of the banking sector registered an obvious decline. However, the conservative liquidity management in the past enabled the banks to have satisfactory level of accumulated liquid assets, which directly influenced on the stability maintenance and overcoming of the tightened market conditions. At the end of 2009, in comparison with 2008, the liquid position of the banking sector improved in terms of the quality, which was contributed by the prudently regulatory measure of the NBRM, introduced in the first quarter of the year, aimed at maintenance of the minimal liquidity rates.

The solvency of the banking system remained high, while the stress-testing the National Bank carries out on regular basis showed that the banks are highly resistant to different hypothetical shocks and simulations.

3.1. Structural characteristics of the banking system

The banking system of the Republic of Macedonia preserved its role as the dominant and the most developed segment of the financial sector despite the minimal decrease in its share in the totals assets of the financial sector. On December 31,2009, the total assets of the banking system registered an annual increase of 7.1%, which is more significant impediment in the annual growth in the previous years. However, the rate of increase in the banking system is low also relative to the annual growth rate in the total funds of the financial sector. Despite such dynamics, the rise in the total assets of the banking system, as in the preceding year, determined approximately 90% of the annual increase in the assets of the entire financial sector of 2009.

[80] More detailed analysis for the banking system can be found in the "Report on the Banking System and Banking Supervision in the Republic of Macedonia" in 2009.

Table 3.3.1
Structure of the banking system of the Republic of Macedonia

Structural indicators of deposit institutions	Year						
	2003	*2004*	*2005*	*2006*	*2007*	*2008*	*2009*
Number of deposit institutions	36	36	34	31	30	29	28
Banks	21	21	20	19	18	18	18
Saving houses	15	15	14	12	12	11	10
Total assets of deposit institutions (in millions of Denars)	106,139	119,539	142,370	176,444	226,545	254,153	271,825
Banks	104,875	117,985	140,436	174,117	223,659	250,704	268,543
Saving houses	1,264	1,554	1,934	2,327	2,886	3,449	3,283
Structure of assets of deposit institutions	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Banks	98.8%	98.7%	98.6%	98.7%	98.7%	98.6%	98.8%
Saving houses	1.2%	1.3%	1.4%	1.3%	1.3%	1.4%	1.2%

Source: NBRM, according to the data submitted by the banks and the savings houses.

The banking system consists of two types of deposit institutions: the banks and the savings houses, with the banks dominance being strongly emphatic. The savings houses have minor role in the total banking activities, and thus, in the activities of the entire financial sector.

Table 3.3.2
Concentration of the activities of the banking system of Republic of Macedonia[81]

Concentration ratios	2003	2004	2005	2006	2007	2008	2009
Total assets							
Herfindahl index	1,842	1,685	1,607	1,595	1,625	1,579	1,637
CR 5	76.1%	76.2%	75.0%	74.7%	76.6%	74.7%	77.4%
Total loans of non-financial entities							
Herfindahl index	1,614	1,606	1,734	1,726	1,793	1,731	1,775
CR 5	77.1%	76.1%	77.8%	77.9%	79.7%	79.1%	80.0%
Loans to households							
Herfindahl index	1,558	1,746	2,010	1,932	2,001	1,953	2,064
CR 5	73.4%	76.2%	78.2%	78.5%	80.0%	76.9%	81.2%
Loans to enterprises							
Herfindahl index	1,718	1,625	1,670	1,719	1,819	1,859	1,937
CR 5	82.8%	79.8%	78.5%	78.3%	79.1%	79.2%	81.3%
Total deposits of non-financial entities							
Herfindahl index	2,374	2,212	2,049	1,928	1,903	1,832	1,947
CR 5	84.7%	84.4%	81.7%	80.2%	81.8%	82.0%	83.5%
Deposits of households							
Herfindahl index	2,674	2,534	2,366	2,172	2,084	2,097	2,098
CR 5	87.3%	85.6%	83.9%	82.5%	83.9%	84.8%	85.7%
Deposits of enterprises							
Herfindahl index	2,073	1,967	1,810	1,789	1,780	1,642	1,793
CR 5	82.3%	83.9%	81.0%	80.9%	81.7%	79.9%	84.9%

Source: NBRM, according to the data submitted by the banks.

In 2009, the high concentration in the banking system remained, from the aspect of individual activities (with the highest concentration with the deposit activity) and from the aspect of individual sectors, where the "households" sector registered the highest concentration.

[81] The indicators for the level of concentration of the banking system of individual European countries are on a significantly lower level relative to the Republic of Macedonia. The Herfindahl index and CP5 indicator for the total assets by countries equal: in Germany 191 and 22.7%, Italy 344 and 33%, Poland 562 and 44.2%, France 681 and 51.2%, Hungary 822 and 54.5%, the Czech Republic 1,000 and 62%, Slovakia 1,197 and 71.5%, Slovenia 1,268 and 59.1%. The concentration is higher in Latvia (1714 and 81.2%) and Estonia (3120 and 94.8%).

Table 3.3.3
Share of the foreign investors in the banks' ownership structure

Structural indicators of foreign owned banks	Year						
	2003	***2004***	***2005***	***2006***	***2007***	***2008***	***2009***
Number of banks with presence of foreign shareholders	15	15	17	17	16	16	16
Number of banks with majority foreign ownership	8	8	8	8	11	14	14
of which: foreign bank subsidiaries	4	4	4	4	5	8	8
Assets of foreign bank subsidiaries/Total assets	43.1%	42.1%	43.7%	45.0%	52.5%	59.0%	61.0%
Capital and reserves of foreign bank subsidiaries /Total capital and reserves	38.1%	36.8%	36.7%	37.6%	39.5%	55.7%	54.9%

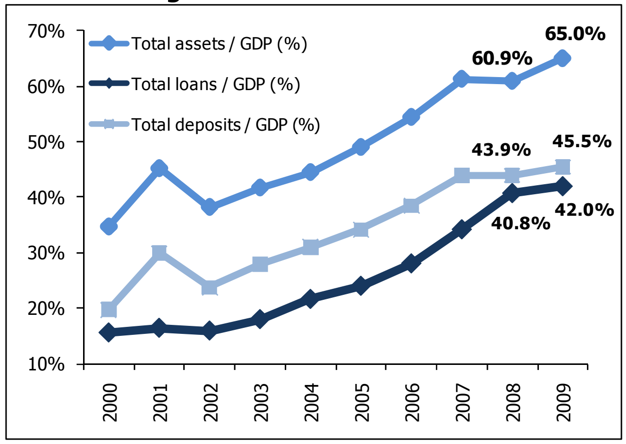
Source: NBRM, according to the data submitted by the banks.

Other feature of the banking system of the Republic of Macedonia is the high presence of foreign capital, with 14 out of 18 banks being under dominant ownership of foreign shareholders, which mostly come from the EU countries. These banks prevail in the main on-balance sheet categories, with shares ranging from 85% (in the total capital) and high 98% (in the total post taxation gain).

3.2. Banks activities

The financial intermediation of the banking system which terminated the trend of increase in 2008, this year began to move upwards again. In the first half of 2009, the level of the financial intermediation was still under big influence of the decrease in the domestic economic activity. However, until the end of 2009, gradual stabilization in the global and the domestic economy was registered, which from its side had certain influence also in mitigating of the psychological pressures in the decision-making of the economic agents. In such conditions, the deposits of the non-financial entities increased, which, from one side influenced on the assets growth. The credits continued registering an upward trend, although with slower dynamics.

Figure 3.3.1.
Degree of financial mediation



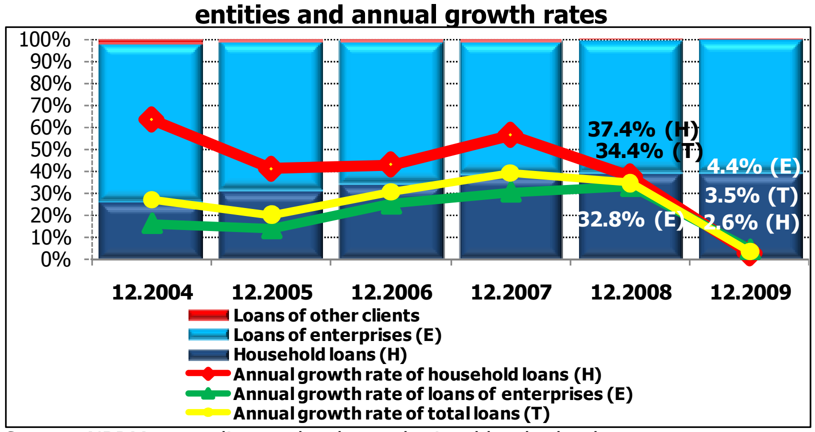
Source: NBRM, according to the data submitted by the banks.

3.2.1. Banks' assets and liabilities structure

The credits of the non-financial entities are the main component of the assets of the banking sector. However, in comparison with the previous year, their share in the assets' structure decreased. It is a result of the slower dynamics of the credit growth relative to the faster increase of the other assets' components, primarily of the placements with other banks and funds and assets on the accounts with the NBRM.

The slower dynamics of the non-financial entities in 2009 was conditioned, from one hand by the slower intensification of the banks' deposit potential, as the main source of their financing, and the banks' credit policy tightening from the other (which was primarily a result of the banks' vigilance about the further worsening of the credit portfolios. Thus on December 31,2009 the credits of the non-financial entities totaled Denar 173,710 million, which is a growth rate of only 3.5%, annually. In 2008, this rate equaled 34.4%. Such a significant impediment of the credit growth was evident with all aspects of the credit structure - sector, maturity and currency structure.

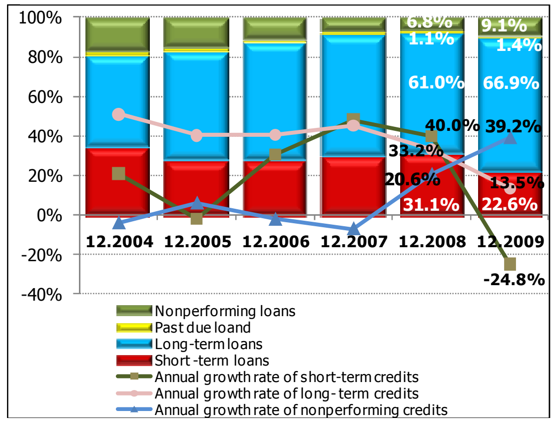
Figure 3.3.2.
Sector structure of the total credits of the non-financial entities and annual growth rates



Source: NBRM, according to the data submitted by the banks.

From the aspect of the sector structure, the credits of both the households and enterprises registered significantly slower growth, which was slightly more evident with the households' credits. As in the previous years, this year as well the households' credits have smaller share in the total credits (with 39.2%) relative to the enterprises' credits, the share of which equaled 60.6%.

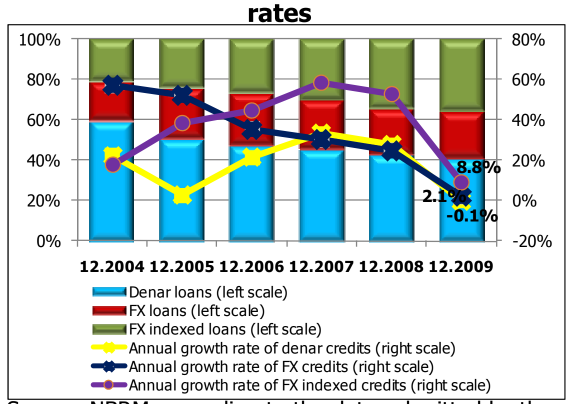
Figure 3.3.3.
Maturity structure of the total credits of non-financial entities and annual growth rates



Source: NBRM, according to the data submitted by the banks.

Significant changes with all types of credits in the maturity structure analysis were evidenced. While the long-term and the due credits showed significantly slower growth (of 19.7 percentage points and 23.6 percentage points, respectively), the growth in the non-performing credits intensified. On the other hand, the short-term credits registered negative growth rate. The increase in the non-performing credits, as well as their larger share in the total credits of the non-financial entities, indicates worsening of the credit portfolio quality. In 2009, these credits incremented by Denar 4,442 million. About two thirds of the non-performing loans account to the enterprises.

Figure 3.3.4.
Currency structure of the total credits of non-financial entities and annual growth rates



Source: NBRM, according to the data submitted by the banks.

In 2009, the Denar loans registered a minimal decline, although their share in the credits' currency structure is the largest. As a result of the banks caution to protect from the currency risk (in conditions of crisis the preference for the foreign exchange specially intensifies), the Denar credits with FX clause showed larger increase in 2009, mounting their share in the total credits primarily for the account of the lower share of the Denar credits.

The slower credit growth dynamics, as well as the lower share of the credits in the assets is due to the bigger significance of the placements with other banks and other non-financial institutions and bigger share of the cash and balances with NBRM in the assets structure of the banking sector. The increase in the balances with NBRM is partially a result of the amendments to the regulations for calculation and fulfillment of the reserve requirement of the banks (increase in the reserve requirement rates[82] and introduction of the requirement for inclusion of part of the reserve requirement in foreign currency in the calculation and fulfillment of the reserve requirement in Denars[83]). In comparison with 2008,

[82] In May 2009, amendments to the Decision on reserve requirement were made, which provided increase in the reserve requirement rates from 10% to 11.5% for the liabilities in foreign currency for the July fulfillment period (i.e. 13% starting for the August fulfillment period) and from 10% to 20% for the Denar liabilities with FX clause. The reserve requirement rate for Denar liabilities remained unchanged, 10%.

[83] The amendments to the Decision on the reserve requirement introduced a requirement for the banks to meet part of the calculated reserve requirement in foreign currency in Denars (13% for the July fulfillment period and 23% starting from the August fulfillment period).

when the placements with domestic and foreign banks went down (from Denar 12,398 million, relative to 2007), in 2009 the placements with banks remarkably increased (primarily foreign banks). To certain extent it is related to the introduced requirement for the banks for meeting the minimum liquidity ratios prescribed by the National Bank[84], but it is also due to the banks' tightening of their crediting policies, which was evident, with different intensity, during the entire 2009.

Figure 3.3.5.
Assets' structure of the banking system

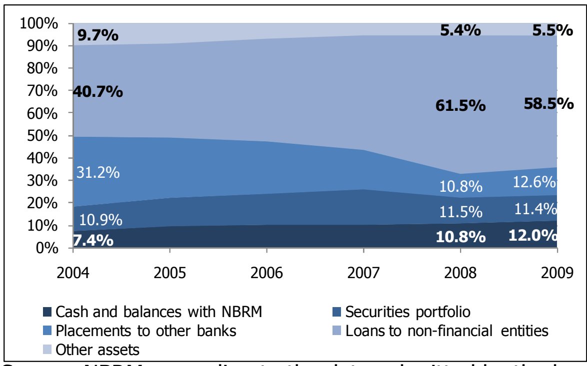
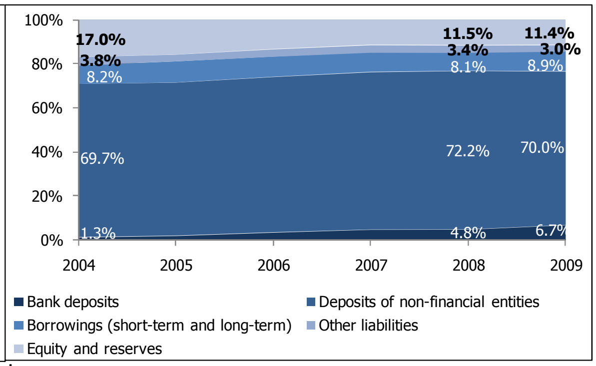


Figure 3.3.6.
Liabilities' structure of the banking system



Source: NBRM, according to the data submitted by the banks.

The deposits of the non-financial entities are dominant category in the liabilities of the banking system and they are the main source of financing of the banks' activities. However, in 2009 they reduced their share in the liabilities for the account of the banks and other financial institutions, which is due to the slower growth in the deposits of the non-financial entities relative to the preceding year (in 2009, they augmented by 3.8%, whereas their rise of 12.8% in 2008). Regarding the pro-cyclic character of the deposits in conditions of a crisis and negative expectations, their movements are fully expected. On December 31, 2009 the total deposits of the nonfinancial entities reached the amount of Denar 187,875 million.

[84] In the first quarter of 2009, the new Decision on managing the banks' liquidity risk became effective. This Decision, inter alia, imposed a requirement for the banks to maintain minimal level of liquidity ratio, defined as a relation between the on-balance sheet and off-balance sheet assets and liabilities maturing in the maturity segments up to 30 and 180 days, and especially for assets and liabilities in Denars and in foreign currency. The placements in NBRM instruments (they are denominated in the domestic currency) can be used in the calculation of the ratios in Denars or in foreign exchange.

Figure 3.3.7.
Sector structure of the total deposits and the annual growth rate

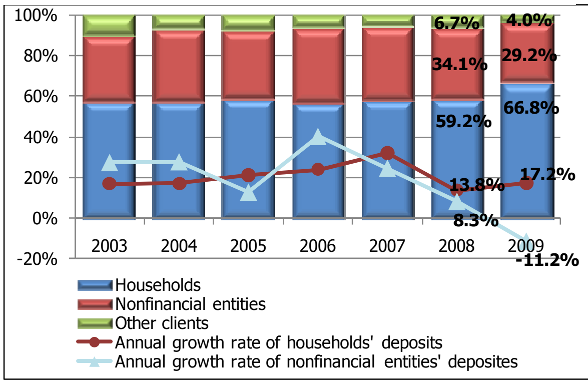
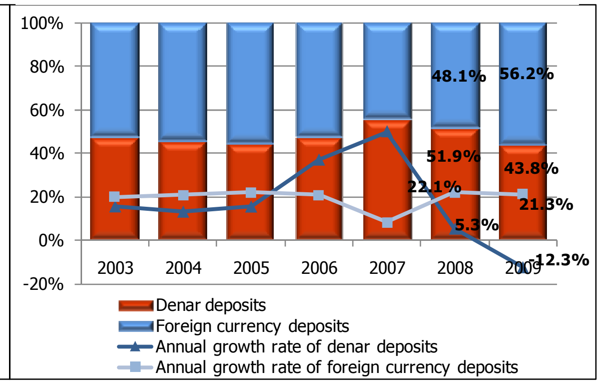


Figure 3.3.8.
Currency structure of the total deposits and annual growth rate



Source: NBRM, according to the data submitted by the banks.

In the sector structure of the deposits of the non-financial entities, the households' deposits prevail. From the aspect of the currency structure, in 2009 the Denar deposits[85]decreased for the first time in seven years, simultaneously decreasing the structural share in the total deposits. The foreign currency deposits continued to mount, although with insignificant deceleration.

In conditions of generally reduced propensity for saving, the banks applied interest rates policies that stimulated the long-term saving, thus improving the deposits' maturity structure. Such movements are somewhat uncommon, having in mind that in conditions of a crisis, the deposits are maintained on a shorter-term basis. Thus the long-term deposits over one year maturity registered bigger increase compared to the short-term deposits with maturity of up to one year, while the sight deposits, for the first time in the last seven years, registered a fall, which equaled 7.3%. Such changes contributed to the decrease in the share of these deposits in the deposits' maturity structure (thus continuing the downward trend evident in the last seven years), contrary to the bigger share of both the long-term and the short-term deposits.

Figure 3.3.9.
Share of the claims from non-residents in the total banks' assets

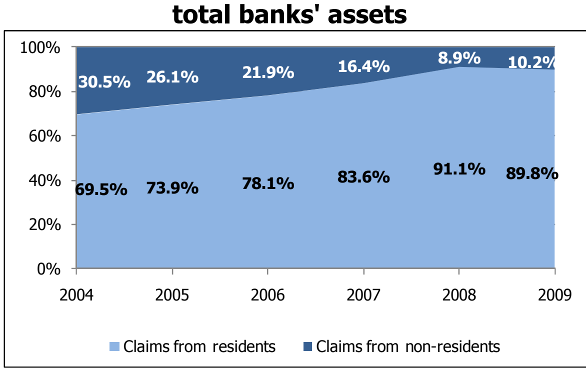
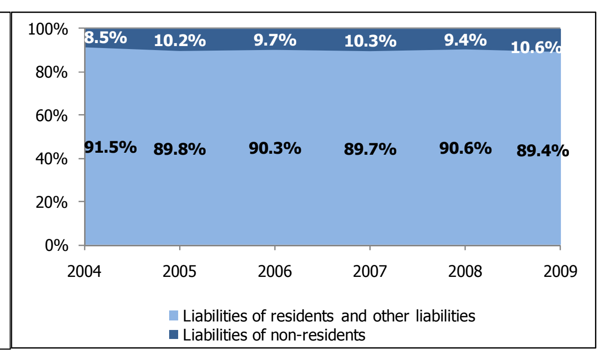


Figure 3.3.10.
Share of the liabilities to non-residents in the total banks' liabilities



Source: NBRM, according to the data submitted by the banks.

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[85] The Denar deposits include also the deposits in Denars with FX clause, which participate with 4.7% in the total deposits.

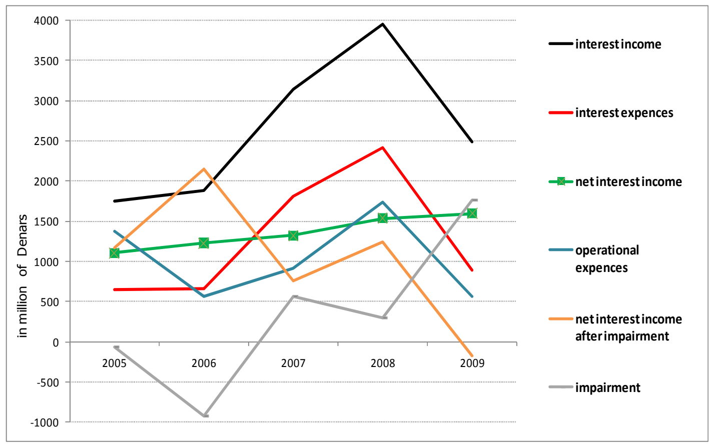
One of the advantages of the banking system of the Republic of Macedonia, which prevented an occurrence of lack of liquidity in circumstances when the largest international banks succumbed to the liquidity shortage, was the orientation of the domestic banking system towards utilization of domestic sources of funds (primarily in form of deposits). For several years, the total liabilities of the banks to nonresidents equal about 10% of the total liabilities. In comparison with 2008, they increased by 0.8 percentage points. The increase is due to the rise in the borrowings and the deposits from the parent entities, as well as the increase in the subordinated and hybrid capital instruments. In the structure of the liabilities to non-residents, the borrowings and the foreign banks' deposits dominated with a share of 65.6%, relative to the subordinated and hybrid capital instruments the share of which equaled 20.6%.

After the several-year period of decrease in the share of the claims from non-residents in the total assets, in 2009 this share augmented primarily as a result of the placements to foreign banks.

3.3. Profitability

The unfavorable economic movements observed both globally and within the domestic economy, were especially noticeable with the banking sector through the worsening in the profitability indicators. Alike to the banking systems of more developed countries which suffered the main blow on the profitability in 2008, the banking system of the Republic of Macedonia began to feel the crisis impact a year later. The 2009 profit of the Macedonian banking system is lower by 51% relative to 2008, and the number of banks that showed loss increased. The main causes for the deteriorated profitability are:

Figure 3.3.11
Annual growth in certain income and expenditures



Source: NBRM, according to the data submitted by the banks

- the worsened quality of the banks' credit portfolio, evident through the increase in the impairment, which consumes 1/3 of the realized net interest income;
- fall in the growth of the banks' activities, especially of the credit activity, which reflected in form of a decrease in the total regular income of 5.8% (the minimal growth in the net interest income was not sufficient to buffer the drop in the net income based on commissions and other regular income);
- the stimulating interest policy of the banks in their strive for maintenance and preservation of the deposit core;
- the increase in the operational costs, including also the wage expenses (although with slower pace relative to the previous years).

The aforementioned determinants resulted in halving the amount of the basic profitability indicators, the return on assets and return on capital. The possible extended effect of the worsened profitability determinants, in conditions of limited possibilities for providing new external sources, can influence on restricting the banks' possibilities for higher capital position from internal sources, through reinvestment of the gain.

The fact that the banks' ability to generate income that covered the expenses from the operations has not been impaired should especially be emphasized. The indicator for that is the amount of the profit before impairment, which remained almost unchanged compared to 2008.

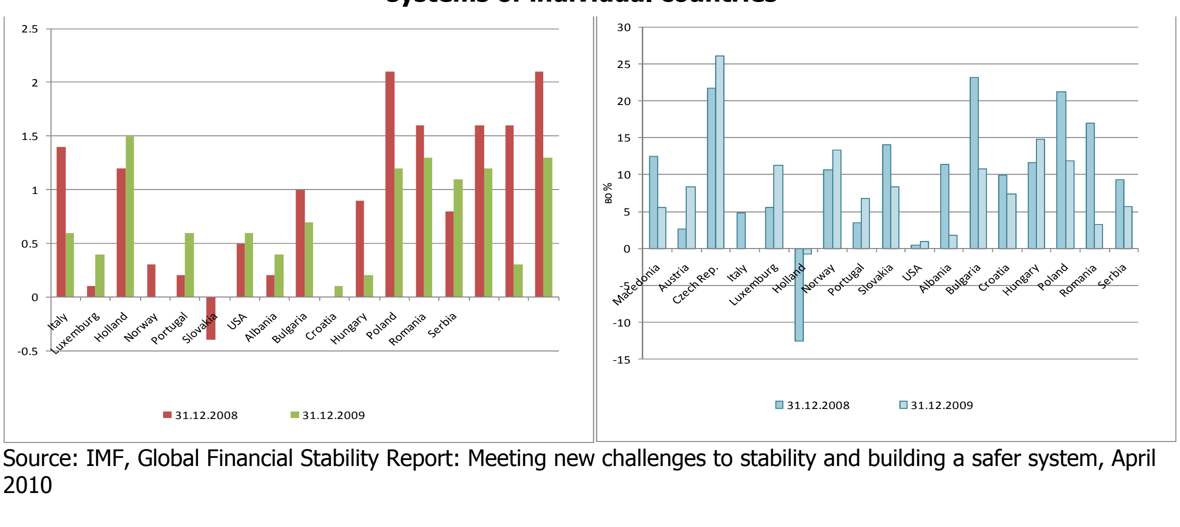
Table 3.3.4
Profitability indicators

Ratio	31.12.2005	31.12.2006	31.12.2007	31.12.2008	31.12.2009
Return on average assets (ROAA)	1.5%	1.8%	1.8%	1.4%	0.6%
Return on average equity (ROAE)	7.5%	12.3%	15.2%	12.5%	5.6%
Operational expenses / total regular income (Cost-to-income)	66.5%	62.0%	58.4%	62.2%	70.1%
Non interest expenses / total regular income	68.1%	63.6%	60.3%	67.2%	75.5%
Salaries / total regular income	28.7%	26.2%	23.2%	24.6%	29.4%
Impairment / net interest income	50.8%	26.0%	29.0%	27.4%	32.8%
Net interest income / average assets	3.9%	4.0%	3.8%	3.8%	3.5%
Net interest income / total regular income	53.8%	57.1%	57.0%	61.9%	66.3%
Net interest income / non interest expenses	79.0%	89.7%	94.5%	92.1%	87.8%
Profit / total regular income	17.1%	25.6%	27.5%	23.2%	12.1%
Number of employees	4633	5010	5390	6111	6084
Asset per employee (in million of Denars)	30.3	34.8	41.5	41.0	44.1
Profit per employee (in million of Denars)	0.3	0.6	0.7	0.6	0.3
Number of banks that operate with loss (total number of banks)	6 (20)	2 (19)	4 (18)	6 (18)	7 (18)
Interest rate spread - denars	6.9	6.5	4.6	3.7	3.1
Interest rate spread - denars with fx clause	6.5	7.0	5.6	4.1	5.7
Interest rate spread - fx	6.8	6.7	6.5	4.2	4.2

Source: NBRM, according to the data submitted by the banks

The comparison of the trend of the indicators for the return on assets and the return on equity by countries showed the delayed effects of the crisis in the developing countries in comparison with the banking systems of the more developed countries.

Figure 3.3.12
Movement of the rates of return on assets (left) and return on equity (right) of the banking systems of individual countries



Source: IMF, Global Financial Stability Report: Meeting new challenges to stability and building a safer system, April 2010

The structure of the income of the banking system is satisfactory, having in mind that the income based on the regular operating[86] represents approximately 95% of the banks' total income and it is sufficient for covering their expenditures. However, the recent economic crisis showed that despite such income structure, they were not sufficient for

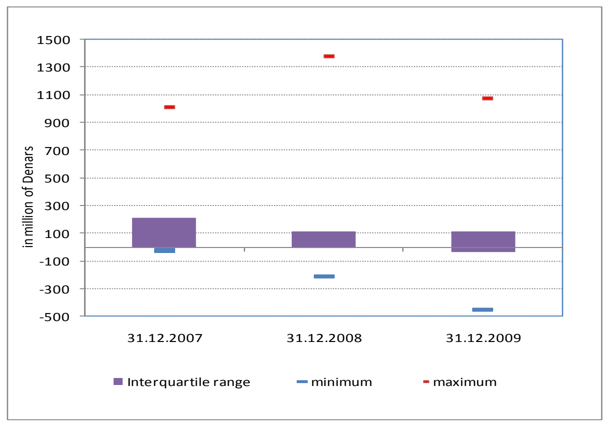
[86] The total regular income are calculated as a sum of the net interest income, net fees income, other net financial income and other regular income.

covering the operational costs with some banks. The upward trend of the share of the operational costs in the regular income shows reduced capability of the banking sector to generate income, i.e. decrease in the banks operational efficiency. The decrease in the operational efficiency can be perceived also through the downward trends of the indicator for coverage of the non-interest expenditures with the net interest income.

In conditions of slower increase in the banks' activities and higher operating risks, the main focus of the banks should be directed towards finding ways for costs cutting. The latest amendments to the Law on Contractual Relations (the implementation of which began in February 2010) that limit the maximum amount of the lending and the penalty interest rate[87] should also be taken into consideration. The competitiveness between the banks for maintenance and widening of the deposit base as the main source of financing of their activities, pressures towards increase in the deposit interest rate. The possible inability of the banks to control the growth of their expenditures, or to provide cheaper source of funds can seriously harm their profitability.

The bank-by-bank analysis of the realized financial result shows significant differences in the profitability of individual banks and worsened profitability. The number of banks having the financial result in 2009 worse than in 2008, increased. The maximal amount of the attained gain is lower, simultaneously increasing the maximal amount of the realized loss. Although the number of banks that registered loss in 2009 increased only by one bank, the total amount of the losses is higher by 78.9% (the loss reached Denar 963 million). Oppositely, the total profit is lower by 1/3 than the profit registered last year.

Figure 3.3.13
Dispersion of the financial result after taxes



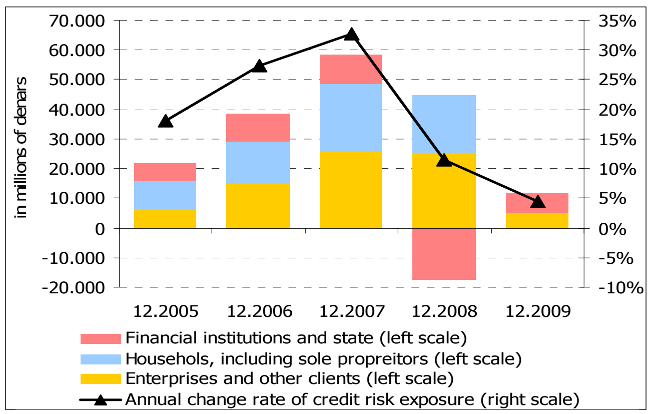
Source: NBRM, according to the data submitted by the banks

[87] These amendments of the Law on Contractual Relations are described more precisely in the part "More important legal solutions adopted in 2009".

3.4. Credit risk

The credit risk is the dominant risk the banks face with in the Republic of Macedonia, while its significance primarily arises from the development degree of the financial system, where the main position accounts for the banks and the financing of the private sector through credits. On the other hand, the deterioration of the global economic environment due to the financial crisis, the decrease in the external demand and the negative dynamics of the growth the most significant trading partners of the Republic of Macedonia witnessed, influenced towards limited possibilities for generating positive economic growth in the domestic economy and access to new sources of financing, accelerated growth of exposure with higher riskiness and impairment and special reserve. The worsening of the credit portfolio's risk profile proves that the periods of rapid credit activity growth are commonly followed by a period of higher riskiness of the portfolio and adequately, bigger impairment losses. The risks related to the global economic environment will be present also in the following period, having an essential influence on the recovery pace of the domestic economy, which from one hand stimulates bigger caution of the banks not to expose to new credit risk, and from the other hand it creates conditions for further worsening of the credit portfolio quality.

Figure 3.3.14
Annual increase in the credit risk exposure and growth distribution by sectors

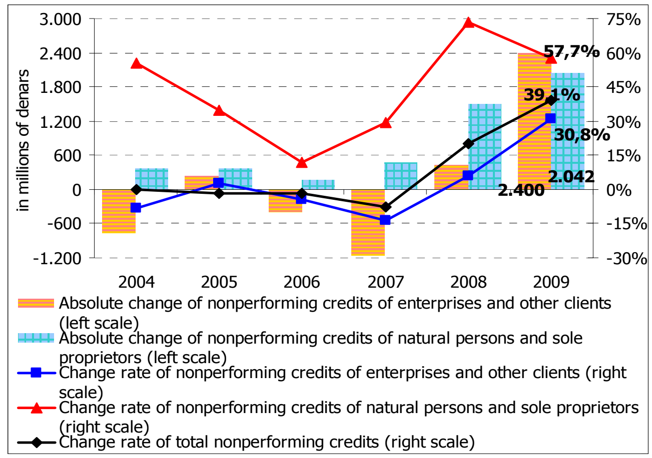


Source: NBRM, according to the data submitted by the banks

In 2009, as a result of the global financial disturbances and unfavorable domestic economic developments, certain changes in the banks' business behavior, towards credit activity reduction, tightening of the financing terms of the private sector and focusing towards investments in low-risk securities were registered. These changes, in conditions of hindered access to new sources of financing, influenced to impede the rise of the credit risk exposure. At the end of 2009, the annual growth rate of the credit risk exposure equals 4.4%. Its slower growth is also registered with the households and the corporate sector, but it is especially apparent with the exposure to the households sector. It actually reflects the general intention of the banks to restrain from credit activity and expose to additional risks given hindered liquidity of the real sector in 2009. On the other hand, in 2009 the banks' tendency to invest in government securities and placement of assets in foreign banks intensified. This movement of the focus of the banks' activities, from the crediting of the private sector to providing liquid assets with lower or minor credit risk, is a reflection of the risk assessment process caused by the effects of the global economic disturbances. This occurrence was characteristic on global level and from the aspect of the financial stability, it can be assessed as favorable, because it influence towards a decrease in the general debt encumbrance (the so-called deleveraging) and should stimulate more efficient allocation of resources. The prudent regulatory measures that the NBRM undertook at the end of 2008, as well as the changes in the monetary policy instruments in the first half of 2009 influenced towards risk reassessment and bigger propensity for having liquid assets.

In 2009, the growth in the non-performing credits intensified, which were the fastest growing component of the credit risk exposure. In 2009, the non-performing credits augmented by 39.1%, which is more almost by double in comparison with the growth rate of 20.1% in 2008. The increase in the non-performing credits was slightly more dynamic with the exposure to households, which to certain degree reflects the process of the so-called portfolio maturation, which is relatively young and created in more relaxed crediting conditions characteristic for the periods of credit expansion. The increase in the non-performing loans was evident also with the exposure to the enterprises, which mirrors the deteriorated performances of the domestic credit users in environment of global economic disturbances. The acceleration of the increase in the non-performing loans influenced on credit risk exposure of 5.8% in 2009, which is by 1.3 percentage points more than in 2008. The share of the non-performing loans in the total credits reached 9.1%. Also, the business performances of the enterprises will inevitably influence on the employment in this sector, and thus available income of the households. Hence the unfavorable movements and the lack of sources of financing with the enterprises can reflect also on the households' ability for debt servicing.

Figure 3.3.15
Annual growth rates of the non-performing loans and its sector growth distribution



Source: NBRM, according to the data submitted by the banks

In conditions of unfavorable macroeconomic movements, slower credit growth and lower liquidity among the business entities, in 2009 the risk degree increased with the credit risk exposure, which was noticeable through the dynamics of the credit risk indicators. The exposure classified in the risk categories C, D and E in 2009 registered an annual growth rate of 29.0%, while on the other hand, the increase in the calculated impairment losses and special reserve in 2009 equaled 17.3%. Hence, in 2009 the decrease in the coverage of the higher risk exposure with impairment losses and special reserve by 8.8 percentage points was evident. These movements additionally elevate the significance of the general economic movements for the performances of the banking system, especially in context of additional cost in form of impairment which should be calculated and allocated from the banks if the expectations for economic activity dynamic do not realize. If the effect of the write-offs in 2009 is taken in consideration, the credit portfolio quality indicator deteriorated by approximately one percentage point.

Figure 3.3.16
Dynamics of selected indicators for the riskiness of credit risk exposure

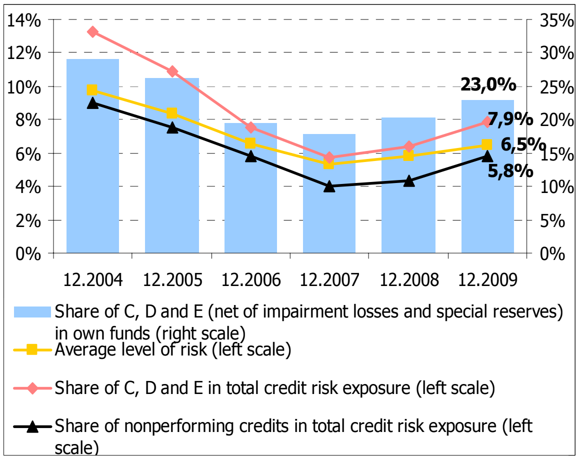
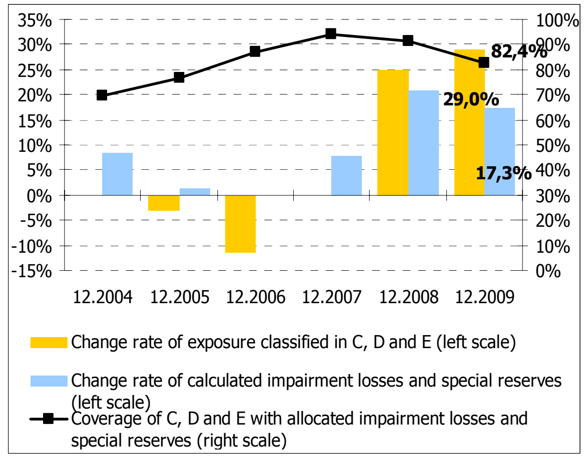


Figure 3.3.17
Annual growth rates of the exposure classified in C, D and E and its coverage with total impairment and special reserves



Source: NBRM, according to the data submitted by the banks

The average risk of the exposure is deteriorated with enterprises as well as with households. Due to the more intensive rise in the exposure to the enterprises classified in more risky categories in 2009, its coverage with the calculated impairment and special reserve decreased by 13.2%. This was not the case with the exposure to the households, where the higher increase in the allocated impairment and special reserve enabled better coverage of the exposure classified in the risk categories C, D and E.

Figure 3.3.18
Annual growth rates of the exposure in more risky categories and calculated impairment and special reserves

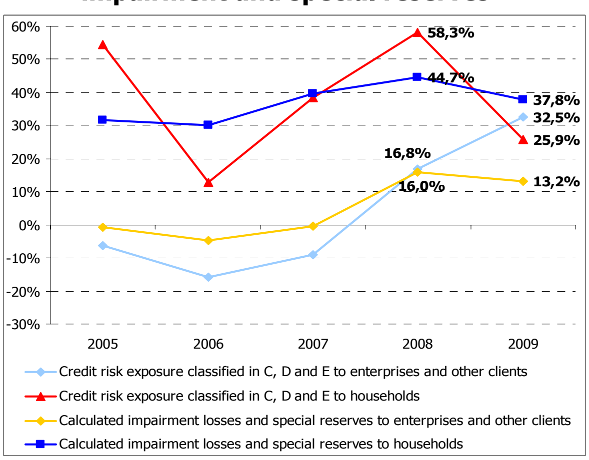
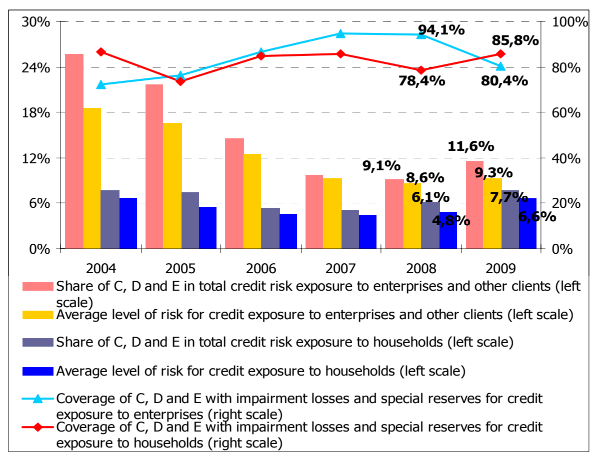


Figure 3.3.19
Selected credit risk indicators for the exposure to enterprises and households

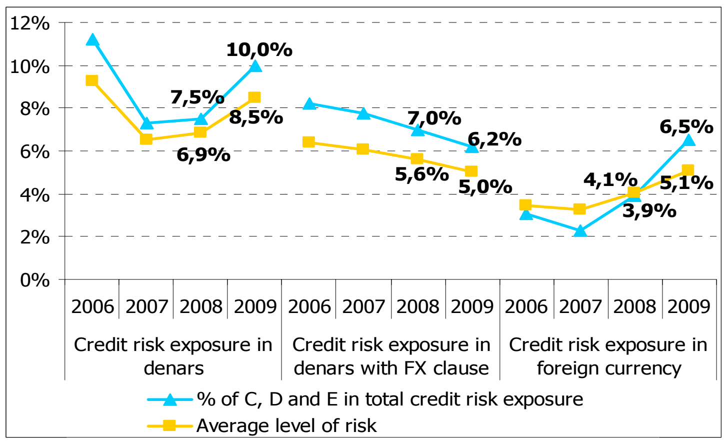


Source: NBRM, according to the data submitted by the banks

During the credit risk analysis, the influence of the collateral features, used as a security for the credit risk exposures, should be taken into consideration. Namely, at the end of 2009, the largest pat of the exposure to enterprises is covered with certain collateral and the share of the uncollateralized exposure equals 13.5%. Regarding the exposure to households, the non-collateralized exposure is higher (37.8%), which is primarily due to the exposure based on current accounts and credit cards where three fourths of the exposure is not collateralized. The most frequently used form of collateral is the real estate, which is used as such with 53.2% of the exposures to the enterprises and 27.6% of the exposure to households, with the real estate coverage of the housing credits being equal to 89.6%. Hence, **the movements and the characteristics of the real estate market in the Republic of Macedonia, the development stage of which can be generally assessed as initial, are especially important for the credit risk of the banking system.** The risks for banks in this domain originate from the practice to use the estimated value of the real estate in the collateralization of the credit risk exposures. In environment of unfavorable economic movements, by rule, there is higher probability that the estimated value of the real estate used as collateral to certain extent to deviate from its true market price.

Analyzed by the currency structure of the credit risk exposure, in 2009 only the indicators for the risk degree of the exposure in Denars with FX clause registered certain positive movement, which primarily arises from the increase in the exposure in form of Treasury bills with FX clause[88]. These bills proved to be attractive investment alternative for the banks because of their low risk, the relatively attractive yield they offered, as well as because of the short contractual maturity date which corresponded to the appetite of the investment public. At the end of 2009, the highest average level of risk, as well as the biggest share of the exposure with higher risk was registered with the Denar exposure.

Figure 3.3.20
Selected credit risk indicators according to the currency structure of the exposure



Source: NBRM, according to the data submitted by the banks

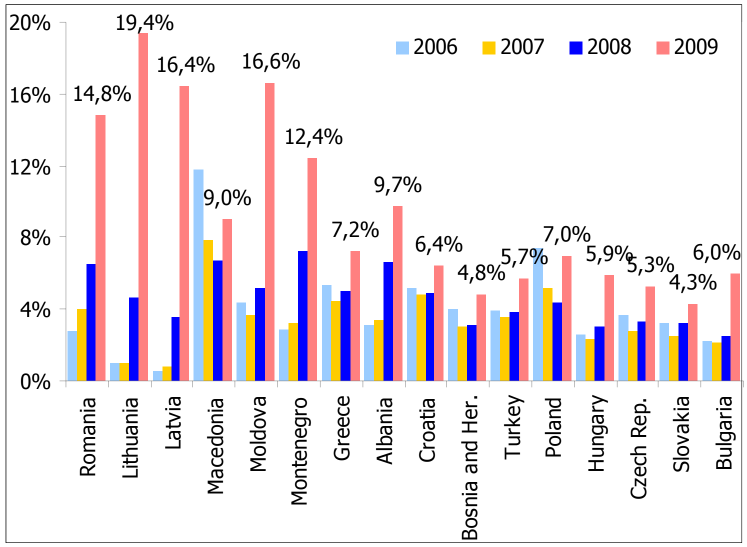
The indirect credit risk remained to be one of the most significant features of the domestic banking system, representing also extremely significant factor for the credit portfolio risk. This risk arouse from the banks' propensity not to expose directly to risks related to the changes in the market variables (currency risk and interest rate risk) and the established practice to safeguard and simultaneously to transfer these risks on the clients - credit users, through incorporating protection clauses (currency clauses or clauses for the interest rate variability with a decision of the bank's management bodies). These clauses, are not actually risk hedging instruments (there is no the so-called "hedging") but actually make transformation of the currency risk and the interest rate risk into credit risk - the so-called indirect risk. This risk becomes even more apparent when the credit users are exposed to market risks, i.e. their capacity for servicing of the liabilities depend on the movement and the level of market variables, such as the foreign exchange rates and interest rates. At the end of 2009, the currency component was present with 62.0% of the credit risk exposure to enterprises and 36.9% with the credit risk exposure to households. The adjustable interest

[88] In 2009, the Government commenced with the issuance of Treasury bills in Denars and FX clause in Euro on the domestic market.

rates shall be applied with 82.4% of the exposure to enterprises and 88.9% of the exposure to households.

The process of worsening of the credit portfolio quality as a result of the global and local economic disturbances was witnessed in several Central and East European countries. This occurrence was caused by the characteristics of the banking systems of the countries from the region, especially the strong role of the external financing and the foreign trade with the developed countries. The unfavorable changes in the economic environment, together with the expansive credit growth in the previous period, created preconditions for bigger share of the non-performing credits in the total credits. However, the countries that suffered the severest impact as a result of the financial crisis registered also the largest jump in the share of the non-performing credits in the last two years, especially in 2009. The Republic of Macedonia registered slightly more moderate increase in this indicator in comparison with the other countries, which primarily arises from the relatively more moderate decrease in the gross domestic product and the smaller recession in 2009, although it seems that it was also influenced by the differences in the degree of prudence in the credit policy of the banks from other countries.

Figure 3.3.21
Share of the non-performing loans in the total credits by countries



Source: IMF, Global Financial Stability Report: Meeting new challenges to stability and building a safer system, April 2010
The data on individual countries are the last available data for September, or December 2009, while the data pertaining to the Republic of Macedonia are for December 31, 2009.

3.5. Currency risk

The presence of the foreign currency component[89] in the assets and liabilities of the banking system is notably high. It was additionally deepened during the crisis developments in the previous two years, having in mind the procyclical character of the foreign currency positions, i.e. the higher propensity for keeping foreign currency in condition of crisis. This feature not only of the banking system, but of the entire economy of the Republic of Macedonia, as well, makes the economic entities to be sensitive to possible changes in the Denar exchange rate. The existence of the mismatch in the foreign currency positions of individual economic entities[90], given possible correction of the Denar exchange rate, can cause significant loss for the entire economy. However, the accepted regime of fix exchange rate of the Denar relative to the Euro also goes in favor of the limitation of the high euroization risks. Simultaneously, the high capitalization and the solvency of the banking system, as well as the results of the stress testing performed by the National Bank should also be taken into consideration that point to satisfactory resistance of the banking system.

The regulation pertaining to the currency risk, which is effective (with certain amendments[91]) since 1995, enable controlled volume of the open currency positions of the banks, and thus protection from the currency risk[92]. At the end of 2009, at the level of the banking sector, decreasing in the gap between assets and liabilities with currency component of 40.2% was registered. Their bigger compliance actually means smaller level of currency risk the banks are exposed to. The approximation of the amounts of the liabilities and the assets with currency component arises primarily from the faster increase in the liabilities with currency component[93] and the worsened quality of the banks' credit portfolio[94].

[89] The term "foreign currency component" encompasses the positions in both the foreign currencies and Denars with FX clause.

[90] More detailed analysis for the foreign currency positions of the non-financial segments is given in the parts pertaining to the corporate sector and the households sector.

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

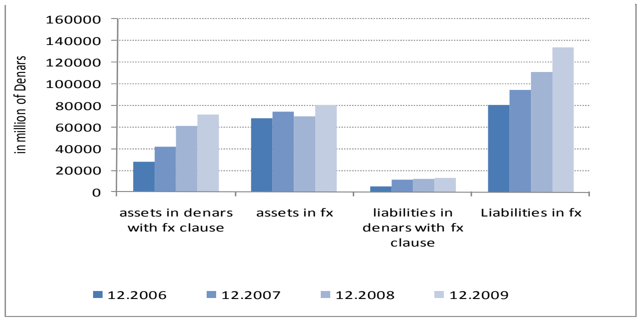
[92] The banks maintain the currency risk exposure within the prescribed limits for the aggregate foreign currency position.

[93] The liabilities with foreign currency component registered a growth rate of 19.6%, or Denar 24,111 million. This growth is mainly due to the obvious currency transformation of the banks' deposits in favor of foreign currency deposits, and partially to the increase in the banks' liabilities based on foreign currency loans. The structure and the movements of the on-balance sheet positions with foreign currency component are given in more details in the Report on the Banking System and the Banking Supervision in the Republic of Macedonia in 2009.

[94] The assets with foreign currency component registered an increase of 15.9%, or by 20,809 million. This increase aroused primarily from the increase in the deposits with foreign banks and the higher reserve requirement rate allocated with the NBRM (from mid 2009, the NBRM increased the reserve requirement rate for liabilities in foreign currency from 10% to 13%). The increase is due to the banks' investments in Treasury bills in Denars with FX clause, as well as to the increase in the credits in Denars with FX clause. Pursuant to the regulations, in the calculation of the open foreign currency position, the allocated impairment for the assets with foreign currency component classified in the risk categories C, D and E, represents a deductable item of the total assets with foreign currency component. Exactly the high annual rise of this impairment, of Denar 1,970 million, was that which conditioned the decrease in the gap between the assets and the liabilities with foreign currency component of approximately 60% in 2009.

The decrease in the gap between the assets and the liabilities with currency component, parallel to the increase in the bank's own funds caused downward trend of the correlation between these two categories, which is another indicator for the decrease in the currency risk level the banks are exposed to. On December 31.2009, the share of the gap between the assets and the liabilities with currency component in the banks' own funds equaled 14.6%, which is an annual decrease of 10.5 percentage points.

Figure 3.3.22
Movement of the assets and liabilities with foreign currency component



Source: NBRM, according to the data submitted by the banks

Despite the smaller gap, however, the higher presence of the currency component imposed the need for its careful monitoring. The banks are protected from the direct currency risk exposure, but the significant misbalances in the foreign currency position of their clients emphasize the significance of the credit risk caused indirectly by the currency risk the banks' clients are exposed to. In conditions of targeting of the Denar exchange rate against the Euro and the high currency substitution in the Macedonian economy, the tightening of the monetary policy (given possible pressures on the foreign exchange market) can also influence on the amount of the credit user's debt and on their capability for debt servicing, regardless whether their debt is in Denars or it is pegged with the value of foreign currency.

Legal framework related to the indirect credit risk

The legal framework in the Republic of Macedonia prescribes a requirement for the banks for establishing a system for monitoring, analysis and assessment of the compliance with the clients' foreign currency position, the total credit risk exposure of which exceeds certain amount, as well as of the effects on the total liabilities (especially on the liabilities towards the bank) from possible change in the Denar foreign exchange rate. In conformity with the regulations, it is considered that the client has harmonized foreign currency position if its anticipated foreign currency inflows, the foreign currency claims and claims in Denars with FX clause cover at least 80% of its total expected foreign currency inflows, foreign currency liabilities and liabilities in Denars with FX clause. Also the clients where the price of the dominant product depends on the movements of the price of that product on the world stock exchanges are considered to have harmonized foreign currency position.

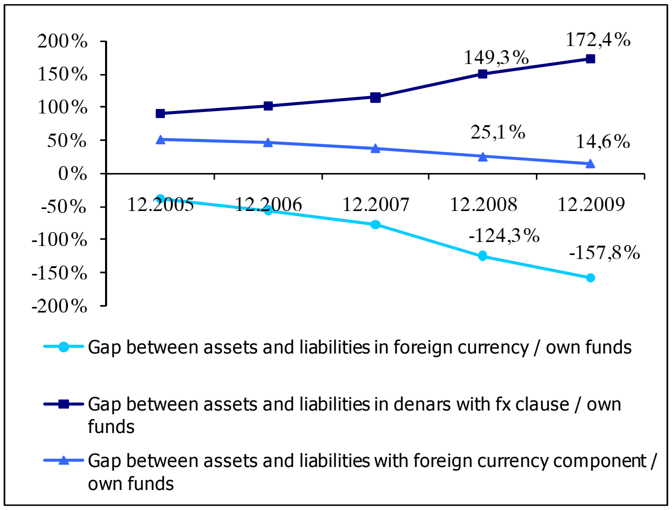
Additionally, the regulations stipulate that when extending the credit in foreign currency, or in Denars with FX clause to a resident credit user, the credit user should meet the following conditions:

- to be classified by the bank in the risk categories A or B, and to have average risk category at the level of the banking system of the Republic of Macedonia according to the Credit Registry of the National Bank in the risk category A or B; or
- to provide first-class instrument for collateral (monetary deposit, low-risk securities etc.).

Having in mind the significance of the indirect credit risk, at the end of 2009 the National Bank submitted a questionnaire on the indirect credit risk to all banks. This questionnaire was aimed at increasing the banks awareness for the significance and the effects of the exposure to the indirect credit risk, to improve their analyses for the sensitivity to this risk, as well as to contribute to the identification of the possible weaknesses in the contents, quality and the manner of implementation of the policies and procedures for assessment of the indirect credit risk. The questionnaire was prepared in the period when the movements in the bank's credit portfolio characterized with constant rise in the share of the exposure to currency component, which is mostly towards clients with non-harmonized currency position. These questionnaires showed that some banks should focus on strengthening of their policies and procedures for managing indirect credit risk. Also, the largest part of the banks undertake additional measures in order to diminish this risk, which consist of stricter criteria for the amount of the debt relative to the proceeds, or the collateral, more frequent monitoring of the compliance of the maturity and currency structure of the client's claims and liabilities (realized and anticipated) etc.

The analysis of the currency structure of the gap between the assets and liabilities with currency component shows that it is completely due to the positive gap between the items in Denars with FX clause[95]. The gap between the items in foreign currency is constantly negative[96]. The risks of such structure would become evident in case of possibly higher liquidity needs of the banks for foreign currency, when bigger demand for foreign currency and possible pressures on the foreign exchange market can occur. From the aspect of individual currencies, the banks' foreign currency position is dominated by the Euro, with a share of about 90%, on the side of both the assets and the liabilities. The current changes in the value of the Euro relative to other currencies, primarily relative to the US Dollar can influence on the banks as well, but the intensity of that influence would be small, since the share of this currency in the foreign currency positions of the banks is small.

Figure 3.3.23
Trend of the correlation between the gap with foreign currency component and the own funds



Source: NBRM, according to the data submitted by the banks

Table no. 3.3.5
Currency structure of the assets and liabilities with currency component and their gap

Foreign currency	31.12.2007			31.12.2008			31.12.2009		
	Currency structure of assets with fx component	Currency structure of liabilities with fx component	Share of the gap in own funds	Currency structure of assets with fx component	Currency structure of liabilities with fx component	Share of the gap in own funds	Currency structure of assets with fx component	Currency structure of liabilities with fx component	Share of the gap in own funds
Euro	86.8%	87.0%	32.3%	88.4%	88.8%	20.7%	89.9%	89.8%	13.2%
USA dollar	8.2%	9.0%	-0.1%	7.5%	8.0%	0.0%	6.9%	7.3%	-0.9%
Swiss frank	2.7%	2.2%	3.0%	2.2%	1.6%	2.8%	1.8%	1.4%	2.0%
Other	2.3%	1.8%	2.9%	1.9%	1.6%	1.6%	1.5%	1.4%	0.2%
Total fx component	**52.0%**	**47.4%**	**38.2%**	**52.3%**	**49.0%**	**25.1%**	**56.5%**	**54.7%**	**14.6%**

Source: NBRM, according to the data submitted by the banks

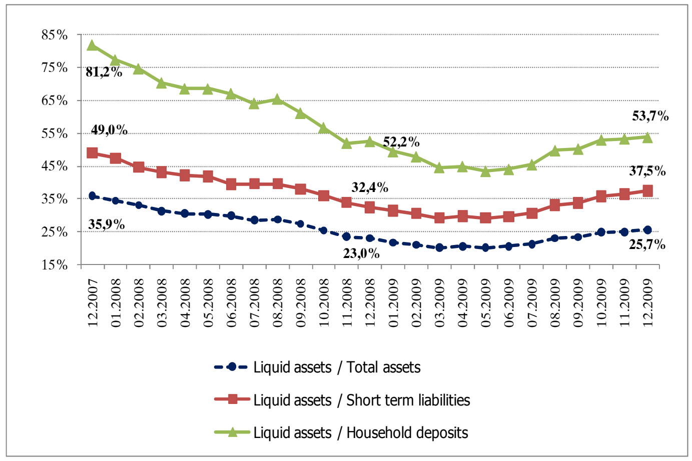
[95] In 2009, the positive gap between the assets and the liabilities in Denars with FX clause registered further rise of Denar 8,977 million, or 18.3%. The assets in Denars with FX clause registered an annual increase of 17%, or Denar 10,345 million, while the liabilities in Denars with FX clause augmented by 11.4%, or Denar 1,368 million.

[96] In 2009, the negative gap between the assets and liabilities of the banks in foreign currency deepened by Denar 12,279 million, or 30.1%. The assets in foreign currency incremented by 14.9%, or by Denar 10,464 million, while the liabilities in foreign currency increased by 20.5%, or Denar 22.743 million.

3.6. Liquidity risk

In comparison with 2008 and the first half of 2009, when the liquidity indicators registered downward movements, **in the second half of 2009, especially at the end of the year, the liquidity of the banking system improved.** The improvement in the liquidity is due to the higher volume of liquid assets (for a period of one year they augmented approximately by 20% and reached Denar 67,461 million, or 25.7% of the total assets). Such increase enabled improvement in all indicators for analyzing and measuring of the liquidity at the level of the banking system.

Figure 3.3.23
Liquidity indicators of the banking system

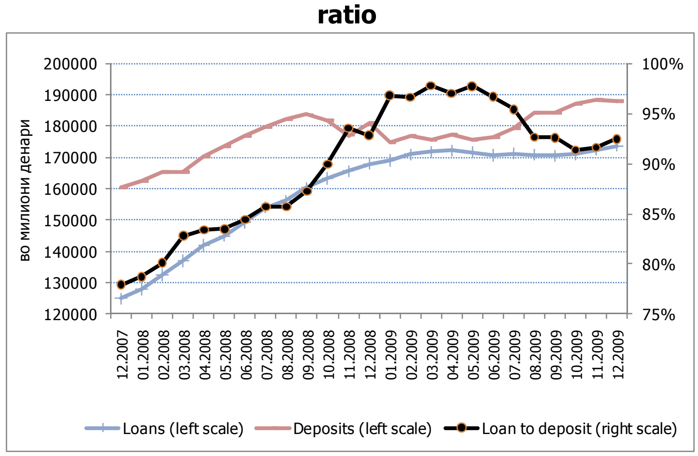


Source: NBRM, according to the data submitted by the banks

3.6.1. Sources of financing of the activities

Opposite to the banking systems of most of the economies (which in conditions of high liquidity on global level, low interest rates and risk premiums increased their debt in the pre-crisis period), **the banking system of the Republic of Macedonia generally financed its activities from domestic sources of funds, primarily domestic deposits** (for many years, about 10% of the total liabilities are liabilities of the banks to non-residents). The loan-to-deposit-ratio is constantly high in the previous year and on December 31, 2009 it equals 92.5%. The dominance of the domestic deposits as sources of financing was one of the main factors thanks to which the banking system did not face with difficulties in the providing of sources of financing, given global liquidity shortages which were fatal for the largest international banks. But, on the other hand, the bigger dependence on the domestic deposits can result in procycling of the banks' credit policies, in environment of possibly deteriorated domestic liquidity (although the deposits, in essence, are the less volatile sources of funds). This occurrence became partially evident in manner that the downward tendencies of the deposit base, which occurred in the last quarter of 2008 and the stagnant movement of the deposits in the first half of 2009, were followed (with certain time-lag) with stagnant movement with the credit activity. Also, the bigger dependence on the domestic deposits can lead to limited possibilities to provide bigger sources of funds in time, and pressures for increasing the interest rates in the urge for maintenance of the current and providing new depositors.

Figure 3.3.25
Movements of loans and depostis and loan to deposit ratio

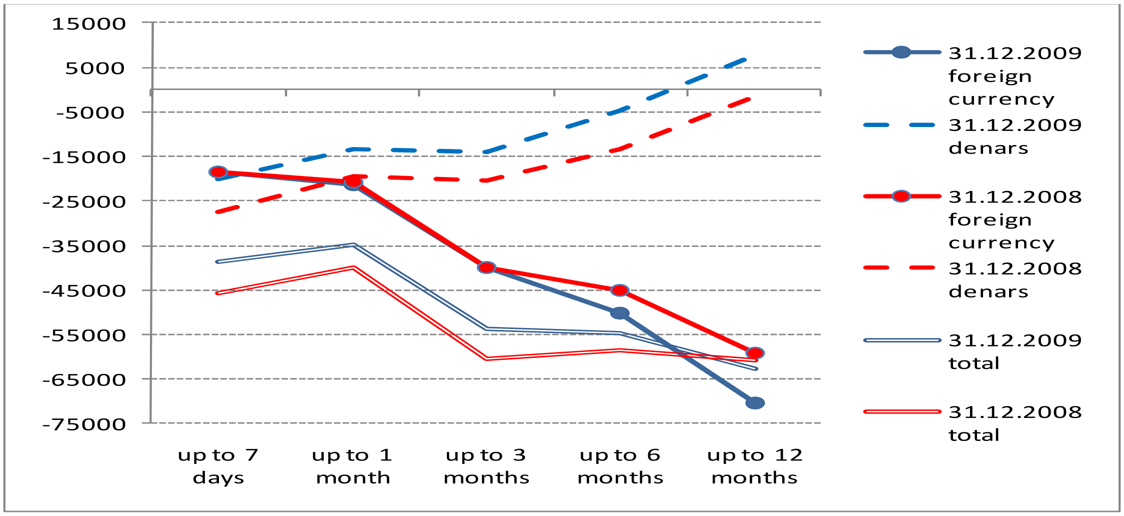


Source: NBRM, according to the data submitted by the banks

The negative effects of the global financial crisis on the liquidity of the banking system of the Republic of Macedonia were felt with a delay (they culminated at the end of 2008). However, they did not manifest through more significant outflows of deposits, but the tendency for keeping foreign exchange in condition of crisis and the extremely **high currency transformation of the deposit base** became evident. Such transformation resulted in further widening of the maturity gap between the assets and liabilities in foreign currency, opposite to the strengthening of the positions in domestic currency.

Figure 3.3.26

Contractual residual maturity (mis)match of the assets and liabilities of the banking system according to the currency and total (cumulative by maturity blocks)



Source: NBRM, according to the data submitted by the banks

The conservative liquidity management in the past enabled the banks to register a satisfactory accumulated level of liquid assets, which influenced directly towards stability maintenance and overcoming of the tightened market conditions in 2008 and 2009. The qualitative strengthening of the liquidity position of the banking sector was contributed a lot by the prudent and regulatory measure of the NBRM. Namely, in the first short liquidity pressures with the banks at the end of 2008, the NBRM immediately introduced a requirement for the banks for maintaining minimal liquidity ratios for both the Denar and the foreign currency positions. Since the introduction of this measure, the banks' liquid assets registered an upward trend and until the end of the 2009 it went up by 38.1%. This measure influenced also towards rise in the low-risk placements in Government securities, which also means appropriate potential for providing additional sources of funds (through repo transactions).

Assessment of the resistance of the banking system to liquidity shocks

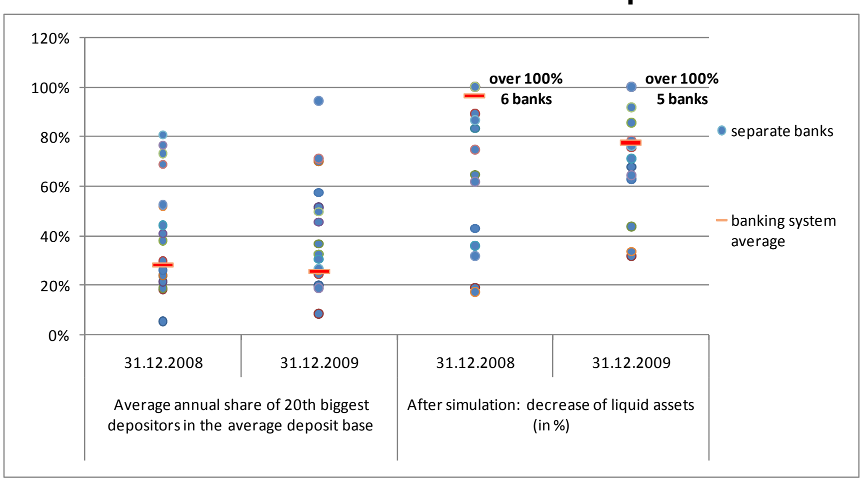
The simulations for assessing the resistance of the banking system to shocks on the side of liquidity show that the banks are less sensitive to the withdrawal of 20% of the households' deposits (all banks have enough liquid assets), than to outflow of the largest 20 depositors (five banks register lack of liquid assets for covering the liabilities based on the outflow of the deposits of the twenty largest depositors, whish is by one bank less compared to December 31,2008).

Table 3.3.6
Effects of the simulations on the amount of the liquid assets

Description	Liquid assets / Total assets	
	31.12.2008	31.12.2009
Before simulation	22,3%	25,2%
After simulation: Withdrawal of 20% of households deposits out of the banking system	14,9%	17,3%
After simulation: Withdrawal of the deposits of top 20 depositors of each bank	1,0%	7,0%

This points to the higher concentration of the banks' deposit base and the risks thereof. Observed by banks, the share of 20 largest depositors in the total deposits, by individual banks, ranges from 8.6% to high 94.4%. In comparison with the previous year, these final values surged, whereas the average at the level of the banking system which decreased. Also, the results of this scenario for 2009 showed bigger resistance of the banking system to this shock, i.e. smaller exposure to liquidity risk, compared to 2008.

Figure no. 3.3.27
Effects of the simulations on the amount of the liquid assets



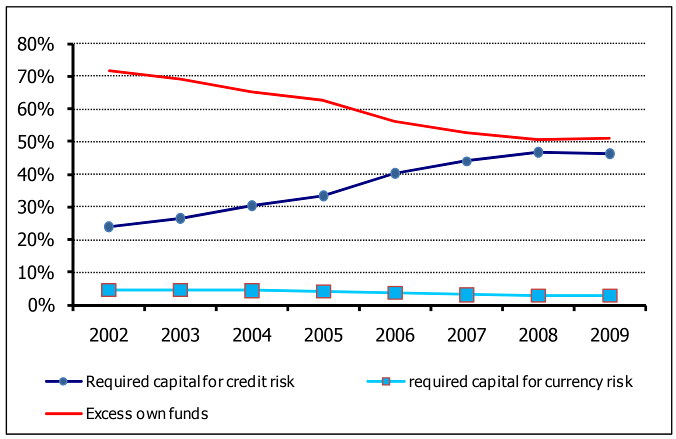
*The stress testing was conducted on the basis of the data submitted by the banks.

3.7. Insolvency risk

The global crisis the consequence of which are still discovered and felt, emphasized the significance of the capitalization for maintenance of the banks stability. The pro-cyclic nature of the own funds, with the Macedonian banking system became apparent in 2009, when the growth rate of the own funds was smaller by seven times, relative to the previous year. In 2009, the own funds minimally increased (by 3.5% or Denar 1,202 million). In 2009, no new issue of shares was realized, while the deteriorated profitability eroded the banks' own funds that registered negative financial result. The own funds growth in 2009 is fully due to the issued subordinated instruments, as well as the retained gain (with those banks that registered positive financial result in 2008). In conditions of reticence of the banking system and hindered financing through international markets, the role of the internal sources for strengthening of the capital base became even more apparent.

The slower rise in the banks' activities, primarily of the credit activity, as well as the worsened quality of the credit portfolio of the banks caused significant slowing down of the growth rate of the risk weighted assets (in 2009 it registered slower growth rate by 13 times relative to the rate registered in 2008). Additionally, the decrease in the gap between the assets and the liabilities with FX component contributed also to the lower amount of the currency risk weighted assets. These movements actually contributed to **reduce the amount of the capital required for risk coverage, i.e. to increase the capital amount exceeding the capital requirement level.**

Figure 3.3.28
Distribution of the banks' own funds for covering individual risks



Source: NBRM, according to the data submitted by the banks

The solvency of the banking system remained high. Measured through the capital adequacy ratio, it is twice bigger than the legally prescribed minimum of 8%. The analysis of the more conservative indicators for the solvency of the banking system indicates stagnant movement with the Tier-1 ratio[97], and decrease in the share of the tangible common equity[98] in tangible assets[99]. The deterioration in this indicator is insignificant and it is due mainly to the changes in the accounting framework the implementation of which began in January 2009[100]. The capitalization ratio[101] also registered a decrease, which primarily arises from the fall in the capital and reserves with certain banks.

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[97] Tier 1 is calculated as a ratio between the core capital and risk weighted assets.

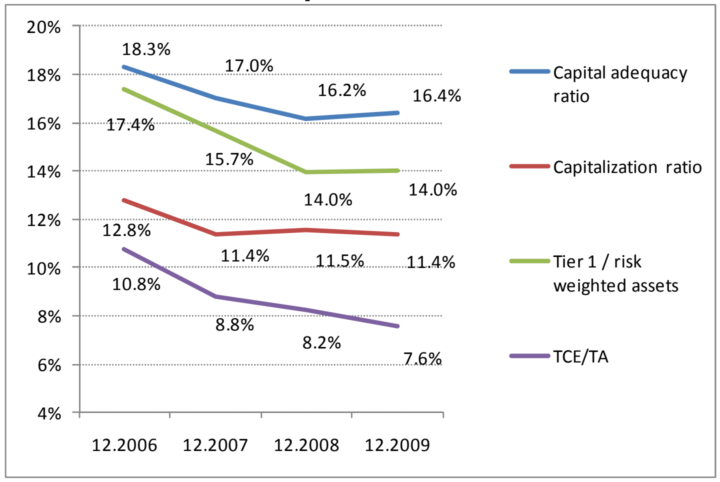
[98] Tangible common equity is obtained by reducing the accounting value of the banks' equity by the amount of all assets which in case of possible liquidation of the bank would have minor, or it would have no value at all (non-tangible assets, which include: capital investments, patents, licenses and concessions, software, goodwill, design, model and brands and other rights and items of non-tangible assets), as well as for the amount of the paid capital of the bank based on preference shares.

[99] Tangible assets are obtained by reducing the total assets by the amount of the non-tangible assets, which include: capital investments, patents, licenses and concessions, software, goodwill, design, model and brands and other rights and items of non-tangible assets.

[100] Part of the premiums based on common shares were re-entered in the banks' reserve fund.

How to increase the own funds imposes as the main challenge for the domestic banks in the following period, within the solvency management domain. Having in mind the lessons learned from the global financial crisis, the last relates especially to the banks significant for the Macedonian financial system (primarily banks with bigger market shares, high scope of activities and high degree of interdependence with other segments of the economy), of the stability of which, to great extent, depends also the stability of the financial system, and thus the total domestic economy.

Figure 3.3.29
Movement of the indicators for solvency and capitalization



Source: NBRM, according to the data submitted by the banks

The comparison with the banking systems of certain countries shows that the banking system of the Republic of Macedonia, according to the capital adequacy ratio and the capitalization rate is in the upper part of the list of analyzed countries.

Table 3.3.28
Movement of the indicators for solvency and capitalization, by countries

Country	Capital adequacy ratio (in %)				Capitalization ratio (in %)			
	Dec.2006	Dec.2007	Dec.2008	Dec.2009	Dec.2006	Dec.2007	Dec.2008	Dec.2009
Macedonia	**18.3**	**17.0**	**16.2**	**16.4**	**12.8**	**11.4**	**11.5**	**11.4**
Austria	13.2	12.7	12.9	14.3	5.2	6.5	6.3	6.8
Czech	11.5	11.6	12.3	14.1	6.0	5.7	5.7	6.5
Greece	12.2	11.2	9.4	11.7	6.7	6.6	4.5	6.1
Portugal	10.9	10.4	9.4	10.3	6.4	6.4	5.5	6.0
Slovenia	11.0	11.2	11.7	11.6	8.4	8.4	8.4	8.6
USA	13.0	12.8	12.8	14.3	10.5	10.3	9.3	11.0
Albania	18.1	17.1	17.2	16.7	5.9	5.8	6.7	8.8
Bulgaria	14.5	13.8	14.9	17.3	7.3	7.7	8.5	11.0
Croatia	14.4	16.9	15.4	16.2	10.3	12.5	13.5	14.0
Hungary	11.0	10.4	11.1	13.1	8.3	8.2	8.0	8.8
Poland	13.2	12.0	10.8	13.1	7.8	8.1	7.9	9.6
Romania	18.1	13.8	13.8	13.7	8.6	7.3	8.1	7.0
Turkey	21.9	18.9	18.0	20.4	11.9	13	11.8	13.6
Serbia	24.7	27.9	21.9	21.2	18.5	21	23.6	23.3
Russia	14.9	15.5	16.8	20.9	12.1	13.3	13.6	15.7

Source: NBRM and IMF, Global Financial Stability Report: Meeting new challenges to stability and building a safer system, April 2010

[101] The capitalization ratio represents the ratio between the capital and reserves of the banks and their total sources of funds.

Assessment of the resistance of the banking system - stress testing

a. Possible influence of the Greek crisis on the banking system

The main objective of this stress test analysis was examination of the possible channels for transmission of the negative effects of the debt crisis in Greece on the banking system of the Republic of Macedonia and the assessment of the resistance of the domestic banking system to shocks related to this crisis. It was assessed that the possible channels for transmission of the crisis effect on the banking system are through the credit users - domestic legal entities which realize net export to Greece and domestic legal entities which have liabilities based on credit operations with Greece. The amount obligations of the Greek entities to Macedonian banks is minor and it is not encompassed in the analysis (they equal Denar 24 million, or 0.01% of the total banks' exposure).

Therefore, moderate and extreme simulation of worsening of the credit capability (credit shock) of the aforementioned categories of credit users debited with the Macedonian banks was conducted.

In the implementation of the simulations, several presumptions were taken into consideration:
-The negative effects can be materialized only with those domestic clients the total export of which towards Greece exceeds 20% of their total export and those domestic entities the debt servicing of which towards the Macedonian banks depends on the collection of the export to Greece - the entities with debt significantly higher (over 400%) than their realized net export to Greece are excluded. Thus the simulation encompassed the exposure of 11 banks to nearly 60 clients; the total exposure to these clients equals less than 1% of the exposure of the banking system;
-The higher percentage share of the export to Greece in the total export of the client, the bigger probability that the client will migrate towards a risk category with higher risk.
-The lower percentage share of the total indebtedness of the client in its net export to Greece, the bigger probability that the client will migrate towards a risk category with higher risk.

The moderate and extreme simulation of the migration of the net exporters to Greece towards risk categories with higher risk were made according to the following table:

% share of the export to Greece in the total export	% share of the total exposure in the net-export to Greece	Risk category after simulation	
		after moderate simulation	after extreme simulation
from 80%-100%	from 0%-100%	E	E
from 80%-100%	over 100%-200%	D	E
from 80%-100%	over 200%	C	E
from 50%-79.9%	from 0%-200%	D	E
from 50%-79.9%	over 200%	C	E
from 20%-49.9%	from 0%-200%	C	E
from 20%-49.9%	over 200%	B	E

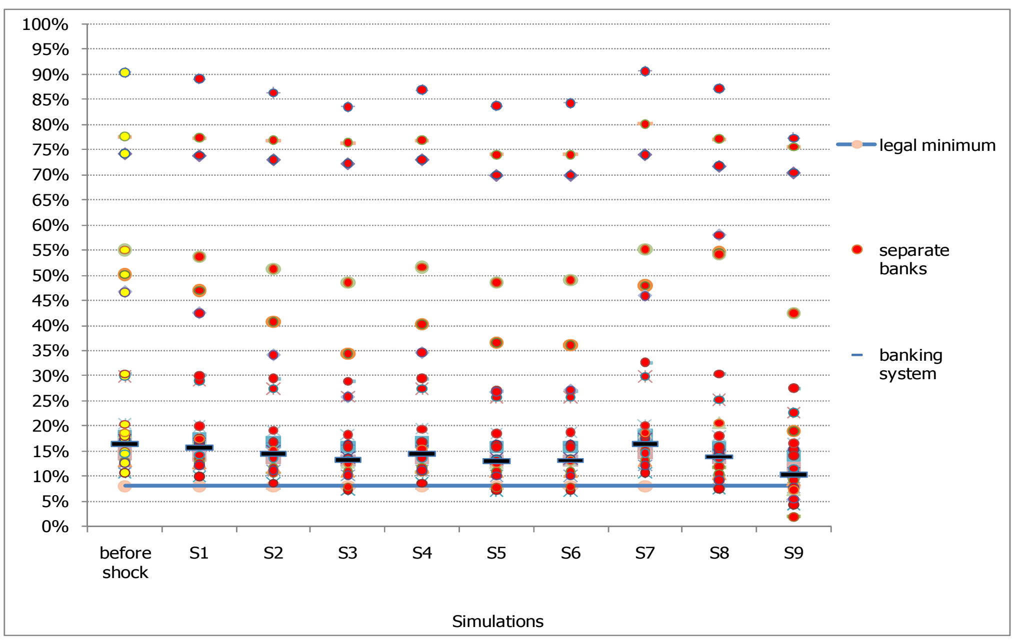
The results of the conducted simulations point to relatively high resistance of the Macedonian banks to the possible negative effects of the crisis in Greece. Even in case of conducted extreme simulation (all clients encompassed in the analysis to migrate towards risk category E), the capital adequacy ratio of none of the banks is lower than 8%.

The main conclusion is that the danger for the banking sector imposed by the crisis with our south neighboring country is based on psychological factors and the depositors' perceptions for the danger that crisis will spill over (which emerged immediately after the global crisis and its huge consequences on the banks and their clients in the developed economies) in the Republic of Macedonia, especially having in mind that two banks (encompassing approximately one third of the total assets of the banking system) are in dominant ownership of Greek banks.

6. Simulations to isolated credit shock and combined shocks on the side of the credit risk, foreign exchange risk and the interest rate risk

This stress test analysis is based on the application of the following nine simulations:
-Three simulations for the isolated credit shock (increase in the exposure to credit risk classified in the risk categories C, D and E of 10%, 30% and 50%),
- fourth simulation as a combination of credit and interest rate shock (increase in the exposure in the risk categories C, D and E of 30% and increase in the domestic interest rates by 5 percentage points),
-fifth simulation as a combination of credit and foreign exchange shock (increase in the credit risk exposure in the risk categories C, D and E by 50% and depreciation of the Denar foreign exchange rate relative to the Euro and US Dollar by 20%),
- sixth simulation as a combination of the shocks on the side of the credit risk, the foreign exchange risk and the interest rate risk (rise in the credit exposure in the risk categories C, D and E by 50%, depreciation in the Denar foreign exchange rater relative to the Euro and US Dollar by 20% and increase in the domestic interest rates by 5 percentage points),
-seventh simulation, appreciation of the foreign exchange rate relative to the Euro and US Dollar in the amount of 20%,
-eighth simulation simultaneous reclassification in the risk category C of the five largest credit exposures to non-financial entities (including the connected entities),
-ninth simulation, increase in C, D and E by 100%, at the expense of the decrease in the exposure in the risk categories A and B (50% of the increase in C, D and E is at the expense of the decline in the risk category A, while the remaining 50% are at the expense of the lower exposure in the risk category B).

Figure 3.3.29
Capital adequacy ratio prior and after the simulations to shocks



Source: NBRM, according to the data submitted by the banks

The results show that the banking system is resistant to shocks with more moderate intensity, while in case of more extreme simulations, the capital adequacy with few banks drops just below the legally prescribed minimum (in the implementation of the third, fifth, sixth and eighth simulation). Significant impact on the resistance of the banking system is felt in case of the last simulation.

3.8. Features, activities and risk profile of the saving houses in the Republic of Macedonia

The saving houses are relatively small financial institutions and they represent the second segment of the banking system in the Republic of Macedonia. They are authorized to collect Denar deposits from the households, to lend credits to natural persons and, to a limited extent, to legal entities.

Table 3.3.30
Structure of the assets and liabilities of the saving houses

Balance sheet	Amount in millions of Denars		Structure	
	31.12.2008	31.12.2009	31.12.2008	31.12.2009
Cash, cash balances, gold, balances and placements to NBRM	76	119	2%	3.6%
Securities portfolio	40	40	1%	1.2%
Placements to financial institutions	72	138	2%	4.2%
Loans to nonfinancial entities*	3,098	2,775	88%	84.5%
Accrued interest and other assets	52	56	1%	1.7%
Fixed and intangible assets	163	155	5%	4.7%
Total assets	**3,500**	**3,283**	**100%**	**100.0%**
Deposits of banks and other financial institutions	0	0	0%	0.0%
Deposits of households	690	565	20%	17.2%
Borrrowings (short-term and long-term)	1,510	1,397	43%	42.6%
Other liabilities	189	95	5%	2.9%
Provisions	0	0.3	0%	0.0%
Equity and reserves	1,112	1,225	32%	37.3%
Total assets	**3,500**	**3,283**	**100%**	**100.0%**

* Loans to nonfinancial entities are on net base and they are decreased for the impearment of the loans.
Source: NBRM, based on the data submitted by saving houses.

Different from the banks the assets of which registered slower rise in 2009, the assets of the saving houses reduced (by Denar 218 million, or by 6.2%). The reduced activities of the saving houses mainly resulted from the lower saving at the saving houses, but also from their lower indebtedness with the domestic banks. Thus, the deposits with the saving houses went down by Denar 125 million or by 18.2%, whereas the liabilities based on long-term credits from domestic banks reduced by Denar 112 million or by 7.4%. Despite this drop, the long-term borrowings from the domestic banks, together with the capital and reserves represented a basic source of financing the activities of saving houses. All deposits with the saving houses are deposits of the household sector, and most of them (approximately 73%) were short-term.

The credits to non-financial entities dominated in the structure of the assets of the saving houses (with participation of 84.5%). Compared with 2008, they reduced by Denar 241 million, i.e. by 7.3%. The households are still the dominant credit users from the saving houses, with participation of 83.7% of the total credits. Regarding the maturity structure of the gross credits, the long term credits participated mostly (83.2%), whereas the Denar credits with FX clause dominated in the currency structure, creating 64.7% of the total credits.

Considering the limited scope of activities of the saving houses, they have high capital adequacy rate, which in 2009 increased additionally. The rise in the own funds, on one hand, and the drop in the assets weighted by the credit risk (which was due to the lower credit activity), on the other, resulted in rise in the capital adequacy in 2009 by 6 percentage points. Thus, at the end of 2009 this rate amounted to 42.1%.

In 2009, the profitability of the saving houses registered considerable drop relative to the previous year, same as in the banks. The profit realized in the saving houses in 2009 amounted to Denar 50 million and it was by 42.8% lower relative to the previous year. Adequate to the type of activities of the saving houses, the net interest income was the basic source for their profit. The participation of the net interest income in the total regular income rose by 15.3 percentage points and at the end of the year, it amounted to 99.7%. Considering the high participation of the credits to households in the total assets of the saving houses, the eventual more demanding servicing of their liabilities would negatively affect the profitability, but also the further operating of the saving houses. The indicators for return on assets (ROAA) and return on equity (ROAE) reduced by 1.3 and 4.1 percentage points, respectively, and at the end of the year they amounted to 1.5% and 4.3%, respectively.

The risk profile of the saving houses was mainly determined by the credit risk, the operational risk and strategic risk. In 2009, the exposure of the saving houses classified in the "C", "D" and "E" risk categories rose by 2.5 percentage points and at the end of the year it participated in the total credit exposure with 11.2%. Also, the participation of this exposure in the own funds of the saving houses rose, reaching up to 30.2%, whereas the participation of the non-provisioned amount of exposure classified in "C", "D" and "E" risk categories in the total own funds of the saving houses amounted to 13%. The allocated impairment enabled coverage of 73.9% of the exposure classified in the "C", "D" and "E" risk categories, which represented lower level of coverage relative to the banks. The average risk of the credit portfolio of saving houses, measured as a ratio between the allocated impairment and the total exposure, amounted to 8.3%. The comparison of the respective indicators for the credit portfolio quality with the banking system indicated to higher risk level of the credit exposure with the saving houses. The relatively high amount of the own funds of the saving houses, relative to the credit exposure with lower quality level and generally, relative to the total credit portfolio (the high capitalization of the saving houses relative to the risks taken in the operating), can be perceived as a facilitating circumstance. On the other hand, the dominant participation of the exposure to the households in the total credit exposure, indicated to high degree of diversification of the credit portfolio with these depository institutions. However, the usually prolonged duration of the transmission of the unfavorable effects from the macroeconomic environment on the household sector shall be taken in consideration, as this would result in further prolonging of the trend of worsening in the quality of the credit portfolio of the saving houses.

The operational risk with most of the saving houses came from the considerable concentration of the functions with one or several persons, undeveloped information systems and weak control systems.

The largest risk of this segment of the banking system resulted from the uncertainty on the economic sustainability of the saving houses, which is due to the difficulties for full following the strict and expensive standards for banking operations.

The exposure to liquidity risk was controlled. The structure of the regulations contributed to this as well, as it limits the amount of the collected deposits by the saving houses in correlation with the height of their capital, but also the structure of the assets and liabilities of the saving houses. Namely, although the amount of the liquid assets was small (it represents 7.5% of the total assets of saving houses), still it enables coverage of 52.2% of the short-term liabilities and 59.7% of the short-term deposits.

4. Non-deposit financial institutions

4.1. Insurance sector

In 2009 the Insurance Supervision Agency started operating, thus creating preconditions for overcoming of one of the potential risks for the insurance sector, and it was the lack of supervisory and regulatory body. The forming and the launching of the Agency is anticipated to provide more realistic perception of the risks to which this segment of the financial system is exposed. Namely, in the following period, despite the strengthening of the supervision on the insurance companies, the Agency focused its activities on completing the bylaws, especially in the area of risk management. The main risks related with the operating of the insurance sector and its contribution to the maintenance of the financial stability resulted from the insufficient coverage of the technical provisions by adequate assets, as well as the liquidity risk related with the uncollected claims based on sold polices which generated most of the annual rise in the assets of this sector in 2009.

Despite the increase in the number of insurance companies by one company (non-life insurance company), the rise and development of the insurance sector registered slowing down in 2009.

Figure 3.4.1
Development of the insurance sector in the Republic of Macedonia

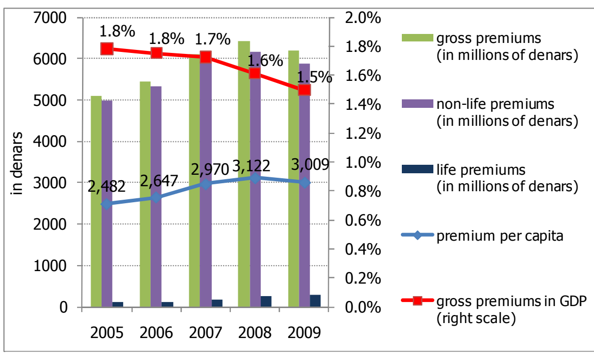
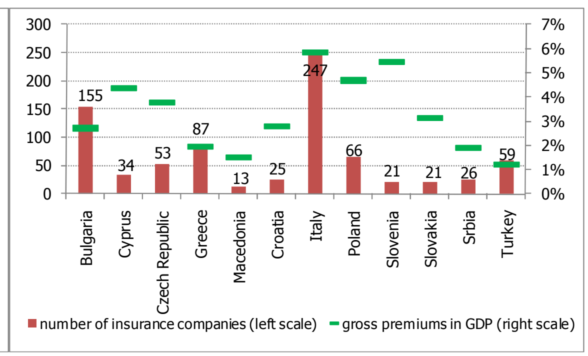


Figure 3.4.2
Development of the insurance sector in certain countries



Source: Supervision and Insurance Agency of the Republic of Macedonia, internal NBRM calculations and "CEA Statistics No. 37".

Measured through the density degree (gross premium per capita) and the penetration ratio (participation of the gross premiums in GDP), the insurance sector of the Republic of Macedonia acted towards downward direction (especially the non-life insurance), relative to 2008. The degree of density in the Republic of Macedonia was near to the countries from the area[102]. However, the insurance sector of the Republic of Macedonia characterized with lowest number of insurance companies, which increased the expectations for extending the insurance business, through opening new insurance companies, including of intermediates (insurance brokers and insurance agencies), as well as through further rise in the foreign capital. **In 2009, the foreign capital increased its participation in the total capital of the insurance sector, which indicated positive expectations for the potential of development in this sector.** The inclusion of four new insurance and brokerage companies was positive for the insurance market as well, and together with the

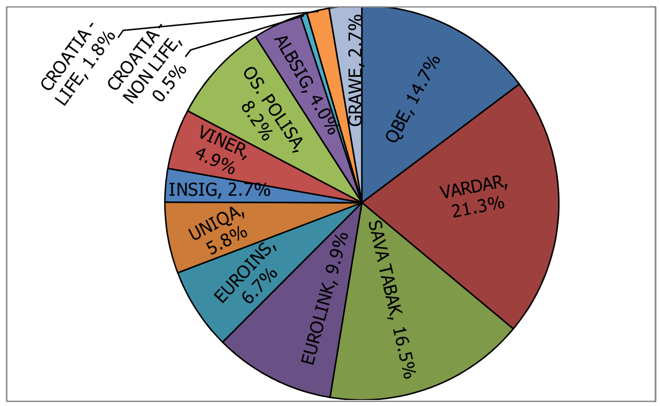
[102] Serbia characterizes with penetration degree of 1.9%, Greece with 2.0%, Bulgaria with 2.7%, Croatia with 2.8%, and Turkey with 1.2%.

existing insurance and brokerage companies (eight) and the agency insurance companies (five) contributed to higher degree of development in the service distribution channels. **Opposite to this, in 2009 the already low level of connection between the banks and the insurance companies reduced** (0.1% of the gross policy premiums of the insurance sector were collected through three banks, and in 2008 five banks collected 0.2% of the gross policy premiums). **The weak connection was confirmed through the low preference of banks to perform credit insurance** - in 2009 two banks performed credit insurance (unchanged number relative to 2008) which participated with 0.004% in the total gross credits of the banking sector (in 2008 this indicator amounted to 0.16%). However, such low level of integration can be positively assessed with respect to the financial stability as a result of the limited possibilities for transfer of eventual negative influences between the two sectors. The insurance sector depended more on the banking sector, considering the fact that 28.6% of the assets of the insurance companies were placements in type of deposits to the domestic banks.

With respect to the market concentration, three insurance companies created a just over a half of the total gross premiums of the sector, whereas the others registered market participation less than 10%. The Herfindahl index on the gross premiums with the insurance companies amounted to 1.237 points and it registered drop by 66 indexed points, relative to 2008, whereas the market participation of the five leading companies reduced by 3.1 percentage point. The fall in the concentration in the total insurance sector pertained to the non-life insurance companies (total eleven), where continuous downward trend of the concentration was registered. Different from this, the concentration with the life insurance and reinsurance was exquisitely high, which was due to the low number of companies - two life insurance companies and one company which besides non-life insurance, performs also reinsurance.

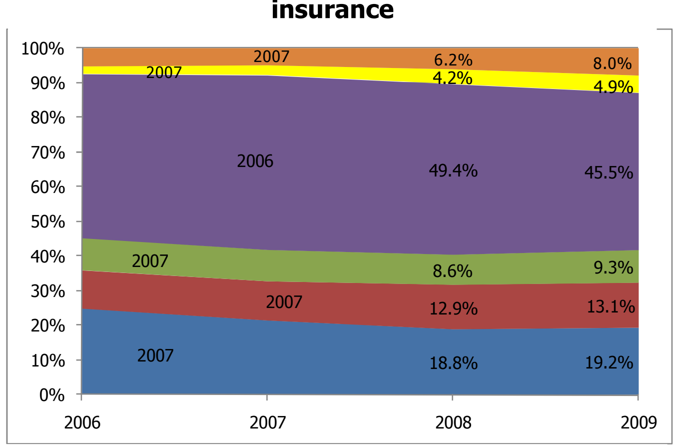
The non-life insurance represented dominant source of generating premium income in the insurance sector, participating with 95.1% in the total gross premiums. However, in 2009, the annual drop in the gross premiums from the non-life insurance (by 4.5% or by Denar 274 million) was the main factor for drop in the total gross premiums of the insurance sector (by 3.7% or Denar 240 million). This premium fall was mainly due to the decrease in the gross

Figure 3.4.3
Participation of the gross premiums with the insurance companies in the total gross premiums of the sector



Source: Supervision and Insurance Agency of the Republic of Macedonia and internal NBRM calculations.

Figure 3.4.4
Structure of the gross premiums by types of insurance



Source: Supervision and Insurance Agency of the Republic of Macedonia and internal NBRM calculations.

premiums in the class of the motor third party liability insurance (by 11.2% or Denar 356 million), as a result of the drop in the prescribed technical premium for this type of insurance. The gross premiums from the life insurance, despite the annual rise of 12.7% (Denar 34 million), gave no considerable contribution to the increase in their participation in the structure of the total gross premiums.

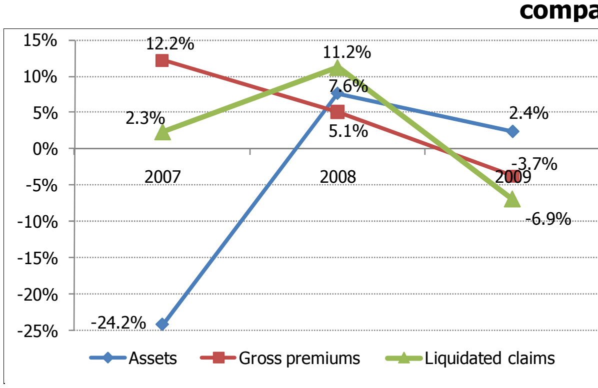
Table 3.4.1
Indicators for the operating of the insurance companies

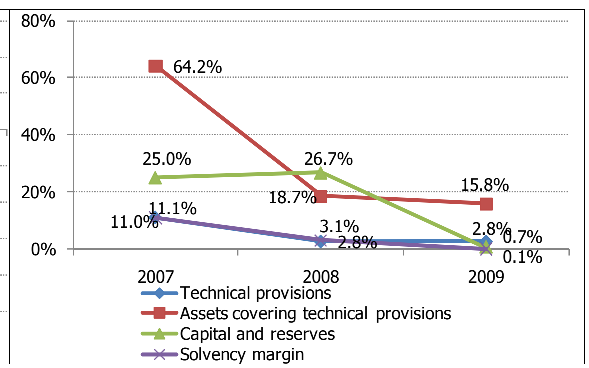
Indicator	2006	2007	2008	2009
Claims ratio	51.4%	46.9%	49.6%	47.9%
Expense ratio	n.a.	36.8%	40.7%	47.8%
Combined ratio	n.a.	83.6%	90.2%	95.7%
Capital and reserves/solvency margin	3.1	3.5	4.3	4.3
Assets covering technical provisions / technical provisions	37.6%	55.5%	64.1%	72.2%
ROA	1.9%	2.1%	1.7%	-1.4%
ROE	10.4%	6.8%	4.7%	-4.0%
Return on investments	15.2%	7.6%	8.1%	4.9%

Source: Supervision and Insurance Agency of the Republic of Macedonia and internal NBRM calculations.

At the end of 2009, the assets of the insurance companies registered rise of Denar 283 million, reaching up to Denar 12.202 million. Their growth resulted from the annual increase of 2.3% in the claims from insurance and reinsurance activities which created the largest part (33.5%) of the structure of the total assets. These claims are based on sold insurance policies, which are not collected. The eventual continuing of their upward trend would increase the liquidity risk of the insurance companies, which have the inflows based on premiums as their basic source of funds. Opposite to this, in 2009 the claims ratio[103] registered drop, as a result of the drop in the eliminated and reported claims with the insurance companies, which in conditions of fall in the gross premiums was considerably significant for their operating.

Figure 3.4.5
Annual change in the components of the indicators for operating of the insurance companies



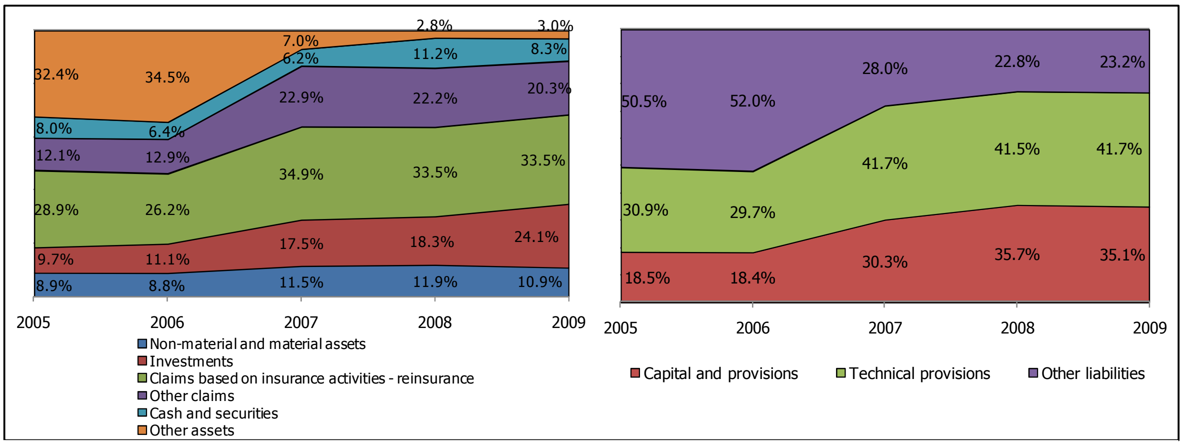


Source: Supervision and Insurance Agency of the Republic of Macedonia and internal NBRM calculations.

103 The claims ratio represents a relation between the amount of paid claims and the amount of the total gross premiums.

On the other hand, the operating costs of the insurance companies registered annual rise of 13.1% which was the reason for increase in the expense ratio[104] and combined ratio[105]. These indicators, supplemented by the fall in the income based on gross policy premiums, resulted in loss from operating at the level of the whole insurance sector (in the amount of Denar 171million). The loss in the insurance sector was solely due to five non-life insurance companies and one life insurance company that showed negative technical result[106] from their operating.

Figure 3.4.6
Structure of the assets and liabilities of the insurance companies



Source: Supervision and Insurance Agency of the Republic of Macedonia and internal NBRM calculations.

At the end of 2009, the capital and reserves of the insurance companies in the Republic of Macedonia amounted to Denar 4,284 million, out of which 81.6% belonged to non-life insurance companies. All insurance companies are solvent, and the insurance sector has 4.3 times higher capital on its disposal, than the required level of solvency margin[107] (unchanged situation relative to 2008). The technical provisions[108] were the most dominant component in the liabilities of the insurance sector. The largest share of the structure of assets which cover the technical provisions [109] was unchanged relative to the previous year, so the deposits in banks were dominant and they were the main generator of the annual rise in these assets. Hence, it can be concluded, once again, that the stability of the banking system is significant for the insurance sector. In the structure of assets

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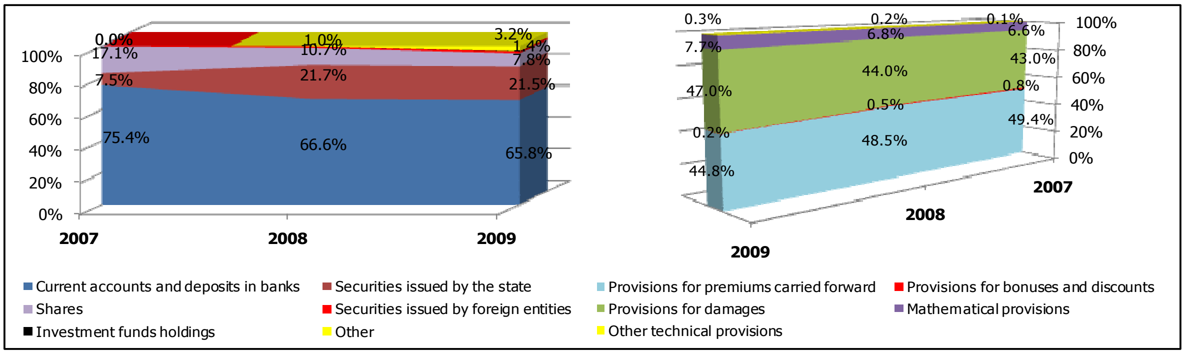
[104] The expense ratio represents a correlation between the amount of operating expenses of the insurance companies and the total gross premiums. The operating expenses shall include: general administrative costs (wages and other costs for the employees); the insurance costs (fee and other insurance costs); depreciation and value consolidation of the equipment and other material assets (less the fee from reinsurer, plus or minus the change in the costs breakdown) and other operating expenses, less the reinsurance.
[105] The combined ratio is calculated as a sum of the claims ratio and expense ratio.
[106] The technical result from operating of the insurance companies means a result from conducting their basic activity - insurance. The other income and expense represent the non-technical result.
[107] The solvency margin represents the minimal required level of capital with the insurance companies, in accordance with the provisions of the Law on Supervision of the Insurance.
[108] The technical reserves are created to ensure permanent fulfillment of the obligations prescribed in the insurance agreements. They consist of: provisions for premiums carried forward (they pertain to the remained period to the expiration of the insurance agreement) provisions for bonuses and discounts, provisions for damages (based on the estimated liabilities of the company) and other technical provisions.
[109] The assets which serve for covering the future liabilities of the insurance companies based on the insurance agreements, as well as the possible losses from insurance operations for which the insurance company is obliged to allocate assets for technical provisions, are the assets that cover the technical reservations. The amount of these assets shall be at least equal with the value of the technical reserves.

which cover the technical provisions, the investments in shares decreased (by Denar 51 million), which can be positively assessed as a prevention of turbulent movements on the financial markets. The conservative policy for placement of assets which cover the technical provisions reflected through **twice lower result from investments in financial instruments**[110] **relative to the previous year**. However, the assets which cover the technical provisions with the non-life insurance companies still fail to fulfill the legally prescribed minimum (these assets cover 68.6% of their technical provisions, opposite to the life insurance companies where this participation amounts to 107.4%). The finalization of the bylaws for the insurance sector (which shall include more precise determination of the type of assets that cover the technical provisions) shall contribute to increase in the low rate of coverage of technical provisions, but also an adequate capitalization with those companies which failed to fulfill the prescribed minimum for full coverage of the technical provisions.

Figure 3.4.7
Structure of assets which cover the technical provisions and technical provisions with the insurance companies



Source: Supervision and Insurance Agency of the Republic of Macedonia and internal NBRM calculations.

The technical provisions of the insurance companies showed insignificant rise and unchanged structure. The provisions for damages[111] generated the rise in the total technical provisions with the insurance companies, which rose by Denar 212 million. The dominance of the reserves for damages is the one that showed the preferences of the insurance companies for higher prudency in the performance of their basic activity - insurance.

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[110] The result from investing in financial instruments is calculated as a ratio between the income from investments less the investment costs (from the non-technical result of the insurance companies) and the stock of the financial investments (from the non-technical result of the insurance companies).

[111] The provisions for damages are allocated in the amount of estimated liabilities which the insurance company is obliged to fulfill, based on the insurance agreements where the insurance situation emerged till the end of the accounting period, including all costs arising form the late performance of the liabilities of the insurance companies on the basis of complete indemnification requests.

4.2. Fully funded pension insurance

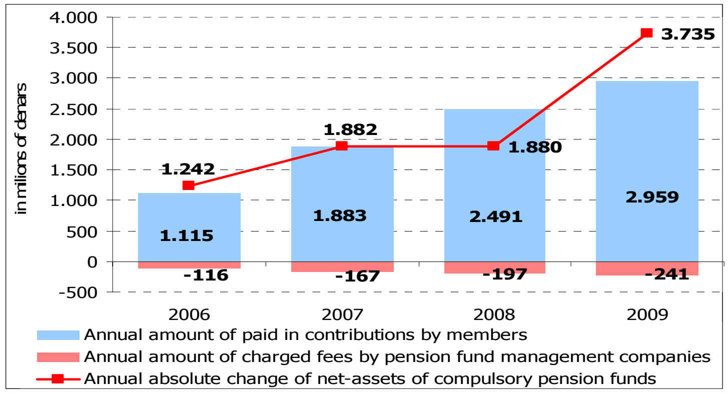
In 2009, the fully funded pension insurance registered improvement in the results from operating and positive developments in the realized income. Simultaneously, in 2009 the voluntary fully funded pension insurance started functioning officially, with two voluntary pension funds being founded. This enabled a new, wider dimension and social role of the fully funded pension insurance, which would have stimulating effect on the further development of this segment of the financial system. On the other hand, the strengthening of the role of the pension funds in the financial system means a need of qualitative improvement of their management, and especially monitoring and control of the undertaken risks during management of the funds. The main risks which are related to the operating of these financial institutions resulted mainly from the risks which are present in the economy as a whole, and the dependency of the performances of the pension funds on the Government financial position was especially evident, considering the fact that the claims from the Republic of Macedonia have the dominant place in the structure of the invested assets of the pension funds. Hence, the attaining of higher degree of diversification of funds was one of the most important imperatives of the pension funds.

The membership in the mandatory pension funds continued to increase in 2009 as well, despite the negative economic developments and effects from the global crisis. Thus, at the end of 2009, the number of members of the mandatory pension funds amounted to 237.024 and on annual basis it registered rise of 21.4%. The growth in the number of members contributed for the coverage of the active households[112] by the mandatory fully funded pension insurance to increase from 21.3% to 25.7%, on annual basis. The membership in the pension funds was mandatory for all persons who are employed for the first time after December 31, 2003, which means that most of the members are young population at age below 35 and the coverage by the mandatory fully funded pension insurance is higher with the younger population. At the end of 2009, about 4% of the individual accounts have not registered any payment of contributions[113].

[112] The data on the active households is based on the assessment of the State Statistical Office.
[113] The data is from the Annual report on the situation in the fully funded pension insurance of the Agency for Supervision of the Fully Funded Pension Insurance.

On December 31, 2009, the net assets[114] of the pension funds amounted to Denar 8.739 million, which corresponded with 2.1% of the gross domestic product. In 2009, the pension funds manifested considerable increase in the net assets of Denar 3.735 million, i.e. by 74.6%. Opposite to the situation in 2008 when the annual amount of paid contributions exceeded the annual rise in the net assets of the pension funds, in 2009 adverse developments were evident. Namely, the paid contributions definitely had the leading role in the annual growth in the net assets of the mandatory pension funds generating 79.2% of it. But, in 2009 the stabilization of the international financial markets, after the turbulences and downward corrections in 2007 and 2008, contributed considerably to the growth in the net assets of the mandatory pension funds. Namely, in 2009 the pension funds changed the method of classification and measurement of certain financial instruments in the sub-portfolio[115]. Such change caused increase in the interest income and depreciation of the discount with the debt securities, but also in the realized capital gains, with simultaneous manifestation of unrealized capital gains. Therefore, after the loss registered by the mandatory pension funds in 2008, in the amount of Denar 434 million, in 2009 they operated with success again, registering gain in the amount of Denar 500 million.

Figure 3.4.8
Net assets of pension funds, paid contributions by the members and commissions by the pension companies



Source: Agency for Supervision of fully funded pension insurance

In the structure of the income of the mandatory fully funded pension funds in 2009, the interest income and discount depreciation with the debt financial instruments, i.e. the deposits with banks and bonds issued by the Republic of Macedonia, participated dominantly with 79.3%. The realized and unrealized capital gains formed 8.4% and 8.5%, respectively, of the income of the mandatory pension funds in 2009. Opposite to the structure of the expenditures in 2008, when the unrealized capital loss from investments in securities mostly influenced the total results of the mandatory pension funds, in 2009, 56.0% of the expenditures pertained to the fees and commissions for management companies.

[114] Pursuant to Article 83 of the Law on the Mandatory Fully Funded Pension Insurance (Official Gazette of the Republic of Macedonia No. 29/2002, 85/2003, 40/2004, 113/2005, 29/2007, 88/2008, 48/2009, 81/2009 and 50/2010), the net assets of the pension fund are determined as a differential between the value of the assets of the pension fund and the liabilities of the pension funds, except the liabilities to the members of the pension funds.

[115] It pertains to the reclassification of the Eurobonds issued by the Republic of Macedonia owned by the pension funds, from the category of financial instruments held up to maturity to the category of financial instruments available for sale. This reclassification, in accordance with the International Financial Reporting Standards, imposed a need for reassessment of the value of the respective financial instrument, which resulted in considerable growth in the value of the net assets of the pension funds. The effect from the reclassification and the reassessment, i.e. reevaluation of the Eurobonds, on the net assets was felt on September 30, 2009 for the "NLB Penziski fond" and on December 31, 2009 for "KB Prv otvoren zadolzitelen penziski fond".

Figure 3.4.9
Results and indicators for the efficiency of the mandatory pension funds

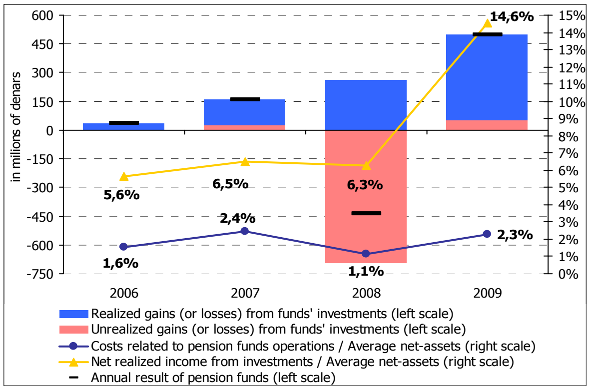
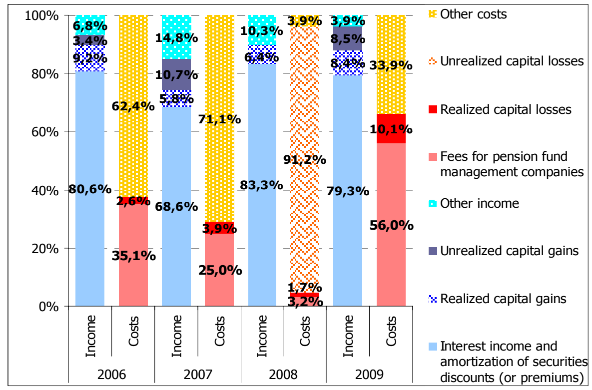


Figure 3.4.10
Structure of income and expenditures of the mandatory pension funds



Source: Agency for Supervision of fully funded pension insurance

The improvement in the operating of the mandatory pension funds can be seen through the dynamics of the efficiency indicators. Thus, the realized gain from investments, showed as a percentage of the average net assets of the mandatory pension funds, to 14.6% in 2009 amounted and on annual basis it registered rise of 10.3 percentage points. The preferences of the pension funds, in the past few years, to invest the dominant share of the assets in debt financial instruments, with growth in the domestic interest rates being registered, acted towards more intensive increase in the interest income, consequently in this indicator as well. The ratio of the expenditures that should be covered by the mandatory pension funds and the average net assets amounted to 2.3% at the end of 2009.

In 2009, the structure of the assets of the pension funds registered certain movements, in direction of increase in the participation of the Government securities, and for the account of the drop in the participation of the banking deposits and equities. The participation of the Government securities in the structure of the assets of the pension funds registered rise of 13.3 percentage points, on annual basis, and at the end of 2009 it amounted to 57.5%, which mainly resulted from the investing by the pension funds in Eurobonds issued by the Republic of Macedonia. Opposite to this, the deposits in the domestic banks registered fall of 6.8 percentage points, on annual basis, but they still maintained the high participation in the structure of assets of the pension funds of 38.5%. These changes in the investment preferences of the pension funds resulted mainly from the exquisitely positive ratio between the return resulting from the bonds issued by the Government and the small risk, characteristic for them. Simultaneously, the higher aversion to risk and the increase in the placements which have small credit risk in 2009 globally characterized the institutional investors, so the domestic pension funds acted identical when investing as well. On the other hand, the larger investing activities of the international financial markets imply a wide range of risk factors the assets of the pension funds are exposed to, and which determine their results, which inevitably imposed a need for increase in the capacity of the pension companies especially in the area of assessment and management of risks.

Figure 3.4.11
Structure of the assets of mandatory pension funds

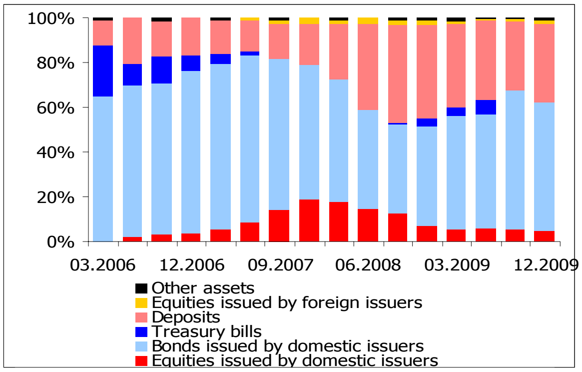
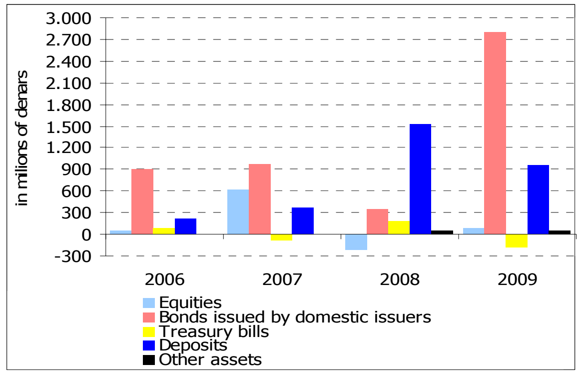


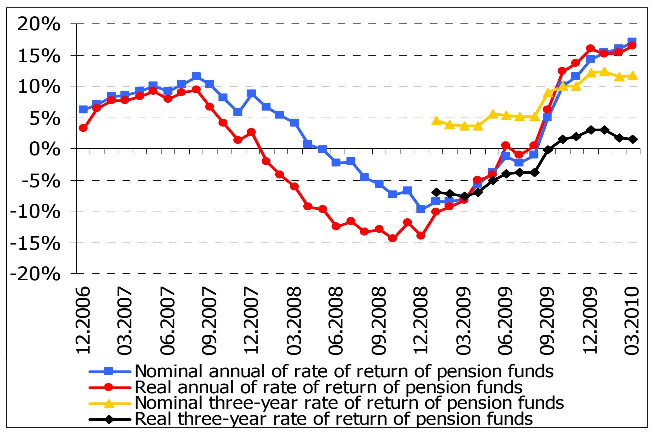
Figure 3.4.12
Annual absolute change in certain asset categories of the mandatory pension funds



Source: Agency for Supervision of fully funded pension insurance

The recovery and the stabilization of the global financial markets in 2009, as well as the deflationary developments in the domestic economy reflected on the dynamics of the nominal and real income of the pension funds. In 2009, the pension funds registered positive nominal annual and three-year[116] return rates of 14.3% and 12.1%, respectively. Simultaneously, in the second half of 2009, the real[117] annual and three-year return rates of the pension funds registered more intensive rise and at the end of the year they amounted to 15.9% and 2.9%, respectively. In order to maintain the long-term stability of the pension system and to ensure a long-term benefit for the members of the pension funds, the maintenance of positive and stable real rates of return is of great importance, which can be positively influenced by the larger diversification of assets. Therefore, the increase in the diversification of assets, by following the legal limitations for investment of assets, shall remain important challenge for the pension funds.

Figure 3.4.13
Annual and three-year nominal and real return rates of the mandatory pension funds



Source: Agency for Supervision of fully funded pension insurance and internal calculations of National Bank of Republic of Macedonia

The conservative approach and the prudency when conducting the investment policies reflected with certain deviations in the maturity and currency structure of assets of the pension funds. Thus, in the maturity structure, increase in the relative importance of the assets with contractual maturity from three to five years and over five years was registered. On December 12, 2009, these assets encompassed 30.6% and

[116] The annual and the three-annual nominal income rate are calculated based on the weighting of the income rates of individual pension funds with their net assets.
[117] The real income rate of the pension funds for certain period is calculated as a differential between the nominal income rate and the inflation rate for the respective period.

31.0% of the assets of pension funds, respectively, registering increase in the participation by 14.8 and 7.2 percentage points, respectively. This deviation in the contractual maturity structure of the assets of pension funds primarily showed the preference of the management companies for investing in instruments with fixed income (deposits and debt securities), opposite to the equity financial instruments. But, on the other hand, within the deposits which were invested by the pension funds to the domestic banks in 2009, the deposits with contractual maturity up to one year participated dominantly with 59.9%. However, the fact that the mandatory fully funded pension funds have relatively young membership, hinders the liquidity risk to have important role in their operating, and the presence of this feature of the reformed pension system is expected also in future, which increases the possibility for diversification of the maturity structure of assets.

Figure 3.4.14
Maturity structure of the assets of the pension funds

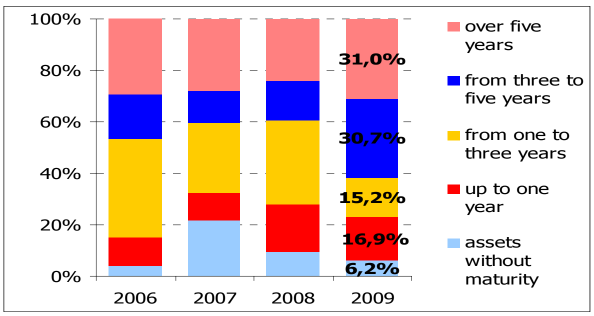
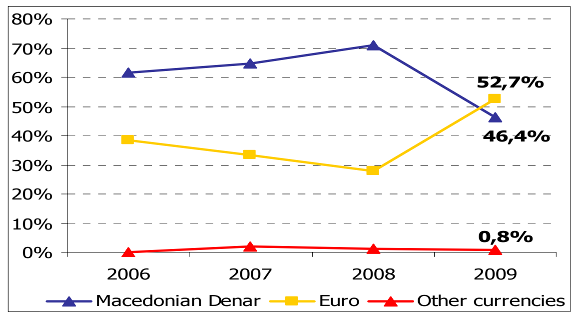


Figure 3.4.15
Currency structure of the assets of the pension funds



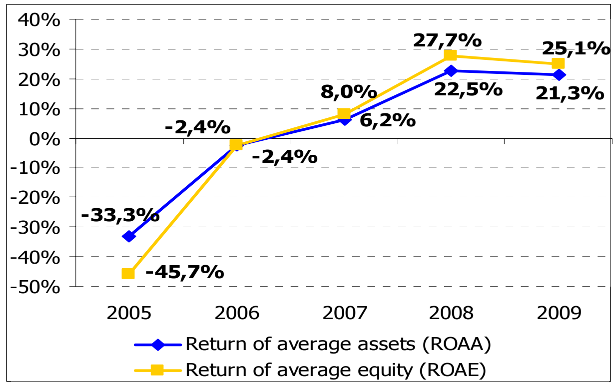
Source: Agency for Supervision of fully funded pension insurance and internal calculations of National Bank of Republic of Macedonia

In 2009, in the currency structure of the assets of the pension funds, considerable increase in the participation of the Euro assets and Denar assets with Euro clause was registered (by 25 percentage points on annual level), for the account of the lower participation of the Denar assets. The rise in the significance of the Euro denominated assets in the currency structure of the assets of the pension funds resulted from the investing in the Eurobonds issued on the international financial markets by the Republic of Macedonia. Besides a protection from currency risk, the Euro assets and Denar assets with clause in Euros, for the pension funds represent also a minimal credit risk, as 98.8% of them are instruments issued by the Republic of Macedonia - Eurobond and structure bonds listed on the official market of the Macedonian stock exchange.

In the second half of 2009 the so called third pillar of the reformed pension system, i.e. the voluntary fully funded pension insurance started operating. Two voluntary funds were founded, and the membership in them can be obtained through opening a voluntary individual account or through membership in professional pension scheme organized by an employer or citizens' association and consequently, opening of a professional account. On December 31, 2009, the total net assets of the voluntary pension funds amounted to Denar 5.7 million and they were mainly invested in banking deposits and bonds issued by the Republic of Macedonia. At the end of 2009, the number of members of the voluntary pension funds amounted to 1.611, out of which 35.6% were participants in pension schemes, and 64.4% were members with concluded agreements and individual account. Considering the fact that the voluntary fully funded pension insurance existed for only few months in 2009, the small number of members and the moderate amount of assets can be considered as anticipated for the initial period. It seems that education of the broader public is inevitable as a precondition for its more dynamic broadening, especially of the employers regarding the forming of professional pension schemes, as well as heir financial features and social advantages.

In 2009 the trend of improvement of the profitability of the pension funds management companies[118] continued. In 2009, the pension funds realized profit of Denar 63 million, which was by 21.7% higher amount relative to 2008. The drop in the rates of contributions for pension insurance, as well as in the fees and commissions collected by the companies had no negative effects on the profitability of the management companies. This came initially from the rise in the membership and paid contributions, but also from the increase in the relative significance of the fees and commissions for the asset management. In 2009, the total income of the pension funds management companies registered rise of 20.0%, and 77.1% of their structure pertained to income based on fees and commissions from the collected contributions, and 15.4% of the fees and commissions for the asset management. In the costs structure of the pension funds management companies, the operating costs of the company encompassed 56.1%, while the costs related with the pension funds management - 43.9%.

Figure 3.4.16
Indicators for the profitability of the pension funds management companies



Source: Agency for Supervision of fully funded pension insurance and internal calculations of National Bank of Republic of Macedonia

[118] The provisions from the Law on Mandatory Fully Funded Pension Insurance ("Official Gazette of the Republic of Macedonia" No. 22/02, 85/03, 40/04, 113/05, 29/07, 88/08, 48/09, 81/09 and 50/10) and the Law on Voluntary Fully Funded Pension Insurance ("Official Gazette of the Republic of Macedonia" No. 7/08), the pension companies are founded as joint stock companies the single activity of which is the management with the assets of the pension funds. Pursuant to the regulations in the Republic of Macedonia, three types of pension companies can be founded: for management with mandatory pension funds, for management with voluntary pension funds, ad for management with mandatory and voluntary pension funds. Both pension companies in the Republic of Macedonia are registered as companies for management with mandatory and voluntary pension funds and they manage with one mandatory and one voluntary pension fund, respectively.

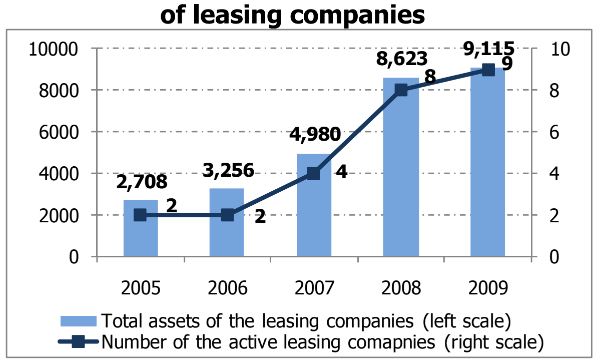
4.3. Leasing sector

The leasing sector, similar as in the other segments of the financial sector, felt the consequences from the negative developments resulting from the financial crisis. In 2009, the activities of this sector registered the largest slowing down in the growth, compared with the other sectors, which is totally opposite to the previous year when it was the fast growing segment in the financial sector. Such developments considerably influenced the profitability of the leasing companies, which showed operating loss this year. The participation of the leasing sector in the domestic economic activity was still low and insignificant.

4.3.1. Depth and activities on the leasing market

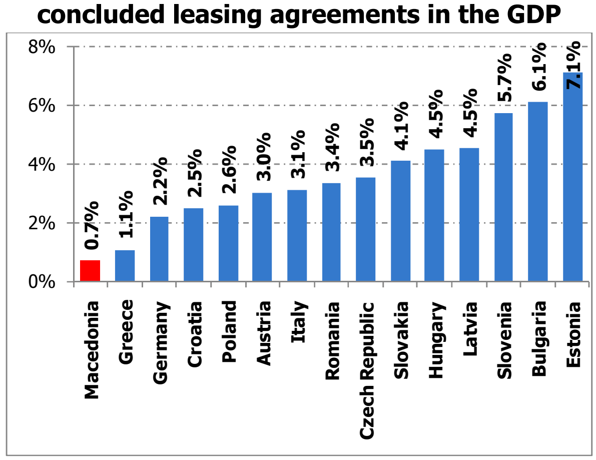
In 2009, the activities of the leasing sector considerable slowed down. The assets of this sector registered considerably lower growth dynamics relative to the previous year, so within the financial sector, the leasing represented a segment with the largest slowing down in the rise of activities. In 2009, the assets of the leasing sector rose by only 5.7%, which was considerably lower compared to 2008 (when this growth amounted to considerable 73.15%). The participation of the assets of the leasing sector in the GDP remained unchanged (2.2%), but its participation in the total assets of the financial sector dropped by 0.1 percentage point (3% on December 31, 2009) and in the total assets of the non-deposit financial institutions, by 3.1 percentage point (29.1% on December 31, 2009). The number of the employees in the leasing sector was almost unchanged and it amounted to 72 persons (in 2008, the growth rate of the number of employees in the leasing sector amounted to 55.3%).

Figure 3.4.17
Development in the total assets and number of leasing companies



Source: Ministry of Finance.

Figure 3.4.18
Participation of the value of the newly concluded leasing agreements in the GDP



Source: the web page of the European Federation of National Leasing Associations, the web page of IMF and Structural indicators for the EU banking sector published in January 2010. The data pertain to 2008, except for Macedonia which pertain to 2009.

Compared to the countries from the area, as well as to some countries from the European Union, the leasing sector in the Republic of Macedonia is still slightly developed. In 2009, this sector was at the last position compared with the analyzed countries, both, regarding the participation of its assets in GDP[119], and the value of the newly concluded agreement relative to GDP.

[119] The indicator on the ratio between the assets of the leasing sector and the GDP in Serbia amounted to 3.8%, in Croatia to 10.1%, while in Slovenia to 16.5%.

4.3.2. Value and structure of the financial leasing agreements

In 2009, the number and the value of the newly concluded leasing agreements registered drop of 51.2% and 31.2%, respectively. Such trend with the leasing companies was parallel with the considerably lower credit activity of banks, different from the situation in some countries, where the lower crediting by banks was replaced with financial leasing. On the other hand, the more hindered servicing of debts, which at the banking sector reflected in worsening in the risk categories of placements, with the leasing companies it manifested through early termination of the concluded agreements with the clients, which was due to the hindered collection of claims and allocation of impairment for the claims. Such situation contributed to sharpening of the criteria (mainly increase in the interest rates) and higher conservativeness and prudency when approving these services.

Figure 3.4.19
Number and value of the newly concluded leasing agreements

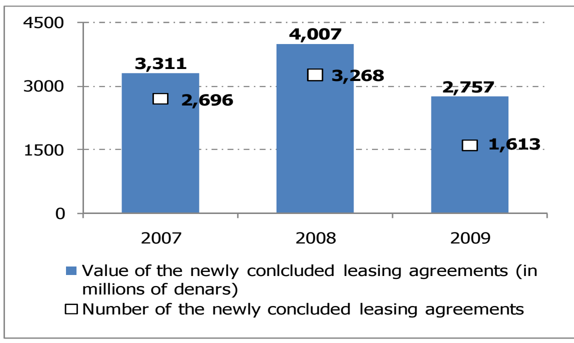
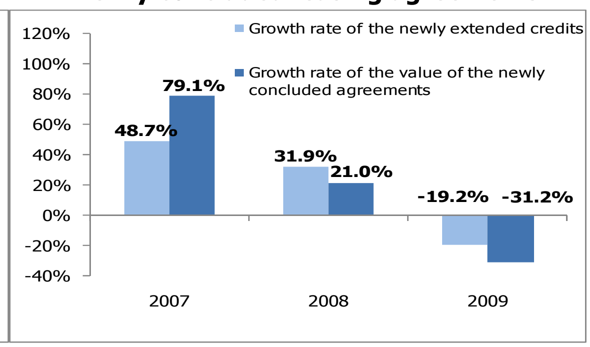


Figure 3.4.20
Development of the growth rate of the newly extended credits and the value of the newly concluded leasing agreements



Source: Ministry of Finance, NBRM.

In 2009 the value of the newly concluded leasing agreements registered fall both, with the natural persons and the legal entities. The legal entities were still the dominant users of the leasing services. In 2009, the value of the newly concluded leasing agreements with the natural persons registered twice higher fall rate, relative to the dynamics of fall in the value of the concluded agreements with the legal entities. The value of the newly concluded leasing agreements with the legal entities was still several times higher than the value of the leasing agreements concluded with the natural persons (in 2009, the participation of the value of the newly concluded leasing agreements with the legal entities in the value of the total concluded leasing agreement registered rise by 7.5 percentage points). On the other hand, the participation of the value of the active leasing agreements concluded with the legal entities in the total value of the active agreements registered rise by 5.3 percentage points and on December 31, 2009 it reached the level of 67%.

Table 3.4.2
Structure and change of the value of the newly concluded and active leasing agreements, by individual sectors

Year	Value of the **newly concluded** leasing agreements	Annual change in the value of **newly concluded** leasing agreements		Value of the **active** leasing agreements	Annual change in the value of **active** leasing agreements	
		in million of Denars	**in %**		**in million of Denars**	**in %**
Legal entities						
2008	2,781	624	28.9%	6,243	1,842	41.9%
2009	2,121	-660	-23.7%	7,782	1,539	24.7%
Natural persons						
2008	1,225	115	10.4%	3,876	312	8.8%
2009	637	-588	-48.0%	3,838	-38	-1.0%

Source: Ministry of Finance.

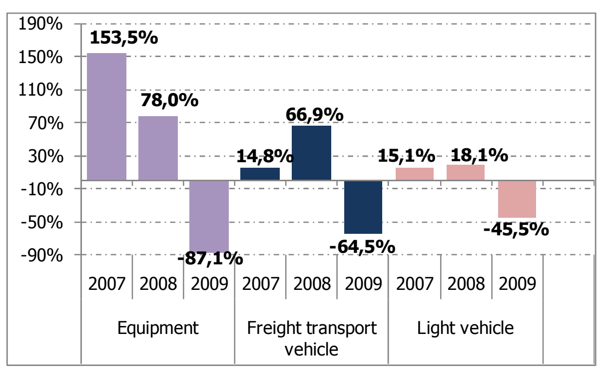
The leasing services for non-movables still participated insignificantly in the portfolio of leasing agreements. In 2009, no new agreement on non-movables was concluded, so the number of effective agreements for non-movables remained unchanged ant it amounted to total four agreements[120]. Such situation resulted from the still unchanged tax regulation which makes the offer of non-movables unattractive relative to the offer of credits by the banks for this type of property.

Table 3.4.3
Structure of the leasing agreements on movables

Type of the leasing contract	Equipment			Freight transport			Light vehicle			Other		
	2007	**2008**	**2009**	**2007**	**2008**	**2009**	**2007**	**2008**	**2009**	**2007**	**2008**	**2009**
Number of newly concluded leasing contracts	109	194	25	248	414	147	2,162	2,554	1,393	176	110	48
Number of outstanding leasing contracts	225	338	276	695	902	554	6,123	7,828	8,555	426	367	236

Source: Ministry of Finance.

Figure 3.4.21
Growth rates of the concluded leasing agreements for movables



Source: Ministry of Finance.

In 2009, the value and the number of the newly concluded leasing agreements for all types of movables registered drop. The leasing agreements on light vehicles still created the largest share of the portfolio of leasing agreements. Their participation in the number of the newly concluded agreements on movables amounted to 86.4% (growth of 8.3 percentage points). However, the

[120] Source: Ministry of Finance.

agreements concluded for procurement of light vehicles registered the largest fall in the number of agreements (by 1.161 agreements or by 45.5%). Thus, the expectations of some leasing companies that the tightened credit policies of banks will redirect the clients towards use of financial leasing failed to realize. Out of total 11.692[121] sold vehicles (transportation and light vehicles) in 2009, only 1.540 (or 8.7%) were sold through leasing agreements.

Table No. 3.4.4
Participation of the concluded leasing agreements for vehicles in the total sold vehicles in the Republic of Macedonia

Type of vehicles	2008	2009
Light vehicle	16.0%	8.7%
Freight transport vehicle	22.7%	8.1%
Total number of vehicles sold on leasing / Total number of vehicles sold in Republic of Macedonia	16.7%	8.7%

Source: Ministry of Finance.

4.3.3. Balance sheet structure and basic performance indicators of the leasing companies in 2009

The structure of the total assets and sources of funds of the leasing companies remained almost unchanged relative to the previous year. The borrowings from abroad still represented the dominant source of funding, whereas the domestic banks participated with only 2.3%.

The claims based on leasing agreements dominated in the assets of the leasing companies. The deposits to domestic banks were only 2.5% of the total assets of this sector (at the end of 2008 this participation amounted to 5.1%). This showed that the interdependence of the stability of the banking sector and the leasing sector was at exquisitely low level, which was mainly due to their insignificant interrelation.

Table 3.4.5
On- balance sheet of the leasing companies on December 31, 2009

ASSETS	in million of Denars	LIABILITIES	in million of Denars
Cash, cash balances and deposits	258	Borrowings	8,136
Claims for financial leasing	6,364		
Short-term receivables	175	Accounts payables	66
Prepaid expenses	1	Provisions for emplyees entitlemen	133
Inventory	152		
Investments available for sale	14	Accrued expenses	479
Assets under rent	1,300		
Property and equipment available for sale	59	Other liabilities	20
Property, plants and equipment	694		
Intangible assets	45	Equity and reserves	280
Other assets	52		
TOTAL ASSETS	**9,115**	**TOTAL LIABILITIES**	**9,115**

Source: Ministry of Finance.

[121] Source: Economic Chamber of the Republic of Macedonia.

The considerably lower growth in the activities of the leasing sector in 2009, related with the slower economic developments in the Republic of Macedonia, resulted in operating losses of the leasing sector. Different from the previous year, when the net gain of the leasing companies amounted to Denar 111 million, this year they showed losses of Denar 50 million. Subsequently, the rates on return of equity and on assets registered negative values. Namely, the undertaken activities of the leasing companies in 2009 were not in a volume that would generate enough amount of income for covering the total expenditures made during the year. The interest expenditures generated mainly from the relatively high credit liabilities represented the largest expenditure item in the structure of the aggregated income statement of the leasing companies. The performance of structure transformation in the liabilities of the leasing companies (increase in the capital as a durable and non-recurring investment of the owners, for the account of the decrease in the credit liabilities), the improvement in the efficiency, both, in the assumption of the leased assets when terminating the concluded agreements with the clients that failed to adhere to the agreement provisions, and in their sale (which imposes a need for better organization on the secondary market of movables and non-movables in the Republic of Macedonia) and the adoption and implementation of the long-awaited changes in the tax regulations (those provisions which encumber the operating of the leasing companies[122]) were some of the factors which could contribute to reducing the expenditures of the leasing companies, drop in the risk premiums, and subsequently, improvement in their competitiveness (mainly regarding the largest competitor - the banks) and growth in the basis for generating income. Such improvements in the functioning of the domestic leasing companies could contribute to easier maintenance of the profitable and stable operating, not only in conditions of expansion, but in conditions of crisis as well.

[122] When purchasing non-movables trough leasing, the turnover tax on real estate shall be paid twice. Also, the leasing companies are not released from the obligation for payment of value added tax, as it is the case with the banks and insurance companies.

IV. Financial infrastructure

1. Payment infrastructure

The finalization of the reforms of the payments systems[123] in the Republic of Macedonia (at the end of 2001) and the continuous activities for their promotion and consolidation with the international standards, enabled creating payment infrastructure characteristic for the modern market economies.

The position of the payment systems reduces the exposure of the participants to a minimum. There is practically no credit risk (as a result of the implemented real time settlement system). The activities for establishing a reserve location for MIPS are in the final phase, which was one of the priorities of NBRM (according to the recommendations of the FSAP mission in 2008) in order to enable constant operability of the payment systems, i.e. minimization of the operational and systemic risk. In 2009, the NBRM in cooperation with the Central Bank of Nederland made an assessment of the consolidation of the MIPS with the seventh basic principle which pertains to ensuring operational stability and system security. The steps for consolidation of the operating of MIPS with this core principle were determined, and this would be a priority of the NBRM in the following period. The consolidation with this core principle shall ensure further reduce in the exposure to operational and systemic risk.

The envisaged assessment of the consolidation of the Clearing House (KIBS) with the core principles (in 2010) is of great importance in order to increase the operational efficiency of the payment system for the Republic of Macedonia.

In 2009, the MIPS operated in real time with availability of 99.98% of the envisaged operating time during the year (by 0.06 percentage points higher relative to 2008). Considering the importance of the uninterrupted functioning of the payment systems, i.e. the payments in the economy, such high degree of availability of MIPS represented a minimal exposure to operational risk.

In 2009, the activities in the National Committee on Payment Systems for implementation of the strategic directions from the Strategy for Development of the Payment System of the Republic of Macedonia until 2011 continued, thus identifying the areas that should be promoted and the steps that should be taken for approximation to the SEPA[124] standards. On the side of the operating group for electronic direct debiting, a plan of activities for introducing the instrument for direct indebtedness was developed.

[123] The NBRM and the banks in the Republic of Macedonia represent the payment operations careers in the Republic of Macedonia. Payment systems are the following:

- Macedonian Interbank Payment system (MIPS) for gross settlement of transactions. NBRM manages with the MIPS.
- The Clearing Interbank Systems (Clearing House "KIBS" AD Skopje) for net settlement of transactions with value less than Denar 1 million. This system is owned by 15 banks.
- Casis AD Skopje - private processing operator of payment cards, which performs authorization and clearing of the transactions with payment cards.

More detailed description of the structure of the payment systems is given in the Financial Stability Reports for 2007 and 2008, as well as in the NBRM's Annual Report 2009.

[124] SEPA-Single European Payment Area

Table 4.1.1.
Value and number of transactions in the payment operations

Item	Value of total operations (in millions of Denars)		Number of transections		Change			
					Value		Number	
	2008	2009	2008	2009	2008/2007	2009/2008	2008/2007	2009/2008
MIPS	1,669,556	1,392,854	4,906,672	4,718,965	19.8%	-16.6%	73.3%	-3.8%
KIBS	199,821	217,061	14,941,822	16,623,623	19.8%	8.6%	19.3%	11.3%
Internal banking payment operations	1,367,415	1,277,436	25,457,090	27,861,712	38.8%	-6.6%	111.1%	9.4%
Total	**3,236,792**	**2,887,351**	**45,305,584**	**49,204,300**	**27.2%**	**-10.8%**	**65.2%**	**8.6%**

Source: NBRM

In 2009, while the number of transactions showed moderate rise, their value registered drop. Despite the signals for recovery of the economy, which showed in the second half of 2009, still the negative influences from the crisis, especially with the real sector, as well as the slowed down economic activities, reflected on the value of transactions in the settlement systems as well. Its drop mainly resulted from the lower value of transactions realized through MIPS.

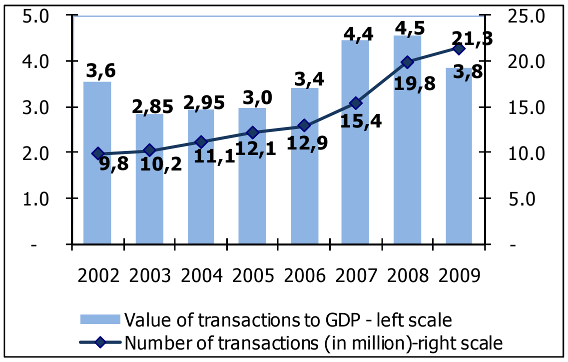
Table 4.1.2.
Payment operations structure

Item	Structure			
	Value		Number	
	2008	2009	2008	2009
MIPS	51.6%	48.2%	10.8%	9.6%
KIBS	6.2%	7.5%	33.0%	33.8%
Internal banking payment operations	42.2%	44.2%	56.2%	56.6%
Total	100.0%	100.0%	100.0%	100.0%

Source: NBRM

For the first time in the last few years, the ratio between the value of transactions realized through MIPS and KIBS and the GDP dropped. This resulted mainly from the developments in these two categories in opposite directions (rise in the GDP by Denar 8.235 million and fall in the value of transactions in MIPS of Denar 276.702 million).

Figure 4.1.1
Value of total transactions in BIBS and MIPS relative to GDP and number of transactions



Source: NBRM

Figure 4.1.2
Trend of the Herfindahl index for the value of transactions

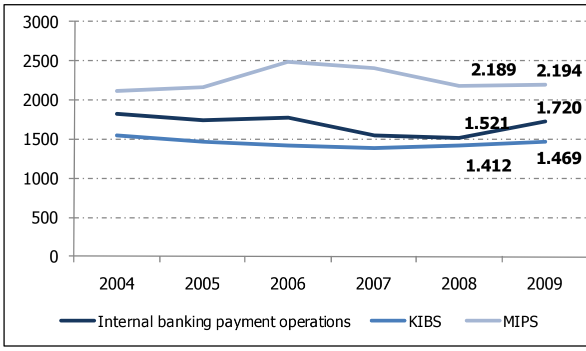
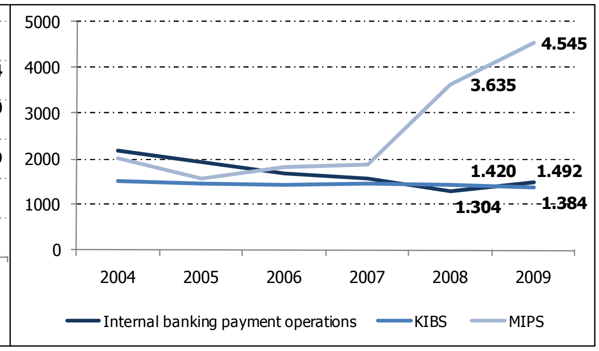


Figure 4.1.3
Trend of the Herfindahl index for the number of transactions



Source: NBRM

Within the individual systems, the concentration with respect to the value of transactions was within the acceptable levels. The Government transactions (Treasury account) which are realized through MIPS were the reason for the extremely high concentration of the number of transactions realized through this system.

2. Significant legal solutions adopted in 2009

In 2009, two new laws were adopted which pertain to individual segments of the financial system of the Republic of Macedonia, as follows: the Law on the Macedonian Bank for Development Promotion and the Law on Investment Funds. Also, in 2009 amendments were made to the Law on Mandatory Fully Funded Pension Insurance and the Law on Obligations.

Law on the Macedonian Bank for Development Promotion

In August 2009 the new Law on the Macedonian Bank for Development Promotion (MBDP) was adopted which validate the main task of the MBDP for promoting and simulating the development of the Macedonian economy in accordance with the strategic policies, goals and priorities of the Republic of Macedonia.

Pursuant to the Law, the single shareholder of MBDP is the Republic of Macedonia (previously, besides the Republic of Macedonia, the Economic Chamber of the Republic of Macedonia, as well as other domestic and foreign legal entities could be shareholders). The initial capital of the bank can be increased through payment of funds from the Budget or from other funds, based on a decision of the Government of the Republic of Macedonia. The Republic of Macedonia shall guarantee for the liabilities of the MBDP, but there is a limitation on the amount of the total liabilities of the bank (they shall not exceed ten times of the amount of the bank's own funds). Different from the previous legal solution which envisaged the possibility for payment of dividend to the shareholders, according to the new Law, the realized net profit shall be retained in the reserves of the MBDP.

The Law also broadens the list of activities that MBDP can perform. Different from previously, the MBDP can perform also payment operations in the country and abroad (including a sale of foreign currencies) and trade with securities on its behalf and for its account. MBDP can perform its activities together with other banks or non-banking institutions (as so far) or directly[125] (including the direct crediting as well), which represent a novelty relative to the bank's operating so far. In order to realize projects or programs of the Government of the Republic of Macedonia, MBDP can grant credits with subsidized interest rate. MBDP can not grant credits or issue guarantees to Republic of Macedonia and to the budget users and individual users of funds from the budget of the Republic of Macedonia. In order to perform its tasks and activities, MBDP ensures funds through borrowings in the country and abroad and through issuing debt securities. Also, pursuant to the new Law, MBDP can collect deposits from legal entities and natural persons, only if they are used as collateral of the payments related with the bank's activities. The exposure of the banks and other financial institutions to MBDP is treated as an exposure to the Republic of Macedonia.

Other significant novelty which arises from this Law is the cancelation of the guarantee fund[126] of MBDP and the transfer of assets from the guarantee fund to the initial bank's capital.

Law on Investment Funds

In January 2009 the new Law on Investment Funds was adopted. The adoption of this law resulted from the need of monitoring the flows on the capital market, the need of improvement and promotion of the existing legislation in the area of the investment funds, as

[125] The provision for direct performance of activities started being applied on January 1, 2010.

[126] The assets of this fund were used for issuing guarantees for collateralization of the payments based on long-term credits for investments extended by banks and other financial institutions in the Republic of Macedonia, so these guarantees were not used for projects financed or guaranteed with assets of MBDP.

well as the need of its compliance with the EU directives. The adoption of the new Law on Investment Funds ensured risk diversification and higher safety when investing, through the possibility for investing the collected funds in different types of financial instruments and professional management with the invested funds through use of the professional knowledge of the portfolio managers who manage the collected assets.

This Law prescribes the founding and operating of the investment funds, the founding and operating of the investment funds management companies, the issuing and sale of the stakes and shares, the purchase of stakes, the promotion of the investment funds, the activities which can be performed by third parties for the investment funds and the operating of the depository banks.

The Law contains special provisions on the manner and the terms and conditions for founding investment funds management companies, thus making difference between the criteria on founding and operating of the companies for management of the open-ended and close-ended investment funds and the companies for management of private investment funds, mainly with respect to the amount of the capital. Pursuant to the Law, the company for management with private investment funds shall act in the legal trade in its name and on behalf of the owners of documents for share in the private fund. This law gives an opportunity to foreign companies for management of funds, opening branches in the Republic of Macedonia after previously obtained authorization for operation by the Securities and Exchange Commission of the Republic of Macedonia and provided that previously it has obtained an authorization for operation in any member state of the European Union or member state of the OECD.

The depository banks, the basic function of which is to keep the assets of the investment fund and to control if the investment fund uses the fund's assets in accordance with the Law and the Statute of the fund, represent a significant segment in the operating of the investment funds regulated by this Law. The activities performed by the depository bank for the management company shall be separated from the other bank's activities. The depository bank keeps the property of each fund on an individual account, including the securities, bank accounts and other property. The property of the investment funds with the depository bank is not included in the property of the depository bank or in the liquidation or bankruptcy estate, and it can not be used for realization of the bank's claims. Only a bank that has a head office in the Republic of Macedonia, and which in accordance with the Banking Law has obtained an approval from the National Bank for performing the activity of custodian bank, can be selected as a depository bank.

Law on amending the Law on Mandatory Fully Funded Pension Insurance

The amendments to the Law on Mandatory Fully Funded Pension Insurance improve the fully funded pension insurance and the protection of the interest of the members of pension funds. The amendments to the Law precise the competencies and authorizations of the Agency for Supervision of the Fully Funded Pension Insurance through broadening its obligations regarding the organization of the manner of merging and acquisition of the companies for management of the mandatory pension funds, prescribing the contents of the external audit of the pension funds, prescribing the highest amount of investments of the pension funds, arranging the contents of the investing strategy etc.

Pursuant to the Law, the assets of the pension funds shall not be invested in deposits with banks which are shareholders in the pension fund management company or the company for management of the mandatory and voluntary pension funds. Also, the amendments to the Law broaden the assets the pension fund can invest in. According to the existing provisions of the Law, the pension fund could, inter alia, invest its assets in: bonds and securities issued by foreign governments and central banks of the member states of the European Union, Japan and USA, bonds and other securities with fixed income and adequate rating issued by non-government, foreign companies and banks from the member states of the European Union, Japan and USA and securities with an adequate rating that are traded on the stock exchanges of the European Union, Japan and USA. The amendments extend the list of acceptable foreign countries to all member states of OECD, which enables higher investment diversification of assets and wider choice of enterprises with respect to the investment of assets of the mandatory pension funds by the companies, as well as investment of larger volume of assets of the pension funds abroad.

The obligation for the pension fund management companies to select a custodian for the mandatory pension fund represents a significant novelty which is introduced with the amendments to this Law. According to the existing provisions of the Law, the National Bank of the Republic of Macedonia was a custodian of the pension funds. According to the amendments, custodian shall be a domestic bank that has a founding and operating license issued by the National Bank and that fulfills the terms and conditions defined by the Law. The most important terms and conditions pertain to the amount of the required capital (Euro 20.000.000 in Denar denomination), as well as to the requirement the custodian bank not to be shareholder in the pension fund management company or shareholder of a person related with the company, while the members of the bank's bodies and its employees cannot be members of the management or supervisory board, general manager, manager or other company employee.

Law on amending the Law on Obligations

The amendments to the Law on Obligations pertain to the determination, the amount and calculation of the penalty and contractual interest.

Pursuant to the Law, the debtor who is late with the payment of the cash liability, besides the principal, shall owe a penalty interest as well. The rate of the **penalty interest** is determined for each half of the year in the amount of the interest rate of the basic instrument of the open market operations of the National Bank of the Republic of Macedonia (reference interest rate) (when the cash liability is denominated or determined in Denars), i.e. in the amount of one-month EURIBOR rate for Euros (when the cash liability is denominated or determined in foreign currency), which was valid on the last day of the half of the year that preceded the current half of the year, increased by ten percentage points for the trade agreements and agreements between the traders and persons of the public law[127], i.e. increased by eight percentage points in the agreements in which at least one person is not a trader. Thus, the provisions which pertain to situations when a domicile penalty interest rate is debited, and which caused misinterpretation regarding the manner of determination of the amount of the penalty interest, were removed with the amendments to the Law. These changes determine the method of calculation of the penalty interest (discursive simple interest method).

The most important amendment to the Law regarding the **contractual interest** pertains to the deletion of the provisions which determined the amount of the contractual interest rate in the cases when the cash liabilities are denominated in foreign currency (the contractual interest rate could not be higher than the contractual interest of the currency domicile country, which is agreed between the commercial banks and first-class debtors). Instead of this, the Law prescribes that the contractual interest rate in the trade agreements and agreements between traders and public law persons is determined contractually, and this

[127] Persons of the public law are the persons who are obliged to act in accordance with the procedure for public procurement, excluding the traders.

rate shall not exceed the rate of the legally prescribed penalty interest, increased by maximum 50%. In the agreements where at least one person is not a trader, the contractual interest rate can not be higher than the rate of the legally prescribed penalty interest for the respective currency (including Denars), which was valid at the day when the agreement was concluded, i.e. the day when the interest rate was changed, if a variable interest rate was agreed. If in the agreements between persons out of which at least one is not a trader, a higher interest rate than the allowed one is agreed, the highest allowed interest rate for the respective currency shall be applied.

When the height of the contractual interest rate is not determined, the Law prescribes, for the agreements between persons out of which at least one is not a trader, an interest rate in the amount of 1/3 of the rate of the legally prescribed penalty interest for the respective currency to be applied, and for the trade agreements or the agreements between traders and public law persons - interest rate in the amount of 1/2 of the rate of the legally prescribed penalty interest for the respective currency.

Other significant novelty which arises from this Law is the change of the place and the date of disclosure of the reference interest rate by the National Bank. So far, in accordance with the Law on Obligations, the National Bank was obliged to disclose the reference rate each January 1st and July 1st in the "Official Gazette of the Republic of Macedonia". With the amendments to the Law, the National Bank is obliged to disclose the reference rate of the basic instrument in the open market operations each January 2nd and July 1st on its webpage and it shall be applicable for the following six months (till the end of the half of the year).

These amendments started being applied on February 1st, 2010.