Periodical Part

Financial stability report for the Republic of North Macedonia in ... ; 2008

Provided in Cooperation with:
National Bank of the Republic of Macedonia, Skopje

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 2008

Skopje, July 2009

Governor's foreword

Safe and sound financial system plays a key role in the efficient resource allocation in the economy, thus ensuring a growth in the economy and higher level of social wellbeing. On the other hand, the financial system which, at a large extent, operates on the basis of trust has been exposed to a high level of uncertainty and cyclical changes in the perceptions and the behavior of the economic entities. Only the stable financial system is a prerequisite for creating an atmosphere of stable business expectations and strengthening of the confidence of the economic agents. Considering that the financial crises result in enormous economic and social expenditures, the financial stability could be considered a very important public good and one of the primary objectives of the overall economic policy.

Without neglecting the primary objective, i.e. the price stability, an increasing number of central banks makes enormous efforts and allocates many resources for the maintenance of financial stability. The accomplishment of this objective has become even more important in the context of the developments on the international financial scene over the last year and a half. We have witnessed, most probably, the largest and the most complex financial crisis so far, with far-reaching implications to the further functioning and development of the global financial system. Therefore, the major task challenging the economic policy makers, including the central banks worldwide is the enhancement of their contribution to the financial system stability and its capacity to face the crises in future. Timely identification of the potential shocks and primarily, undertaking of corresponding preventive measures for strengthening the resilience of the financial system to the future potential shocks are the major challenge to the central banks in the forthcoming period.

The current crisis washed ashore significant issues related to the activities to be undertaken by the central banks for the purposes of successful prevention, management and settlement of potential future financial crises. Therefore, in global terms, the focus is on the discussion for the need of redefining the role and responsibility of the central banks for the financial stability, and the need of larger so-called "self-insurance" of the financial institutions by ensuring higher capital level, as an absorber of potentially unfavorable shocks, higher liquidity level and more efficient risk management. In addition, one of the key lessons delivered by the financial crisis is that institution - oriented supervision could neglect the systemic risks. Hence, the greater focus on the macro-prudential supervision, i.e. risk-based supervision is crucial, if not for prevention, at least for abating the adverse effects of the future crises. Stress should be placed on the further enhancement of the endeavors for more efficient and timely understanding of the systemic risks and strengthening of the capability and capacity of the financial system to face them. It is more than clear that the attempt to fully eliminate the systemic risks by regulating the overall financial system, is not only impossible, but could also have discouraging effects on the economic activity. Therefore, the financial system regulators should seek to establish a legal framework and environment to create favorable impetus to the financial development, and simultaneously to provide a solid base for maintaining the financial stability.

Starting from these challenges and tasks, the National Bank of the Republic of Macedonia in 2008 continued making efforts to promote more stable and efficient financial system. The National Bank shares its responsibility for the stability of the overall financial system with the other regulatory and supervisory authorities in the Republic of Macedonia. Thus the cooperation and coordination of the activities of all economic policy makers is especially important.

In order to face the future challenges to fulfill its mandate to support the safety and soundness of the financial system, the National Bank has been permanently allocating resources. The comprehensive analyses and evaluations of the financial stability in the Republic of Macedonia, among other things, developed into the third *Financial Stability Report for the Republic of Macedonia*, basically aimed to provide a comprehensive understanding of the domestic financial system and to identify the basic risks that could affect its stability. This is expected to make all economic agents more informed in order to prevent or abate the adverse effects of the potential risk effectuation in due course.

Introduction

In 2008, the world has faced one of the greatest financial and economic crises in the last century, with widely dispersed destructive influence on almost all areas of social environment. The financial crisis, which occurred in 2007 in one segment of the financial markets and on a restricted area, in 2008 developed into a global financial crisis, covering the overall financial markets. With its destructive influence on the economies of almost all countries worldwide, this crisis turned into a global economic crisis, bringing the global economy to a deep recession.

This crisis has been accompanied by a large uncertainty and mistrust between the economic agents, and the most sophisticated prediction techniques could not provide certain answer on the duration of this crisis and the eventual epilogue. The permanent downward revision of the growth rate of the national economies and the global economy, of the price changes in some more substantial types of assets, and of some other relevant economic categories increases the risk aversion by the economic agents. This results in multiple increases in the risk premia and virtual closedown of the interbank markets in the developed countries. This was accompanied by the sharp fall in the demand for credits by the corporate sector and the household sector, and virtually no credit support from the banks. This brought about significant contraction on the economic activity in the developed countries which, given the high integration of the international trade and financial flows, swiftly spilled over the other countries, including the emerging economies and the economies in transition.

The global economic and financial crisis had a restricted direct effect on the financial stability, but significantly influenced the macroeconomic stability in the Republic of Macedonia. The enhanced recession tendencies in the developed countries, particularly the largest trade partners of the Republic of Macedonia and the steep fall in the metal prices, reduced the foreign currency inflows from exports. The above, along with the decrease in the private transfers and capital inflows, and in environment of high household and public consumption, widened the gap between the demand for and the supply of foreign currency, creating pressures on the exchange rate stability. The global crisis washed ashore the major weaknesses of the Macedonian economy, mainly evident through the high concentration and exports exposure to the price fluctuations on the international markets, and the reliance on private transfers, as sources of funding the disequilibrium in the trade balance. Given the uncertainty regarding the recovery of the global economy, the risk of further increase in the external disequilibrium keeps on prevailing.

Apparently, in an environment like this, the risks to the financial stability come through various channels and forms. The global financial crisis creates risks to the bank liquidity and to the maintenance of the quality of credit portfolio. Additionally, the deepening of the external disequilibrium makes pressures on the exchange rate, the stability of which (in environment of high euroization) is a key prerequisite for maintaining the financial stability. Thus, in 2008, when the risks to the financial stability in the Republic of Macedonia increased considerably, the NBRM undertook several measures. To eliminate the pressures on the exchange rate, it made multiple increases of the referent interest rate. Moreover, the NBRM undertook stricter prudential regulation of the credit expansion and rigorous implementation of the supervisory standards. In this context, the stricter liquidity risk management standards play an important role, acting as a prevention instrument, aimed at strengthening the Denar and foreign currency liquidity of the banks in the Republic of Macedonia.

The enhanced macroeconomic risks and their extended effect, have a direct influence on the two basic nonfinancial sectors - the household and the corporate sectors, and hence, the stability of the overall financial system.

The aggravated conditions on the labor market, due to the deceleration of the economic activity in the country, act towards increasing the uncertainty to the future income of the households, their purchasing power and financial capability. The debt of the households to the financial institutions in 2008 kept on growing, however at a slower pace compared to 2007. However, the slower growth in the financial assets and the available household income, relative to the growth rate of its debt, in 2008, contributed to increasing the burden for debt repayment. Moreover, the negative gap between the available income and the household consumption further widened in 2008, which is yet another factor that increases the uncertainty to the future financial capacity of the households.

Basic risks arising from this sector, which could have positive effects on the financial stability, result from the opportunities for excessive borrowing, particularly of some cycles of people with lower coverage of the credit liability with their monthly income. This risk should be supplemented with its exposure to interest and currency risk, the materialization of which, if any, could directly affect the household financial liabilities, and consequently, the decrease in their wealth and living standard. **Hence, the maintenance of the value of financial assets and liabilities of the household, through the preservation of macroeconomic stability, has a crucial importance to the financial stability.**

In 2008, the risks to the financial stability arising from the corporate sector went up, but they remained controlled, causing no adverse effects on the balance sheets of banks and other financial institutions. Still, the recession tendencies in the global economy and consequently, the deceleration of the domestic growth had severe effects on the financial capacity of the companies. The initial signs of deterioration of the corporate performances were demonstrated by canceling orders and temporary interruptions in production, lower corporate liquidity, harder claim collection, increased number of blocked accounts of the companies. All this could have adverse effects on the capacity of the corporate sector to regularly service its liabilities to the banks and other non-deposit institutions, and to nonresident creditors.

The debt of the corporate sector, which kept on increasing in 2008, generates certain risks to its future operations. The intensive annual growth and domination of the long-term credits in the total corporate credits, when most of them have floating or adjustable interest rate, increased their exposure to interest rate risk. On the other hand, the fast increase and the domination of the debt with currency component in the total corporate debt imply higher exposure to currency risk, too. The higher corporate exposure to interest and currency risk inevitably entails higher exposure of the corporate sector creditors to indirect credit risk. **Hence, the maintenance of macroeconomic stability is crucial to the financial capacity of the corporate sector, its capacity to service the liabilities to creditors and the capability to find easy access to sources for funding of its regular operations.**

Given the tightening of credit policies, credit rationalization and increase of the interest rate, the eventual reduction or price increase in the future credit support by the resident and nonresident creditors could put at stake the capacity of the corporate sector to refinance and repay the current debt, and the capacity to finance its regular activities. Simultaneously, it could slow down the overall volume of activities of the companies and deteriorate the indicators for their operations.

Notwithstanding the turbulent global economic developments and the increased macroeconomic risks in the country, the financial system of the Republic of Macedonia remained safe and sound. The solvency of banks and insurance companies, as the most important types of financial institutions, was high above the required minimum, thus ensuring sufficient capacity to absorb the potential adverse shocks from the further risks growth. However, activities of almost all segments of the financial system reported slower growth, also illustrated with lower earnings and higher risks. However, the low cross-sectoral correlation and ownership among the financial institutions reduced the possibility to disturb the stability of the segments resulting from the risk spillover, to a minimum.

The banking system as a dominant segment of the financial system of the Republic of Macedonia plays a key role in the maintenance of the financial stability. In spite of the increased external and domestic risk factors, in 2008 the banks remained safe and stable. The following factors are the main contributors: maintenance of traditionally high liquidity and solvency by the banks; the banks orientation towards classical bank activities; their insignificant exposure to nonresidents, also including the relatively low reliance on external financing. Various stress-test scenarios illustrate that even in the case of simultaneous materialization of credit, currency and interest rate risk of extreme nature, the capital adequacy across the banking system would not fall below the required minimum of 8%. In 2008, for the first time over the last six years, the role of the banks in the financial intermediation process stagnated to a certain extent, as a result of the deceleration of the growth in the deposit base and the total banking assets. Furthermore, under the influence of the psychological pressure, as a reflection of the higher uncertainty from the crisis on the international financial markets and the undermined domestic macroeconomic environment, 2008 also registered a change in the currency preferences of the bank depositors. They were demonstrated through an increased interest to save in foreign currency.

The lower volume of activities, accompanied with the higher operating costs and the interest expenses of the banks, in 2008, also interrupted the multi-annual trend of continuous improvement of their earnings and efficiency.

In the future period, the banks are expected to face many challenges. On a short run, the **credit risk,** as a dominant bank risk, is expected to be given even greater importance in the range of bank risks. The transformation of the financial crisis into a real sector crisis inevitably leads to tightening the working conditions of the domestic borrowers. This, in turn, would act towards decreasing the financial capacity of the borrowers and higher credit risk, given the deceleration of the credit activity of the banks that started in the second half of 2008, and continued in a faster pace in 2009. Actually, 2008 witnessed an interruption of the multi-annual permanent trend of improving the quality of credit portfolio of the banking system, showing the initial signs of increasing its risk. The higher risk level is particularly characteristic for the credit portfolio of the household sector, whereas, the initial signs of deterioration of the credit portfolio quality of the corporate sector were registered in the second half of 2008, the intensity of which is expected to peak in 2009. One of the key challenges for the banks on a short and medium run is the real measurement of credit risk. This is a result of the fact that in the of economic cycle expansion stage, most frequently, the credit risk is underestimated. In addition, special challenge to the NBRM, as authorized bank supervision authority, will be the monitoring of the application of the new regulation concerning the credit risk management by banks, most of which is based on the international financial reporting standards. Unlike the preceding regulation governing this area, which was based on strictly defined rules for credit risk identification and measurement and the potential losses arising from it, the new regulation allows for higher flexibility in the management of this risk.

Liquidity risk in the banks' operations follows, but it is not less important compared to the credit risk. In 2008, the banks in the Republic of Macedonia held sufficient liquid assets for smooth servicing of their liabilities and permanent regular operations. However, the last quarter of 2008 witnessed certain liquidity pressures on the banks, under the influence of the higher uncertainty between the economic entities, caused by the global economic developments and the higher macroeconomic risks in the country. On the other hand, the growth in the banks' credit activity, particularly the long-term lending, over the recent years, with dominant presence of short-term sources of funding, enables acceleration of the maturity transformation performed by the banks. This widened the gap between the contractual maturity of the banks' assets and liabilities. The maturity transformation of the assets and liabilities was also accompanied with the acceleration of their currency transformation. The gap in the contractual maturity of the assets and liabilities is much more noticeable at the foreign currency assets and liabilities.

In spite of the negative gap between the foreign currency assets and liabilities, the banks primarily maintain long open currency position, thus hedging the risk of potential depreciation of the domestic currency. Major part of the long open currency position of the banks is due to the approved

Denar credits with currency clause. In this way the banks remove the **currency risk from their balance sheets, but replace it with indirect credit risk,** which could materialize in the case of change in some of the key macroeconomic variables.

Such structure of the banks' balance sheets (higher share of foreign currency deposits on the liabilities side, and relatively high share of Denar assets with foreign currency clause and lower liquidity), just reaffirms the necessity of maintaining macroeconomic stability, as a basic prerequisite for financial stability. **The maintenance of stable Denar exchange rate and the required level of operational foreign currency liquidity in the banking system are of crucial importance for the preservation of the stability of the banking system and the overall financial system.**

The slower economic activity in the country, the low liquidity of economic entities and the difficult collection of insurance premium, made the insurance business somehow uncertain. This is demonstrated with the deceleration of their basic activity measured through the slower growth of the gross policy premia. Also, the increase in the amount of liquidated damages and higher operating costs also led to deterioration of the remaining insurance business indicators, primarily those concerning the earnings and operating efficiency. However, the solvency of insurance companies remained high, since some of them further recapitalized. However, the absence of efficient onsite and offsite supervision of the insurance companies' operations remains one of the major risks related to this segment of the financial system, which restrict the identification and assessment of the risks they face with.

While the leasing companies are the fastest growing segment within the financial system, they still play a relatively marginal role in the total economic activity and the overall financial system. Hence, the risks arising from these institutions have restricted influence on the financial stability. On the other hand, the risks generated by other nonfinancial sectors (corporate and household sectors) could have significant influence on the performances of this sector. Thus, the extended effect of the unfavorable developments in the real sector could adversely affect the volume of activities and the level of risk of the leasing companies, taking into account that the companies are most important clients. Moreover, the further decrease in the purchasing power and the financial capacity of the households, if any, could also have severe effects on this financial system segment.

In spite of the higher prudence and conservative attitude of the pension funds to their investments, the volatile macroeconomic environment and the negative developments on the financial markets caused a downtrend of the rate of return of the pension funds. The downward price changes of certain financial instruments the pension funds have been exposed to, and the high inflationary pressures typical for the first half of 2008 undermined the real value of the return of the pension funds, reducing the three-year return (from the establishment of pension funds) to negative value. Such negative gap in the return of the pension companies could be even wider, if the pension fund investments in 2008 were not directed towards financial instrument with lower risk, primarily bank deposits. Some of the major potential risks to the further operating of the pension funds on a medium and long run, with implications to the households' wealth and the overall financial stability, would possibly be the extended adverse effects on the financial markets and further slowdown of the economic growth. This, in turn, could create pressures on the labor market, which would mean a fall in the regular inflows of the pension funds based on paid-in contributions and possibility for liquidity pressures on the operations of the pension funds. However, this problem is relative, taking into account the relatively young membership of the pension funds, where the repayment of liabilities based on pensions is not expected in near future.

Notwithstanding the marginal interconnection of the domestic financial markets with the international ones, it seems however, that the first significant consequences from the global financial crisis were noticed in this very segment of the financial system of the Republic of Macedonia. Back in the first half of 2008, the secondary capital market witnessed a sharp fall in the price levels and lower stock market turnover. Such downward price correction (steep fall in the stock market indices and market capitalization), accompanied with higher refraining from investment, outflow of foreign portfolio-investments and slowdown in the foreign direct investments, and deterioration of the market liquidity, was typical for the entire last year, and the first quarter of 2009. These developments resulted from the synergy of several factors: the global downward price correction on the international markets, primarily the regional stock markets, higher uncertainty and deterioration of the perceptions for economic growth of the country, the relatively low liquidity on the Macedonian capital market, the high concentration of portfolio-investors with same geographic origin and similar investment affiliations, as well as the higher political risk in this region. **The rapid fall in the price levels on the stock market in the Republic of Macedonia triggered no significant implications to the other segments of the financial system, except for the pension funds, the brokerage houses and investment funds.** The bank exposure to market risk is insignificant, based on positions in equities intended for trading, so that such developments on the Macedonian stock market caused no relevant implications to their earnings. Still, the higher refraining from new investments and the fall in the market value of the banks' shares were a potential factor for postponing the foreign strategic investments and new issues of shares of some banks in the Republic of Macedonia. The insurance companies, as the second most significant financial institution, also avoided the significant direct consequences from the developments on the Macedonian stock market, because their exposure to the financial markets was in the form of placements in government securities. However, the unfavorable developments on the Macedonian stock markets had greater effect on the operations of the pension funds. The results from the operations of these institutions considerably deteriorated, primarily due to the non-effectuated losses based on their investments in shares issued by domestic joint stock companies, the market prices of which in 2008 went down drastically.

The transmission of the negative implications from the Macedonian stock market to the financial assets, and hence, the financial capacity of the household sector should be highlighted. Although the effect of the change in the market price of the securities portfolio on the overall financial assets of the households is unquantifiable, one cannot leave out the capital loss of this sector in 2008 based on investments in equities. This channel of transmission of the risks to the household sector, and hence, to the overall financial stability, will be more significant if such unfavorable developments on the capital market continue. This resulted from the fact that the household sector was a net buyer of shares on the Macedonian stock market in 2008, besides the global refraining from investments and the outflow of portfolio-investments from the Macedonian capital market.

In 2008, the NBRM continued with its activities for further promotion of the payment systems and their compliance with the international standards. Considerable progress has been made with the establishment of domestic settlement of transactions on the international payment cards. Also, the NBRM became indirect participant in the TARGET2 system, through the Central Bank of the Netherlands. However, further strengthening of the payment system oversight is required for the next period.

In spite of the turbulent global economic developments and the higher macroeconomic risks in the country, the financial stability in the Republic of Macedonia in 2008 remained satisfactory. However, taking into account the basic risks and the potential channels for spillover of the adverse effects among the segments in the Macedonian economy, including the overall financial system, one of the basic prerequisites for maintaining the financial stability is to preserve the macroeconomic stability. In this context, the NBRM will be alert to the developments in the Macedonian economy, particularly the banking system. Taking into account the ultimate objective to maintain the price stability, the exchange rate stability as an intermediary goal, and the support to the financial stability, the NBRM, as so far, will undertake all necessary measures and actions in this area.

I. Macroeconomic environment

During 2008, the risks for the global financial stability significantly increased. The financial crisis which has started in 2007 and was restricted to one region and one specific type of financial market, the sub-prime mortgage market in the USA, during 2008 grew into an international crisis and caused a significant slowdown of the global economic growth. Expectations that the negative economic growth rates would be common only for the developed economies, and the negative effects will be offset by accomplishing dynamic growth rates in the emerging economies, did not materialize. On the contrary, it became evident that as a result of the high level of interconnection and globalization of the markets, almost no country is immune to the negative effects from the crisis.

On the other hand, in conditions of generally reduced liquidity, deteriorated confidence and tighter conditions for borrowing on the international financial markets, the credit support for the private sector significantly declined. The impact on the private sector was evident through the decline in its ability for debt refinancing and subsequent downward adjustment of the level of consumption and investments. This reflects back on further rising of negative pressures on the overall economic activity and expectations about additional downward corrections of the global economic growth. Under such conditions, especially evident is the influence of the adverse feedback loop between the financial sector and the real sector.

Macedonian economy was not under the direct influence of the negative effects from the crisis on the international financial markets. However, the spillover of the adverse effects from the crisis in the real sector of the countries that are traditional economic partners of the Republic of Macedonia had an indirect impact on the Macedonian economy. The contraction of the economic activity and consumption in these countries had an adverse effect on the level of the economic activity, as well as on the external economic position of the Republic of Macedonia. The unfavorable conditions on the metals market, especially in the second half of the year, also had an adverse impact on the domestic exporters, and hence on the external economic position of the country. Another channel through which the adverse effects from the global crisis were transferred to the Republic of Macedonia were the psychologically induced pressures, which in conditions of a significant degree of euroization in the domestic economy, and under the influence of the uncertainty caused by the developments on the international financial markets, materialized through significant pressures on the foreign exchange and currency exchange markets.

In conditions of generally deteriorated confidence, credit contraction and tighter terms of borrowing on the international financial stage, global risk reassessment by the investors, as well as slow recovery of the global economy, the main challenge for maintaining the financial stability in the Republic of Macedonia in 2009 will be to maintain its macroeconomic stability.

1. International conditions

In 2008, almost all developed countries registered a significant slowdown, even negative economic growth rates. GDP contraction in the developed economies, which, according to IMF, is expected to continue also in the next year, will still represent one of the main challenges in maintaining price stability on a global level. Thus, in 2009, global GDP is expected to register annual fall of 1.3%, with a GDP contraction being expected in all developed economies. Certain recovery of the global economy is envisaged for 2010.

Table 1
Annual economic growth rates by region and country

areas and countries	GDP annual growth		GDP growth (forecast for 2009)		GDP growth (forecast for 2010)	
	2007	2008	april 2009	Difference from october 2008 forecast (p.p.)	april 2009	Difference from october 2008 forecast (p.p.)
World	5.15%	3.20%	-1.32%	-4.35	1.89%	-2.33
Advanced economies	2.71%	0.85%	-3.79%	-4.27	0.01%	-1.99
Euro area	2.67%	0.86%	-4.23%	-4.41	-0.44%	-1.79
USA	2.03%	1.11%	-2.75%	-2.81	-0.05%	-2.09
Emerging and developing economies	8.34%	6.11%	1.58%	-4.47	3.99%	-2.73
Russia	8.10%	5.60%	-5.98%	-11.48	0.50%	-5.50
China	13.01%	9.05%	6.52%	-2.73	7.51%	-2.29
India	9.30%	7.29%	4.52%	-2.42	5.61%	-2.12
Central and eastern Europe	5.42%	2.95%	-3.68%	-7.07	0.77%	-3.95
Romania	6.20%	7.10%	-4.14%	-8.94	-0.04%	-5.34
Albania	6.26%	6.77%	0.38%	-5.89	2.00%	-4.20
Bosnia and Herzegovina	6.84%	5.50%	-2.99%	-7.99	0.50%	-4.50
Croatia	5.47%	2.36%	-3.53%	-7.26	0.25%	-4.25
Macedonia	5.86%	5.00%	-2.00%	-7.00	1.00%	-4.00
Largest foreign trade partners of the Republic of Macedonia (export side)						
Serbia	6.91%	5.43%	-2.00%	-8.00	0.00%	-6.50
Germany	2.51%	1.29%	-5.61%	-5.61	-1.00%	-2.00
Greece	4.04%	2.93%	-0.20%	-2.20	-0.60%	-3.20
Bulgaria	6.16%	6.02%	-2.00%	-6.25	-1.00%	-6.50
Italy	1.56%	-1.04%	-4.45%	-4.21	-0.39%	-0.73

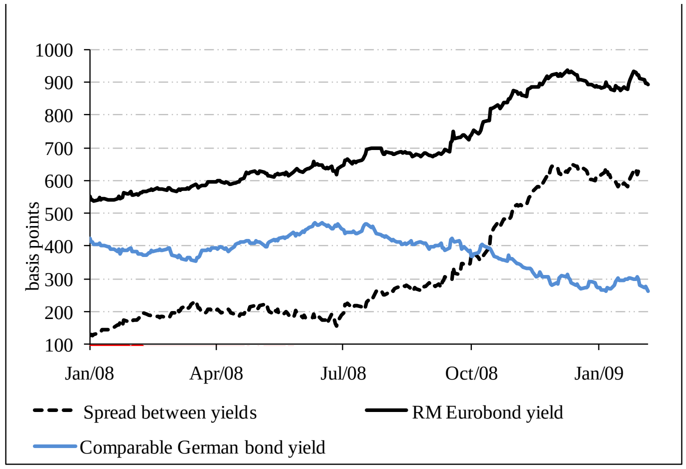
Source: IMF, World economic outlook database, october 2008 and april 2009.

Although through indirect transmission channels, the adverse effects did not bypass even the emerging and developing economies, which faced with significant slowdown of the domestic economic activity. Unlike the first half of 2008, when there was a prevailing opinion that the financial crisis would not severely hit these countries, after the radical worsening of the crisis in the last quarter of the year, it became evident that no country remained immune to its adverse effects. The practice has confirmed the unsustainability of the opinion that the fast economic growth of the emerging economies will continue and it will be a sufficiently strong counter balance which will globally contribute to offsetting the economic slowdown in the developed countries. In all emerging economies economic growth slowed down significantly relative to the preceding year.

Slower economic growth and continuous downward correction of the expected economic growth rates in the following two years in the countries that are the most significant trading partners on the side of the export of the Republic of Macedonia, have largely contributed to the materialization of the indirect adverse effects of the crisis in the domestic economy. The contraction of the economic activity and consumption in these countries had an adverse effect on the level of the export demand and the position of the Macedonian exporting companies. Under such conditions, the Republic of Macedonia inevitably faced with deterioration in the external position, slowdown of the economic activity, as well as a significant downward correction of the expected growth rates in 2009.

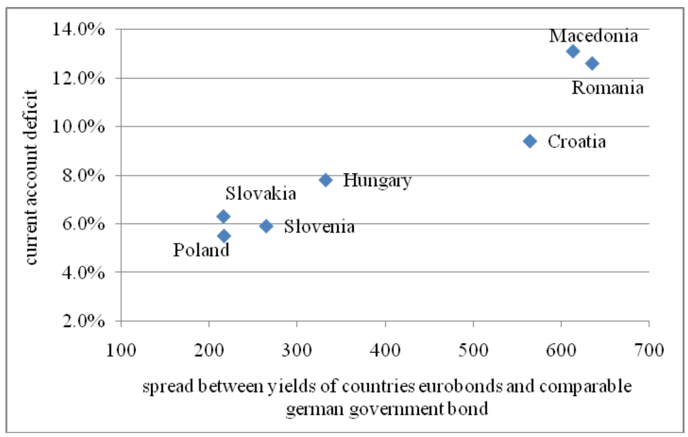
In conditions of reduced liquidity of the markets and significantly higher risk aversion of the financial markets, investors reassessed the risks and risk premia increased significantly. Such a tendency was more common in the emerging economies and developing countries, especially starting from the last quarter of 2008. The amount of the adjustment of risk premia indicates a significant dependence of the perception of risks on the external position of the individual countries (Figure 2). The countries with relatively smaller external imbalances faced with smaller growth of risk premia. On the other hand, countries with emphasized imbalances, including the Republic of Macedonia, faced with a significant rise in the risk premia, i.e. deteriorated conditions for international borrowing, which will represent one of the main restricting factors for faster recovery of the domestic economy from the adverse effects of the global crisis. Investors' perception for an increased risk level is clearly confirmed through the movements of the differences in the yields of the Eurobonds issued by these countries and the yield of the comparable German government bonds (Figure 4). In the last quarter of 2008, these differences in certain countries reached the level of 700 basis points. In the Republic of Macedonia, the risk premium, measured in such a manner,

Figure 1
Return of the Eurobond issued by the Republic of Macedonia



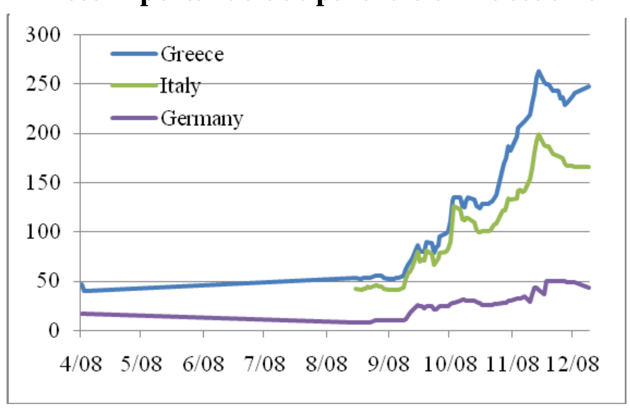
Source: Ministry of Finance and Bloomberg

Figure 2
Current account deficits and risk premuims of some countries



Source: IMF and Bloomberg

Figure 3
Price of credit default swaps for some of the most important trade partners of Macedonia



Source: Bloomberg

Figure 4
Return differentials for government bonds od different countries and the respective comparable German government bonds

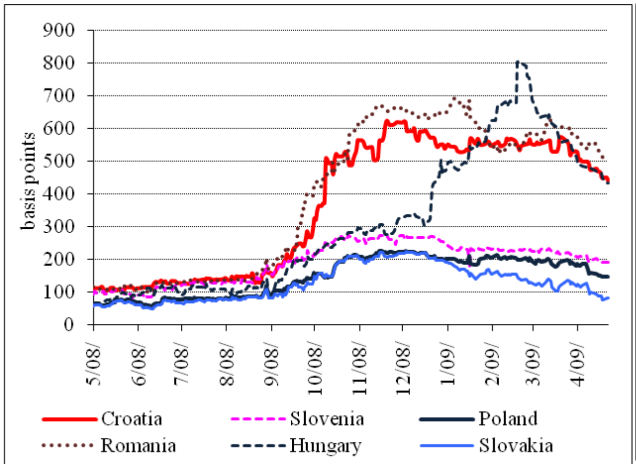
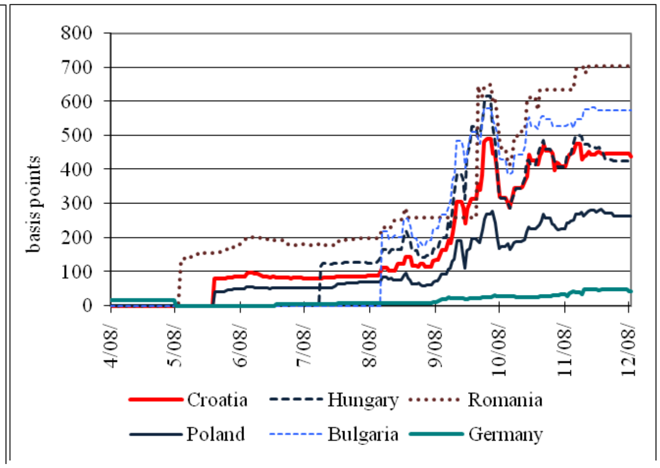


Figure 5
Price of credit default swaps for some countries



Source: Bloomberg

went up to substantial 650 basis points (Figure 1), which is to a certain extent due to the lower yield of German government bonds in conditions of increased demand for these securities. At the same time, the premium, i.e. the price for hedging against credit risk, expressed through the credit default swaps (CDs[1]) increased dramatically in all analyzed countries, which is only another indicator about investors' perception about an increased level of risk of the individual economies (Figure 5). Except Bulgaria, which was assessed as a riskier country, in the other countries, most important trading partners of the Republic

Figure 6
Stock price indices worldwide

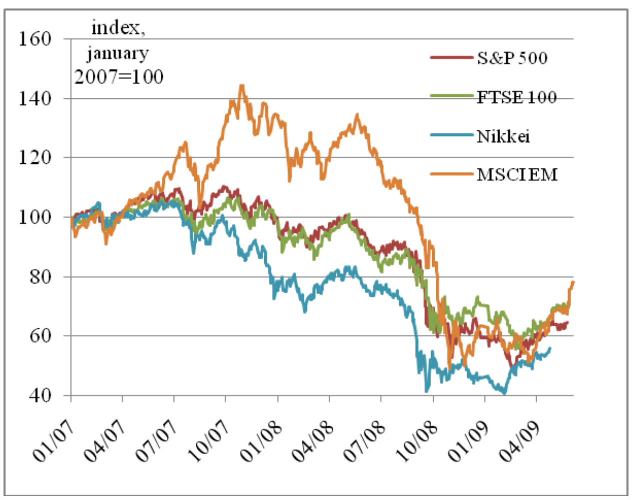
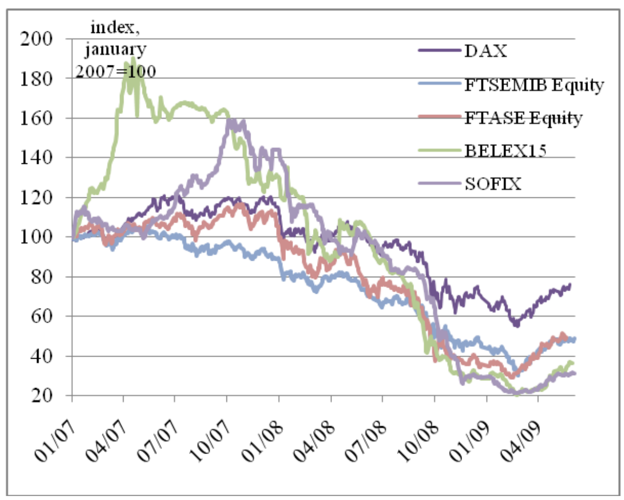


Figure 7
Stock price indices of the countries the most important trading partners of Macedonia



Source: Bloomberg

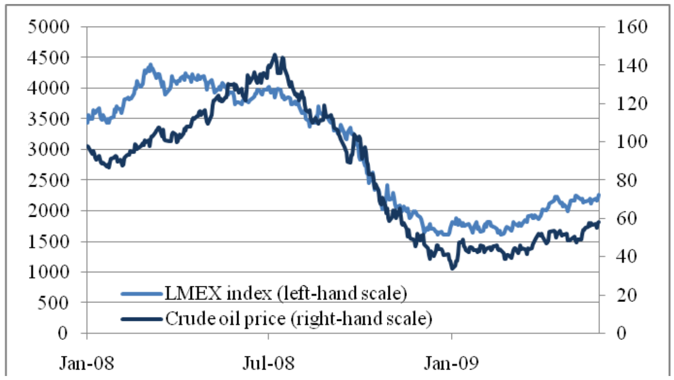
of Macedonia, despite the increase, the risk premia remained at a lower level compared with the other

[1] The price of the credit default swaps (CDS) is an annual amount of premium which the CDS buyer pays in order to protect against credit risk related to a particular issuer of securities, in this case particular country. The increase of this gap maintains investors' perception about increased risk of a certain entity/government, i.e. it denotes an increase in the premium which should be paid for hedging against credit risk related to a certain entity.

analyzed countries (Figure 3). They were especially low for Germany, primarily as a result of the international investors' "flight to safeheaven" (investments in government securities of the developed countries.

Another negative feature of the global developments in 2008 was the downward correction of the prices on the capital markets worldwide. The uncertainty about the scope of the adverse consequences from the crisis, and how far reaching they are, as well as the global slowdown of the economic activity have reflected on the weak performances of the capital markets. This is clearly proved by the movements of all analyzed indices of the stock prices on the international stock exchanges, which at moments had "free fall", which was especially evident in October 2008.

Figure 8
Prices of oil and metals

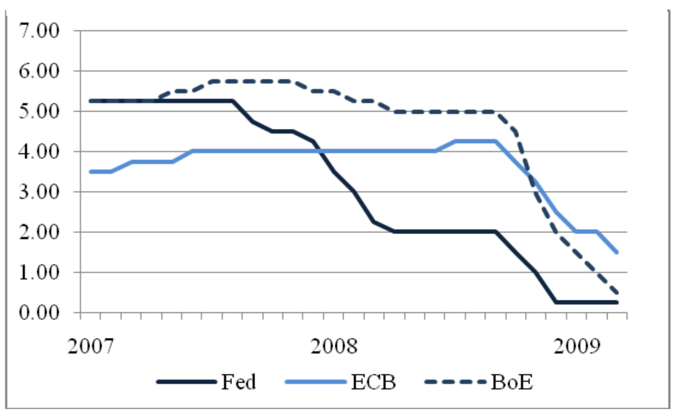


Source: Bloomberg

Commodity prices in 2008, as well as in the beginning of 2009, were characterized with emphasized volatility, which has created significant uncertainty for their importers and exporters. Contrary to the upward trend registered by that time, in the second half of 2008, a trend of sharp downward correction of commodity prices has started. On annual level, the CRB index (Reuters /Jefferies Commodity Research Bureau Index) dropped by 36%[2]. At the same time, the oil price registered an annual fall of 56%, caused primarily by the reduced global demand and increased stocks. The prices of basic metals dropped as a result of the significant slowdown of the global economic activity. This is clearly depicted by the dynamics of the price index on the London Metal Exchange (LMEX Index), which in 2008 registered a downward correction of 49%. Such unfavorable conditions on the metals market during 2008, along with the global slowdown of the economic activity, led to an additional deterioration of the external position of a number of countries, especially those whose export component of the foreign trade is oriented toward the metal industry, including the Republic of Macedonia.

The response of the governments and central banks to the crisis was translated into a number of measures aimed at recovery of the economy and strengthening of the almost frozen credit activity of banks. In conditions of substantial recession pressures, governments and central banks were the only economic agents which increased the indebtedness level, as opposed to the global trend of its reduction in the balance sheets of the other economic agents (financial institutions and private sector). Announced fiscal stimulation packages are expected to result in an increase of the government spending by 1.5% of GDP in the EU and more than 5% in the USA. At the same time, as an addition to the liquidity and capital support, most central banks relaxed their monetary policy. The continuous and

Figure 9
Central banks' referent interest rates



Source: Bloomberg

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[2] Source: Bloomberg. The CRB index is a composite measure of the movement of the prices of 19 groups of commodities, including energy, cereals, basic and industrial metals, precious metals, etc.

aggressive downward correction has reduced the key interest rates of the central banks in most of the developed economies to historically lowest levels, so that in certain countries they are almost equal to 0%.

The economic crisis and the fiscal policy

Current economic crisis calls for two types of measures of the economic policies: the first type of measures pertains to the financial system "consolidation" (buying out of the so-called toxic assets and increasing the financial market liquidity), while the second type of measures pertains to boosting demand and increasing the confidence of the economic agents. Having in mind the limited maneuver room of the monetary policy (regulating the liquidity in the system), the second set of measures mainly remained in the hands of the fiscal policy. The significant slowdown of the economic activity in all economies, developed, emerging, and developing, expressed through the rapid fall of the private demand during 2008, and especially since the beginning of 2009, requires prompt response of the economic policies. In such conditions, the International Monetary Fund has called for a significant fiscal response at a global level, which will depend on the degree at which the financial crisis has hit certain economies. However, although such a fiscal stimulus could be desirable for a larger number of countries, they are not facing with the same restrictions in its realization. First of all, not all the countries have sufficient fiscal room for using fiscal expansion, as it may jeopardize the sustainability of public finances. The latter is especially important in conditions of a slower dynamics of realization of budget revenues due to the decelerated pace of economic activity. Second, a number of economies are facing with variable capital flows (even their sudden termination), high external and public indebtedness, as well as increase in the risk premium, which implies upward pressure on the interest rates. Third, countries which maintain a de facto fixed nominal exchange rate, as the Republic of Macedonia, and which have subordinated the macroeconomic policies to the maintaining of its stability, could have a significantly restricted fiscal maneuver room, as fiscal expansion may boost import demand, which in conditions of stalled export performances will "inflate" the current account deficit.

Table 2 - Fiscal stimulus in selected countries (budget expenditures / GDP)

Country	2008	2009	2010
Australia	0.7	2.1	1.7
Canada	0	1.9	1.7
China	0.4	3.1	2.7
Germany	0	1.6	2
India	0.6	0.6	0.6
Italy	0	0.2	0.1
Japan	0.3	2.4	1.8
Corea	1.1	3.9	1.2
Russia	0	4.1	1.3
Saudi Arabia	2.4	3.3	3.5
USA	1.1	2	1.8

Source: IMF

IMF analysts argue that two aspects of the current economic crisis are important when defining the set of fiscal measures. First, **fiscal measures should be aimed at increasing public expenditures, instead of reducing taxes or increasing transfers.** These measures could contribute to the increase in the purchasing power of the households and companies, but their response to such an increase in conditions of crisis could be uncertain. Additionally, if the country is small and open and faces with pressures on the foreign exchange market, the increased purchasing power will only increase the import demand and will additionally influence the pressure on the foreign exchange market. Second, since the crisis has spread to the entire economy, it requires **diversification of the fiscal stimulus, i.e. support of the demand through a number of various measures** (on the expenditure side), which would include increasing the expenditures for infrastructure, stimulating measures in the agriculture, as well as direct packages for assisting the most severely hit industries, such as the textile industry and metal industry. Of course, it is most important such measures to be timely and not to induce questions related to the public debt sustainability.

Fiscal stimulation of the economic activity in 2008 and in the beginning of 2009 varied from country to country, but all countries needed it - developed, emerging and developing countries

(Table 2). Thus, during 2008, a number of countries in the world adopted or announced plans for fiscal stimulation of the demand in the domestic economy, of which more than two thirds is envisaged to be realized through the public expenditures. In 2008, the USA adopted the largest three-year fiscal package, equaling 4.9% of GDP for the period 2008 - 2010, while India and Italy adopted the smallest fiscal packages (1.8% and 0.3%, respectively). On annual level, in the group of 20 world economies (including developed and emerging economies) the increased budget spending at the dawn of the crisis in 2008 rose up to 1.7%, 1.9% and 2.4% of GDP in South Africa, Spain and Saudi Arabia, respectively. Already for 2009, all G-20 countries announced increased budget spending rising as high as 3.9% (Korea) and 4.1% (Russia) of GDP. The largest part of such a fiscal stimulus will pertain to investments in the infrastructure (Canada, France, Germany, Korea), but also to an increase in the social packages (Russia, Germany, Great Britain, USA, etc.) and support for the small and medium companies (Korea), while a smaller part also through investments in education and health care (Australia and China). Some of the countries also allow tax exemption for the households, while Canada, USA and Japan allow tax benefits both for the households and for the corporate sector. Actually, the design of the fiscal policy in the individual economies is a result of various factors, such as: the possibility to increase public expenditures and the amount of the public debt, the size of the output gap (i.e. the depth of the economic recession), the effectiveness of the fiscal multiplier (how fast and to what extent the fiscal stimulus will affect the real activity), etc.

However, such measures adopted by the G-20 countries can not be directly replicated in countries with small and open economies, and hence with high marginal propensity to import. Small and open countries had a significant growth rate in the preceding years, which moderately declined in 2008 (on average to the level of around 6%). However, it is expected to drop down to 4% in 2009, primarily as a result of the dramatic fall of the export demand and sudden exhaustion of the sources of capital inflows in these countries. Such a position weakens the real activity in these countries, but on the other hand it builds an unsustainable current account deficit. Countries such as Hungary, Estonia, Latvia and Bulgaria have huge current account deficits and external debts. Thus, between 2000 and 2008, in the countries of central and eastern Europe, external debt to GDP ratio increased from 45% to 51%. Additional fiscal expansion (increase of the budget deficit) would only deteriorate this position, creating import demand and upward pressures on the foreign debt. Hence, the direction of the fiscal stimulus in these countries is sought in the part of restructuring of the budget expenditures (their redirection toward investments in the infrastructure, support for small and medium enterprises and stimulation of agriculture) and/or postponing of part of the budget revenues, where possible.

The Government of the Republic of Macedonia has adopted a package of measures for mitigating the effects from the global economic crisis, which include also measures from a fiscal nature, such as: postponement of the payment of the tax duties for companies which will ensure a proper guarantee for the debt, exemption from the profit tax if the profit is reinvested, reduction of the customs duties in a large number of items, lower tax rates for farmers and allocation of funds for investments in the infrastructure for the forthcoming period.

Source: Working papers and analyses of the IMF and the web-site of the Deputy Prime Minister of the Government of the Republic of Macedonia (Package of measures of the Government of RM)

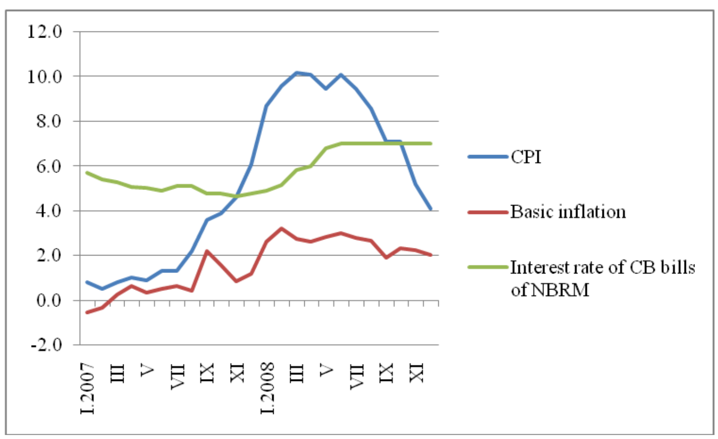
Despite the substantial interventions and stabilizing policies of the Governments, supervisory and regulatory bodies around the world, the global financial system is still exposed to significant negative pressures. One of the main challenges for the economies around the world is, of course, restoring the confidence in the financial markets and reestablishing the normal functioning of the financial intermediation. The existing confidence crisis is best confirmed with the fact that during October 2008 (immediately after the failure of Lehman Brothers), European banks placed a substantial amount of Euro 200 billion in the form of overnight deposits with the ECB, which points to their unwillingness to place the funds with the other commercial banks. At the same time, the ECB, although in smaller amounts, continuously extended liquidity credits to banks. Such movements clearly indicate deteriorated functioning even of the interbank asset markets.

2. Macroeconomic environment in the Republic of Macedonia

The increased inflationary pressures from the end of 2007 continued in the first half of 2008, interrupting a longer period of low and stable inflation in the Republic of Macedonia, and were the greatest risk for the macroeconomic and financial stability in this period. In the second half of 2008, the threats of global financial crisis which started a few quarters earlier, turned into a serious danger for the real sector of the Macedonian economy. The slowdown of the production activity and exports, and on the other hand the still high household and public consumption, resulted in deepening of the current account deficit, increased demand for foreign exchange and pressures on the foreign exchange and currency exchange markets, which emphasized the importance of the stability of the domestic currency for maintaining the macroeconomic and financial stability.

The slowdown of the Macedonian economy which has gradually started in this period, put an end to the fast growth of the economy since the beginning of 2007, and started to be an important factor for the stability of the Macedonian economy and of the financial system. The period of faster economic growth (first quarter of 2007 until the third quarter of 2008) was characterized with an increase in the economy in all sectors (except agriculture in certain quarters of 2007), followed by an increase in the household income from wages and intensified credit activity of the banking system. This provided possibility for increasing the domestic and import consumption and relatively comfortable financing of the debts to the financial institutions. Favorable economic conditions and reduced corporate taxation have also contributed to the growth in the corporate profits and the extremely fast growth in the gross investments.

Figure 10
Inflation and referent interest rate



Source: State Statistical Office and NBRM

However, it appeared that such an economic expansion created many risks. First of all, increased inflationary pressures, especially in the part of the prices of food and energy products and the upward pressure on the interest rates, had an adverse impact on the purchasing power of the households and hence on the maneuver room for new debts to banks and servicing of the existing debt. Thus, in the first and in the second quarters of 2008, inflation, measured through the consumer price index, equaled 9.5% and 9.9%, respectively, mainly caused by the increase in the prices of food and energy products. Core inflation for the same period equaled 2.9% and 2.8%, respectively. Moderate intensification of the core inflation since the beginning of 2008, however, indicates that part of the inflationary pressures arise also from the demand side, mainly as a result of the faster growth of wages relative to the growth of productivity and accelerated credit activity. With the intensification of the global crisis in the second half of the year, the inflationary tendencies in the Republic of Macedonia calmed, and the annual inflation rate positioned at 8.3%, but the December inflation rate equaled 4.1% with prospects for further decline.

Next, in the second half of 2008, the slowdown of the pace of the real sector (fall in the price of significant export products, cancellation of the orders and announcements for temporary interruptions in the production) and in general, the movements on the domestic and the international financial markets (tightening of the terms of lending, so-called credit rationing, continued pressure on the commercial bank interest rates), widely affected the business sector in the country, through a decline in the export potentials, postponement or cancellation of the planned investments and increased uncertainties about the business tendencies, in general. Thus, a number of business entities started to experience financial pressures, while the economic activity remained with poor prospects for its near recovery. On the other hand, due to the already mentioned reasons, the outlook for restricted households' income became serious, and hence the capacity for debt servicing. Even in such conditions, household consumption intensified, creating an additional risk factor for the financial system (the increment of the households' disposable income from the preceding year created positive expectations about the future income, which were evident in the increased spending and borrowing of the households from the financial sector).

Figure 11
GDP growth and contribution of the components for growth

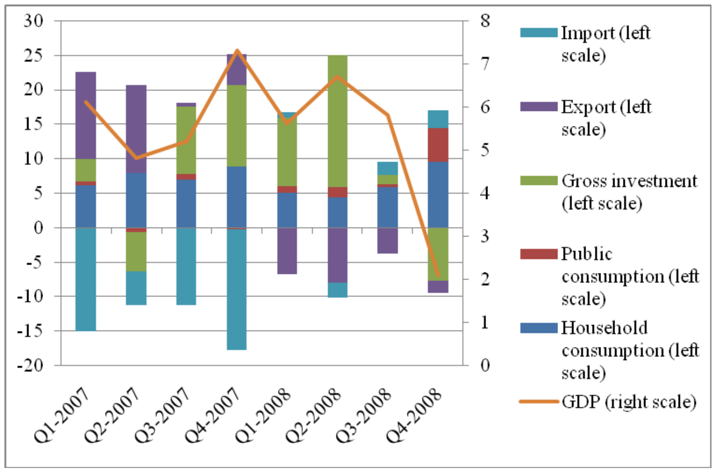
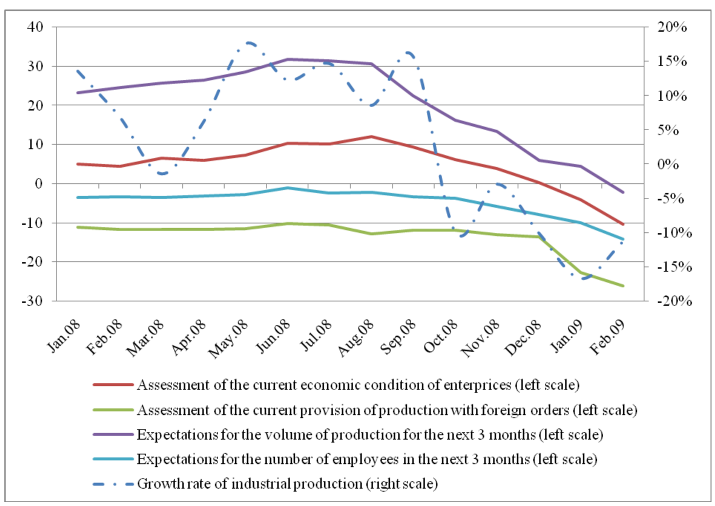


Figure 12
Growth of industrial production and business tendencies in the manufacturing industry

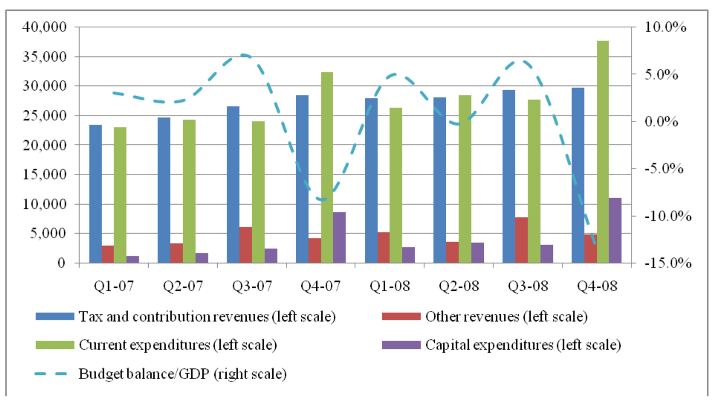


Source: State Statistical Office

Although in 2008, GDP growth equaled substantial 5%, the quarterly analysis reflects the previously elaborated tendencies in the economic activity. Since the beginning of 2007, quarterly GDP growth rates ranged from 4.8% (second quarter of 2007) to 7.3% (fourth quarter of 2007), but the growth significantly dropped in the last quarter of 2008 (2.1%), accompanied by a decline in the quarterly industrial output of 7.6%. The analysis of the expenditure components also confirms the abovementioned analysis. While previously, growth was led by gross investments and exports, such tendencies started to deteriorate in 2008. Although in 2008 gross investments rose by 16.5%, there was a dramatic downward tendency in the second half of the year, with the most significant fall of 33.6% being registered in the last quarter. On the other hand, exports fell by 9.2% during the entire 2008. At the same time, imports, the volume of which is larger than the exports, decreased by only 1%. Given such developments, the increase in the consumption remained high (8.1%), with a significantly faster growth of the public consumption (23% in the fourth quarter of 2008). Industrial output continued to fall sharply in the first two months of 2009, while the assessments of the managers in the processing industry about current and future production significantly deteriorated (Figure 12).

As a result of such macroeconomic environment, during 2008, the risks for the financial stability in the Republic of Macedonia significantly increased, with a risk of deterioration of the households' and companies' capability of financing their financial liabilities in 2009. The increased risks were a signal for undertaking steps towards their limiting. Monetary policy was tightened, which was expressed through the increase in the reference interest rate on several occasions during 2008, aimed at maintaining the value of the domestic currency. At the same time, prudent regulation of the credit expansion was strengthened and supervisory standards were implemented more vigorously. The reference interest rate (on the Central Bank bills) went up from 4.8% at the end of 2007 to 7% in May 2008, a rate which was maintained until the end of the year. Monetary policy tightening caused rapid and significant change of the interest rates on the liabilities side, but until the end of the year the signal was followed also by the lending interest rates. In order to limit the risks from the high credit expansion channeled to the households, NBRM has adopted additional measures, which: strengthened the treatment of banks' claims on the households on the basis of credit cards and overdrafts on current accounts when calculating their solvency; and created an obligation for allocating compulsory deposit by the banks and savings houses, if their credit growth to the households is higher than the one determined by the NBRM. At the end of 2008, NBRM adopted additional standards for liquidity risk management, through prescribing an obligation for maintaining minimum level of liquidity by banks and savings houses.

Figure 13
Fiscal developments

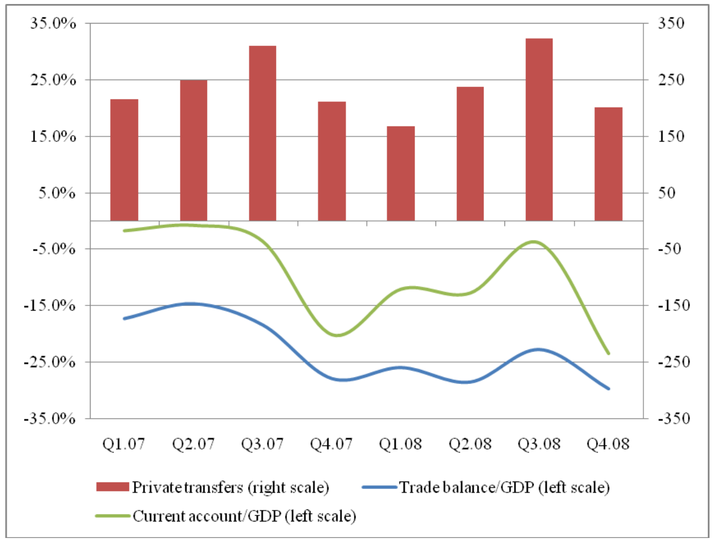


Source: Ministry of Finance

On the other hand, fiscal policy was relaxed, which was expressed mainly through the further reduction of the personal income tax and profit tax, and increased wages in the public administration, as well as through the announcements for even greater public spending in 2009. The fiscal policy relaxation was aimed at stimulating the economic activity through creation of higher household and investment demand, but also through encouraging the shift from grey into formal economy. However, in conditions when the global crisis deepened (last quarter of 2008), the expansive fiscal policy contributed to the deepening of the current account deficit. In the first three quarters of 2008, fiscal policy remained prudent, with the budget being in balance or in surplus. Toward the end of the year, however, in conditions of deteriorated prospects for households' income and "subdued" export and investment outlook of the corporate sector, fiscal policy became more expansive than usual (increase in the current and capital expenditures of 16.4% and 28.7%, respectively, and within current expenditures, an increase in wages of 4.1% and in the expenditures for goods and services of 32.8%, which has resulted in a fiscal deficit of 13.6% in the fourth quarter). This, in conditions of deteriorated prospects for export and investments, has contributed to an excessive stimulation of the final consumption (increased household and public consumption in the fourth quarter of 11.2% and 23%, respectively), which additionally reflected on the deepening of the trade deficit.

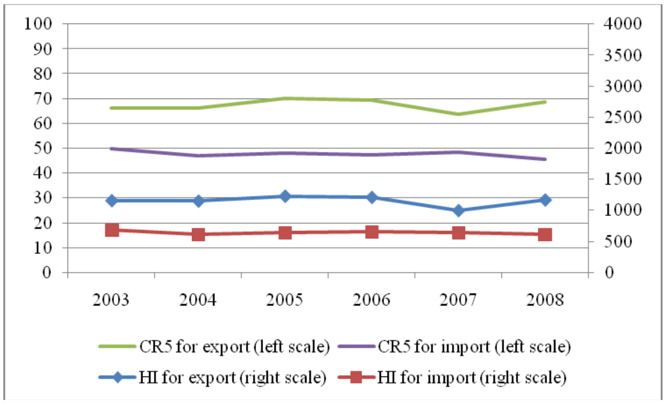
The foreign trade and the movements in the current account, in general, caused a significant risk for the macroeconomic and financial stability in 2008. In 2008, trade deficit grew by 6.9 percentage points relative to GDP, reaching 26.7%. In conditions of lower private transfers, it caused the current account deficit relative to GDP to increase from 7.2% in 2007 to 13.1% in 2008 (Figure 14). However, the sources of risk throughout the year were various. In the first half of the year, deteriorated terms of trade, arising from the growing prices of food and energy products and the intensified domestic household and investment consumption, put a significant pressure on the trade balance. In the second half of the year, as a result of the global economic crisis, which was manifested also through the reduced export demand and unfavorable conditions on the metals market, terms of trade deteriorated additionally. The adverse effects for the Macedonian economy were mainly expressed through a decline in the volume and the value of the export of metals (dominant export branch). In the same period, the escalation of the financial crisis caused a significant slowdown of the global growth, which put additional pressures for deterioration of the trade. In such conditions, however, there was a dramatic fall in the world oil prices, which reduced the pressures on the domestic trade deficit. On the other hand, this implied a significantly lower foreign demand, with dramatic effects for the real sector, through a reduced domestic output and consequently, lower export of goods. Toward the end of the year, the relaxed fiscal policy put an additional pressure on the demand for foreign products, thus contributing to the deterioration in the trade. However, the analysis of the trade balances by individual group of products points to the conclusion that the trade deficit is, to the largest extent, realized in the part of the production products (machines and transport devices and mineral fuels and lubricants), although in the fourth quarter, the deficit relative to GDP increased also in the groups of chemical products and food products, which belong to the category of consumption products.

Figure 14
Current account developments



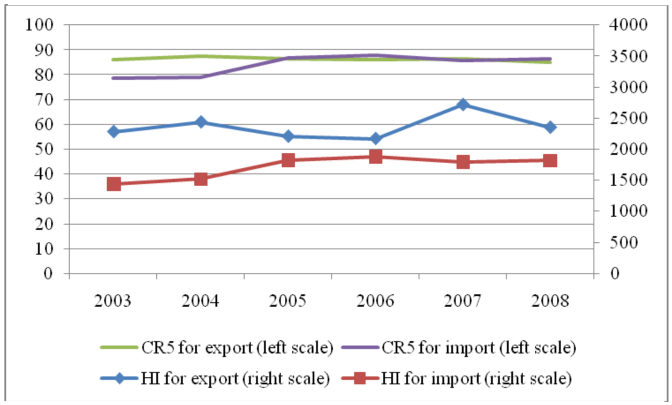
Source: NBRM

Figure 15
Geographic concentration of foreign trade



Source: NBRM and SSO

Figure 15
Product concentration of foreign trade



Source: NBRM and SSO

The high level of trade deficit is accompanied with another unfavorable structural feature - the high level of concentration of the foreign trade. The analysis of the concentration ratio of the first five countries (CR5) and the Herfindahl index (HI) indicate presence of a significant degree of geographical concentration of exports, which increased further in 2008. Even higher concentration level is common for the production component of the exports, although in 2008 a decline was registered. Output concentration in two groups of products (iron and steel and textile products, which participate with significant 51.8% in the total exports), contribute to the extreme susceptibility of the Macedonian economy to shocks, such as those in 2008 (decline in the price of metals on the world markets and reduced demand for textile products). The low level of geographical diversification of the export makes Macedonian economy sensitive to the negative movements in the economies of the countries that are largest importers. However, in conditions of global crisis which has hit all economies, the geographical diversification is less important. Potential adverse effects are, to some extent, mitigated also with maintaining the favorable rating of the EU countries that are the most important trading partners of the Republic of Macedonia. The other most important trading partners registered moderate deterioration in the rating relative to 2007, in line with the global developments and the level of development of their economies.

Table 3
Rating of the largest foreign trade partners of the Republic of Macedonia

Importers	Share of total exports of RM (%)	Credit rating Apr.09	Credit rating Apr.08	Exporters	Share of total imports of RM (%)	Credit rating Apr.09	Credit rating Apr.08
Serbia	*23.5*	BB- negative	BB- negative	Russia	*13.6*	BBB+ negative* BBB negative**	A- positive BBB+ positive
Germany	*14.2*	AAA stable	AAA stable	Germany	*9.5*	AAA stable	AAA stable
Greece	*13.4*	A- stable	A stable	Serbia	*7.8*	BB- negative	BB- negative
Bulgaria	*9.5*	BBB negative	BBB+ stable	Greece	*7.5*	A- stable	A stable
Italy	*8.1*	A+ stable	A+ stable	Italy	*5.6*	A+ stable	A+ stable

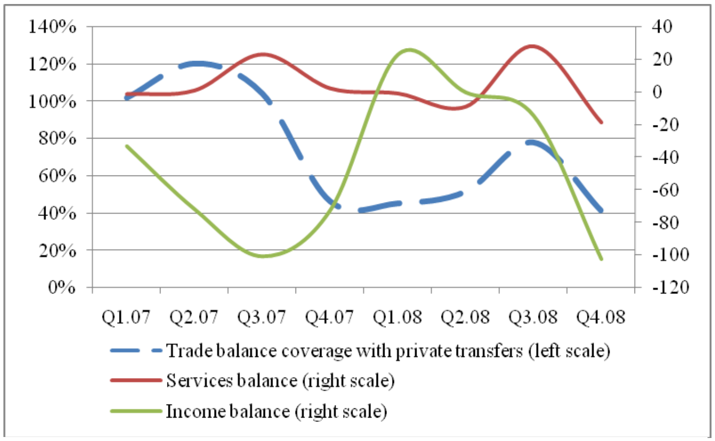
* in local currency; ** in foreign currency

Source: Standard and Poor's

Materialization of the risks from the world economic crisis affected also the other current account items. Deteriorated foreign trade in goods and services and the negative net-inflows from

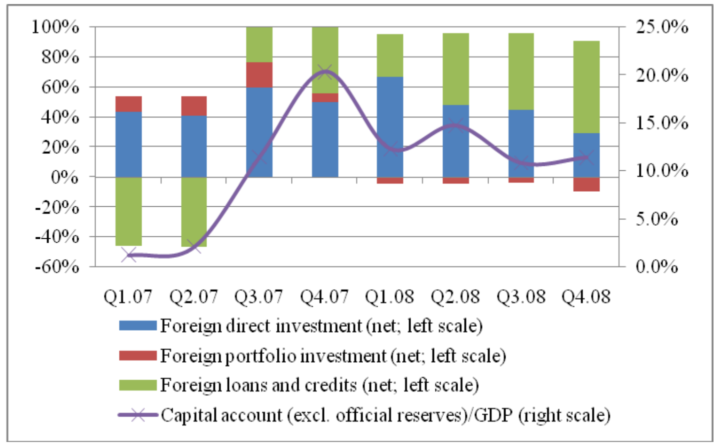
income acted toward further deepening of its deficit in 2008. The inflows from services registered a decline in 2008, primarily as a result of the fall in the investment activities abroad (by 35.1%) and the slowdown in the construction activity of Macedonian companies abroad. At the same time, the increased

Figure 17
Services and income balances and trade balance coverage with private transfers



Source: NBRM

Figure 18
Capital-financial account

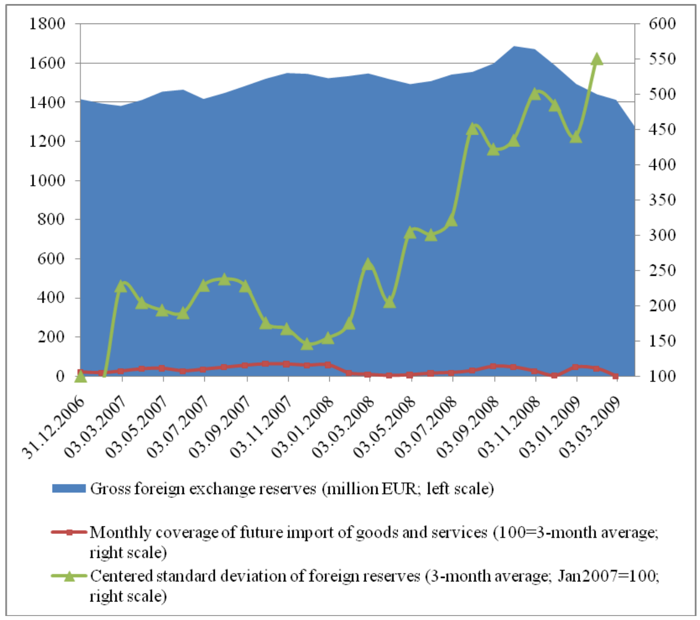


Source: NBRM

import of goods caused higher net-outflows on the basis of transport services (by 20.2%). The deepening of the effects from the global crisis and the possible further stimulation of the domestic consumption could lead to further deepening of the deficit in the services balance. On the other hand, although income from financial investments registered certain improvement relative to 2007, as a result of the significant deterioration in the fourth quarter, it acted toward deepening of the current account deficit in 2008.

The exposure of the Macedonian economy to risk from the volatility of the inflows from private transfers, became especially evident in 2008. The general unpredictability and volatility of the inflows from private transfers were especially intensified during 2008, when they fell by 5.8% relative to 2007, with a deteriorated outlook for their improvement. Furthermore, in 2008, lower private transfers covered only 53.6% of the trade deficit, as opposed to 84.1% in 2007, with tendency for further decline in the coverage level.

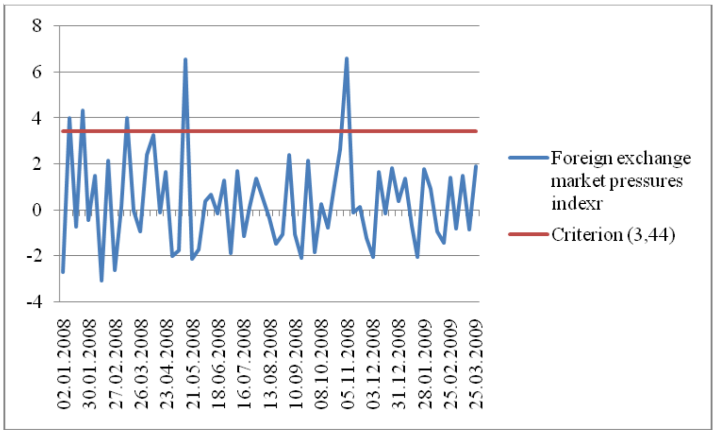
Figure 19
Foreign exchange reserves



Source: NBRM

The investment climate in the Republic of Macedonia in 2008 was under the influence of the political developments in the country and in the region in the first half, and of the global economic crisis in the second half of the year. This reflected on the capital account of the balance of payments. The trend of small but steady increase of foreign direct investments (FDI), which started in the beginning of 2007, has changed under such influences, starting from the second quarter of 2008. The largest fall in the FDI was registered in the fourth quarter (of 55.9% p.a.). At the same time, increased political and economic risks caused permanent increase in the net outflows on the basis of foreign portfolio investments (disinvestment). Under such conditions, in 2008 the utilization of foreign loans and credits increased (by 2.3 times on net basis). As a result of the sudden interruption of the capital inflows and withdrawal of funds invested in a short run in 2008, the surplus on the capital-financial account (excluding foreign reserves) fell to 10.8% and 11.4% of GDP, respectively, in the last two quarters (from 20.3% in the last quarter of 2007). In conditions of slow upward correction of the liquidity on the international financial markets, there is a room for further decline in the capital inflows.

Figure 20
Forex market pressures index

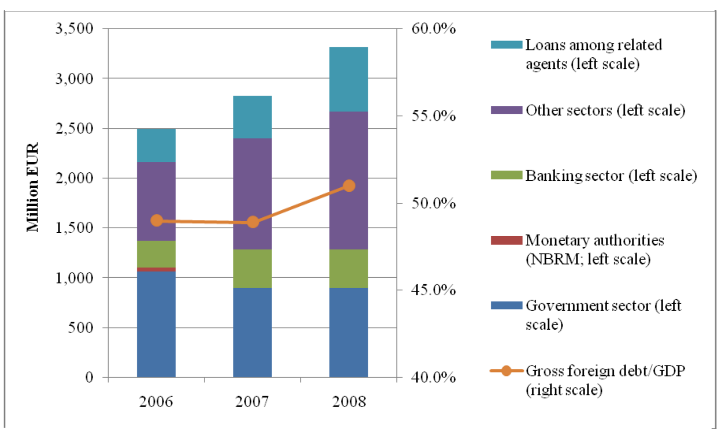


Source: NBRM calculations

Increased inflation in the first half of 2008 and the deteriorated situation on the current account as a result of the increased import and decreased export, as well as the effect from the psychologically driven fear from change in the exchange rate of the Denar against the Euro in the second half of the year, caused increased interventions from the gross foreign reserves in order to meet the demand on the markets. Thus, as of end 2008, foreign reserves reduced by nearly 2% relative to the end of 2007, but on quarterly basis, the decline equaled 11.5%. Actually, larger interventions from the foreign reserves were registered in the last quarter of 2008 and continued in the first months of 2009. Throughout the whole period, however, foreign reserves remain slightly above the limit of three-month import coverage, with the index of the pressure on the foreign exchange market exceeding the set criterion only on few occasions in 2008. Further larger depletion of the foreign reserves may represent a significant risk for the financial and macroeconomic stability.

At the end of 2008, the gross external debt of the Republic of Macedonia equaled Euro 3,318.4 million, and registered an increase of 17.2% relative to the previous year. Thus it positioned at the level of 51% of GDP, which is a moderate increase relative to 2007. In conditions of a strategy for maintaining the total public debt at a constant level, the external public debt increased by 4.7% relative to the end of 2007. On the other hand, the increase in the external private debt was more significant and equaled 24.5%. It is to be mentioned that the debt of the banking sector remained unchanged, so that the entire increase in the external private debt was realized by the non-banking sector. It is

Figure 21
Gross foreign debt



Source: NBRM

encouraging that 45% of this increase was in the form of loans between related entities (mother and daughter companies), which could represent basis for strengthening the long-term support of the economic growth. The remaining 55% of the increase of the gross external indebtedness of the private sector are primarily generated by companies. The increase in the external private debt could be a potential risk for the financial stability in conditions of tightened global liquidity conditions and narrowing of the sources for financing of the indebtedness. However, the global decline in the interest rates could be a positive tendency, aimed at stimulating the global economy through the monetary policy measures.

2.1 Country risk

As a result of a series of political and economic events during 2008, the credit rating of the Republic of Macedonia deteriorated slightly. Deepening of the current account deficit, in conditions of tighter international flows of capital and decelerated activity of the domestic economy, as well as the increased uncertainty about the future economic movements in the country, are the main reason of economic nature, for such a change in the credit rating.

Table br.4
Credit rating of the Republic of Macedonia

		2004	2005	2006	2007	2008
S&P	foreign currency	**BB** positive perspective	**BB+** stable perspective	**BB+** stable perspective	**BB+** stable perspective	**BB+** negative perspective
	domestic currency	**BB+** positive perspective	**BBB-** stable perspective	**BBB-** stable perspective	**BBB-** stable perspective	**BBB-** negative perspective
Fitch	foreign currency		**BB** positive perspective	**BB+** stable perspective	**BB+** positive perspective	**BB+** stable perspective
	domestic currency		**BB** positive perspective	**BB+** stable perspective	**BB+** positive perspective	**BB+** stable perspective
Japan credit rating agency (JCR)	foreign currency				**BB+** stable perspective	
	domestic currency				**BBB-** stable perspective	

Surce: Web pages of the rating agencies

II. Non-financial sector

1. Household sector

In 2008, the risks for the financial stability arising from the household sector surged. However, they remained within controlled framework, not causing more significant adverse effects on the balances of banks and other financial institutions.

In a short run, risks related to the household sector are expected to become increasingly important, having in mind the prolonged effects from the global economic crisis on the economic situation in the country. Actually, these risks are manifested with an increased uncertainty with respect to the future income of the households, their purchasing power and financial capability.

Households' debt to the financial institutions continued to grow in 2008, but at a slower pace relative to 2007. However, the slower growth of the financial assets and disposable income of households, compared with the growth rate of its indebtedness in 2008, contributes to the increase in the burden for debt repayment.

The high households' exposure to interest rate and currency risks, remains to be the main source of risk, which could influence the capability of debt repayment of the household sector, and consequently the stability of individual segments of the financial system. Hence, maintaining the value of the financial assets and financial liabilities of the households is of key importance for the financial stability.

1.1. Financial assets and disposable income of the household sector

Financial assets of the household sector continued to grow in 2008, but at a slower pace relative to the preceding year. The annual growth rate of 7.9% registered at the end of 2008, was by 6.3 percentage points lower relative to the growth rate registered in 2007. Such a dynamics caused the households' financial assets to reach the level of Denar 176,726 million as of December 31, 2008.

The slower growth of the households' financial assets mainly reflected the slower growth of deposits in banks and savings houses. Despite that, deposits are still dominant portion of the households' financial assets, and they were the main generator of its growth. On annual level, deposits went up by Denar 13,635 million or by 14.4%. This growth rate is by 17.4 percentage points lower relative to the growth rate registered in 2007. However, despite the slowdown, the increase in households' deposits caused significant 66.8% of the annual growth of the households' financial assets. Decelerated growth of households' deposits in 2008, was primarily a result of the psychological pressures in the public due to the uncertainty caused by the developments on the international financial markets and possible effects on the economy and banks in the Republic of Macedonia. The redirection of part of the households' disposable income into investments in securities[3] on the Stock Exchange, as well as the fall in the private transfers from abroad had an additional influence.

Table 5
Financial assets of the households

Type of assets	31.12.2007		31.12.2008		Annual change			
	Amount (in millions of Denars)	Structure (in %)	Amount (in millions of Denars)	Structure (in %)	In millions of Denars	In %	In the structure (in p.p.)	Share in the change
Deposits in banks and saving houses	94,872	57.9%	108,507	61.4%	13,635	14.4%	3.5	66.8%
Cash in circulation[1)]	12,555	7.7%	12,321	7.0%	-234	-1.9%	-0.7	-1.1%
Shares[2)]	39,487	24.1%	40,009	22.6%	522	1.3%	-1.5	2.6%
Bonds	13,504	8.2%	10,546	6.0%	-2,958	-21.9%	-2.3	-14.5%
Treasury notes	10	0.01%	5	0.0%	-5	-46.6%	0.0	0.0%
Holdings in open investment funds	45	0.03%	34	0.02%	-11	-24.7%	0.0	
Pension funds' assets	3,120	1.9%	5,037	2.9%	1,917	61.4%	0.9	9.4%
Life insurance[3)]	171	0.1%	267	0.2%	96	55.9%	0.0	0.5%
TOTAL	163,764	100.0%	176,726	100.0%	12,962	7.9%		63.5%

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

Shares[4] are still the second most important component in the structure of the households' financial assets. In 2008, there was a moderate increase in the investments of the household sector in shares. The increased investment in shares of 1.3% is confirmed also through the position of the households as a net-buyer, which could ultimately be explained with the households' increased interest in investments in shares having in mind the dramatic decline in the market value of most of the shares in 2008, but also their lower level of financial education. Having in mind the movements on the Macedonian

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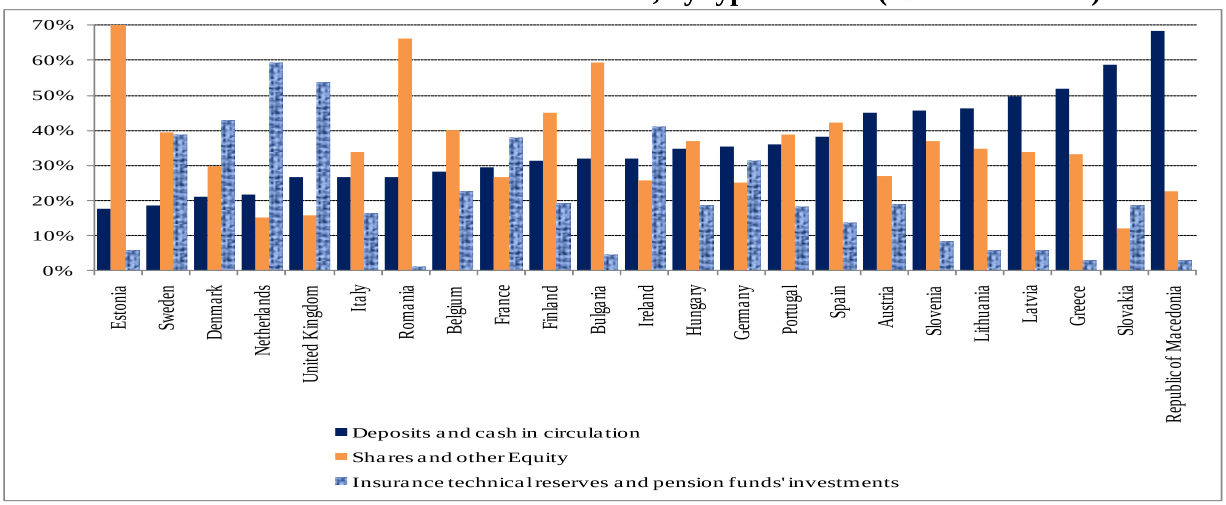
[3] Unlike 2007, when households were a net-seller, in 2008 they were a net-buyer of securities. The calculation is based on the realized value (not the number) of sold and purchased securities in 2008.
[4] Source: Central Securities Depositary. In the absence of information about the market prices, in the calculations the nominal value of the shares is used.

Stock Exchange, as well as the fact that in these calculations the nominal value of the shares is used, one may assume that the value of this type of financial assets is to some extent underpriced, having in mind the fact that despite the fall in the value of the shares in 2008, they were generally above their nominal value. On the other hand, the value of this part of the financial assets in real terms is far lower than in 2007, when the market value of most of the shares was few times above their nominal value.

Households' investments in bonds continued to fall also in 2008. Such a dynamics arises from the structure of the bonds, where government structured bonds for old foreign currency saving and denationalization are dominant, and whose repayments are made throughout the year. At the end of 2008, bonds cover 6.0% of the households' financial assets, which makes them the third largest item.

Households' assets in the private pension funds registered the largest annual relative growth (of 61.4%), with great certainty about further increase both in their value and in their importance for the households' financial assets. Such a positive dynamics is a result of the highly regular inflows of the pension funds on the basis of paid-in contributions, as well of the fact that they are still relatively "young" financial institutions without current liabilities for payment of funds.

Figure 22
Households' financial assets structure, by type of assets (% of total assets)



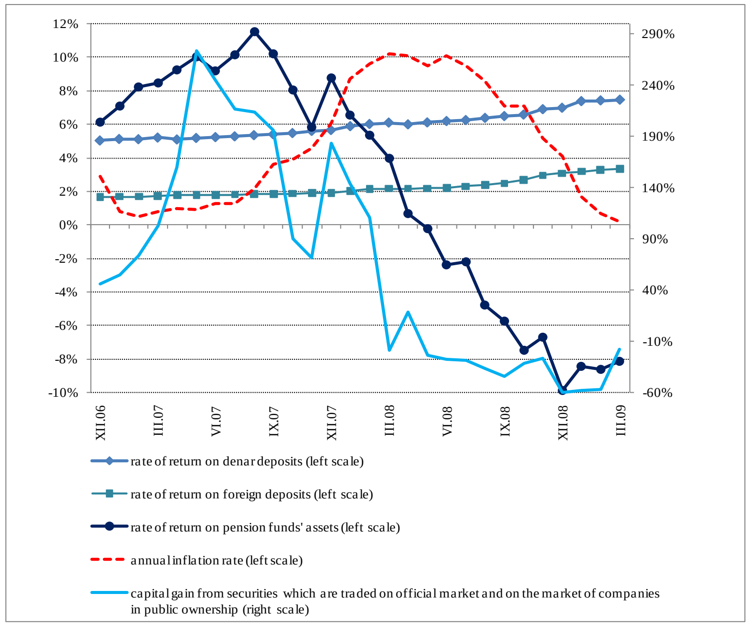
Source: Eurostat (Statistics in focus, 32/2009)

The comparative analysis of the structure of the households' financial assets according to the type of assets, by country, confirms the high share of "deposits and currency in circulation" in the financial assets of the households in the Republic of Macedonia[5]. The share of deposits and currency in circulation in the Republic of Macedonia equals 68.4% and it is the highest relative to the other EU countries. In some of the new EU Member States (Slovakia, Latvia, Lithuania and Slovenia) and Greece, the share of these assets is above 45% and is close to the level registered in the Republic of Macedonia. The share of stocks and other equity investments in the households' financial assets is the highest in Estonia, Romania and Bulgaria. According to the share of these assets, Republic of Macedonia is in the middle of the group of countries that are being compared. The share of the assets in the insurance and pension companies in the Republic of Macedonia is on a very low level (3.1%), similar as in part of the

[5] Data on the EU countries pertain to 2007, while data on the Republic of Macedonia pertain to 2008. There is some reservation regarding the comparability of the data by country, having in mind the possible methodological differences in the scope of individual categories.

new EU Member States (Latvia, Lithuania, Slovenia) and some countries of the region (Bulgaria and Greece). Only households in Romania dispose of a relatively lower level of assets in the insurance and pension companies, relative to the Republic of Macedonia.

Figure 23
Dynamics of the annual rates of return on some of the households' financial instruments



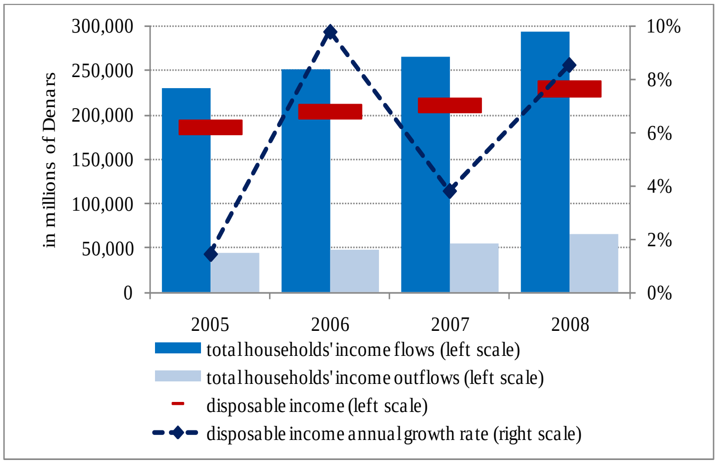
Source: NBRM and NBRM calculations based on data obtained from the Agency for supervisions of the fully funded pension insurance

In 2008, deposits were the only return-generating segment of the households' financial assets[6]. Under the influence of psychological factors and the uncertainty created due to the international financial crisis, banks conducted more aggressive interest rate policy in order to maintain the current and attract new depositors. Weighted interest rates on Denar and foreign currency deposits, reached the highest level of 7.5% and 3.3%, respectively. However, in conditions of relatively high annual inflation rates during 2008, deposit interest rates expressed in real terms were negative. With the stabilization of the inflation rate in 2009, deposits started to generate a positive real growth. **Other financial instruments from households' assets had negative annual rates of return, which led to capital loss.** During 2008, in almost all months, the annual rates[7] of capital gain on securities[8] were negative, and fell down to -59.7% at the end of 2008. The capital loss from securities is primarily a result of the high annual rates of decline of market capitalization of the shares (which are traded on the official market and on the market of companies in public ownership). Starting from May 2008, the annual nominal rate of return[9] of pension funds became negative and toward the end of 2008, it registered the highest negative level of 9.9%. One should have in mind the fact that the annual inflation rate is an additional negative factor which acts toward deepening of the negative rates of return of the pension funds. Such a downward dynamics of the rate of return of pension funds reflects the negative movements on the domestic stock exchange under the influence of the developments on the international financial stage, movements on the stock exchanges in the region and of course, the increased risks related to the macroeconomic environment in the country. The risk for the financial stability and for the household sector from the negative rates of return of the investments of pension funds is mitigated at this moment, with the fact that the first more important liabilities for payment out of these funds will fall due in twenty to thirty years.

[6] Annual return is calculated for the following instruments of households' financial assets: deposits, securities (quoted shares and bonds, and shares of companies in public ownership) and assets in the pension funds.
[7] The annual rates of capital gain/loss are calculated on the basis of the annual change of the market capitalization of the securities. Paid dividends and paid coupon interest are not taken into consideration.
[8] For the needs of this analysis, securities pertain to bonds and shares traded on the official market and shares traded on the market of companies in public ownership.
[9] The annual nominal rate of return is calculated on the basis of weighting of the rate of return of the individual pension funds against their net-assets.

Households' disposable income continued to grow in 2008[10] (by Denar 18,110 million, or by 8.6% p.a.).[11] **The movements on the labor market during 2008,** reflected through the annual growth in the employment rate of 1.1 percentage point and the nominal growth in the net-wages per employee of 10.3% (growth of 1.9% in real terms) positively influenced the annual growth of the households' disposable income.

Figure 24
Movements of the households' total income flows, total income outflows and disposable income



Source: SSO and NBRM calculations.

In 2008, households' personal consumption exceeded the level of disposable income. During 2008, households' personal consumption[12] went up by Denar 42,852 million, or 15.7%, relative to 2007. Within the structure of the personal consumption, around 73% pertain to the expenses for essential[13] products, almost half of which are expenses for food and beverages, i.e. products with low price elasticity. The high share of essential products is confirmed also by the fact that in December 2008, the average value of the consumer's basket for food and beverages was 72.4% of the average net weight in the same period. Having this in mind, as well as the fact that in 2008, the changes in the food prices caused around 70% of the average inflation, each rise in the prices of the essential products in the future will denote an increase in the households' expenditures, potential worsening of the living standard, and decline in the portion intended for saving.

1.2. Households' debt

Households' debt continued to grow in 2008, but at a slower pace relative to the preceding year. The annual growth rate of 37% registered at the end of 2008, was by 7.2 percentage points lower relative to the growth rate registered in 2007. Such a dynamics caused the households' debt to reach the level of Denar 70,478 million as of December 31, 2008.

10 The data on 2008 is according to NBRM estimations in conditions when there is still no data published by the State Statistical Office (SSO), and it is subject to revision, in line with the revision of the data used for its development.
[11] For comparison, the annual growth rate of the disposable income for 2007 in the EU Member States (27) was 4.2%, while in the countries of the Euro area (15), it was 4%. Source: Eurostat.
[12] The calculation is based on data from the SSO.
[13] In the absence of data about the structure of public consumption for 2008, the data about 2007, published by the SSO, are used. The essential products include: food, beverages, clothing and foot wear, housing, heating and lighting, and hygiene and health care. Other products for personal consumption include: transport, communications, culture and recreation, education, hotels and restaurants, other goods and services.

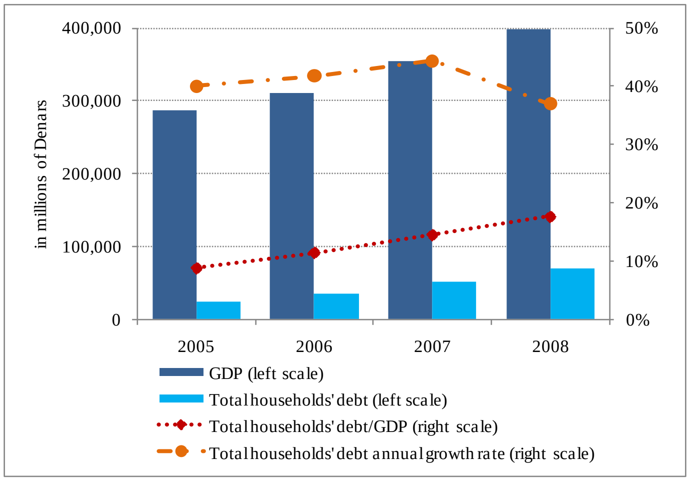
Table 6
Total households' debt[14]

Type of debt	31.12.2007		31.12.2008		Annual change			
	Amount (in millions of Denars)	Structure (in %)	Amount (in millions of Denars)	Structure (in %)	In millions of Denars	In %	In the structure (in p.p.)	Share in the change
Banks	45,792	89.0%	63,700	90.4%	17,908	34.8%	1.4	94.1%
Saving houses	2,012	3.9%	2,778	3.9%	766	1.5%	0.0	4.0%
Leasing	3,564	6.9%	3,899	5.5%	335	0.7%	-1.4	1.8%
External debt	76	0.2%	101	0.2%	25	0.0%	0.0	0.1%
TOTAL	51,444	100.0%	70,478	100.0%	19,034	37.0%		100.0%

Source: NBRM on the basis of data obtained from the banks and savings houses and the Ministry of Finance about the leasing companies

The slower growth of households' debt mainly reflected the slower growth of lending[15] by banks and savings houses. Despite the slowdown, credits are still dominant portion of the banks' total households' debt, and they are the main generator of its growth.[16] On annual level, the debt to the banking sector registered the highest growth of Denar 17,908 million or 34.8% (which is by 10.4 percentage points lower rate relative to 2007). Although slower, the increase in the credit support for the households by the banks caused 94.1% of the annual growth of the households' debt.

Figure 25
Level of households' indebtedness



Source: NBRM calculations on the basis of the data obtained from the banks and the Ministry of Finance

Leasing companies are the second largest creditor, after the banks, with a share of only 5.5% in the total households' debt. Despite the rise in the value of the leasing contracts in 2008, the share of this type of debt registered a decline of 1.4 percentage points in the total households' debt relative to 2007, which is mainly a result of the faster growth of the debt to banks.

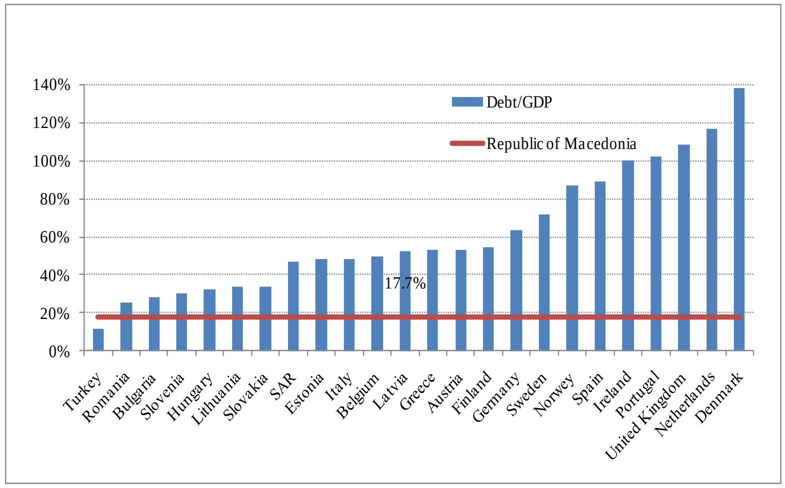
14 For the needs of this analysis, the total debt of the household sector consists of: debt to banks from credits, interest and other liabilities, debt on the basis of credits and interest to the savings houses and the value of the active leasing agreements.

15 Decelerated credit activity of banks is primarily banks' reaction to the global crisis, which reflected in the form of higher caution when extending credits, i.e. tightening of the terms of lending, increasing the interest rates on some credit products intended for the households, etc. The macroprudential measures undertaken by the NBRM also had their influence.

16 In the Republic of Macedonia, debt on the basis of credits participates with 94.3% in the total households' debt. For comparison, in 2007, this indicator by country, ranged from 71.3% in Italy and Slovakia to above 99% in Holland, Austria and Denmark.

Despite the increase, the debt of the households in the Republic of Macedonia is still on a relatively low level compared with the other countries. In the analyzed period (2005-2008), the total households' debt to GDP ratio in the Republic of Macedonia grew continuously and reached the peak of 17.7% at the end of 2008. Despite the increase of 2.9 percentage points relative to 2007, this indicator still points to a relatively low level of indebtedness, compared with some countries. Thus, in Romania, Bulgaria and Slovenia this indicator ranges between 25% and 30%, which is closest to the level registered in the Republic of Macedonia. The highest level of households' debt is common for Ireland, Portugal, United Kingdom, Holland and Denmark, where this indicator exceeds 100%.[17] Although comparative indicators show that there is still room for increasing the households' debt in the Republic of Macedonia, one must not neglect the risk of possible high indebtedness of individual segments of the households.

Figure 26
Debt to GDP ratio, by individual countries

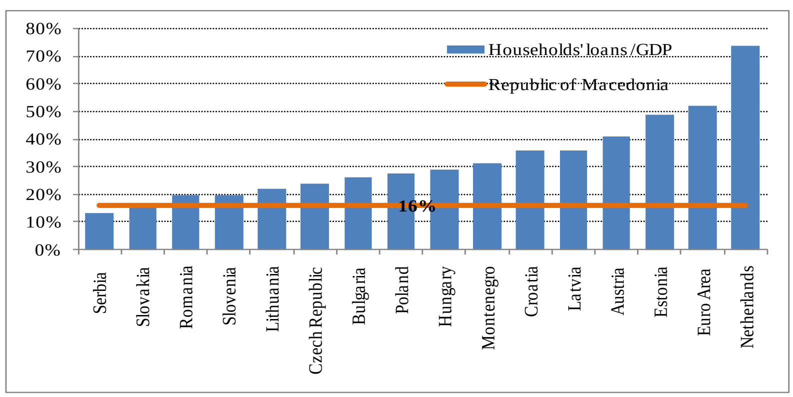


Source: Eurostat, SSO and data submitted by the banks.

1.2.1. Debt to the banking sector

Households' debt to the banks has a dominant share of 90.4% in the total households' debt. It continued to grow, and at the end of 2008 stood at Denar 63,700 million, which is by Denar 17,908 million (or 34.8%) more relative to the end of 2007. **Despite the increase, the credit support for the households in the Republic of Macedonia by the banks is still on a relatively low level compared with the other European countries.** At the end of 2008, the total household loans to GDP ratio equaled 16.0%. This indicator is not much lower than the one registered in Slovakia, Romania and Slovenia,

Figure 27
Households' loans to GDP ratio, by individual countries



Source: NBRM based on data obtained from banks, Central banks internet web sites and GFRS, MMF, April, 2009

[17] The data pertain to 2007, except for the data on the Republic of Macedonia, Estonia, Austria, Slovenia and SAR, which pertain to 2008.

where it ranges in the interval between 16% and 20%, unlike the countries of the Euro area, where at the end of 2007 it equaled 52%. Smaller ratio of total household loans to GDP was registered only in Serbia (13.1%).[18]

Figure 28
Net percentage of banks* which declared tightening/easing of the terms for extending households' housing loans

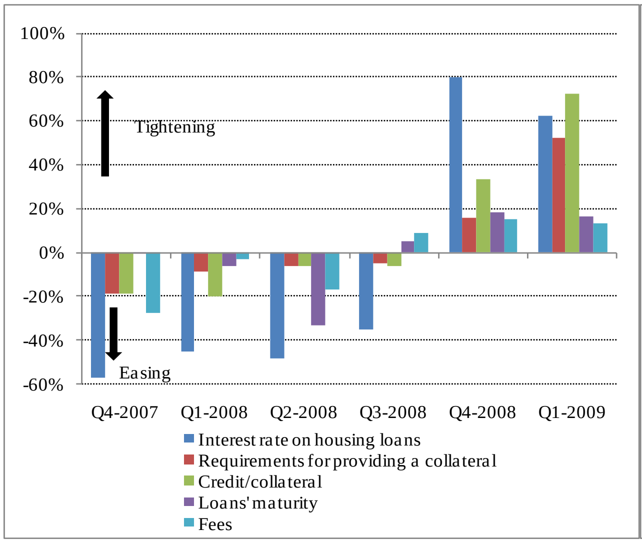
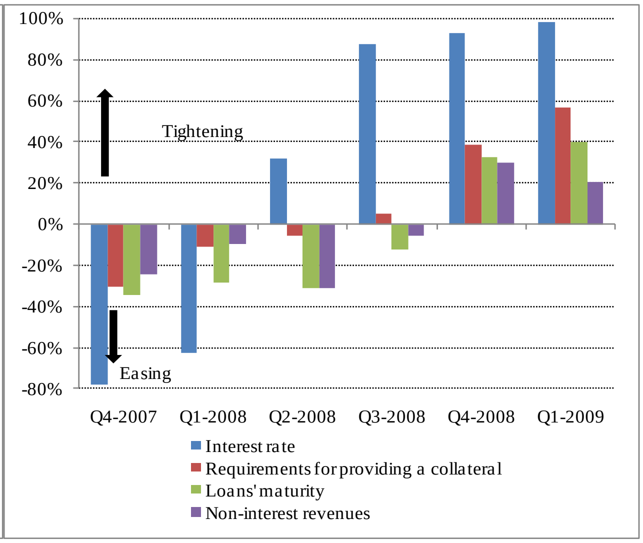


Figure 29
Net percentage of banks* which declared tightening/easing of the terms for extending consumer and other loans to households



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.

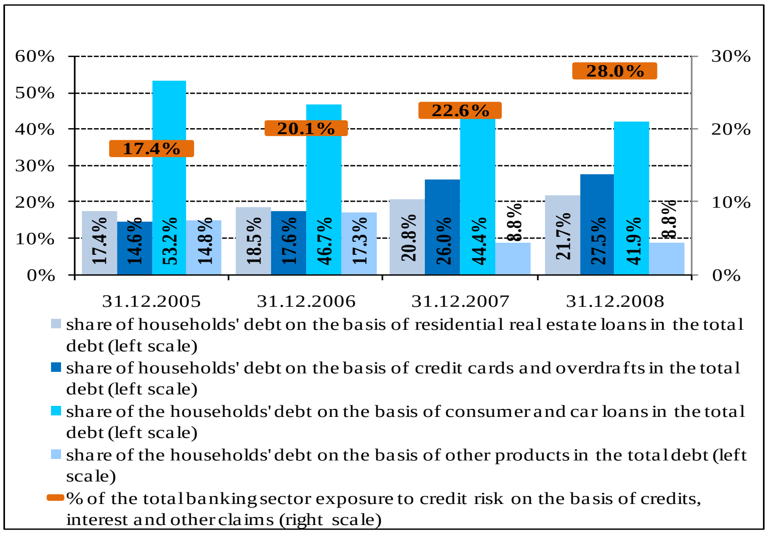
The slower growth of lending to households at the end of 2008 and in the beginning of 2009 was under the influence of the tightened terms of lending by the domestic banks and lower demand for credits by the households. Relatively high percentage of the banks that participated in the Survey responded in favor of increase in the price of credits (regarding the consumer credits even 90% of the banks responded in favor of higher price), tightening of the criteria for collateral, and coverage of the credit with collateral. Banks pointed to the cost of financial assets, expectations from the overall economic activity (for the consumer loans this factor was mentioned for the first time[19]), risk that foreclosure can not be executed, users' creditworthiness, as factors which contributed to the tighter terms of lending.[20] Together with the trend of tightening the banks' credit policy, a lower demand for credit by the households was registered. In the first three months of 2009, over 70% of the banks assessed that there was a partial decline in the demand for housing and consumer loans, which represents the highest percentage of banks since the introduction of the Survey. Large number of the banks (over 73%) expect the trend of partial tightening of the terms of lending to continue also in the second quarter of 2009.

[18] Data on the Republic of Macedonia, Serbia, Slovakia, Romania, Czech Republic, Bulgaria, Poland, Hungary, Montenegro, Croatia and Estonia pertain to 2008. Data on the other analyzed countries pertain to 2007.
[19] Source: Survey on the banks' credit activity, April 2009.
[20] Source: NBRM Surveys on the banks' credit activity

The capability of the household sector to service the debt in a timely manner, does not depend only on its amount, but also on the source of its repayment. At the end of 2008, around 60% of the total credit exposure to households pertains to credit beneficiaries whose monthly income on all basis ranges between Denar 7,000 and 30,000.[21]

The households' debt intended for consumption purposes (consumer loans, automobile loans, current accounts, credit cards and other credits) had a high share of 78.3% in the total households' debt to the banking sector. In 2008, household's debt on the basis of credit cards and overdrafts on current accounts continued to register the fastest growth (by Denar 5,605 million, or 47%). Such a pace caused an annual increase of 2 percentage points of the share of these credits in the total households' debt. **Households' debt on the basis of housing loans continued to grow, but at a slower pace.** The annual growth rate of housing loans for 2008 was 45%, which is by 18.8 percentage points lower relative to the growth rate registered in 2007. Despite its slower growth, the share of the debt on the basis of housing loans in the total households' debt to the banks grew by 1.3 percentage points.

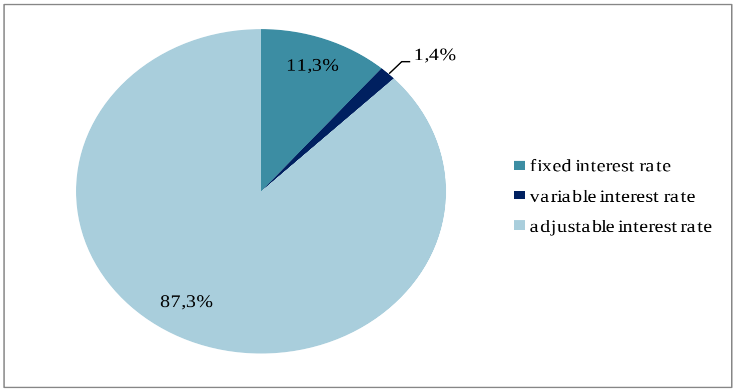
Figure 30
Structure of the households' debt, by type of banking product



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

Banks' tendency to transfer the interest rate and currency risks to their clients is an additional risk for the household sector from a viewpoint of the amount of the indebtedness and the possibilities for its servicing. This, on its part, creates higher so-called indirect credit risk for the banks, reflected in the threat of worsening the quality of their credit exposure to the households. The materialization of the currency risk and the risk of change of the interest rates would directly act toward increasing households' financial liabilities, which would at the same time lead to a decline in the wealth and the

Figure 31
Structure of the households' loans, by type of interest rate

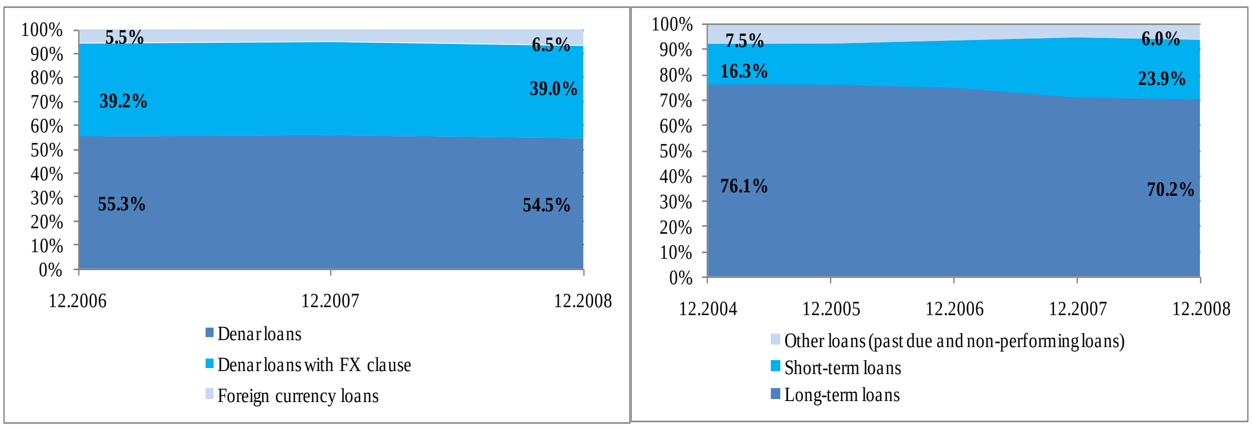


Source: NBRM, based on the data submitted by the banks.

[21] The analysis was made on the basis of data obtained from sixteen out of seventeen banks, which have credit exposure to the household sector. Within this structure, one of the banks reported a "no wage" category, which covers around 10% of its total credit exposure to the households. Regarding the obtained data, it is a general conclusion that most of the banks are not ready to prepare these data precisely, which points to weaknesses in the banks' systems for monitoring the credit risk in a significantly dispersed number of clients.

living standard of the households and would jeopardize their credit worthiness. Households' debt with currency component (FX debt and Denar debt with FX clause) covered 45.5% of the total debt to the banks, while the credits with so-called "adjustable" interest rates[22] account for 87.3% of the total credits to households. **Additionally, the dominance of the long-term debt even more emphasizes households' sensitivity to the interest rate and currency risks, due to the uncertainty regarding the movement of the interest rates and the exchange rate.** In the future, further deepening of these risks may be expected, primarily due to the expectations about an increase in the interest rates, decelerated growth of wages, as well as possible decline in employment as a consequence from the effects of the global financial crisis. Such movements could have adverse influence on the quality of the households' debt and their ability to pay back the debts.

Figure 32
Currency and maturity structure of the households' loans to banks

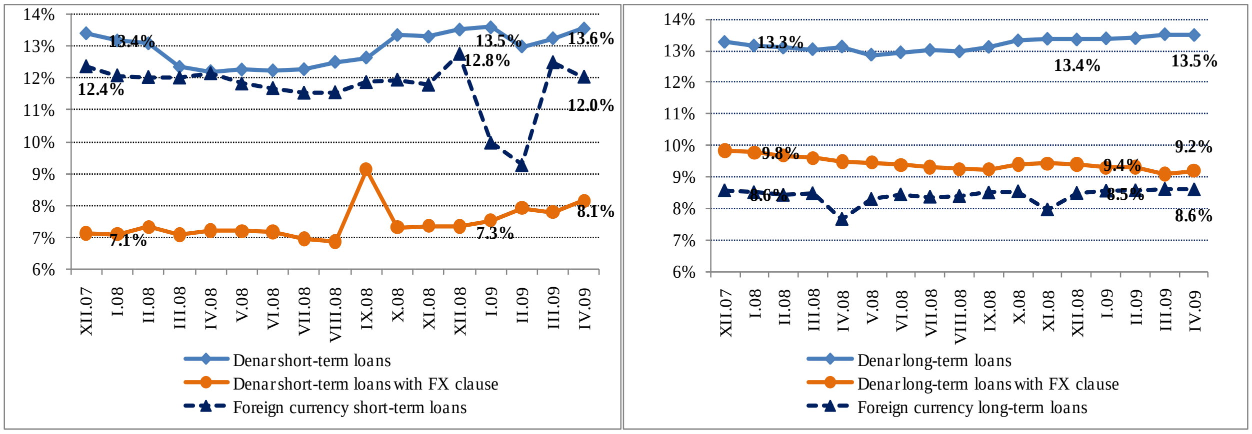


Source: NBRM, based on the data submitted by the banks.

During 2008, banks increased the interest rates on Denar credits extended to households, especially the interest rates on newly-extended credits in Denars. In the period December 31, 2007 - April 30, 2009, the interest rates on short-term and long-term Denar credits increased by 0.2 percentage points, respectively. The increase in the interest rates on the newly-extended credits was especially evident in the beginning of 2009, and at the end of April it reached the level of 17.1%, which is by 2.6 percentage points more relative to the level of December 2007. Interest rates on short-term foreign currency credits registered more significant oscillations at the end of 2008 and in the beginning of 2009, primarily under the influence of the interest rates on the international financial markets. The movements of the interest rates on the long-term foreign currency credits are more moderate, with the interest rate on annual level remaining unchanged (8.6%).

[22] They have features of both fixed and variable interest rates. They vary depending rather on the bank's policy than on the change in some key interest rate to which the risk premium would be added when setting the interest rate on the loan. Source: Report on the credit structure, according to the type of interest rate, which the banks submit to the NBRM as part of the set of reports with general data on the banks.

Figure 33
Movements of the denar short-term and long-term households' loans interest rates



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

Assessment of the financial stability of the household sector and its ability to service the liabilities

The level of households' debt continued to grow in 2008, however at a slower pace, compared with the preceding year. However, the slower growth of the households' financial assets, compared with the growth rate of its indebtedness in 2008, could influence the debt servicing capacity. Despite the slower growth of the households' debt, its share in the total financial assets went up by 8.5 percentage points and reached the level of 39.9% at the end of 2008. The increased indebtedness led to higher share of the debt in the net financial assets[23], which potentially means greater exposure of the households to risks. This indicator increased from 45.8% for 2007 to 66.3% at the end of 2008. Of course, households' increased exposure to risks was caused by the slower growth of the financial assets and lower volume of net financial assets, which caused a decline in their share in GDP. On annual level, the share of households' financial assets in GDP fell by 1.9 percentage points, while that of the net financial assets fell by 5 percentage points. For illustration, the financial assets to GDP ratio ranges between 48% (Slovakia) and 375% (Switzerland). The net financial assets to GDP ratio ranges from around 3% (Latvia) to 252% (Switzerland).[24]

Table 7
Financial stability indicators of the household sector

Indicators	2005	2006	2007	2008
Households' indebtedness annual growth ratio	40.0%	41.8%	44.4%	37.0%
Households' financial assets annual growth ratio	n.p.	6.5%	14.2%	7.9%
Households' disposable income annual growth rate	1.4%	9.8%	3.8%	8.6%
Households' debt /GDP	8.8%	11.5%	14.5%	17.7%
Financial assets / GDP	47.0%	46.1%	46.2%	44.3%
Net financial assets /GDP	38.2%	34.6%	31.7%	26.7%
Disposable income / GDP	64.7%	65.5%	59.7%	57.6%
Households' debt / Disposable income	13.6%	17.5%	24.3%	30.7%
Households' debt / Deposits	43.6%	49.9%	54.6%	65.4%
Households' debt / Total (financial) assets*	18.7%	24.9%	31.4%	39.9%
Households' debt / Net (financial) assets * (Leverage)	23.0%	33.1%	45.8%	66.3%
Finanancial assets / households' debt	535.4%	402.3%	318.3%	250.8%
Financial assets annual growth / households' debt annual growth	n.p.	83.5%	129.2%	68.1%
Households' interest burden (the ratio of interest expenditure to disposable income)	n.p.	n.p.	1.5%	2.0%
Households' indebtedness (interest payments plus loan payments to disposable income)	n.p.	n.p.	8.6%	12.6%
Loans / Deposits	37.5%	43.2%	51.2%	61.5%
Net savings / GDP	12.6%	13.0%	13.0%	10.4%
Net savings / Disposable income	19.4%	19.9%	21.8%	18.1%

Note: In the absence of data on the non-financial assets, in order to calculate the total and net assets, the calculation of these data was made only by using total financial assets and net financial assets.

[23] Households' net-financial assets are the difference between the total financial assets and the total households' debt.
[24] Source: Eurostat. Data pertain to 2007.

Analyzing the dynamics, it is evident that the level of coverage of the total households' debt with the financial assets has continually declined and at the end of 2008 it was reduced to the lowest level so far of 250.8%. Such a downward dynamics reflects the faster growth of the indebtedness relative to the growth of the financial assets. This contributed the accumulation of financial assets to provide partial "coverage" of the increase of the indebtedness, of 68.1%. At the same time, the more intensive growth dynamics of the indebtedness, relative to the growth of the households' financial assets, was the reason behind the fall of the financial assets in 2008 of 5.4%, relative to the preceding year.

The slower growth of the households' disposable income, compared with the growth rate of its indebtedness, contributed to the decline in the level of coverage of households' debt with households' income. The faster annual growth of the total debt (37%) than the growth in the disposable income (8.6%), contributed to the increase in its share in the disposable income of 6.4 percentage points, and at the end of 2008 it reached its historical peak of 30.7%. However, despite the increase, the share of households' debt in the disposable income in the Republic of Macedonia is still on a lower level relative to some developed countries[25], and close to the level registered in Turkey (29.5%) and Slovenia (30.1%).

The increase in the liabilities for repayment of interest and principal, could have a negative impact on the households' ability to service their debt regularly. On annual level, the collected interest/disposable income indicator went up by 0.5 percentage points, while the collected interest and principal/disposable income indicator went up by 4 percentage points. For comparison, the collected interest/disposable income indicator is 3.9% in Austria, 4.6% in Turkey, 5.6% in Estonia, 5.9% in Europe, 6.2% in Croatia and 11.6% in the South African Republic. The debt/disposable income ratio ranges from 4.7% (in Estonia) to 14.4% (in USA).[26]

The household sector is a net-creditor of the banking sector. At the end of 2008, however, households' net savings[27] dropped by Denar 5,082 million, or by 11.1% relative to 2007. Thereby, households' net-savings had lower relative significance for the total economic activity in the country. Thus, at the end of 2008, the ratio of the households' net savings to GDP equaled 10.4%, which is a decline of 2.6 percentage points relative to 2007. The decline in the net savings is a result of the faster annual growth of credits relative to the deposits, which caused a decline in the level of coverage of the households' credits with deposits. At the end of 2008, the households' loans to deposits ratio was 61.5%, which is an increase of 10.3 percentage points relative to 2007. Despite the increase, the comparison with other countries shows that there is still room for deepening of the credit support for the household sector by the financial institutions, which consequently means increased level of financial intermediation.

2. Corporate sector

The corporate sector of the Republic of Macedonia continued to grow also in 2008. However, this growth was followed by certain deterioration of the corporate sector performances, with exception to the improved profitability. The qualitative improvements in the enterprises operating have little or no effect on the improved profitability of the corporate sector, with regard to the certain deterioration of other indicators of enterprises' operations. Namely, it is due, to largest extent, to the shown larger profit as a result of the amendments to the regulations from the tax area, which also stimulated a decrease in the degree of tax evasion.[28] Despite the improvement, the indicators for successfulness in the enterprises operations are still low. The lower liquidity, as well as the problems related to the collection of claims and payment of the corporate sector's liabilities, are certain signs that the consequences of the global economic crisis are felt in the real sector, mainly in the foreign trade and investments. However, larger effects on the enterprises' balances can be manifested with certain time-lag.

[25] This indicator ranges from 45% to 55% in the Czech Republic, Lithuania and Slovakia, 76.7% in SAR (2008), 83% in Estonia (30.09.2008), 112.1% in the European Union (2007), and high 250% in Holland (2007). Source: Eurostat and IMF Global Financial Stability Report, April 2009, and web sites of central banks.

[26] Data on Austria, Croatia, Estonia and SAR pertain to 2008, while data on the other countries pertain to 2007. Source: web sites of central banks and IMF Global Financial Stability Report, April 2009.

27 Net savings represent the difference between the households' total deposits and total credits.

[28] In December 2006, amendments to the regulations were adopted, replacing the current profit tax of 15% with 12% in 2007, and 10% in 2008, with tax exemption for the amount of the reinvested gain being envisaged.

The expected delay of the economic growth in the countries that are the main trading partners of the Republic of Macedonia and consequently, the decrease in the export demand, the decrease in the prices of metal, as well as the expectations for slowing down of the total economic growth in the country in 2009, will reflect negatively on the financial capacity of the enterprises. From its part, it can have negative influence on the capability of the corporate sector for regular servicing of the liabilities, which would cause worsening in the quality of the banking system's credit portfolio, which is the largest resident creditor of the enterprises.

The increase in the indebtedness of the corporate sector, which continued also in 2008, generates certain risks for its future functioning. The intensive annual increase and the dominance of the long-term in the total enterprises' credits, in conditions when the largest portion of them has variable or adjustable interest rate, increased their exposure to interest rate risk. On the other hand, the strong increase and the dominance of the debt with currency component in the total debt of the corporate sector mean higher exposure also to currency risk. In conditions of short net foreign currency position, which is a reflection of the higher amount of liabilities than assets with currency component, the corporate sector is exposed to risk of possible devaluation of the domestic currency, which would influence towards decrease in the financial assets and the net value of the companies. On the other hand, the larger exposure of the companies to both interest rate and currency risk means higher exposure of the corporate sector creditors to indirect credit risk. Hence, the maintenance of the macroeconomic stability is of key importance also for the financial capacity of the corporate sector, its capability for servicing the liabilities towards creditors, as well as the capability for easier access to the sources of financing of the regular activities.

In conditions of tightening of the credit policies, credit rationalization and increase in the interest rates, the possible decrease or price increase in the future credit support by resident and nonresident creditors can put in question the possibility of the corporate sector for refinancing and repayment also of the current debt, as well as the possibility for financing its regular activities. Simultaneously, it can cause deceleration in the total volume of the enterprises' activities and deterioration of the indicators for their operating.

2.1 Analysis of the performances of the corporate sector

The corporate sector of the Republic of Macedonia continued to expand also in 2008. At the end of 2008, the total assets of the corporate sector equaled Denar 1,008,325 million, which is an annual increase of 12.1%[29]. Simultaneously, in 2008 13,534 new enterprises were founded[30], which is 11.2% of the total number of enterprises at the end of 2008. However, the number of newly founded enterprises in 2008 is smaller than the number registered in the preceding year (the number of the newly founded enterprises in 2007 equaled 12,889).

In 2008, the number of enterprises with blocked accounts and enterprises against which a bankruptcy procedure has been initiated increased. Thus, the number of enterprises against which a bankruptcy procedure has been initiated went up by 194, or 12.6% compared to the previous year. But this increase was mitigated by the fact that these enterprises represent only 1.4% of the total number of enterprises. Also, the number of legal entities with blocked accounts went up by 3,045, or 27.3% in one-year period. At the end of 2008, the number of legal entities with blocked accounts equaled 14,213 or 11.8% of the total number of enterprises on December 31, 2008. The fact that the number of blocked depositors continues to increase also in 2009 concerns additionally and at the end of May 2009 it reached

[29] Source: Central Registry of the Republic of Macedonia (CRM). The analysis was made on the basis of the data from the annual statements for 2008 and it pertains to the entities as of June 12, 2009, which submitted annual statements to the CRM in conformity with the legal obligation.
[30] Source: CRM.

the level of 14,504[31]. The slower opening of new businesses, compared to the increase in the number of blocked depositors and enterprises in bankruptcy procedure, can be a reaction of the enhanced uncertainty and deteriorated economic conditions in the country, as a result of the global economic crisis. The worsened economic situation in the country and in the world has no significant reflection on the financial statements of the corporate sector for 2008. More significant effects on the enterprises' balances are expected with certain delay.

Table 8
Balance sheet of the corporate sector

BALANCE SHEET	Amount (in millions of Denars)		Structure		Annual change		
ASSETS:	2007	2008	2007	2008	absolute amount	in %	share in the change
Subscribed, but not paid-up capital	280	345	0,0%	0,0%	65	23,3%	0,1%
Fixed assets, of which:	466.154	520.823	51,8%	51,7%	54.669	11,7%	50,1%
Tangible assets	*13.671*	*15.263*	*2,9%*	*2,9%*	*1.592*	*11,6%*	*2,9%*
Non-material investments	*396.807*	*448.394*	*85,1%*	*86,1%*	*51.587*	*13,0%*	*94,4%*
Long-term financial investments	*55.676*	*57.166*	*11,9%*	*11,0%*	*1.491*	*2,7%*	*2,7%*
Current assets, of which:	432.691	487.156	48,1%	48,3%	54.465	12,6%	49,9%
Inventories	*126.904*	*146.162*	*29,3%*	*30,0%*	*19.258*	*15,2%*	*35,4%*
Short-term receivables	*237.176*	*267.538*	*54,8%*	*54,9%*	*30.362*	*12,8%*	*55,7%*
Short-term financial investments	*37.013*	*35.096*	*8,6%*	*7,2%*	*-1.917*	*-5,2%*	*-3,5%*
Cash and securities	*31.599*	*38.360*	*7,3%*	*7,9%*	*6.761*	*21,4%*	*12,4%*
TOTAL ASSETS	**899.125**	**1.008.325**	**100%**	**100%**	**109.199**	**12,1%**	**100%**
LIABILITIES							
Capital and reserves	436.609	460.718	48,6%	45,7%	24.109	5,5%	22,1%
Long term provisions for risks and expences	3.410	3.813	0,4%	0,4%	403	11,8%	0,4%
Liabilities to creditors, of which:	437.692	519.203	48,7%	51,5%	81.511	18,6%	74,6%
Liabilities on the basis of credits	*77.496*	*92.339*	*17,7%*	*17,8%*	*14.843*	*19,2%*	*18,2%*
Accounts payable	*77.518*	*75.645*	*17,7%*	*14,6%*	*-1.873*	*-2,4%*	*-2,3%*
Other liabilities	*282.678*	*351.218*	*64,6%*	*67,6%*	*68.541*	*24,2%*	*84,1%*
Accrued expences and deffered revenue	21.414	24.591	2,4%	2,4%	3.176	14,8%	2,9%
TOTAL LIABILITIES	**899.125**	**1.008.325**	**100,0%**	**100,0%**	**109.199**	**12,1%**	**100,0%**

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

The assets and liabilities structure of the corporate sector remained almost unchanged compared to 2007. The fixed and the current assets have equal share in the enterprises' assets structure and almost completely contributed to the growth in the total activities of the enterprises. As in the previous year, in 2008 the enterprises financed about half of their activities from own funds, while the remaining half was provided from others sources of funds.

Table 9
Indicators for the corporate sector performances

Ratio	2007	2008
Equity ratio: (equity and reserves) / total liabilities	48,6%	45,7%
Self- financing ratio: (capital and reserves+ long-term provisions) / (fixed assets+inventories)	74,2%	69,6%
Quick ratio (acid test)	0,7	0,6
Current ratio	1,0	0,9
Average collection period	211	221
Average inventory period	113	121
Average payment period	328	340
Profit margin (net)	1,9%	3,0%
Net profit per employee (in 000 denars)	49,1	71,6
Return on equity (ROAE)	1,7%	2,8%
Return on assets (ROAA)	0,8%	1,3%

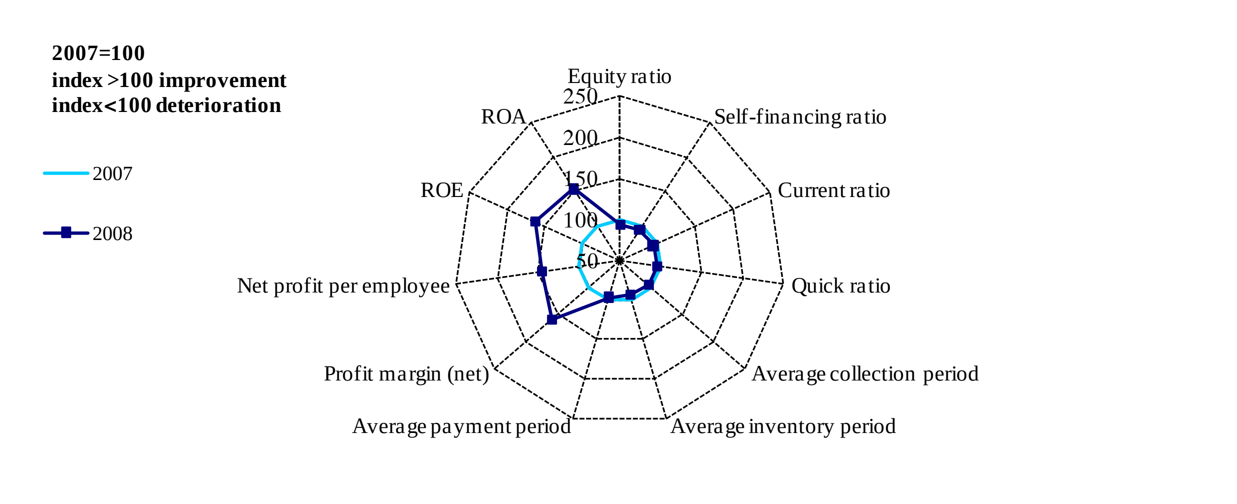
Source: Central Registry of RM and NBRM calculations

[31] The datum includes all legal entities (from all sectors), but mostly it refers to the legal entities from the corporate sector. Source: NBRM.

Oppositely to the other indicators for the corporate sector performances, the profitability in this sector in 2008 registered improvement. The improvement was evidenced also with the indicators for successfulness in the enterprises operations which are still on low level. At the end of 2008, the indicators for the return on assets (ROA) and return on equity (ROE) equaled 1.3% and 2.8%, respectively, which is an increase of 0.5 and 1.1 percentage points compared to 2007. The improved profitability of the corporate sector almost completely results from the improved profit margin, the largest portion of which is due to the increase in the profit shown by the enterprises. Annually, the profit went up by Denar 5,430 million or 72.3%, while the profit margin by 58.5%.

The financial safety of the corporate sector registered insignificant decrease in 2008. However, despite the decrease, the corporate sector characterizes with high level of capitalization. The reduced share of capital and reserves in the structure of the corporate sector's sources of funds is an indicator for lower financial safety and larger sensitivity of the corporate sector to external shocks. However, the decrease in the share of the own funds in the total sources is relatively low (2.9 percentage points), with the share of the own funds in the sources of financing continuing to be high. The lower financial security of the enterprises is followed by the increase in their indebtedness. Other sources of funds went up by Denar 85,090 million, or 18.4%, annually. Such a dynamics of the total liabilities contributed their value to exceed the value of the own funds, and at the end of 2008, this ratio reached the level of 118.9%.

Figure 35
Indicators for the corporate sector performances



Source: CRM and NBRM calculations

In 2008, the indicators for the liquidity of the corporate sector registered continuous decrease, which is due, to large extent, to the larger delay in the collection of claims and payment of liabilities. On December 31, 2008, the current ratio and the quick ratio equaled 0.9 and 0.6, which is below the minimum accepted levels[32]. The low liquidity position of the corporate sector is in direct correlation with the low utilization of funds, which is proved with the turnover indicators, i.e. through average inventory period, period of collection of claims and period of payment of liabilities of the corporate sector. At the end of 2008, the average period necessary for collection of claims equaled approximately seven months; about four months were necessary for realization of the stocks, while almost

[32] The generally accepted satisfactory level of the current, i.e. quick ratio is 2, i.e. 1, respectively.

one year, on average, for payment of the liabilities. The reduced liquid position results from enlarged problems in both collection of claims and payment of liabilities of the corporate sector (due to the decrease in the price of export products of higher significance, cancelation of orders, announcements for temporary termination of the manufacturing etc.).

Hence, it can be concluded that the improved profitability of the corporate sector is due very slightly, or it is not due at all, to the qualitative improvements in the enterprises operations, with respect to the deterioration (although minimal) of other indicators for the enterprises operations. In that regard, it can be concluded that the increase in the profit shown by enterprises is mostly a result of the changes in the tax area, which influenced towards decrease in the tax evasion degree with the corporate sector. On the other hand, further improvement in the enterprises' profitability is possible primarily through the improvement in their total financial and operational situation, i.e. through strengthening of their competitiveness and successfulness, which would have positive influence on the total economy.

Analysis of the corporate sector performances by activity

The different nature of the operations the enterprises from different activity perform, as well as the different threshold of their resistance to worsened external conditions are manifested in significant differences in the indicators for their operations.

Most of the activities characterizes with high level of capitalization, as well as with certain decrease in the share of both capital and reserves in the total sources of funds. The most significant decrease in the capitalization is registered with the enterprises from the following activities: "supply of electricity, gas, steam and air-conditioning", "construction" and "accommodation facilities and food services".

Table 10
Indictors for the corporate sector operations, by activity

Indicators	Year	Equity ratio: (equity 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	Inventory period	Average payment period	Profit margin (net)	Return on equity (ROAE)	Return on assets (ROAA)
Agriculture, forestry and fishing	2007	83.9%	89.8%	0.4	0.8	306	343	896	1.6%	0.1%	0.1%
	2008	81.9%	88.3%	0.4	0.7	219	233	827	1.5%	0.2%	0.1%
Mining and quarrying	2007	53.0%	70.5%	0.5	0.7	6	3	9	-0.5%	-11.6%	-6.2%
	2008	60.7%	93.6%	0.9	1.1	11	3	9	1.3%	22.9%	13.9%
Processing industry	2007	45.6%	67.5%	0.6	0.9	476	348	749	0.0%	0.0%	0.0%
	2008	43.2%	63.3%	0.5	0.9	589	439	984	-0.3%	-0.1%	0.0%
Electricity, gas, steam and air-conditioning	2007	53.1%	82.7%	0.7	1.1	2,707	277	1,664	1.8%	0.1%	0.1%
	2008	46.3%	71.8%	0.6	0.9	2,577	359	1,517	0.8%	0.1%	0.0%
Water supply, waste water removal, waste management and environment	2007	67.4%	88.7%	0.7	1.0	133	16	121	6.6%	5.2%	3.5%
	2008	62.9%	83.8%	0.7	1.0	134	22	110	9.2%	8.1%	5.1%
Construction	2007	32.6%	62.8%	0.7	1.1	76	37	101	4.4%	25.6%	8.3%
	2008	26.9%	54.9%	0.7	1.0	82	34	113	4.7%	31.9%	8.6%
Wholesale and retail	2007	34.1%	59.5%	0.6	1.1	1,489	1,126	2,523	3.5%	0.8%	0.3%
	2008	33.6%	57.3%	0.6	1.0	1,679	1,333	2,977	6.5%	1.3%	0.4%
Transport and storage	2007	45.3%	77.2%	0.7	0.9	2,944	586	4,207	-5.4%	-0.4%	-0.2%
	2008	44.9%	73.7%	0.7	0.8	3,131	572	4,751	-12.9%	-1.0%	-0.5%
Accommodation facilities and catering services	2007	49.7%	62.3%	0.4	0.6	27	21	105	1.2%	3.5%	1.7%
	2008	43.7%	55.9%	0.4	0.6	30	23	119	2.0%	6.1%	2.7%
Information and communication	2007	69.0%	121.6%	1.4	1.6	1,079	207	1,701	14.6%	0.9%	0.6%
	2008	64.3%	105.8%	1.1	1.3	1,059	208	1,645	-4.0%	-0.3%	-0.2%
Real estate	2007	40.6%	58.7%	0.5	0.6	937	177	1,383	30.3%	6.1%	2.5%
	2008	45.2%	60.3%	0.5	0.6	565	199	929	44.8%	9.2%	4.1%
Professional, scholar and technical activities	2007	36.5%	79.0%	0.8	1.0	2,305	566	3,445	14.1%	2.2%	0.8%
	2008	38.7%	85.4%	0.9	1.1	2,804	524	3,918	18.5%	2.2%	0.8%
Administrative and auxiliary services	2007	32.6%	49.7%	0.5	0.6	n.p.	n.p.	n.p.	n.p.	0.2%	0.1%
	2008	29.0%	49.6%	0.6	0.6	n.p.	n.p.	n.p.	n.p.	0.9%	0.3%

Source: CRM and NBRM data, based on the annual accounts for 2008.

In 2008, the liquidity with almost all activities remained low and registered no changes of higher importance compared to the preceding year. Despite the most remarkable drop in the liquidity indicators with the enterprises from "information and communication" activity, on December 31, 2008 the enterprises from all activities registered the highest quick ratio and current ratio - 1.1 and 1.3, which is near or below the generally accepted minimum levels.

Insufficient level of the indicators for assets and liabilities turnover was registered with the enterprises from almost all activities. The longest average inventory period, period of collection of claims and period of payment of liabilities was registered with the activities from transport and storage area, trade, supply of electricity, manufacturing industry, professional, scholar and technical activities and information and telecommunication. The indicators with almost all these activities worsened in 2008.

The profitability indicators of the enterprises from most of the activities improved. The most significant improvement was registered with the "mining and quarrying" activity, which enters from non-profitable into a zone of profitable operating, thus registering high rates of return on assets and equity. Such positive dynamics was conditioned by the functioning of all most important mines. It should be especially emphasized that besides the reduced world production of metals, the metal ore extraction registered no decrease. Influenced by the government capital investments and foreign direct investments[33], the construction revived significantly, which can be seen through the high rates of return on assets and equity. The value added in the construction registered real growth of 13.7%, annually, and significantly contributed to the total rise of the GDP.

2.2 Indebtedness of the corporate sector

The indebtedness of the corporate sector continued to grow also in 2008, but with faster dynamics compared to the previous year. The annual growth rate of 31.2% registered at the end of 2008 went up by 3.2 percentage points compared to the rate recorded in 2007. Such a dynamics conditioned the corporate sector's indebtedness to reach the level of Denar 222,950 million on December 31, 2008.

Table 11
Total indebtedness of the corporate sector[34]

Type of debt	31.12.2007		31.12.2008		Annual change			
	Amount (in millions of Denars)	Structure (in %)	Amount (in millions of Denars)	Structure (in %)	Absolute amount (in millions of Denars)	In %	In structure (in percentage points)	Share in the change
Residents	**80,178**	**47.2%**	**106,357**	**47.7%**	**26,179**	**32.7%**	**0.5**	**49.3%**
- Banks	75,777	44.6%	100,126	44.9%	24,349	32.1%	0.3	45.9%
- Leasing	4,401	2.6%	6,231	2.8%	1,830	41.6%	0.2	3.4%
Non-residents	**89,718**	**52.8%**	**116,593**	**52.3%**	**26,875**	**30.0%**	**-0.5**	**50.7%**
Total:	**169,896**	**100.0%**	**222,950**	**100.0%**	**53,054**	**31.2%**		**100.0%**

Source: NBRM and Ministry of Finance.

The non-residents continue to be the largest creditors of the corporate sector, although the gap between the debt to residents and non-residents (from the aspect of the share in the total debt of the corporate sector) narrows by 1 percentage point. The total liabilities of the enterprises to non-residents registered an absolute increase of Denar 26,875 million, which is by Denar 0.7 billion more than

[33] The policy of intensified public investments in infrastructural projects, which commenced at the end of 2007 and continued in 2008, had large contribution for the revival of the construction activity. In the first half of the year, together with the government investments in construction works, the entry of individual foreign direct investments intensified the construction growth, but since the third quarter, influenced by the crisis, the private investments from this area registered a decrease (according to the data pertaining to the buildings). Oppositely, the government investments boosted at the end of the year, pointing to the possibility for intensified activity in this sector also in the following period. According to the type of objects, the largest increase in the construction activity was registered with the infrastructure - civil engineering and waterworks, while the buildings (without residential) registered moderate increase compared to the previous year. Source: Annual Report for 2008, NBRM.

[34] For the needs of this analysis, the total indebtedness of the corporate sector encompasses: the debt based on credits, interest and other claims to banks, the total liabilities of the corporate sector to abroad (non-residents) and the value of the active leasing contracts.

the rise in the domestic debt. Thus the debt to the non-residents remained to dominate in the structure of the corporate sector's debt (on December 31,2008 this share equaled 52.3%). Roughly 54% of the total liabilities of the corporate sector to abroad accounts for the liabilities based on concluded credit agreements, which augmented by 42.2% in 2008 (or by Euro 302.4 million). The currency structure of the external debt has been dominated by the liabilities in Euro, with a share of 88.2% and liabilities in US Dollars, with a share of 11.5%[35]. From the aspect of maturity, larger share of the liabilities (52.6%) accounts for the short-term ones, although in 2008 higher relative increase of 48.4% was registered by the long-term liabilities (in 2008, the short-term liabilities of the corporate sector to non-residents went up by 16.2%)[36]. At the beginning of 2009, the credit rating of the Republic of Macedonia declined, which would cause increase in the expenses of the domestic enterprises for debiting abroad, as a result of higher risks premiums of country, which the residents will charge from the enterprises from the Republic of Macedonia.

The banks are the largest resident creditor of the corporate sector, with a share of 44.9% in the total debt of the enterprises. In 2008, the indebtedness of the enterprises to domestic banks, based on credits, interests and other claims, went up by Denar 24,349 million (or by 32.1%), thus increasing the structural share in the total debt of the corporate sector, by 0.3 percentage points.

Despite the high relative increase in the value of the active leasing contracts (growth of 41.6%), on December 31, 2008, the share of this source of financing in the total exposure of the enterprises equaled only 2.8% (growth of 0.2 percentage points, compared to the end of 2007).

Table 12
Currency structure of the indebtedness of the corporate sector

Type of debt	31.12.2007		31.12.2008		Annual change			
	Amount (in millions of Denars)	Structure (in %)	Amount (in millions of Denars)	Structure (in %)	Amount (in millions of Denars)	In %	In structure (in percentage points)	Share in the change
Denar debt	29,317	17.7%	35,609	16.4%	6,292	21.5%	-1.3	12.2%
FX debt	117,763	71.1%	150,332	69.1%	32,569	27.7%	-1.9	62.9%
Denar debt with FX clause	18,561	11.2%	31,461	14.5%	12,899	69.5%	3.3	24.9%
Total:	**165,642**	**100.0%**	**217,402**	**100.0%**	**51,760**	**31.2%**		**100.0%**

Source: NBRM

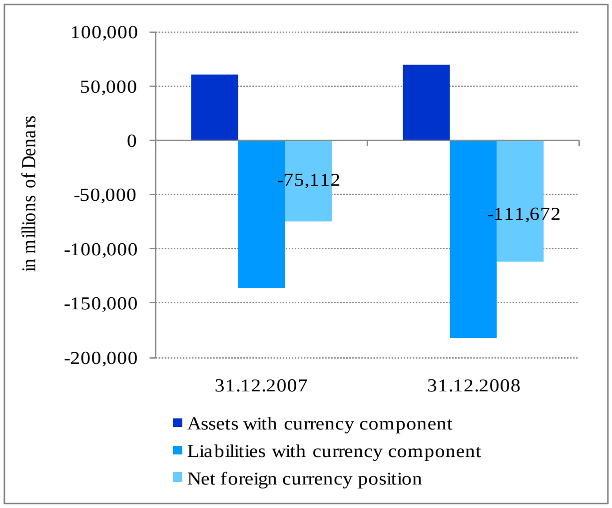
Note: The calculation does not contain the debiting based on leasing, since the data on its currency structure are not available. Regarding the debt to domestic banks, the calculation contains only the information on debiting based on credits.

The debt with currency component (in foreign exchange or in Denars with FX clause) dominates in the currency structure of the enterprises' total debt, with a share of about 85%. In 2008, this indebtedness registered annual growth of Denar 45,468 million, or 33.4%, which conditioned 87.8% of the increase in the total debt of the enterprises. The high debt with currency component of the corporate sector implies its bigger sensitivity to currency risk.

Figure 36
Foreign currency position of the corporate sector

[35] The calculation has been made only on the basis of the liabilities
[36] The data on the external debt of the corporate sector are preliminary.

On aggregate level, the corporate sector registered short net foreign currency position, which reflects the higher amount of liabilities than assets in the currency component. For the corporate sector such a position, on aggregate level, means exposure to risk of possible devaluation of the domestic currency, which would influence on the decrease in the financial assets, as well as the net value of the companies. On December 31, 2008, the short net foreign currency position of the corporate sector equaled Denar 111,672 million, on aggregate level, which is an annual increase of Denar 36,560 million (or 48.7%)[37]. Thus at the end of 2008, the total assets with currency component covered only 38.6% of the total liabilities with currency component of the corporate sector, which is an annual decline of 6.3 percentage points. In conditions of lack of more detailed information, there is a risk that the coverage of the liabilities with claims with currency component will be even lower at the level of individual enterprises, or economic activities certain enterprises belong to, if the total claims with currency component of the corporate sector are concentrated with a small number of enterprises.



Source: NBRM

Table 13
Maturity structure of the indebtedness of the corporate sector

Type of debt	31.12.2007		31.12.2008		Annual change			
	Amount (in millions of Denars)	Structure (in %)	Amount (in millions of Denars)	Structure (in %)	Amount (in millions of Denars)	In %	In structure (in percentage points)	Share in the change
Short-term credits	78,259	47.2%	97,616	44.9%	19,357	24.7%	-2.3	37.4%
Long-term deposits	79,434	48.0%	110,774	51.0%	31,340	39.5%	3.0	60.5%
Other credits (past-due and non-performing)	7,949	4.8%	9,012	4.1%	1,063	13.4%	-0.7	2.1%
Total:	**165,642**	**100.0%**	**217,402**	**100.0%**	**51,760**	**31.2%**		**100.0%**

Source: NBRM
Note: The total exposure includes: the 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 register the highest share in the maturity structure of the total debt of the corporate sector. At the end of 2008, the long-term credits participated with 51% in the total indebtedness, which is an increase of 3 percentage points compared to the end of 2007. The high share of the long-term debt elevates the sensitivity of the corporate sector to changes in the interest rates (exposure to interest rate risk). The domestic banks' exposure to interest rate risk is especially emphasized in conditions when larger part of the domestic bank's credits are extended with interest rates which can be

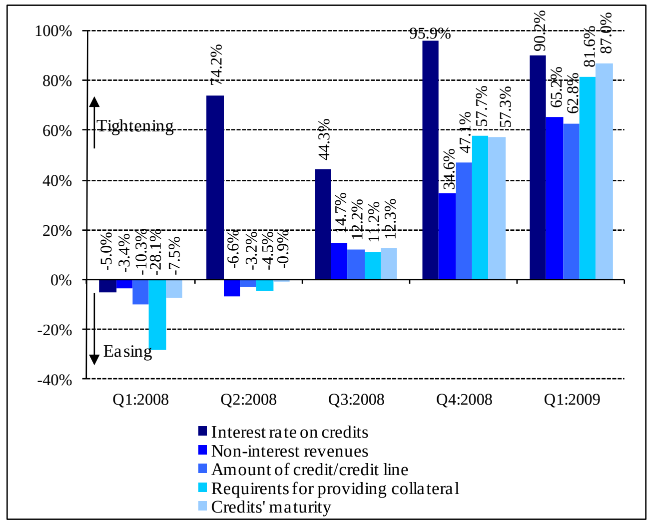
[37] The net foreign currency position of the corporate sector is calculated as a difference between assets and liabilities with currency component of the corporate sector. The assets with currency component consists of: deposits with currency component, funds on the accounts abroad, funds in foreign currency vault, total claims of the residents on non-residents and investments abroad. The liabilities with currency component consist of: credits with currency component from domestic banks and total liabilities of the residents to non-residents. The calculation fails to include funds in the foreign currency vault, since no such data are available. Having in mind the non-availability of datum on investments abroad as of December 31, 2008, the datum pertaining to December 31, 2007 is used. In the calculation of the deposits with currency component, the part referring to Denar deposits with currency clause for 2008 is as of January 31, 2009, while for December 31, 2007 the amount of the Denar deposits with FX clause of the enterprises was estimated (until January 31, 2009 there were no data on the amount of the Denar deposits with currency clause by sectors).

changed based on an autonomous decision of the creditor-banks (about 63% of the extended credits have adjustable interest rate[38]). Also, 57.6%[39] of the debt of the corporate sector to non-residents characterizes with variable interest rates, dependant on the movements of the interest rates on the foreign markets.

2.2.1 Indebtedness towards domestic banking sector

The indebtedness of the corporate sector[40] towards domestic banks continued to increase in 2008, despite the certain tightening of the crediting conditions by the banks. The main factors contributing to the enhanced crediting of the enterprises were: the higher demand for credits, the need of the corporate sector for larger investments in fixed assets, reserves and working capital, the necessity for restructuring or repayment of the current debt, etc.[41] On December 31, 2008, the total debt of the enterprises to the banking sector equaled Denar 100,126 million, which is more by Denar 24,349 million (or 32.1%) compared to the end of 2007 (for comparison, in 2007 the enterprises' debt towards banking sector went up by Denar 17,174 million, or by 29.3%). The intensified growth of the corporate sector's indebtedness is occurring in environment of certain tightening of the credit conditions by the domestic banks, which only proves the significant role of the bank credits as sources of financing of the corporate sector's activities. On the other hand, the intensified borrowing under more rigorous credit conditions can reflect negatively on the future financial reliability of the enterprises for timely servicing of their liabilities. The tightening of the lending conditions[42] for enterprises commenced in the second quarter of 2008 and became especially intensified in the last quarter of 2008 and in the first quarter of 2009. More conservative credit policy of the banks is logical consequence of the deteriorated macroeconomic environment and consequently, the banks' perceptions for higher risks and worsening of their expectations for the future economic activity. In conformity with the latest Lending Survey (for the first quarter of 2009), the banks expect further tightening of the credit conditions, as well as partial decrease in the demand for credits by the enterprises.

Figure 37
Net percentage of banks* which declared tightening/easing of the terms for extending credits to enteprises



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.

[38] According to the data provided by the banks.
[39] The calculation has been prepared only on the basis of the liabilities of the corporate sector to abroad, based on principal.
[40] The indebtedness of the corporate sector to the banking system encompasses the debt on the basis of credits, interest rates and other climes. More than 95% of the total enterprises' debt towards domestic banks are based on credits.
[41] In conformity with the results of the Lending Surveys of the banks in the four quarters of 2008 and in the first quarter of 2009.
[42] In conformity with the results of the Lending Surveys of the banks in the four quarters of 2008 and in the first quarter of 2009.

Figure 38
Movement of the interest rates on short-term credits extended to enterprises

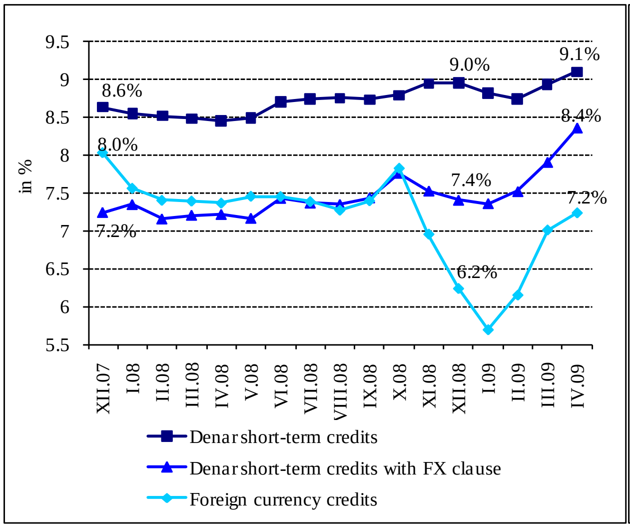
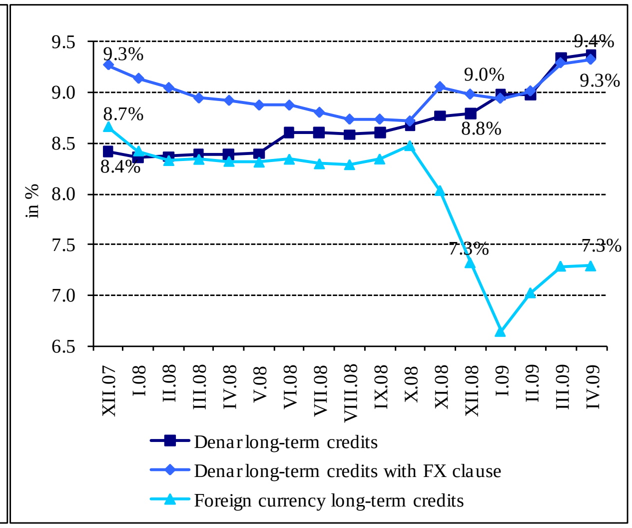


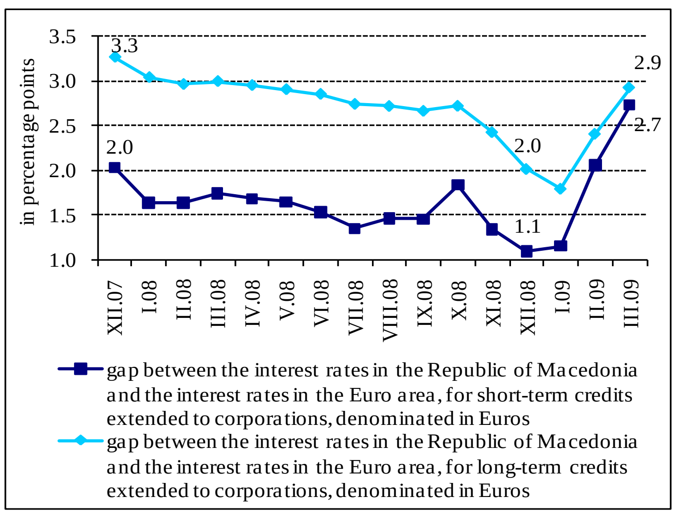
Figure 39
Movement of the interest rates on long-term credits extended to enterprises



Source: NBRM

In 2008, the banks increased the interest rates on both Denar credits and Denar credits with FX clause extended to the corporate sector. Oppositely, the interest rates on foreign exchange credits to enterprises registered a decrease (mostly as a result of the downward move ment of the interest rates on the international financial markets) and at the end of the year they got closer to the interest rates in the Euro area. Annually (December 31,2007 - December 31,2008), the highest increase of 0.4 percentage points was registered by the interest rates on the Denar short-term and long-term credits extended to enterprises. Oppositely, the interest rates on the foreign exchange short-term credits declined by 1.8 percentage points, while the interest rates on the foreign exchange long-term credits dropped by 1.4 percentage points. The decrease in the interest rates on Euro credits resulted in gap reduction between interest rates in the Republic of Macedonia and the interest rates in the Euro area for enterprises' credits extended in Euro currency. Namely, on December 31, 2008 such a gap reduced to the level of 2 percentage points for the interest rates on long-term Euro credits, i.e. at the level of 1.1 percentage point for the interest rates on the long-term credits in Euros. However, if possibly comparing the amount of the interest rate encumbrance of the enterprises from the Republic of Macedonia, in case of borrowing from foreign financial institutions from the Euro area or from domestic banks, the additional risk premium the foreign financial institutions charge from nonresident enterprises (in this case, the enterprises from the Republic

Figure 40
Gap between the interest rates in the Republic of Macedonia and the interest rates in the Euro area for credits extended to enterprises in Euros

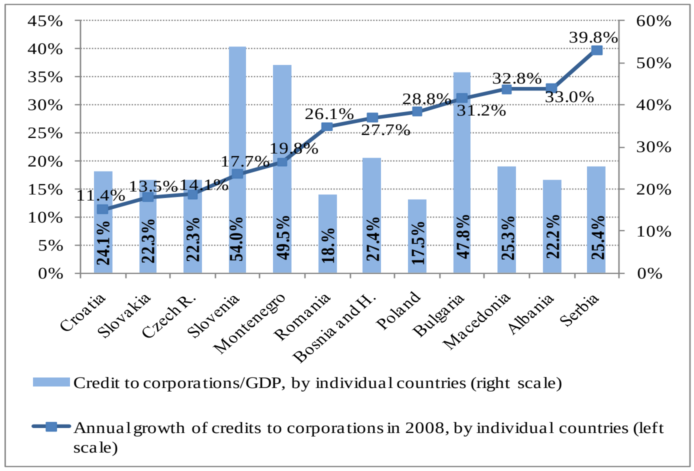


Source: NBRM and Monthly Bulletins from the web sites of the ECB.

of Macedonia), the amount of which is adequate to the perceptions for the country risk, should also be taken into consideration. This should especially be taken into consideration having in mind the worsening in the perspective for the credit rating of the Republic of Macedonia in 2008, i.e. the lowering of the credit rating at the beginning of 2009. In the first quarter of 2009, the domestic interest rates on the foreign exchange credits extended to enterprises registered an upward movement, which resulted in widening of the gap between the interest rates on Euro credits extended to enterprises in Republic of Macedonia and those in the Euro area.

The high increase in the enterprises' credits in 2008 puts the Republic of Macedonia in the group of countries with the highest annual growth rates of credits to the corporate sector, among the analyzed countries of the Central and South-East Europe. On the other hand, according to the indicator for the share of the total enterprises' credits in the GDP, the Republic of Macedonia ranges in the middle of the list of analyzed countries. Thus in 2008, the credits of the enterprises in the Republic of Macedonia augmented by 32.8%, which is lower only if compared to Albania and Serbia. Oppositely, the financial intermediation in the Republic of Macedonia, presented as a share of the total enterprises' credits in the GDP equaled 25.3% (21.4% for 2007) and it is lower compared to Serbia, Bosnia and Herzegovina, Bulgaria, Montenegro and Slovenia.

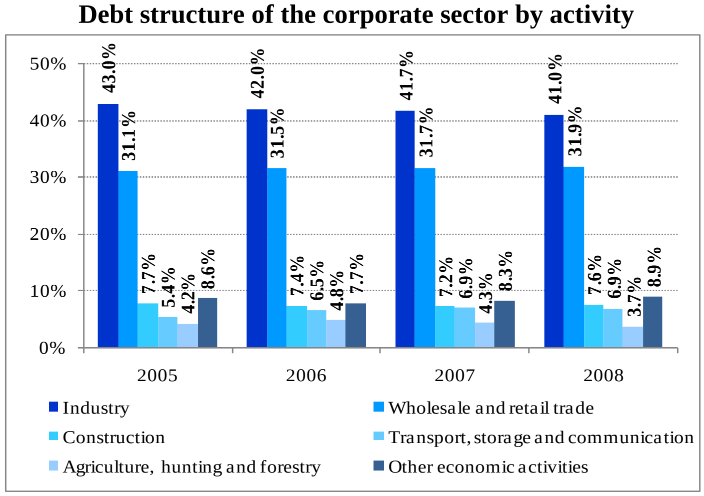
Figure 41
Annual growth rate of the credits to enterprises and the share of the credits to enterprises in the GDP, by individual countries from Central and South-East Europe



Source; NBRM, web sites of the individual central banks and the IMF.

The highest annual increase in the debt to the domestic banks was registered by the enterprises engaged in "industry", covering 41% of the total indebtedness of the corporate sector at the end of 2008. In 2008, the indebtedness of the enterprises from the "industry" sector registered the highest absolute increase of Denar 9,497 million (or 30.1%). The highest absolute growth of Denar 7,858 million in the debt structure of the enterprises from the "industry" sector accounts for the indebtedness of the clients from the manufacturing industry.

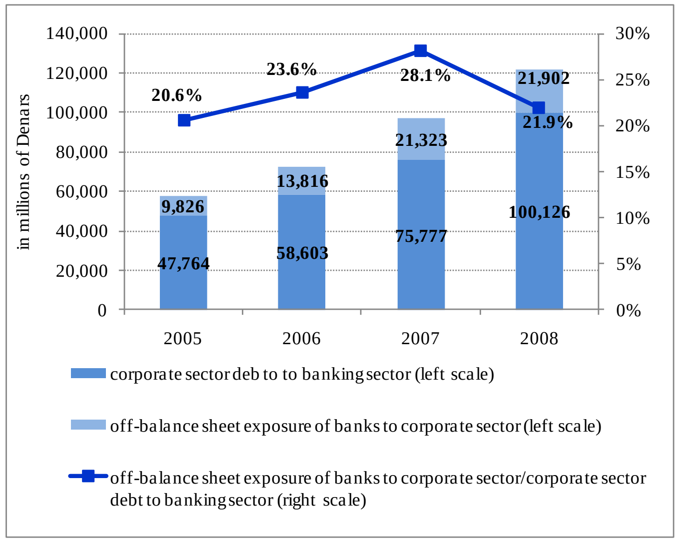
Figure 42
Debt structure of the corporate sector by activity



Source: NBRM

In 2008, the trend of increase in the off-balance sheet exposure of the banking sector to the corporate sector continued, although the increase was significantly slower[43]. The banks' off-balance sheet claims on the domestic enterprises registered an annual rise of Denar 579 million, or by 2.7% (as a comparison, in 2007, the off-balance sheet claims of the banks from the corporate sector went up by Denar 7,507 million, or by 54.3%). The big deceleration of the growth of the off-balance sheet claims arises mostly from the decrease in the amount of the uncovered guarantees and letters of credits. Almost 90% of the off-balance sheet exposure refer to the clients from "industry" (primarily manufacturing industry), "retail and wholesale trade" and "construction" (as a result of the used guarantees and letters of credit).

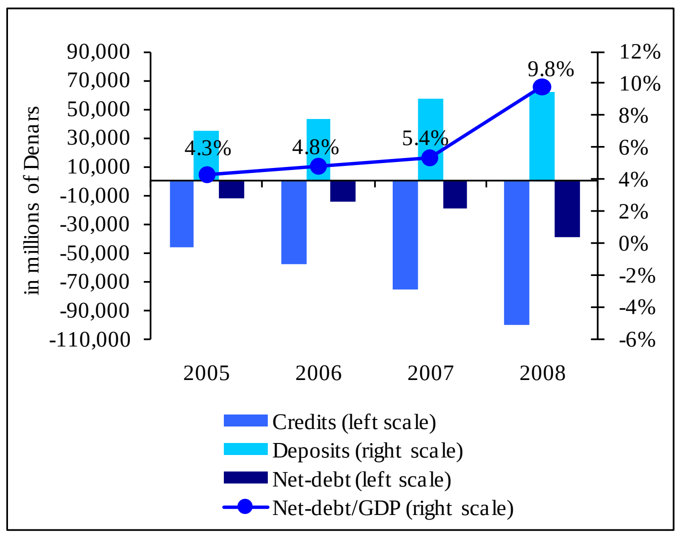
Figure 43
Dynamics and structure of the credit exposure of the banking system to the corporate sector



Source: NBRM

The net indebtedness of the corporate sector towards the domestic banking system registered significant annual increase, which results from the larger annual increase in the enterprises' credits by almost four times, compared to the growth in their deposits. At the end of 2008, the net indebtedness of the corporate sector, calculated as a difference between the total liabilities (credits) and the total claims (deposits) of the enterprises from banks, totaled Denar 39,097 million, which is an increase of Denar 20,136 million, or 106.2% compared to 2007. Thus on December 31, 2008, the ratio between the net indebtedness of the corporate sector and the GDP reached the level of 9.8%, which is increase of 4.5 percentage points compared to the end of 2007. The significantly higher lending to the enterprises (annual growth rate of 32.8%) compared to their deposits (annual growth rate of 8.3%) in 2008 caused decrease in the level of coverage of the credits with deposits of the corporate sector of 13.8 percentage points. Thus on December 31, 2008, the corporate sector's deposit-credit ratio equaled 61.2%. Despite the decrease in the level of coverage of the credits with enterprises' deposits in the Republic of Macedonia, this indicator is still high compared to some other South-East European countries[44].

Figure 44
Net debt of the corporate sector and its share in the GDP



Source: NBRM

[43] 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.
[44] Thus at the end of 2008, the indicator for coverage of the enterprises' credits with deposits by countries, equaled: 30.6% in Bosnia and Herzegovina, 36.8% in Slovenia, 39.7% in Montenegro, 44.5% in Albania, 52.8% in Serbia (the datum on Serbia is as of June 30, 2008) and 60.2 % in Croatia. Source: Web sites of the individual central banks.

In 2008, slight worsening of the corporate sector ability for regular servicing of the liabilities to domestic banks is evidenced. Namely, the nonperforming loans of the enterprises, recorded in the banks' balance sheets, registered annual growth of 6.7%, or Denar 474 million (in 2007, the nonperforming loans of the enterprises registered absolute decline of Denar 1,274 million), while the credit exposure with higher degree of risk to the corporate sector surged by Denar 1,628 million, or 16.9% (in 2007 the credit exposure with higher risk level to this sector fell by Denar 924 million). Also, in 2008, claims on the corporate sector in the total amount of Denar 1,641 million, were written off by the banks, which is 2.2% of the total debt of the enterprises at the end of 2007. The expected delay in the economic growth of the countries that are the main trading partners of the Republic of Macedonia and consequently the decrease in the export demand, the decrease in the prices and demand of metals, as well as the expectations for the deceleration of the total economic growth in the country, can reflect negatively on the future financial capacity of the enterprises and to disrupt the regular servicing of the liabilities to the domestic banks, which will cause, from one hand, deterioration in the quality of the credit portfolio of the banking system. Additionally, the tightening of the bank's credit policy may result in delay in the credit support to the corporate sector and thus cause even larger deceleration in the total volume of activities of the domestic enterprises.

III. Financial sector

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

The turbulent movements on the international financial markets in 2008 influenced on certain segments, as well as on the size and the structure of the entire financial system of the Republic of Macedonia. In general, slower enlargement of the financial system, as well as lower inflow of foreign capital in the ownership structure of individual financial institutions, are registered.

The low degree of inter sector integration and the limited cross ownership among individual financial institutions, enabled to minimize the possibility for distraction of the individual segments stability as a result of the spill over of the risks they face with.

Together with the increase in the number and the significance of the non-deposit financial institutions and the anticipated rise in the competitiveness between these institutions and the banks, significant challenge the institutions face with is the need for preparation of strategy for their further growth and development, as well as the establishment of appropriate system for risk management, which will have key role in the future development and readiness for coping with crises situations in future.

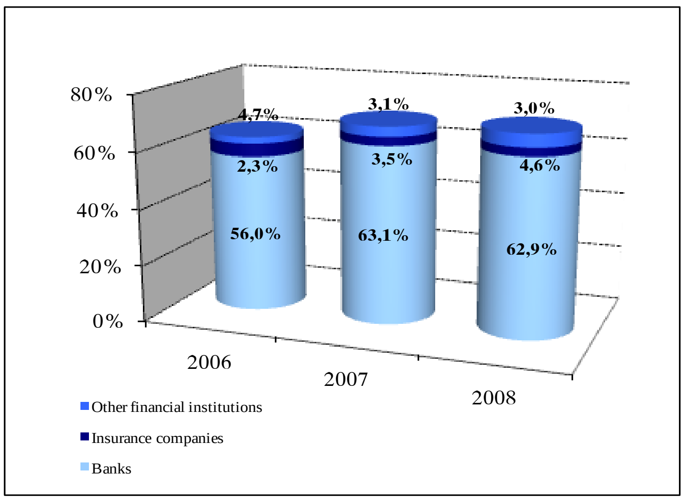
Table 14
Structure of the total assets of the financial system of the Republic of Macedonia

Type of financial institutions	Total assets (in millions of denars)		Structure (in %)		Number of institutions	
	2007	2008	2007	2008	2007	2008
Depository financial institutions	**226.546**	**254.153**	**91,67%**	**90,48%**	**30**	**29**
Banks	223.659	250.704	90,50%	89,25%	18	18
Saving houses	2.887	3.449	1,17%	1,23%	12	11
Nondepository financial institutions	**20.593**	**26.754**	**8,33%**	**9,52%**	**45**	**57**
Insurance companies	11.075	11.920	4,48%	4,24%	12	12
Leasing companies	4.980	8.623	2,02%	3,07%	4	8
Pension funds	3.124	5.037	1,26%	1,79%	2	2
Pension fund management companies	202	258	0,08%	0,09%	2	2
Brokerage houses	1.088	804	0,44%	0,29%	16	20
Investment funds	66	84	0,03%	0,03%	3	8
Investment fund management companies	15	28	0,01%	0,01%	2	5
Private equity management companies	43	0	0,02%	0,00%	4	4
Total	**247.139**	**280.907**	**100,00%**	**100,00%**	**75**	**86**

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

In 2008, significant deceleration of the growth in the financial system's total assets in the Republic of Macedonia was registered. Its structure, from the aspect of the share of the individual types of financial institutions in the total financial potential, registered no changes of higher significance. On December 31, 2008, the total assets of the financial system of the Republic of Macedonia equaled Denar 280,907 million. They registered annual growth of 13.7%, which is only half of the annual growth rate in 2007. In conformity with the institutional structure, the financial system of the Republic of Macedonia continues to be classified as a bank-based (bank-centric) system, with the banks being dominant in the maintenance of the stability of the entire banking system. Namely, despite the decrease in the share, the banks are still the most significant segment, representing 89.3% of the total assets of the financial system. The second most significant institutions in the banking system, as in the previous two years, are the insurance companies, the share of which in the total assets equals 4.2%. Despite the increase in their assets, the share of the insurance companies in the total assets of the financial system continues to decrease.

Figure 45
Share of the assets of the financial system in the gross domestic product



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

In 2008, the slower growth pace of the total assets of the financial system, contributed to slight increase in its significance for the economic activity of the country. At the end of the year, the share of the assets of the financial system in the gross domestic product[45] equaled 70.5%, which is an increment of only 0.8 percentage points compared to 2007. The dominant role of the banks is proved also through the share of their assets in the gross domestic product, which despite the insignificant decrease

[45] The amount of GDP for 2008 is given according to estimated data.

compared to 2007 is still far higher relative to the other segments of the financial system. The savings houses and the non-deposit financial institutions still characterizes with significantly lower role in the process of financial intermediation. For comparison, the total assets of the financial system in the East European countries[46] participate, on average, with roughly 95% in the gross domestic product, which points to its larger significance for the economic activity of the analyzed countries.

The deceleration of the assets growth was evident with all segments of the financial system, which generally corresponds to the general impediment of the economic activity in the country. The pension funds and the leasing companies, as in the preceding year, remained to be the fastest growing segments of the financial system.

Figure 46
Annual growth rates of individual institutional segments of the financial system

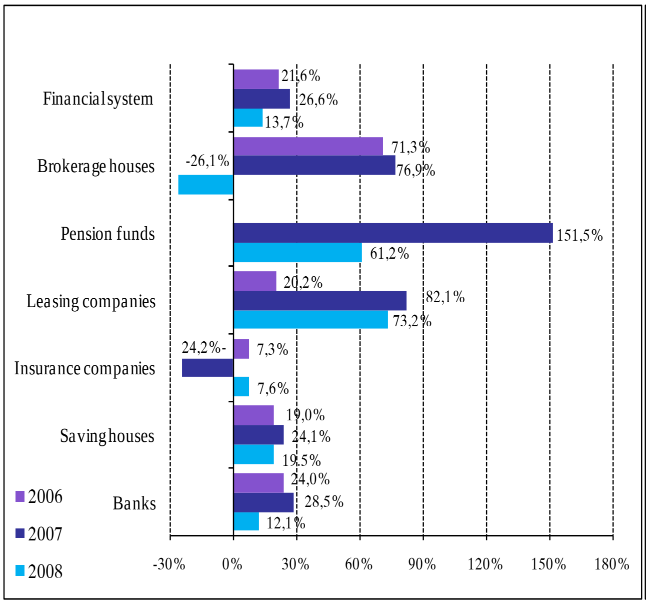
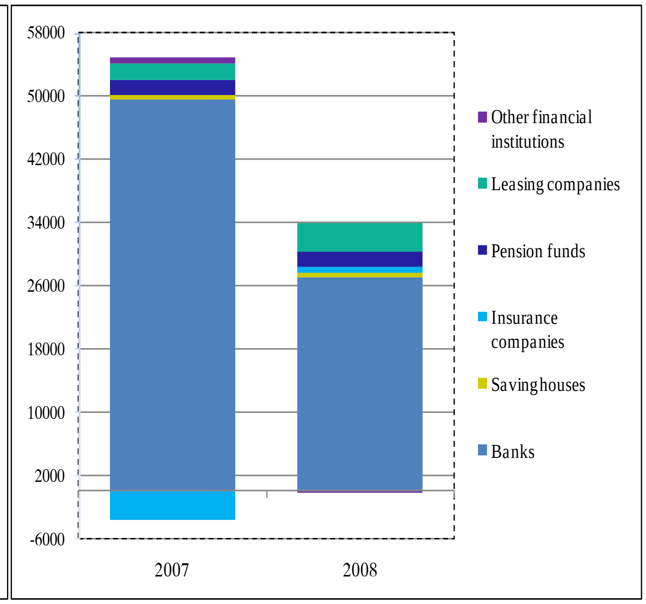


Figure 47
Share of individual institutions in the annual increase in the assets of the financial system



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

The high growth rates with the pension funds are mainly due to the fact that these institutions are still in the initial stage regarding the creation of their funds, with the inflows based on contributions being mainly regularly realized, while the outflows of funds are still minimal due to the relatively new membership structure. In comparison with 2007, the impediment of the total assets growth of these institutions mainly reflected the unfavorable price movements on the capital markets. Such movements on the stock exchange were also the main reason for the significant reduction of the total assets of the brokerage houses. On the other hand, the increase in the number of leasing companies and the broadening of their supply of services, in conditions of certain regulatory restrictions for the banks, were the main factors contributing to the higher assets growth of this segment, as well as for the increase in their share (10.8%) in the annual increment in the assets of the financial system. The higher share of the individual segments of the annual growth of the financial system assets, as a result of the increase in their total assets, was registered also with the savings houses (1.7%), pension funds (5.7%) and insurance companies (2.5%). The reduced growth rate of the total banks' assets resulted in their lower share in the annual growth of the assets of the financial systems, which equaled 79.9% (96.6% in 2007).

[46] Source: Web sites of the Central banks, of the analysed countries.

In 2008, the level of concentration of assets of the individual segments of the Macedonian financial system showed different changes, which were continuation of the movements from the last two years. The decrease in the concentration of the total assets was evidenced with the insurance companies and the brokerage houses, while the level of concentration with the banks remained almost unchanged.

Figure 48
Dynamics of the Herfindahl index for the individual segment of the financial system

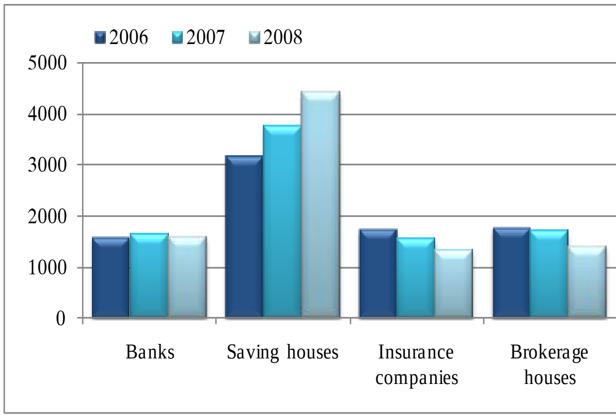
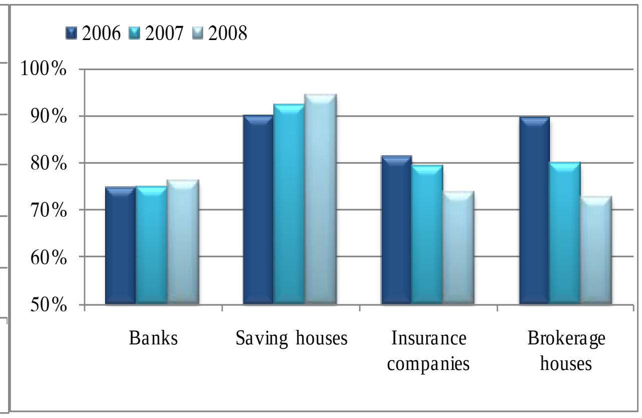


Figure 49
Dynamics of the CR5 indicator for the individual segment of the financial system



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

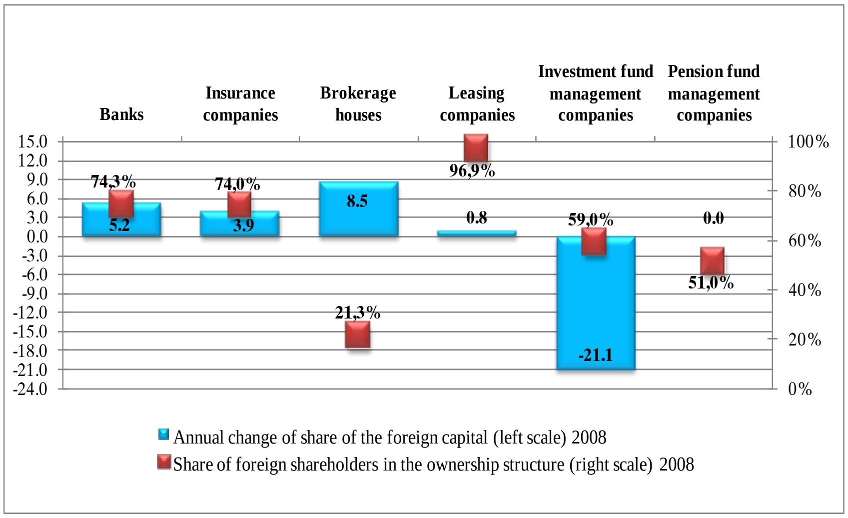
Oppositely, the savings houses were the only segment which registered further increase in the level of concentration according to the Herfindahl index[47] and the CR5 indicator[48]. As a result of such movements, the savings houses registered the highest degree of concentration also at the end of 2008. Regarding the leasing companies, despite the increase in their number by twice, the degree of concentration is still very high (the Herfindahl index equaled 3,923). The decline in the degree of concentration with most of the financial segments results from the increase in the number of institutions and the elevated ambitions for market share, which are expected to influence towards further widening of the palette of products and volume of activities in the financial system, and thus the level of financial intermediation in the country.

[47] The Herfindahl index is calculated according to the formula $HI = \sum_{j=1}^{n} (S)_j^2$, where S is the share of each bank in the total amount of the analyzed category (for example: total assets, total deposits, etc.), and n is the total number of banks in the system. When the index varies in the interval of 1,000 to 1,800 units, the concentration level in the banking system is deemed acceptable.

[48] The CP5 indicator represents the share of the assets (i.e. the analyzed category) of the five financial institutions with the largest assets (i.e. the analyzed category) in the total assets (i.e. the analyzed category) of the suitable institutional segment the analyzed institutions belong to.

The restructuring of the financial system ownership towards increase in the share of foreign shareholders continued also in 2008, although with slower pace compared to the preceding year. However, the ownership structure of the investment funds management companies registered also a decrease in the share of the foreign capital, as a result of the reduced interest of the foreign investors. The lowest share of foreign capital is still characteristic for the brokerage houses, despite the highest growth rate in 2008. On the other hand, the leasing companies, as in the preceding year, preserved the highest share of own capital in their ownership structure and they are almost completely in full foreign ownership (96.8%).

Figure 50
Annual change in the share of the foreign capital in the ownership structure of individual financial institutions



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

Table 15
Ownership structure of the individual financial institutions

Owners	Banks	Insurance companies	Brokerage houses	Leasing companies	Pension fund management companies	Investment fund management companies
Domestic shareholders	*25,7%*	*25,9%*	*78,7%*	*3,1%*	*49,0%*	*41,0%*
Nonfinancial legal entities	9,2%	3,8%	22,8%	2,9%	0,0%	22,9%
Banks	2,2%	3,0%	13,4%	0,0%	49,0%	0,0%
Insurance companies	0,1%	0,5%	1,8%	0,0%	0,0%	0,0%
Other financial institutions	0,6%	0,1%	0,0%	0,0%	0,0%	0,0%
Natural persons	7,2%	11,0%	40,7%	0,2%	0,0%	18,1%
Public sector	6,5%	7,5%	0,0%	0,0%	0,0%	0,0%
Foreign shareholders	*74,3%*	*74,1%*	*21,3%*	*96,9%*	*51,0%*	*59,0%*
Natural persons	3,0%	0,4%	8,5%	0,2%	0,0%	4,2%
Legal entities	71,3%	73,7%	12,8%	96,8%	51,0%	54,9%
Total	***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)

In 2008, no changes regarding the low level of inter sector integration and the limited cross ownership among the individual segments of the financial system in the Republic of Macedonia were registered. The relatively simple structure of both financial system and supply of financial instruments on the market, contributed also for smaller degree of inter sector risks spill over and amortization of the negative influences of the global financial crisis on the individual segments of the financial system of the Republic of Macedonia.

The low level of inter sector connection evident in the financial system is verified also through the volume of the capital investments of the banks, as dominant segment of the financial system, in other financial institutions. At the end of 2008, the largest portion of the capital investments of the banks are made in financial entities in the Republic of Macedonia, but their share in the total assets of the banks is minimal and equals 0.5%. Simultaneously, the largest part of the banks' capital investments is below 5% of the capital of the entities in which the assets are invested. Namely, with exception to the pension funds management companies, where the banks are major shareholders', other financial institutions still register low level of cross ownership.

Table 16
Capital investments of the banks as of December 31,2008

Entities in which the investment was made	Capital investments of banks		No. of capital investments according to 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	**972.191**	**78,6%**	**85**	**34**	**4**	**4**
Banks	290.624	23,5%	8	-	-	1
Insurance companies	55.512	4,5%	4	-	-	-
Brokerage houses	35.203	2,8%	-	-	-	2
Pension fund management companies	109.821	8,9%	-	-	2	-
Other financial institutions (stock exchange, securities depository, clearing houses)	215.828	17,4%	16	16	-	-
Nonfinancial entities	265.203	21,4%	57	18	2	1
Foreign entities	**265.366**	**21,4%**	**10**	**4**	**-**	**-**
Banks	118.215	9,6%	1	1	-	-
Other financial institutions (stock exchange, securities depository, clearing houses)	142.977	11,6%	9	2	-	-
Other financial entities	0	0,0%	-	-	-	-
Nonfinancial entities	4.174	0,3%	-	1	-	-
Total capital investments	**1.237.557**	**100,0%**	**95**	**38**	**4**	**4**

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

The business connection between the banks and the non-deposit financial institutions is mainly based on the deposits of the non-deposit financial institutions placed with the banks. On December 31, 2008 the total deposits invested by the non-deposit financial institutions in the banking system of the Republic of Macedonia equaled Denar 6,547 million and annually, they went up by Denar 2,561 million, or 39.1%.

Figure 51
Structure of the deposits of the non-deposit financial institutions in the banking system of the Republic of Macedonia

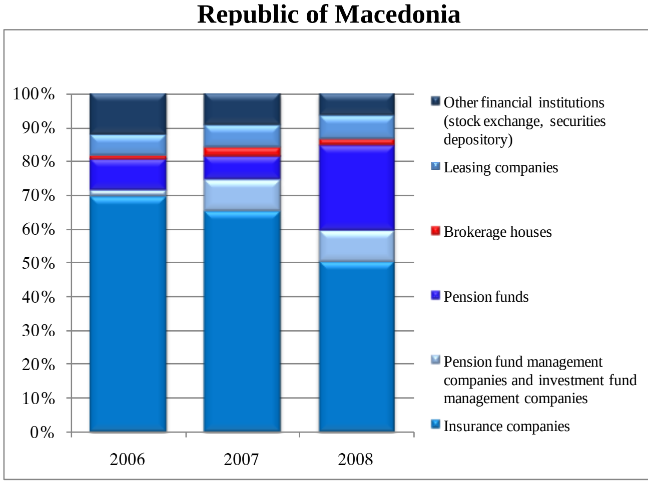
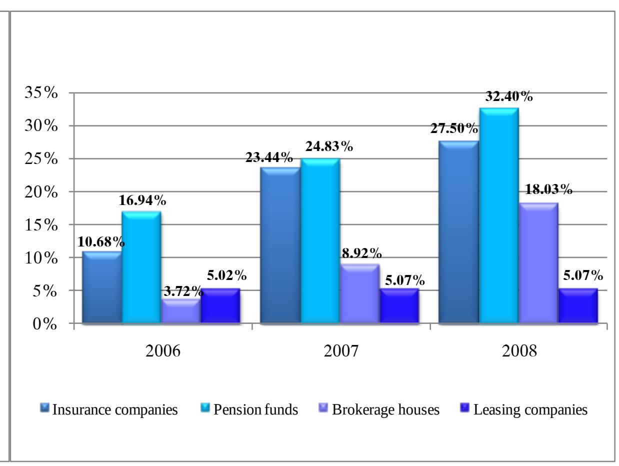


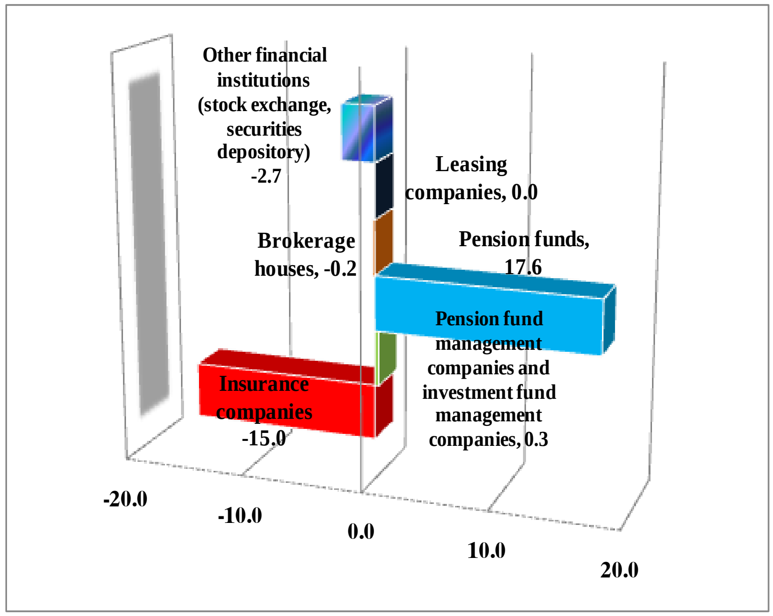
Figure 52
Share of the deposits in the total assets of the individual non-deposit financial institutions



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

Despite such increase, the deposits of the non-deposit financial institutions equal only 3.4% of the total deposit base of the banking system. However, the significance of these deposits is large for the non-deposit financial institutions with regard to the moderate supply of other financial instruments on the markets in the Republic of Macedonia. In 2008, the investments of the non-deposit financial institutions in deposits, participated with 24.5% in their total assets, which is an increase of 5.9 percentage points. As in the previous years, the highest share of the deposits in the total assets is characteristic for the insurance companies and capital investment pension funds. The insurance companies' deposits still have the largest share of 50.1% in the total deposits of the non-deposit financial institutions despite its significant decrease compared to 2007. Annually, the share of the deposits of the capital financed pension funds reached the highest growth and at the end of 2008 it equaled 24.9%. In conditions of turbulent downward price movements on the securities market and upward trend of the deposit interest rates of the banks, in 2008 the pension funds showed tendency to deposit their assets in domestic banks.

Figure 53
Annual change in the share of of the individual types of non-deposit financial institutions in their deposits in the banking system



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

In 2008, the trend of gradual lengthening of the maturity of the non-deposit financial institutions' deposits in the domestic banking system continued. However, the short-term deposits remain to be their dominant component. Such maturity transformation was based on the increase in the long-term deposits of the pension funds[49] and decrease in the share of the short-term deposits of the insurance companies[50].

[49] The long-term deposits of the pension funds equaled 63.6% of the total long-term deposits of the non-deposit financial institutions. They surged by Denar 1,289 million, annually, thus determining 75.5% of the total annual growth in the long-term deposits of the non-deposit financial institutions deposited with the banks.

[50] The short-term deposits of the insurance companies participated with 71.8% in the total short-term deposits of the non-deposit financial institutions, and annually, their share in the total short-term deposits of the non-deposit financial institutions went down by 2.8%. Despite that, the short-term deposits remained to be the dominant component in the total deposits of the insurance companies, where they participated with 79.0%.

Figure 54
Maturity structure of the deposits of the non-deposit financial institutions of the banking system of the Republic of Macedonia

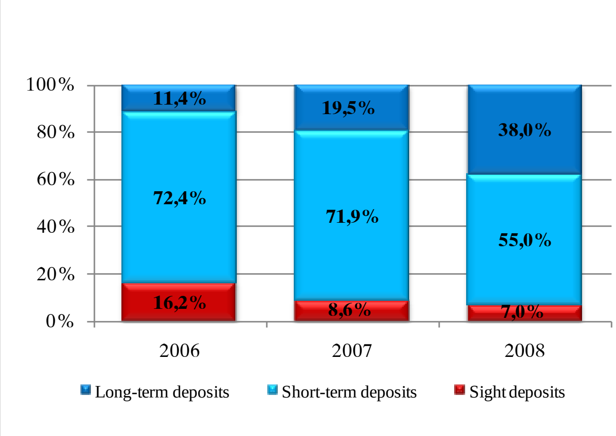
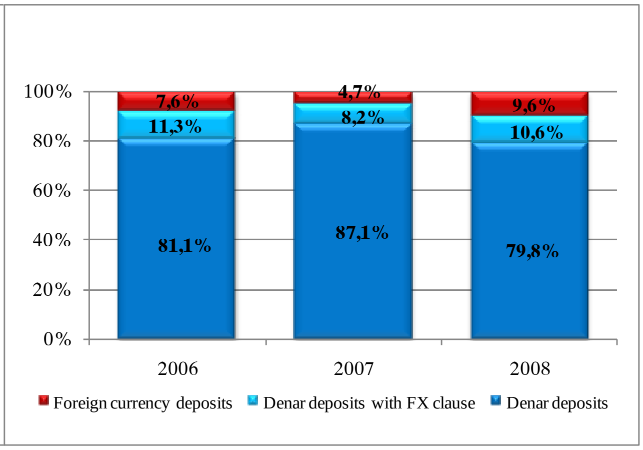


Figure 55
Currency structure of the deposits of the non-deposit financial institutions in the banking system of the Republic of Macedonia



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

The change in the currency tendencies in favor of increase in the foreign currency deposits was characteristic also for the non-deposit financial institutions. Such currency transformation was the most apparent with the deposits of the insurance companies[51].

2. Domestic financial markets

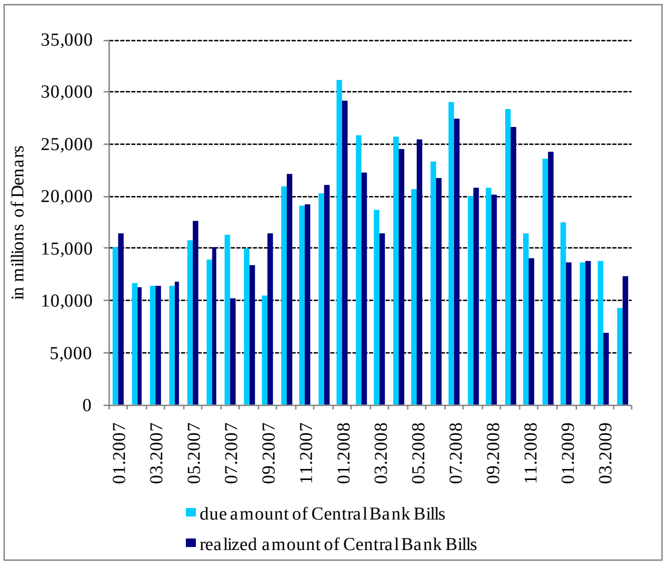
2.1 Money Market and Short-term Securities Market

The moderate supply of instruments, the small volume of secondary trading and the low degree of integration in the international financial flows, remained to be the main characteristics of the domestic Money and Short-term Securities Market in 2008. Such characteristics determine their limiting effect on determining the conditions for financing the non-financial sectors, as well as its limited sensitivity to shocks on the international money markets. The indirect negative effects of the global financial crisis were felt more intensively on the foreign exchange market in the Republic of Macedonia, where the lower foreign exchange inflows on the basis of export of goods and services, portfolio investments, foreign direct investments and private transfers from abroad, caused intensified pressure for depreciation of the domestic currency value, which, in turn, caused adequate NBRM interventions on the foreign exchange market. The significance of the stable foreign exchange rate of the Denar for the macroeconomic and financial stability, as well as the relatively high turnover on the foreign exchange market (the turnover on the foreign exchange market is higher than the GDP registered in 2008) point to the conclusion that this market is one of the most significant segments of the financial markets in the Republic of Macedonia.

[51] The insurance companies' deposits with currency component registered an annual increase of 105.7% and equaled 91.2% of the total foreign currency deposits of the non-deposit financial institutions. Their share in the total annual increment in the foreign currency deposits of the non-deposit financial institutions equaled 88.6%.

In 2008, the National Bank of the Republic of Macedonia was the larger issuer of short-term securities on the Money and Short-term Securities Market, thro ugh conducting CB bills auctions, as the basic instruments of the monetary policy. The total amount of CB bills issued in 2008 equaled Denar 279,012 million, which is by Denar 92,969 million more compared to 2007. However, the realized amount of these securities in 2008 was slightly below the total due amount for the same period, with which through this monetary instruments, total of Denar 3,559 million, on cumulative basis, were issued. In 2008 several changes in the NBRM monetary instruments' layout were carried out, which were directed towards stabilization of the movements on the foreign exchange market and calming down of the inflation and inflation expectations of the market entities. Thus, inter alia, the NBRM changed the type of tender of the CB bills auctions from "interest rate tender" to "volume tender" (unrestricted) and fixed interest rate. Also, the interest rate on these instruments increased in several occasions. On the secondary market (the Over the Counter Market), the total traded amount of CB bills equaled Denar 1,665 million, which is less by Denar 86 million compared to 2007.

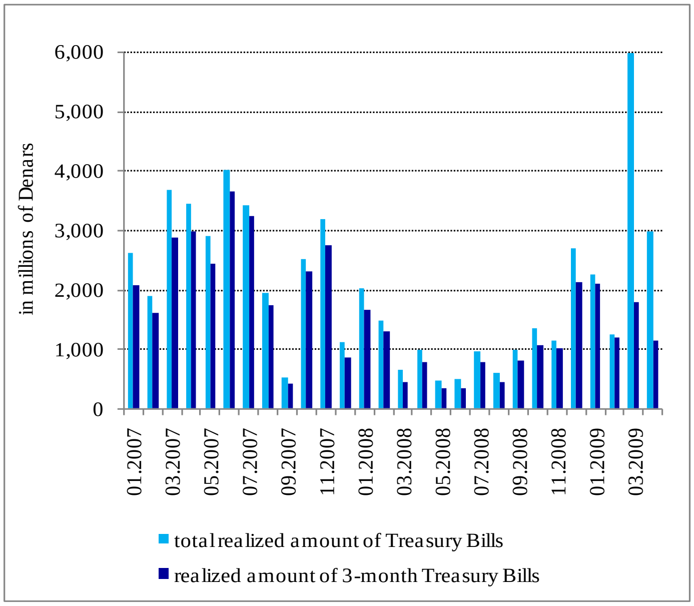
Figure 56
Due and realized amount of CB bills, by months



Source: NBRM

The total realized amount of Treasury bills registered a significant decrease in 2008, which is primarily due to the high annual drop in the total supply[52], as well as to the lower demand for Treasury bills. In 2008, the Ministry of Finance issued Treasury bills in the total amount of Denar 13,924 million, which is by Denar 17,384 (18,676) million less compared to 2007. In the structure of the Treasury bills issued in 2008, the dominant share of 80.2% accounts for the Treasury bills with three-month maturity, followed by the six-month and 12-month Treasury bills, the share of which equals 17.2% and 2.6%, respectively. In 2008, the Ministry of Finance used "interest rate tender", while in certain period of the year (March 18 - July 08, 2008) it practiced a Treasury bills auctioning based on "volume tender" principle (unrestricted amount and fixed interest rate). Larger issue

Figure 57
Realized amount of Treasury bills, by months



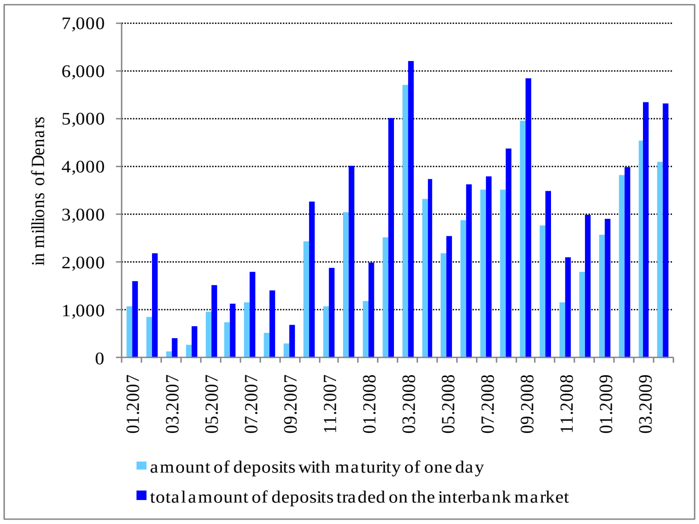
Source: Ministry of Finance and NBRM calculations

[52] In 2008, the reduced supply of Treasury bills is mostly due to the Decision on gradual decrease in the supply of Treasury bills for monetary purposes, the utilization of which as a monetary policy instrument ceased, starting from June 2008.

of Treasury bills was registered in the last quarter of the year, due to the need of additional financing of the increased high budget deficit in this period. Such a trend continued also in 2009, when for the first time the Ministry of Finance began issuing one-month Treasury bills[53]. In 2008, the total traded amount of Treasury bills on the Over the Counter Market equaled Denar 186.5 million, which is an annual decrease of Denar 320.3 million. More than a half of the total turnover of Treasury bills on this market accounts for the Treasury bills with residual maturity from one to three months.

In 2008, the turnover on the interbank deposits market increased by more than double. The total traded amount on this market equaled Denar 45,759 million in 2008, which is an increase of Denar 25,210 million, or 122.7% compared to 2007. About 78% of the traded amount of deposits on the deposit market is with one-day maturity. The trend of increase in the total turnover on the interbank deposit market continued also at the beginning of 2009.

Figure 58
Amount of deposits traded on the interbank market, by months



Source: NBRM

In 2008, the gap between the interest rates on the domestic Money Market and the reference interest rate on the international financial markets deepened. In conditions of uncertain economic environment, intensified inflationary pressures, the growing deficit on the current account, strong credit growth, as well as the expectations for more relaxed fiscal policy (which were registered, to great extent, mainly in the last quarter of the year), in the first half of 2008 the NBRM performed gradual increase in the interest rate on the CB bills. The increase in the reference interest rate had transfer effect also on the interest rates on the

Figure 59
Movements of the interest rates on the money market in the Republic of Macedonia

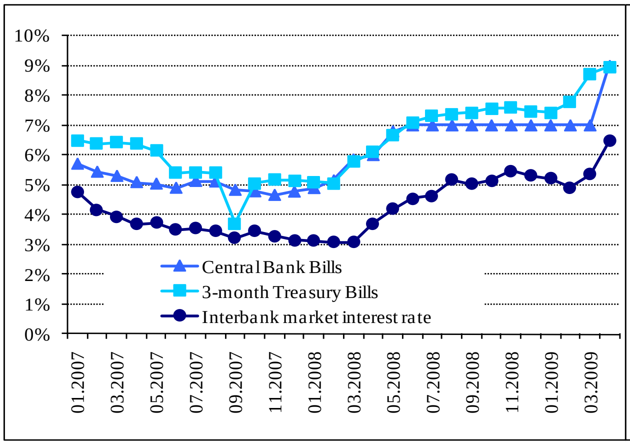
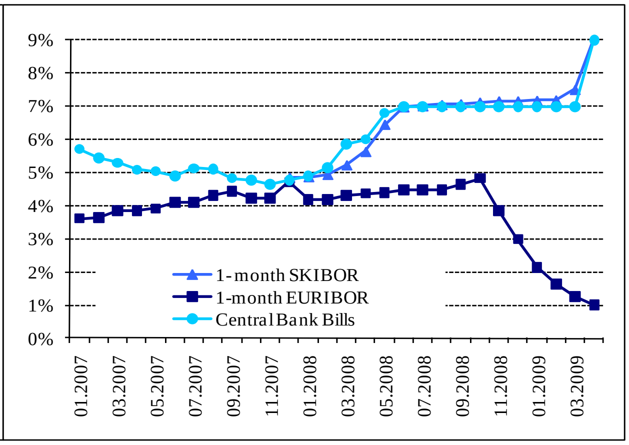


Figure 60
Movements of the interest rates on CB Bills, 1-month SKIBOR and 1-month EURIBOR



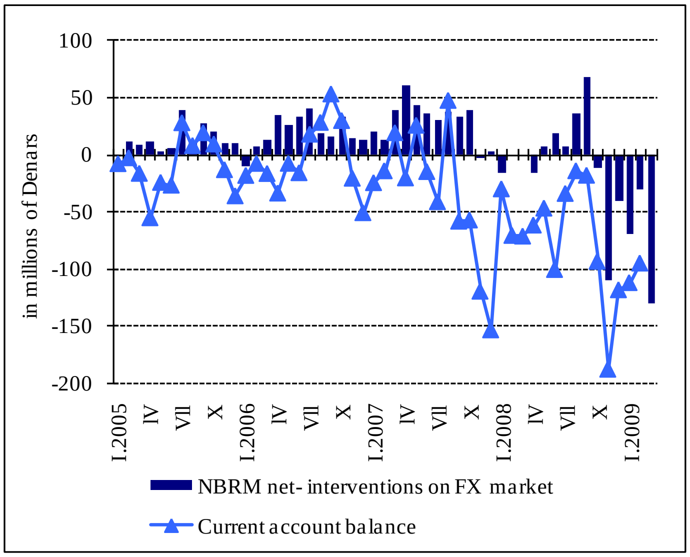
Source: NBRM, Ministry of Finance and EURIBOR web site.

[53] The first auction of one-month Treasury bills was held on March 10, 2009.

Treasury bills market and interbank deposit market, which reached the highest levels in the last several years. Contrary to the upward movements of the interest raters on the domestic Money Market, in the first three quarters of 2008, the reference rates on the international financial markets (EURIBOR) registered significantly lower increase, and in the last quarter of the year they registered severe drop as a result of the deepening of the global economic crisis, the lack of liquidity on the financial markets and the significant downward correction of the reference interest rate of the ECB. Thus the gap between the weighted CB bills rate and the rate of the average one-month EURIBOR registered an annual decline of 3.9 percentage points (from 0.1 percentage point on December 31, 2007 to 4 percentage points on December 31, 2008), while the gap between the rate of the average one-month SKIBOR and the rate of the average one-month EURIBOR incremented by 4.1 percentage points (from 0.1 percentage point on December 31, 2007 to 4.2 percentage points on December 31, 2008). The divergent movements of the interest rates on the domestic Money Market and the reference rates on the international financial markets continued also in the beginning of 2009.

The total turnover on the foreign exchange market, although with slower pace, continued to increase also in 2008. The NBRM interventions on the foreign exchange market in 2008, especially in the last two quarters of the year, were in direction of net sale of foreign exchange, opposite to 2007, when the NBRM intervened with net purchase of foreign exchange. In conditions of enhanced pressure for depreciation of the domestic currency value in 2008, such interventions on the foreign exchange market were necessary, for the purpose of efficient and effective implementation of the strategy for targeting the nominal foreign exchange rate relative to the Euro. The total turnover on the foreign exchange market in 2008 amounted to Euro 6,811 million, which is an increase of Euro 856 million, or 14.4% compared to 2007. The inflation intensification in the first half of 2008, the increase in the current account deficit in conditions of slower pace of the foreign direct investments and the intensified outflow of portfolio investments, as well as the bigger demand for foreign exchange on the foreign exchange market, caused pressures for depreciation of the domestic currency and NBRM interventions, which resulted in net sale of foreign exchange in the total amount of Euro 55.9 million in 2008. Having in mind the ongoing unfavorable movements of individual balance of payments categories in the first months of 2009, the NBRM continued to intervene on the foreign exchange market with net sale of foreign exchange.

Figure 61
NBRM net- interventions on the foreign exchange market and balance on the balance of payments' current account of the Republic of Macedonia, by months



Source: NBRM

2.2 Capital market

2.2.1 Primary capital market

The total value of new issues of long-term securities in 2008 registered an increase compared to the preceding year, mostly as a result of the larger interest of the private sector for realization of new issues of shares. In 2008, 27 new issues of long-term securities in the total amount of Denar 5,665 million were realized, which is an increase of Denar 1,921 million (or 51.3%) compared to the value of the new issues of securities in 2007. The most active issuer of long-term securities in 2008, contrary to the practice in the preceding years[54], was the private sector (primarily the financial institutions), which realized 20 new issues of securities in the total amount of Denar 3,381 million. About 80% (or Denar 2,728 million) of the total amount of realized new issues of non-government securities account for the new issues of shares (all issues of shares were realized on the basis of private offer[55]). Also, in November 2008, for the first time, one financial institution issued long-term bonds through public offer. The issue of securities was partially realized (with successfulness of 88.86%) in the total value of Denar 653 million[56]. Thus the third issue of corporate bonds in the Republic of Macedonia was realized. The poor movements in this corporate segment are consequence of the insufficient interest of the companies for issuing corporate bonds, as well as of the lack of the additional level of banking expertise (within investment banking domain) regarding the structuring and the promotion of this type of securities. The non-financial companies in the Republic of Macedonia, as in the preceding years, continue to show poor interest to finance their activities through the capital market, having in mind that in 2008 only two issues of securities in the total amount of Denar 539 million were realized.

Table 17
Value and structure of the realized long-term securities issues

in millions of Denars

Realized issues of long-term securities	2007	2008
Amount of realized issues of long-term government securities	**2,016**	**2,284**
1. 2- year continous government bonds	699	390
2. 3- year continous government bonds	216	59
3. Denationalization bonds	1,101	1,835
Amount of realized issues of long-term non- government securities	**1,728**	**3,381**
1. Corporate bonds	300	653
2. Shares	1,428	2,728
- Issued by banks	*1,108*	*1,275*
- Issued by other financial institutions	*155*	*914*
- Issued by non-financial companies	*164*	*539*
Total amount of realized issues of long-term securities	**3,744**	**5,665**

Source: Securities and Exchange Comittee and NBRM calculations.

[54] In the previous years, the most active issuer of the long-term securities was the Ministry of Finance, on the behalf of the Republic of Macedonia.
[55] At the end of the third quarter of 2008, the Securities Exchange Committee issued an approval to one financial institution for issuing shares through public offer. The securities issue has not been realized yet.
[56] The issuer of the bonds was NLB Tutunska Banka AD Skopje, the coupon interest is six-month EURIBOR + 1.2%, while the maturity is three years.

In 2008, identical to the previous years, the Government was the active issuer of the long-term securities. Thus the Ministry of Finance, on the behalf of the Republic of Macedonia conducted six issues of continuous government bonds, three of which, in the total amount of Denar 390 million, were with contractual maturity of two years, while the other three, in the amount of Denar 59 million, had contractual maturity of three years. Besides the continuous bonds, in 2008 the Ministry of Finance realized the seventh issue of denationalization bonds in the amount of Euro 30 million. They, such as the previously issued denationalization bonds, are quoted on the official market of the Macedonian Stock Exchange, representing one of the quoted securities with higher liquidity.

Despite the certain movement on the primary capital market in 2008, it still characterizes with relatively small number and value of new issues of securities. The minor significance of the primary capital market in the Republic of Macedonia can be illustrated through the comparison with the Czech Republic, Poland and Slovenia, where the total value of the issued shares through the public offer during 2008 equaled US Dollar 2,516.1, US Dollar 1,151.6 and US Dollar 248.9 million, respectively[57].

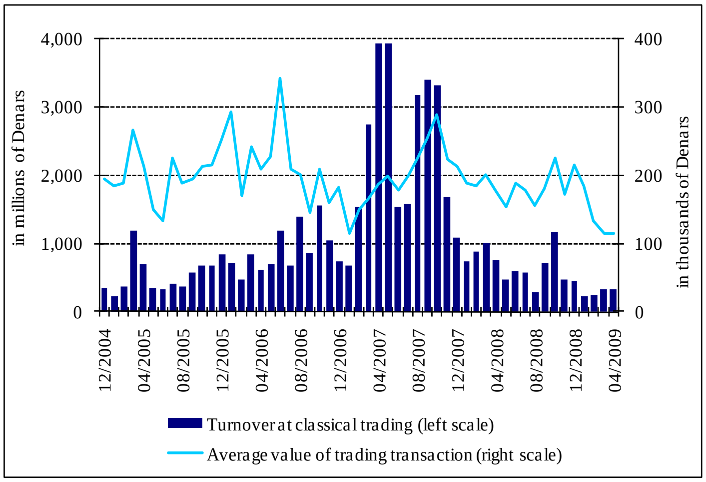
2.2.2 Secondary capital market

Opposite to the movements on the secondary capital market, evident in the several previous years, 2008 characterizes with a trend of prolonged correction of the price levels, decrease in the stock exchange turnover and higher restraint of the potential investors. These developments resulted from the simultaneous influence of several factors, and primarily the effects of the global downward correction in the prices on the international financial markets, the indirect effects of the developments on the stock exchanges in the region, but also on the larger uncertainty and deterioration in the prospective for the economic growth of the country as a whole. Additional factors supporting the downward price correction of the shares are small liquidity on the Macedonian capital market, the concentration of the portfolio investors having same geographic origin and similar investment tendencies, as well as the increased political risk in the region. Such a situation resulted in constant downward correction of the stock exchange indices, outflow of portfolio investments and deceleration of the foreign direct investments, strong decrease in the market capitalization and worsening of the liquidity on the secondary capital market. In conditions of continuous decrease in the prices of the shares, partial redirecting of the demand from shares to bonds, was registered, which, as safer and liquid financial instruments provided certain safeguard of the investors' property in this type of securities. The apparent degree of correlation in the movements of the regional stock exchange indices points to the conclusion that the recuperation of the Macedonian capital market will correspond to the recovery of the regional stock exchanges.

[57] Source: MMF, Global Financial Stability Report, April 2009.

The trend of decrease in the activities of the Macedonian Stock Exchange, which commenced in the last quarter of 2007, especially intensified in 2008. Thus in 2008, the total turnover in case of classical trading equaled Denar 8,129 million, which is a decrease of 3.5 times compared t o 2007. Consequently, the average daily turnover in 2008 was smaller by Denar 91.6 million compared to the average daily turnover in 2007 (the average daily turnover for 2008 equaled Denar 32.7 million). On the other hand, the average value of one trade transaction registered a decline from Denar 200 thousand in 2007, to Denar 185 thousand in 2008, which is another indicator for the lowered volume of the stock exchange trading in the Republic of Macedonia.

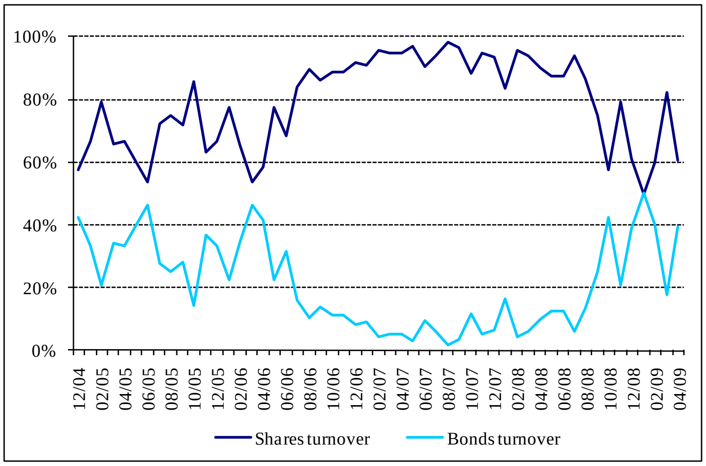
Figure 62
Stock exchange turnover in case of classical trading and average value of one trading transaction



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

The main determinant for the decrease in the stock exchange turnover in 2008 was the reduced trading with shares. In 2008 the registered turnover of shares equaled Denar 6,676 million, which is a decrease of Denar 20,418 million compared to 2007. Oppositely, the turnover of bonds amounted to Denar 1,453 million in the same period, and it was lower by Denar 108 million compared to 2007. The partial redirecting of the demand, from shares to bonds (especially characteristic for the second half of 2008 and the beginning of 2009) as a safer and more liquid financial instrument, resulted in gradual increase in the share of the turnover of bonds in the total stock exchange turnover, given simultaneous decrease in the share of the trading of shares. The share of the turnover of shares in the total stock exchange turnover fell from 93.4% in December 2007, to 60.9% in December 2008 (this share reduced to 49.8% in January 2009).

Figure 63
Structure of the stock exchange turnover in case of classical trading



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

Table 18
Structure of the total stock exchange turnover by types of investors

Type of investors	Purchase side of the stock exchange turnover			Sell side of the stock exchange turnover		
	2006*	2007	2008	2006*	2007	2008
Average share of foreign investors	34.1%	51.1%	33.8%	9.9%	21.0%	38.8%
Average share of resident legal entities	39.0%	16.1%	31.9%	50.6%	28.4%	25.5%
Average share of resident natural persons	27.0%	32.8%	34.3%	39.6%	50.5%	35.6%

Source: Web site of the Macedonian Stock Exchange and the NBRM calculations.
*The average share of the individual types of investors in the stock exchange turnover for 2006 is calculated on the basis of the available data for the last seven months of the year.

The analysis of the structure of the stock exchange turnover according to the type of investors, points to adverse behavior of individual investors in 2008, compared to that in 2007. In 2008, the foreign investors acted as net sellers, contrary to 2007, when they were net purchasers of securities. Oppositely, the resident legal entities and natural persons in 2008 registered net purchase of securities, while in 2007 they acted as net sellers of securities.

Figure 64
Net effect of the stock exchange trading of individual investors in 2007 and 2008

Source: Web site of the Macedonian Stock Exchange and the NBRM calculations.
Note: The larger oscillations with the individual lines in the figure pertaining to 2008 corresponds to the following events: 1) February 2008 - taking over of “Makosped osiguruvawe” from the Bulgarian “Euroins”; 2) March 2008- pessimistic announcements relating to the attempt of the Republic of Macedonia for admission to NATO; 3) August 2008- entry of the Dutch "Demir-Halk Bank" in “IK Banka” AD Skopje; 4) October 2008- severe drop in the stock exchange indices followed by the decision of the Board of Directors on introducing additional price restrictions in the trading of securities.

The intensified interest of the foreign investors for sale of securities, given simultaneous lower interest for purchase, determined net sale of securities in the total amount of Denar 175.7 million. Regarding the resident natural persons, in 2008 almost equal share on both purchase and sale side of the stock exchange turnover was registered, which points to different behavior of the different groups of households. However, the reduced participation of the domestic natural persons on the sale side of the stock exchange turnover, given slight increase in the share of the purchases, contributed the resident natural persons in 2008 to purchase securities on net basis in the total amount of Denar 23.4 million. In 2008, the resident legal entities showed higher interest in purchasing securities, having in mind the increase in their average share almost by double on the purchase side of the stock exchange turnover, given the simultaneous reduced share on the sale side of the stock exchange turnover. In that manner, in 2008 the domestic legal entities registered net purchase of securities in the total amount of Denar 152.3 million. The interest of the domestic entities to invest in securities, in conditions of prolonged price correction on the capital market and decrease in its liquidity, reflect negatively on the value of the financial assets of the domestic investors. This especially refers to the domestic natural persons, which showed bigger interest for purchasing shares, in conditions of their downward price correction. In most of the cases, these market participants have developed no investment strategy, they have relatively short investment horizons and insufficient degree of financial education. However, on the other hand, the bigger presence of the natural persons as investors on the capital market influences towards larger dispersion of the shareholders' structures of the companies, thus imposing a need of increase in their transparency in the publishing data and generally, improvement in the corporate governance.

In 2008, the total turnover of continuous Government bonds registered on the Over the Counter Market equaled Denar 400 million, which is a decrease of Denar 296.3 million compared to 2007[58]. The share of the turnover of Government bonds with residual maturity from one to two years equals 75%, while the remaining part refers to the Government bonds with residual maturity from two to three years. The small volume of the secondary trading with continuous Government securities, as well as their moderate maturity spectrum (absence of continuous bonds with longer maturities) prevents construction of the yield curve for the Government securities. The construction of this curve, on one hand, would enable creation of relevant non-risk interest rate as a basis on which the economic agents would valuate the risk they undertake during different types of investments.

Despite the enlargement in the number of brokerage houses in 2008, the severe drop on the stock exchange resulted in an increase in the concentration, not only from the aspect of the value of the registered classical trading of the individual members of the stock exchange, but from the aspect of the total stock exchange turnover, as well. Oppositely, the indicators for the concentration of the market capitalization of the listed companies decreased, pointing to the conclusion that the decrease in the market capitalization in 2008 was more apparent with the listed companies with higher market capitalization (due to the more apparent correction in the prices of their shares and/or because of their smaller interest for new issues of shares). On December 31,2008, 20 brokerage houses were operating in the Republic of Macedonia, which is an increase of 4 brokerage houses compared to the end of 2007. Despite the increase in the number of members of the Macedonian Stock Exchange, the indicators for the concentration of the stock exchange turnover registered a significant increase. Thus the CR3 indicator for the total stock exchange turnover of the members of the stock exchanges registered an increase of 13.5 percentage points. Also, the indicator for the correlation between the turnover with the ten most traded shares and the total turnover went up by 12.6 percentage points. On the other hand, the indicators for the share of the five and the ten shares with the largest market capitalization in the total market capitalization registered a decline of 2 and 2.8 percentage points, respectively, which points to the reduced concentration of the market capitalization of the listed companies.

[58] The continuous Government bonds are listed also on the Macedonian Stock Exchange, but they have not been traded on this market so far.

Table 19
Indicators for the degree of concentration on the secondary capital market in the Republic of Macedonia

Indicators for the concentration level	2006	2007	2008
Number of stock exchange members	17	22	29
CR3 for total stock exchange members turnover	47,8%	41.9%	55.4%
CR5 for total stock exchange members turnover	62,2%	58.9%	66.6%
CR5 for total stock exchange turnover in case of classical trading	62,4%	54.8%	59.0%
Turnover of the five most traded securities/total turnover	61.4%	54.3%	63.3%
Turnover of the ten most traded securities/total turnover	79.7%	74.3%	86.9%
Market capitalization of the five shares with largest market capitalization/total market capitalization	78.5%	52.2%	50.2%
Market capitalization of ten shares with largest market capitalization/total market capitalization	79.7%	72.8%	70.0%

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

The trend of correction in the price levels, which commenced in the last quarter of 2007, followed by a decrease in the total turnover on the stock exchange, caused deterioration in the performances of the brokerage houses, while in some of them, the capability for long-term profitability maintenance and thus the endurance on the market was jeopardized. In 2008, the total assets of the brokerage houses registered a decrease of Denar 283.6 million (or 26.1%), while the total registered income of this segment of the financial system is lower by Denar 126.2 million (or 33.7%) compared to the realized income in 2007. Consequently, the registered net gain in 2008 equaled Denar 59.2 million, which is a decline of Denar 181.9 million (or 75.4%)[59]. The possible continuation of the trend of lower stock exchange turnover would jeopardize the endurance of some brokerage houses on the market (in 2008, two brokerage houses were closed), which would cause lower competitiveness in this segment of the financial system and thus further increase in the concentration on the stock exchange turnover.

Figure 65
Dynamics and monthly rates of change in the market capitalization of the listed companies on the official stock exchange market

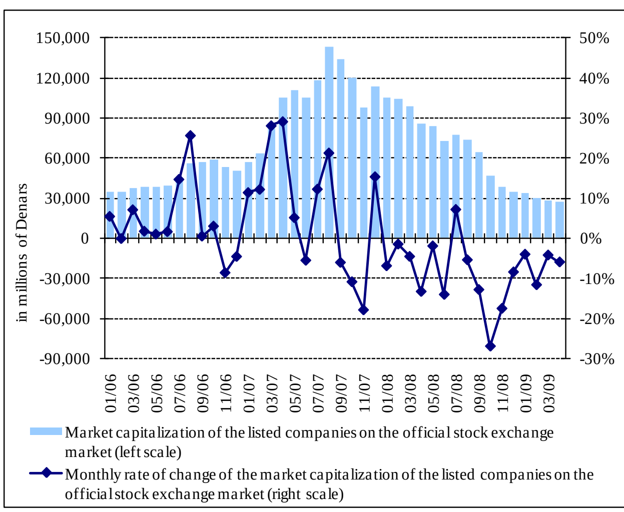
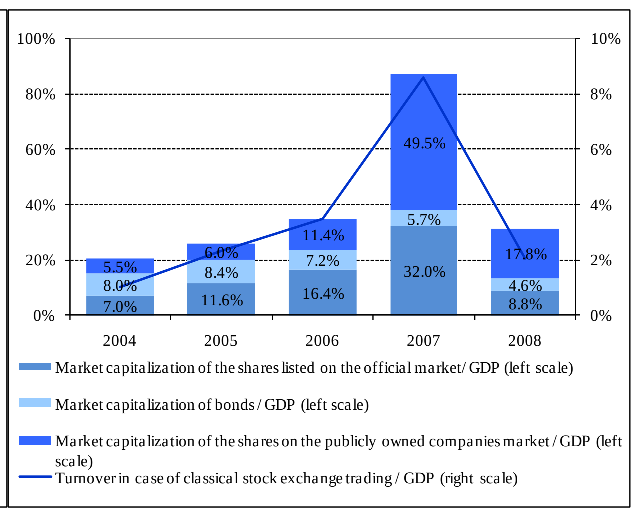


Figure 66
Market capitalization and turnover on the Macedonian stock exchange relative to the GDP



Source: Web site of the Macedonian Stock Exchange and the NBRM calculations.
Note: GDP for 2008 is estimated datum.

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

The continuous correction in the price levels in 2008 caused significant decrease in the market capitalization of the listed companies on the Macedonian Stock Exchange. In 2008, the market capitalization of the shares which are listed on the official market went down by Denar 78,244 million (or by 68.9%). Consequently, the ratio of the market capitalization of the listed companies on the official market and the GDP registered annual decline of 23.2 percentage points (from 32% for 2007 to 8.8% for 2008%). The relatively severe decrease of 59.5% (or Denar104,231 million) registered market capitalization of the companies which are traded on the market of publicly own companies, thus reducing the share of the market capitalization of this market segment in the GDP from 49.5% in 2007, to 17.8% in 2008. The general aversion of the regional investors to undertake risk, in conditions of global crisis, the lower liquidity and the fears for deceleration of the domestic economies caused negative movements on all stock exchanges in the region. The most apparent decrease in the correlation between the market capitalization of the listed companies and the GDP was evidenced on the Zagreb Stock Exchange where this indicator registered a decrease of 80.9 percentage points. On the other hand, the Bulgarian stock exchange registered the most severe drop in the turnover at classical trading with shares and GDP ratio of 12.4 percentage points.

Figure 67
Ratio of the market capitalization of the listed companies on the regional stock exchanges and GDP

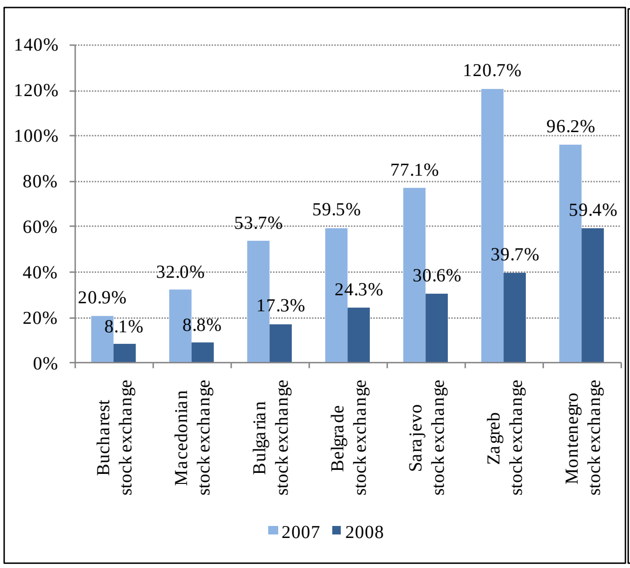
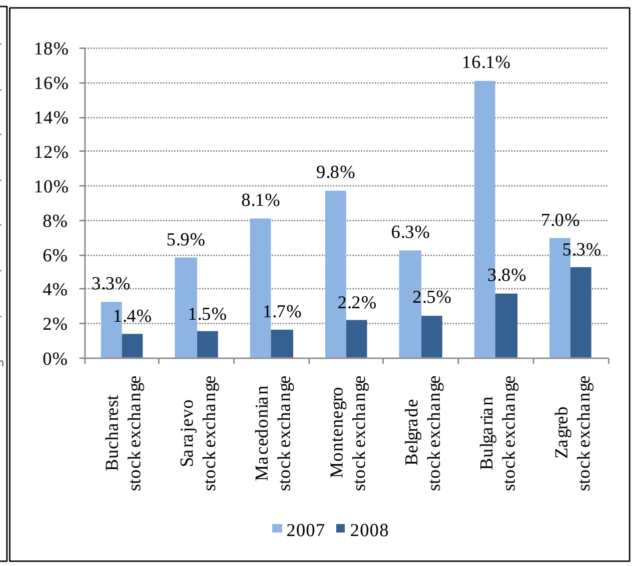


Figure 68
Ratio of the turnover at classical trading with shares on the regional stock exchanges and the GDP



Source:Web sites of the Federation of the Euro-Asian Stock Exchanges, IMF, Macedonian Stock Exchange and NBRM calculations

Another proof for the presence of the "bear market" on the Macedonian stock exchange is the strong drop in the values of the Macedonian stock exchange index (MBI-10) and the publicly owned companies index (MBID). Oppositely, the bonds index of the Macedonian stock exchange (OMB), with short periods of stagnation and decrease, registered an upward trend, except in September and October, when it suddenly decreased. In that manner, the bonds that are traded on the Macedonian Stock Exchange, in conditions of extremely unfavorable stock exchange movements, provided certain safeguard of the financial assets of the investors in these types of financial instruments. The stock exchange index MBI-10, as the main represent of the price levels of the most liquid listed companies on the official market, at the end of 2008 equaled 2,096.16 points and it decreased by 72.9% on annual basis. Also this index showed significantly higher variability, which was especially apparent at the end of March and at the beginning of April, as well as in July, September, October and November. In 2008, the Index of the publicly owned companies (MBID) registered a decrease of 73.7% and at the end of 2008 it reduced to the level of 2,213.89 index points. In April and May, the stock exchange indices MBI-10 and MBID registered slight upward trend, which is maybe announcement for change in the trend on the stock exchange movements and first signs of recovery of the Macedonian capital market. Opposite to the movement of these stock exchange indices in 2008, the bonds index of the Macedonian Stock exchange (OMB) registered slight increase of 1.9%. Also, at the beginning of 2008, this index registered relatively small variability. However, at the beginning of 2009 this index was corrected downwards, which is expected if the upward movements of the core interest rates in the Republic of Macedonia in 2008 and at the beginning of 2009 are taken into consideration. Namely, the increase in the interest rates causes decrease in the yield up to the bonds' maturity, which will result, on its part, in a growth in their prices. The relatively slow reaction of the bonds price levels to the upward trend of the market interest rates is due to the specific characteristics of the bonds which are traded on the Macedonian stock exchange (structural bonds of the Republic of Macedonia, old foreign exchange saving bond and denationalization are primarily traded).

Figure 69
Movements of the basic stock exchange indices

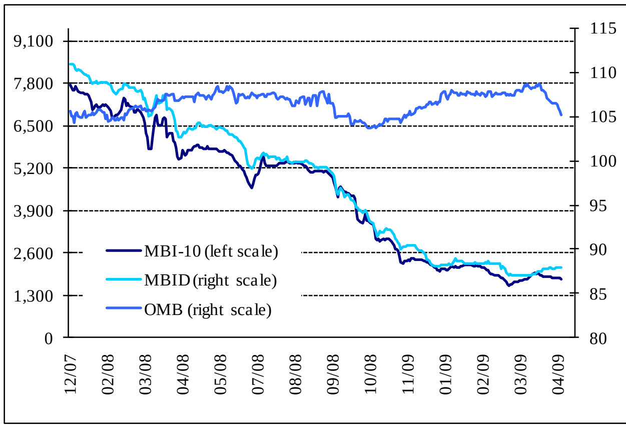
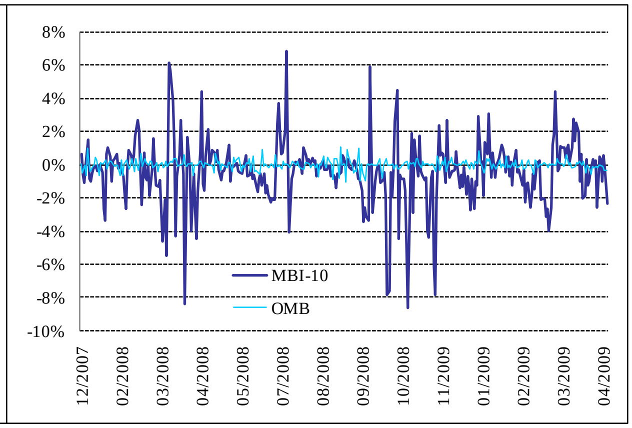


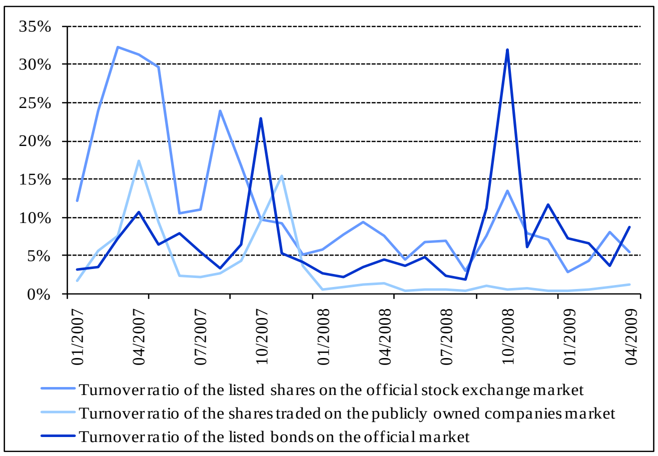
Figure 70
Daily changes of MBI-10 and OMB



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

The trend of prolonged downward correction, which commenced at the end of 2007, inevitably had negative repercussions on the depth and the liquidity of the secondary capital market, which is verified also with the decrease in the turnover ratios of the individual market segments. In 2008, the turnover ratio of the quoted shares on the stock exchange official market equaled, on average, 7.3%, which is less by 10.7 percentage points compared to 2007. High decrease of 6.1 percentage points was also registered by the turnover ratio of the shares that are traded on the market of publicly owned companies, which equaled 0.7%, on average, in 2008. On the other hand, the turnover ratio of the quoted bonds on the official market remained unchanged compared to 2007 (in 2008, this indicator,

Figure 71
Turnover ratios of the securities traded on the stock exchange, in the case of classical trading



Source: Web site of the Macedonian Stock Exchange and the NBRM calculations equaled 7.2% on average). The restricted liquidity (which additionally worsened in 2008) on the Macedonian secondary capital market prevents fast and easy sale of securities, in conditions of downward trend of their prices, which reflects negatively on the value of the investors' financial assets.

Table 20
Correlation coefficient of the MBI- 10 movements with the movements of the main indices of the stock exchanges in the region

Stock exchange indices	MBI 10- SKOPJE		
	2006	2007	2008
BELEX 15 - BELGRADE	82.4%	59.7%	95.9%
SOFIX- SOFIA	72.3%	70.2%	97.7%
CROBEX- ZAGREB	93.8%	85.8%	97.1%
SBI 20- LJUBLJANA	85.3%	92.9%	98.7%

Source: Web sites of the respective stock exchanges in the region and the Macedonian Stock Exchange and the NBRM calculations

The movement of the Macedonian Stock Exchange Index shows high degree of correlation with the movements of the stock exchange indices of the Balkan countries. The correlation is more apparent in 2008, when all regional stock exchange indices registered downward trend. The high degree of concentration of portfolio investors with similar investment preferences in the countries from the Balkan region, results in high degree of correlation of the movements of the regional stock exchange indices. In environment of favorable stock exchange movements, characteristic for the two previous years, when the portfolio manager had sufficient liquidity level, while the price levels of all regional stock exchanges registered an upward trend, the investors were more interested in the capital markets, which were providing higher yield rates (adequate to the level of undertaken risk) and diversification of their portfolio of securities. Such tendencies of the investors influenced the volume of the turnover and the increase in the price levels of individual regional stock exchanges to be more or less risky, which from its part determined slightly lower correlation degree of the regional stock exchange indices in conditions of positive stock exchange movements. Oppositely, in conditions of global economic crisis and in environment of lack of liquidity, the interest of the investors is completely directed towards providing sufficient level of liquid funds, which pressures strongly on the sale side of all stock exchanges in the region and consequently, decrease in the turnover and downward corrections of the price levels. Hence, in conditions of unfavorable trends on the stock exchanges from the Balkan region, the degree of correlation of the movements of the regional stock exchange indices is significantly high. Namely, in 2008 the correlation coefficient of the movements of MBI-10 index with the movements of the main indices on the stock exchanges from the region equal over 95%. The high correlation in the movement in the price level on the regional stock exchanges can influence also on the duration of the price correction, which began from the second half of 2007. The slight increase in the regional stock exchange indices (including also MBI-10), in April and May 2009 is possible signal for gradual recovery of the regional stock exchanges.

2.2.3 Investment funds in the Republic of Macedonia

In 2008, further increase in the competitiveness in the financial systems' segments was registered, with the primary focus of the activities being directed towards the capital market. Thus, in 2008 five new investment funds and two funds management companies were established, so on December 31, 2008 total of eight investment funds and five funds management companies were functioning in the Republic of Macedonia. Also, the domestic financial market was enhanced with five new private funds and four funds management companies, and at the end of 2008 their number equaled fourteen and nine, respectively. The functioning of the investment and private funds contributes to expand the supply of investment alternatives on the domestic financial market, and their role is especially important also from the aspect of collection of funds from small investors, which in most of the cases are limited in their efforts for accomplishing satisfactory degree of diversification of its individual portfolio. Having in mind that the Securities and Exchange Commission is not competent to control the operating of the private funds, while the data on the owners of the documents pertaining to stake, the payments in and from the private funds as treated as business secret[60], the further analysis is focused exclusively on the investment funds in the Republic of Macedonia.

The absence of competent body in the Republic of Macedonia that will monitor and control the private funds operating, i.e. the authorized companies for managing private funds, means bigger risk for the potential investors in this type of funds. Despite the current minor significance of the private funds, the possible materialization of the risks that the investor take in these funds, can have certain repercussions also on the stability of the total financial system. Additional risk in this regard is also considered the absence of the Investor Compensation Fund[61].

Figure 72
Structure of the investment funds' assets

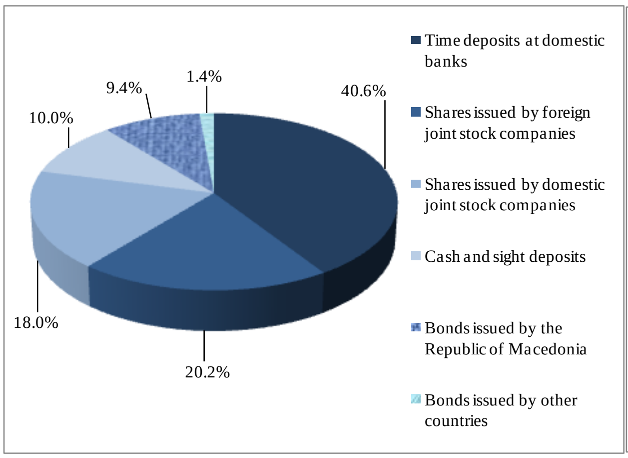
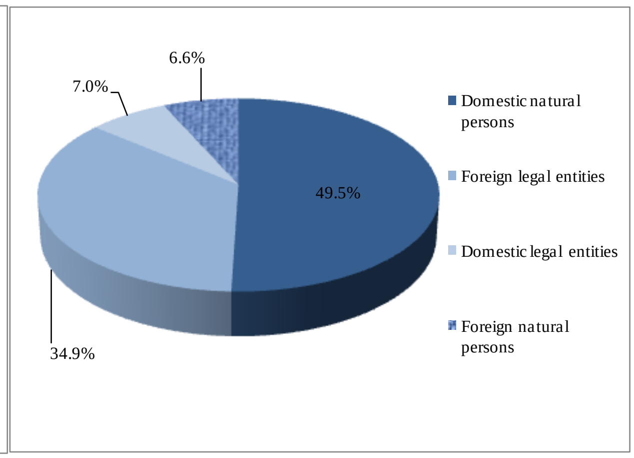


Figure 73
Ownership structure of issued documents for stake



Source: Securities and Exchange Commission and NBRM calculations.

In 2008, the total assets of the investment funds registered an increase. On December 31,2008 the total amount of the funds' assets equaled Denar 84 million (or 27.4%), which is an increase of 18 million compared to the end of 2007. The largest share in the total assets' structure of 40.6% accounts for the short-term time funds with the domestic banks. On the other hand, the largest share of 49.5% in the ownership structure of issued documents for stake in investment funds accounted for the domestic natural persons.

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[60] In conformity with the Law on Investment Funds ("Official Gazette of RM" no. 12/2009)

[61] The funds in the Fund would be collected by its members - funds management companies and other institutions offering investment services for their clients, and the collected funds are intended for securing the claims of the clients - investors, i.e. remuneration of their deposits - claims, in situation when some of the members is not in possibility to realize the liabilities to clients, in conformity with the concluded agreement between two parties.

Figure 74
Movement of the daily average selling price of the stake document with the investment funds established in 2007

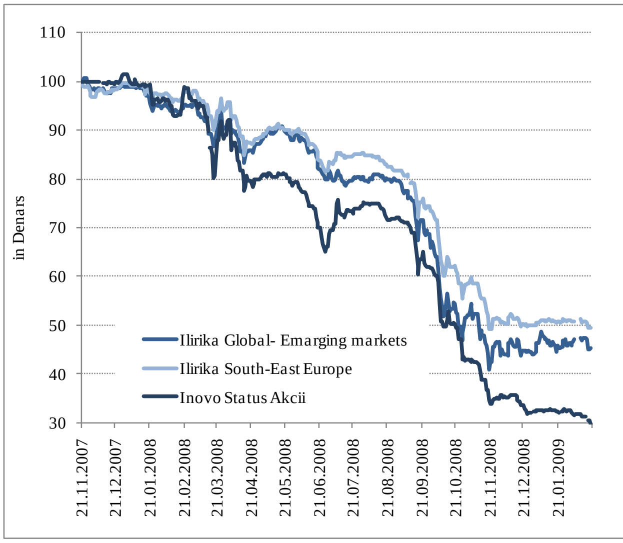
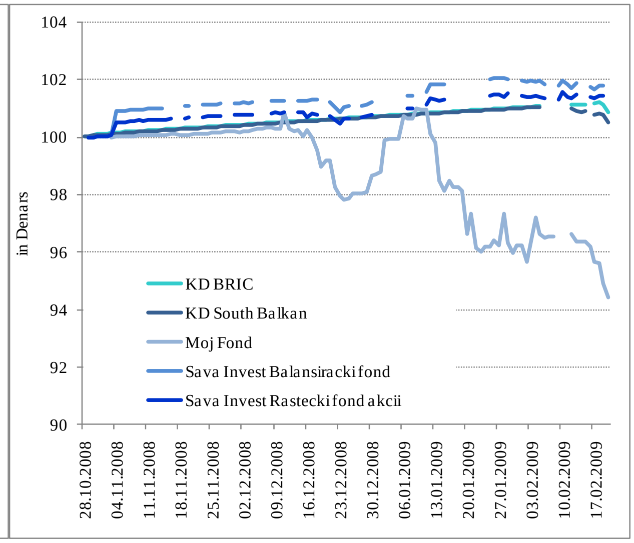


Figure 75
Movement of the daily average selling price of the stake document with the investment funds established in 2008



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

In 2008, the investment funds registered relatively high net inflows of funds, compared to the value of their assets. The total inflow of funds in the investment funds in 2008 equaled Denar 85 million, compared to the amount of the outflows, which equaled only Denar 107 thousand for the same period. However, the high net inflow of funds caused no appropriate increase in the value of the investment fund's assets (this was especially the case with investment funds established 2007). The reasons for that should be found in the severe decrease in the prices of individual financial instruments (primarily shares), in which the funds of the investment funds are invested, and which are recorded in the accounting record according to their current price on the market. The ownership structure of the inflows of funds in the investment funds are dominated by the foreign financial institutions (with 36.3%) and domestic natural persons (with a share of 29.3%). On the other hand, in 2008, the largest portion of the funds from investment funds was withdrawn by the foreign legal entities, in the amount of Denar 74 thousand.

3. Banking system of the Republic of Macedonia[62]

3.1. Structural features of the banking system

The banking system remained dominant in the financial intermediation in the Republic of Macedonia at the end of 2008. Notwithstanding the lower share in the overall assets of the financial system, and the significant slowdown in the growth of the total activities, the banking system has kept its crucial role in the development and the performances of the overall financial system. On December 31, 2008 the total assets of the banking system stood at Denar 254,153 million, which is an increase of 12.2% compared to 2007. Such rate indicates considerable slowdown of the annual growth compared to the preceding year, and is at relatively lower level compared to the average growth rate of the financial system assets and at significantly lower level compared to its fastest growing segments (lease companies and pension funds). The decrease in the share of the banking system in the total assets

[62] More detailed analysis and data on the banking system are presented in the Report on Banking System and Banking Supervision in the Republic of Macedonia in 2008.

of the financial system was inconsiderable (by 1.2 percentage points), and with a share of 90.5% it remained its dominant and most developed segment. Simultaneously, the increase in the banking system assets accounted for the most (81.8%) of the growth in the assets of the overall financial system.

Table 21
Structure of the banking system of the Republic of Macedonia

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

Source: NBRM, based on data submitted by banks and savings houses.

The banks remained dominant in the banking system, whereas insignificant changes were registered in the role of the savings houses compared to the preceding year. Considering the insignificant role of the savings houses in the overall activities of the banking system, the further analysis of this segment of the financial system focuses only on the bank operations.

Table 22
Concentration of activities of the banking system in the Republic of Macedonia

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

Source: NBRM, based on data submitted by banks.

In spite of the decrease compared to the previous year, the relatively high level of concentration of the activities is still one of the basic structural features of the banking system of the Republic of Macedonia. Relatively higher level of concentration is present in the banks' deposit activity, although according to the dynamics of the Herfindahl index, the concentration level of this segment of the banking operations registered the fastest annual fall. Observing by type of clients of the banking system, larger concentration is present in the activities with the households, being particularly noticeable in the deposit base of this type of clients. Also, analyzing by sector and type of bank activities, the household deposits are a segment of the bank activities that registered the highest concentration level. The high concentration level in this area of bank activities further increased as a result of its growth compared to 2007, thus interrupting the gradual downtrend evident in the recent years. Such upward development of the concentration level could primarily result from the different level of successfulness of the banks endeavors to conquer as much as possible of the deposit market, particularly evident in the second half of 2008. The three largest banks made up more than 75% of the total annual growth in the banks' deposit core, illustrating the relatively low competitive position of other banks on the nonfinancial entities' deposit market.

Panzar-Rosse competition index for the Macedonian banking system

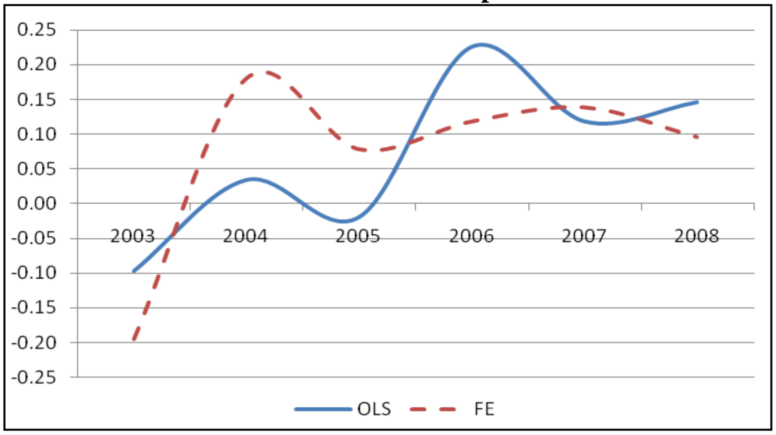
In the literature, one of the basic ways of measuring competition in the banking system is the Panzar-Rosse h-Statistics test. This test measures the level of competition in the banking system through the elasticity of the bank's factor expenses (wage expenses, interest expenses and operating expenses) compared to the total interest income. The data is calculated as follows. We start from the following regression:

$$\text{interest income}_{it} = \alpha + \beta_1 \text{labor costs}_{it} + \beta_2 \text{interest expenses}_{it} + \beta_3 \text{operating expenses}_{it} + \gamma_1 \text{total assets}_{it} + \gamma_2 \text{credits / total assets}_{it} + \gamma_3 \text{own funds / total assets}_{it}$$

whereas, i index refers to sector unit (in the case of a bank), and t denotes the time component. The first three variables are called factor expenses. The sum of coefficients obtained before them, ($\beta_1 + \beta_2 + \beta_3 = h$) represents the Panzar-Rosse h-statistics test for competition in the banking industry. If h=1, the bank market is perfectly competitive; if 0<h<1, the market is characterized with monopolistic competition; if h<0, the market is a monopoly, which does not necessarily imply that there is only one player, but several large players which negotiate with each other and dictate the conditions on the bank market.

The calculations for the Republic of Macedonia include annual data for 22 banks for 2003-2008 and panel calculation technique. The 2003 analysis includes 22 banks, which, by the end of 2008, due to status changes (bank acquisitions, mergers, bankruptcy and liquidation) reduced to 17. MBPR a.d. Skopje has been excluded from the overall period under observation due to the specific nature of its activities.

Figure 76
Panzar-Rosse h-Statistics test for competition in the Macedonian banking system



Source: NBRM calculations.

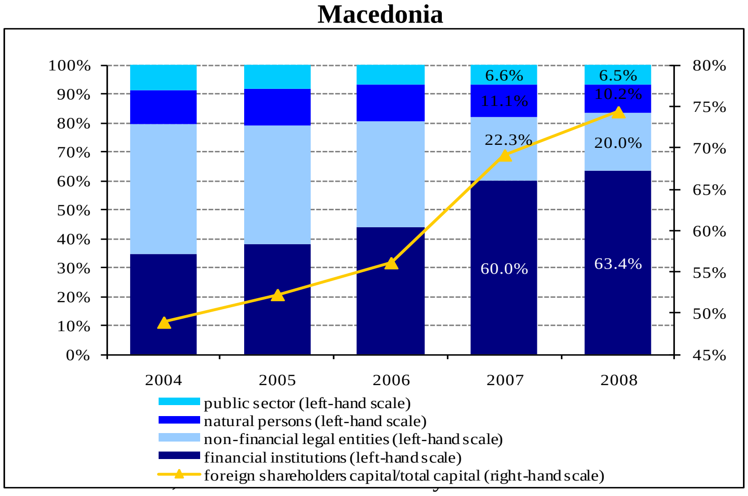
The average Panzar-Rosse h-statistics calculated for the overall 2003-2008 period swings around 0.07, indicating that the banking system of the Republic of Macedonia is in the zone of monopolistic competition, with evident tendency toward monopolistic market. Figure 78 shows the movement of the h-statistics from 2003 to 2008, by year. The OLS estimator has been given as a comparison, but its consistence and impartiality are disputable, taking into account that the model is not dynamical. Hc
features of the banks, which are unchangeabl
observation, the Macedonian banking system is close to the zone of monopolized market.

Table 23
Share of foreign shareholders in the banks' ownership structure

Structural indicators of foreign owned banks	Year					
	2003	*2004*	*2005*	*2006*	*2007*	*2008*
Number of banks with presence of foreign shareholders	15	15	17	17	16	16
Number of banks with majority foreign ownership	8	8	8	8	11	14
of which: foreign bank subsidiares	4	4	4	4	5	8
Assets of banks with majority foreign ownership/Total assets (in %)	44.0%	47.3%	51.3%	53.2%	85.9%	92.7%
of which: foreign bank subsidiares	43.1%	42.1%	43.7%	45.0%	52.5%	59.0%
Capital and reserves of banks with majority foreign ownership/Total capital and reserves (in %)	44.6%	47.6%	49.1%	50.0%	71.1%	84.2%
of which: foreign bank subsidiares	38.1%	36.8%	36.7%	37.6%	39.5%	55.7%

Source: NBRM, based on data submitted by banks

Figure 77
Ownership structure of the banking system of the Republic of Macedonia

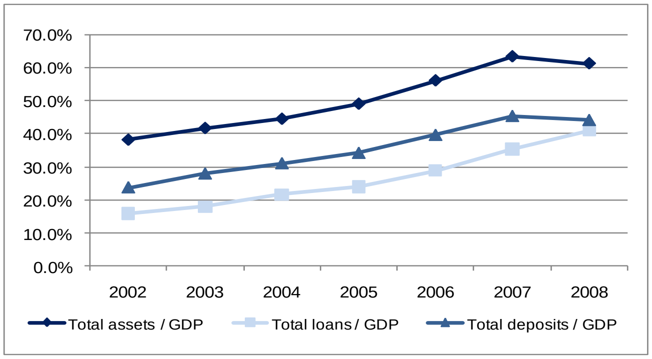


The ownership restructuring of the banking system in the Republic of Macedonia continued in 2008 in a slower pace compared to the preceding year. The changes, same as in the preceding years, were directed towards increasing the share of the financial institutions and foreign shareholders. As a result of such ownership changes, on December 31, 2008, the financial institutions constituted as much as 63.4% of the ownership structure of the shares issued by the banks, which compared to the end of 2007, is an increase of 3 percentage points. Additionally, the significance of the foreign investors went up, evident through the higher number of banks in dominant ownership of foreign shareholders - foreign banks as well as a subsequent increase in their share in the total assets and capital of the banking system in the Republic of Macedonia. The share of foreign shareholders in the total capital of the banking system compared to 2007 went up by 5.2 percentage points, reaching 74.3%. Such changes in the ownership structure of the banks are mostly due to the takeover of three banks by foreign strategic investors.

3.2. Bank activities

At the end of 2008, for the first time in the last six years, the role of the banks in the financial intermediation slowed down. The deceleration of the domestic economic activity, the higher uncertainty and intensive psychological pressures on the domestic entities contributed to the slowdown in the growth of the banks' deposit base. In environment of slower growth of deposits as a dominant source of funding of the banks and the stricter terms for borrowing on the international market resulted in deceleration in the growth of the total banks' assets as well. These developments were the basic reason behind the stagnation of the level of financial intermediation, measured as a ratio of the banks' total assets and total liabilities -to-GDP[63]. On the other hand, given the further restructuring of the banks' assets and the stable demand for credits, the credit support to the private sector and the growth of its significance to the domestic economic activity carried on in 2008.

Figure 78
Level of financial intermediation



Source: NBRM and SSO.

3.2.1. Structure of the banks' assets and liabilities

The assets and liabilities structure of the banks in the Republic of Macedonia largely contributed to their safety, soundness and resilience to the direct negative effects of the turbulent developments on the international financial markets. Two aspects of the banks' balance sheet structure are particularly vital: the banks' orientation towards classical bank activities and the marginal exposure of the Macedonian banks to nonresidents.

The domination of deposits is the main structural feature of the liabilities, which have gradually and consistently increased their significance in the structure of the overall banks' sources of funding. Such tendency continued in 2008 in spite of the substantial deceleration of their increase. On December 31, 2008, the total deposits stood at Denar 180,913 million, which is by 12.8% more on annual basis, which is the lowest annual growth rate registered in the last six years, and by more than a half less compared to 2007.

Figure 79
Structure of assets of the banking system

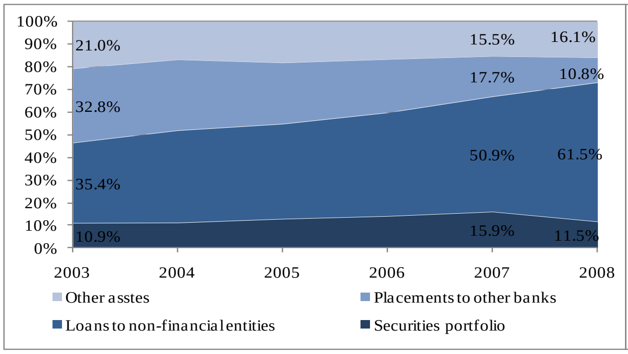
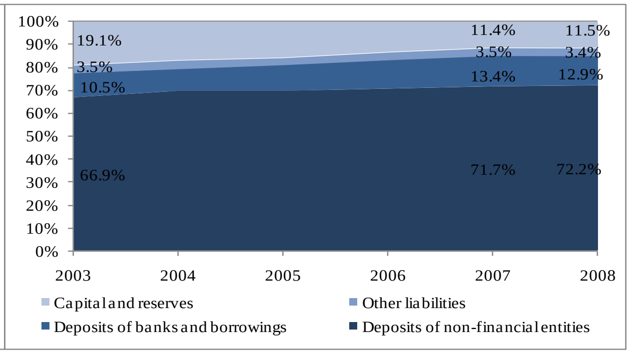


Figure 80
Structure of liabilities of the banking system



Source: NBRM, based on data submitted by banks

[63] The GDP data for 2007 is preliminary, and for the 2008 it is estimated.

Along with the slowdown of the deposit growth, the psychological pressure as an indirect channel of transmission of the negative effects of the crisis on the international financial markets, in 2008 transformed their currency structure in a faster pace. It was demonstrated through the **faster growth and higher contribution of the foreign currency deposits to the overall annual deposit growth and the higher share of the foreign currency deposits in the structure of the banks' total deposit core.** For the first time in the last three years, the foreign currency deposits surged by considerable 22.1%, compared to Denar deposits which grew up with a rate of 5.3%. Additionally, dominant portion (76.8%) of the annual growth of the total deposits was due to the increase in their foreign currency component, which also contributed to the 3.6 percentage point increase in their share in the total deposit, reaching 48.1%. **Slowdown was also registered in the growth of the corporate and the household deposits.** The corporate and household deposits reported an annual increase of 8.3% and 13.8%, respectively, which is by significant 16.3 percentage points and 18.3 percentage points, respectively, lower growth rates compared to those reported for 2007. Such dynamics of the deposits by sector caused no significant changes in the sector structure of the total deposits, which is dominated by the household deposits making up 59.2%. Observing the deposit maturity, **the growth in the long-term deposits of the banking system accelerated, unlike the growth in the sight deposits[64] and the short-term time deposits which decelerated, most probably due to the banks' encouraging policy for long-term savings.** With an annual increase of 92.1%, the long-term deposits were growing in a faster pace compared to the sight and short-term deposits which registered annual growth rates of 4.6% and 11.4%, respectively. Notwithstanding the growth in the share of long-term deposits, the unfavorable maturity structure, with respect to the domination of the short-term deposits (accounting for 90.8%), is still one of the main features of the bank deposits.

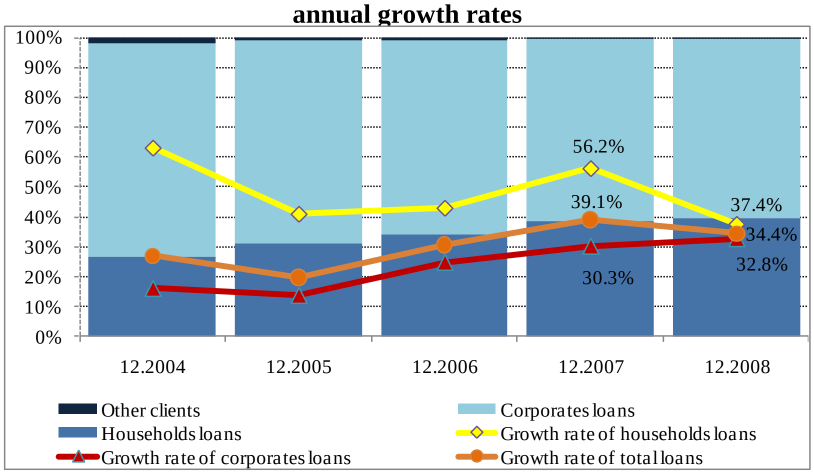
The significance of borrowings, as the second major category of foreign sources of funding, kept on decreasing. In spite of the annual growth of Denar 760 million, on December 31, 2008 they reported a 0.6 percentage point decrease in the total liabilities, thus reducing to 8.1%.

Lending to the domestic real sector was again dominant activity of the banks in 2008, which in spite of the slower growth, reinforced its dominant position on the assets side. In 2008, under the influence of the macro-prudential measures undertaken by the National Bank, and the changed perceptions of the banks themselves and the tightening of their credit policies, the banks' lending activity was going up in a slower pace. In spite of the deceleration compared to the previous year, the banks' credits to nonfinancial entities kept on increasing with considerably higher rate compared to the assets and liabilities. On December 31, 2008, the credits totaled Denar 167,908 million, reporting an annual growth of 34.4%, which is by 4.7 percentage points less compared to 2007. Given the constant and stable credit demand, having a slower deposit growth, the increase in lending activity was largely underpinned by the further restructuring of the banking system assets. As a result of such tendency, the credits enhanced their dominant share in the banks' total assets, whereas the assets placed with other banks kept on decreasing.

The slowdown in the lending activity was typical for all types of credits with respect to their sector, currency and maturity structure.

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

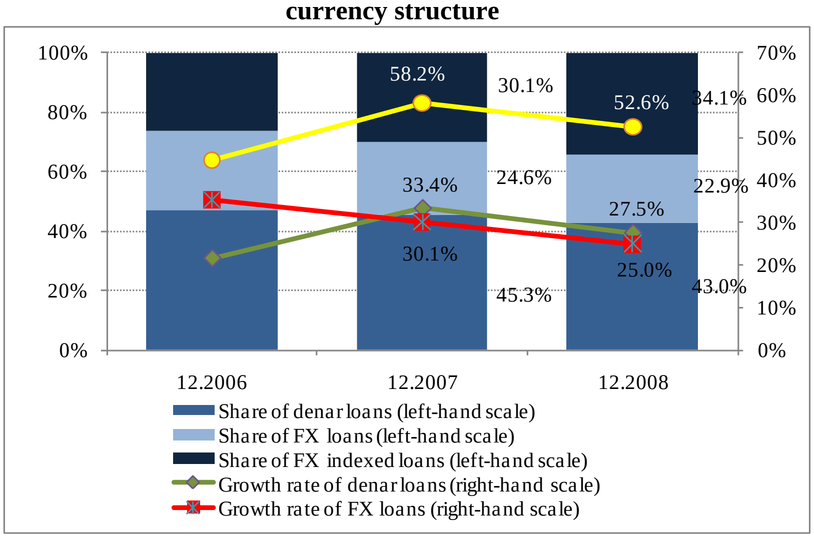
Figure 81
Sector structure of the total credits to nonfinancial entities and annual growth rates



Source: NBRM, based on data submitted by banks.

Lower growth rates were particularly typical for the household lending, unlike the corporate lending which recorded relatively stable, i.e. slightly higher growth rate relative to 2007. Such dynamics of the lending activity to the sectors caused no significant changes in the sector structure of the total credits, which still demonstrates a dominant share of 60% of the corporate lending.

Figure 82
Share in total credits and annual growth rates of the credits by currency structure



Source: NBRM, based on data submitted by banks.

Notwithstanding the slower growth, in 2008, the lending to nonfinancial entities in Denars with FX clause kept on increasing in fastest pace. These credits registered the highest absolute and relative annual growth, contributing with 45.9% to the increase in the total credits to nonfinancial entities. In spite of the deceleration of the growth of credits with FX component[65], at the end of 2008, their presence in the banks' credit portfolio went up, indicating considerable propensity of the Macedonian banks to use the exchange rate risk hedging clauses. As a result of the relatively slowest growth pace, the Denar credits further decreased their share in the structure of total credits to nonfinancial entities.

The short-term and long-term lending registered slower relative growth compared to 2007. Still, the long-term credits remained dominant in the structure of total credits, accounting for most of their growth. Reporting the highest absolute annual growth, these credits contributed with 60.3% to the total annual growth of the lending to nonfinancial entities in 2008.

[65] The credits with FX component include foreign currency and Denar credits with FX clause.

Figure 83
Structure of assets of the banking system

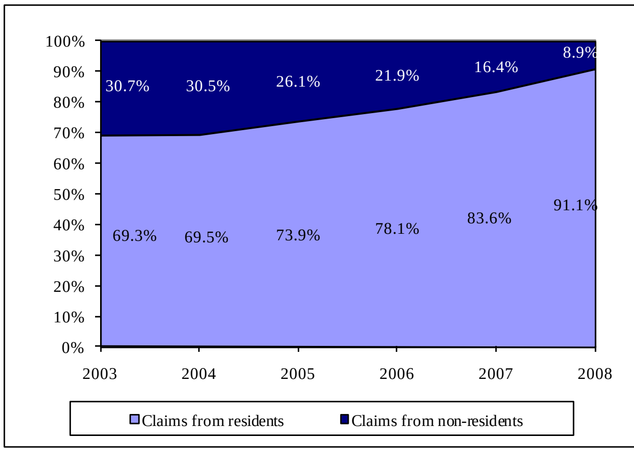
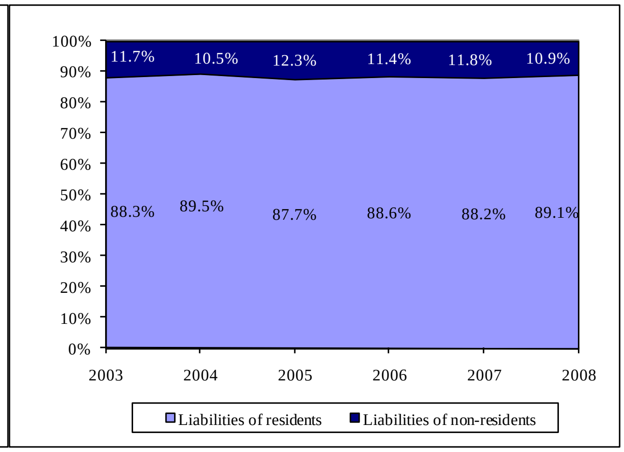


Figure 84
Structure of liabilities of the banking system



Source: NBRM, based on data submitted by banks.

The redirection of the funds placed with foreign banks to credit approved to the domestic economy contributed to further decrease in the relative importance of the claims on nonresidents in the banks' total assets structure. The share of claims on nonresidents in the total banks' assets at the end of 2008, was at the historically lowest level, particularly due to the deposits with foreign first-class banks, as a part of the payment operations and the international credit and guarantee operations.

In addition, typical for the banking system of Republic of Macedonia is the relatively low share of liabilities to nonresidents in its total liabilities[66]. Such structure of funding the bank activities is particularly favorable under the current conditions of generally decreased liquidity, the disturbed confidence and stricter terms for borrowing at the international financial markets. Borrowings and deposits from foreign banks and the subordinated and hybrid capital instruments make up 55.8% and 26%, respectively, of the liabilities to nonresidents.

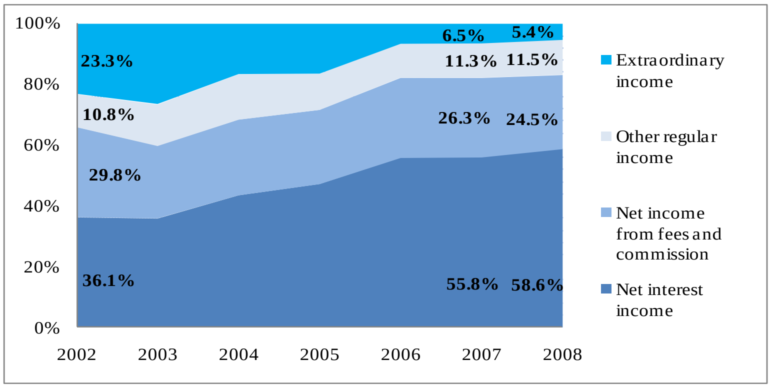
3.3. Profitability

In 2008, the banks in the Republic of Macedonia kept on operating profitably. Still, the multi-annual trend of permanent improvement of their earnings and efficiency was interrupted. In 2008, the total profit of the banking system of the Republic of Macedonia amounted to Denar 3,410 million, which is by Denar 240 million, i.e. 6.6% less relative to 2007. The profit decrease is due to the increase in the operating costs and interest expenses and the slower growth in the fee net-income. Yet another indicator for the deteriorated earnings is the increase in the number of banks that reported a loss, from four in 2007, to six in 2008 and the increase in their share in the total banks' assets from 2.6% in 2007, to 9.4% in 2008.

[66] The calculation of the total liabilities does not include capital and reserves and the amount of unappropriated profit.

The structure of total banks' income points to further strengthening of the role of regular incomes, primarily the net interest income, which is a major driver of the banks' earnings. The net interest income remained dominant in the banks' income structure, contributing with 77.4% to the increase in the total income. The higher significance of the net interest income in the structure of total income of the banks results from the increase in the banks' lending activity, which although in a slower pace, continued in 2008. As a result of the substantial deceleration of the increase in the fee net-income (from 19.9% in 2007, to 6.8% in 2008) their significance to the creation of the banks' total income went down. Yet, they remain the second most important component in the total income structure.

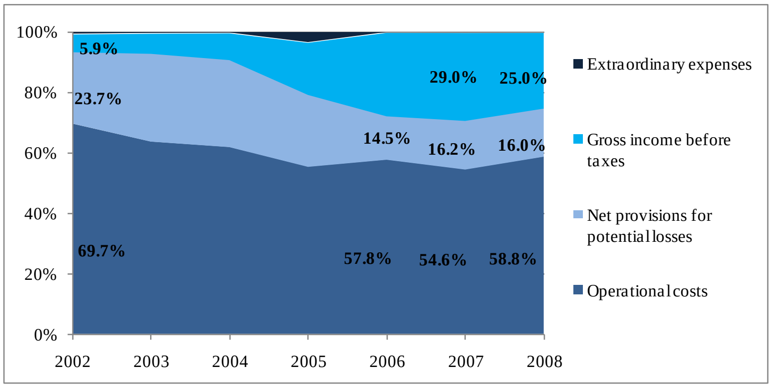
Figure 85
Structure of banks' total income



Source: NBRM, based on data submitted by banks.

The banks' deteriorated earnings in 2008 is also illustrated through the interruption of the uptrend of the banks' total incomes which remains a pretax profit, after settlement of all their total expenses. The operating costs still absorb the largest portion of the total banks' incomes. The structure of operating costs is still dominated by the employee and services costs, accounting for 39.5% and 22.1%, respectively, and contributing with 30.8% and 32.1%, respectively, in the overall growth in the operating costs.

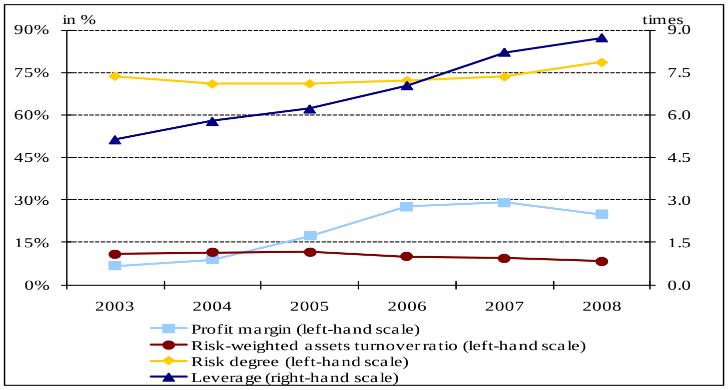
Figure 86
Usage of the banks' total income



Source: NBRM, based on data submitted by banks.

The decrease in the absolute profit in 2008, unlike the growth in the banks' assets, which although in a slower pace continued in 2008, contributed to decreasing the rate of return on average assets (ROAA). At the end of 2008, this indicator equaled 1.4%, which is by 0.4 percentage points less compared to the preceding year. On the other hand, **the rate of return on average equity (ROAE) in 2008 equaled 12.5% which is by 2.7 percentage points less compared to 2007. Unlike**

Figure 87
Dynamics of ROAE-constituting components

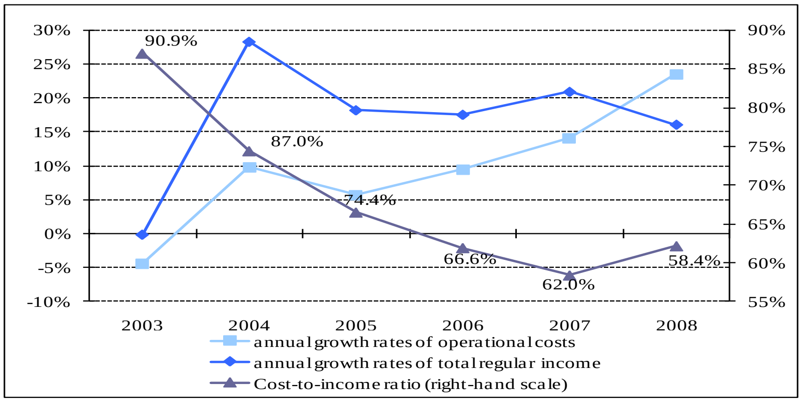


Source: NBRM, based on data submitted by banks.

the preceding year, when the dynamics of ROAE[67] was mostly determined by the leverage ratio[68], in 2008, it was under the adverse influence of the changes in the profit margin[69], and the banks' risk indicator. The higher growth rates of both deposits and borrowings, as sources of funding, relative to the moderate growth of equity and reserves, contributed to further increase in the banks' leverage ratio (by 6.2% more compared to 2007). On the other hand, the profit margin, unlike the continuous growth in the recent years, went down by 4.1 percentage points in 2008, equaling 25.0%, thus severely affecting the banks' earnings. ROAE in 2008 was additionally adversely affected by the increase in the general risk level of the bank activities, evident through the increase in the banks' risk weighted assets -to- average assets ratio from 73.5% in 2007, to 78.6% in 2008.

The end of 2008 witnessed the interruption of the few-year trend of improving the banks' operating efficiency. In environment of more dynamical annual increase in the operating costs (23.5%) relative to the total regular income (16.1%), the cost-to-income ratio deteriorated compared to 2007. The deterioration of the operating efficiency is also demonstrated through the decrease in the noninterest expenses / net interest income coverage margin, from 94.5% in 2007, to 92.1% in 2008.

Figure 88
Dynamics of the cost-to-income ratio and its constituting components



Source: NBRM, based on data submitted by banks.

In forthcoming period the banks will be challenged by risks which make the future developments in their earnings uncertain. The credit risk is one of the most significant risks the banks face with, primarily due to the relatively fast growth in the credit portfolio and the relatively short credit history of some clients, on the one hand, and the lack of sophisticated management, monitoring and risk hedging instruments, on the other. The materialization of the negative effects of this risk is expected to intensify in the forthcoming period, along with the expected further deterioration of the banks' credit portfolio quality as a result of the crisis spillover from the international financial markets to the domestic real sector. In addition, given the generally increasing interest rates, the use of contractual clauses which allow the banks to make smooth upward revision of the interest rates, could put large weight on the financial burden of the clients for debt repayment, and as a feedback, to be materialized in the banks' balance sheets as a credit risk. The deterioration of the banks' credit portfolio quality for the banks means irregular credit collection, proportional decrease in the interest income and higher claim impairment, eventually resulting in a decrease in their earnings. On the other hand, the increasing interest rates, when the banks seek to "conquer" as larger portion as possible of the domestic market of deposits of nonfinancial entities, entails higher interest expenses and proportional decrease in the banks' earnings. In addition, the increase in the role of non-deposit financial institutions is yet another challenge for the banks

[67] The rate of return on average equity (ROAE) could be presented as follows:

$$ROAE = \frac{P}{CR} * \frac{S}{S} * \frac{A}{A} * \frac{RWA}{RWA} = \frac{P}{S} * \frac{S}{RWA} * \frac{A}{CR} * \frac{RWA}{A} = PM * RWAturnover * L * RBAratio$$

where: P = after-tax profit; CR = average own funds; S = total regular income; A = average assets, RWA = risk weighted assets; PM = profit margin; RWAturnover = risk weighted assets turnover; L= leverage and RBAratio= risk bearing assets ratio.

[68] Leverage ratio = average assets -to- average equity ratio at the level of the overall banking system.

[69] Profit margin = after-tax profit -to- total regular income ratio.

to maintain their earnings potential. In future the banks are expected to improve their earnings position by increasing their control capacity and decreasing the operating costs.

3.4 Credit risk

The financial crisis in the banking systems of the developed countries realistically demonstrated the meaning of credit risk from the range of bank risks, pointing to it as a potential reason behind the disturbances in all other operating segments, and hence, as a key factor for maintaining the financial stability. For the banking system of the Republic of Macedonia, this ascertainment is even more relevant, considering the dominant position of the banks in the structure of financial system, and their focus on the so-called "traditional" bank activities, particularly the lending. This business orientation and the lack of direct involvement of the domestic banks in the international financial markets prevented the crisis of the financial systems in the developed countries to have adverse effects on the domestic banks through losses due to impairment of assets placed with foreign banks. On the other hand, the transformation of the financial crisis into a real sector crisis inevitably makes the work conditions for the domestic borrowers harder, thus increasing the bank risks for credit risk identification and management.

The deceleration of the growth of credit exposure in 2008 was accompanied with intensification of the growth of credit exposure classified in the riskier categories, particularly apparent in the second half of 2008. Thus, at the end of 2008, the annual growth rate of the credit exposure equaled 11.4%, with clearly illustrated downtrend over the entire 2008. This trend has also been accompanied with simultaneous changes in the contribution of the sector to the credit exposure growth. In 2008, the growth in the overall credit exposure was solely due to the growth (although slower) in the exposure to households and corporations, whereas the credit exposure to the financial institutions and the state went down, driven primarily by the lower demands for CB bills and government securities, as well as the decrease in the placements in foreign banks.

Figure 89
Dynamics and growth rates of the credit exposure by risk category

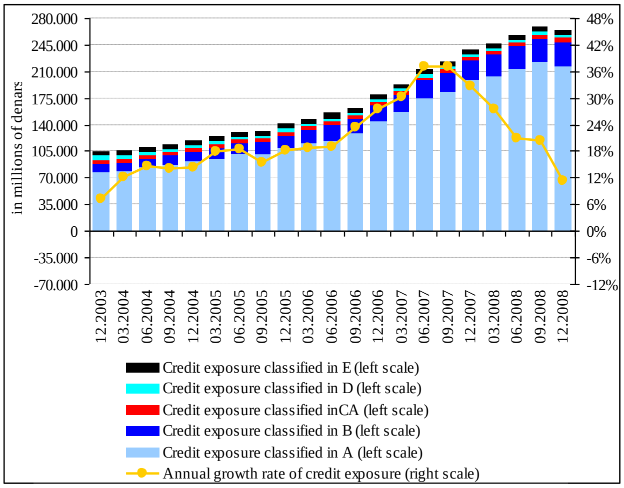
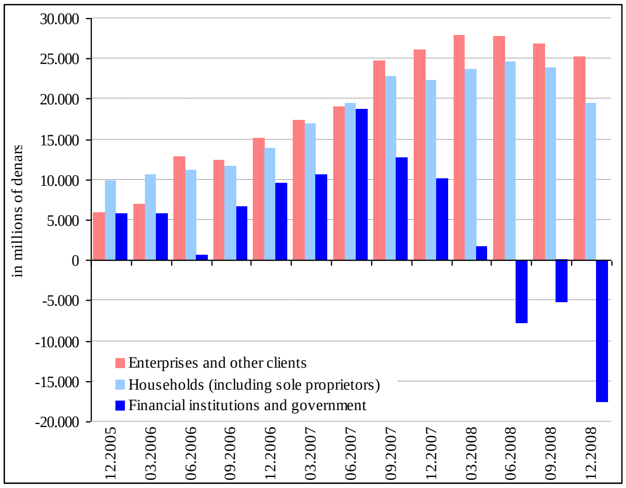


Figure 90
Distribution of the annual growth of credit exposure by sector



Source: NBRM. based on data submitted bv banks.

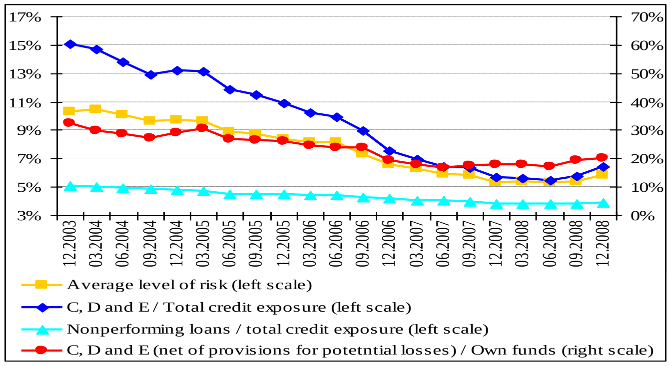
Major determinants for the decrease in the credit exposure growth were the deceleration of the deposit growth as a basic source of funding the banks' activities, the gradual change of the banks' perceptions compared to risk taking and tightening of their credit policies, and the undertaken macro-prudential measures and actions by NBRM for hedging the high credit growth

risks, particularly to the households. These factors, in environment of relatively high exploitation level of the deposit core for funding the credit activity, and the stricter borrowing terms on the international financial markets are expected to further decelerate the pace of banks' credit exposure in the Republic of Macedonia. On the other hand, the pro-cyclical nature of banking and the banks' propensity, in period of expansive credit policy, to loosen the lending standards usually leads to higher risk level of the credit portfolio, given the slower credit growth and economic activity.

3.4.1 Credit exposure risk level in the banking system

In environment of significant changes and volatility of the external business surrounding, the trend of improving the risk level of the credit portfolio of the banking system in 2008 was interrupted, recognizing the first signs of its risk. Thus, in 2008, more of the credit exposure risk indicators demonstrated negative changes. The crisis on the international financial markets and its spillover into the real sector, in conditions of slowdown in the credit dynamics and the regulatory requirements for increasing the prudency, are expected to further act as accelerator of the process or "maturing" of the credit exposure, and hence, the negative changes, if any, in its risk profile. At the end of 2008, the risk exposure in C, D and E risk categories accounted for 6.4% of the total credit exposure, and relative to the end of 2007, it went up by 0.7 percentage points. The average risk level of the credit exposure at the end of 2008 reached 5.8%, which is by 0.5 percentage points more relative to the end of 2007. Additionally, 2.3 percentage points deterioration was registered in the indicator for the share of non-provisioned amount of exposure classified in C, D and E risk categories in the total own funds of the banking system. In the event of extreme scenario of full non-collectability of the exposure classified in these three categories with higher risk level, the loss coverage would absorb 20.2% of the banks' own funds (17.9% at the end of 2007). The capital adequacy ratio would reduce from the current 16.2% to 12.9%.

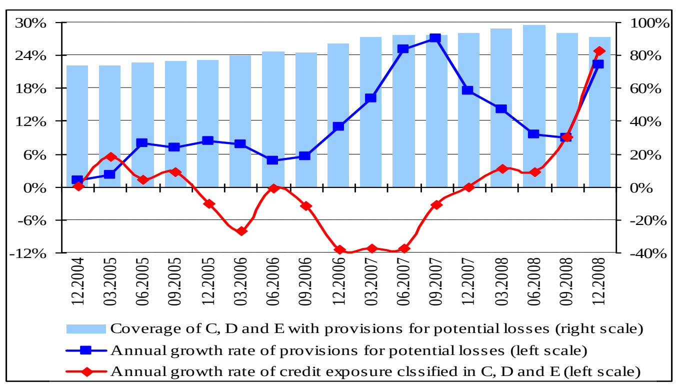
Figure 91
Changes in the indicators for the credit exposure risk level in the banking system



Source: NBRM, based on data submitted by banks.

The growth in the credit risk loss provisions reported a slower pace compared to the growth in the exposure classified in C, D and E risk categories, which reduced the level of coverage of this exposure with the amount of loan loss provisions. At the end of 2008, the loan loss provisions reported an annual growth rate of 20.8%. On the other hand, the annual growth rate of the exposure classified in C, D and E equaled 24.9%, which is the highest annual growth rate over the last six years. The growth in the credit exposure classified in C risk category reported the highest share of 61.1% in the total annual growth of the credit exposure with higher risk level, which by its nature is

Figure 92
Annual growth rates of potential credit risk losses and exposure clasiied in higher risk categories

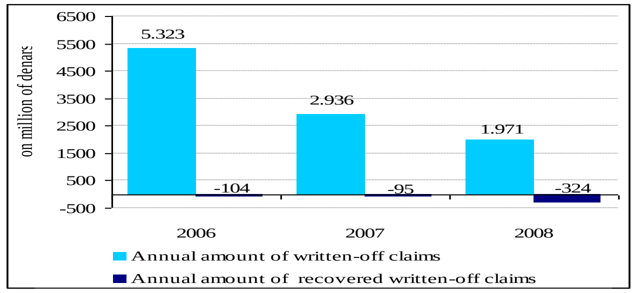


Source: NBRM, based on data submitted by banks.

transitional (short-term) category. Given the stricter economic conditions in the country and worldwide, this could entail further deterioration of the banks' credit portfolio quality. Taking account of these trends, at the end of 2008, the loan loss provisions covered 90.6% of the exposure classified in C, D and E risk categories, which is by 3.0 percentage points less compared to the end of the preceding year.

The level and dynamics of the writing-offs made by the banks is yet another element underlying the assessment of the credit exposure risk. The net written-off claims in 2008[70] constituted 0.7% of the credit exposure at the end of 2007. The written-off claims based on interest, making up 57.6%, registered the highest share in the structure of written-off claims in 2008, and the written-off claims based on credit principals accounted for 34.9%. In spite of the decrease in the net-writing-offs in 2008 (by Denar 1.2 million), they are still in a volume that influence the credit exposure risk indicators. If the banks did not make these writing-offs, on December 31, 2008, the indicator for the share of exposure classified in C, D and E in the total credit risk exposure would be by 0.5 percentage points higher and would equal 6.9%.

Figure 93
Developmnts of the banks' net written-off claims

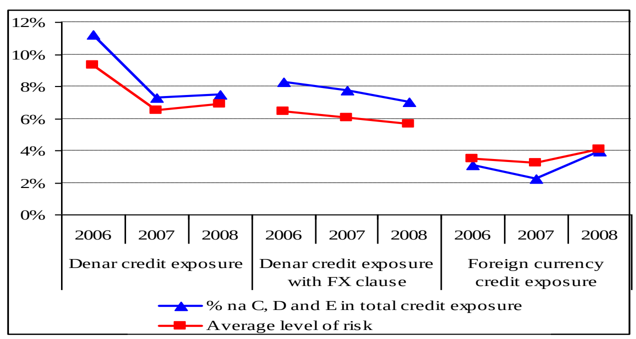


Source: NBRM, based on data submited by banks

Observing the currency structure of the credit exposure, in 2008 only in the Denar exposure with currency clause registered an improvement of the risk level, which is primarily due to the substantial 45.8% annual growth of this exposure. Thus the indicator for the average risk level of this kind of exposure at the end of 2008 equaled 5.6%, which is by 0.5 percentage points less, compared to the end of 2007. On the other hand, the indicators for the average risk level of both the Denar and the foreign currency credit exposure increased. The Denar exposure with lower quality level in 2008 went up by 15.1%, making its average risk level reach 6.9% (an increase of 0.4 percentage points).

The average risk level of the foreign currency credit exposure went up from 3.2% at the end of 2007, to 4.1% at the end of 2008, primarily due to the annual growth of foreign currency exposure with higher risk level of 56%, whereas the total foreign currency exposure went down by 8.7% in the same period. In spite of such developments, the lowest risk level and the lowest share of exposure classified in C, D and E risk categories is still registered exactly in the foreign currency exposure to credit risk.

Figure 94
Selected indicators for the credit exposure risk levels according to the currency structure



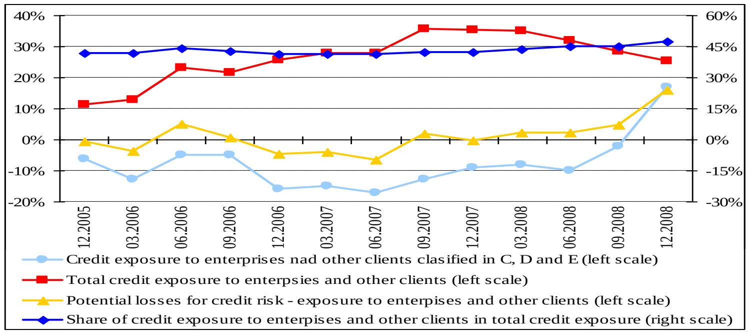
Source: NBRM, based on data submited by banks

[70] The amount of net written-off claims is the difference between the amount of written-off claims within a certain period and the amount of collected written-off claims in the same period.

3.4.2. Risk level of the credit exposure to corporations and other clients sector[71]

The trend of permanent improvement of the risk level of credit exposure to the corporations and other clients sector in 2008 started demonstrating signs of deceleration. This phenomenon was especially evident in the second half of the year, with the first signs of deceleration of the credit exposure growth and demonstrated higher uncertainty for the future developments of the quality of exposure to this sector. In the second half of 2008, as a result of the financial and economic crisis in the developed countries, the companies started suffering from the lower export demand and difficult claim collection. In environment of deceleration of the pace of lending activity and the expectations for slowdown in the economic activity in the country, the companies work conditions started deteriorating, which already affected, and will inevitably have its further effect on the indicators for the risk of credit exposure to this sector. Hence, in the second half of 2008, the annual growth rate of the credit exposure with higher risk level and the potential credit risk losses arising from the exposure to the corporations and other clients sector accelerated. At the end of 2008, the credit exposure classified in C, D and E and the potential credit risk losses arising from the exposure to the corporations and other clients sector reported annual growth rates of 16.8% and 16.0%, respectively. These annual rates of change were the highest over the last five year. In such conditions, and taking into account that in the stages of expansion of the economic cycle, the risk volume could be underrated, it is of exceptional importance for the banks to recognize, in full and in due course, the provisions (losses on asset impairment) in their financial statements. This is necessary, not only for the transparency of the external financial reporting, but also for the adjustment of the business strategies and policies to the developments in the economic environment. Apart from this, a basis would be created for coping with the so called "problem exposures" which would arise in future and for the timely identification of the need for increasing the capital, if needed. This requires risk management systems in place, including the procedures for credit risk management.

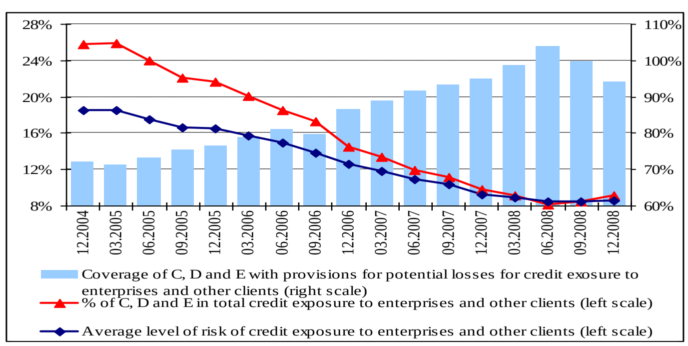
Figure 95
Annual rates of change in the credit exposure and in the credit risk loss provisions of the corporations and other clients sector



Source: NBRM, based on data submited by banks

On annual basis (December 31, 2007 - December 31, 2008), the risk level of the credit exposure to corporations and other clients sector improved. In 2008, the indicators for the average risk level and for the share of credit exposure classified in C, D and E risk categories in the overall credit exposure improved by 0.6 and 0.7 percentage points, respectively. However, the improvement in the risk level of this kind of exposure is primarily due to the relatively high amount of claims on corporations subject to writing-off by the banks in the first half of 2008. If we exempt

Figure 96
Dynamics of the indicators for the risk of credit exposure to the corporations and other clients sector



Source: NBRM, based on data submited by banks

[71] Other clients include nonprofit institutions which serve to the households, exterritorial authorities and organizations, nongovernment institutions, social insurance funds, etc.

the effects of the writing-off of claims on this sector (Denar 1,376 million, i.e. 1.4% of the exposure to this sector on December 31, 2007), on December 31, 2008, the indicator for the average risk and the share of credit exposure with lower level of quality in the total credit exposure would equal 9.6% and 10.1%. Relative to December 31, 2007, this would mean a deterioration of the indicators by 1.0 and 0.3 percentage points, respectively. On the other hand, the second half of 2008 (when the banks made relatively small writing-offs of claims on this sector) witnessed a signs of increasing the risk level of credit exposure to the corporations and other clients sector. In addition, in the second half of 2008, the indicator for the coverage of the exposure classified in the categories with higher risk with loan loss provisions went down. Yet, at the end of 2008 it remained satisfactory at the level of 94.1%.

Table 24
Indicators for the risk degree and the concentration of the credit exposure for selected activities of the corporations and other clients sector

Indicators for risk level and concentration of credit exposure	Date	Industry	Agriculture, hunting and forestry	Construction	Wholesale and retail trade	Transport, storage and communication
Average level of risk	31.12.2008	10,7%	17,3%	7,6%	6,8%	6,0%
	30.06.2008	10,3%	17,6%	7,4%	7,0%	5,5%
	31.12.2007	11,1%	18,1%	7,9%	7,9%	5,9%
	31.12.2006	15,1%	19,3%	8,5%	11,4%	8,2%
Share of „C“, „D“ and „E“ in total credit exposure	31.12.2008	11,7%	18,1%	9,1%	7,1%	7,1%
	30.06.2008	10,2%	17,5%	8,5%	6,5%	5,8%
	31.12.2007	13,0%	18,7%	11,3%	6,5%	4,5%
	31.12.2006	18,3%	20,7%	14,9%	11,9%	6,9%
Coverage of „C“, „D“ and „E“ with provisions for potential losses	31.12.2008	91,9%	95,7%	83,5%	96,2%	85,5%
	30.06.2008	101,5%	100,5%	87,6%	108,7%	94,9%
	31.12.2007	85,0%	96,8%	69,8%	121,5%	130,6%
	31.12.2006	82,5%	93,2%	56,9%	95,8%	118,5%
Herfindahl-index	31.12.2008	2.349	1.704	2.160	1.986	1.442
	31.12.2007	2.359	1.875	2.222	1.903	1.731
	31.12.2006	2.157	1.685	2.032	1.773	2.178
CR5	31.12.2008	86,2%	79,5%	85,3%	81,6%	70,7%
	31.12.2007	87,3%	82,8%	85,0%	79,6%	73,5%
	31.12.2006	85,5%	79,2%	87,8%	77,6%	77,8%

Source: NBRM, based on data submited by banks

The diverged movements of the risk level of the credit exposure to the corporations and other clients sector in the first and the second half of 2008, were also evident through the indicators for the main activities[72] of this sector, and particularly the industry and construction activities, which jointly constitute 48.6% of the total credit exposure to the corporations and other clients sector. In the first half of 2008, most of the indicators demonstrated positive developments. However, in the second half of 2008, the trend evidently switched towards deterioration of the indicators for the risk level, signalizing deterioration of the quality of portfolio of this sector. However, neither of the analyzed activities at the end of 2008 reported full coverage of the exposure classified in C, D and E with loan loss provisions.

The credit exposure to the corporations and other clients sector is characterized with relatively high level of concentration, in spite of the decrease in 2008. The Herfindahl index for the total exposure to the corporations and other clients sector on December 31, 2008 equals 1.981 index points, which is above the acceptable concentration level[73], and the high concentration is also illustrated with the value of CR5-indicator of 80.7%. Observed by activity, especially high concentration level was registered in the exposure to the industry and construction, where the Herfindahl-index exceeds 2.000 index points, and the CR5-indicator exceeds 85%. This indicates that the credit risk from the exposure to

[72] The analysis includes five activities (industry, agriculture, hunting and forestry, construction, retail sales and wholesales, and transport and communications), jointly constituting 89.7% of the total credit exposure to the corporations and other clients sector, and their contribution to the creation of the gross domestic product in 2008, according to the data of the State Statistical Office, equaled 60.5%.

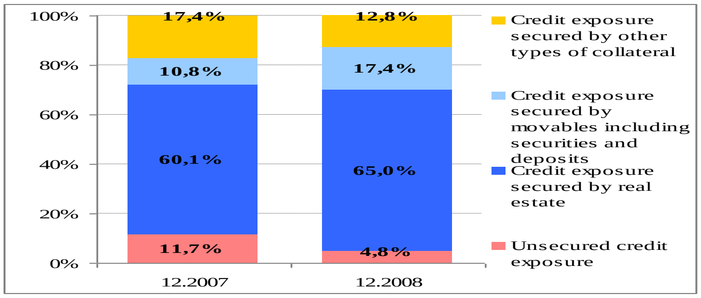
[73] Acceptable concentration level is considered when the Herfindahl index is between 1000 and 1800.

the corporations and other clients sector is concentrated in several banks of the banking system, which, in turn, implies that the higher deterioration of the credit exposure quality, if any, would not have equal effect on all banks.

The coverage degree of the credit exposure to the corporations and other clients with collateral could be considered satisfactory. At the end of 2008, above 95% of the credit exposure to the corporations and other clients was secured with collateral, and only 4.6% remained uncollateralized. The structure of collateral is dominated by real estate, covering 65% of the credit exposure to the corporations and other client sector. Given the lack of functional property market, and therefore, a relevant source of market prices of real estates, most often, in the practice, the banks accept the real estate as collateral at estimated value. This phenomenon bears some latent risks which primarily arise from the features and developments on the property market (property location, physical characteristics, liquidity, market depth, etc.), and the potential divergences of the collateral market value (price) from its estimated value. In conditions of deceleration of the economic growth and decrease in the property market turnover, greater divergences could occur between the estimated and the market value of the property, which in the case of foreclosure would turn into loss for the banks. Hence, even though the credit exposure to the corporations and other clients sector is formally collateralized, the essential collateralization in the case of foreclosure, if any, is disputable and depends on the market circumstances and characteristics of the subject property presented as collateral.

Figure 97

Structure of credit exposure to the corporations and other clients sector by type of collateral



Source: NBRM, based on the report on the structure of credit exposure to corporations and other clients by type of collateral, submitted by the banks

Besides the direct credit risk to the banks, the substantial presence of so called indirect credit risk is additional risk factor to the future changes in the risk level and the level of potential losses generated from the credit portfolio. While the direct credit risk is due to the direct deterioration of the credit and purchasing power of the client, the indirect credit risk would arise from the incapability to absorb the increase in the credit liabilities, which would occur from the developments of some macroeconomic variables. Major source of the indirect credit risk is the use of the so-called currency clauses (credits with currency component) for borrowers with mismatched currency structure of cash flows or currency position, thereby being exposed to currency risk, and hence, their creditworthiness and purchasing power is sensitive to the potential changes in the exchange rate. As of December 31, 2008, the currency structure of the exposure to the corporations and other clients sector, the exposure with currency component dominates, making up 58.5%. On the other hand, the share of credits with currency component to corporations and other clients sector which are certainly considered to have their currency risk covered (net exporters and borrowers whose product price depends on the price changes on the international stock markets) constitute only 11% of the total credits with currency component approved to this sector[74]. Another source of indirect credit risk are the contractual clauses of adjustable interest rates[75], allowing the banks to transmit the interest rate risk to their clients, Thus, on December 31, 2008, 62.7% of the total credits to nonfinancial legal entities were credits with so-called adjustable interest rates[76]. The

[74] Source: DK-2 and KDK-2 reports (on the foreign currency credits and Denar credits with currency clause to residents) the banks submit to the NBRM.

[75] Adjustable interest rates are those changed with a decision of the bank's management bodies.

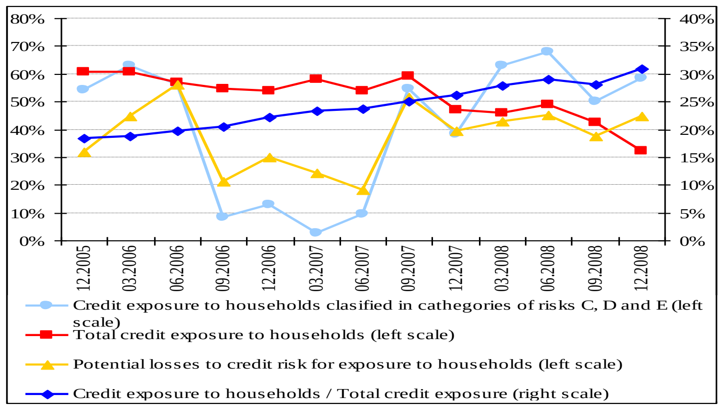
[76] Source: Report on credit structure, by type of interest rate, the banks submit to the NBRM.

indirect credit risk arises primarily from the way in which the banks have conducted their business strategies and credit policies over the recent years, and is emphasized at times of increasing the macroeconomic risks in the country. Hence, the effectuation of the indirect credit risk, if any, besides its severe effects on the credit exposure quality, and thus, increasing the losses on impairment, will also lead to reconsideration of the strategic operational aspects, particularly at banks which include the currency clauses or adjustable interest rates clauses in most of the credit products, without taking account of economic characteristics of their clients.

3.4.3. Risk level of the credit risk exposure to the household sector

Credit exposure to the households sector in 2008, registered an upward trend of the risk level. The deterior ation of the risk profile of the exposure to households is due to the faster increase in the credit exposure classified in higher risk categories, compared to the increase in the growth of the total exposure to the household sector. At the end of 2008, the credit exposure to the households classified in higher risk categories and the respective potential credit risk losses reported an annual growth rate of 58.3% and 44.7%. These rates exceeded the annual growth rate of the total credit exposure to the household sector which at the end of 2008 equaled 32.3% and registered steady decrease. Most of the exposure to households is relatively "young" created over the recent years, when the lending terms were generally loosened, which makes the process of so-called "maturing" of the portfolio and deterioration of its risk profile expected and evident. Still, at the end of 2008, as a prudential response to the effects of the global financial crisis and the responses and measures by the central banks, the banks tightened their credit policies. The higher sensitivity of the income and of the creditworthiness of the households to the potential adverse changes in the economic surrounding, which is expected to increase over the next period, could further decelerate the growth of credit exposure to this sector and deteriorate its risk profile.

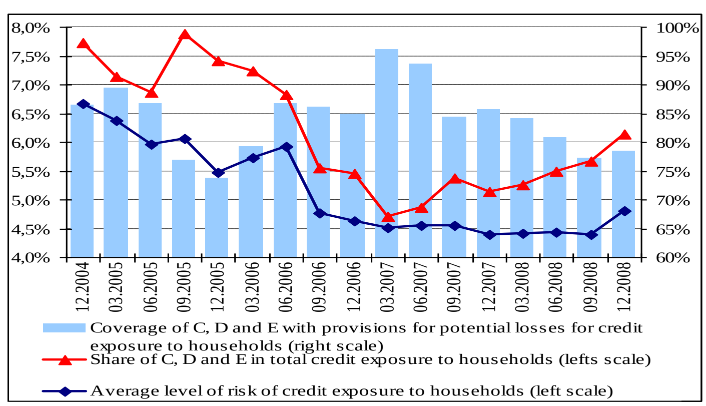
Figure 98
Annual rates of change in the credit exposure and the potential credit risk losses on households



Source: NBRM, based on data submited by banks

The increase in the credit exposure to households classified in higher risk categories was directed towards deterioration of the indicator for the average risk of exposure to households. On December 31, 2008, the average risk level of the credit exposure to households equaled 4.8% and compared to the end of 2007 went up by 0.4 percentage points. Also, the exposure classified in C, D and E risk category accounts for 6.1% of the total credit risk exposure to the household sector, and compared to the end of 2007, it went up by one percentage point.

Figure 99
Dynamics of the indicators for the credit exposure to the household sector



Source: NBRM, based on data submited by banks

If the banks did not write off the exposure to the household sector in 2008, the average risk level and share of exposure classified in C, D and E in the total exposure to the household sector at the end of 2008 would have registered higher values of 5.1% and 6.4%, respectively. The acceleration of the growth of credit exposure classified in C, D and E acted towards decreasing the indicator for the coverage of this exposure with loan loss provisions by 7.3 percentage points, and at the end of 2008 it equaled 78.4%.

The deterioration of the risk indicators in 2008 was also present in most of the products constituting the credit exposure to households. On annual basis, an increase in the average risk level was reported at the consumer credits, the current account overdrafts, the exposure based on credit cards and other credits which jointly, at the end of 2008, encompass more than three quarters of the total credit exposure to the households. In 2008, the risk indicators of the credit exposure based on credits for residential and business facilities and car credits improved, but their joint share in the total credit exposure to the households at the end of 2008 equaled 24.1%. In addition, only the loan loss provisions for these two types of credit exposure to the households at the end of 2008 fully covered the exposure classified in riskier categories. Moreover, the coverage of the riskier exposure with loan loss provisions for consumer credits registered an annual drop of significant 14.0 percentage points.

Table 25
Indicators for the risk level and concentration by product of the credit exposure to the households

Indicators for risk level and concentration of credit exposure	Date	Residential and commercial real estate credits	Consumer credits	Overdrafts	Credit cards	Car credits	Other credits
Share of „C", „D" and „E" in total credit exposure	31.12.2008	2,9%	10,1%	6,0%	4,6%	2,9%	8,1%
	30.06.2008	4,3%	8,5%	5,0%	3,8%	4,3%	4,3%
	31.12.2007	4,5%	7,1%	6,0%	3,5%	3,6%	5,0%
	31.12.2006	5,3%	6,6%	5,1%	3,2%	n.p	6,5%
Average level of risk	31.12.2008	3,7%	6,0%	4,7%	3,9%	3,3%	7,8%
	30.06.2008	4,6%	5,5%	4,2%	3,2%	4,2%	5,9%
	31.12.2007	4,8%	5,3%	4,4%	3,2%	4,1%	5,3%
	31.12.2006	5,7%	5,0%	3,8%	2,4%	n.p	6,7%
Coverage of „C", „D" and „E" with provisions for potential losses	31.12.2008	129,3%	59,7%	77,8%	83,7%	114,8%	96,8%
	30.06.2008	105,2%	65,0%	83,4%	83,4%	96,9%	134,7%
	31.12.2007	106,3%	73,7%	74,1%	90,4%	113,5%	106,1%
	31.12.2006	107,2%	75,6%	74,3%	75,8%	n.p	104,0%
Herfindahl-index	31.12.2008	2.185	1.469	3.135	5.343	2.260	5.940
	31.12.2007	2.155	1.778	3.122	5.210	2.597	2.494
	31.12.2006	2.954	1.721	2.613	5.485	n.p.	2.393
CR5	31.12.2008	87,9%	91,7%	94,0%	89,2%	95,1%	97,5%
	31.12.2007	88,1%	82,5%	97,3%	93,8%	93,8%	90,0%
	31.12.2006	96,3%	76,4%	93,5%	99,1%	n.p.	84,3%

* **Note:** Banks started to report data to NBRM for commercial real estate credits and car credits as of 31.03.2007. The cathegory „other credits" is composed by all other credit products which are not included in previous cathegories.

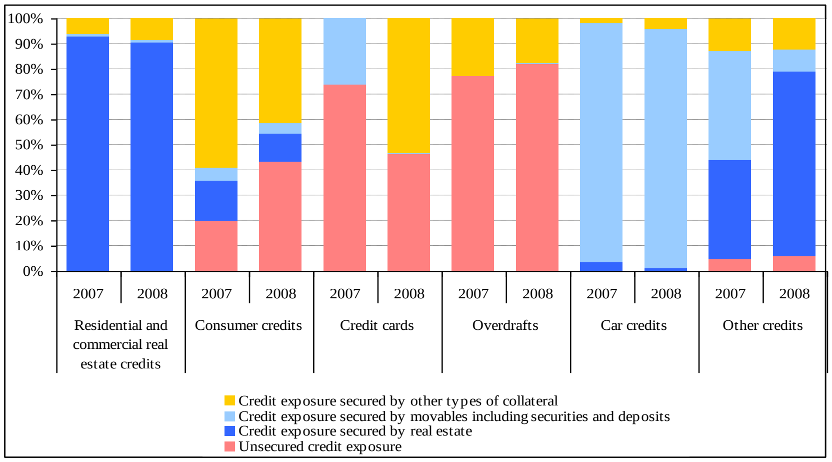
Source: NBRM, based on data submited by banks

The concentration of the credit exposure to the households sector in 2008 remained relatively high, which is higher than the concentration of the credit exposure to the corporations and other clients sector. The Herfindahl index for the overall exposure to the household sector on December 31, 2008, equaled 2.286 index points, which is more than 400 points over the acceptable concentration level. However, it should be noted that on annual basis, this indicator demonstrates a decline of 134 points, thus illustrating the intensification of the competition and the growing orientation of the banks' lending activity to this sector. The high concentration of credit exposure to the household sector is also demonstrated through the value of CR5-indicator of 84.3%, and through the values of these indicators of certain products for the household sector. Only at the consumer credit exposure, the Herfindahl-index is within the acceptable level, and at the credit card exposure is as much as over 5.000 points. These high concentration indicators, on the one hand, indicate the dominant position of several banks on the household lending markets, but on the other hand, they indicate that the potential greater deterioration of the risk level of exposure to households, either due to the materialization of the direct or the so-called indirect credit risk will primarily affect exactly the same few banks.

The indirect credit risk is considerably present in the credit exposure to the household sector. At the end of 2008, 45.5% of the household credits have a currency component (foreign currency credits or Denar credits with currency clause), and 87.3% of the total household credits are credits with so-called adjustable interest rates[77]. This implies that the banks transfer the currency and interest rate risk to the borrowers of the household sector, same as of the corporate sector. As the income and the economic power of the households is sensitive to the potential changes in the macroeconomic variables (primarily the exchange rates or interest rates), it helps the banks not to "get rid" of these risks, but to transform them into an indirect credit risk.

At the end of 2008, the uncollateralized exposure in the total banks' credit exposure to the households was relatively high, constituting 35.7%[78]. Analyzed by credit products, most of the uncollateralized exposure arises from the exposure based on credit cards and current account overdrafts[79], which additionally emphasizes the risky nature of the exposure based on these credit products. On the other hand, more than 90% of the exposure based on credits for residential and business facilities is collateralized with real estate mortgage, and most of the car credits are collateralized with pledge on movables (usually cars or other transport vehicles). Same as in the exposure to corporations and other clients sector, at the credit exposure to the household sector, the essential coverage of the credit exposure with various forms of collateral mostly depends on the features of the secondary market for the types of property used as collateral.

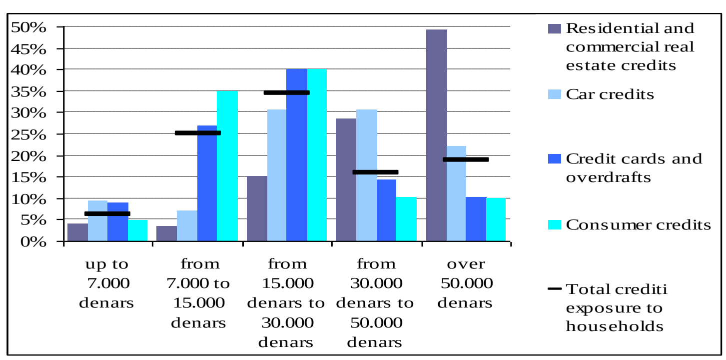
Figure 100
Structure of credit exposure to the household sector by type of collateral



Source: NBRM based on data submited by banks

The credit portfolio analysis according to the amount of income of the borrowers indicates that most of the banks' portfolio is composed of borrowers with monthly income, on all bases, ranging from Denar 7,000 to 30,000. At the end of 2008, the share of credit exposure to persons with monthly income from Denar 15,000 to 30,000 and to persons with monthly income from Denar 7,000 to 15,000 is 34.3% and 24.9%, respectively, of the total credit exposure of the banks. This distribution of the total credit exposure, to a certain

Figure 101
Allocation of credit exposure to the households by amount of monthly income of the borrowers



Source: NBRM based on data submited by banks

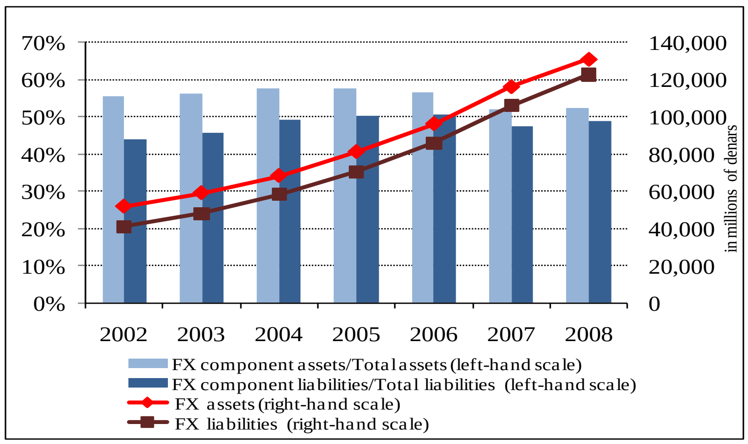
[77] Source: Report on credit structure, by type of interest rate, the banks submit to the NBRM.
[78] Source: Report on structure of credit exposure to households, by type of collateral, the banks submit to the NBRM
[79] Since March 2008, when determining the capital adequacy ratio, the calculation of the credit risk weighted assets, includes the exposure based on credit cards and current account overdrafts with 125% higher risk weight.

extent, was expected, taking into account the size of the average nominal net wage paid in December 2008 of Denar 17,363. On the other hand, it proves that the credit exposure of the banks to the household sector and the size of the potential losses on impairment, are sensitive and interdependent with the overall macroeconomic developments, and particularly those related to the developments in the employment and the actual purchasing power of the households. Analyzed by credit product offered to the households, most of the exposure to consumer credits and credit cards and current account overdrafts are borrowers who belong exactly to these categories of monthly income. On the other hand, the car credits and credits for residential and business facilities reported higher exposure to borrowers with higher income, indicating that these credit products are more available and used by persons with higher income. The lowest portion of the exposure is to persons with an income below Denar 7,000, which is quite understandable, taking into account that the low income restricts the absorbing capacity of this group of borrowers for higher debt.

3.5 Currency risk

The high share of currency component[80] in the total assets and liabilities of the banks in the Republic of Macedonia remained in 2008. The evident psychological pressures from the uncertainty caused by the international financial crisis and the expectations for the possible effects on the domestic economy, brought about further strengthening of the currency component, particularly of the deposit base. The items with currency component on the assets side make up 52.3% (an increase of 0.3 percentage points compared to 2007), and the presence of currency component on the liabilities side equaled 49.0% (an increase of 1.6 percentage points compared to 2007). These developments interrupted the trend of gradual decrease in the share of currency component in the banks' balance sheets that started in 2006. At the end of 2008, the gap between the currency component on the assets side and on the liabilities side across the banking system kept on narrowing.

Figure 102
Share of assets and liabilities with currency component in the total banks' assets and liabilities



Source: NBRM based on data submited by banks

The aggregate open currency position[81] of the banking system kept on decreasing in 2008, which as a trend started in 2005. This decrease, alongside the increase in the banks' own funds caused permanent downtrend of their ratio. On December 31, 2008, the aggregate open currency position of the banking system was long and totaled Denar 9,157 million, which is by 10% less compared to 2007. In addition, the aggregate open currency position equaled 27.9% of the banks' own funds, which is an annual decrease of 8.7 percentage points.

[80] Assets and liabilities with currency component include assets and liabilities items in foreign currency and in Denars with currency clause.
[81] Aggregate open currency position of the banking system is a sum of the aggregate currency positions of the banks. The aggregate long currency positions of the banks are with positive sign, and the aggregate short currency positions of the banks are with negative sign.

Figure 103
Structure of the aggregate open currency position across the banking system

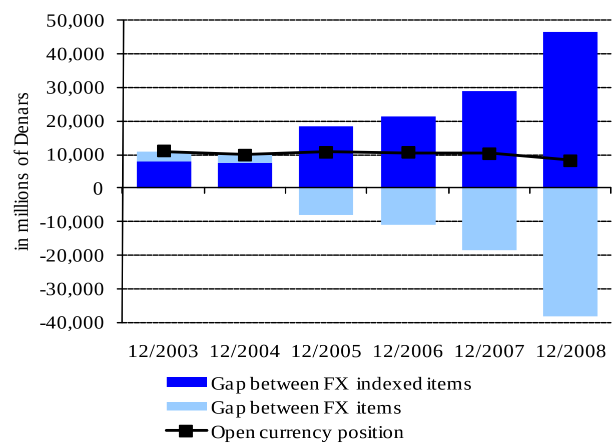
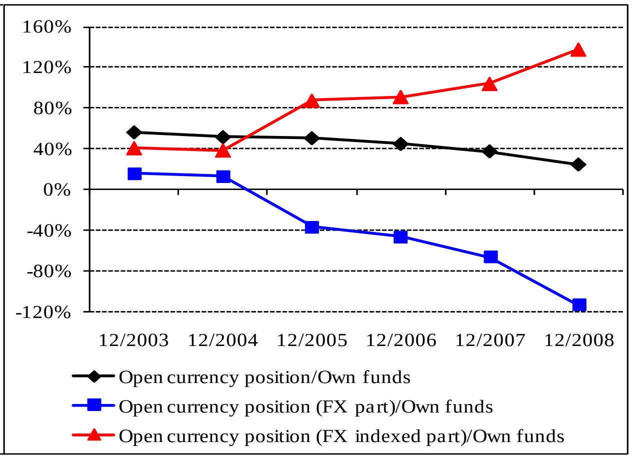


Figure 104
Share of assets and liabilities with currency component in the total banks' assets and liabilities



Source: NBRM, based on data submitted by banks

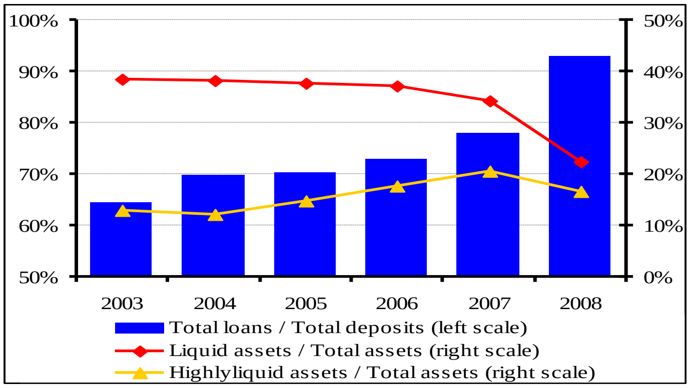
The long aggregate currency position across the banking system is still due to the positive difference between the assets and the sources of funding in Denars with currency clause. On the other hand, the negative gap between the assets and liabilities in Denars kept on widening. Over the recent years, given the permanent moderate growth in the foreign currency deposits and the faster growth of the Denar deposits, the propensity of the banks to place funds in foreign banks decreased, seeking to increase the lending to private sector in the country. The lack of other currency risk hedging instruments, the banks actively applied the currency clauses in their credit products, thus transforming the currency risk into the so called indirect credit risk. On the other hand, the deposit products with currency clause are less present.

3.6 Liquidity risk

The banking system of the Republic of Macedonia in 2008 was holding sufficient level of liquid assets for smooth servicing of all its liabilities and permanent regular operating. Major source of funding the banks' operations were the deposits of domestic legal entities and households, the external sources of funding were used moderately, and the domestic interbank debt was low. All these elements restricted the occurrence and the dissemination of the adverse effects of the disturbances on the global financial markets, thus contributing to the maintenance of the banking system stability. In the last quarter of 2008, the banks reported certain liquidity pressures primarily arising from the perception and the interpretation of the international financial disturbances by the domestic depositors, and from the outflows of funds for repayment of the external liabilities. The multi-annual permanent growth in lending was accompanied with the acceleration of the maturity and currency transformation of the banks' assets, bringing about significant broadening of the gap between the assets and liabilities with shorted contractual maturities. The high level of openness of the domestic economy, the growing imbalances and the growth in the domestic interest rates, given the global economic crisis, inevitably lead to increasing the risks of macroeconomic nature, thus creating the need of increasing the level of prudency in the liquidity management by the banks.

In 2008, the banks largely used their liquidity potential as a source of funding their activities, i.e. particularly the lending. The nonfinancial entities' total credits -to- deposits ratio continued with its uptrend, and at the end of 2008 it reached historically the highest level of 92.8% (an increase of 15.0 percentage points compared to 2007). On the other hand, the liquid assets[82] constituted 22.5% of the total assets at the end of 2008, and on annual basis it went down by 11.7 percentage points. These developments increase the banks' exposure to liquidity risk, particularly with respect to the amount of foreign assets they hold, which is especially noticeable in conditions of relatively high euroization of the domestic economy and the gradual change in the preferences of the domestic depositors to save in foreign currency. Additionally, the increase in the competitiveness in the banking system, the lower availability of sources of funding, along with the contracting monetary policy, created a need of revising the business strategies of the banks, particularly the lending activity and initially demonstrated through tightening of the credit policies by the banks.

Figure 105
Development of the share of liwuid assets in the total assets and loans-to-deposits ratio

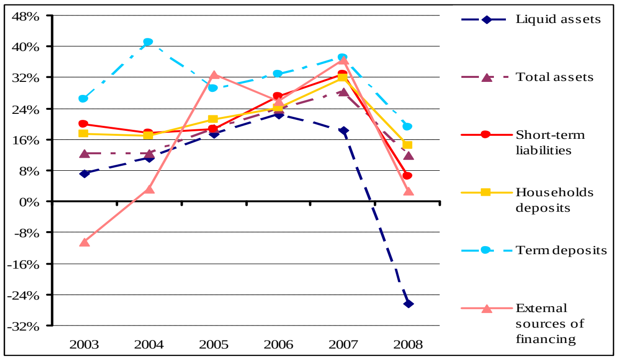


Source: NBRM, based on data submitted by banks

The decrease in the liquid assets, while the sources of funding increase, which continued in a rather slower pace in 2008, made most of the liquidity indicators demonstrate faster downtrend. Unlike the developments of the last several years, in 2008, the amount of liquid assets went down by 26.4% on annual basis. On the other hand, the different categories of sources of funding went up on annual basis, although in far slower pace compared to the past years (Figure 106). As a result of such divergent movements, the indicators for the coverage of short-term liabilities, total liabilities and household deposits with liquid assets also went down on annual basis. At the end of 2008, the coverage of short-term liabilities with liquid assets equaled 33.0%, registering an annual fall of 14.7 percentage points. The household deposits - liquid assets coverage equaled 52.2%, which is the lowest level of this indicator in the last six years. The downtrends of the volume of liquid assets and liquidity indicators, in the context of undermined real sector performances and stricter terms on the international capital markets restrict the potential lending growth, but they also increase the vulnerability of the banks to larger liquidity outflows, if any.

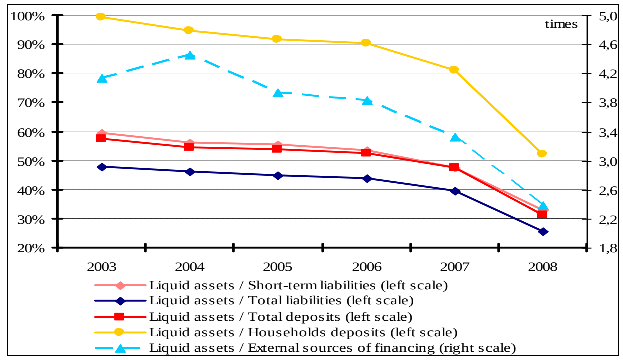
[82] Liquid assets include highly liquid assets, short-term funds placed with foreign banks and placements in other short-term debt securities. The highly liquid assets includes cash and balances with the NBRM, CB bills, correspondent accounts with foreign banks and placements in short-term securities issued by the government.

Figure 106
Comparison of the annual rates of changes in the liquidity assets, total assets and selected categories of sources of funding



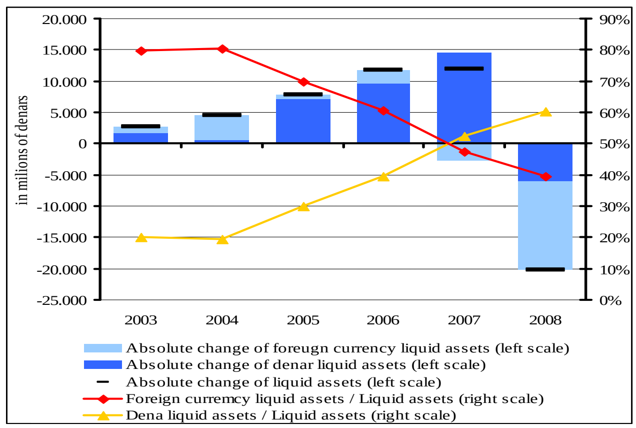
Source: NBRM, based on data submited by banks

Figure 107
Developments of selected liquidity indicators for the banking system



The downward trends of the liquid assets in 2008, were accompanied with continuation of the trend of its currency transformation, towards decreasing the share of currency component. At the end of 2008, the foreign currency component of the liquid assets accounted for 39.6% of the liquid assets. Also, in 2008, the foreign currency component of liquid assets went down by Denar 14,034 million, i.e. by 38.6%. Same as in the last several years, the conversion of foreign currencies placed with foreign banks to placements in Denars and in Denars with currency clause in the domestic economy triggered these developments. At the end of 2008, the liquid assets in Denars reported a decrease of Denar 6,123 million, i.e. 15.3%. The changes in currency structure of liquid assets, having domestic economy which acts as an absorber of external shocks, is a factor with adverse effects, from the aspect of both the maintenance of macroeconomic stability, and the preservation of the stability of the banking system.

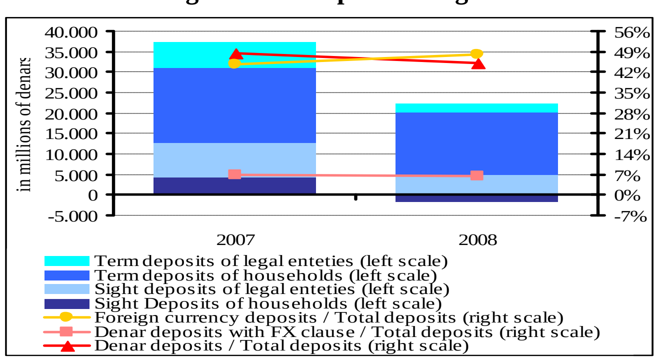
Figure 108
Currency features of liquid assets and absolute annual change



Source: NBRM, based on data submited by banks

The structure of banks' sources of funding in the Republic of Macedonia is dominated by nonfinancial entities' deposits. At the end of 2008, they made up more than 72% of the total sources of funding, and registered an annual growth of 12.8%, which is the lowest annual growth rate of the deposits over the last six years. Most of this growth is due to the increase in the household time deposits, which points to the greater propensity of the households to save, which, to a certain extent, is also determined by the growing trend of the deposit interest rates. Moreover, in 2008, the currency preferences of depositors started changing towards increasing the share of foreign

Figure 109
Currency structure of deposits and absolute annual change in some deposits categories



Source: NBRM, based on data submited by banks

currency deposits in the structure of the banks' deposit core.

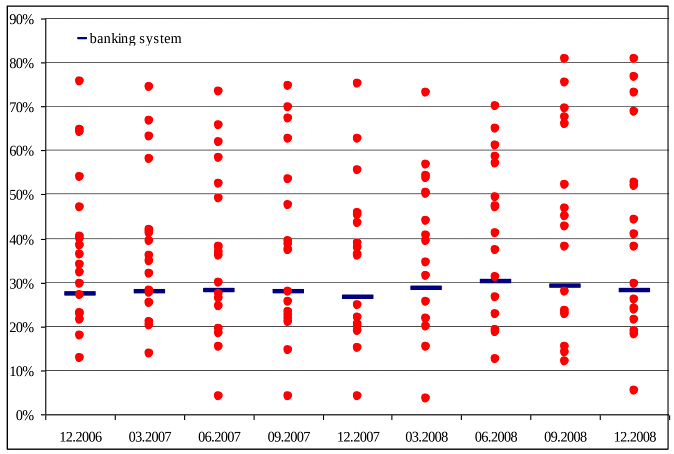
Table 26
Relative significance of sources of funding

Sources of funds' indicators	2003	2004	2005	2006	2007	2008
Primary sources of funds (deposits) / Total sources of funds	66,9%	69,7%	69,7%	70,7%	71,7%	72,2%
Secondary sources of funds / Total sources of funds	10,5%	9,5%	11,3%	12,5%	13,4%	12,9%
Primary sources of funds(deposits)/ Total liabilities	83,3%	84,5%	83,4%	83,6%	82,8%	81,9%
Secondary sources of funds / Total liabilities	13,0%	11,5%	13,5%	14,7%	15,5%	14,6%

Sources: NBRM, based on data received by banks

The concentration of deposits in the banking system of the Republic of Macedonia, measured through the share of the twenty largest deponents in the total deposits remained relatively stable. In the last three years, this share in the banking system ranged from 25% to 30%. However, observed by bank, large differences could be noticed, with some banks registering remarkable deposit concentration which exceeds 50%, reaching up to 70%. The differences in the deposit concentration primarily reflect the differences in the approach to the market and the competitive position of the banks. However, the high concentration of some banks also represents a higher risk to the liquidity position, in the case of potential outflow of the deposits of the larger depositors.

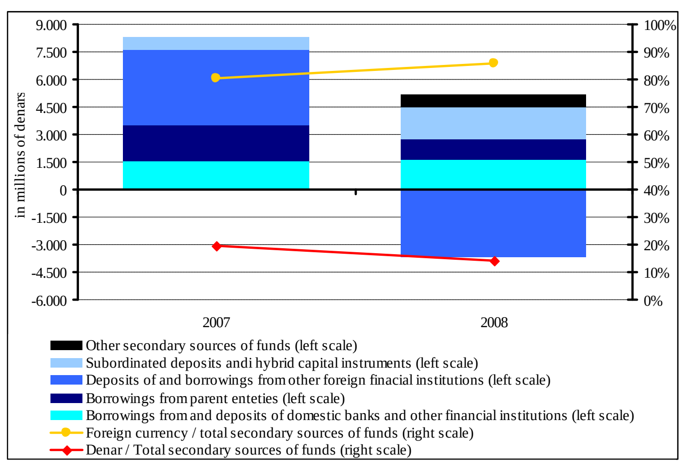
Figure 110
Share of twenty largest depositors in the total deposits for the banking system and by banks



Sources: NBRM, based on data received by banks

The share of secondary sources of funding in the structure of sources of funding of the banking system is considerably lower compared to the deposits. At the end of 2008, they accounted for 12.9% of the total sources of funding, which is by 0.5 percentage points less compared to 2007. The decrease in the significance of the secondary sources of funding in the total sources of funding of the banks is primarily a result of the substantial deceleration of their growth (from 38.2% in 2007 to only 4.9% in 2008). The deceleration of the annual growth of the secondary sources of funding is due to the annual fall in the deposits and borrowings from foreign banks and financial institutions mainly in the second half of 2008. However, the other categories of secondary sources of funding went up,

Figure 111
Currency structure of secondary sources of funding and absolute annual change in the constituting categories



Sources: NBRM, based on data received by banks including the funds used by the banks' parent entities. This, not only confirms the support of the domestic banks from their parent entities, but also plays an important role for maintaining the capital adequacy, because a portion of these funds are subordinated deposits and hybrid capital instruments. The currency structure of secondary sources of funding registered no significant changes in 2008.

Table 27
Indicators based on residual contractual maturity of the assets and liabilities

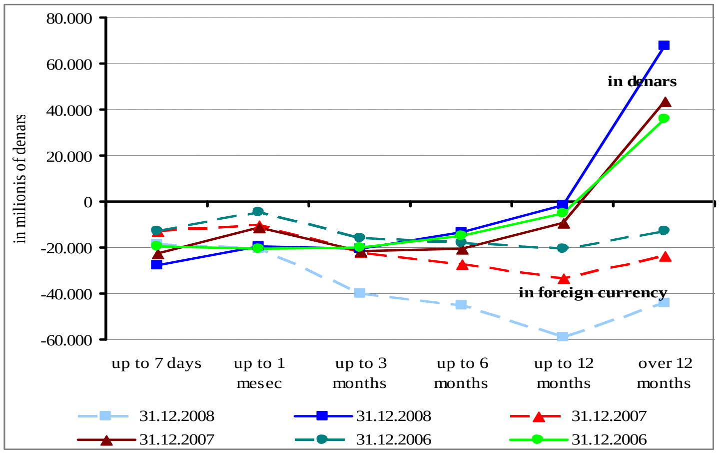
Indicators	2004	2005	2006	2007	2008
Assets with residual contractual maturity up to one month / Total assets	41,0%	40,4%	37,0%	36,1%	28,0%
Libialities with residual contractual maturity up to one month / Total liabilities	64,0%	60,0%	58,5%	49,7%	47,8%
Assets / Liabilities (with residual contractual maturity up to one months)	78,6%	82,1%	72,5%	79,7%	64,4%
Assets / Liabilities (with residual contractual maturity up to three months)	74,0%	77,5%	69,4%	69,9%	59,5%
Assets / Liabilities (with residual contractual maturity up to one year)	86,8%	86,7%	81,5%	77,0%	70,4%

Source: NBRM, based on data submited by banks

The growth of banks' credit activity over the recent years, with a dominant presence of short-term sources of funding, ensured acceleration of the maturity transformation performed by the banks. The several-year trend of broadening the gap between the residual contractual maturity of assets and liabilities intensified in 2008. The cumulative maturity mismatch between the banks' assets and liabilities is particularly evident between the assets and liabilities with contractual residual maturity up to three months.

The maturity transformation of assets and liabilities was also accompanied with acceleration of their currency transformation. The increase in the difference of the contractual maturity of assets and liabilities is significantly faster in the foreign currency assets and liabilities. The cumulative maturity mismatch between the foreign currency assets and liabilities is neither overcome with the last maturity segment, i.e. over twelve months. This is a result of the process of transformation of the foreign currency placements in foreign banks into Denar placements and Denar placements with currency clause in the domestic economy. The higher presence of subordinated deposits and borrowings from parent entities of some banks in the Republic of Macedonia also contributed to the creation of the gap between the contractual maturity of assets and liabilities. The risks which are inherent to the contractual maturity mismatch are particularly evident with the decrease in the foreign currency inflows in the domestic economy, thus increasing the likelihood for making the access difficult or making the assets on the domestic and international financial markets more expensive. This, in the worst case scenario, could lead to serious implications to the stability of the banking system and problems with the operational availability of the banks' foreign currency assets.

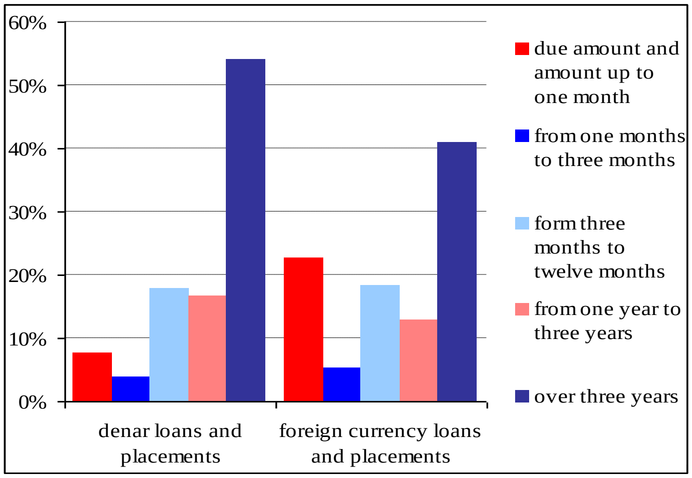
Figure 112
Cumulative contractual residual maturity (mis)match of assets and liabilities of the banking system by currency



Source: NBRM, based on data submited by banks

Liquidity risk is also closely connected with the credit portfolio quality, particularly with respect to its capacity to generate the contractual cash flows of credits with relatively longer maturities. The potential materialization of the credit risk entails certain impairment of projected cash flows from the banks' placements, thus affecting their future liquidity position. This is also illustrated through the structure of contractual residual maturity of credits to nonfinancial entities and the funds placed in banks, which provide additional understanding of the volume of maturity and currency transformation of assets. Assets with residual maturity longer than three years dominate the Denar claims and foreign currency claims, accounting for 54.1% and 41.0% respectively. On the other hand, the share of claims with residual maturity to one month of 22.6% of the total foreign currency placements is considerably higher compared to the respective 7.7% share of claims with residual maturity of up to one month of Denar placements. This difference arises from the presence of funds on correspondent accounts and assets placed with foreign banks with maturity of up to one month, which are a constituent part of the banks' liquid assets.

Figure 113
Structure of claims based on credits to nonfinancial entities and placements in banks according to the residual contractual maturity



Source: NBRM, based on data submitted by banks. Denar credits and placements also include credits in Denars with currency clause

3.7 Insolvency risk

At the end of 2008, the solvent position of the banks in the Republic of Macedonia remained satisfactory. The capital adequacy ratio of the banking system remained as twice as higher than the required minimum of 8%, and each bank held sufficient capital for covering the identified risks. The international developments in 2008 and the series of interventions of the national authorities of the developed countries to recapitalize the banks confirmed the essential importance of the capital position and solvency for maintaining the stability in the banking system, and hence, the financial stability. The banks in the Republic of Macedonia were not involved in activities with complex financial instruments, neither had investments in the international capital markets, which proved to be a kind of protection against potential direct losses due to the financial crisis in the developed countries. However, the difficulties in the operations of the domestic real sector, and the increasing risk premia for countries with relatively low credit rating, could make the two most used sources of increasing the own funds of the domestic banks (reinvested profit and subordinated debt instruments) unavailable in the same volume or price as before. It would inevitably create new challenges for the domestic banks in the area of solvency management and its maintenance at satisfactory level.

Given the decelerated dynamics of the overall activities, while the banks' own funds were growing rapidly, the trend of gradual decrease in the capital adequacy ratio continued in 2008, yet in considerably slower pace compared to the preceding years. In 2008, the banks' own funds registered annual growth of Denar 6,191 million or 22.3%, which is the highest growth rate over the last six years. The largest contribution of 61.2%, to the annual growth of the own funds was made by the growth in the core capital. The additional capital also registered a fast growth of 91.4% in 2008, mainly due to the greater exploitation of subordinate deposits and hybrid capital instruments of parent entities. However, same as in the last several years, in 2008, the risk weighted assets registered faster growth compared to the growth of own funds. As a result of such developments, at the end of 2008 the capital adequacy ratio of the banking system equaled 16.2%, and was by 0.8 percentage points lower compared to the end of 2007. At the same time, all other indicators for the capital position of the banking system went down.

Figure 114
Developments and annual change og selected indicators for the solvency of the banking system

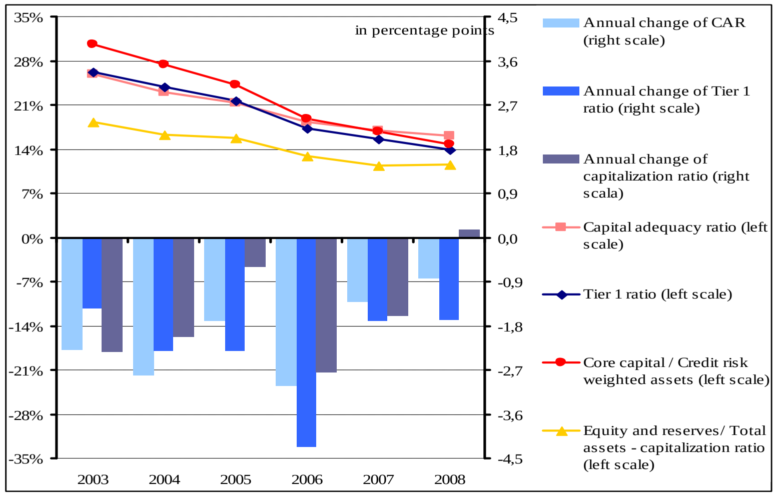
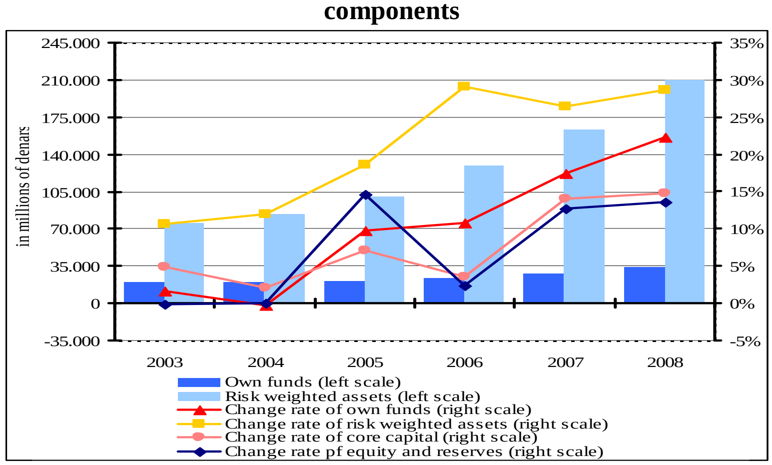


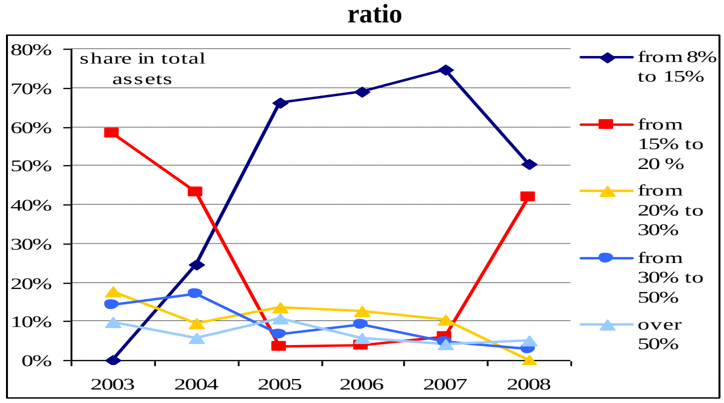
Figure 115
Dynamics and rates of changge in the capital adequacy ratio components



Source: NBRM, based on data submited by banks

The allocation of the banks' assets according to the capital adequacy ratio kept on moving towards lower ratios and illustrates the general trend of decreasing the banks' capital adequacy. At the end of 2008, more than 92% of the bank assets belong to ten banks with capital adequacy below 20%. However compared to the end of 2007, the fastest increase in the share of asset was reported by the banks with adequacy ranging from 15% to 20%, at the expense of the decrease in the share of banks' assets with capital adequacy

Figure 116
Allocation of banks' assets according to the capital adequacy ratio

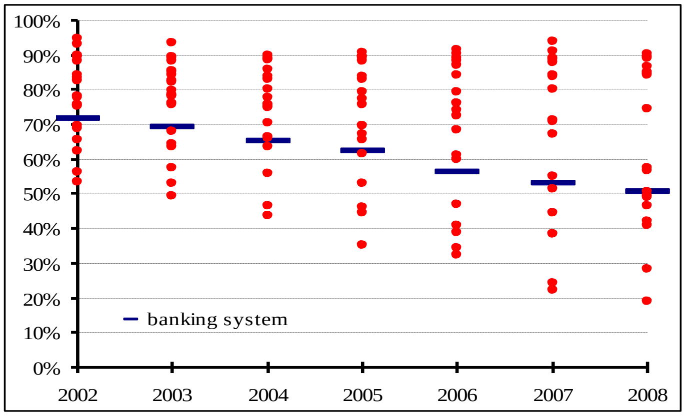


Source: NBRM, based on data submited by banks

ranging from 8% to 15%.

The dynamical growth of risk weighted assets in 2008 contributed to the continuation of the trend of increasing the capital requirement for credit risk, at the expense of the decrease in the portion of own funds over the capital requirement for covering the taken risks[83]. At the end of 2008, 46.9% of the own funds serve for covering the credit risk, and 2.9% for covering the currency risk. However, the allocation of own funds for covering the risks and the decrease in the portion of own funds over the capital requirement for covering risks demonstrates considerable differences among the banks. The banks with more aggressive approach on the market and which registered faster growth in their activities, have lower level of own funds for covering the taken risks. The deceleration of the economic growth and deterioration of the economic environment increases the likelihood for materialization of the taken credit risk and therefore, creates expectations for increasing the losses on asset impairment. In such conditions, the banks with lower level of own funds over the capital requirement for covering risks, would be limited for the future growth in their activities, or would face with the necessity of recapitalization.

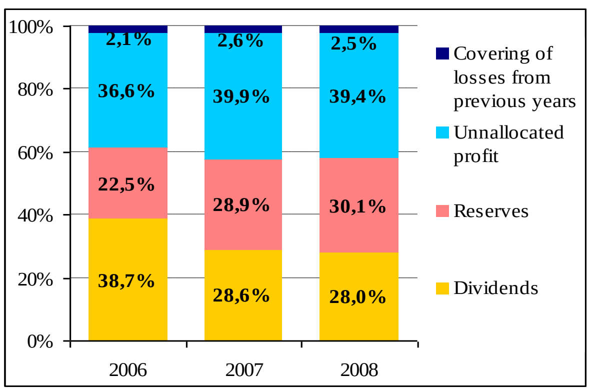
Figure 117
Dynamics of own funds over the capital requirement for covering risks across the banking system and by bank



Source: Internal calculations of NBRM, based on data submited by banks

The conservative dividend policies in 2008 were again a basis for further increase in their core capital, and hence, of the total banks' own funds. In 2008, two thirds of the annual growth of core capital was due to the reinvestment of a portion of the generated profit for 2007, and only one third is a result of new issue of shares. This trend is expected to continue in 2009, taking into account that most of the profit (72.0%) for 2008, with the decisions of the meetings of shareholders, was intended for strengthening of their capital position. The banks' determination to expand their capital base by reinvesting the profit, on the one hand confirms the importance of the profitability for ensuring sustainable operational growth, but on the other hand, shows the banks' sensitivity to the deterioration of the credit portfolio quality, taking into account that the current profit itself is the first absorber of the potential losses on asset impairment.

Figure 118
Profit allocation across the banking system



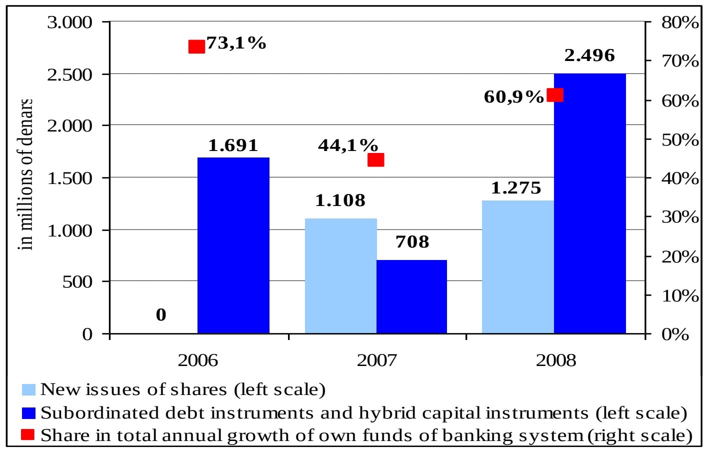
Source: NBRM, based on data submited by banks

[83] Own funds for covering the credit risk equal the multiplication of the credit risk weighted assets by 8%, the own funds for covering the currency risk equal the multiplication of the currency risk weighted assets by 8% and the own funds over the requirement for risk covering equal a residual category and is obtained when the total own funds for covering credit risk and own funds for covering currency risk are subtracted from the total own assets.

Risks to the domestic banks from the financial crisis and its effects on the operations of their parent entities

While the domestic banking system, which same as most of the banking systems in the developing countries, were not directly stricken by the financial crisis, the banking system of developed countries over the recent period, has been facing a series of problems, and even failures of banks or government intervention for their recovery. However, the indirect effects of the negative developments in 2008 have already been evident in the domestic economy, and one of the factors that could affect the activities of the domestic banks, their liquidity and access to capital is the effects of the crisis on the condition of their foreign parent entities. In spite of the fact that domestic banks dominantly owned by foreign banks or financial groups are independent legal entities, incorporated in the Republic of Macedonia, yet, their business strategies are in close relation with the strategic determinations and financial capabilities of their parent entities. Apart from this, the foreign bank groups often apply integrated approach in the liquidity and risk management, at a group level, which more or less could affect the sources of funding, and therefore, the volume of future activities of the domestic banks. In addition, the domestic banks, besides the reinvestment of their profit, as a way of maintaining the capital position, also use the assets of their parent entities, either in the form of new issues of shares by the means of so-called private bid[84] or in the form of subordinated and hybrid capital instruments[85]. In 2008, the foreign parent entities invested Denar 3,771 million in instruments included in the calculation of the own funds of the banks in the Republic of Macedonia, 33.8% of which result from the successful private bids of newly issued shares, and 66.2% are instruments of the additional capital. The global restriction of investments, increase in the risk premia or potential problems "at home" which would encounter the parent entities, increase the uncertainty to the domestic banks, particularly with respect to availability or price of this capital support.

Figure 119
Investments of the foreign parent entities in instruments for increasing the own funds of the domestic banks



Source: SEC and NBRM, based on data submited by banks

Generally speaking, the financial crisis undermined the performances of the financial institutions in all countries, whereby the transmission mechanisms, the pace of spillover of the effects and final implications had been different and determined primarily by the features of the local bank systems and the position and specificity of each institution. In 2008, the price of instruments which represent credit risk insurance (so called credit default swap premium), for almost all financial institutions registered an uptrend, by achieving enormously high and historically unnoticeable values in the September - October period, when the bankruptcy of Lehman Brothers jeopardized the global capital flows. The higher mistrust and skepticism concerning the "soundness" of each financial institution had an adverse effect on the global international money markets and put the credit market on hold in a range of

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[84] According to the Law on Securities, new issues of shares are effectuated through auction or private bid for pre-identified buyers.
[85] According to the Decision on capital adequacy methodology, successful effectuation of new issues of shares increases the banks' core capital, and the subordinated debt instruments and hybrid capital instruments increase the banks' additional capital.

developed countries. This meant harder work conditions of all financial institutions, including those which were not initially included in the activities of the investment banking. **The permanent hindering of the work conditions over the last two years also had its effect on the performances of the foreign financial institutions present on the Macedonian banking market through its daughter banks.** Over the last two years, the rate of return on the average capital as a basic measure of profitability of the foreign parent bank with significant presence in the Republic of Macedonia has registered steady downtrend. On the other hand, the parent banks originate from banks with banking systems which according to their development level could be considered as "mature" and have easier access to the international financial markets, which helps them manage their solvency more easily. This is also evident through the lower capital adequacy ratios, and their more stable development.

Figure 120
Capital adequacy and return on capital for some foreign parent banks

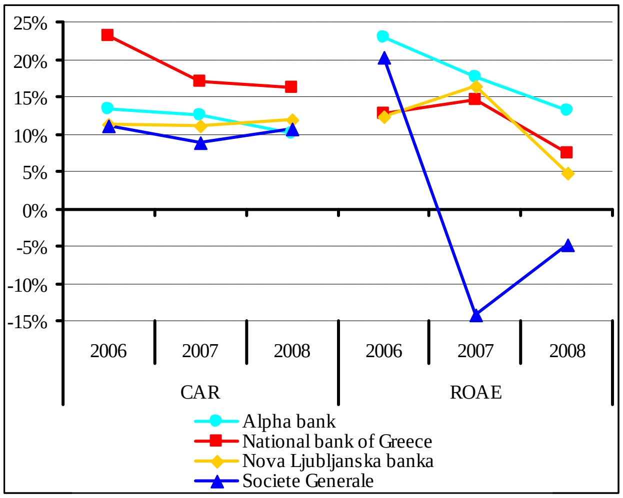
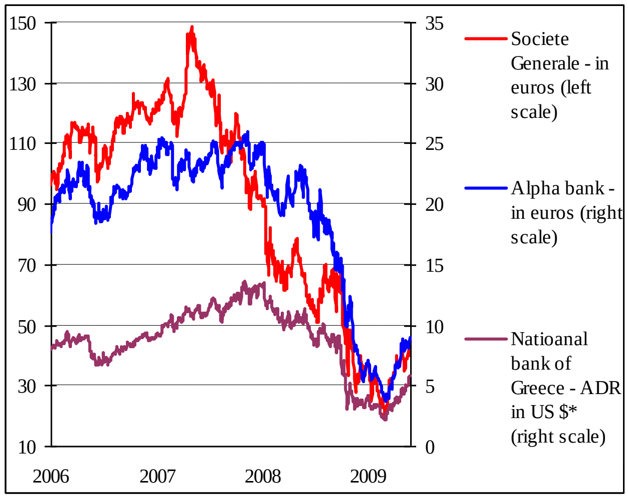


Figure 121
Changes in the price of shares of some foreign parent banks



Source of data: Annual audited financial statements of parent bank and Bloomberg,
*ADR - American depositary receipt

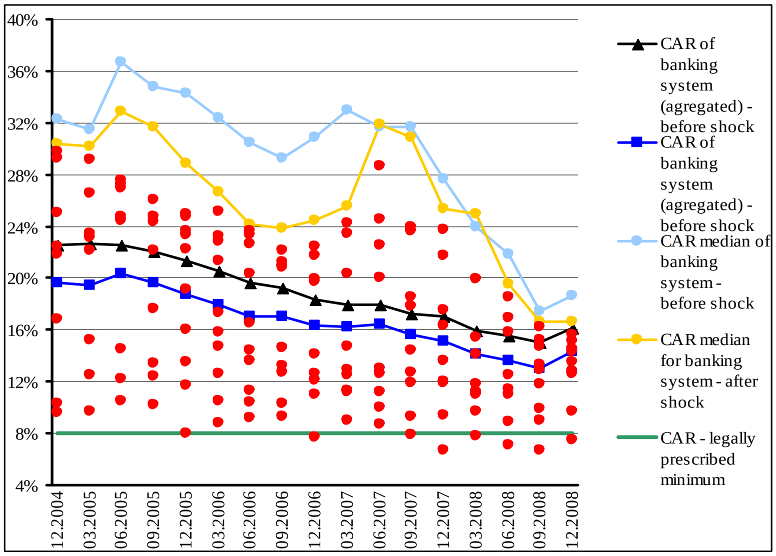
The prices of listed shares of parent banks reported a permanent downward trajectory, which confirms the evident sensitivity of the investors to the situation in the financial sector and the higher aversion for investment in equity instruments issued by banks. However, it is encouraging that none of these foreign banks in 2008 find itself in a situation to ask for direct financial support from the authorities in their domicile countries. One should take into account that the international financial reporting standards used in the presentation of the financial statements of parent banks impose principles for recognition of impairment of financial assets, and consequently, creation of credit risk provisions, based on past business events, i.e. do not take into account the general trends of investments in the real economies and future losses as a result thereof. Hence, the transformation of financial crisis into a real sector crisis and the general slowdown of the foreign trade developments, means that it will take some time to claim that there is a full recovery and the risks are decreasing.

Assessment of the resilience of the banking system to shocks through stress -test simulations

The banking system in the Republic of Macedonia is relatively resilient to various hypothetical shocks, with sufficient capacity to absorb the negative effects of such shocks. The various stress-test simulations show that even in the case of simultaneous materialization of credit, currency and interest rate risk of extreme nature, the capital adequacy across the banking system would not fall below the minimum requirement of 8%. Same as in the recent periods, the banking

system is mostly exposed to credit risk, also illustrated by the results from various simulations for insulated credit shock.

Figure 122
Results from stress-test simulation for the effect of simultaneous credit, currency and interest rate shock on the capital adequacy



Source: Internal calculations of NBRM, based on data submitted by banks
*The red dots represent the result of the stress-test simulation (capital adequacy ratio) by bank, showing only the banks with a result below the capital adequacy median for the banking system after the shock

The simulation based on the simultaneous materialization of credit, currency and interest rate risk[86] **and its influence on the banks' capital adequacy on December 31, 2008, indicates that the overall banking system would have sufficient own fund to absorb this hypothetical shock.** The capital adequacy rate would reduce by 1.8 percentage points from the initial, but would not fall below the minimum requirement of 8%. The historical comparison of the results of this simulation indicates that notwithstanding the trend of decreasing the capital adequacy and the various pace of this phenomenon in each bank, the capital adequacy ratio at this extreme scenario, however, would never fall below 8%. Additionally, the results from this simulation by bank also indicate a satisfactory resistance level. On December 31, 2008 only one bank would have an adequacy below 8%, also proved with the results from the simulations for previous dates. Yet, the results of this simulation should be interpreted prudently, since the effect of the materialization of the indirect risk of the potential loss of value of the domestic currency or of the use of the option for one-side change in the interest rates, and therefore, harder encumbrance for the borrowers has not been included. The simulation for insulated credit shock in the form of higher exposure classified in riskier categories (C, D and E) by 50%, shows that the adequacy ratio across the banking system would reduce by 2.4 percentage points, but yet, above the minimum requirement.

The influence of the credit shock on the capital adequacy could also be illustrated with a simulation for simultaneous deterioration of the quality of credit exposure to the household and corporations and other clients sectors, i.e. migration of the credit exposure from the current risk category towards riskier categories. This case simulates a transfer of 10% or 30% of the credit exposure from the current classification to the next two riskier categories, distributed equally. In such case, the capital adequacy of the banking system would go down by 1.9 percentage points at the first scenario, i.e. by 5.6 percentage points, at the second, more extreme, scenario. The redistribution of the credit exposure to nonfinancial entities, from the categories with lower risk level to the categories with higher risk level would cause deterioration of the credit exposure quality indicators. The average risk level of the credit exposure in the banking system would reduce by 1.5 percentage points, i.e. by 4.4 percentage points, for the both scenarios, respectively. This simulation also indicates that the banking system is more sensitive

[86] This simulation assumes simultaneous increase of 50% in the credit exposure in C, D and E risk categories, depreciation of the exchange rate of the Denar against the Euro and the US Dollar of 20% and increase in the domestic nterest rates by 5 percentage points.

to the possible deterioration of the quality of credit exposure to the corporations and other clients sector, rather than to the households sector.

Table 28

Initial situation and results of the potential deterioration of the quality of credit exposure to corporations and other clients and to households

Credit exposure which migrates in the next two risk cathegories	Scenario 1 - migration of 10% of credit exposure			Scenario 2 - migration of 30% of credit exposure		
	CAR	% of C, D and E in total credit exposure	Average level of risk	CAR	% of C, D and E in total credit exposure	Average level of risk
Baseline balance for total credit exposure	**16,2%**	**6,4%**	**5,8%**	**16,2%**	**6,4%**	**5,8%**
Results of simulation for migration of total credit exposure	**14,3%**	**10,5%**	**7,3%**	**10,6%**	**18,8%**	**10,2%**
Results only for credit exposure of enterprises and other clients	15,0%	9,0%	6,7%	12,7%	14,2%	8,6%
Results only for credit exposure to households	15,5%	7,9%	6,3%	14,1%	10,9%	7,5%

Source: Internal calculations on NBRM, based on data submited by banks

The simulation for simultaneous reclassification to the C risk category of the credit exposure to the five largest credit exposures to nonfinancial entities (including the connected entities, not only emphasizes the banks' sensitivity to credit risk shocks, but also shows that some banks face significant risk of credit exposure concentration. This simulation would reduce the capital adequacy ratio of the banking system to 14.1%, therefore, in two banks it would reduce below the minimum requirement of 8%. The extreme option of this simulation, which means reclassification to E risk category and full provisioning of the five largest credit exposures to nonfinancial entities, emphasizes, to the larges extent, the banks' exposure to the concentration risk. In this case, the capital adequacy ratio in the banking system would equal 4.4%, and eight banks would have a capital adequacy ratio below 8%.

The stress-test analysis of the banking system resilience to liquidity shocks on December 31, 2008, shows that the banks in the Republic of Macedonia, in spite of the decrease in the volume of liquid assets, and therefore, the liquidity indicators, maintained a satisfactory level of resilience to potential unfavorable and unexpected liquidity shocks. The amount of liquid assets the banks held on December 31, 2008 is ample for covering the hypothetical liquidity blow in the form of outright withdrawal of 20% of the total household deposits from the banking system. If this extreme shock becomes a reality, the liquid assets and the highly liquid assets of the banking system would drop by 39.0% and 52.3%, respectively. Such fall of liquid assets by bank would range from 3.5% to 74.1%.

In spite of the risk of mass system mistrust, and therefore, extensive outflow of deposits captured with the above simulation, there seems to be that the banks in the Republic of Macedonia suffer more from the risk of concentration of deposits and sources of funding. The adverse effect on the banks' liquidity is increasingly evident in the simulation for hypothetical withdrawal of the deposits of the twenty largest depositors of each bank. In the case of this highly extreme scenario, five banks would face a lack of liquid assets to compensate the outflow of deposits of the twenty largest depositors. However, across the banking system, the reduction of liquid assets in the case of such extreme scenario would equal 82.0%, pointing to a certain possibility for abating and preventing the effects from spillover of this extreme shock from one bank to the entire banking system.

4. Non-deposit financial institutions

4.1. Insurance sector

In conditions of slower economic activity in the country and uncertainty on the financial markets, the dynamics in the development of the insurance sector was closely connected with the development and performances of the real and financial sector. The amendments to the regulations, the establishment of the insurance agency system, the low liquidity of the economic entities and the difficulties in the collection of insurance premium, gave certain level of insecurity with the insurance companies concerning the anticipated results from their long-term strategies. All this negatively influenced the growth in the insurance industry and it can effect significantly on its future stability and sustainability in 2008. On the other hand, the changes in the ownership structures of the insurance companies and their capitalizations contributed to increase in the "buffers" of the insurance companies for neutralization of the current and possible future negative effects from the global and domestic economic situation.

In such market conditions, the further growth and development in the insurance companies is directly correlated with their ability to built successful and sustainable strategy for long-term growth. The strengthening in the cooperation with the supervisory government is an additional factor that may give positive effects in that direction. But, having no Insurance Supervision Agency as independent supervisory body, in accordance with the amendments to the Law on Insurance Supervision from September 2007, is still one of the basic restrictions that may influence the safety and soundness of this industry. As a result of the uncreated supervisory capacity, during 2008 there was lack of effective on-site and off-site monitoring of the operating of the insurance companies, so the lack of data on the activity and the possibility for assessment of the risk characteristic for this segment of the financial system increased.

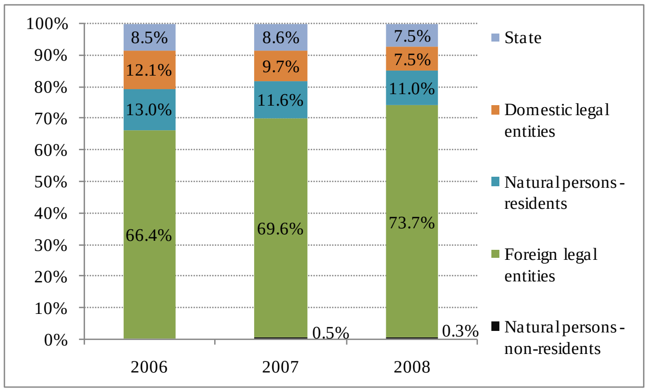
Structure features of the insurance sector

At the end of 2008, the number of the insurance companies remained unchanged, relative to the end of the previous year. Thus, total twelve insurance companies operate on the insurance market, out of which only two companies perform activities in the group of life insurance, and the other ten companies are active in the group of non-life insurance[32]. Same as in the previous years, the presence of the reinsurance for which only one company is registered, was at very low level.

[32] One of these ten companies that carry out non-life insurance services, still performs servicing of the already concluded life insurance agreements from the previous years, when that company provided non-life and life insurance services.

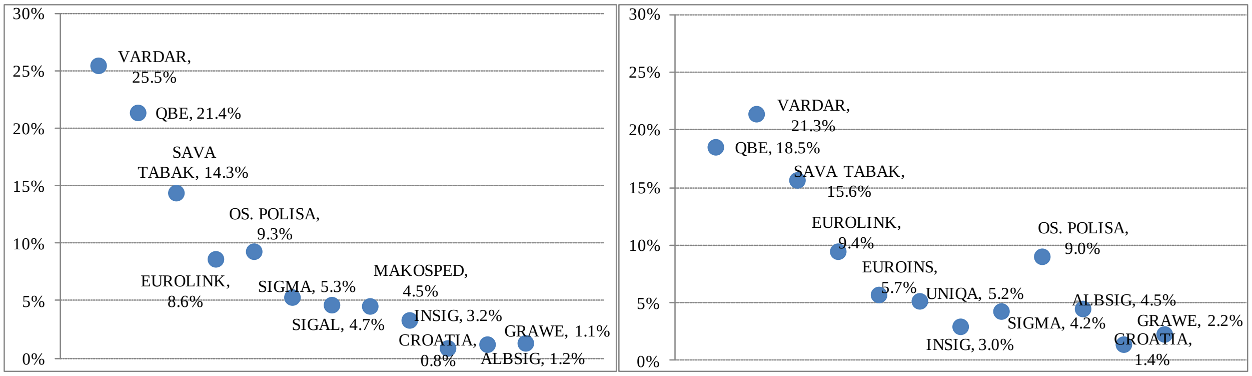
In 2008, the trend of enter of foreign capital on the insurance market in the Republic of Macedonia continued. One company switched from dominant domestic to dominant foreign ownership, whereas another company changed its ownership structure (the shares were sold from one to other owners). At the end of 2008, only one insurance company was fully owned by domestic shareholders (natural persons), whereas the other eleven companies are owned by foreign legal entities. The trend of enter of foreign capital in the insurance sector contributed to certain strengthening in the competitiveness in this segment of the financial system and for broader offer of insurance products on the market, as for example the insurance of agricultural sown fields, mini Casco insurance, combined life insurance, as well as the general liability insurance.

Figure No. 123
Ownership structure of the insurance companies



Source: Central depository for securities of RM and internal NBRM calculations

Figure No.124
Participation of the gross policy premiums with the insurance companies for 2007 (left) and 2008 (right) in the total gross policy premium of the sector

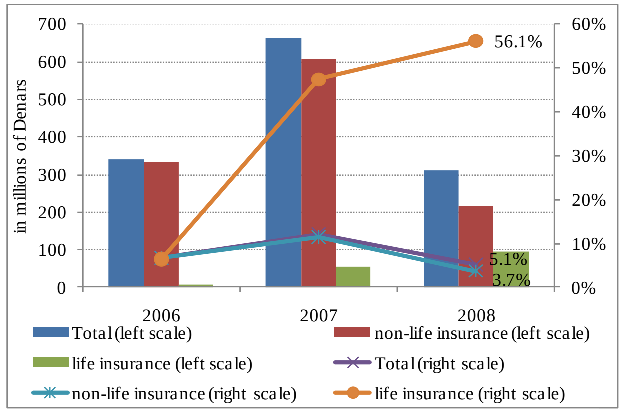


Source: Ministry of Finance of RM and internal NBRM calculations

The relatively high market concentration was still one of the basic features of the insurance sector's activities, despite its further drop. The Herfindahl index (according to the gross policy premium) decreased from 1.556 index points in 2007, to 1.332 index points in 2008, which was within the acceptable level of concentration. The market concentration, measured through the participation of the five leading insurance companies in the gross policy premium, although registering further decrease, is still high equaling 73.8% at the end of 2008 (79.1% in 2007). With respect to certain types of insurance, the life insurance and the reinsurance registered considerably high concentration, which was due to the small number of active companies in this area. The non-life insurance registered continuous drop in the concentration, which was moderate, and measured by the Herfindahl index, it equaled 1.441 index points on December 31, 2008, (annual decrease of 166 points). In the same time, the CR5 indicator calculated for the gross premiums for this type of insurance amounted to 76.5%, relative to 80.5% in 2007.

In 2008, the companies that perform non-life insurance kept the dominant position on the insurance market. Thus, 95.8% of the total gross policy premiums and 97.9% of the total sold insurance policies are within the area of non-life insurance. The life insurance, despite the considerably high annual growth rate maintained the marginal role in the total insurance activities in the Republic of Macedonia, in 2008. On December 31, 2008, this insurance segment participated with only 3.2% in the total gross policy premiums and 2.1% in the total sold insurance policies.

Figure No. 125
Absolute and relative annual growth in the gross policy premiums

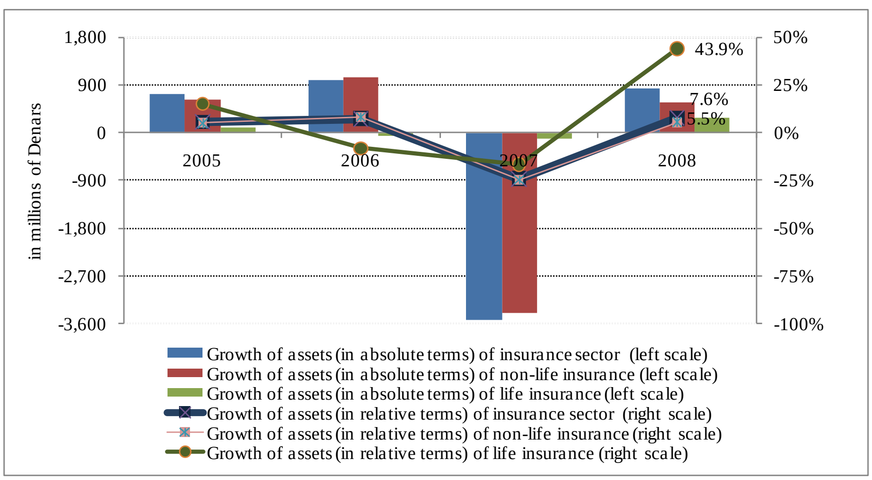


Source: Ministry of Finance of RM and internal NBRM calculations

Size and growth in the insurance sector's activities

At the end of 2008, the total assets of the insurance sector registered annual growth, which although at considerably lower level relative to the average growth at the level of the financial system, represents positive development relative to the previous year, when the assets of this sector registered downward trend. On December 31, 2008, the total assets of the insurance companies amounted to Denar 11.920 million registering annual rise of Denar 845 million or 7.6%. Despite the considerably higher annual growth rate of the assets of the life insurance companies, the dominant share of 92.4% of the total assets of the insurance sector still belonged to the non-life insurance companies.

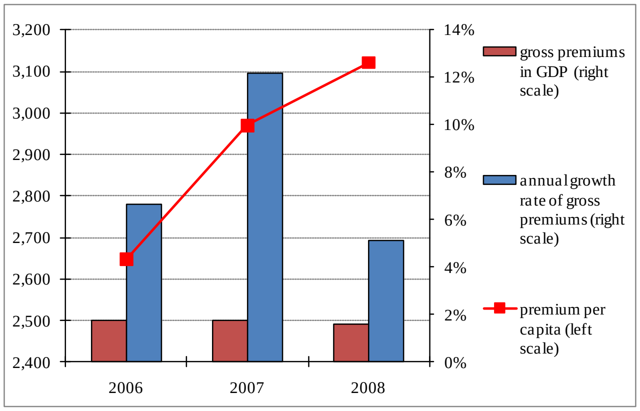
Figure No.126
Absolute and relative annual growth in the assets of the insurance companies



Source: Ministry of Finance of RM and internal NBRM calculations

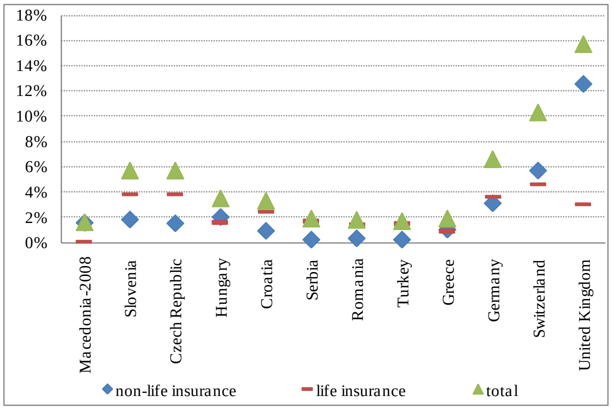
Opposite to the positive development with the total assets, the dynamics of the gross policy premiums reflected slowing down. The annual growth rate of the gross policy premiums reduced from 12.2% in 2007, to 5.1% in 2008. The non-life insurance companies contributed mostly to the slower growth, the gross premiums of which went up by only 3.7% relative to 2007. The stagnation in the insurance sector is confirmed also through its unchanged significance for the economic activity in the country, which measured as a correlation between its assets and GDP, was still fewer than 2%, same as in the previous years. However, the gross premium per capita in the Republic of Macedonia registered growth, so at the end of 2008 it equaled Denar 3.122, i.e. by 5.1% more relative to 2007.

Figure No.127
Growth in the insurance sector



Source: Ministry of Finance of RM and internal NBRM calculations

Figure No.128
Participation of the gross policy premiums in the GDP with individual countries



Source: Swiss Re, Sigma No 3/2008

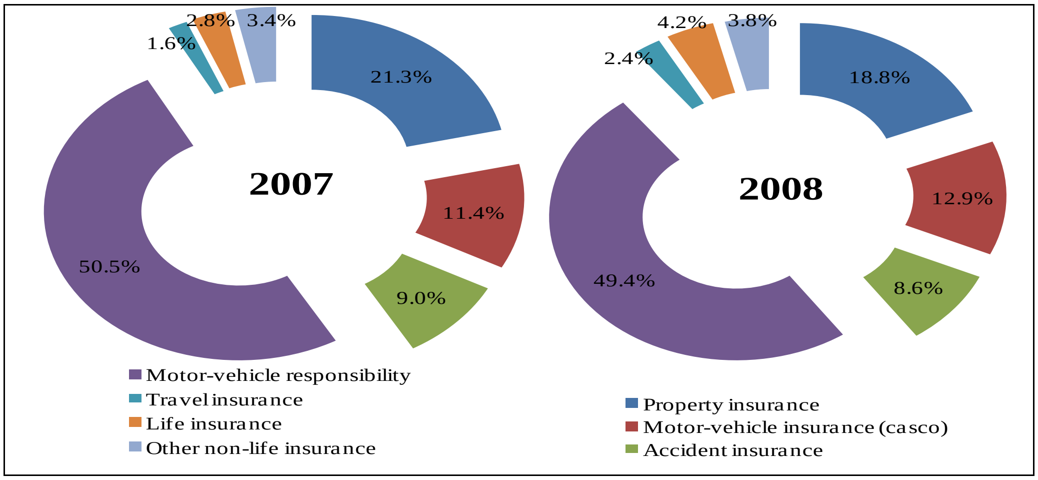
The insurance sector in the Republic of Macedonia characterizes with relatively low participation of the gross premiums in the GDP, relative to the other European countries. However, in accordance with the amount of this indicator, the insurance sector of the Republic of Macedonia has almost the same level of development as in Serbia, Greece, Romania and Turkey.

The small number of life insurance companies, the insufficient knowledge for the insurance products, as well as the low standard of living, placed the Republic of Macedonia at the bottom of the scale of analyzed countries according to the life insurance, with participation of the gross policy premiums in GDP of only 0.1%. Within the non-life insurance, the situation is somewhat better (with almost same level as in Slovenia and Czech Republic), with participation of the gross premiums in GDP of 1.5%.

Structure on the market by insurance classes

The structure of the total gross policy premiums registered no changes relative to the previous year. The motor third party liability insurance still mostly participated in the total gross premiums. Certain fall in the participation of these premiums was registered, but it came mainly as a result of the drop in the price of this type of insurance. Relative to that, same as in the previous year, the life insurance, the tourist assistance insurance and the other classes of non-life insurance had the lower participation in the total policy premiums.

Figure No.129
Structure of the gross policy premiums by insurance classes



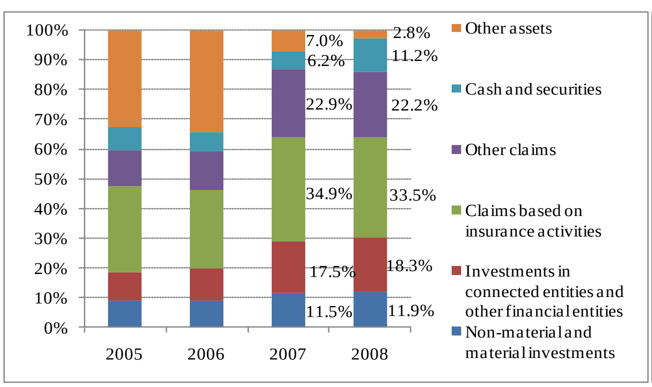
Source: Ministry of Finance of RM and internal NBRM calculations

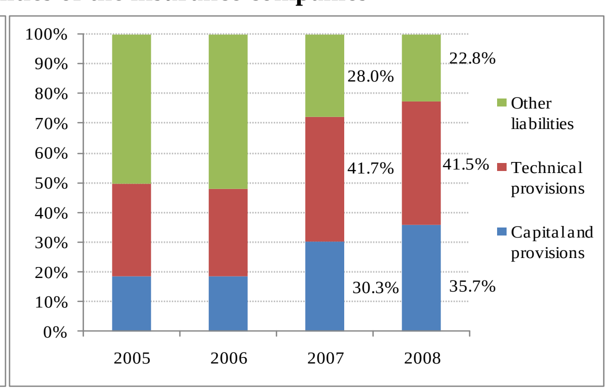
With highest realized annual growth of Denar 135 million, the gross policy premiums from motor car insurance - Casco, determined the largest share (43.4%) of the total annual growth in the gross premiums at the level of the insurance sector. The life insurance represented the next insurance class that the gross premiums of which registered more significant annual growth in the amount of Denar 96 million. Opposite to that, the property insurance was the only class of insurance activity where in 2008, the gross policy premiums of which registered drop in the amount of Denar 97 million. Within the rest of the insurance classes, no significant changes were registered in the level of the gross premiums relative to 2007.

Structure of the assets and the liabilities of the insurance companies

On December 31, 2008, the asset structure of the insurance companies remained almost unchanged relative to the same date of the previous year. Most of the assets pertain to the claims on direct insurance activities. The cash and the securities which registered annual growth of Denar 648 million, mostly contributed to the total growth in the total assets of the insurance sector. Such structure of the assets of the insurance sector, especially the absence of complex credit products, contributed for this segment of the financial system not to be directly exposed and significantly affected by the crises at the international financial markets.

Figure No.130
Structure of the assets and the liabilities of the insurance companies

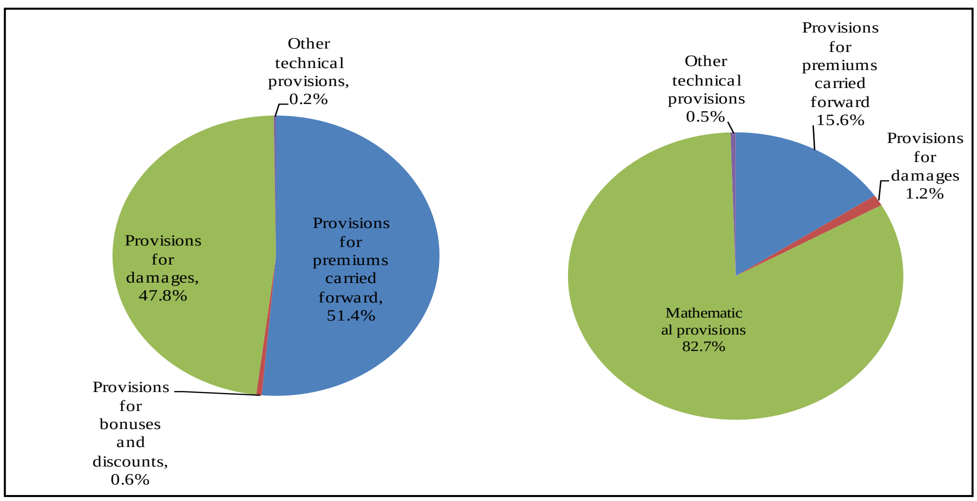




Source: Ministry of Finance of RM and internal NBRM calculations

The structure changes on the side of the liabilities were acting towards strengthening of the safety and soundness of the insurance companies and improvement in their capability for dealing with the eventual future risks. The capital and the reserves registered highest annual growth of Denar 898 million or 26.7%. As a result of such changes, at the end of 2008, the capital and the reserves of the insurance companies reached up to the level of Denar 4.256 million, so they considerably increased their participation in the structure of the total sources of assets of the insurance companies. The rise in the capital and reserves was due to the capitalization of more than a half of the insurance companies, which contributed to higher growth in the capital, by percent, relative to the assets of the insurance sector. Such tendency may be assessed as especially positive for maintaining its stability in the future. Relative to the capital structure, 88.8% of the total capital is the capital of the non-life insurance companies (93.2% in 2007). The life insurance companies with realized annual growth of capital of 106.9%, at the end of 2008 had capital in the amount of Denar 475 million on their disposal. The technical provisions[33] relative to the last year rose by 7.1% so they maintained the largest participation in the liability structure of the insurance companies. The growth in the technical provisions almost solely corresponded with the annual growth in the total gross premiums in the insurance sector. Such correlation between the growth in the technical provisions and the total gross policy premiums represented significant indicator for the cautious policy of the insurance companies, in order to enable permanent performance of the obligations liabilities arising from the insurance agreements.

Figure No.131
Structure of the technical provisions with the non-life insurance companies (left) and life insurance companies (right)



Source: Ministry of Finance of RM and internal NBRM calculations

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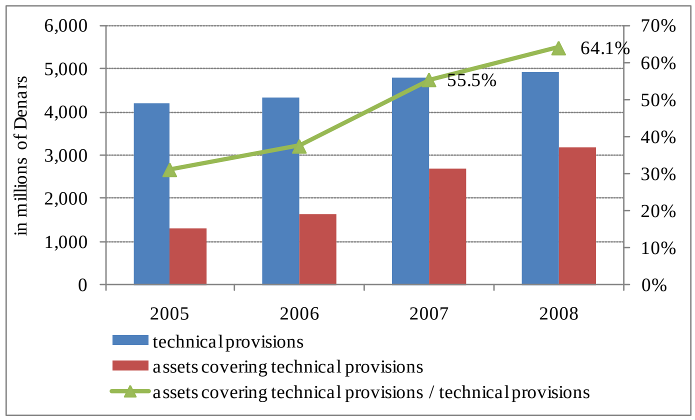
[33] For the purpose of permanent fulfillment of the obligations prescribed in the insurance contracts, the insurance company is required to establish technical provisions, consisting of the following: provisions for premiums carried forward, provisions for bonuses and discounts, provisions for damages and other technical provisions. The : provisions for premiums carried forward are allocated in the amount of the part of the premium that is transferred to the future accounting period in proportion between the expired insurance period and the remained period to the expiration of the insurance agreement. The provisions for bonuses and discounts are allocated in the amount equal to the sums that the insured have to accept on the basis of: 1) right for participation in the profit, as well as other rights emerging from the insurance agreements (bonuses), 2) right for partial drop in the premiums (discounts) and 3) right to return one part of the premium pertaining to the unused insurance period which was due to the early insurance termination (cancelation). The provisions for damages are allocated in the amount of estimated liabilities which the insurance company is obliged to fulfill, based on the insurance agreement 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. Other technical provisions are allocated for the planned future liabilities and risks from bigger damages arising from the insurance coverage for the responsibility of the pharmaceutical producers, earthquake, flood as well as other liabilities and risks from the insurance agreements.

Relative to the previous year, the structure of the technical provisions with the non-life insurance and with the life insurance remained unchanged. Thus, with the technical provisions of the non-life insurance, the provisions for damages and provisions for premiums carried forward remained dominant (98.9% -2007), whereas with the life insurance, the mathematical provisions[34] kept the leading position (88.2% - 2007) in the structure of the technical provisions of the insurance companies.

At the end of 2008, the assets covering technical provisions registered annual growth of 18.7%, or Denar 500 million. The non-life insurance gave the largest contribution to the growth in the assets covering technical provisions at the level of the entire sector, where these assets registered annual growth of Denar 434 million (or 18,7%), opposite to the growth of Denar 66 million (or 18.9%) with the life insurance.

The non-life insurance companies in 2008 failed to fulfill the minimal required level of assets covering technical provisions, despite the growth in the level of coverage relative to the previous year.[35] The assets covering technical provisions with the non-life insurance amounted to Denar 2.755 million and they covered only 60.6% of the technical provisions with these companies, which was significantly less than the legally prescribed minimum. Different from them, the companies operating in the area of life insurance accounted for 102.7% of the technical provisions in 2008. **At the level of the entire sector, the tendency was in positive direction, i.e. the correlation between the assets covering technical provisions and the total technical provisions registered permanent increase in the previous years.**

Figure No.132
Development in the technical provisions and the assets covering technical provisions at the insurance sector



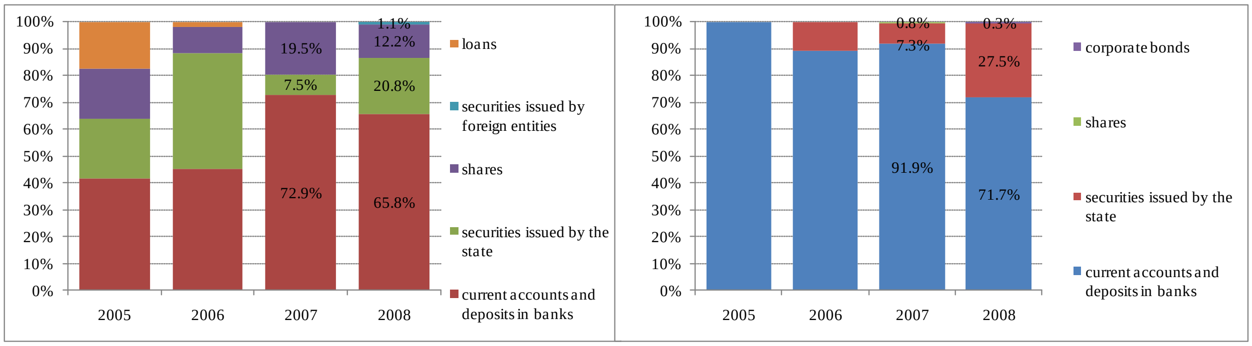
Source: Ministry of Finance of RM and internal NBRM calculations

Opposite to certain structure deviations relative to the previous year, the structure of the assets covering technical provisions still reflects the relatively conservative policies for placement of assets by the insurance companies. In conditions of evident turbulent developments on the international financial markets, as well as downward price corrections on the domestic capital market, such structure largely contributed to minimizing the negative effects from these negative developments. In 2008, non-life and life insurance companies were still placing most of their assets covering technical provisions to the banks in the Republic of Macedonia (in form of bank accounts and deposits). However drop in their structure participation was evident for the account of the growth in the significance of the Government securities, which in the future should have positive influence on the profitable position of the insurance sector as well. Simultaneously, the investments in Government securities largely contributed to the total growth in the assets covering technical provisions. Such

[34] The mathematical provision is allocated in the amount of the current value of the estimated future liabilities of the insurance companies, arising from the insurance contracts, reduced by the current value of the future premiums that should be collected on the basis of those contracts. The mathematical provision is calculated by applying appropriate actuarial evaluation.
[35] In accordance with the Law on insurance supervision, assets which shall cover the technical reserves shall be at least equal to the technical reserves.

improvement in the structure of the assets covering technical provisions showed also higher level of orientation of the insurance companies towards diversification of their financial investment risk.

Figure No.133
Structure of the assets covering technical provisions with the non-life insurance (left) and the life insurance (right)

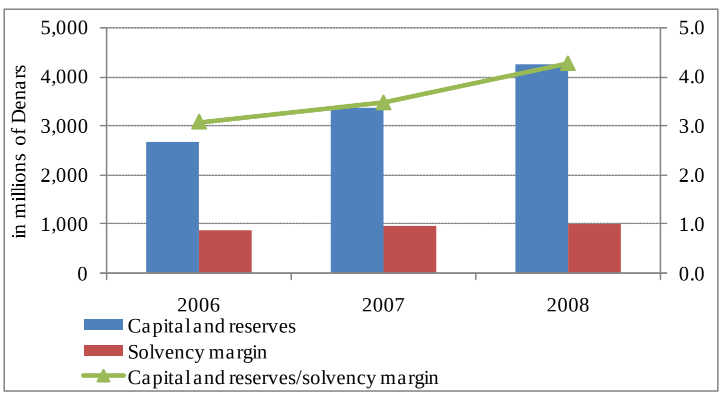


Source: Ministry of Finance of RM

Indicators on the operating of the insurance companies

The strengthening of the capitalization of the insurance companies contributed to further growth in their high solvency position. At the end of 2008 the capital of the insurance sector was considerably above the level of the solvency margin[36]. All insurance companies had capital above the required level of the solvency margin on their disposal. At the end of 2008, at the level of the entire insurance sector, the solvency margin, as minimal required level of capital, according to the of premium rate method, amounted to Denar 997 million registering annual growth of 3.1%. The capital of the insurance sector exceeded the solvency margin by 4.3 times. The required level of solvency margin calculated by the premium rate method with the non-life insurance companies amounted to Denar 970 million, so the total capital with these companies was by 3.9 higher than the required level of the solvency margin. The total capital of the life insurance companies was by 17.9 times higher than the required level of the solvency margin (equaling Denar 27 million).

Figure No.134
Capital and required level of solvency margin



Source: Ministry of Finance of RM

[36] The solvency margin represents the minimal capital level which is necessary for the insurance companies. It is calculated by applying the premium rate method, or damages rate method, depending on that which of these methods will give higher result.

At the end of 2008, almost all other indicators for the operating of the insurance companies registered worsening.

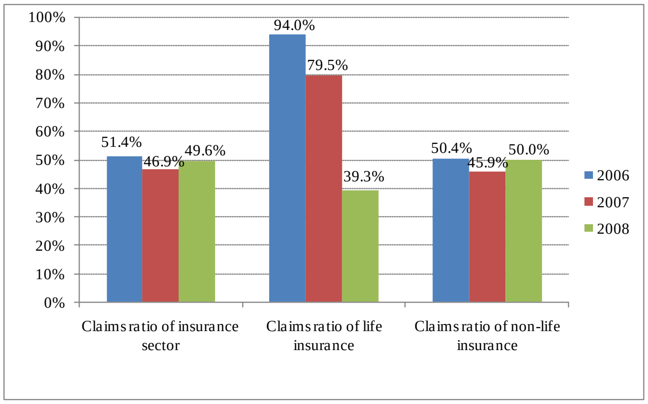
Table No. 29
Indicators for the operating of the insurance companies

	2006	2007	2008
Claims ratio	51,4%	46,9%	49,6%
Change rate of liquidated claims	-2,6%	2,3%	11,2%
Change rate of gross premiums	6,7%	12,2%	5,1%
Expense ratio	n.a.	36,8%	40,7%
Combined ratio	n.a.	83,6%	90,2%
Net profit (in milions of Denars)	272	227	198
ROA	1,9%	2,1%	1,7%
ROE	10,4%	6,8%	4,7%
Return on investments	15,2%	7,6%	8,1%

Source: Ministry of Finance of RM and internal NBRM calculations

In conditions of lower growth in the gross policy premiums, the **claims ratio**[37] registered upward trend at the end of 2008. Only the life insurance registered positive change in the claims ratio, as a result of the drop in the removed claims by 22.8%, relative to the end of 2007. Opposite to that, with the non-life insurance the claims ratio registered rise mostly with the accident insurance, for which this indicator equaled 69.7%, which represented annual growth of 8.5 percentage points.

Figure No.135
Claims ratio for the entire insurance sector and by types of insurance



Source: Ministry of Finance of RM and internal NBRM calculations

Expense ratio, which is calculated as a correlation between the operating expenses[38] and the total gross policy premiums in the insurance sector, indicates worsened operative efficiency of the insurance companies. The growth in this indicator was due to the annual growth of the operating expenses (16.4%), with the administrative costs registering the largest growth of Denar 118 million.

[37] Claims ratio represents a relation between the amount of paid claims and the amount of the total gross policy premiums.

[38] Operating expenses include the insurance costs (fee and other insurance costs); general administrative costs (costs for the employees and other administrative 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 or other operating expenses, less the reinsurance.

Consequently to the development in the previous two coefficients, at the end of 2008, the **combined ratio**[39] was higher than in the previous year.

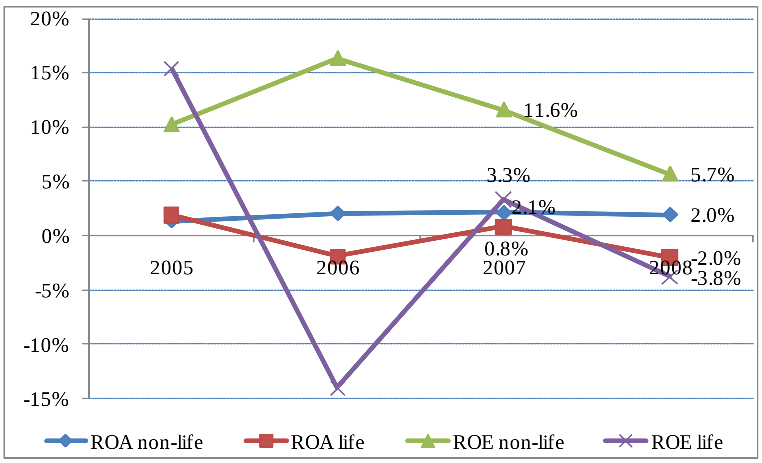
In conditions of improved structure of assets covering technical provisions, **the return on investments in the financial instruments**[40] registered certain growth at the end of 2008, but it did not affected significantly on the net profit of the insurance companies.

The slowing down in the basic activity of the insurance sector, expressed through the slower growth in the gross policy premiums, resulted in drop in its profitable position. The net profit of the insurance sector at the end of 2008 amounted to Denar 198 million registering further decline by Denar 29 million or by 12.9%. The decrease of the realized net profit came mainly from the life insurance companies, which realized loss in the amount of Denar 18 million and compared with 2007 it represented considerable worsening of Denar 23 million. With the non-life insurance, profit in the amount of Denar 216 million was realized and relative to 2007 it registered fall of Denar 6 million.

At the end of 2008, one non-life insurance company and one life insurance company showed loss. The loss in the non-life insurance company came as a result of the fast broadening of the sale network on the territory of the Republic of Macedonia, whereas with the life insurance it resulted from the performed write offs of claims.

The lower profit and the slower growth in the activities contributed to drop in the basic profit indicators of the insurance sector, which was especially evident in the life insurance companies. In 2008, the rate of return on assets (ROA) and the rate of return on equity (ROE) registered fall by 0.4 percentage points and by 2.1 percentage points, respectively, on annual level. Both indicators registered fall also on the level of individual types insurance, relative to the previous year. The worsening was especially evident with the life insurance companies, where due to the realized loss, the indicators registered negative values.

Figure No.136
Development in the ROA and ROE indicators by type of insurance



Source: Ministry of Finance of RM and internal NBRM calculations

The worsened profitability can be perceived also through the development in the technical result[41]**,** which amounted to Denar 13 million in 2008 (Denar 77 million in 2007). The drop in the technical result, compared with 2007, was mostly due to the non-life insurance, which showed technical result of Denar 5 million, opposite to the realized Denar 73 million in 2007. The performances in the life insurance, despite the achievement of twice higher technical result, relative to the previous year (rise from Denar 4 million in 2007 to Denar 8 million in 2008), were not enough for neutralizing the negative effect from the lower technical result in the non-life insurance.

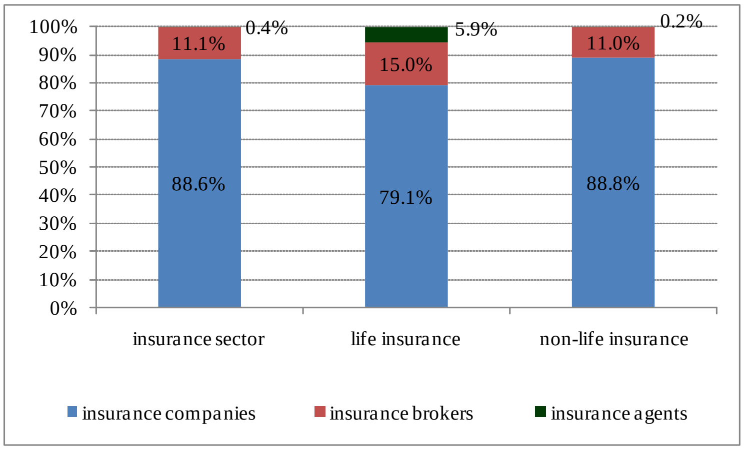
[39] The combined ratio is calculated as a sum of the claims ratio and expense ratio.
[40] This indicator is calculated as a ratio between the income from investments, less the costs for investments and the financial investment stock.
[41] The technical result from operating means a result from conducting the basic activity - insurance. The other income and expense represent the non-technical result.

Representation and intermediation in the insurance

At the end of 2008, 943.225 insurance agreements (policies) were active, out of which the largest part were concluded by the insurance companies, and insignificant part were concluded by the insurance agents and insurance brokerage companies. In 2008, the insurance agents [42] were introduced as an innovation on the insurance market.

As a result of the relatively short period of operating, the insurance agents in 2008 managed to conquest a significant part only of the life insurance market. In 2008, total 1.025 agents - natural persons and five insurance agencies were given licenses. In 2008, their participation in the sale of insurance policies was relatively lower, relative to the other insurance sellers. However, their emergence in the market should contribute to growth in the availability of the insurance services, which should increase their role in the insurance market in the Republic of Macedonia as well.

Figure No.137
Sectors structure of the insurance market by gross policy premiums



Source: Ministry of Finance of RM and internal NBRM calculations

The insurance brokers, although few (46 natural entities and 8 insurance and brokerage companies), participate with larger share on the insurance market, relative to the insurance agents. Thus, at the end of 2008, the insurance and brokerage companies realized 104.321 insurance policies, out of which 2.921 policies are in the life insurance group. Their relatively higher market participation can be perceived through the participation in the total value of the gross policy premiums in 2008.

Connection of the insurance sector with the banking sector

The low level of connection between the insurance and the banking sector in the Republic of Macedonia on all bases, remained in 2008 as well. On the one hand, it narrows the range of financial products that can be offered on the market. On the other hand, the low level of integrity significantly restricts the channels of transfer of the negative effects between these two sectors, which in conditions of international financial crisis, represented positive feature with respect to the financial stability of the country.

In 2008, the interownership connection of the banks and the insurance companies acted towards negative direction and remained at very low, symbolical level. Thus, the banks own 3.0% of the total value of the issued shares of the insurance companies (3.2% in 2007), whereas the insurance companies own 0.1% of the total capital of banks (0.3% in 2007).

[42] The insurance agents (agents, representatives, intermediates) are persons who conclude insurance agreements on the behalf of and for the account of the insurer, on the basis of previous agreement for representing concluded between the insurance company and the agent.

In 2008, the number of banks that perform intermediation in the insurance rose to five banks (from two in 2007), but still there was not evident change in the participation of the collected premiums in the total gross premiums of the insurance sector. Thus the total gross premiums collected by the banks in 2008 amounted to Denar 13.340 thousands, which is 0.2% of the total gross premiums at the level of the insurance sector (0.1% in 2007).

The weak link between the banks and the insurance companies can be confirmed also through the credit insurance by the banking sector. Namely, in 2008 two banks were using credit insurance, in the amount of Denar 275 million. These credits are only 0.16% of the total gross credits in the banking sector. The premiums for credit insurance in the amount of Denar 3 million represent only 0.05% of the total gross premiums in the insurance sector. However, despite such minimal participation, the claims ratio from the credit insurance was exquisitely high and it continued to worsen (from 94.6% in 2007 to 95.7% in 2008).

4.2. Fully funded pension insurance

The continuous price correction on the domestic financial markets and the turbulences in the international financial markets that characterized 2008, resulted in significant changes in the external environment of the mandatory fully funded pension funds. The epilog of these changes was a negative result from the operating of the pension funds, negative annual contribution in 2008, and through that, a negative reflection on the wealth of their members as well, i.e. of the households. However, despite the negative developments in the income from the invested assets, the pension funds in the Republic of Macedonia were not facing losses that would deteriorate their operative functioning or which could not be compensated on log term. In the same time, the fall in their contribution did not result in serious implications for the financial system or in damaging the purchasing power of the households as the final holder of the assets from the pension funds. This resulted from the system positioning and the characteristics of the fully funded pension insurance, as well as from the fact that the pension funds are relatively "young" financial institutions without current liabilities for payment of assets based on pensions. Additionally, the pension funds realized relatively high annual growth rates of the assets, which contributed to further growth in their role and in their significance for the financial system.

The upward trend in the number of members of the pension funds continued in 2008 as well. It represented significant determinant for growth in the coverage of the employees with the second pillar of the pension system, which contributes to increase in the long-term economic and social security of the households, as a strategic goal of the reform in the pension insurance system. Namely, the second pillar of the pension system, at the end of 2008, covers about 30% of the employees and about 20% of the active households[43]. However, the worsening in the macroeconomic performances caused certain latent risks for the system of the fully funded pension insurance. The negative developments in the real sector and the slowing down in the economic growth may create pressures on the labor market, which would represent drop in the regular inflows of the pension funds based on paid contributions. In this context, the experience so far shall be taken in consideration, which shows that about 70% of the average number of registered members of the pension funds pay contributions on regular basis and that there are about 5.6% of the total individual accounts of the member that have not one payment of contribution[44].

[43] The data on the active households and the number of employed persons are based on the assessments of the State Statistical Office.
[44] Source of data: Annual report on the operating of the Agency for fully funded pension insurance and the revised financial reports of the pension funds.

Table No. 30
Structure indicators on the fully funded pension insurance

Indicator	December 2006	December 2007	December 2008	Annual change 2007/2006	Annual change 2008/2007
Number of members	128,031	162,653	195,140	34,622	32,487
Members of second pillar of pension system/Labour force	14,2%	17,9%	20,3%	3,7 p.p.	2,4 p.p.
Members of second pillar of pension sustem/Number of employed persons	22,1%	27,4%	30,3%	5,3 p.p	2,9 p.p.
Total assets of second pillar pension funds (in milions of Denars)	1,246	3,124	5,037	1,878	1,913
Total net-assets of pension funds (in millions of Denars)	1,242	3,119	5,005	1,886	1,877
Total net-assets of pension funds as % od BDP	0,40%	0,92%	1,26%	0,52 p. p.	0,34 p.p.
Share of pension funds in total market capitalization of stocks quoted on official market of Macedonian Stock Exchange	0,09%	0,52%	1,01%	0,43 p.p.	0,49 p.p.
Share of pension funds deposits in total deposits of the banking system	0,16%	0,34%	1,09%	0,18 p.p.	0,75 p.p.

Source of data: Agency for supervisions of the fully funded pension insurance, State Statistical Office, Macedonian Stock Exchange AD Skopje and internal NBRM calculations

The variable macroeconomic ambient in 2008, the turbulences in the financial markets, combined with the conservative approach in the investing and managing the assets from the pension funds resulted in downward trend in the income rate of the pension funds. Starting in the second quarter of 2008, the annual nominal income rate[45] of the pension funds had negative values, and it reached the bottom at the end of 2008. The intensification in the annual inflation rate and reaching its highest levels in the second half of 2008, was an additional negative factor that undermine the real dimension of the realized income of the pension funds. Thus, for the period of three years from the founding of the pension funds, since the beginning of 2006, till the end of 2008, the nominal income rate of the pension funds amounted to 1.32%, but the real income rate was negative equaling -3.28%. The pension funds management companies, in the following period, will face with a challenge related with the protection of the real value of the assets of the pension funds. Therefore, the need for proactive approach in the process of creating and subsequent revising of the investment strategies is imposed, where the changes in the entire economic environment would adequately reflect as well.

Figure No.138
Dynamics of the annual income rate of the pension funds and annual inflation rate

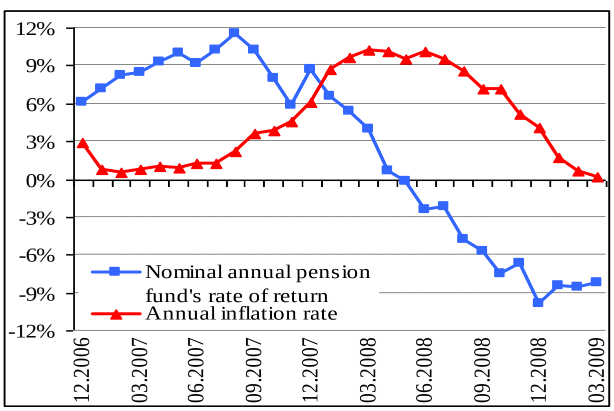
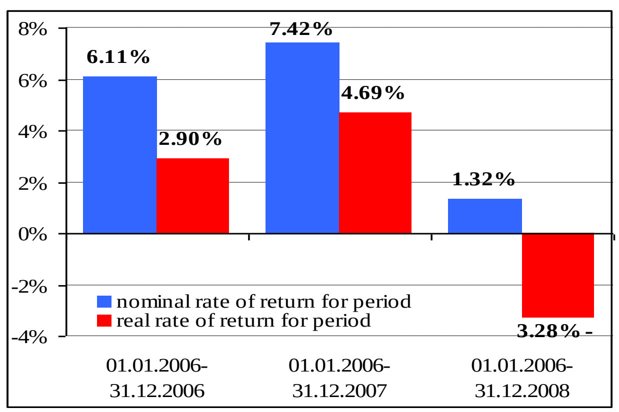


Figure No.139
Nominal and real income rate of the pension funds for certain periods

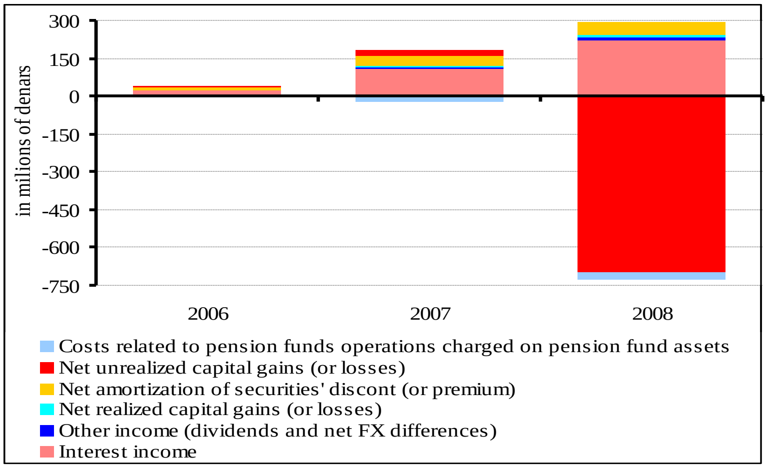


Source: Agency for supervisions of the fully funded pension insurance, State Statistical Office on the inflation rate and internal NBRM calculations

[45] The annual nominal income rate is calculated on the base of the weighting of the income rate of the individual pension funds with their net assets.

In 2008, the pension funds registered considerable worsening in the results from operating, which was mostly due to the unrealized losses based on negative price changes in the investments in equity securities. Different from the first two years of functioning of the fully funded pension insurance, when the pension funds realized profit from operating, in 2008 they realized loss in the amount of Denar 434 million. The main reason for the negative effect in 2008 was the unrealized losses from investment of funds, in the amount of Denar 697 million which resulted mainly from the drop in the prices of equity securities issued by domestic shareholding companies. These losses resulted from the investment decisions adopted and realized in the previous two years. This additionally emphasize the need for the pension funds management companies to formulate and to revise the investment strategies for investment of the assets of the pension funds, on regular basis, which would mean also strengthening in the risk management system in the process of investing the assets of the pension funds[46]. However, it shall be taken in consideration the fact that the final effect on the cash flows of the pension funds will emerge at that moment when these unrealized losses will be realized, i.e. when the investments will be alienated. Having the maturity structure of the membership in mind, as well as the structure of assets the pension funds, it seems that on short term there wont be any need for their sale. In the same time, on long term, the possibility for recovery of the market values of the shares is higher, which may decrease the unrealized capital loss.

Figure No. 140
Dynamics of the income and expenditure categories of the pension funds



Source of data: annual reports of the pension funds

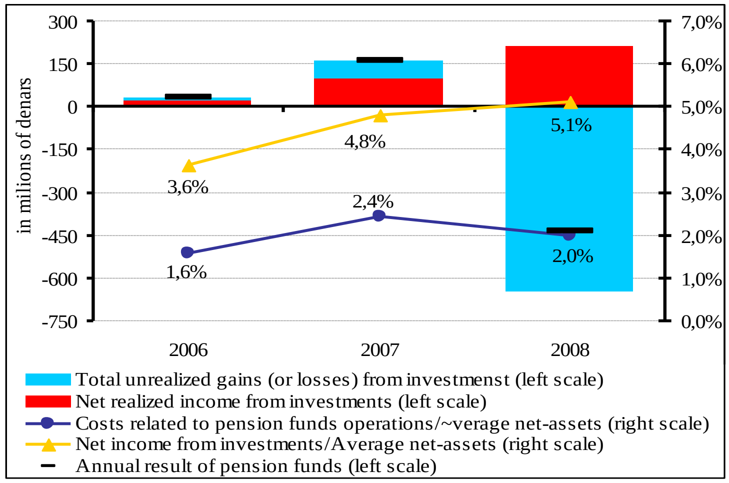
In 2008, the income of the pension funds based on their investments, initially in form of deposits in banks and debt securities, was enough to cover the total expenditures from operating which are defined in the regulation and they are for the account of the assets of the pension funds. In 2008, this income was enough to cover the total expenditures from operating of the pension funds which amounted to Denar 30 million. In 2008, the income from interest in total amount of Denar 221 million and annual growth rate of 104.1% were the main income category of the pension funds, and they were followed by the net income based on amortization of the discounts or premiums from the debt securities in the amount of Denar 51 million. The total net profit from investments[47], in 2008 equaled Denar 212 million registering rise of 109.9% relative to 2007.

[46] With the latest amendments to the Law on Mandatory Fully Funded Pension Insurance ("Official Gazette of the Republic of Macedonia" no. 48/2009), each pension funds management company shall have an investment strategy and shall perform its revision at least every third year. Within the investment strategy, it is required for the methods for measurement of risk from investments of the pension insurance funds' assets and the processes for risk management to be prescribed.

[47] The net profit from investments represents a differential between the total income from investments and the total expenditure for operating, so the total income from investments are consisted of income from interests, income from dividends, realized capital income and positive foreign exchange differentials, while the total operating costs include the fees for the management company, other fees which according to the law fall on the fund, the negative exchange rate differences and the realized capital losses.

Despite the loss that the pension funds realized in 2008, still their efficiency indicators registered positive developments. Thus, the indicator for the correlation of the total expenditures of the pension funds and the average net assets for 2008 equaled 2.4% registering drop of 0.4 percentage points relative to 2007. The indicator on the correlation between the net gain from investing and the average net assets of the pension funds in 2008 amounted to 5.1% and compared to 2007 it registered rise of 0.3 percentage points. These trends in the efficiency indicators, combined with the realized growth in the net gain from investments, the continuous inflows of assets and the growing interest rates on the domestic interbank market, indicated that the pension funds have solid ground for increase in the income rate in the future, especially with the normalization of the stock on the domestic and the international financial markets.

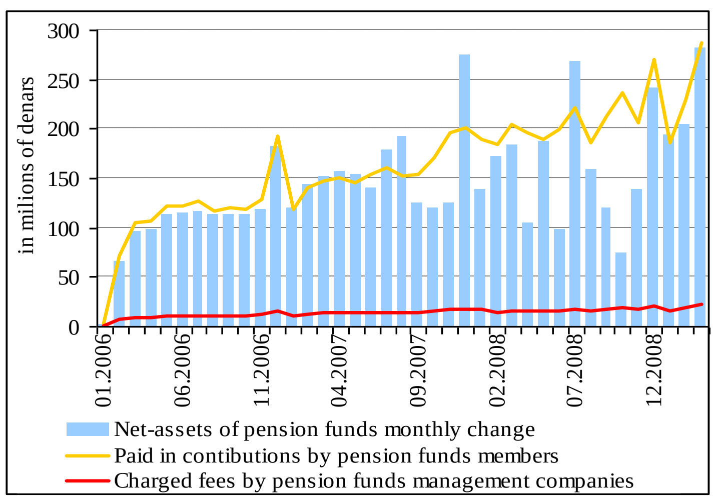
Figure No.141
Results from the operating of the pension funds, its structure and efficiency indicators



Source of data: annual reports of the pension funds

At the end of 2008, the net assets of the pension funds amounted to Denar 5.005 million, i.e. they are at the level of 1.3% of the gross domestic products[48]. In 2008, the net assets of the pension funds registered rise of 60.2%, which represented considerable slowing down relative to the annual growth rate in 2007 of 151.6%. However, relative to the other segments of the financial system, the annual growth in the net assets of the pension funds is one of the highest. The total annual absolute growth in the net assets in 2008 was due to the contributions paid in by the members of the pension funds. Opposite to that, the realized inflows based on "fertilization" of the assets were less significant for the annual growth in the net assets of the pension funds. The unrealized capital losses, which mainly resulted from the negative developments on the domestic capital market, in 2008 were acting towards downward developments in the value of the assets of the pension funds. This exactly mostly contributed for the mismatch of the monthly amount of the paid in contributions by the members and the monthly change in the net assets of the pension funds. Namely, since the last quarter of 2007 and till the first quarter of 2009, a period that concedes with the price correction on the domestic capital market, the monthly change in the net assets was often considerably lower than the monthly inflow from the paid contributions, which clearly

Figure No.142
Dynamics in the paid contributions, paid fees and monthly change in the net assets of the pension funds



Source of data: Agency for supervisions of the fully funded pension insurance

[48] Estimated data on the gross domestic product in 2009, Source: State Statistical Office.

indicated the accumulation of unrealized losses from investments in securities. The contributions collected by the pension funds management companies seem to have no influence on the development in the amount of the assets.

In the process of analyzing the development and the amount of the net assets of the pension funds, as well as their significance for the financial system, the maturity structure of their membership shall be taken in consideration. The relatively young membership structure, which is still far from the legally prescribed maturity for pensioning was an exceptionally positive circumstance for the domestic pension funds, in conditions of global financial crises. Namely, at the end of 2008 the average maturity of the members of the pension funds is 31, and the legally prescribed maturity for pensioning in the Republic of Macedonia is 62 for women, i.e. 64 for men. It created insignificant amount of current obligations of the pension funds. Hence, the outflows of assets and the liquidity risk are still not realized during their operating, which in conditions of downward developments in the prices of the financial instruments, was exceptionally significant for absorbing of the eventual negative consequences on their operating. Additionally, the changes in the method of calculations and the system for payment of wages in the Republic of Macedonia[49], which were implemented at the beginning of 2009, shall enable increase in the regularity of the inflows in the pension funds based on contributions, which shall make the effects from the planned drop in the rates on the basis of which the contributions for pension insurance are calculated and paid relative[50].

In 2008, certain deviations in the investment preferences of the pension funds were registered, acting towards increase in the prudency and conservativeness of the investments, but also a continuous rise in the level of asset diversification. These deviations reflect the perceptions and assessments of the pension funds management companies for the correlation between the risk and the income arising from the various investment alternatives. In conditions of global financial crises and downward trend on the domestic capital market, the investments of the pension funds were acting towards financial instruments with relatively low risk level, mainly the bank deposits. Namely, different from the last 2 years when the Treasury bonds were the careers of the growth in the assets of the pension funds, in 2008, the deposits invested in domestic banks took over that role registering impressive annual growth rate of 265 % and making 80% of the annual growth in the total assets of the pension funds. Additionally, the value of the equities issued by domestic issuers, on annual basis, registered drop of 39.7%, i.e. of Denar 233 million, which mainly resulted from the drop in their market values.

The deviations in the investment preferences of the pension funds influenced the structure of their assets, through growth in the participation of the deposits, for the account of the drop in the participation of the equities and bonds issued from domestic issuers. In 2008, the deposits in the domestic banks formed 80.0% of the growth in the total net assets of the pension funds. Relative to December 31, 2007, the participation of the deposits in the net assets rose by 23.4 percentage points. In 2008, the pension funds continued to invest in foreign equity financial instruments, but still their participation in the total assets was minimal and at the end of 2008 it was approximately 1%. The low exposure to instruments issued by foreign issuer contributed for the fall in the international stock

[49] Since January1, 2009, , the Public Revenue Office started to collect the mandatory pension insurance, instead of the Pension and Disability Insurance Fund (PDIF), through the system of integrated collection of the personal tax calculated for the paid wages and contributions calculated on the basis of wages. After the collection, the contributions are transferred to the Pension and Disability Insurance Fund.

[50] The latest changes to the Law on Mandatory Social Insurance (Official Gazette of the Republic of Macedonia No.142/08), the pensions and disability contributions rate which amounts to 21.2% of the gross wage, is envisaged to drop gradually in the following three years, i.e. to 19.0% in 2009, than to 16.5% in 2010, and to 15.0% in 2011. For the persons encompassed with the second pillar of the pension insurance, the distribution of the contributions is planned to remain the same, in correlation of two thirds in the first pillar (PDIF), relative to one third in the second pillar.

exchanges in 2008 to have no serious negative effects on the value of the net assets of the domestic pension funds.

Figure No.143
Annual absolute change in the individual categories of the assets of the pension funds

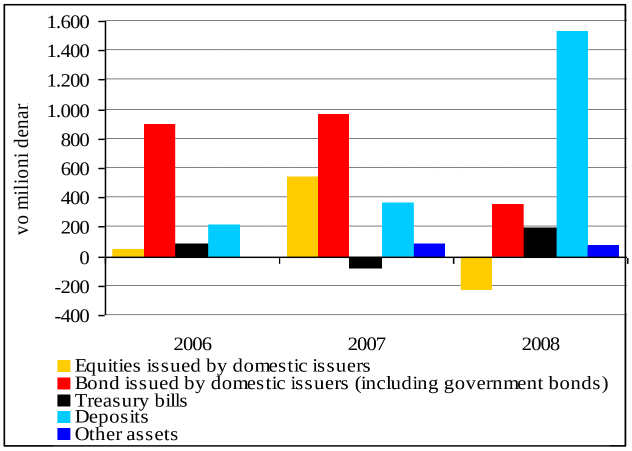
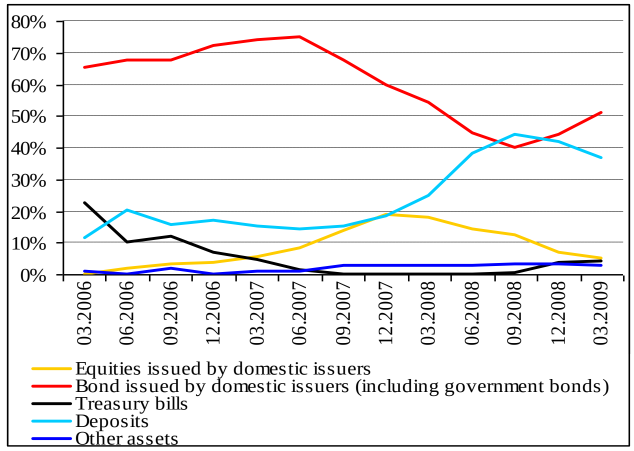


Figure No.144
Structure of the assets (investments) of the pension funds



Source: Agency for supervision of the fully funded pension insurance

The rise in the significance and attractiveness of the bank deposits as an investment alternative for the pension funds, additionally confirmed and increased the significance of the stability and the liquidity of the banking system as an imperative for maintenance of the financial stability. Simultaneously, this increased the business interaction between the pension funds and the banks, initiating in the same time use of other channels for mobilizing the sources of funds by the banks. The planned transfer of the function of the custodian bank from NBRM[51] to the commercial banks may represent an additional factor which is expected to increase the business interaction between the pension funds and the banks, and it is anticipated to be realized in the last quarter of 2009.

In 2008, deviations in direction of increment in the participation of the Denar investments were registered in the currency structure of the assets of the pension funds. At the end of 2008, the Denar assets created 71.1% of the total assets of the pension funds, which was by 6.4 percentage points higher than in the end of 2007. The higher preferences for Denar investments resulted mainly from the more attractive income from domestic currency instruments, especially the Denar deposits, but also due to the more conservative approach in the process of investing assets by the pension funds management companies. The fact that 96.5% of the assets with currency component (in euros and in denars with FX clause) are Denar assets with FX clause, i.e. bonds issued by the Republic of Macedonia shall be taken in consideration [52].

[51] With the launching of the second pillar of the pension system, NBRM performed the custodian function as transitional solution. The amendments to the Law on Mandatory Fully Funded Pension Insurance ("Official Gazette of the Republic of Macedonia" No. 48/2009) envisage for the custodian functions to be performed by the commercial banks in the Republic of Macedonia since October 2009.

[52] The investments of the pension funds in bonds issued by the Republic of Macedonia consist of: denationalization bond, old foreign currency saving bonds, continuous Treasury bonds and the Eurobond issued in 2005. All these bonds, excluding the continuous Treasury bonds, are with foreign currency component, i.e. they have inbuilt FX clause in Euros (so called structure Treasury bonds) or they are foreign currency nominated (Eurobond).

The financial crisis and the corrections of the price levels of shares, followed by the growth in the income from the bank deposits resulted in certain deviations in the maturity structure in the assets of the pension funds. At the end of 2008, the participation of the assets without specified maturity[53] dropped by 12.4 percentage points on annual basis. Most of the deposits in the domestic banks which were invested in 2008, were with contractual maturity of 1, 3 and 5 years, which resulted in growth in the participation of these maturity segments in the maturity structure, relative to the end of 2008.

Figure No.145
Currency structure of the assets of the pension funds

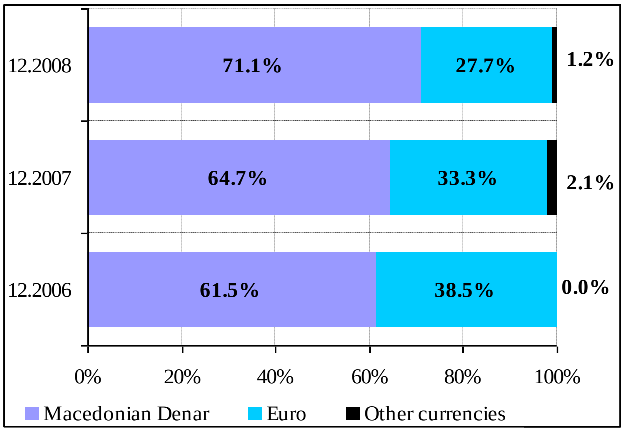
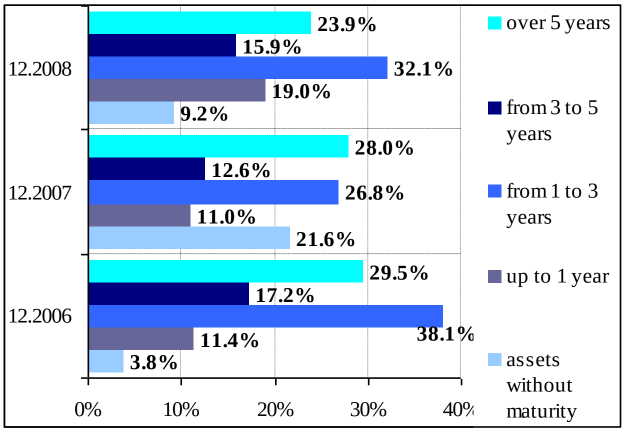


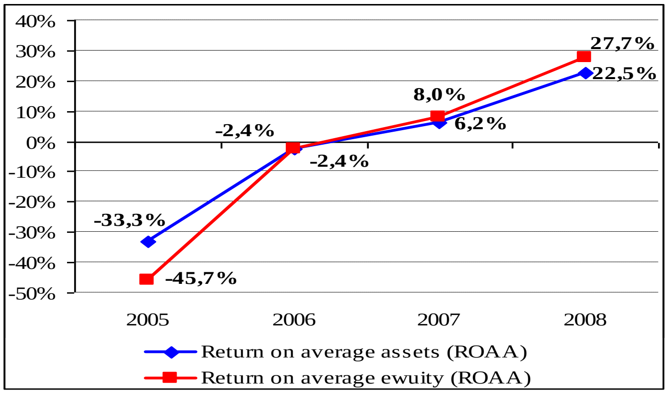
Figure No.146
Maturity structure of the assets of the pension funds



Source: Agency for supervisions of the fully funded pension insurance and internal NBRM calculations

The growth in the membership and in the volume of assets from the fully funded insurance the pension funds have on their disposal, influenced in direction of improvement in the financial performances of the mandatory pension funds management companies. Namely, in 2008 the indicators for the profitability of the mandatory pension funds management companies registered considerable increase which enabled coverage of the losses from operating which were made at the beginning of their founding. The improvement in the financial results of the pension funds management companies was exceptionally significant facing the start of the operative functioning of the voluntarily pension insurance, announced for the second half of 2009, and with that the eventual enter of new the pension funds management companies on the financial market. In the same time, with the realization of the planned gradual decrease in the contributions for pension and disability insurance in the following several years, space for additional drop in the contributions collected by the pension funds management companies may be created, and through that - an increase in the competition.

Figure 147
Profitability indicators of the mandatory pension funds management companies



Source: Agency for supervisions of the fully funded pension insurance and internal NBRM calculations

[53] The equities, i.e. the shares and the participations of the investment funds represent assets without determined maturity.

However, the announced start of the voluntarily pension insurance, the eventual enter of new companies and the forming of new pension funds, imposed the need of higher financial education of the public.

4.3 "Leasing" sector

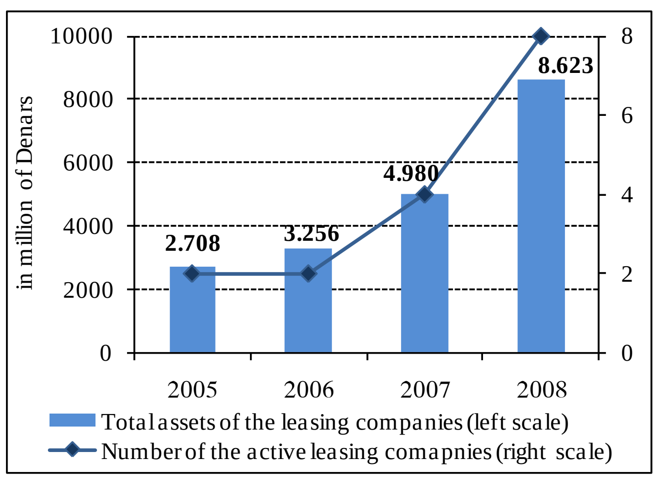
In 2008, parallel with the slowed down economic growth in the Republic of Macedonia and the slower growth in the assets of the financial system, slowing down in the growth and activities of the "leasing" sector was registered. Not depending on the slowing down, this sector represented the fastest growing segment within the financial system in 2008. The rise in the assets and the number of the leasing companies contributed to growth in their role for the total economic activity in the country. However, their significance for the gross domestic product remained relatively small at the end of 2008 as well, relative to the other segments of the financial system, as well as to the leasing sectors of other countries. Despite the significant growth in the number of the leasing companies, they still operate in conditions of high market concentration.

In 2008, the legal entities increased their participation in the sector structure of the leasing agreements and they remained the dominant clients of the leasing companies. In the same time, the structure of the leasing agreements for movables remained unchanged, with higher domination of the leasing of passenger cars. Relative to the previous year, the successful operating of the leasing sector considerably improved, which was clearly signalized through the indicators on its profitability.

Depth and activities on the leasing market

In 2008, in conditions of slower development of the activities of the entire financial system, the leasing sector was the fastest growing part of the financial system. The assets of the leasing sector registered considerable annual growth of 73.2% despite the slowing down of 8.9 percentage points relative to 2007. This sector was one of the fast growing sectors with respect to the number of the newly formed companies as well. Namely, the number of the leasing companies was twice higher, so at the end of 2008 eight companies offering financial leasing were active. Parallel with the growth in the number of the companies which perform financial leasing, the number of the employees in this sector also rose. On December 31, 2008, the total number of employees in the leasing sector amounted to 73, which represented growth of 55.3% relative to the previous year.

Figure No.148
Development in the number of active leasing companies and the value of their assets



Source: NBRM, based on the data submitted by the Ministry of Finance

The newly formed leasing companies still give no contribution enough to the growth in the competitiveness on the leasing market. The assets of the newly formed companies reached up to 5.1% of the assets of the leasing companies. The high level of concentration on the market is confirmed with

the Herfindhal indicator on the total assets, which on December 31, 2008 it equaled 3.923 index points, as well as with the CR5 indicator which was at the level of 99.9% on the same date.
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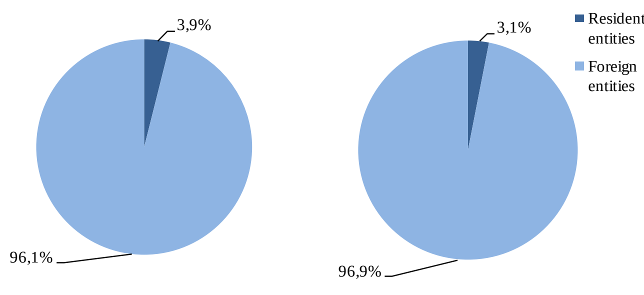
Despite the constant and the relatively fastest growth in the total assets, the role of the leasing sector for the total economic activity in the country, as well as in the financial system, was still small. Thus, at the end of 2008 the assets of the leasing sector represented 2.2% of GDP, which was an annual growth of just 0.7 percentage points. In the same time, the participation of the assets of the leasing companies in the total assets of the financial system rose by 1.1 percentage points relative to 2007 and at the end of 2008 it reached the level of 3.1%.
Analyzed within the non-deposit financial institutions, the leasing sector was more significant creating 32.2% of the total assets.

The ownership structure of the leasing sector was almost unchanged relative to 2007 and it characterizes with evident domination of the foreign capital. The largest share of this capital, i.e. 71.1% is in the ownership of foreign financial institutions, whereas the rest of it is owned by foreign non-financial legal entities (28.7%) and natural persons (0.2%). Opposite to that, the larger share of the capital in domestic ownership, i.e. 94.1% belongs to the non-financial legal entities, whereas the natural persons own only 5.9%.

Figure No.149
Ownership structure of the leasing companies



Source: NBRM, based on the data submitted by the Ministry of Finance of the Republic of Macedonia.

Figure No.150
Participation of the assets of the leasing sector in GDP

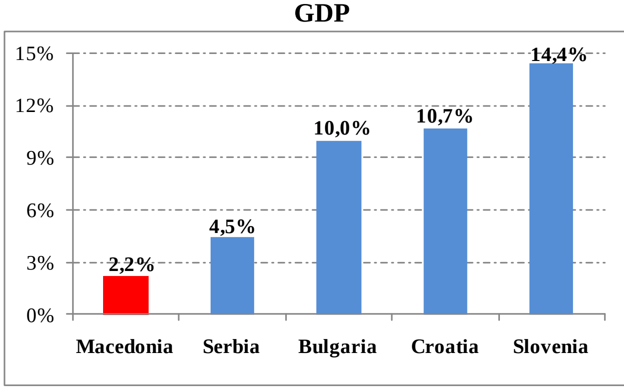
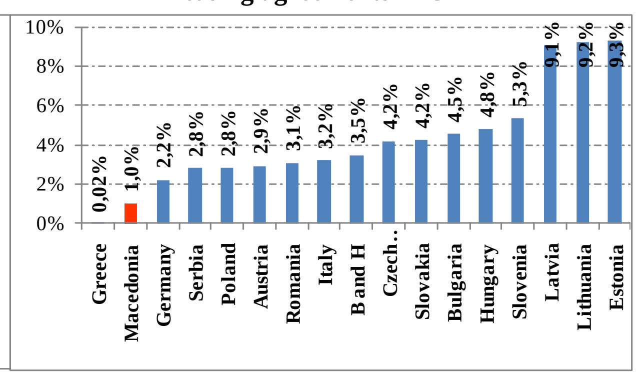


Figure No.151
Participation of the value of the newly concluded leasing agreements in GDP



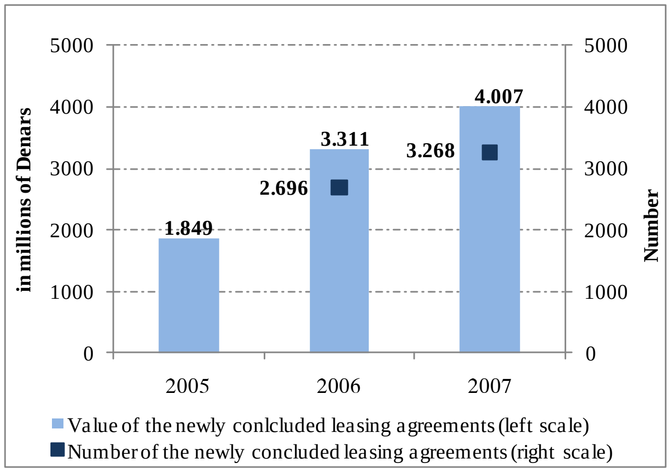
Source: web pages of the central banks, the web page of the Federation for national Leasing Associations in Europe and the web page of the Ministry of Finance of Serbia. The data in the Figure No. 151 for Bulgaria and Croatia pertain to 2007, while the data on the other countries pertain to 2008. The data in the Figure No. 152 for all countries pertain to 2007, except for the Republic of Macedonia which pertain to 2008.

Compared with the countries from the region, as well as with the European Union countries, the leasing sector in the Republic of Macedonia was poorly developed. The correlation between the assets of the leasing companies and the gross domestic product was at the lowest level relative to part of the countries from the region. Such lowest participation may partially result from the insufficiently developed leasing real estate market in the Republic of Macedonia. The reason for this may be found in the negative tax policy, regarding the double taxation of the real estates sold through leasing, as well as the taxation of the interest based on the leasing agreements with VAT. The lower level of development of the leasing sector in the Republic of Macedonia is confirmed through the indicator for the value of the newly concluded leasing agreements relative to GDP. Excluding Greece, this indicator in the Republic of Macedonia is at the lowest level.

Value and structure of the financial leasing agreements

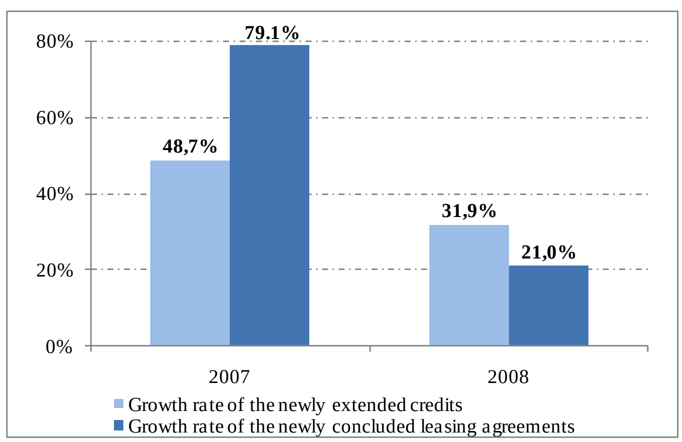
In 2008, although with lower tempo, the number and the value of the leasing agreements continued to grow. Relative to 2007, the value of the newly concluded leasing agreements went up by 21% which represents considerable slowing down in the growth relative to the previous year, when the growth rate amounted to 79.1%. Consequently, the value of the newly concluded leasing agreements remained almost unchanged at the level of 1% of the gross domestic product of the Republic of Macedonia. The slowing down in the activities of the leasing companies can be seen also through the number of the newly concluded agreements, which in 2008 went up by 21.2%, which was by 4.3 percentage points less relative to 2007. As a result of the slower dynamic of growth in the newly concluded leasing agreements, in 2008 the annual growth rate of the active leasing agreements also dropped, from 67% (in 2007), to 27.1% (in 2008). The value of the active agreements equaled Denar 10.120 million on December 31, 2008.

Figure No.152
Number and values of the newly concluded leasing agreements



Source: Ministry of Finance

Figure No.153
Growth rate of the newly extended credits and newly concluded leasing agreements



Source: NBRM and Ministry of Finance.

Although according to the growth rate of the assets, the leasing companies are the fast growing segment of the financial system, the considerably lower growth in the newly concluded leasing agreements placed this sector behind the banking system, which in 2008 registered relatively higher growth rate of the newly extended credits. The trend present in some countries from the region, where due to the more intensive effects from the financial crisis and the macro prudent measures undertaken, the fulfilling of significant part of the credit requirements on the market transferred from the banks to the leasing sector, was not registered in the Republic of Macedonia. Of course, the leasing companies may become more competitive with potential for more intensive further growth mainly due to the fixed interest rates of the leasing agreements, the absence of costs for establishing collateral for the credits etc.

Despite the lower growth rate in the number and in the value of the newly concluded and active agreement, no considerable changes in their average value was registered. The average value of one concluded leasing agreement in 2008 amounted to Denar 1.226 thousands (relative to Denar 1.228 thousands in 2007), whereas the average value of one active agreement on December 31, 2008 amounted to Denar 1.073 thousands (relative to Denar 1.066 thousands in 2007).

Different from 2006, when the natural entities dominated, in 2007 and 2008, the legal entities were dominant clients of the leasing companies. In 2008, despite the considerable slowing down in the growth in the newly concluded leasing agreements with the legal entities, they maintained the dominant position, with twice higher participation in the total value of the newly concluded agreements, relative to the agreements with the natural persons. Thus, the legal entities participated with 69.4% in the structure of the newly concluded leasing agreements in 2008, which represented annual growth by 3.4 percentage points. The value of the newly concluded agreements with the natural persons continued with moderate growth rate of about 10%. In conditions of such developments, the legal entities strengthened their share in the structure of the active leasing agreements as well on December 31, 2008, which amounted to 61.7%, and it was by 6.4 percentage points more relative to December 31, 2007.

Table No. 31
Structure and change in the value of the newly concluded and active leasing agreements, by individual sectors

Year	Value of the **newly concluded** leasing agreements	Change in the value of **newly concluded** leasing contracts of legal entities		Value of the **active** leasing agreements	Change in the value of **active** leasing contracts of legal entities	
		in million of Denars	**in %**		**in million of Denars**	**in %**
Legal entities						
2007	2.157	1.301	152,0%	4.401	2.125	93,3%
2008	2.781	624	28,9%	6.243	1.842	41,9%
Natural persons						
2007	1.110	117	11,8%	3.564	1.038	41,1%
2008	1.225	115	10,4%	3.876	312	8,8%

Source: NBRM, based on the data submitted by the Ministry of Finance.

The leasing agreements on real estate no longer had significant role and participation in the number and the value of the total agreements in 2008 as well. Only one leasing agreement on real estate was concluded, so at the end of the year total four leasing agreements on real estate were active, and their total value amounted to Denar 158 million. On the other hand, the movables remained the dominant position participating with 98.4% in the total value of the active agreements.

The structure of the leasing agreements on movables remained unchanged with evident domination of the passenger cars. Namely, 78.1% of the concluded agreements on movables in 2008 pertain to passenger cars, which represent marginal drop of 2.1 percentage point, relative to 2007. Simultaneously, the participation of the agreements on passenger cars in the active leasing agreements on movables equaled 83%, on December 31, 2008, which was by only 1 percentage point more relative to the previous year. But, the participation of the passenger cars sold on leasing in 2008 in the total number of sold vehicles in the Republic of Macedonia was lower. Namely, out of total 17.744[54] sold vehicles in 2008, 14.4% were sold through leasing, which represents annual drop of 1 percentage point. However, despite the lower participation of the sale of passenger cars though leasing in the total sale of passenger cars, the average value of one leasing agreement[55] was almost twice higher than the average value of one car loan through the banking system. Namely, the average value of one concluded leasing agreement with natural entity amounted to Denar 817 thousands, whereas the average value of one car loan amounts to Denar 416 thousands.

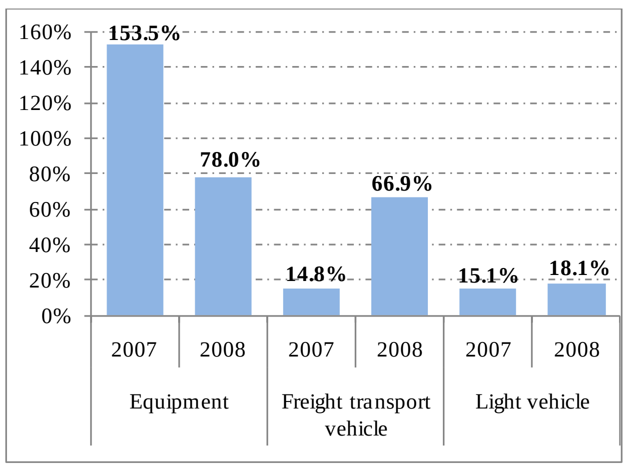
Table No. 32
Structure of the leasing agreements on movables

Type of the leasing contract	Equipment			Freight transport vehicle			Light vehicle			Other		
	2006	2007	2008	2006	2007	2008	2006	2007	2008	2006	2007	2008
Number of newly concluded leasing contracts	43	109	194	216	248	414	1.878	2.162	2.554	10	176	110
Number of outstanding leasing contracts	337	225	338	515	695	902	4.158	6.123	7.828	24	426	367

Source: Ministry of Finance

In 2008, the sale of equipment registered largest percentage growth in the number of the concluded leasing agreements which was solely due to the lower previous level of activities in this segment of operating of the leasing companies. However, the sale of equipment on leasing in 2008 grew with almost twice lower tempo relative to the previous year. The lower growth rate in the number of the leasing agreements on equipment fully corresponded with the general slowing down in the economic activity in 2008, in the Republic of Macedonia and on global level. On the other hand, in 2008, the cargo vehicles that were sold with intermediation of the leasing companies registered considerably higher growth dynamics. The leasing agreements on the passenger cars, although having the dominant role in the concluded agreements on movables, grew with significantly lower dynamics relative to the agreements on equipment and cargo vehicles.

Figure No.154
Growth rate of the newly concluded leasing agreements for movables



Source: NBRM, based on the data submitted by the Ministry of Finance.

Structure of the balances and basic indicators for the performances of the leasing companies in 2008

[54] Source: Association of Chambers of Commerce of the Republic of Macedonia.
[55] The average value of the leasing agreement was calculated on the basis of the data of the concluded agreements of natural persons.

The structure of the total assets and sources of assets of the leasing companies did not suffer considerable changes relative to the previous year. In 2008, the borrowings from abroad were still the dominant source of funding the activities of the leasing companies. The assets whit which the domestic banks participated in the funding of the activities of the leasing sector represented less than 2% of the total sources of assets. Also, there were no changes in the participation of the deposits of this sector placed with the domestic banks, which as in the previous year, in 2008 as well equaled about 5% of their total assets.

In 2008, despite the slower dynamics of growth in the activities, the leasing companies operated more successfully. Relative to 2007, when the net gain dropped by 35.2%, in 2008 it registered rise by 50% equaling Denar 111 million. Consequently, the rate of return on equity rose by 15.9 percentage points and in 2008 it amounted to significant 50% (the high rate of return on equity arises from the low participation of the capital in the total assets of only 2.6%). Simultaneously, considering the high growth in the assets, the rate of return on assets decreased by 0.3 percentage points amounting to 1.6%. The prolongation of the negative influence from the negative macro economic developments in the country may influence the purchasing power of the clients, which consequently would cause difficulties in the payment of their debt, including the one to the leasing sector. Such situation may affect considerably on the further development and the performances of this segment of the financial system.

IV. Financial infrastructure

1. Payment systems

In 2008, the NBRM continued the activities for further improvement of the payment systems and their consolidation with the international standard. For further consolidation of the MIPS with the 10 core Basel principles for systemically important payment systems, NBRM performed certain improvements in the implementation of its operative function. The establishment of the domestic settlement of the transactions of the international payment cards gave significant improvement. In 2008, NBRM became direct participant in the TARGET2 system, through the central bank of Nederland. There is a need for additional strengthening in the monitoring of the payments systems' segments.

Payment infrastructure

The reform of the payment systems in the Republic of Macedonia was finalized on December 31, 2001, so the accounts of the legal entities were transferred to the commercial banks and the settlement systems of transactions through the accounts in the commercial banks with NBRM were established, as follows: Macedonian Interbank Payment System (MIPS)[56] for settlement of transaction on gross principle and the Clearing Interbank Systems (KIBS)[57] for settlement of the transactions on net principle. In the MIPS of the NBRM, the SWIFT standard for the type of payment messages and ISO 9362 for the bank identification codes were applied. Within the clearing house "KIBS" AD Skopje, an own standard for exchange of the payment messages was developed. Such positioning of the payment systems and the security settlement systems in the Republic of Macedonia created payment infrastructure characteristic for modern market economy. In the same time, they represented solid basis for development of the financial infrastructure and rise in the level of the financial intermediation in the country.

In the following FSAP mission, from April 2008, high level of consolidation of the MIPS with the Core principles for the systemically important payment systems of CPSS (Committee on Payment and Settlement Systems) within BIS Basel was determined.

Development in the payment infrastructure and risk management

The position of the payment systems in the Republic of Macedonia enables minimizing of the risk the participants are exposed to. The exposure of the participant to c**redit risk** in this system can hardly be registered, due to the applied real time gross settlement principle. The management of the **liquidity risk** in the MIPS is performed through using the option of management of the payments in "queuing", as well as the possibility for the banks to use non-interest intraday credit from NBRM, under

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[56] MIPS - Macedonian Interbank Payment System of NBRM is a real time gross settlement system (RTGS - Real Time Gross Settlement) of the payments with high value (above Denar 1 million) and the urgent interbank payments. The Government payments are also performed through this system. The settlements of the transactions with securities concluded on the Macedonian Stock Exchange AD Skopje are also performed through MIPS; it is directly related with the Central Depository for Securities, which enables security settlements by the "delivery against payment" principle, in T+3period. Through MIPS a platform for settlement of securities and bonds and of the Treasury bonds of the National Bank is established. The settlement is performed by the "delivery against payment" principle in real time.

[57] KIBS (Clearing Interbank System - Clearing House AD Skopje) is a system for multilateral delayed net settlement of the payments with small value (less than Denar 1 million), founded by the banks in the Republic of Macedonia. Most of the payments in this system are performed for the account of the banks' clients, so the balances after the performed clearing are settled in MIPS, and the payment become final and irrevocable.

prescribed conditions. Also, the MIPS uses general instruments for managing with the credit and liquidity risk. Namely the MIPS encompasses information system for support of the instruments for management of the credit and liquidity risks, the participants have clear, full and prompt (real time) financial information. For smooth performance of the operative function, NBRM in 2008 fully replaced the hardware and software infrastructure of MIPS.

There was a certain weakness in the systems in the process of management with the liquidity risk with the Clearing house "KIBS" AD Skopje, with the applied system of the so called unwinding[58] of the payment transactions which participated in the multilateral netting. According to the FSAP recommendations, the improvement shall be acting towards introducing an agreement on dividing the losses in KIBS. Namely, in case of inability for settlement of the user with highest individual settlement liability, the process of „unwinding“ may cause a lack of liquidity, i.e. spreading of the liquid problems among the other participants as well (i.e. domino effect). On the other hand, the risks in KIBS are being managed through the given possibility to the banks to use the access (in real time) to its net position during the day, in order to cover the eventual lack of assets on time through loans.

Additionally, in order to minimize the operative and the systemic risk and to enable continuity in the operating in conditions of unexpected stoppage or obstruction of the primary system, the finalization of the initiated activities for establishing a secondary location was necessary. Namely, in 2009 the establishment of the reserve system on secondary location was planned. The realization of this activity is acting towards compliance with the seventh principle of the systemically important payment systems.

In 2008, the availability of the MIPS was high, equaling 99.93% of the envisaged operating time during the year, so the efficiency of the functioning of this segment of the financial infrastructure was confirmed. Relative to the previous year, the availability of the system rose by 0.1 percentage point.

The establishment of the national settlement of international payment cards had especially high significance for increase in the efficiency of the payment operations. This activity was finalized in 2009 (May), when NBRM started to realize the agreement "MasterCard International Incorporated" for national (domestic) settlement of the cash free payments in the trade network in the Republic of Macedonia and cash withdrawal in a bank or from ATM with MasterCard issued by the commercial banks in the Republic of Macedonia. This shall contribute to drop in the costs of the commercial banks, and finally, to fall in the costs of the service providers in the trade network.

In 2008, NBRM joint the TARGET2[59] system, as an indirect participant through the Central Bank of Nederland. The indirect joint of Macedonia to TARGET2 system caused certain changes in the system and the activities for the back office, so they were successfully adjusted to the operations of the TARGET2 system.

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[58] As an instrument for decrease in the liquidity risk within KIBS, there is a procedure of so called unwinding processed orders, for the participant who can not realize its negative net liability. On that manner, in case of negative net position of any participant, KIBS cancels the prepared calculation and prepares new one which excludes the orders from the participant who failed to fulfill the liability. According to the Instructions for operating with KIBS, this procedure can be repeated till the settlement among banks is performed.

[59] The real time gross settlement system of the payments in Euros among the EU member states. This system includes the national real time gross settlement systems of the EU member states and the payment system of the European Central Bank.

Regulation and supervision

The NBRM, the Ministry of Finance and the Security Committee are the regulatory bodies in the area of the payment systems in the Republic of Macedonia. The total bylaws on the payment systems by NBRM were finalized in 2007. In 2008 some amendments related with the manner of treating the payment systems careers in the process of instigating bankruptcy or liquidation procedure against a participant in the payment preparations were performed. This change contributes to growth in the efficiency of the bankruptcy procedures.

NBRM is an authorized supervisory body for the payment systems in the Republic of Macedonia. Considering the significance of the payment systems for the financial stability of the country, and having the recommendations of the last FSAP mission in April 2008 in mind, further staffing in the supervisory function on the systems the operator of which is not the central bank ("KIBS" AD Skopje, "Kasis" AD Skopje[60]) is necessary.

Also, strengthening in the supervision in the area of the security settlement was required (according to the current regulation, the supervision in this area does not rest with NBRM).

Payment operations volume

In 2008, the number and the value of the transactions of the payment operations continued to grow. In conditions of slower economic growth and slower growth in the activities of the total financial system, the total value of the transactions in the payment operations grew with lower dynamics as well. While the value of the transactions went up by 12.2 percentage points with a slower pace relative to 2007, the total number of the transactions registered considerable growth (higher annual growth rate by 49.6 percentage points). The slower pace of growth in the value of the transactions was due to the transactions realized through MIPS, the growth rate of which went down by 28.6 percentage points. The high growth in the number of the transactions through MIPS (of 59.9 percentage points), indicates the tendency for use of this system for smaller payments as well, which is in favor of the decrease in the risks in the payment operations.

Table No. 33
Value and number of transactions in the payment operations

Item	Value of total operations (in millions of Denars)		Number of transactions		Change			
					Value		Number	
	2007	2008	2007	2008	2007/2006	2008/2007	2007/2006	2008/2007
MIPS	1.452.746	1.669.556	2.831.339	4.906.672	43,5%	14,9%	13,4%	73,3%
KIBS	166.803	199.821	12.528.630	14.941.822	12,8%	19,8%	16,4%	19,3%
Internal banking payment operations	985.250	1.367.415	12.058.263	25.457.090	31,8%	38,8%	15,3%	111,1%
Total	**2.604.799**	**3.236.792**	**27.418.232**	**45.305.584**	**36,5%**	**24,3%**	**15,6%**	**65,2%**

Source: NBRM

The value and the number of the transactions made in the internal banking payment operations registered highest growth rate. The number of these transactions participated mostly in the structure of the payment operations as well, the participation of which relative to the previous year rose by 12.2 percentage points.

[60] "Kasis" AD Skopje is private processing center of the payment cards which performs authorization and clearing of the transactions with the payment cards. The "Kasis" is connected to MIPS for final transaction settlement.

Table No. 34
Structure of the payment operations

Item	Structure			
	Value		Number	
	2007	2008	2007	2008
MIPS	55,8%	51,6%	10,3%	10,8%
KIBS	6,4%	6,2%	45,7%	33,0%
Internal banking payment operations	37,8%	42,2%	44,0%	56,2%
Total	100,0%	100,0%	100,0%	100,0%

Source: NBRM

Despite the slower growth in 2008, the value of the transactions realized through MIPS and KIBS relative to GDP, maintained the upward trend. On December 31, 2008 the value of these transactions exceeded the GDP by 4.7 times.

The concentration in the payment operations, both, with respect to the value and the number of the transactions was at the acceptable level and in 2008 it continued the downwards trend. In 2008, the Herfindahl index calculated for the value of the transactions in the payment operations amounted to 1.349 index points, while this index calculated for the number of the transactions equaled 1.147.

Figure No.155
Value of the total transactions in KIBS and MIPS relative to GDP, and number of transactions

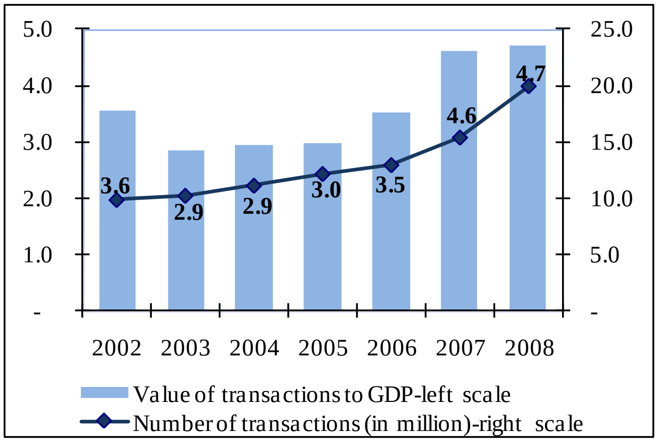


Figure No.156
Trend of the Herfindahl index on the value of transactions

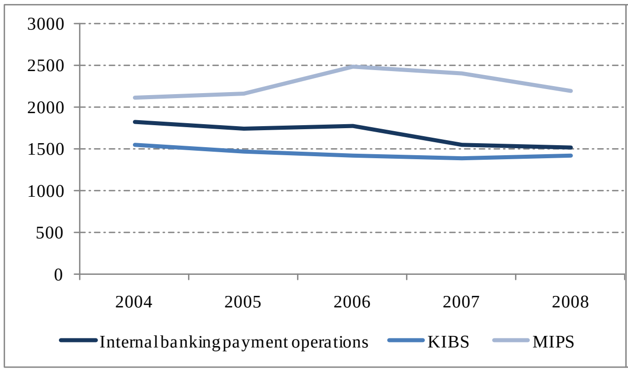
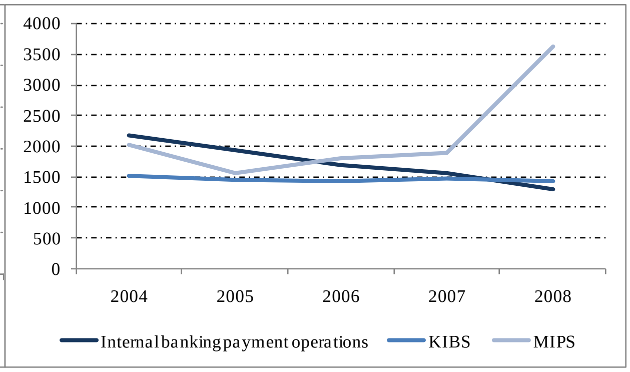


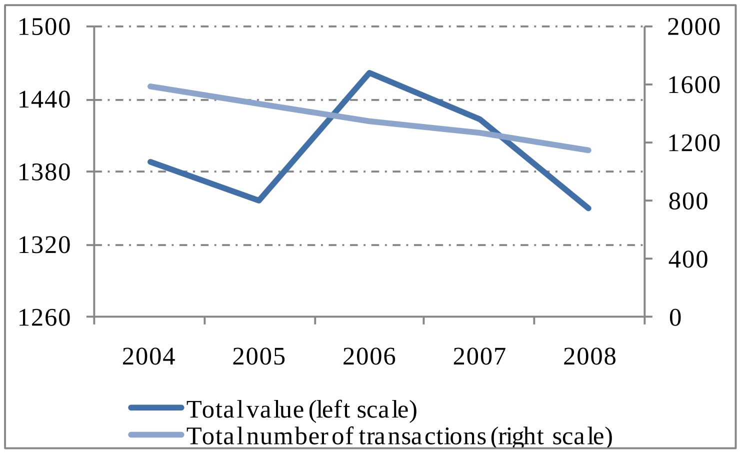
Figure No.157
Trend of the Herfindahl index on the value of transactions



Source: NBRM

Especially high concentration was evident in the payment operations through MIPS, where the Herfindahl indices on the value and the number of transactions amounted to 2.189 and 3.635 index points, respectively. This high concentration was totally understandable, considering the including the transactions on the treasury account realized through MIPS in the calculation. If these transactions are being excluded from the analysis, the concentration in MIPS is acceptable (it amounts 1.496 and 1.286 index points for the value and the number of transactions through MIPS). The Herfindahl index registered mildest and most stable development with the internal development.

Figure No.158
Trend of the Herfindahl index on the number and value of the total payment operations



2. Legal solutions of higher importance adopted in 2008

Several new laws that influence on the financial system of the Republic of Macedonia were adopted in 2008: The Law on Credit Bureau, The Law on Voluntarily Fully Funded Pension Insurance and the Law on Financial Collateral. Also, some amendments to several current laws were performed which directly or indirectly regulate the manner of functioning of certain segments of the financial system, as follows: Law on Mandatory Fully Funded Pension Insurance, Law on Obligations, Law on check, Law on Establishing the Macedonian Bank For Development Promotion, Law on Trade Companies, the Law on Foreign Currency Operations, Law on Deposit Insurance Fund, Law on Leasing and Law on Audit.

2.1 Law on Credit Bureau

In July 2008 the Law on Credit Bureau was adopted. This law enables founding of private credit bureaus in the Republic of Macedonia, the basic activity of which shall be collecting and processing of data on the indebtedness and regularity in the fulfillment of the liabilities by certain natural persons and legal entities. The following entities can found a private credit bureau:

- banks from the Republic of Macedonia;
- companies founded by banks only;
- share companies founded and having its main office in the Republic of Macedonia, only if they fulfill certain conditions[61] prescribed by law.

Different from the Credit Registry of NBRM[62] which contains data on the liabilities of individual entities to banks and saving houses, the private credit bureau despite the data on the liabilities of

[61] (1) to have core principle of at least Euro 1.000.000 in Denar equivalent according to the middle exchange rate of NBRM on the day of the founding of the credit bureau, (2) to be founded at least three years before the day of the founding of the credit bureau and to have positive financial results in the last two years and (3) to perform activities from the insurance area, financial leasing, telecommunication services or informatics technology.

individual entities based on credits, guarantees, letters of credit etc. to the banks and saving houses, shall also contain data on the liabilities based on loans, payment cards, financial leasing, insurance, taxes, liabilities based on telecommunication services, energy services, utility fees, taxes, contributions and etc. Based on the collected data, the credit bureau prepares a report on the actual stock of certain person's liabilities. The issuance of these reports is performed on the basis of previously given approval by that person. The data and the reports on the individual persons acquired in the process of performance of the credit bureau's activities represent confidential data which the credit bureau and all data providers and users are obliged to be familiar with and to keep it.

The law defines the persons which may emerge as data providers and users, regulates the manner of the procedure, the rights and obligations of the persons in the process of data exchange, as well as the status and keeping the data. Different from the NBRM's Credit Registry, which contains data on the claims of banks and saving houses in the Republic of Macedonia exclusively, the data in the private credit bureau, despite the banks and saving houses shall be submitted also by: the insurance companies, the financial leasing companies, other credit issuers, the companies for operations with payment cards, the Public Revenue Office, the Central Registry of the Republic of Macedonia, the Pension and Disability Insurance Fund of the Republic of Macedonia, the city of Skopje and the local government units, the service providers in the area of utilities, energy, telecommunications and other trade companies that provide services on the basis of which liabilities emerge for the legal entities and natural persons. The submission of data to the bureau is performed only on the basis of written agreement between the data provider and the credit bureau.

The entities that provide data for the bureau, together with the entities the data refer to represent the users of the data from the credit bureau.

2.2 Law on Financial Collateral

This law supplements the group of laws that regulate the area of the claim collateral. The Law on financial collateral represents consolidation of the regulations of the Republic of Macedonia with the EU Directive 2002/47 on financial collateral agreements.

The law stipulates the terms and manner for the possibility for the cash or another financial instrument to be utilized as financial collateral for certain claims. The agreements for financial collateral may envisage transfer of the ownership or establishment of lien. With the agreement for financial collateral with transfer of ownership, the recipient of the financial collateral may have the financial collateral (the financial instrument or the cash) on its disposal (sell it). With the agreement on financial collateral with lien, the recipient of the financial collateral may have the pledged collateral on its disposal only after being previously given an authorization from the collateral issuer. Not depending on the type of agreement, at the maturity date of the financial claim that is being collateralized, the recipient shall be obliged to ensure equal financial instrument, i.e. cash in the same amount.

By regulating this matter, higher level of safety of the financial transactions is achieved among the persons which according to law can conclude agreements for financial collateral, the liquidity on the financial market is increased, through the possibility for to have the financial instrument used as financial

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[62] The Credit Registry of NBRM operates since 1998. It represents database for the credit exposure of banks and saving houses to residents and non-residents, legal entities and natural persons. In the second half of 2008, the improved Credit Registry of NBRM started operating. The improvements pertain to the broadening of the database it consists, as well as increase in the frequency of data delivery (for more details in the Report on the banking system and banking supervision in 2008).

collateral on disposal and the administrative encumbrance is lower in the process of concluding agreements for financial collateral.

2.3 Law on voluntarily fully funded pension insurance

The Law on voluntarily fully funded pension insurance regulates for the first time the voluntarily fully funded insurance in the Republic of Macedonia, i.e. the so called third pension pillar. This finalizes the reform of the pension system in the Republic of Macedonia, thus ensuring long-term stability of the pension system and safety of the insured which are part of this system.

The voluntarily fully funded pension insurance represents pension insurance on voluntary basis, funded with asset capitalization. Same as the second pillar, the third pillar consists of individual, privately managed saving accounts, which different form the second pillar are opened by natural persons, on voluntarily, not mandatory basis. The goal of the third pillar is to ensure higher income after the pensioning of the ensured who are already ensured in the first and/or the second pillar (mandatory pension and disability insurance). Namely, this insurance may include any person who is able and who wants to allocate additional assets from its own current income.

This law regulates the founding, the operating principles, the rights and the liabilities of the voluntarily pension funds management companies and the voluntarily and mandatory pension funds management companies. These companies can be founded after previously issued license from the Agency for Supervision of the Fully Funded Pension Insurance. The voluntarily fund can be founded as open investment fund, in accordance with the Law on Investment Funds. The assets of the voluntarily pension fund can not be subject to claims, neither such funds can be enforced by, or on behalf of the creditors of the company that manages this pension fund.

This law prescribes the possibility for forming professional pension schemes. An employer or citizens association can organize and finance professional pension scheme for their employees or members. The professional scheme must not include all the employees with certain employer. The employer has a right to select which employees or members can participate in the professional pension scheme, as well as to determine the income rate that shall be paid for each employee included in the scheme. The possibility envisaged by this law ensures preconditions for consolidation of the social insurance system of the Republic of Macedonia with the EU system.

The pension funds management companies can invest the assets from the voluntarily pension funds in the instruments prescribed by this law, adhering to the limitations from this law and bylaws adopted by the Agency for Supervision of the Fully Funded Pension Insurance. These companies are obliged to keep the safety of the assets, to take care for the diversification of the risk from investments and to maintain adequate liquidity. The pension funds management company selects custodian, that is responsible for keeping the assets of the voluntarily pension fund. A custodian of the domestic assets shall be a bank that has founding and operating license issued by the Governor of the NBRM and that fulfils the criteria prescribed by this law.

For the purpose of consolidation with the provisions of the Law on Voluntarily Fully Funded Pension Insurance, in 2008 the Law on Mandatory Fully Funded Pension Insurance was amended. All provisions pertaining to the mandatory pension funds management companies, pertain also to the mandatory and voluntarily pension funds management companies. The amendments to the law determines and further regulate the responsibilities and authorizations of the Agency for the Fully Funded Pension Insurance and precisely stipulates the liability for the companies to maintain the amount of equity capital (at least one half of the founding capital), calculated by the methodology for calculating the capital prescribed by the Agency. Also, significant innovation which is introduced with the amendments to this law is the introducing of the liability for the pension funds management company to organize special organizational unit for internal audit that will perform continuous and full audit on the legitimacy and accuracy of the company's operating.

2.4 Law on amending the Law on Obligations

The amendments to the Law on Obligations envisage certain changes that directly influence the banking and the financial system. The provisions from this law precisely prescribe the manner of determining the legally prescribed penalty interest and contractual interest. The amount of the penalty interest rate is determined for each half oh the year, in the amount of the reference interest rate of the basic instrument for the NBRM's open market operations that was valid at the last day of the previous half of the year, increased by 10 percentage points. The contracting parties can agree higher rate from the penalty interest rate, but up to one third of that rate at maximum (contractual penalty rate).

The contractual interest shall be determined with an agreement, thus not being higher than the rate of the legally prescribed penalty interest that was valid at the day of the concluding the agreement. The amendments to this law explicitly prescribe the ban for calculating of interest on interest which is not paid at its maturity date. The deposits with banks, saving houses and other financial institutions have no such ban.

Special feature of the changes to the Law on Obligations was the precise determination of the method of calculation of the penalty and contractual interest in the cases when it is agreed for the monetary liability to be denominated in foreign currency or when it is already denominated in such currency. In these cases, the interest rate (contractual or penalty) can not be higher than the respective interest rate of the country of origin of currency. This provision restricts the amount of the interest rates of the credits granted or indexed in foreign currency.

2.5 Law on amending the Law on Check

The amendments to the Law on check introduce a possibility for the banks in the Republic of Macedonia to be able to print and to put into circulation check blankets. The form and the back of the check blankets, the level of protection of the check blankets from forgery, as well as the manner of their putting into circulation is regulated by the banks themselves.

2.6 Law on amending the Law on Establishing the Macedonian Bank for Development Promotion

The amendments to the Law on Establishing the Macedonian Bank for Development Promotion mainly enables consolidation with the provisions of the new Banking Law adopted in 2007. Simultaneously, considering the special features of this bank, the changes envisage certain exceptions from the Banking Law as well, which mainly pertain to the fulfillment of the reserve requirements, to the manner of appointing of the members of the Supervisory Board which represent the state capital of the bank etc.

2.7 Law on amending the Law on Trade Companies

The amendments to the Law on Trading Companies are made in order to improve the operating of the trade companies. One of the more significant changes pertains to the right of the share holders to subscription initially of newly issued shares and other securities when the basic principal of the company is increased. This change shall become effective at the moment the Republic of Macedonia enters the European Union.

2.8 Law on amending the Law on Foreign Currency Operations

The amendments to the Law on foreign currency operations explicitly interdict the collecting or payment of effective foreign cash on claims among residents.

Within the part of the Law pertaining to the foreign exchange operations, the situations when NBRM ceases the license for performing foreign exchange operations is precisely described. After the cease of the license, the resident that performed foreign exchange operations, its founders and the members of the management boards, have no right to request for a license for performing foreign exchange operations within 10 years from the effectiveness of the decision on license cease. Also, the list of activities which according to this law are thought as misdemeanor is supplemented and new higher cash penalties are prescribed.

Regarding the carrying out the misdemeanor procedures and imposing the misdemeanor sanctions, the amendments to the law enable consolidation with the provisions of the Misdemeanor Law. The State Currency Inspectorate, NBRM and the Customs Service carry out, i.e. impose misdemeanor procedure and misdemeanor sanctions, each institution in its operating domain.

2.9 Law on amending the Law on Leasing, Law on amending the Law on Audit and Law on amending the Law on Deposit Insurance Fund

The amendments to these three laws pertain only to the need for consolidation with the provisions from the Misdemeanor Law, adopted in 2006. Regarding to this, the amendments pertain to the conducting of misdemeanor procedure and imposing the misdemeanor sanction and the manner of forming and operating of the misdemeanor body. Also, the amendments regulate the possibility for carrying out intermediation and settlement procedures and the manner of implementation of these procedures.