Periodical Part

Financial stability report for the Republic of North Macedonia in ... ; 2010

National Bank of the Republic of Macedonia

FINANCIAL STABILITY REPORT FOR THE REPUBLIC OF MACEDONIA IN 2010

june, 2011

Contents

EXECUTIVE SUMMARY

Financial stability in the Republic of Macedonia in 2010 was satisfactory, and the risks for its future maintenance were reduced. This situation was largely determined by the conditions in the global macroeconomic environment, which in 2010 was marked by a gradual recovery of the world economy from its deepest recession in the last eighty years. In such conditions, macroeconomic environment in the Republic of Macedonia generally created a positive climate for maintaining financial stability. After the moderate slowdown in the previous year, domestic economic activity in 2010 was gradually recovering. Export growth, coupled with strong positive dynamics of private transfers, contributed to a significant improvement of the external position of the country. The favorable balance-of-payments position positively affected the supply on foreign exchange market, as a result of which there were no pressures on the exchange rate, as one of the main points of maintaining domestic stability.

Macroeconomic projections for 2011 indicate a continuing climate of stable macroeconomic environment, which would mean lower risks for the macroeconomic and financial stability. However, the risks are not exhausted and are primarily related to the possibility of spillover of risks from the global environment, primarily from the euro area (which could reflect on the future dynamics of export demand and access to and cost of capital in global markets), and to the uncertainty about the future dynamics of world oil and food prices (whose negative effects could materialize through the inflation expectations of domestic entities and the external position of the country).

The favorable macroeconomic environment, contributed positively to the strengthening of the financial system stability. In 2010, total assets of the financial system grew at a rate of 13.3%, which is nearly two times higher compared to 2009. The simple market structure and the absence of complex financial groups, have downplayed the possibility of disturbing the stability of individual segments as a result of spillover of the risks they face.

The stability of the financial system of the Republic of Macedonia is largely dependent on the stability of the banking system as its dominant segment. Despite the intensification of activities in 2010, banks were extremely cautious and continued to work steadily and carefully. Acceleration of banks' activities was mainly supported by growth in deposits, primarily in the household sector. In substantial part, the banks took advantage of the growth of the sources for further strengthening of their liquidity position through low risk investments in domestic securities, and part of the deposit expansion potential was directed towards credit support of the real sector. Although the credit activity of banks at the end of 2010 registered a single-digit growth rate, it still was among the highest in the region. Stability and reliability of the banking sector are confirmed by its stable liquidity and high capitalization evident from the rate of capital adequacy ratio more than twice higher than the legally prescribed minimum. The results of stress tests performed, which showed satisfactory resilience of the banking system to simulated shocks support this ascertainment.

In 2010, the level of risks in the banking sector remained in a controlled framework. After the two-year period of deterioration of the loan portfolio, at the end of 2010, certain indicators of credit risk noted improvement. However, this improvement should be interpreted cautiously, as it does not mark a major change in the risk profile and risk reduction among borrowers. The major determinant of improvement in the indicators of credit risk in the banking system was the growing exposure to the sector "financial institutions and government" which usually bears a low degree of risk. In addition, the movement of credit risk indicators was strongly influenced by the conducted write-offs and collection through foreclosures.

Other segments of the financial system have a modest impact on overall financial stability in the Republic of Macedonia, as they still have a modest amount of assets and activities. Leasing activities, which were of little importance in the overall financial system, decreased further. At this point fully funded pension insurance still has a small role in the financial system of the Republic of Macedonia, but in the future it is expected to gain importance. This segment of the financial system is exposed to increased risks from the executed investments in securities of countries facing debt crisis. Although these investments are a small percentage of the total assets of funds, and regulation treats them as low risk, starting from the current condition of the issuers of securities, measures should be taken in the short run (by both pension funds management companies and by the regulatory authority) to limit their further growth. The significance of the insurance sector is still small, but it has potential for further development especially in the life insurance segment. Also, there is room for further increase of the mutual direction of products and services offered by banks and insurance companies. The risks arising from the insurance sector are with a downward direction, which is primarily based on the enhanced activities of the supervisory and regulatory authority for the introduction of international standards in this segment of the financial system.

Risks to financial stability produced by the households and the corporate sector during 2010, are controlled, unlike 2009, when they were assessed to be growing. These two non-financial segments are not expected to cause serious adverse consequences for the financial stability in the short run.

The favorable macroeconomic environment during 2010, positively influenced the financial condition of the corporate sector, which grew both in terms of the size of assets, and in terms of the number of newly established enterprises. At the same time, despite the decline registered in the previous year, this year the value added in the corporate sector registered growth in real terms. The first positive impulses in the process of recovery of the domestic economy created by the improvement in global conditions and increased activities in the economies of our most important trading partners, have contributed to the positive movement in the export-oriented segment of the domestic corporate sector. Furthermore, recovery of exports had stimulating effects on future expectations of domestic entities, reducing their restraint from spending and new investment, which created some positive impulses also on the part of domestic demand. Corporate sector liquidity registered slight improvement relative to 2009, while the indicators of the effective

use of funds remained at almost the same level. Confirmation of the revival of the corporate sector activities is also its improved capacity to maintain and promote the profitable operations, assessed by the growth of the profit from regular operations of almost 10% compared to 2009. In 2010, the corporate sector debt, especially the external debt, and there was some deterioration in the ability of domestic enterprises for regular servicing of contractual obligations to the banking system. Such developments justify the caution still present with the banks with respect to the increase in credit support to domestic enterprises. Further recovery of global and domestic economic activity, and hence of future operations and financial condition of enterprises, would lead toward improved perceptions of the banks about the risks they take in their operations and toward enhanced credit support to the corporate sector.

The scope of activities and performance of the corporate sector and its efficiency in dealing with the risks it is exposed to is to a large extent determined by the disposable income and general financial power of the population. The positive gap between disposable income and consumer spending increased, which allowed growth of household savings. In addition, investments in deposits with domestic banks and savings houses had the largest contribution to the growth of financial assets of households. The higher annual growth rate of financial assets, compared with the rate of growth of household debt led to an improvement in the ability of households to repay the total debt. Given that almost half of the sources of funding for domestic banks are household deposits, every possible materialization of risks to which households are exposed, may have adverse effects on the liquidity and stable operations of domestic banks. One of the main risks coming from this non-financial sector, which can have more significant consequences for the financial stability stems from the possibility of excessive borrowing, especially of those segments of the population with lower levels of coverage of credit obligations with monthly income.

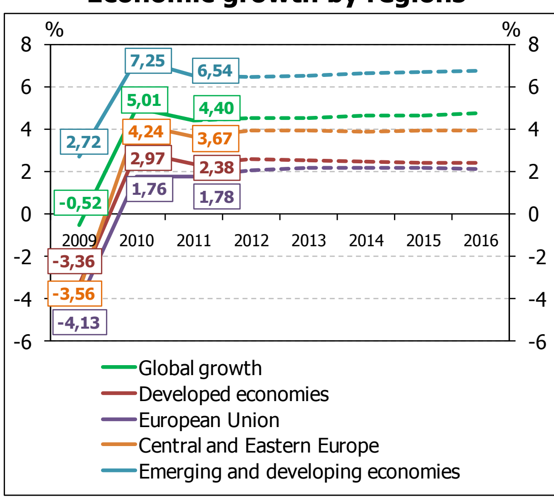
Key risk factor for the financial condition of the corporate sector and households is their high exposure to currency risk and the risk of changing interest rates. The possible materialization of these risks would reflect directly on their ability to service debts and hence the performance of banks.

I. Macroeconomic environment

1. International conditions

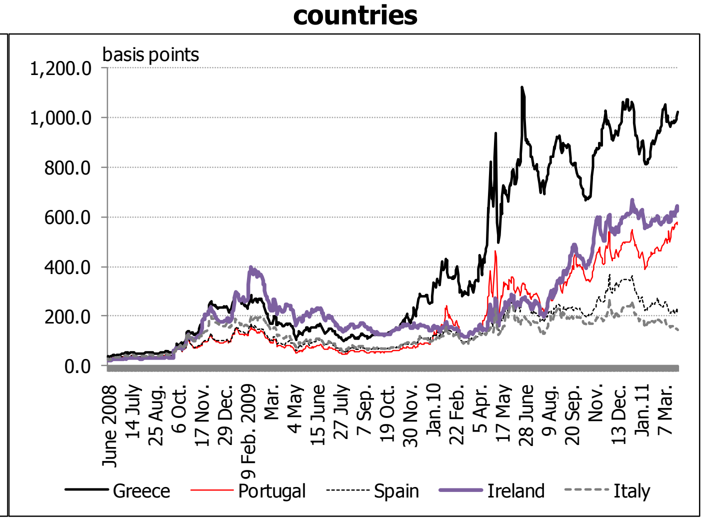
The global macroeconomic environment in 2010 was marked by a gradual recovery of the world economy from its deepest recession in the last eighty years. The growth of economic activity present in 2010, albeit with slower dynamics, is expected to continue over the next year. However, the global macroeconomic environment is characterized by still present risks that could jeopardize the expected pace of economic growth. Emerging economies, primarily from Asia are still expected to be the main carriers of economic growth. In conditions of lower economic growth and lower interest rates, but high liquidity in developed economies, emerging economies are faced with large capital inflows. Despite the many positive effects arising from such flows of capital, they emphasize the risk of "economic overheating" or possibly their sudden withdrawal. On the other hand, in developed countries, which are still expected to grow at a slower pace, the main limiting factors of future growth are the rising unemployment, especially in the American and European economies, the problems with fiscal sustainability of some countries in the Euro zone and the subsequent instability of the financial markets. Global risk, relevant for all economies, are the upward inflationary pressures, which started in late 2010, amid growing trend of world prices of food and oil.

Figure 1.1.1
Economic growth by regions



Source: World Bank (WEO, April 2011)

Figure 1.1.2
Dynamics of CDSs (credit default swaps) by countries



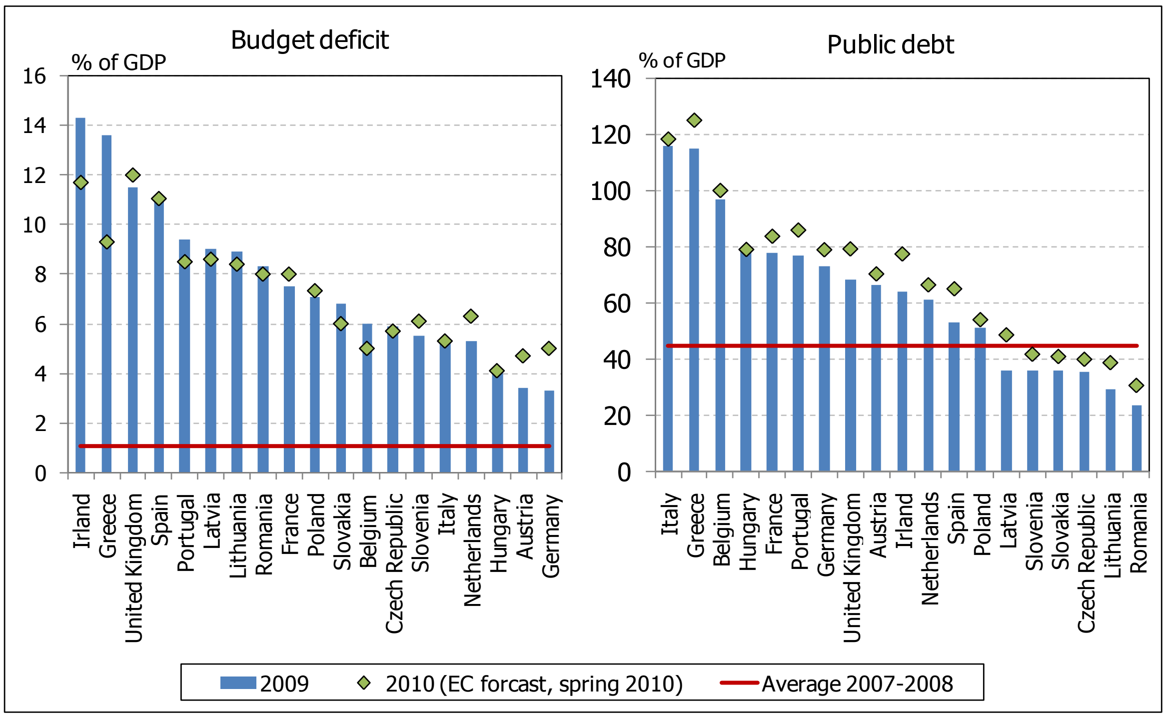
Source: Bloomberg

The center of the volatility of financial markets in 2010 is located on European soil. Namely, one of the main risks to financial stability since the beginning of 2010 is the crisis of the government debt of certain so-called "peripheral" countries of the Euro zone[1]. In conditions of high public debt (Figure 1.1.3) and concern of market participants about its long term sustainability, the lack of confidence and high risk premiums on government debt of those countries (measured by the amount of CDS -

[1] This joint title refers to: Portugal, Italy, Ireland, Greece and Spain.

credit default swaps"[2]), increased significantly (Figure 1.1.2). The escalation of mistrust was evident in the spring of 2010, when financial markets were almost closed for financing of Greece. In such circumstances, the EU and the IMF created a package for financial support of Greece, which was to enable temporary bridging of the financial gap until the implementation of radical fiscal consolidation that would reduce public debt and again allow its market funding. At the same time, the European Financial Stability Facility - EFSF was established, to assist other countries in the Euro zone with possible trouble with the financing of the state. Such activities only temporarily reduced the risk premium on Greek government debt. At the same time, there was a rising lack of confidence in the government debt to other European countries with weak fiscal position, primarily Ireland and Portugal, after which their risk premiums have begun to move along the upward path. Already in October 2010, it was necessary to establish a package of financial assistance to Ireland, from the funds of EFSF and the IMF. Despite expectations that these actions will prevent further contamination, in April 2011, Portugal also requested financial assistance to overcome the problems with financing of the public debt.

Figure 1.1.3
Public finances in several countries in Europe



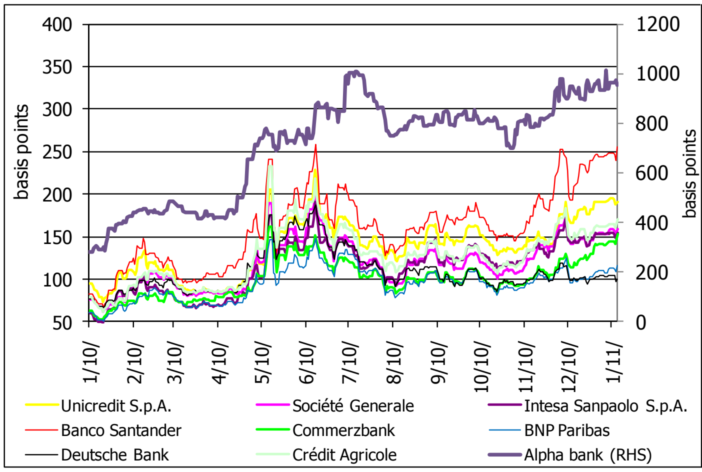
Source: ECB

Expansion of the problems with public finances in Spain seems to be a real risk, although the markets perceive a lower risk. **In such circumstances, fiscal consolidation and the possibility of reduction of the public debt to long-term sustainable levels are**

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

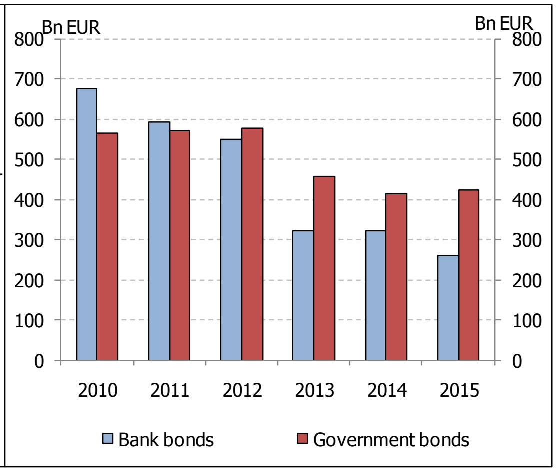
the primary factors that will determine the future pace of economic activity in Europe.

Figure 1.1.4
Dynamics of CDSs (credit default swaps) for certain banks



Source: Bloomberg

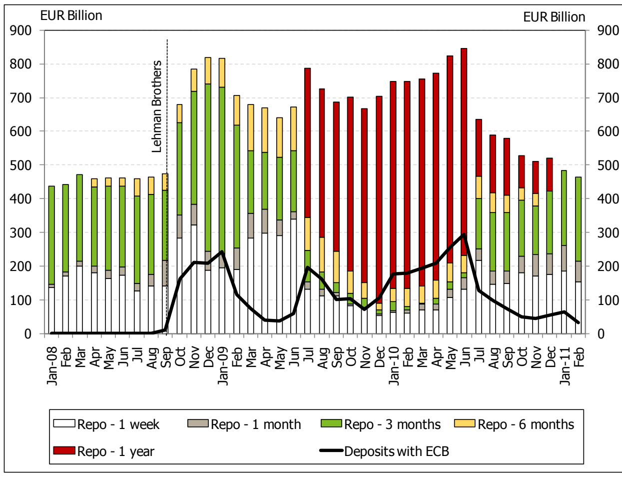
Figure 1.1.5
Maturing public and banks debt in the Euro zone



Source: IMF. Due to high budget deficits the expected refinancing needs may be even higher than the amounts maturing in a certain year.

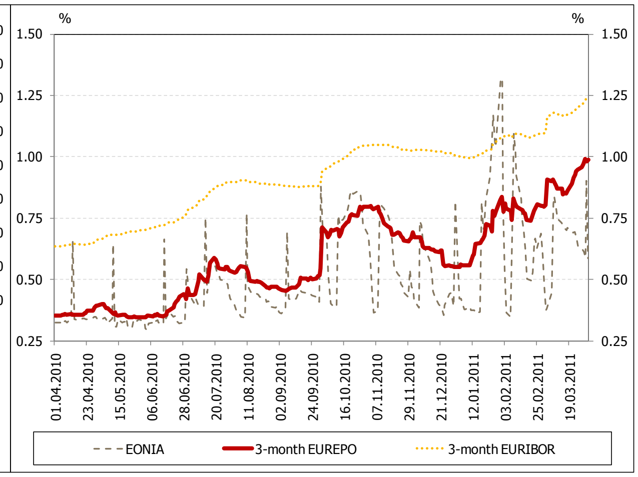
The severity of problems associated with government debt increases if one takes into consideration the possibility of their spillover into the banking systems and in the private sector in the European Union in general. European banking and private sectors are exposed to negative impacts from the crisis of government debt through several transmission channels. First, the high exposure of banks to government bonds of countries in the Euro zone. Its reduction not only would reduce the problem of sovereign debt crisis, but rather it would become even bolder and would increase the reverse negative effects for the banks. Next channel of transmission of adverse effects in banks and in the private sector in general, is the climate of high uncertainty in the markets created due to the government debt crisis, which adversely affects the availability and cost of funds. The negative effects of the feedback loop between public finances and the banking system is clearly reflected in the movement of risk premiums, measured by the price of credit risk swaps. The markets have successfully differentiated banks that originate from countries with less favorable fiscal position, for which risk premiums are higher (Figure 1.1.4). Finally, the need to refinance the high public debt in the next period could lead to so-called "crowding out" of the private sector from the capital markets or at least impede its access to these markets. **Materialization of these risks through the aforementioned transmission channels could seriously endanger the stability of the European banking system. With the globalization of financial markets, this crisis would have a strong adverse impact on other economies and the global economy in general.**

Figure 1.1.6
Average monthly borrowing from ECB and placing deposits with ECB



Source: Bloomberg

Figure 1.1.7
Basic interest rates at the European interbank market



Source: Bloomberg

The negative impact of the government debt crisis on the banking system is clearly shown through the liquidity tensions in the European interbank market, which were particularly pronounced in the first half of 2010. In the countries with vulnerable public finances, not only states but also banks have faced problems with financing from international markets. Additionally, because of uncertainty about the exposure to "risk-bearing" government debt, banks also from other countries faced with limited access to sources of funding. In such circumstances, the banks that had surplus liquid assets placed them in deposits with the ECB, while those with short liquidity position had to rely on the liquidity support from the ECB. As a result, the use of ECB instruments has exceeded even the level common for the period after the collapse of Lehman Brothers (Figure 1.1.6). At the same time, in circumstances of lack of confidence, short-term interest rates on the interbank market have constantly risen (Figure 1.1.7). In order to stabilize the situation, despite the liquidity support of banks in the wake of the government debt crisis, the ECB started to apply some unconventional measures. Thus, amid growing risks to the financial stability in the euro zone, primarily because of the aforementioned relationship between government debt market and banks, the ECB began to buy government bonds of countries with vulnerable fiscal position.

Such activities of the ECB had only short-term effect of calming the financial markets, but opened up space for the emergence of significant risks to the stability in the Euro zone. The main problem of such policy (implicit lending to some states) is the question of its long-term sustainability, in circumstances where it deviates significantly and is contradictory to the basic tasks of the ECB. In that sense, extremely important is the opportunity and time frame for withdrawing from such operations, which could lead to significant losses from the portfolio of bonds of the ECB and ultimately jeopardize the stability of the currency and the Euro zone. **Providing financial and macroeconomic stability, in general, in the Euro zone in the long run, requires improving the institutional framework** for the need of better coordination of the monetary policy of the ECB and the fiscal policies of individual Member States. Also aimed at maintaining stability is the plan with which the temporary EFSF (established for financial support to countries in the Euro zone with problems in public finance), starting from 2013 should be replaced with the European stabilization mechanism, as a permanent mechanism for ensuring financial stability of the Euro zone as a whole. This mechanism would be used to restructure the public debt of certain countries only in exceptional circumstances. Moreover, in order to reduce the moral hazard, in case of restructuring of certain public debt, part of the costs would be covered also by the respective investors/depositors.

Figure 1.1.8
Dynamics of the risk premium on the Macedonian Eurobond

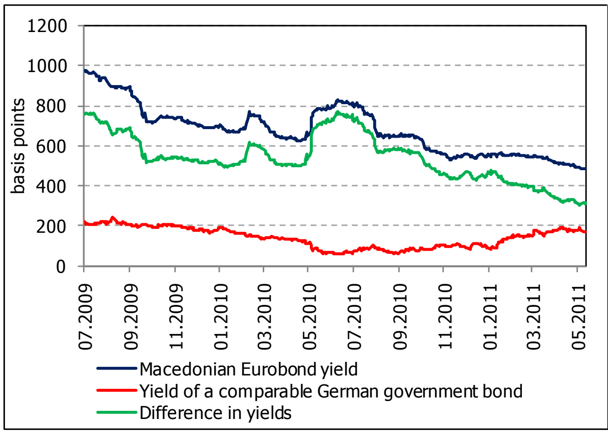
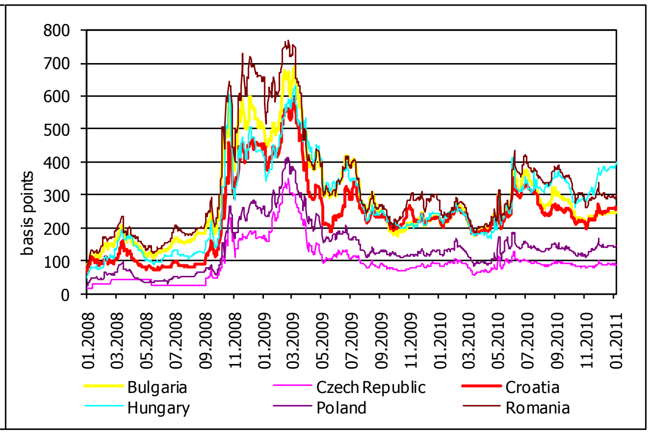


Figure 1.1.9
Dynamics of CDSs - credit default swaps for several countries



Source: Bloomberg. In the case of Macedonia this is the second issued Eurobond of July 2009, with maturity to January 2013.

Stabilization of public debt market and banking sector are not only essential prerequisite for sustainability and dynamization of the economic growth in the EU, but under conditions of high risk of "contagion", they are of great importance for the growth and stability in emerging and developing countries in Europe. This conclusion is clearly confirmed by the trend of the risk premiums on bonds in these countries. The trend of general reduction of the risk premium was interrupted by the escalating crisis of government debt in the Euro zone, when significant growth of the risk premium on government bonds of European emerging economies of about 100 base points, was registered. Activities for overcoming the problems with public finances in Greece acted towards re-reduction of the risk premium until the crisis in Ireland, when it rose again (this time by 40 base points). At the same time, emerging economies of the EU, were the only region for which, in 2010, a downward adjustments to the forecasts for the amounts of net capital inflows was made, despite the expressed upward correction of these flows in the emerging economies of Asia. The main reason for such correction were exactly the serious problems with public finances in some countries of the Euro zone. In the Republic of Macedonia the upward pressure on the risk premium was particularly visible during the escalating debt crisis in Greece, as a normal consequence of closer economic relations with this European economy.

Table 1.1.1
Revision of net capital inflows in emerging economies
USD million

	2008	2009	2010	2011	2012
Net capital inflows					
January 2011 projection	622	602	908	960	1009
October 2010 projection	594	581	825	833	
difference	28	21	83	127	
Revision by regions					
Latin America	-0,9	11,1	7,0	6,6	
European emerging economies	-3,9	-8,0	-28,3	-1,7	
Africa/Far East	17,5	-2,9	1,0	4,1	
Asian emerging economies	3,2	24,7	104,0	111,1	

Source: Source: Institute of International Finance

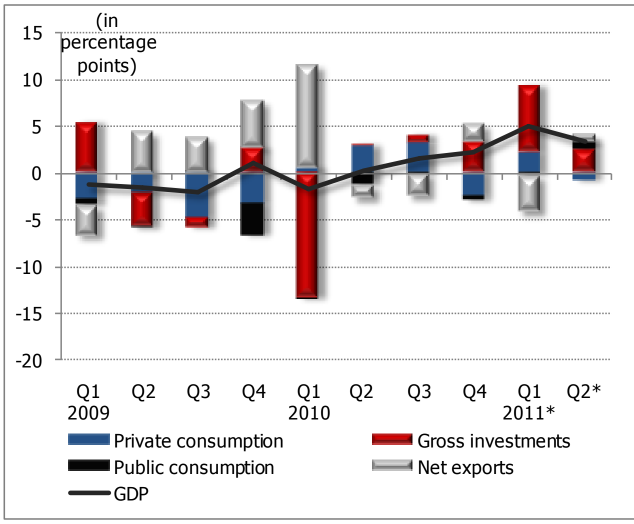
It is expected that the main generators of the global economic growth in the future will be the emerging economies, primarily from Asia. The favorable development prospects and high interest spreads in emerging economies, in terms of high liquidity and search for higher yields, provided significant capital inflows into these countries. **In circumstances of dynamic economic activity and strong domestic demand, the significant capital inflows, further emphasize the risk of "economic overheating" in the emerging economies. In this sense, economic policy makers in these economies are facing significant challenges.** In conditions of already relatively strong economic growth, most emerging economies face with significant upward pressures on domestic interest rates. It creates additional pressures for appreciation of the exchange rates of currencies of these countries. In such conditions, economic policy makers face the challenge of finding suitable macroprudent response to minimize the possible negative effects on the performances of the domestic economies. Such activities should contribute to long-term sustainability of the dynamic economic growth in these major engines of global economic activity.

2. Domestic environment

Macroeconomic environment in the Republic of Macedonia in 2010, generally created a positive climate for maintaining financial stability. After the moderate slowdown in the previous year, domestic economic activity in 2010 was characterized by a gradual recovery. The positive dynamics of economic activity was supported largely by the growth of export demand, with strong positive impulse from the global economic recovery. Export growth, coupled with the strong positive dynamics of private transfers, contributed to significantly improving the external position of the country. Such positive developments, which contributed to creating a favorable environment in terms of maintaining macroeconomic and financial stability, is expected to continue over the next year. However, the generally favorable macroeconomic perspective is tainted by a few risks, which generally arise from international economic environment. The two primary risks are related to the upstream inflationary pressures, which started in late 2010, amid growing trend

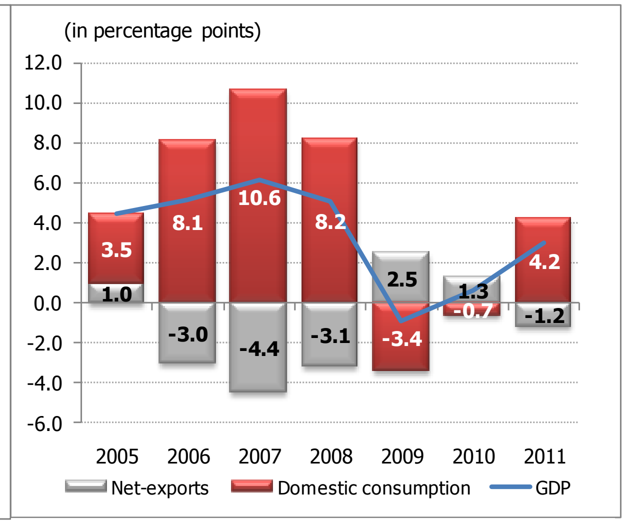
of world prices of food and fuel and uncertainty about the future pace of economic activity in our major trading partners.

Figure 1.2.1
Components contribution to the quarterly real GDP growth



Source: SSO and NBRM calculations.*

Figure 1.2.2
Components contribution to the annual real GDP growth



Source: The 2011 data are NBRM estimates.

During 2010, the domestic economy began to recover gradually, amid strong positive impulse of global economic recovery. Starting from the second quarter of the year, GDP experienced positive quarterly growth rates. As a result of such movements, after the contraction of 0.9% in 2009, the domestic economy ended up 2010 with growth of 0.7%. Recovery of the domestic economy was primarily due to the growth in export demand, in conditions of growth of economic activity in our major trading partners and the favorable dynamics in metals prices, which created a strong positive impulse for the domestic export sector. In circumstances of accelerated deposit potential growth and favorable liquidity position of the banking sector, a positive impulse to domestic economic activity was given by the twice higher growth of credit support to private sector, relative to the previous year. Economic growth was supported by the relatively favorable conditions in the domestic labor market and the positive impulse of fiscal spending on domestic investment. In such conditions, starting from the second quarter of 2010 there was a gradual recovery also of the domestic demand. However, its annual contribution to domestic economic activity remained in the zone of negative values and did not create upward pressure back on the level of imports.

Figure 1.2.3
Dynamics of the trade balance, private transfers and current account deficit

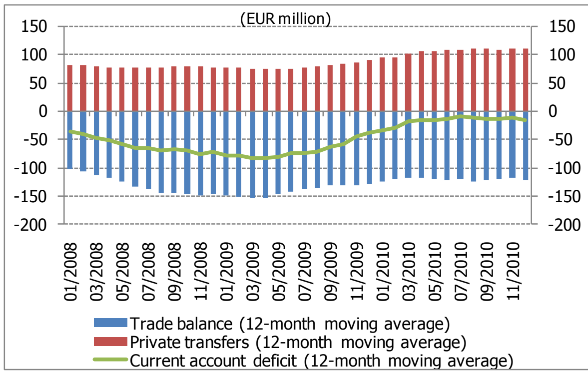
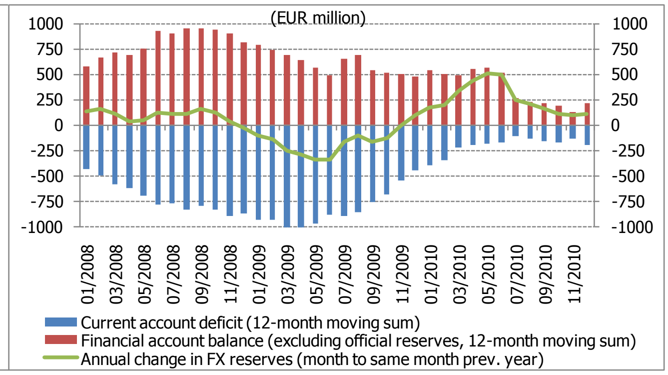


Figure 1.2.4
Dynamics of the current and financial account balance (excluding official reserves) and FX reserves



Source: NBRM.

In such conditions, improvement of the external position of the country was registered. The current account deficit continued the downward trend from the previous year and in 2010 it was reduced to 2.8% of GDP, down by about 4 percentage points compared to 2009. This relatively rapid downward adjustment of the level of current account deficit (in 2008 accounted for 12.7% of GDP), reflects the improvement in the trade balance and the strong growth in private transfers. Reducing the deficit in foreign trade was a result of the significant positive shift in the export demand, despite the still insufficient domestic demand for imported products. On the other hand, the stable macroeconomic environment in the country, the absence of negative impact of psychological pressures and improved expectations of economic entities, coupled with the credibility of the monetary policy, created a positive climate of confidence in the exchange rate stability. This contributed to a strong growth in net inflows from private transfers, which enable "coverage" of over 90% of the trade deficit.

Despite the solid economic fundamentals and sound domestic macroeconomic environment, the high liquidity in the global capital market did not have a significant positive contribution to capital inflows into the domestic economy. Net inflows on the capital and financial account (excluding official reserves) in 2010 were lower by 53.3% or 4 percentage points of GDP relative to the previous year. Despite the reduction, their level (231.6 million) was **sufficient for full funding of the relatively small current deficit and provided additional foreign exchange inflows into the domestic economy.** Such movements in the capital and financial account enabled an annual growth of gross foreign reserves of Euro 117 million, up to a level of Euro 1.7 billion as of 31.12.2010. The stock of gross foreign exchange reserves provides a relatively favorable position in terms of four-month coverage of the import of goods (f.o.b) and services from the next year.

Figure 1.2.5
Capital and financial account balance, excluding official reserves

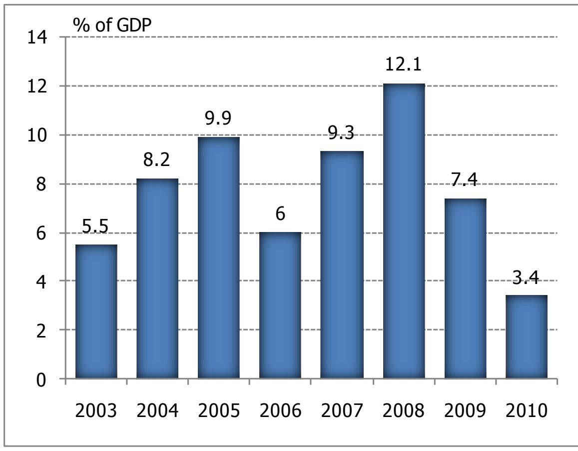
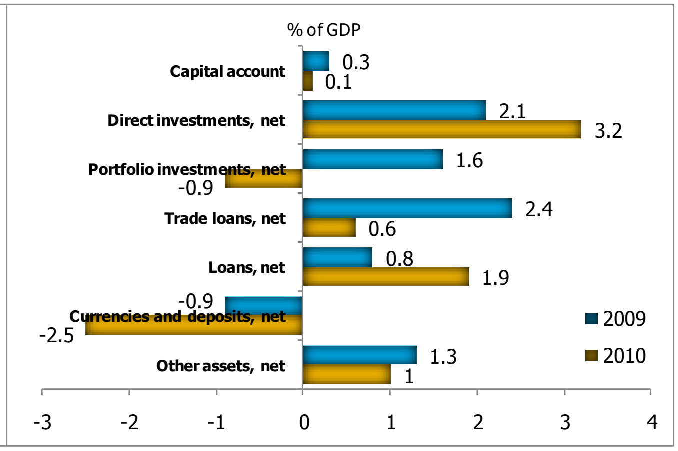


Figure 1.2.6
Components of the capital and the financial account



Source: NBRM and SSO.

The favorable balance-of-payments position positively reflected on the supply on the foreign exchange market, resulting in absence of the exchange rate pressures, as one of the main elements for maintaining domestic stability.

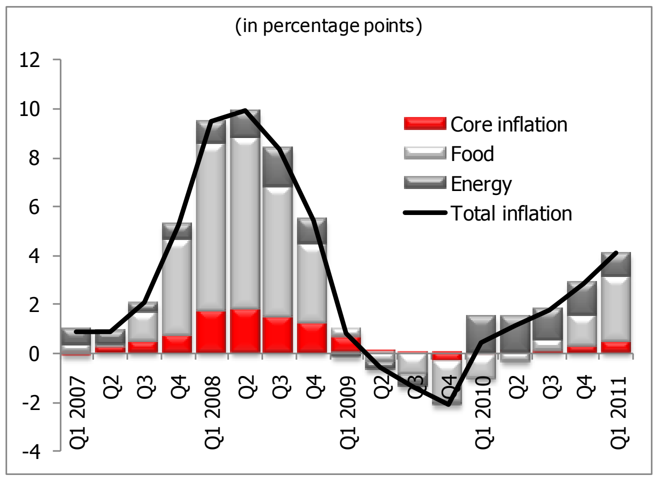
The total external debt of the Macedonian economy in 2010 continued to grow. After the increase by 7.5 percentage points of GDP in 2009, gross external debt of the Republic of Macedonia in 2010 increased by an additional 5.8 percentage points, and at the end of the year it was 62.4% of GDP. Moreover, unlike in 2009 when the increased public debt and private sector debt almost equally influenced the growth of gross debt, in 2010 the main driver of growth was the growing debt of the private sector (with a contribution of 82.5% in the total increasing external debt). The sensitivity of the domestic economy to external shocks, in conditions of growing external debt is offset partly through the relatively favorable structure of the new debt. In fact, most of the growth of the private debt in 2010 refers to long-term loans from banks (primarily from mother companies), commercial loans and intercompany debt, which are usually characterized by lower exposure to refinancing risk.

Macroeconomic projections for 2011 indicate a continuing climate of relatively stable macroeconomic environment, which would mean lower risks for macroeconomic and financial stability. However, the risks are not exhausted and are primarily related to: the possibility of spillover of risks from the global environment, primarily from the the Euro zone, and future dynamics of world oil and food prices.

The uncertainty about the sustainability of the recovery of global economy, especially the dynamics of recovery and financial instability in countries of the Euro zone can spill over into the Republic of Macedonia through several channels. Problems with the stability and sustainability of public finances are large and create adverse transmission effects on the possibilities for faster economic recovery in the Euro zone, which questions the **future dynamics of export demand.** Smaller demand for Macedonian export products would have an adverse impact on the future dynamics of domestic economic activity and would create negative pressures on the balance of payments, i.e. the country's external position. On the other hand, the volatility of financial markets and the need for refinancing of the high public debt in the Euro zone in the following period could significantly **impede and/or make more expensive the access to capital in global markets. In such conditions, the possibility for the government for external financing of the foreign debt and fiscal deficit is significantly limited.** Materialization of this risk was evident already in the first half of 2011 when the Republic of Macedonia made a change in the planned structure of external borrowing and instead of the planned Eurobond issuance, it used a portion of the available funds from the concluded precautionary credit line with the International Monetary Fund. In order to reduce the exposure to risks from the changing conditions for external financing, the economic policies-makers (primarily fiscal) should take action to develop the domestic public debt market, especially for longer maturities, but without prejudice to the credit support for the private sector. Another challenge the fiscal policy is faced with is the potential impact of the planned reduction of social contributions in 2012 and 2013 on the budgetary balance. In such conditions, of particular importance is the maintenance of the planned low budget deficits.

Additional risk for the domestic environment is the uncertainty about the duration and severity of the inflationary pressures that began in the second half of 2010 amid rising trend of energy and food prices on world markets. In such conditions, the Macedonian economy has felt pressures from import prices, although inflation growth was moderate and had no significant impact on economic agents' expectations about its future dynamics. However, the continued upward trend in world oil and food prices in the first quarter of 2011, increased the risk of uncertainty about the duration and severity of these upward price pressures. The materialization of the negative effects of this risk could occur through two basic points: the inflationary expectations of domestic actors and the external position of the country. Any replication of the inflationary pressures on the inflation expectations of domestic agents, could lead to pressures on the foreign exchange market. On the other hand, rising world prices of energy and food, through the impact on the value of imports, could negatively reflect on the foreign trade balance.

Figure 1.2.7
Contributions to the annual rate of inflation



Source: SSO and NBRM calculations.

Figure 1.2.8
Contributions to the annual changes of labor productivity

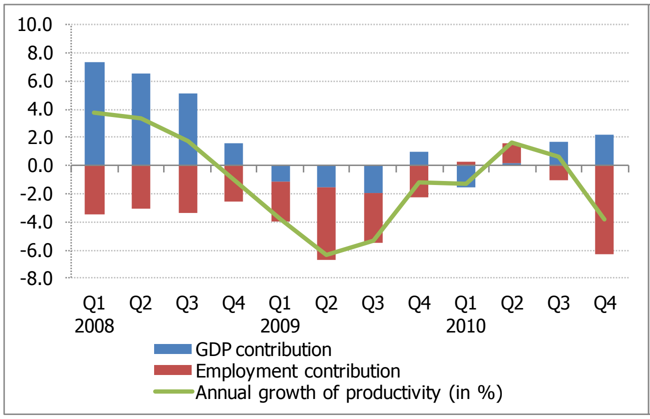
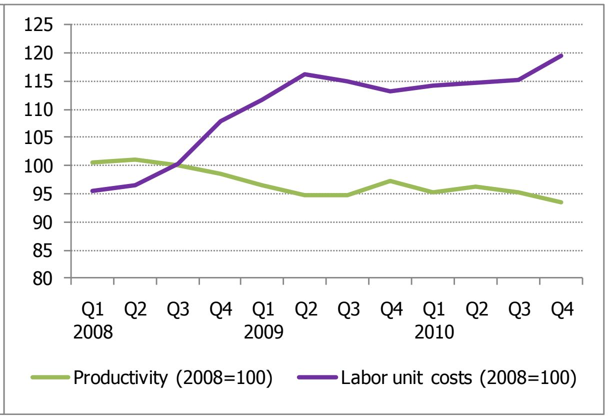


Figure 1.2.9
Comparison of the dynamics of productivity and labor unit costs



Source: SSO and NBRM calculations.

The projected GDP growth in 2011 is largely based on the expectations for favorable trends in domestic consumption, making external risks to the future dynamics of the economic activity complement the risks derived from the domestic environment. The risks are primarily related to the absence of the expected intensity of personal consumption and the realization of expected investments. On the one hand, the expected growth in private consumption could be jeopardized in the event of a greater than expected adverse pressure of inflation on the disposable income of households. Simultaneously, the future pace of private consumption is suffering from the risk that the expected production growth will be effected without an increase in employment, in conditions of sufficient room for significant improvement of labor productivity. The dynamics of domestic investments is based on the planned capital investment of the government, the expected foreign direct investments and projected credit growth, whose possible absence or underperformance would have a negative impact and would jeopardize the achievement of the expected dynamics of domestic economic activity.

II. Non-financial sector

1. Household sector

Risks to financial stability that were generated by households were within controled frames during 2010. Following the improvement of most indicators of indebtedness of households in 2009, in 2010 there was a slight deterioration in some of them mainly due to the faster growth of household debt on an annual basis. The moderate relaxation of credit conditions by banks, supported by the recovery of domestic economy and loosening of the monetary policy, led to increased demand for loans and increased indebtedness of households. The high exposure of households to interest rate and currency risks remain the basic sources of risk, which may affect their ability to service debts, and consequently the stability of individual segments of the financial system. Signal of their improved solvency is the slower growth of non-performing loans of households. Moreover, this fact is weakened if one has in mind that the slowdown of the dynamics of non-performing loans results from their extremely rapid growth during 2009, and the effect of written-off claims. Also, the further concentration of debt among segments of the household sector which have lower income may adversely affect the indicators of ability of the household sector for timely servicing of debt.

The positive gap between disposable income and private consumption in 2010 increased, which caused annual growth of the household savings rate. In addition, investments in deposits with domestic banks and savings houses had the largest contribution to the growth of financial assets of households. Given that almost half of the sources of funding for domestic banks accounted for deposits from households, the non-financial sector is a significant creditor of the banking system and the possible materialization of any risks that households are exposed to, may have adverse effects on the liquid and stable operation of domestic banks.

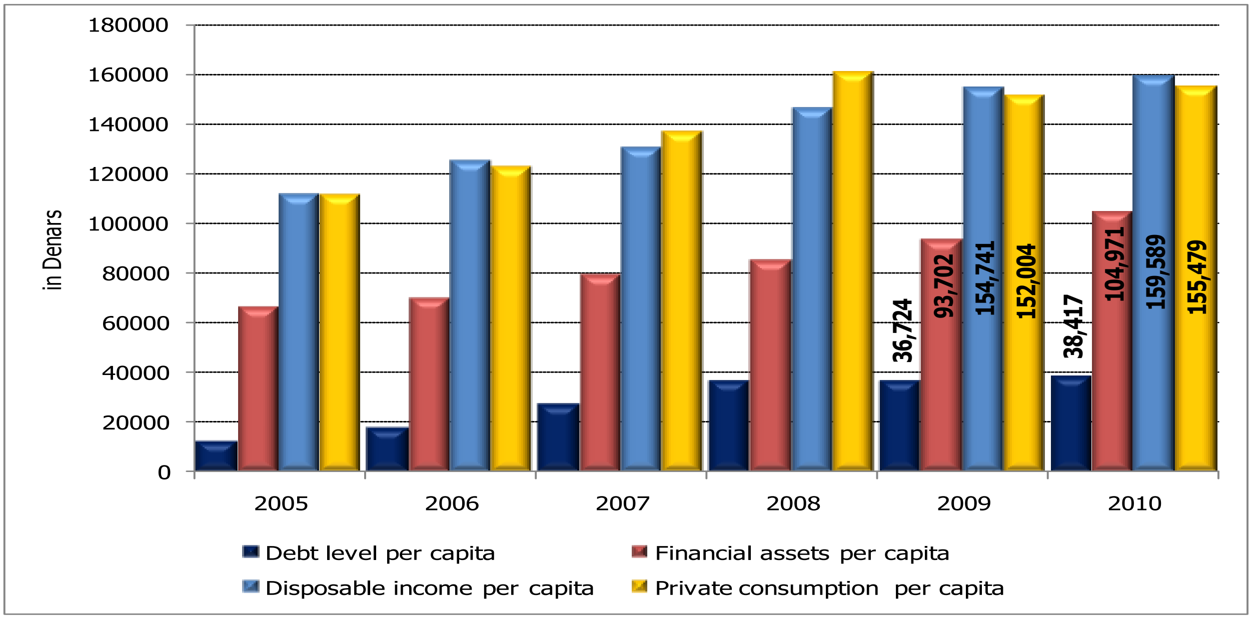
1.1. Assessment of the financial stability of the household sector and debt repayment capability

In 2010, despite the significantly faster growth of household debt on an annual basis, indebtedness measured by the share of debt in gross domestic product and disposable income[3] increased slightly. On the other hand, higher annual growth rate of financial assets during 2010 compared with the rate of increase in household debt, improve the ability of households to repay their whole debt at once (measured through the ratio debt / financial assets) and increase the possibility for further borrowing (measured by the ratio debt / net financial assets[4]).

[3] Disposable income is determined with internal calculations of the NBRM on the basis of data from the SSO, Ministry of Finance and NBRM.

[4] Net financial assets represent the difference between the total financial assets and total debt of households.

Figure 2.1.1
Movement of households' indebtedness, financial assets, disposable income and private consumption, per capita



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

Figure 2.1.2
Indicators of households' indebtedness

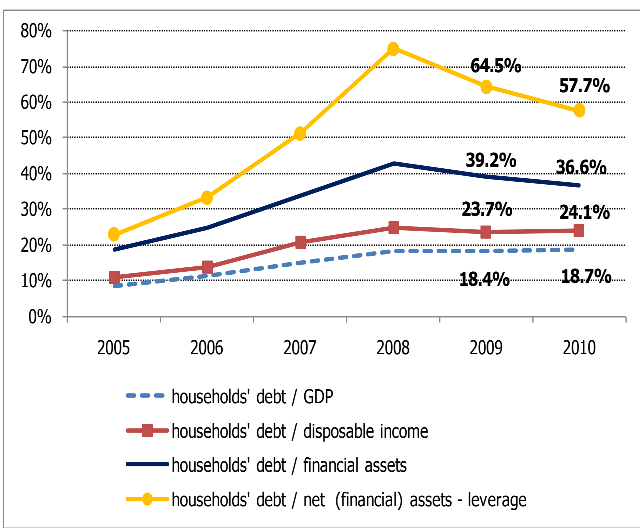
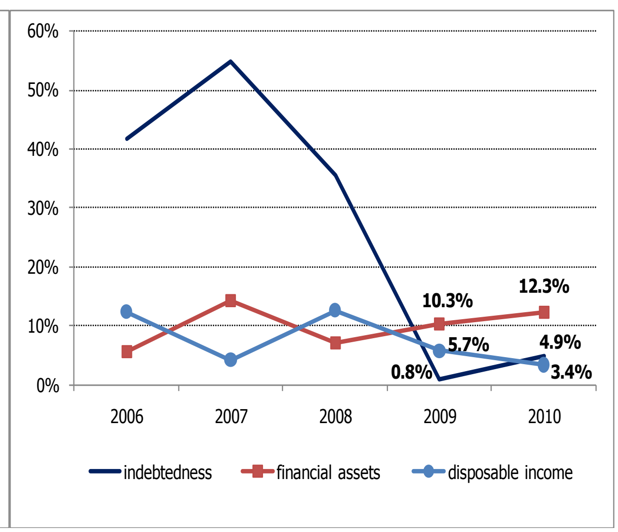


Figure 2.1.3
Annual growth rate of households' indebtedness, financial assets and disposable income

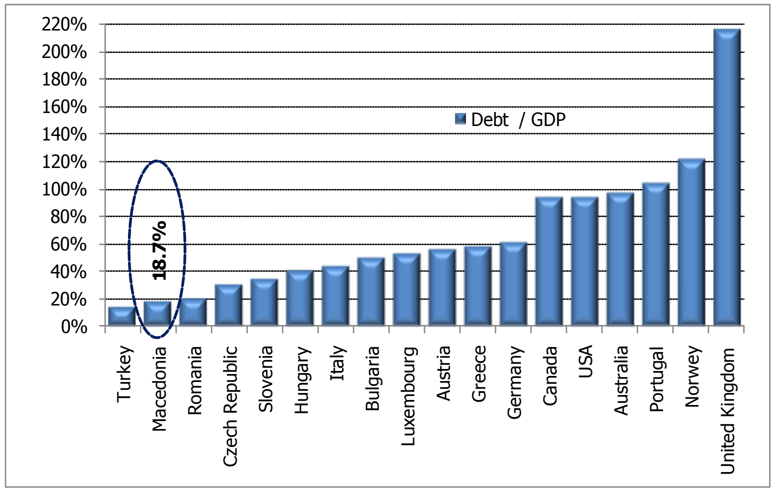


Source: NBRM, on the basis of data submitted by banks and saving houses, MF, CDS, MAPAS, CES, ISA.

Despite the increasing indebtedness of households in 2010, the comparison with selected countries indicates that Macedonia has a relatively low share of

household debt in GDP. The lower indebtedness is common for countries with low levels of disposable income. This partly reflects the historically repressed level of financial support to this sector, which does not allow to quickly reach the level of developed countries. Despite the fact that there is still room to increase the indebtedness of households in the Republic of Macedonia, one must not neglect the risk of high indebtedness of certain segments of the population. Sharp increase in household debt can seriously affect macroeconomic and financial stability of the country. In this regard, we should not neglect the fact that the scope of the households that appear as users of various financial products constantly expands, and they represent a significant debtor to banks, savings houses, leasing companies and insurance. Thus, maintaining their ability to service the debt highlights the importance of this sector to overall financial stability.

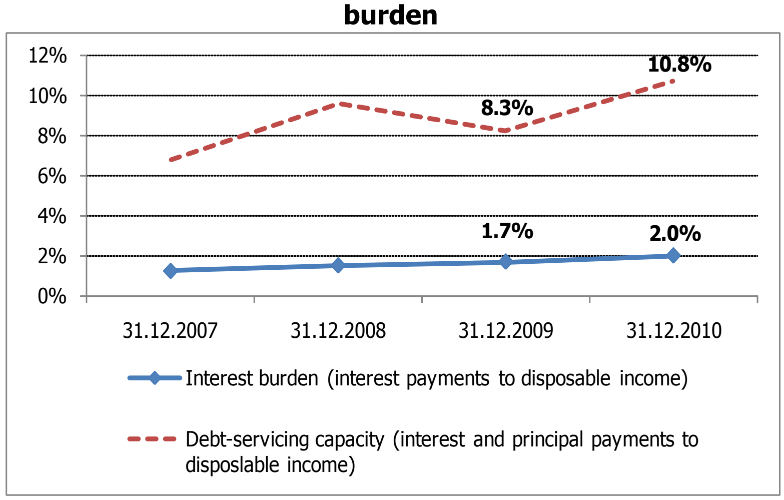
Figure 2.1.4
Households' debt to GDP ratio, by individual countries



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

In 2010, the ability of households to service interest and principal and interest together, reduced but it is still within acceptable limits. This situation is due to higher annual growth rates of repayment of principal and interest than the rates of growth of disposable income. The downward trend in lending interest rates during 2010 compared with 2009 (which was in line with the loosening of the monetary policy and facilitating the conditions for granting loans by banks, although they still show considerable caution) conditioned an increased demand for loans, resulting in accelerated pace of growth of households indebtedness in 2010. This meant an increased burden of repayment having in mind the slower pace of growth of disposable income. Increased share of repayment of principal and interest in the disposable income is potentially an indicator of increased private consumption, which is in line with the moderate growth in private

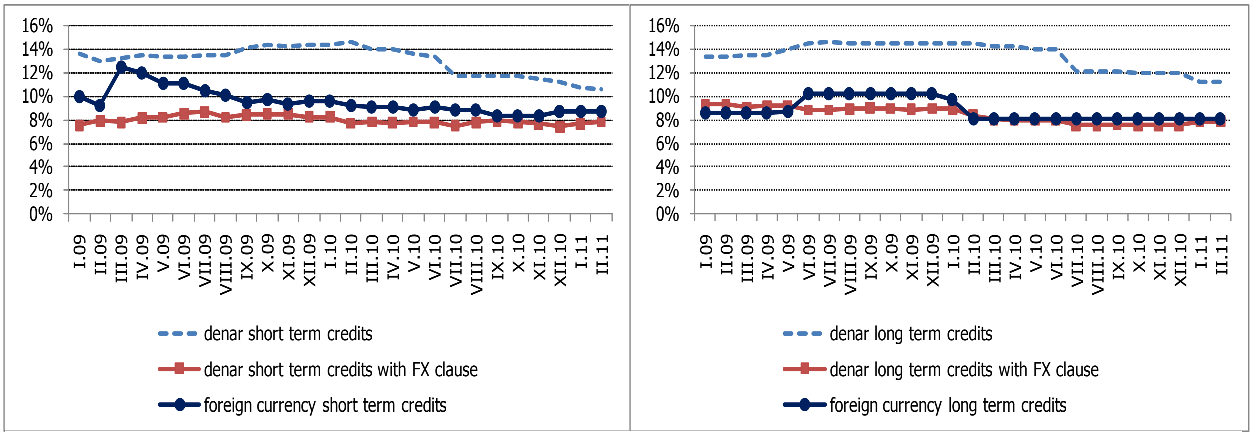
Figure 2.1.5
Households' debt-servicing capacity and interest burden



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

consumption in 2010 (1.1%). For comparison, the repayment of interest relative to the disposable income equals 3.7% in Estonia, 6.7% in Croatia and 7.5% in Romania. Repayment of principal and interest in the disposable income equals 5.9% in Slovakia, 9.5% in Italy and 22% in Romania[5].

Figure 2.1.6
Movement of interest rates of short-term and long-term households' credits

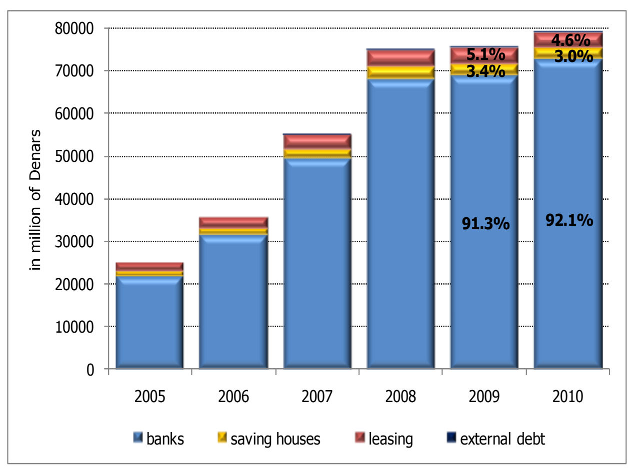


Source: NBRM, on the basis of data submitted by banks.

1.2. Household debt

In 2010, household debt grew at a significantly faster pace than in the previous year. Increased indebtedness is mainly due to the relaxation of credit conditions by banks, which was in line with the recovery of domestic economy and the loosening of monetary policy in 2010. Realized annual growth rate of household debt is seven times higher than the rate of growth in 2009, but still far lower than the rate of growth in 2008. It is also far more dynamic than the increase in financial assets and disposable income. **Loans from banks (which amount to Denar 72,800 million) still represent the largest share of total household debt and contribute to its growth.** Indebtedness on the basis of leasing, is with a significantly lower share in the total household debt, and it had negative contribution to the total growth of the indebtedness of 4.8%.

Figure 2.1.7
Total households' debt



Source: NBRM, on the basis of data submitted by banks and saving houses, MF for leasing companies.

[5] Source: IMF (All FSI Table 1).

The largest part of the total indebtedness of households to the banks (of 72.1%), still refers to the debt for consumption (consumer loans, car loans, current accounts, credit cards and other loans). At the end of 2010, the fastest growing was the debt based on consumer loans (13.3%) and housing loans (14.6%) whereby they fully conditioned the growth of household debt to the banks. In contrast, debt based on other types of banking products, had negative or negligible annual change.

Figure 2.1.8
Amount and structure of households' debt by type of banking product

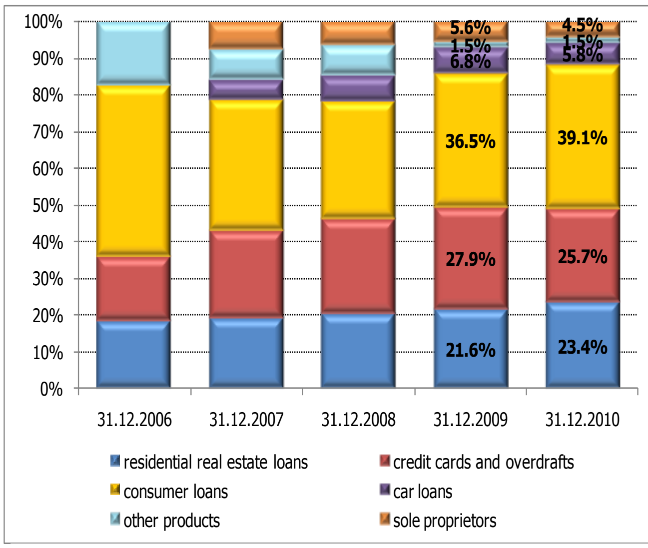
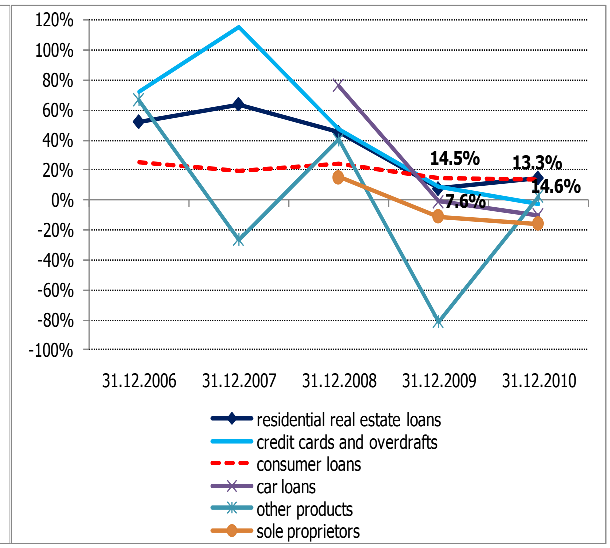


Figure 2.1.9
Annual rates of change of households' debt by type of banking product



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

The acceleration of lending to households was also influenced by relaxation of the conditions for granting loans by banks, which according to surveys on the credit activity[6] was more pronounced in the first three quarters of 2010. The analysis by individual specific conditions indicates that most domestic banks have reduced the interest rates on housing and consumer loans. Most banks consider the other conditions for approval of housing and consumer loans largely unchanged, during the first three quarters of 2010. **In the last three months of 2010, all conditions for approval of housing and consumer loans, including interest rates, remained largely unchanged (about 70% of banks reported in this direction).** As a result, during this period there was a slowdown in the intensity of the relaxation of credit conditions, common for earlier periods. In the first quarter of 2011, most banks expect[7] partial relaxation of the credit conditions, while in the second quarter of 2011, most banks do not expect major changes in the conditions for approving loans to households.

[6] More details about the conditions for lending to households are given in the surveys on the credit activity, published on the web site of the NBRM - www.nbrm.mk.
[7] More details on the banks' epectations about the conditions for lending to households are given in the surveys on the credit activity from January and May 2011.

Figure 2.1.10
Net-percentage of banks* which declared tightening/relaxing of the terms for extending housing loans to households

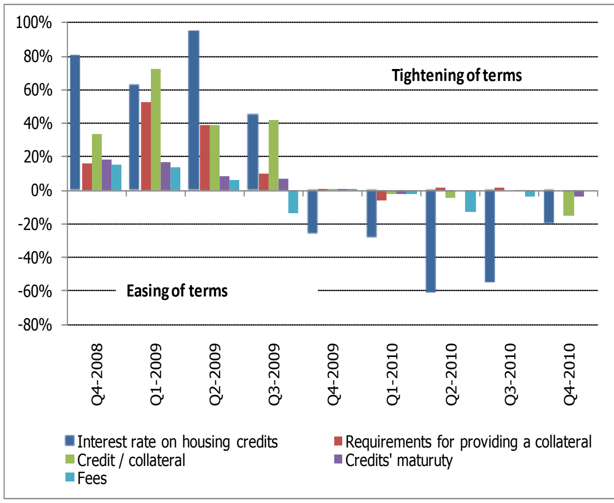
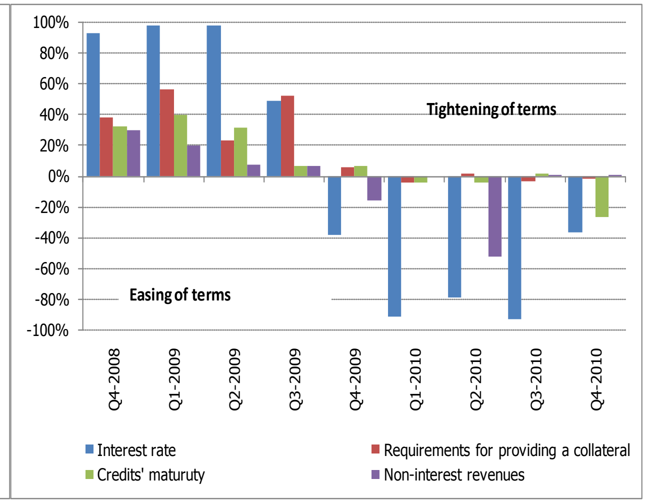


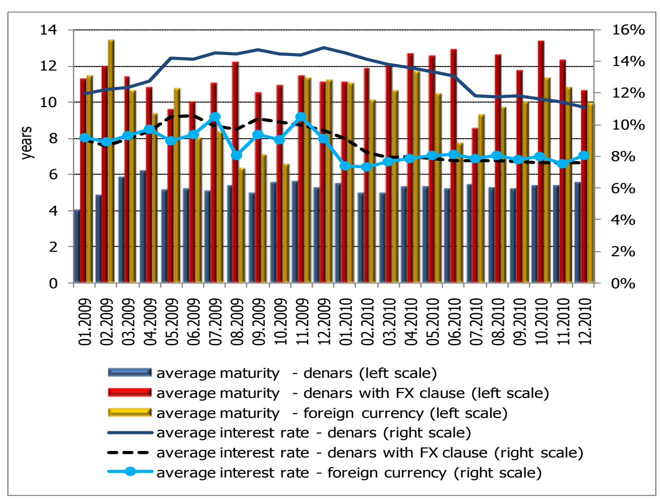
Figure 2.1.11
Net-percentage of banks * which declared tightening/relaxing of the terms for extending consumers' and other loans to households



Source: NBRM, Surveys on 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.

Average interest rates on newly extended loans to individuals during 2010, were mainly headed in a downward direction. The average interest rate on newly extended loans to individuals for 2010 was 10.6% and was by 1.1 percentage points lower than the average interest rate on newly extended loans in 2009. The decline stems from the reduction in average interest rates on newly extended loans of all three types of exposure by currency. The largest decline in the average interest rate is registered in the exposure in denars with FX clause, while the smallest one is that in the exposure in denars.

Figure 2.1.12
Average maturity and interest rates on newly extended loans to individuals, by currency

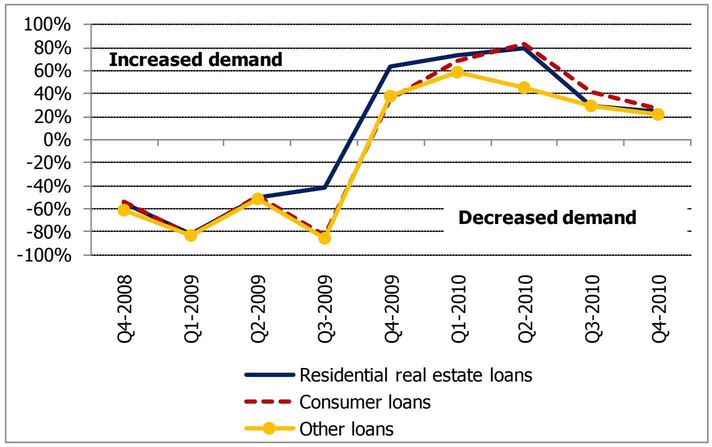


Source: NBRM (Credit regygstry), on the basis of data submitted by banks.

The average maturity of newly extended loans in 2010 registered minimal decrease by 0.4 years (about five months) and in 2010 it was 7.8 years. Despite the highest average price of newly extended Denar loans, their average maturity is the smallest and during 2010 it was 5.24 years, which is almost unchanged compared to 2009. The highest average maturity, of 11.8 years, was that of the newly extended Denar credits with FX clause. At the same time, they registered the largest change in the average maturity (annual increase of 0.9 years).

According to the surveys on the credit activity[8], the demand for credits was more pronounced in the first half of 2010, while in the second half of 2010, it mainly remained unchanged. Thus, starting from the last quarter of 2009 until the second quarter of 2010, demand for household credits grew, while in the second half of 2010, mainly it has remained unchanged. In the first and second quarters of 2011, most banks expect[9] partial increase in the demand for loans.

Figure 2.1.13
Changes in the credit demand* by households

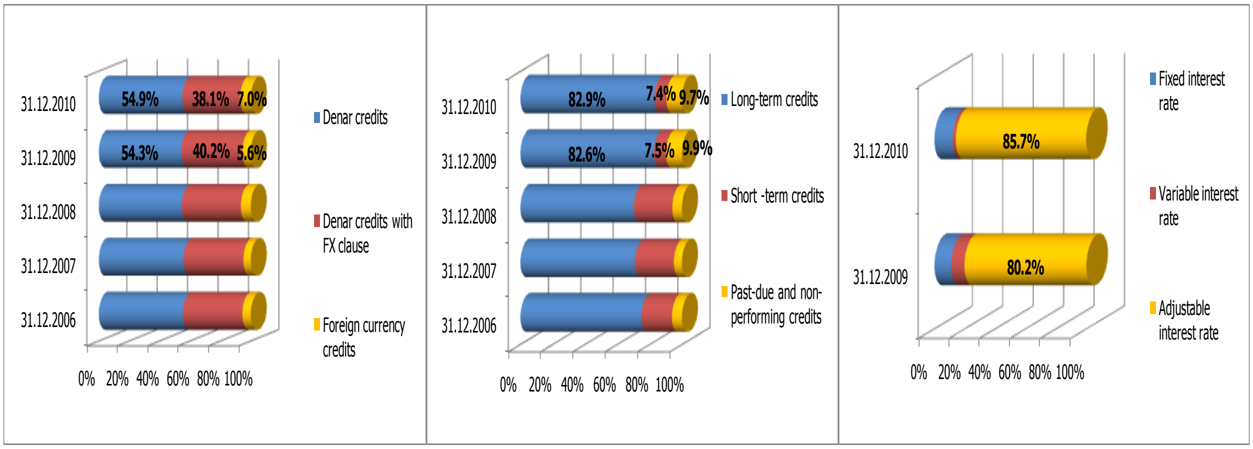


Source: NBRM, Surveys on banks' credit activity.
*Note: **Changes in the credit demand** is calculated as difference between the percentage of banks which declared increased demand for loans and percentage of banks which declared decreased demand for loans. The positive change indicates increased demand for loans on the level of the banking system, while negative indicates decreased demand for loans on the level of the banking system.

The analysis of the structure of the household debt indicates a relatively high share of debt with foreign currency component in the total indebtedness of households and a very high presence of credits with so-called "adjustable"[10] interest rates in the total loans to households. **Hence, the high households' exposure to interest rate and currency risks remain significant sources of risk, which may affect their ability to service debt, and consequently the stability of their creditors.** In such circumstances, maintaining the exchange rate at a stable level and creating an environment of low interest rates in the domestic economy is crucial to the maintaining of the ability of households to service debt at a satisfactory level. **Additionally, the dominance of long-term debt further underlines the sensitivity of the population to interest rate and currency risks.**

[8] More details about the households' demand for credits are given in the surveys on the credit activity, published on the web site of the NBRM - www.nbrm.mk.
[9] More details on the banks' epectations about the households' demand for credits are given in the surveys on the credit activity from January and May 2011, published on the web site of the NBRM - www.nbrm.mk.
[10] Adjustable are considered those interest rates that are changed by a decision of an authorized bank body.

Figure 2.1.14
Currency, maturity and structure of households credits towards banks by type of interest rate



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

Slower growth of non-performing loans of households is a signal for improved payment capability of credit users from this sector and consequently, lower credit risk for domestic banks. However, one should bear in mind that the slowdown of the dynamics of non-performing loans results from their extremely rapid growth during 2009 (the rate of growth of non-performing loans at the end of 2009 was 57.7%, while at the end of 2010 it reduced to 4.7%), and from the effect of the written-off claims[11]. If one excludes the effect of written-off claims, the growth rate of non-performing loans at the end of 2009 would be 57.8%, and at the end of 2010, 12.1%. On the other hand, the growth of non-performing loans with simultaneous growth of financial assets and disposable income of households is an indicator of increased stratification among households (according to data that the banks[12] submitted to the National Bank, about 60% of the debt is concentrated among households with monthly income from Denar 7,000 to Denar 30.000[13]), which in turn, requires increased vigilance of domestic banks in granting new credit exposures to households. At the same time, the further concentration of debt among segments of the household sector which have lower income may adversely affect the indicators of the ability of the entire household sector for timely servicing of the debt.

1.3. Savings rate, disposable income and private consumption of the household sector[14]

The positive gap between disposable income[15] and private consumption in 2010 caused

[11] If the effect of written-off claims during 2010 is excluded, the share of the exposure to natural persons classified in risk categories C, D and E would equal 8.1% instead of 7.5% (7.7% as of 31.12.2009).
[12] The analysis was made on the basis of data obtained from sixteen out of seventeen banks with exposure to the household sector. Within this structure, one of the banks reported "no wage" category, which accounts for 6% of its total exposure to households.
[13] Of them approximately 45% of the exposure is concentrated with households with monthly wages ranging between Denar 7,000 and 15,000.
[14] In the preparation of this chapter, source of part of the conclusions is the Annual Report of NBRM for 2010.
[15] The disposable income represents the difference of inflows (compensation of employees' assets, private transfers,

the **household savings rate[16] to reach a level of 2.6%, which is by 0.8 percentage points higher than the level in 2009.** However, compared to the rates of saving in other countries, it is far lower, with the exception of the Czech Republic and Denmark. **In 2010, disposable income continued to grow at a slower pace, but still had a significant annual growth.**

Figure 2.1.15
Movement of disposable income, private consumption and saving rate of households

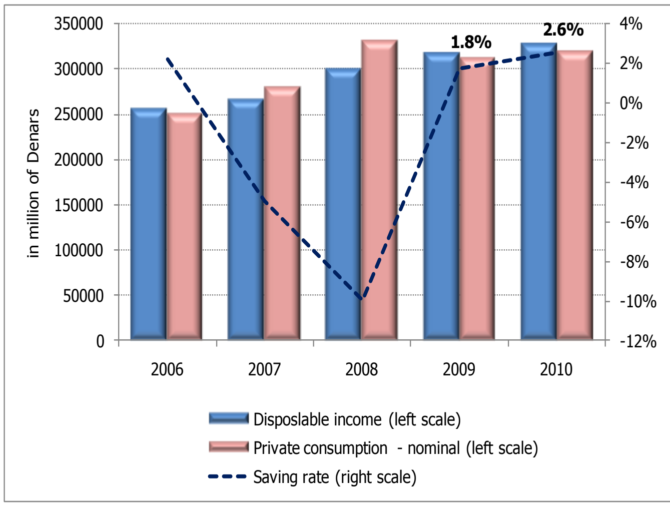
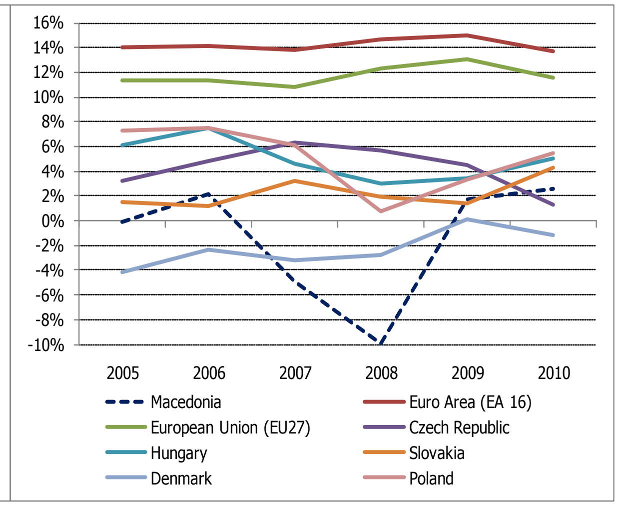


Figure 2.1.16
Households' saving rates, by individual countries



Source: NBRM, SSO and OECD Economic Outlook No.88 (data by individual countries are assumptions).

The main generator of growth of disposable income is private transfers, and the growth of the wage bill. Amid slow pace of growth of the average net wage, the growth of the wage bill was due to higher employment. During 2010, there were signals for post-crisis recovery in the labor market in the Macedonian economy, manifested by an increase in the number of employees by 1.3% compared to 2009. Similar paths of movement are registered in the other indicators on the condition of the labor market. The employment rate rose by 0.3 percentage points compared to 2009 and reached 38.7% for 2010. Favorable shifts in the labor market during the year indicate a gradual recovery in this segment of the economy, which is consistent with the improved economic situation and increased aggregate demand. However, a certain part of the growing employment may be a result of other factors such as increased transfer of employees from the informal to the formal sector of the economy under state stimulus policies, especially those aimed at supporting the rural development. Given the simultaneous rise in labor demand and supply, the average unemployment rate in 2010, declined by 0.1 percentage points and equaled 32.1%. However, unemployment is still high, despite its downward trend and positive shifts in the labor force. Along with the low labor

income of individual producers, social transfer, dividends income, interest payments by banks, payments from frozen foreign currency deposits, property income, income from copyrights, capital income, inflow from denationalization, income from lottery and other similar games and treasury bills interest income) and outflows (total social contributions, private transfers, personal income tax and interest payment) to households.

[16] Household savings rate denotes the ratio of the gap between the disposable income and private consumption to disposable income.

productivity, they are the main reason for the insufficient growth of disposable income, and also disable a more dynamic (than the achieved) growth of inflows based on funds of the employees. **The growth of average wages[17] continued during 2010, but with a significantly slower dynamics in most of the year (except in the last month of the year when a significant acceleration of growth of wages was registered).** The average nominal net wage in 2010 amounted to Denar 20,554 and was higher by 3% compared to the same period of the last year. Amid the recorded cumulative inflation rate of 1.6%, net-wages have registered an increase of 1.4% in real terms, in 2010. For comparison, the annual growth of average nominal net-wage in 2009 was 9.8% (growth of 10.8% in real terms). Trends in the labor market and wages had a stimulative effect on the households' expectations and consumption (except for the last quarter of 2010).

Figure 2.1.17
Rate of employment and unemployment

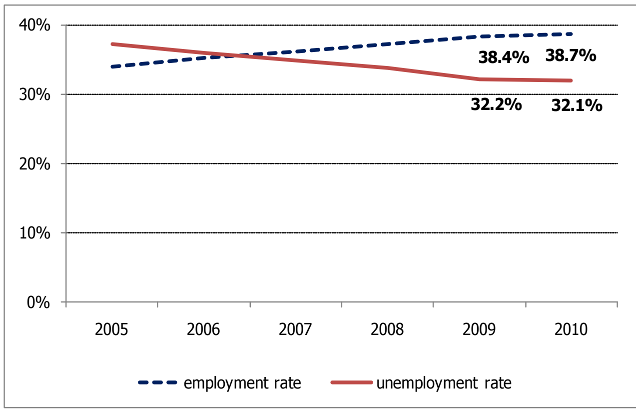
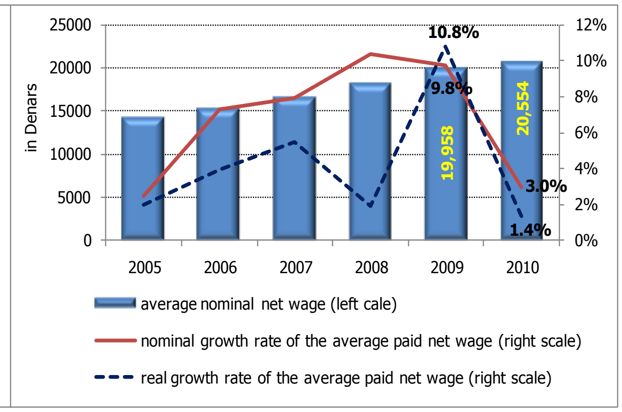


Figure 2.1.18
Movement of average nominal net wage and its nominal and real growth rate



Source: SSO.

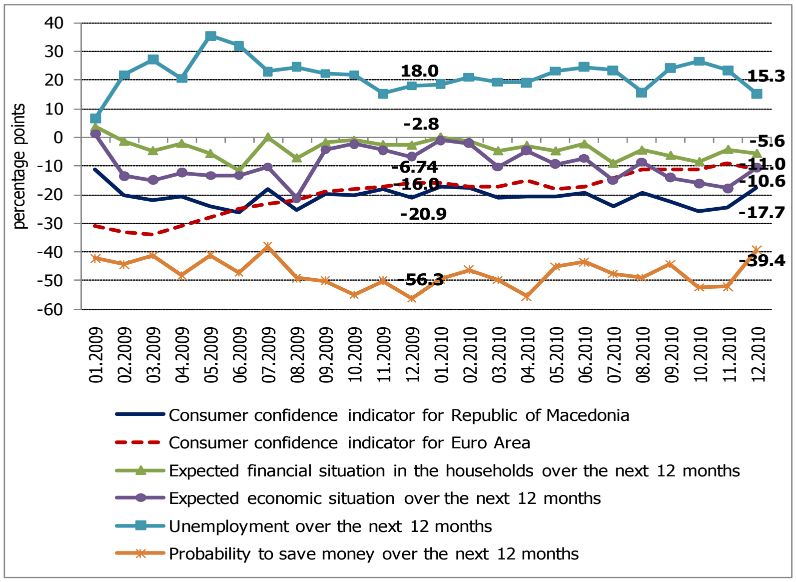
In 2010, private consumption recorded a real growth of 1.1%. The intensity of growth of private consumption increased steadily until the third quarter. In the last quarter it started to decline again. This indicates a gradual, yet "hesitant" post-crisis recovery of private consumption. Namely, during 2009, household consumption continuously decreased (negative perceptions of households in conditions of uncertainty about the duration of the global economic crisis and its effects on the domestic economy, as well as the more difficult access to financing were the main factors that influenced the dynamics of consumption in this period). The annual growth in private consumption started at the beginning of 2010, signaling a positive reaction of households to the improved global and domestic economic outlook. Furthermore, opportunities for additional funding of consumption through the credit market were higher compared with the previous year. Despite the growth in private consumption, the part of the average net-wage for food and beverages decreased on annual level, which increased the portion for meeting the other needs in comparison with last year. The share of the consumer basket for food and beverages in 2010, occupied 57.2%[18] of the average net-wage (64.5% in 2009). Despite the favorable trends, the data for the last quarter of the year show a significant decline in households' propensity to consumption. In the absence of indicators that would help explain this movement, the downward adjustment of consumption in the last quarter probably

[17] Source for the wages: SSO
[18] Source: SSO (reports on the consumer basket, prices and wages) and NBRM calculations.

reflects households' perception of lower disposable future income in accordance with the rise in inflation, which was manifested more intensely in the last quarter of 2010. This conclusion may partly be supported by the Consumer Opinion Survey[19], in which households have less favorable expectations regarding future financial condition, and significantly favorable expectations regarding the savings in the next 12 months.

In December 2010, the value of the indicator of confidence[20] increased by 3.2 percentage points compared to the value of the same month last year. This theoretically means increased confidence of households with respect to the economic situation in the country, their jobs and income, and subsequently, increased consumption in the future (according to the Consumer Opinion Survey in the next twelve months). However, despite the improvement of the indicator, one should not neglect the fact that it is still in the negative zone and it is low. It is due to perceptions of households in December 2010, that the economic situation in the country, the financial position of households and unemployment expectations for the next 12 months will be less favorable compared to their rating in December 2009. Consequently, the increase of the indicator is a result of the significantly favorable expectations regarding the savings in the next 12 months.[21] The comparison with the Consumer confidence indicator in the Euro Area shows that it is higher than in the Republic of Macedonia, and compared to December 2009, it is increased.

Figure 2.1.19
Consumer confidence indicator



Source: SSO and ECB.

[19] Source: SSO, Survey on consumers' opinion, December 2010.

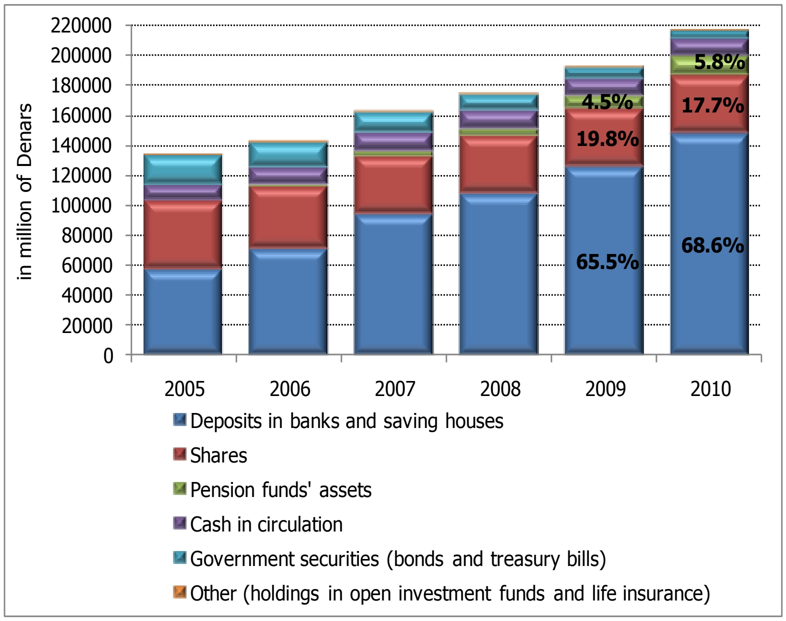
[20] The consumer confidence indicator in the Consumer Opinion Survey is calculated as the arithmetic average of the balances (in percentage points) of the answers to the questions about the financial situation of households, the general economic condition of the country, the unemployment expectations and savings, all over the next 12 months. Source: SSO. Otherwise, according to several definitions it should measure the level of consumer optimism regarding the general economic situation in the country, expressed through consumer savings and consumption.

[21] If the value of the indicator is increasing and if it is high, it denotes households' increased confidence in the economic situation in the country and, consequently, greater willingness to spend and borrow money, thus facilitating the economic growth. Conversely, if the value of the indicator decreases or is low, it means lower household confidence in the economic situation in the country, and consequently reduced consumption and increased savings, which contributes to the decline of economy.

1.4. Financial assets of the household sector

Financial assets of the household sector continued to grow in 2010. Relative to 2009, they grew by Denar 23,677 million or 12.3%. Such dynamic caused an increase in the share of financial assets in GDP of four percentage points compared to 2009, reaching the level of 51% at the end of 2010. Despite the continued growth, financial assets per capita is still low.

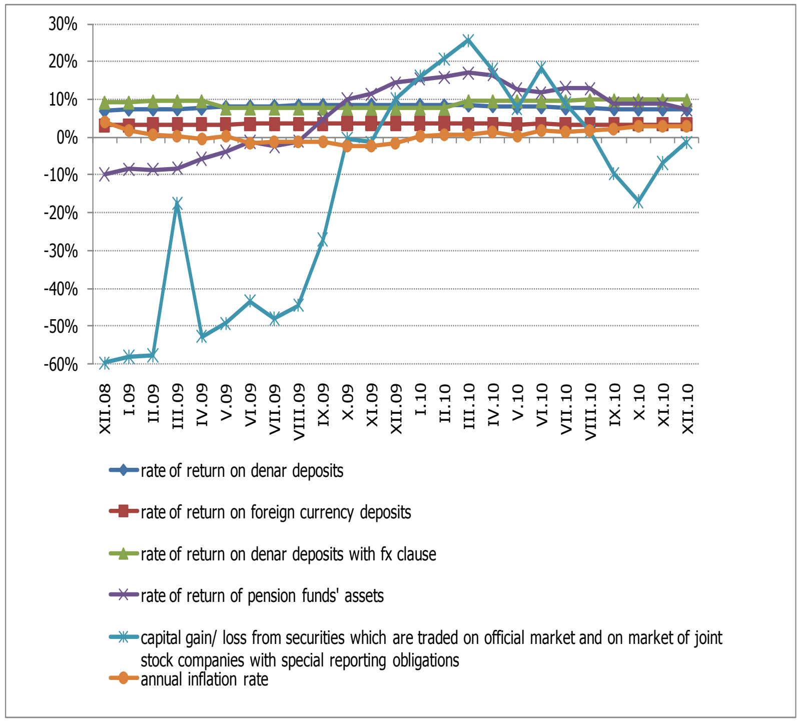
Figure 2.1.20
Amount and structure of financial assets of households, by type of assets



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

The largest contribution to the growth of financial assets of households is that of the households' investments in deposits with domestic banks and savings houses. They still have the largest share in the financial assets of households of 68.6%. At the end of 2010, amid more favorable macroeconomic environment relative to the previous year, household deposits in banks and savings houses registered growth of Denar 22,102 million, or 17.5%, thus contributing with 93.4% in the total increase of the households' financial assets. **Given that almost half of the sources of funding for domestic banks account for household deposits, this non-financial sector is a significant creditor of the banking system and the possible materialization of the risks that households are exposed to may have negative effects on the performance of domestic banks.** In addition to deposits, household assets in private pension funds registered high annual relative increase (of 42.8%), thus contributing to the increase of the financial assets of households with 15.8%. Other types of household assets registered a decline on annual basis or an increment that insignificantly affected the growth of financial assets in this sector.

Figure 2.1.21
Movement of annual rates of return of some of the households' financial assets instruments



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

The comparison of the annual rates of return on the instruments of the financial assets indicates that all the instruments of the household financial assets during all months of 2010 had a positive contribution to the growth of household financial assets, other than securities[22], which in the last four months of 2010 registered negative annual rates[23] of capital gain. In the first half of 2010 (except in May 2010) the annual rates of capital gain on securities were the segment with the highest yield on the financial assets. However, their downward trend in the second half of 2010, and even negative rates in the last months of 2010, caused this instrument on average not to be among the instrumensts with the highest return on financial assets. The annual nominal rate of return[24] on pension funds, in almost all months of 2010, is the highest compared to rates of other instruments. Thus, this instrument has the highest average annual rate for 2010 and consequently, has a significant contribution to the growth of household financial assets. Weighted interest rates on Denar, foreign currency and foreign currency deposits with FX clause averaged high 7.3%, 3.4% and 9.8%, respectively. Interest rates on these instruments of financial assets, although not among the highest rates of return from the range of instruments of financial assets, when combined with their highest presence in the structure of financial assets, classify this instrument as a segment of the financial assets which brings the greatest return. Here, one should have in mind that under the impact of inflation, deposit interest rates in real terms are lower, yet they still produce real growth

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

2. Corporate Sector

Notwithstanding the decrease in the preceding year, the corporate added value increased in 2010, in real terms. The first positive impetuses in the domestic economy recovery process in 2010 were added by the improved global conditions and accelerated economies of our most important trading partners, thus contributing to enhanced activities in the export-based segment of the domestic corporate sector. Exports recovery continued stimulating the future expectations of domestic agents, and tends to reduce their restraint from spending and new investments, thus triggering certain positive impulse to the domestic demand, as well. Such developments in the domestic economy only prove that the volume of activities, performances and financial capacity of corporations in a small and open economy as the Macedonian, are largely determined by the global and regional developments.

Corporate performance ratio analysis show no significant changes in 2010 compared to 2009. Corporate debt ratios registered certain deterioration. Liquidity registered marginal improvement, with the ratios being relatively low. Asset utilization ratios remained almost the same, similar to the profitability ratios.

In 2010, the corporate debt structure showed the fastest growth of foreign currency debt, short-term borrowing and variable rate debt. Each of these domestic corporate debt components creates certain corporate risks.

In 2010, domestic corporations showed certain deterioration of their creditworthiness, which was a signal to the banks to be careful when increasing the credit support to domestic companies and to seek to preserve the credit portfolio quality. The further recovery of global and domestic economic activity should have positive effects on the companies' future operations and financial position and their creditworthiness. This would improve the domestic banks' risk perceptions and would enhance the credit support to the corporate sector.

2.1 Corporate performance analysis

In spite of the fall in the preceding year, in 2010, the corporate added value registered a real growth. The real annual growth rate of corporate added value[25] for 2010 equaled 2.1% (0.7% real GDP growth for 2010), compared to the real fall of 3.2% for 2009. Construction and wholesale and retail sale industries made the greatest positive contribution to the corporate business expansion (the real annual added value growth rates of these sectors equaled 14.9% and 4.8%, respectively), with considerable decrease of the negative contribution being registered in the industrial sector (the activity of industrial sector registered a real annual fall of 2% in 2010, compared to the real fall of 10.8%, in the previous year).

The improvement of global conditions and economic expansion of our most important trading partners in 2010 added the first positive impetuses in the

[25] The corporate added value calculation does not include the added value of real estate, professional, scholar and technical businesses and administrative and auxiliary services.

domestic economy recovery process, making positive transmission effects in terms of utilization of the capacities of domestic exporters and higher export volume. In 2010, the exports boosted by 21.9%, in spite of the 32.1% drop in the preceding year, indicating **expansion in the export-oriented domestic corporate sector in 2010.** Export recovery kept on stimulating the future expectations of domestic entities, diminishing their restraint from consumption and new investments, adding positive impetus to the domestic demand (moderate positive developments in both the personal and investment consumption)[26]. Such developments in the domestic economy only prove that the volume of activities, performances and financial capacity of companies in a small and open economy as the Macedonian, are largely determined by global and regional developments (particularly the economic growth in the countries that are most important trading partners). However, the sensitivity of Macedonian corporate sector to external shocks is particularly high, taking into account the week competitiveness of the domestic companies on foreign markets and the relatively high export concentration ratio[27].

Table 2.2.1
Number of companies in the Republic of Macedonia

Description	2008	2009	2010	Annual change 2010 / 2009		Annual change 2009/ 2008	
				absolute amount	in %	absolute amount	in %
Number of enterprises in bankruptcy procedure, during the year	1,737	2,270	1,445	-825	-36.3%	533	30.7%
Number of newly established enterprises, during the year	13,534	10,729	11,685	956	8.9%	-2,805	-20.7%
Number of total enterprises, at the end of year	120,448	124,559	128,376	3,817	3.1%	4,111	3.4%
Number of enterprises with blocked accounts, at the end of year	14,213	22,518	31,047	8,529	37.9%	8,305	58.4%

Source: NBRM calculations, based on data of the Central Registry of the Republic of Macedonia.
*Note: Data include all legal entities, most of which being corporate legal entities (nonfinancial legal entities).

The improved business environment and revival of corporate activities in 2010 resulted in lower number of companies under bankruptcy on the one hand, and higher number of new businesses, on another[28]. The lower number of companies under bankruptcy reduced the bankruptcy rate from 1.9% in 2009 to 1.2% in 2010 (the corporate bankruptcy rate is a ratio between the number of companies in bankruptcy proceedings in the current year and the number of companies at the end of the preceding year).

[26] Source: NBRM Annual Report for 2010 presents these developments in more details.
[27] Roughly half of the 2010 exports was concentrated in five countries (Germany, Bulgaria, Serbia, Italy and Greece). Moreover, iron, steel and wearing apparel accounted for over 40% of the exports.
[28] Data include all legal entities (of all sectors), but mostly corporate legal entities. Source: NBRM and CRM.

Table 2.2.2
Corporate performance ratios

TYPE OF INDICATORS	2009	2010
Debt indicators		
Total debt ratio: total liabilities excluding capital and reserves/total assets	49.5%	50.4%
Leverage ratio: assets/capital and reserves	1.98	2.02
Debt-to-capital ratio: total liabilities excluding capital and reserves/capital and reserves	98.1%	101.7%
Capitalization ratio: long term libilities/(long term liabilities + capital and reserves)	19.7%	21.7%
Interest coverage ratio: EBIT/interest expense	4.60	4.24
Debt coverage ratio: EBIT/(borrowings+interest expense)	0.37	0.40
Liquidity indicators		
Current ratio: current assets/current libilities	1.21	1.28
Acid-test ratio: (current assets-inventory)/current liabilities	0.85	0.90
Cash ratio: cash and cash equivalent and securities/current liabilities	0.09	0.10
Cash conversion cycle (in number of days): receivables conversion period + inventory conversion period - payables conversion period	13	25
Indicators of corporate sector' s efficiency at using its assets		
Receivables conversion period (in number of days): (accounts receivable X 365) / sales revenue	130	132
Inventory conversion period in number of days (approximation): (inventory X 365) / sales revenue	71	72
Payables conversion period in number of days (approximation): (short term accounts payable X 365) / expenses from regular operations	188	180
Total assets turnover: sales revenue/total assets	0.69	0.71
Equity turnover: sales revenue/capital and reserves	1.37	1.44
Profitability indicators		
Return on assets: profit after tax/total assets	3.58%	3.52%
Return on equity: profit after tax/capital and reserves	7.08%	7.11%
Profit margin: profit after tax/sales revenue	5.15%	4.93%
Return on capital employed: EBIT/(total assets-current libilities)	6.21%	6.30%
Return on sales: EBIT/sales revenue	5.63%	5.58%
Profit after tax per employee, in Denars (productivity indicator)	82,399	81,797

Source: NBRM calculations, based on the data of the Central Registry of the Republic of Macedonia.
*Note: some asset utilization ratios are approximately estimated, since there are no available data on costs of products sold and the amount of procurements in the year.

The analysis of corporate performance ratios in 2010[29] shows no significant changes compared to 2009. Corporate debt ratios deteriorated, whereas liquidity registered minor improvement, with the ratios still being relatively low. The asset utilization and earnings ratios remained almost the same, with some positive developments being recognized in the income statement structure.

Corporate debt ratios deteriorated. The higher percentage of growth of the assets and liabilities of domestic companies in 2010 (of 7.2% and 9.2%, respectively) compared to the

[29] The calculation of corporate performance ratios uses the annual accounts of 53,238 companies (588 large and 52,650 small and micro companies) that submitted annual accounts to the Central Registry of the Republic of Macedonia for 2010. On 31.12.2010, 128,376 legal entities operated in the Republic of Macedonia. The difference refers to budget users, nonprofit organizations, sole proprietors, banks and other financial institutions and nonfinancial legal entities that submitted empty annual accounts or conducted no business activity during the year.

increase of the capital and reserves of 5.3% (or Denar 28,835 million), resulted in certain deterioration of the total debt and leverage ratios and debt/capital ratio. On the other hand, the twice as fast growth of financing costs, compared to the increase of operating income in 2010 (the financing costs and operating profit went up by 18.6% and 9.5%, respectively), resulted in a slight decrease of financing costs - domestic companies' operating profit coverage ratio. Notwithstanding the certain increase of the use of financial leverage by the corporate sector, the capital and reserves still make up nearly half of the total sources of funding of the domestic companies, and the operating profit was by more than four times higher than the financing costs (usually, the generally accepted threshold of this indicator is 1.5).

In 2010, domestic corporations' liquidity ratios slightly improved. The faster growth of current assets and corporate cash and securities of 12.3% and 16.9%, respectively compared to the 5.9% increase of current liabilities, resulted in certain improvement of the companies' current, quick and cash liquidity ratios. The quick liquidity ratio is slightly below the generally accepted threshold for this ratio (1), while the current liquidity ratio is above the commonly accepted threshold (also 1), yet far away from the generally accepted satisfactory level (2).

Corporate asset utilization ratios remained the same. In 2010, the average period required for claim collection was 4.4 months, the stock effectuation took 2.4 months, while the average liability repayment period was 6 months. As the asset utilization ratios depend largely on the prevalent activity of the business, the analysis of all corporate indicators (analysis of business of all industries, on aggregate basis) has no practical significance. More detailed analysis of these ratios, by activity, follows below.

Along with the asset utilization ratios, the domestic companies' earnings ratios also showed no significant changes. The corporate capacity, however, to maintain and increase profitability also improved. The net-profit in 2010 was by 5.7% (or by Denar 2,190 million) higher compared to 2009. The operating profit (pre- interests and taxation profit from operations) went up by 9.5%, and sales income increased by 10.4% (or nearly Denar 78 billion) compared to 2009. Observing expenses, the costs of row materials and other materials recorded the steepest growth of 19.5% (or by almost Denar 30 billion), due to the rise of prices of row materials on global markets in the second half of 2010, but does not reflect the revival of corporate sector during the year. The slightly faster growth of domestic corporate assets (of 7.2% or Denar 77,884 million), compared to the increase of net-profit (5.7%), resulted in a minor decrease of the return on total assets (from 3.58% in 2009, to 3.52% in 2010).

The corporate workload and performances and its risk management efficiency largely determined the disposable income and the household financial power, in general. The potential drop of employee number in the domestic corporate sector and/or the amount of net paid wages, could have averse effects on the household creditworthiness, which would eventually distress the stability of the financial (and particularly the banking) system. In 2010, the number of employees in the domestic companies went up by 30,222 (or by 6.5%), and on 31.12.2010, the corporate sector made up 75.6% of the total employee number in the Republic of Macedonia. Besides, the average weighted monthly net paid wage in the corporate sector increased by 5.5% (or by Denar 941) annually, in nominal terms, which should have positive effect on the disposable income of the respective households. Despite such movements, conclusions remain the same: that the corporate sector lacks capacity to absorb the active population in the Republic of Macedonia (on 31.12.2010, the corporate sector absorbed 52.2% of the total active population in the Republic of Macedonia) and that the labor productivity is low (it additionally diminished in 2010[30]), which could have adverse effects on the employment rate and the corporate wages in case of cost rationalization by domestic companies.

The trend of faster rise of global food and energy prices in the last quarter of 2010 and the first quarter of 2011 gradually increased the domestic price level, through the import price growth. The raw materials price growth on the global markets is a challenge for the domestic companies on a short run. Provided that such trend continues, the corporate costs would additionally increase due to the rise of input prices in the business process. This could put pressure on the domestic product prices. For now, the inflation growth is moderate, without significant impact on the expectations of economic agents for its future growth.

Development of highly competitive exports-oriented corporate sector is one of the priorities of the Macedonian economy, on a long run. Components that require careful consideration include increase of long-term corporate investments (apart from attraction of foreign investments, to find ways to increase domestic investments), decrease of the dependence of domestic economy on the imports, human resource development (starting with the development of suitable management staff) and building corporate culture and awareness, encouraging, developing and promoting an entrepreneurship spirit, imposing sanctions to decrease the financial indiscipline among domestic enterprises, etc. Implementation of structural reforms in the domestic economy, aimed to develop highly competitive exports-oriented corporate sector, should have multiple positive effects, primarily when coping with high unemployment rate and high trade deficit in the domestic economy, and when creating higher maneuver space for the macroeconomic policy makers, to achieve satisfactory economic growth rates, in environment of stable price level.

2.1.1. Corporate performance ratios, by activity

Construction companies reported the highest financial leverage ratio, whereas companies in the agriculture, forestry and fishing industry registered the lowest debt level. In 2010, domestic companies of almost all industries registered higher debt ratio. Exceptions are companies in the agricultural, forestry and fishing industry where the debt ratios remained almost the same, and wholesale and retail sale companies that reported lower debt ratios.

In 2010 compared to the preceding year, liquidity of almost all industries registered no considerable changes. Wholesale and retail sale companies and transport, storage, information and communication services reported the highest liquidity ratios, whereas the accommodation facilities and catering services registered the lowest liquidity ratios.

Construction companies reported slightly faster deterioration of asset utilization ratios, whereas the asset utilization improved in the industrial

[30] See NBRM Annual Report for 2010.

businesses. In general, these ratios are the weakest in the construction business, and excellent in the commercial companies, which is quite an expectation, taking into account the traits of these businesses.

Table 2.2.3
Corporate performance ratios, by activity

TYPE OF INDICATORS	Agriculture, forestry and fishing		Industry		Construction		Wholesale and retail trade		Transport, storage, information and communication		Accomodation facilities and catering services		Real estate activities and other activities	
	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010
Debt indicators														
Total debt ratio	17.7%	17.6%	53.1%	53.5%	66.3%	67.9%	61.7%	60.0%	34.8%	37.4%	55.6%	57.4%	44.4%	46.5%
Leverage ratio	1.21	1.21	2.13	2.15	2.96	3.11	2.61	2.50	1.53	1.60	2.25	2.35	1.80	1.87
Debt-to-capital ratio	21.5%	21.4%	113.2%	114.8%	196.3%	211.5%	161.0%	150.1%	53.3%	59.8%	125.1%	134.8%	79.8%	86.8%
Capitalization ratio	5.3%	6.3%	25.9%	28.6%	34.2%	33.1%	19.3%	18.7%	11.6%	15.4%	31.2%	30.6%	15.4%	17.4%
Interest coverage ratio	1.93	2.26	1.76	2.56	9.31	6.25	8.21	6.47	10.05	9.30	-3.31	-0.41	14.08	9.57
Debt coverage ratio	0.10	0.10	0.15	0.27	1.06	0.54	0.77	0.56	0.57	0.65	-0.25	-0.03	0.91	0.58
Liquidity indicators														
Current ratio	0.93	1.04	1.21	1.34	1.32	1.25	1.29	1.33	1.15	1.30	0.78	0.75	1.07	1.05
Acid-test ratio	0.55	0.64	0.85	0.93	0.94	0.87	0.79	0.83	1.03	1.17	0.63	0.60	0.89	0.88
Cash ratio	0.04	0.06	0.07	0.09	0.08	0.08	0.09	0.10	0.12	0.14	0.11	0.10	0.16	0.13
Cash conversion cycle (in number of days)	-28	-2	39	54	44	39	16	23	-41	-11	-133	-163	-61	-61
Indicators of corporate sector' s efficiency at using its assets														
Receivables conversion period (in number of days)	154	157	165	155	205	227	89	94	121	127	105	115	188	194
Inventory conversion period in number of days (approximation)	122	117	83	82	99	121	69	71	22	21	45	50	54	51
Payables conversion period in number of days (approximation)	304	276	209	183	260	309	142	143	183	159	283	328	304	306
Total assets turnover	0.15	0.15	0.58	0.63	0.68	0.59	1.38	1.31	0.49	0.56	0.43	0.41	0.41	0.41
Equity turnover	0.18	0.18	1.23	1.36	2.02	1.84	3.59	3.28	0.75	0.89	0.98	0.97	0.74	0.78
Profitability indicators														
Return on assets	0.4%	0.2%	1.5%	2.9%	5.8%	3.2%	6.6%	4.8%	5.9%	6.3%	-0.4%	0.2%	3.6%	2.4%
Return on equity	0.5%	0.2%	3.3%	6.3%	17.1%	10.0%	17.1%	12.0%	9.1%	10.0%	-0.9%	0.5%	6.5%	4.4%
Profit margin	2.6%	1.4%	2.7%	4.6%	8.5%	5.5%	4.8%	3.7%	12.1%	11.2%	-0.9%	0.5%	8.8%	5.7%
Return on capital employed	0.5%	0.5%	3.5%	5.9%	11.5%	7.2%	14.3%	10.2%	8.3%	8.8%	-1.3%	-0.2%	4.8%	3.6%
Return on sales	3.1%	2.8%	3.8%	6.0%	8.7%	5.8%	4.9%	3.8%	12.6%	11.6%	-2.0%	-0.3%	7.7%	5.6%
Profit after tax per employee, in Denars (productivity indicator)	3	1	44	90	102	65	157	119	256	289	-4	2	130	92

Source: NBRM calculations, based on data from the Central Registry of the Republic of Macedonia.
*Note: Some of the asset utilization ratios are approximate, due to the lack of data on the costs of products sold and the amount of procurements during the year.

In 2010, profitability ratios of industrial businesses reported steeper increase, whereas such ratios of the construction businesses substantially worsened. Construction, wholesale and retail sale companies and transport, storage, information and communication services enjoy the strongest profitable position, whereas companies in the agriculture business, and particularly accommodation and catering services reported relatively low profitability ratios, with the latter recognizing operational loss over the last two years.

2.1.2. Corporate performance ratios, by size of the companies

On 31.12.2010, merely 1.1% of the total company number that submitted annual accounts to the Central Registry of the Republic of Macedonia are large and medium-size companies, and the remaining 98.9% are small-size and micro companies[31]. Assets of large and medium-size companies account for 55.3% of the total

[31] Companies have been classified into large, medium-size, small-size and micro using the criteria specified in Article 470 of the Company Law (this law uses the term vendors, rather than companies).

corporate assets. On the other hand, small-size and micro companies contributed, almost fully, to the total corporate assets growth for 2010. This year, these two corporate segments reported operating profit, with the large and medium-size companies constituting 52.4% of the total profit. Large and medium-size companies reported annual profit growth of Denar 4,338 million (or by 25.5%), whereas small-size and micro companies reported by Denar 2,148 million (or by 10%) lower profit, compared to 2009.

Table 2.2.4
Corporate performance ratios, by company size

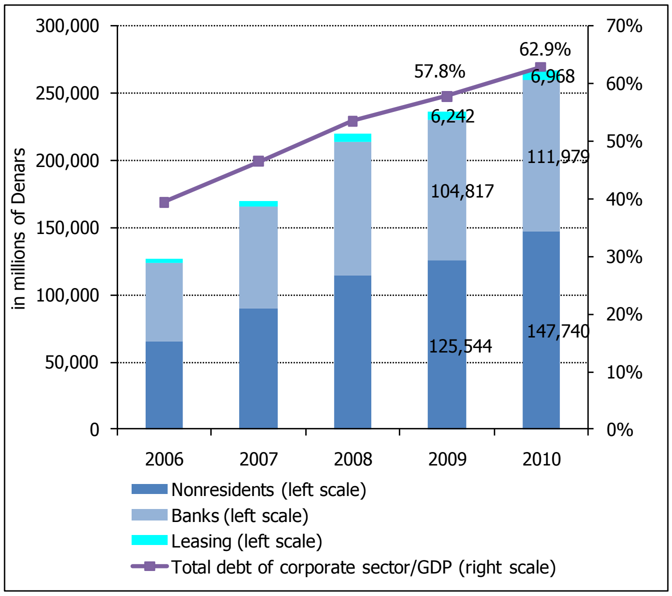
TYPE OF INDICATORS	Large and medium enterprises		Small and micro enterprises		Corporate sector	
	2009	2010	2009	2010	2009	2010
Debt indicators						
Total debt ratio	40.9%	40.4%	61.8%	62.8%	49.5%	50.4%
Leverage ratio	1.69	1.68	2.62	2.69	1.98	2.02
Debt-to-capital ratio	69.2%	67.9%	161.8%	168.7%	98.1%	101.7%
Capitalization ratio	15.2%	17.1%	28.1%	29.5%	19.7%	21.7%
Liquidity indicators						
Current ratio	1.24	1.38	1.18	1.22	1.21	1.28
Acid-test ratio	0.89	1.02	0.81	0.81	0.85	0.90
Cash ratio	0.08	0.09	0.10	0.10	0.09	0.10
Cash conversion cycle (in number of days)	26	38	-4	8	13	25
Indicators of corporate sector' s efficiency at using its assets						
Receivables conversion period (in number of days)	124	121	137	144	130	132
Inventory conversion period in number of days (approximation)	62	56	80	90	71	72
Payables conversion period in number of days (approximation)	159	138	221	225	188	180
Total assets turnover	0.62	0.66	0.80	0.78	0.69	0.71
Equity turnover	1.05	1.11	2.09	2.10	1.37	1.44
Profitability indicators						
Return on assets	2.7%	3.3%	4.8%	3.8%	3.6%	3.5%
Return on equity	4.5%	5.6%	12.7%	10.1%	7.1%	7.1%
Profit margin	4.3%	5.1%	6.1%	4.8%	5.2%	4.9%

Source: NBRM calculations, based on data from the Central Registry of the Republic of Macedonia.
*Note: 1) Corporate performance ratio calculation has been made on the basis of annual account of 53,238 companies that submitted annual account to the Central Registry of the Republic of Macedonia for 2010. On 31.12.2010, 128,376 legal entities operated on the territory of the Republic of Macedonia.
2) Some of the asset utilization ratios are approximate, due to the lack of data on the costs of products sold and amount of procurements during the year.

Large and medium-size companies reported far better debt ratios, higher liquidity and higher asset utilization ratio. Small-size and micro companies have slightly better profitability ratios.

2.2 Corporate debt

Figure 2.2.1
Corporate debt dynamics and structure, by type of creditor



Source: NBRM and Ministry of Finance.
*Note: For the purposes of this analysis, the total corporate debt includes debt based on loans, interests and other claims of banks, total corporate external liabilities (nonresidents) and value of active leasing agreements. The corporate external debt data are preliminary.

In 2010, corporate debt growth was twice as high compared to the preceding year. Corporate debt growth accelerated with the revival of the global and domestic economic activity, including the increase of foreign trade, the higher loan demand, the expansion of sources of funding for the domestic banks and the gradual loosening of the banks' terms of lending. In 2010, the total corporate debt went up by Denar 30,084 million (or by 12.7%), which is by Denar 13,931 million (or by 5.4 percentage points) more compared to the debt growth in 2009. The domestic companies' debt to nonresidents registered the fastest absolute growth of Denar 22,196 million (or 17.7%), increasing the dominant share of domestic companies in the total debt from 53.1% on 31.12.2009, to 55.4% on 31.12.2010[32]. Corporate debt to leasing companies registered a solid relative growth of 11.6% (or Denar 726 million). The debt to domestic banks registered a moderate growth of 6.8% (or Denar 7,162 million), making its share in the total debt of domestic companies to reduce from 44.3% at the end of 2009, to 42% on 31.12.2010.

Table 2.2.5
Structure and changes in each corporate debt component

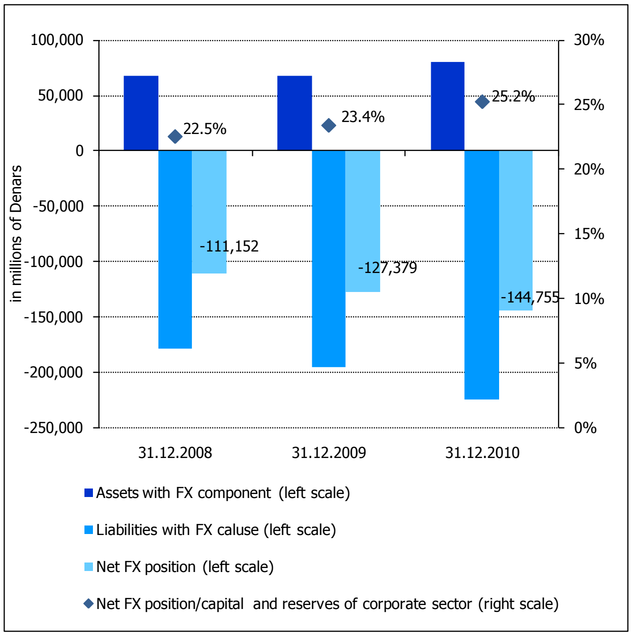
	Type of indebtedness	Structure (in %)		Annual change (31.12.2009 - 31.12.2010)	
		31.12.2009	31.12.2010	Amount (in millions of Denars)	In %
currency	Denar indebtedness	16.0%	14.5%	878	2.4%
	FX indebtedness	69.2%	72.5%	29,046	18.2%
	Denar indebtedness with FX clause	14.8%	12.9%	-567	-1.7%
maturity	Short term indebtedness	38.2%	39.7%	15,522	17.2%
	Long term indebtedness	57.0%	55.4%	12,754	9.5%
	Other indebtedness (past-due and nonperforming)	4.8%	5.0%	1,808	15.8%
type of interest rate	Indebtedness with fixed interest rate	17.4%	15.9%	-23	-0.1%
	Indebtedness with variable interest rate	32.2%	36.3%	13,248	23.2%
	Indebtedness with adjustable interest rate	47.3%	44.7%	2,769	3.3%
	Other indebtedness	3.1%	3.1%	514	9.4%

Source: NBRM and Ministry of Finance.
*Note: The debt currency structure does not take into account the active leasing agreements due to unavailability of data on their currency structure. The analysis of debt structure by type of interest rate takes into consideration the debt to the banking system and nonresidents, based on loan principal (the value of active leasing agreement is not taken into account due to unavailability of adequate data).

[32] The corporate external debt data are preliminary.

In 2010, the foreign exchange debt, short-term debt and variable rate debt of the corporate sector registered the fastest growth.

Figure 2.2.2
Currency position of corporate sector



Source: NBRM

Foreign exchange debt of domestic companies almost fully determined the corporate debt growth, thus increasing the share of currency component in the total debt (from 84% on 31.12.2009 to 85.4% at the end of 2010). Such currency structure of corporate debt indicates **an increase in its sensitivity to currency risk,** which is particularly evident taking into account the **short net currency position of domestic companies**[33] (short net currency position reflects the excess liabilities over assets with currency component that increased in 2010 by additional Denar 17,376 million or by 13.6%)[34]. The consistent implementation of **nominal exchange rate targeting strategy of the Denar against the Euro by the NBRM, however, is crucial for minimizing the likelihood of this risk.** On the other side, taking into account the lower level of domestic foreign exchange interest rates relative to the Denar ones, and the relatively low levels of interest rates on the global financial markets for a quite some times, **the corporate foreign exchange debt bears slightly lighter interest encumbrance** compared to other company debt components.

The fast growth of the corporate short-term debt[35] indicates **greater concentration of new liabilities of the domestic companies in a shorter time period,** that tends to impede liquidity management. Besides, the higher short-term financing is **closely related to the need for regular renewal of short-term liabilities (refinancing)**, which in case of potential contingent macro shocks could be significantly limited and/or available at higher prices (interest rates). On the other hand, in the last year and a half, domestic interest rates on some short-term company loans (Denar and FX) were higher compared to the interest

[33] Net currency position is the difference between the assets and liabilities with currency component of the corporate sector. Assets with currency component include deposits with currency component, cash on accounts abroad, total claims of residents on nonresidents and investments abroad. Liabilities with currency component include credits with currency component from domestic banks and total liabilities of residents to nonresidents. Since there are no data available on investments abroad as of 31.12.2010, the calculations use data as of 31.12.2009. In the calculations of deposits with currency component, the segment that refers to Denar deposits with FX clause for 2008 is as of 31.01.2009 (to 31.12.2008 there is no data on the amount of Denar deposits with FX clause, by sector).

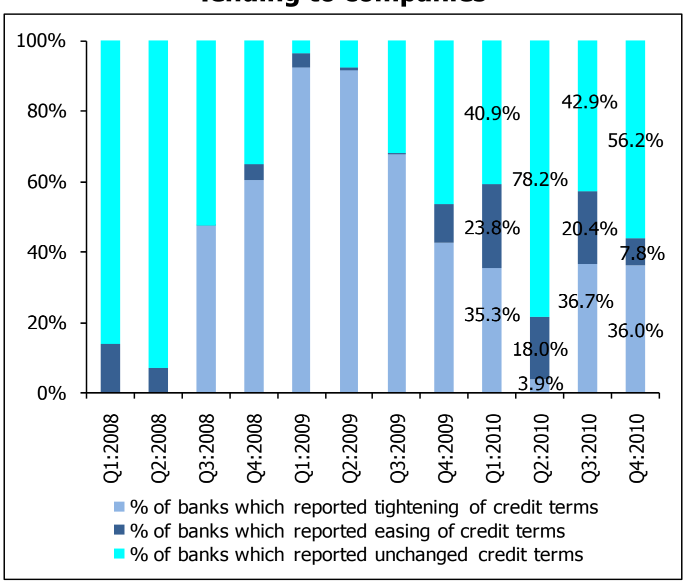
[34] Since there are no detailed data, there is a chance the coverage ratio of liabilities with claims with FX clause to be even lower when analyzing by company, or by economic activity, if the total corporate claims with FX clause are concentrated in few companies.

[35] One should take into account that most of the short-term debt growth is to nonresidents, and short-term loans from domestic banks remained almost the same in 2010.

rates on long-term company loans, that mirrors the situation in the Euro area[36], showing that **large portion of short-term financing is also related to the slightly heavier interest encumbrance for the domestic companies (at least in the last year and a half).** Notwithstanding the fastest annual growth of short-term corporate debt, the share of **long-term debt** was the highest (55.4%), **implying longer encumbrance of corporate sector with costs for its financing, and possibility to spread its liabilities over a longer time period. On the other hand, the higher share of long-term debt increases the corporate sensitivity to interest risk.**

The highest absolute growth of debt with variable rates (variable rate debt to domestic banks and to nonresidents increased by Denar 8,765 million and Denar 4,483 million, respectively) shows that **interest rates on most of the new debt of domestic companies depend on the growth of interest rates on global markets.** Notwithstanding the relatively low levels of interest rates on global financial markets, **they registered certain upward trends in the second half of 2010, indicating higher interest encumbrance for domestic companies with variable rate debt.** Conversely, the structure of total corporate debt shows the highest share of adjustable rate debt (interest rates changeable with autonomous decision of the creditor), solely concentrated with domestic banks (44.7% of loans to domestic companies have adjustable interest rates). The high share of adaptive rate debt indicates **higher corporate exposure to interest rate risk.**

Figure 2.2.3
Percentage* of banks that reported tightening/loosening/ unchanged terms of lending to companies



Source: NBRM, bank lending surveys
*Note: Weighted percentage of banks, depending on the share of each bank in the total company loans in the banking system, on a specific date.

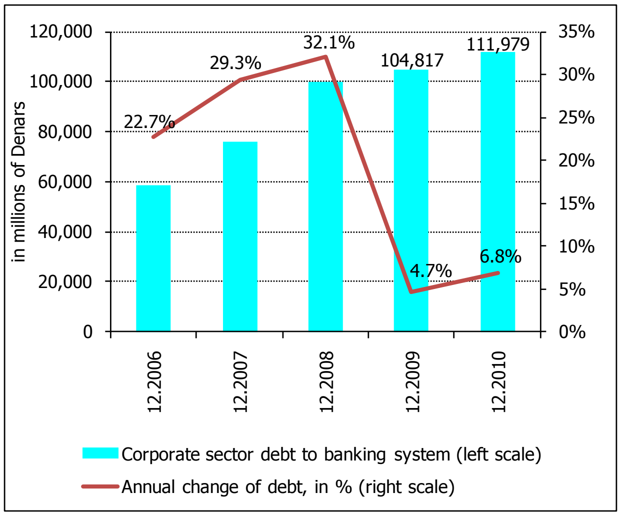
2.2.1. Debt to domestic banking sector

In 2010, corporate debt to domestic banks[37] registered slightly faster growth compared to the year before. According to the lending surveys, most domestic banks reported unchanged terms of lending to corporations. The analysis by credit term, however, shows that in 2010, more than half of the banks (on average) cut the interest rates on loans to corporate sector. The stable global and domestic macroeconomic environment, the constant bank deposit growth in 2010, and primarily the improved expectations of the banking and private sector contributed to slightly higher credit support to the corporate sector (and in general, increase in the total lending activity of the banks). The monetary

[36] See for example, the Monthly Reports posted on the ECB website.
[37] Corporate debt to the banking system includes debt based on credits, interests and other claims. More than 98% of the total corporate debt to domestic banks is based on credits.

policy also followed this trend, by cutting the key interest rate a few times in 2010. However, the corporate lending accelerates gradually, reflecting the banks determination over the last two years to maintain the quality of credit portfolio, and their stability, in general. Hence, most of the banks did not changed their terms of lending to the corporate sector in 2010, and the major factors they claimed to contribute to the further application of the lending terms, in general, include high costs for their capital position, need of further strengthening of their liquidity position, higher risk of failure to collect the collateral, and uncertainty of some banks related to the future developments in the overall economy and the perspective of the branches of the companies[38].

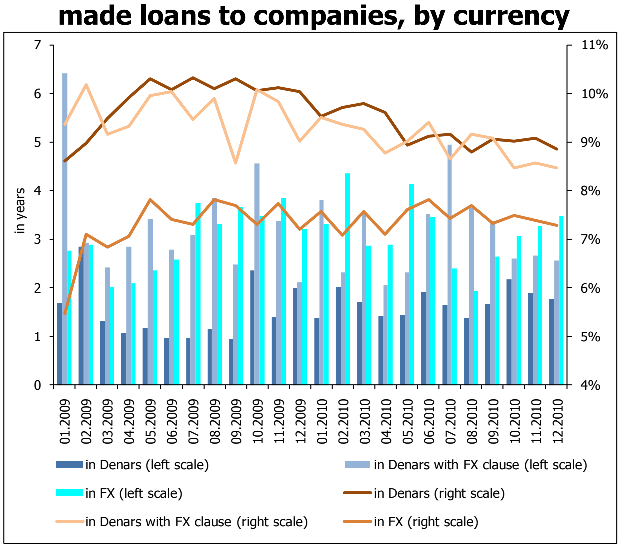
Figure 2.2.4
Growth of the corporate debt to the banking system



Source: NBRM, based on data submitted by banks.

However, the analysis of lending terms indicate relatively high percentage of banks that reported cut of interest rates on loans to corporate sector in 2010 (on average, slightly more than half of the banks cut their interest rates in 2010)[39]. On the other hand, most of the banks reported that they have not changed the other lending terms in 2010 (noninterest income, size of loan or line of credit, collateral requirements and loan maturity), while few banks reported that they loosened or tightened their lending terms. The last Lending Survey (for the first quarter of 2011), shows that banks expect no changes in the terms of lending to the corporate sector in the next quarter, and expect the demand for loans to increase.

Figure 2.2.5
Average maturity and interest rate on newly made loans to companies, by currency



Source: NBRM, based on data submitted by banks.

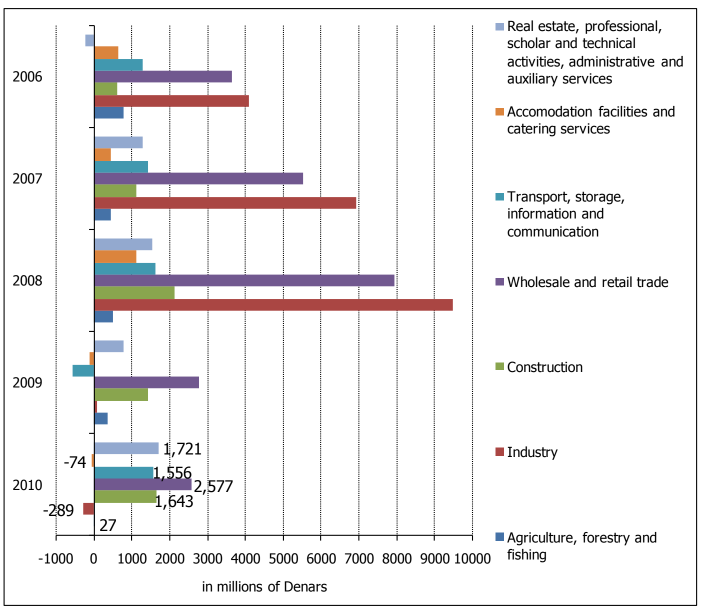
In 2010, the amount of newly approved credits to the corporate sector registered certain growth compared to the year before. Interest rates on newly approved credits dropped, and the average maturity increased marginally. Most of the newly extended credits are in Denars (39.3%), although their amount is by Denar 198 million lower compared to the approved Denar credits in 2009. On the other hand, newly extended FX credits registered the fastest growth (of Denar 2,156 million, or 9.3%), due to the lower interest rates on these credits (compared to Denar credits and Denar

[38] According to the results of the Lending Surveys in the four quarters of 2010.

[39] In the first quarter of 2010, 74.7% of the banks reported cut of the interest rate on corporate loans, and in the second quarter, this percentage increased to 84.9%. In the next two quarters of 2010, 32.8% and 12.5%, respectively, of the banks cut their interest rates.

credits with FX clause), the accelerated activities in the export sector in 2010 (in line with the faster external demand) and consequently, the higher demand for credits by the export oriented corporations, and the higher FX borrowing of the domestic banks from international financial institutions, aimed to provide financial support to the domestic corporate sector. The average interest rates on newly approved loans to the corporate sector was by 0.3 percentage points lower in 2010 compared to the average interest rate on newly extended loans in 2009, due to the lower average interest rates on newly approved loans in Denars and in Denars with FX clause (by 0.5 percentage points). The average maturity of newly extended loans in 2010 registered minor increase of 0.1 year (slightly over one month), equaling 2.6 years in 2010. In spite of the highest average price of newly approved Denar credits, their average maturity was the lowest in 2010, as well (1.7 years, or by 0.1 year more compared to 2009). The newly extended credits in Denars with FX clause reported the highest average maturity of 3.3 years, with the greatest change in the average maturity being made in the newly extended FX loans (the average maturity of new FX loans went up from 3.0 years in 2009 to 3.2 years in 2010). Long-term credits registered the highest share (83.1%) in the annual increase of corporate loans, indicating that some credited companies in 2010 used certain financial support from the banks to invest in their existing facilities. On the other hand, short-term loans remained almost the same as in 2009, indicating that the concluded agreements on short-term lines of credits were probably renewed to help the corporate sector conduct its regular operations.

Figure 2.2.6
Annual absolute corporate debt growth, by activity

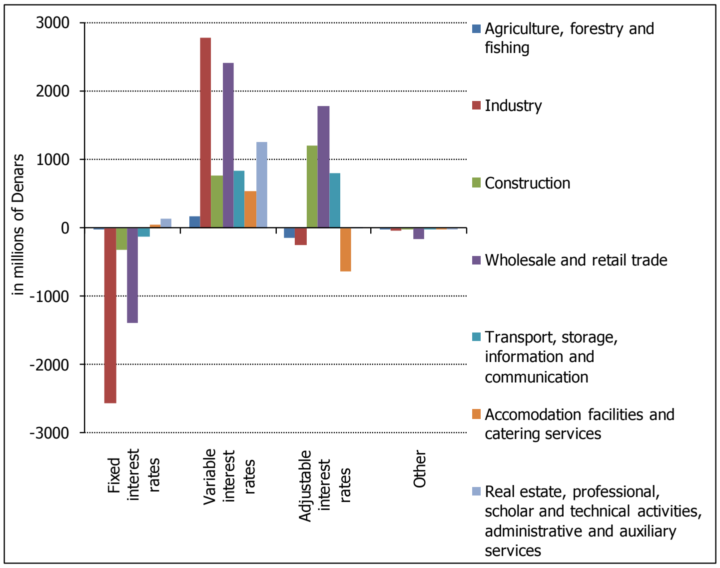


Source: NBRM, based on data submitted by banks

The greatest credit support in 2010 was provided to business from the wholesale and retail sale industry. In spite of the annual fall of the debt of clients in the industrial business, their debt still dominates the total corporate debt to the banking system. In 2010, the debt of wholesale and retail sale industry increased by Denar 2,577 million (or by 7.4%), enhancing their share in the total corporate debt to the banking system by 0.2 percentage points (from 33.1% on 31.12.2009 to 33.3% on 31.12.2010). The debt of the real estate, professional, scholar and technical businesses and administrative and auxiliary services to domestic banks registered the highest percentage change (29.2%). The debt of the industrial business went down annually by -0.7%, remaining dominant in the total debt of the corporate sector to domestic banks, of 36.5%.

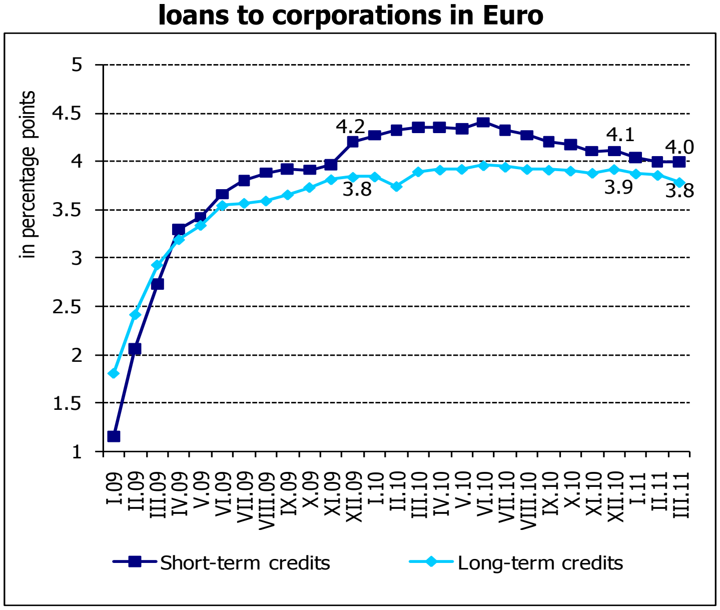
In 2010, off-balance sheet exposure of the banking system to the corporate sector increased by Denar 3,390 million, or by 15.5%[40] (as a comparison, in 2009, the bank off-balance sheet exposure to domestic companies decreased by Denar 46 million, or by 0.2%). The industry (primarily, the manufacturing), the wholesale and retail sale and the construction (due to the used guarantees and letters of credit) constituted almost 90% of the off-balance sheet exposure.

Figure 2.2.7
Annual absolute corporate loan growth, by type of interest rate



Source: NBRM, based on data submitted by banks.

Figure 2.2.8
Gap between the interest rates in the Republic of Macedonia and interest rates in the Euro area, on loans to corporations in Euro



Source: NBRM and Monthly Reports posted on the ECB website

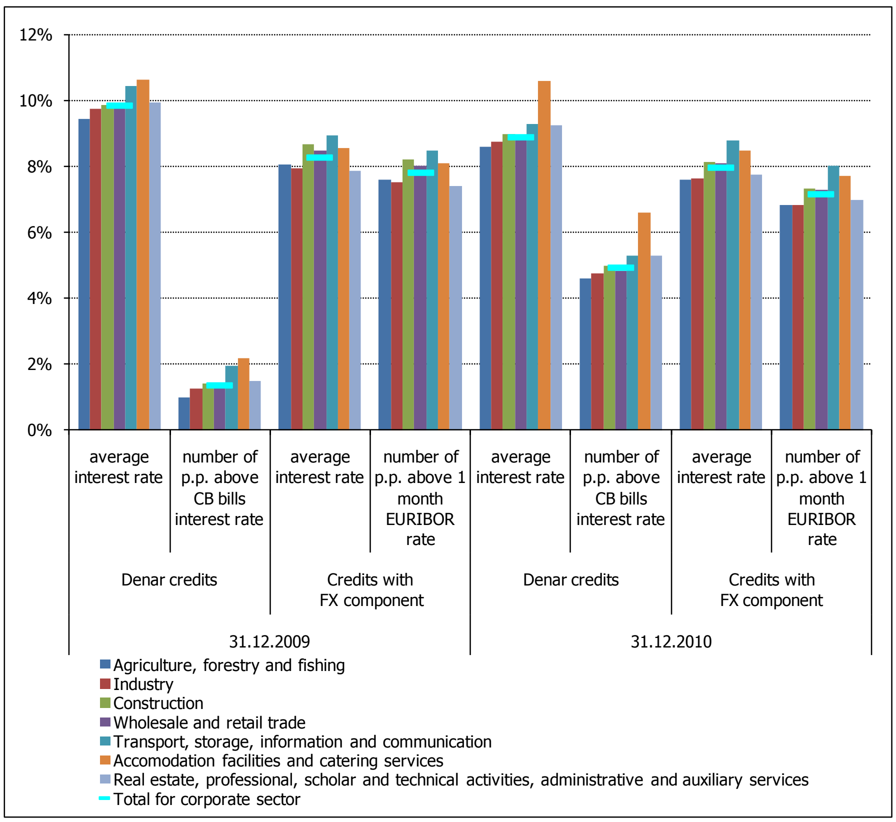
In 2010, variable rate loans to domestic companies registered the highest absolute growth. Fixed rate loans went down annually, with the adjustable rates being mostly applied to loans to domestic companies of all economic sectors. The highest annual growth of variable rate lending was registered in the industrial and the wholesale and retail sale businesses (by Denar 2,788 million and Denar 2,408 million, respectively), making up almost 60% of the total growth of variable rate loans. At the same time, these businesses registered annual fall of the borrowing with fixed rates (by Denar 2,563 million and Denar 1,392 million, respectively) causing, almost fully, the total decrease of fixed rate loans to the corporate sector. Adjustable rate loans still dominate the total loans to domestic companies of all economic sectors (on 31.12.2010, the adjustable rate loans made up from 71.4% in the total loans to all accommodation and catering services to 87% to construction companies).

The absence of significant growth of interest rates on corporate loans in Euro in the Republic of Macedonia and in the Euro area resulted in minimum changes in the gap between them

[40] Bank off-balance sheet exposure, in fact, implies future corporate liabilities to other creditors or suppliers and potential credit liabilities to banks.

in 2010. Thus, the gap between the interest rates in the Republic of Macedonia and those in the Euro area on short-term corporate loans in Euro registered a minimum annual fall of 0.1 percentage point, and the gap between the long-term Euro loan interest rates went up by 0.1 percentage point[41]. The further increase of interest rates on the European financial markets in the second half of 2010 and continuation of such trend in 2011 should bring about future narrowing of the gap between the interest rates on Euro corporate credits in the Republic of Macedonia and those in the Euro area. However, this largely depends on the direction of the development of domestic foreign exchange interest rates on loans to companies, i.e. on the level of their (non)synchronization with the interest rate developments on the global financial markets.

Figure 2.2.9
Average interest rates on loans to corporations and percentage points over the CB bills rate / one-month EURIBOR rate, by business activity



Source: NBRM, based on data submitted by banks.
*Note: Average interest rates on performing undue loans to domestic companies.

The fastest annual decrease of interest rate encumbrance to the domestic companies was registered in Denar loans to the industrial and the wholesale and retail sale sector (interest rates on Denar loans approved to these businesses reduced by 1 percentage point) and loans with currency component to construction companies (by 0.6 percentage points).

On the other hand, Denar credits approved to agriculture, forestry and fishing industry and loans with currency component extended to industrial businesses were the **least expensive** (8.6% and 7.6%, respectively, on 31.12.2010). Conversely, Denar loans to accommodation facilities and catering services and loans with currency component extended to transport, storage, information and communication industry -bore **the highest interest rates** (10.6% and 8.8%, respectively, on 31.12.2010).

[41] In case of comparison between the interest encumbrance of companies in the Republic of Macedonia when they borrow from foreign financial institutions in the Euro area and from domestic banks, one should take into account the additional risk premium charged by foreign financial institutions to nonresident companies (in this case, companies from the Republic of Macedonia), the amount of which corresponds to the country risk perceptions.

The differences in the average interest rates from one business activity to another not necessarily correspond to the differences in the average risk profile of such businesses, approximately presented through the performance indicators. Interest rates on loans made to industrial sector are among the lowest, relative to other sector, although the performance indicators show that the industrial sector ranks among those with poorer performances. On the other hand, the transport, storage, information and communication industry belongs to those with excellent performance indicators, and loans made to businesses in this industry are the most expensive. **On the other hand, the performances of some sectors largely correspond with the nonperforming - to - total credit ratio, in the respective segments of credit portfolio of the domestic banks** (businesses with better performances generally tend to decrease the share of nonperforming loans in the respective sub-portfolio of domestic banks, and vice versa, businesses with poorer performances "generate" higher share of nonperforming loans). Construction businesses are an exception, and although they have slightly higher risk profile (the poorest performance indicators, on average), their share of nonperforming loans in total loans of this business activity ranks among the lowest, compared to other business activities.

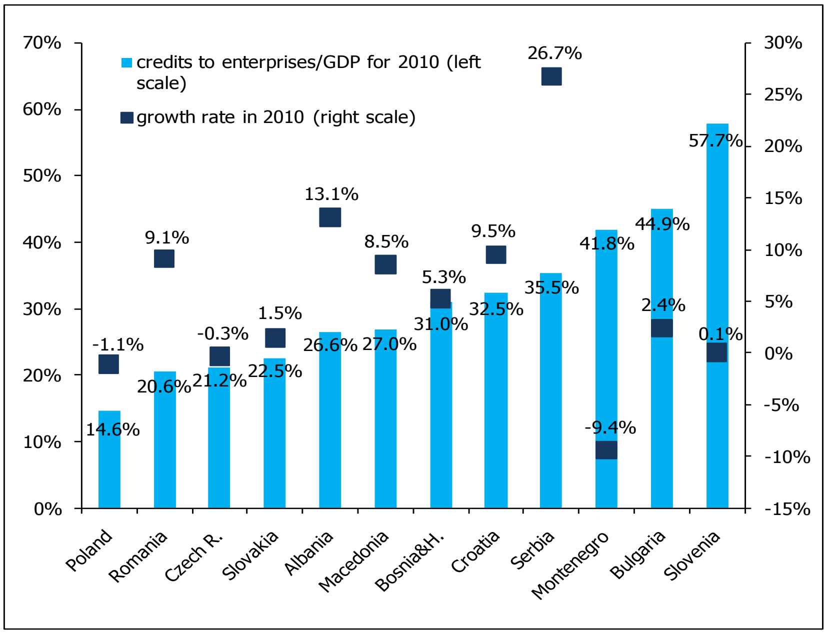
Table 2.2.6
Comparison between the corporate performance indicators, nonperforming loans - to - total loans ratio and level of interest rate, by business activity

Activity	Average rating, according to certain indicators for corporate sector operations for 2010 (1: best indicators, 7: weakest indicators)	Rank, according to average rating (1: best rating, 7: weakest rating)	Ratio for non-performing credits (2010)	Rank, according to the ratio for non-performing credits (1: lowest ratio, 7: highest ratio)	Interest rate on regular undue credits (2010)	Rank, according to interest rate (1: lowest interest rate, 7: highest interest rate)
Wholesale and retail trade	3	1	6.8%	2	8.35%	3
Transport, storage, information and communication	3.1	2	6.7%	1	8.9%	7
Agriculture, forestry and fishing	3.5	3	8.0%	4	7.8%	1
Accomodation facilities and catering services	4.4	4	15.2%	6	8.8%	6
Real estate and other activities	4.4	4	9.6%	5	8.37%	4
Industry	4.6	5	15.2%	6	7.9%	2
Construction	5	6	6.9%	3	8.5%	5

Source: NBRM and CR.

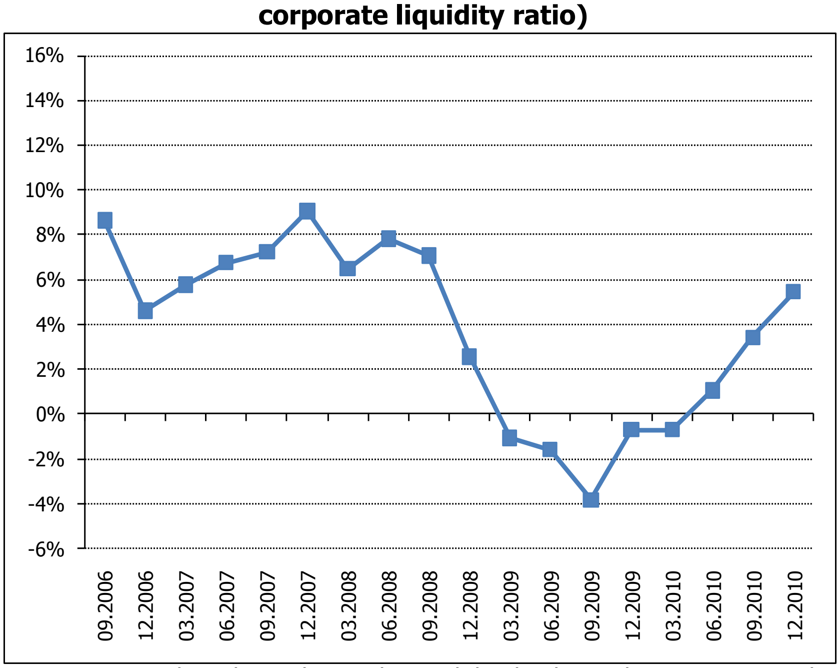
*Note: An average rating, according to the level of selected performance indicators for 2010, has been calculated for each business activity as an average of the business activity ratings for each indicator. Each business activity is rated according to the level of the following 8 indicators: total debt, long-term debt, current and quick liquidity, number of days for claim collection and liabilities repayment, ROA and ROE. Depending on the level of each ratio, ratings are given, from 1 (for the business activity with excellent ratio), to 7 (for the business activity with poor ratio). Then, an average rating is determined from the ratings given to each business, used for ranking the business activities, from 1 (business activity with highest average rating) to 7 (business activity with lowest average rating).

Figure 2.2.10
Annual corporate credit growth rates and share of corporate credits in GDP for 2010, by country



Source: NBRM, based on data submitted by banks, State Statistical Office, websites of central banks and the IMF.

Figure 2.2.11
Growth of sight deposits and transaction accounts of companies / added value in the corporate sector (as a corporate liquidity ratio)



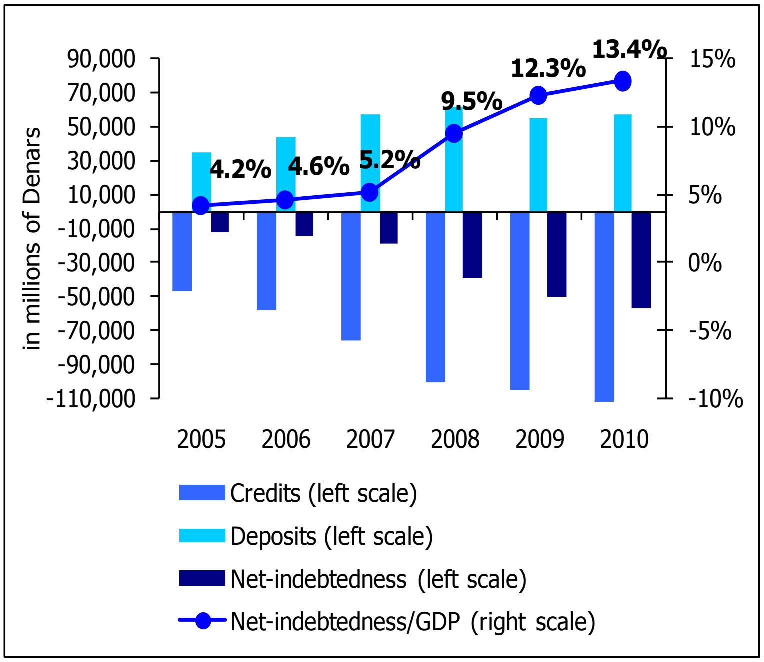
Source: NBRM, based on data submitted by banks and State Statistical Office.
Note: Growth of sight deposits and transaction accounts, and the added value of corporate sector have been calculated annually. The calculation of added value of corporate sector does not include added value of real estate, professional, scholar and technical businesses and administrative and auxiliary services.

According to the corporate loan growth rate of companies in 2010, the Republic of Macedonia ranks among countries from the Central and Southeastern Europe, with slightly higher annual corporate loan growth. On the other hand, according to the indicator for the share of total corporate loans in GDP, the Republic of Macedonia ranks in the middle of the list of countries under observation. Thus, in 2010, corporate loans in the Republic of Macedonia increased by 8.5%, which is lower compared to Romania, Croatia, Albania and Serbia. Conversely, the financial intermediation in the Republic of Macedonia, measured as a share of total corporate loans in GDP equaled 27% (by 1.3 percentage points higher compared to the end of 2009), which is lower compared to Bosnia and Herzegovina, Croatia, Serbia, Montenegro, Bulgaria and Slovenia.

The gradual revival of the domestic economic activity, favorable developments in the external sector and slightly greater credit support to the corporate sector increased the corporate deposits with domestic banks, on annual basis. Transaction deposits and sight deposits were

major drivers of the growth. In 2010, the corporate deposits went up by Denar 2,677 million, or by 4.9% (fall of Denar 6,883 million in 2009). Such developments indicate slightly improved liquidity position of the domestic companies, also demonstrated with the upward trend of the ratio between transaction accounts and sight deposits growth and the corporate added value in 2010.

Figure 2.2.12
Net-indebtedness of domestic companies to banking sector



Source: NBRM and SSO

The faster growth of corporate loans compared to the growth of corporate deposits increased the net-debt of domestic companies, and accordingly, decreased the corporate loans - corporate deposits coverage ratio. In 2010, the net-debt of corporate sector to domestic banks (the difference between the total credits and deposits of companies) registered an annual increase of Denar 6,316 million (or by 12.5%), reaching Denar 56,756 million on 31.12.2010. Thus, at the end of 2010, the corporate net-debt-to-GDP ratio reached 13.4% (growth of 1.1 percentage point compared to the end of 2009). On the other hand, on 31.12.2010, credit - deposit ratio of the corporate sector reduced to 50.3% (a decrease of 1.8 percentage points). Analyzing the corporate net-debt-to-GDP ratio and credit to deposit coverage ratio of the companies in the Republic of Macedonia, in more details, account should be taken of the fact that relatively high amount of corporate deposits has been concentrated in only one depositor (which does not borrowed from domestic banks). Provided that this depositor is exempted from the analyses, the corporate net-debt-to-GDP ratio would equal 15.8%, and the credit - deposit coverage ratio of the corporate sector would reduce to 41.6%. Besides, in environment of faster inflation rate in late 2010 and early 2011 and the resulting decrease of real return for the corporate sector on placements in time deposits, major challenge for the banks in the future period will be to keep the existing depositors - companies (and to attract new ones), particularly in the segment of time deposits.

Table 2.2.7
Indicators for servicing of the contractual liabilities to the banking system

	2009	2010
Repayment of principal on credits by enterprises, in current year/(credits to enterprises at the end of previous year + new credits in current year)	45.0%	42.6%
Probability of Default* (PD- probability of default of the contractual obligations of domestic companies for payment of debt to banks)	9.7%	10.2%
Increase of non-performing credits to corporate sector, in millions of denars (in %)	2,616 (34.8%)	1,245 (12.3%)
Increase of banking system credit exposure with higher degree of riskiness towards domestic enterprises, in millions of Denars (in %)	3,605 (32%)	121 (0.8%)
Amount of restructured credits of corporate sector, in millions of Denars (% of share of restructured credits in current year in total debt of corporate sector towards banks at the end of previous year)	2,393 (2.4%)	3,200 (3.1%)
Amount of written-off claims of corporate sector, in millions of Denars (% of share of written-off claims in current year in total debt of corporate sector towards banks at the end of previous year)	2,421 (2.4%)	1,206 (1.2%)

Source: NBRM, based on data submitted by banks.
*Note: Percentage of the share of number of companies-debtors to domestic banks transferred from A and B risk category to C, D and E risk category in the current year (from 31.12. of the preceding year to 31.12. in the current year), in the total number of companies-debtors classified in A and B risk categories on 31.12. the year before.

Year 2010 witnessed some deterioration of the creditworthiness of the domestic companies. The amount of repaid credit principal in 2010 was by roughly Denar 1.2 billion lower compared to 2009, which is an annual decrease of 2.4 percentage points, of the share of principal repayment in the total corporate loans (stock of loans at the end of the previous year plus the amount of newly extended loans in the current year). The likelihood of default of the corporate sector to the domestic banks increased by half percentage point and reached 10.2%[42] in 2010. Conversely, the annual growth of nonperforming corporate loans and higher risk credit exposure (credit exposure to domestic companies classified in C, D and E risk categories) slowed down substantially, mostly due to the foreclosures made by banks to domestic companies[43], and to the writing-off of claims on the corporate sector made by the banks in 2010 (if the effect of the write-off of claims on corporate sector in 2010 is ignored, the growth of nonperforming loans and higher risk credit exposure would be higher, and would equal 24.2% and 8.8%, respectively). On the other hand, the amount of credits with changed contractual terms, due to the worsened financial standing of the companies-debtors (the amount of restructured loans in 2010 is by about one third greater than the amount of credits restructured in 2009) is relatively high. Such developments in bank credit portfolios just prove the need of prudential increase of credit support to domestic companies and further bank focus on maintaining the quality of credit portfolio. Further recovery of the global and domestic economic activity should have positive impact on future activities and financial position of companies and their creditworthiness. This would improve domestic banks' risk perceptions and would encourage the credit support to the corporate sector.

[42] Percentage of the share of number of companies-debtors to domestic banks transferred from A and B risk category to C, D and E risk category in the current year (from 31.12. of the preceding year to 31.12 in the current year), in the total number of companies-debtors classified in A and B risk categories on 31.12 the year before.
[43] The total gross amount of uncollected claims underlying the foreclosure procedures in 2010 was valued at Denar 2,284 million (which is by 123% more compared to 2009). Most of these uncollected claims are on domestic companies. In 2010, the total amount of sold foreclosures (from all bank clients) was Denar 230 million worth (in 2009, this amount was Denar 218 million).

III. Financial sector

1. Structure and level of concentration in the financial sector of the Republic of Macedonia

2010 witnessed acceleration of the growth assets of the financial sector in the Republic of Macedonia, almost solely determined from the growth of the assets of banks and pension funds. Financial sector remained the relatively simple structure where the banking system plays the leading role[44] with the non-depository financial institutions playing a relatively marginal role. The low level of intersectoral integration and restricted cross ownership between financial segments are one of the major features of the financial sector of the Republic of Macedonia. The simple market structure and absence of complex financial groups minimizes the possibility for disturbance of stability of the segments due to the spillover of risks they face with. The relation of other financial system segments with the banking sector is the most evident through the bank capital investments in other institutional segments, and particularly through the assets deposited by non-depository financial institutions with the banks.

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

Type of financial institutions	Total assets (in millions of Denars)		Structure (in %)		Number of institutions	
	2009	2010	2009	2010	2009	2010
Depository financial institutions	**271,825**	**308,276**	**89.8%**	**89.9%**	**28**	**26**
Banks	268,543	305,290	88.7%	89.0%	18	18
Saving houses	3,283	2,986	1.1%	0.9%	10	8
Non-depository financial institutions	**30,821**	**34,586**	**10.2%**	**10.1%**	**76**	**74**
Insurance companies	12,202	12,518	4.0%	3.7%	13	14
Insurance brokers	n.a.	n.a.	n.a.	n.a.	12	14
Insurance agents	n.a.	n.a.	n.a.	n.a.	5	6
Leasing companies	8,588	8,509	2.8%	2.5%	9	10
Pension funds	8,752	12,494	2.9%	3.6%	4	4
- Mandatory pension funds	8,746	12,449	2.9%	3.6%	2	2
- Voluntary pension funds	6	44	0.0%	0.0%	2	2
Pension fund management companies	333	401	0.1%	0.1%	2	2
Brokerage houses	754	468	0.2%	0.1%	18	14
Investment funds	152	170	0.1%	0.0%	8	6
Investment fund management companies	40	26	0.0%	0.0%	5	4
Private equity fund management companies	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total	**302,646**	**342,862**	**100.0%**	**100.0%**	**104**	**100**

Source: For each institutional segment, the competent supervisory authority (NBRM, SEC, MAPAS, ISA and the Ministry of Finance).

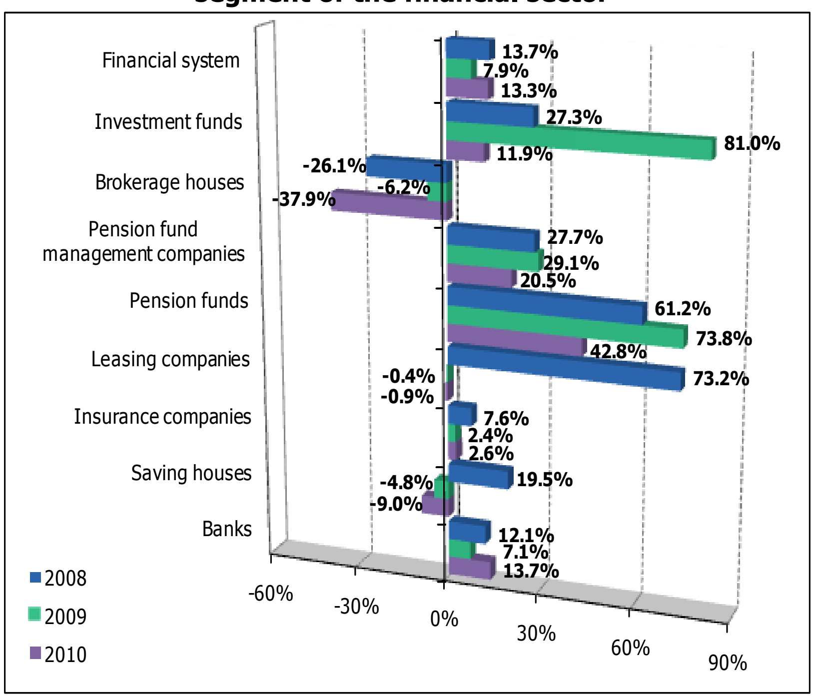
Notes: In line with the regulation, private funds and private fund management companies are not required to submit data on the value of their assets and net-assets. The Insurance Supervision Law does not require from insurance brokerage houses and insurance representation companies to submit financial reports to the Insurance Supervision Agency.

[44] In this report, the term "banking system" includes only banks, and not savings houses, and the term "depository institutions" includes the savings houses, as well.

The total assets of the financial sector of the Republic of Macedonia increased by 13.3 % in 2010, which is twice higher growth rate compared to the preceding year. Such growth illustrates the tendency of convergence to the growth registered in the years prior to the financial crisis. The financial sector of the Republic of Macedonia is characterized with a relatively simple structure, from the viewpoint of type of financial institutions and variety of products and services it offers. **The share of different types of financial institutions in the total financial potential changed slightly.** In 2010, the banking system strengthened its role and remained the most important institutional segment for the maintenance of the stability of overall financial sector. With respect to the size of assets in the overall financial sector, the banking system is followed by insurance companies and mandatory pension funds that share the second position, although having considerably lower share compared to the banking system. The changes of share of these two segments in the total financial sector in the last four years are divergent; the share of insurance companies goes down, and the share of pension funds increases. The role of private pension funds significantly strengthened after the thorough reform and establishment of multi-pillar pension system which is a combination of public, currently funded and private, capital funded pension insurance in the Republic of Macedonia that started in 2006 with the launch of the mandatory private pension funds.

The faster growth pace of total assets of the financial sector followed the recovery of economic activity of the country in 2010. Such growth was mainly contingent upon the growth of assets of the banking system, and to a lower extent, upon the growth of assets of the pension funds. The banking system kept on playing the role of major driver of the absolute growth of total assets of the financial sector, even though its percentage growth was far lower compared to the growth of the pension funds assets. Other institutional segments reported slower, or even negative growth, making insignificant impact on the growth of total assets of the financial system.

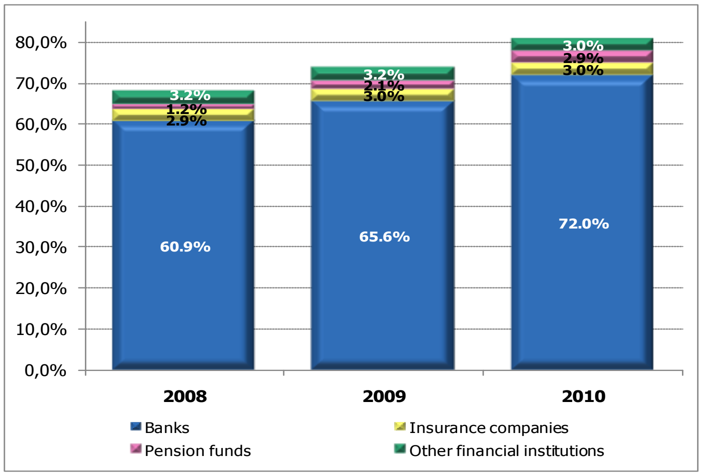
Figure 3.1.1
Annual growth rates of the assets of each institutional segment of the financial sector



Source: For each institutional segment, the competent supervisory authority (NBRM, SEC, MAPAS, ISA and the Ministry of Finance).

The faster growth of assets of the financial sector significantly increased its relevance to the economic activity in the country. At the end of 2010, the share of total assets of the financial sector in the gross domestic product went up to 80.9%, which is an increase of 6.9 percentage points compared to the preceding year. The bank relevance and contribution are remarkable, compared to other depository institutions (savings houses) and non-depository financial institutions that made substantially lower contribution to the process of financial intermediation. In the following years increasing contribution of the non-depository financial institutions in the extent of financial intermediation is expected. The comparative analysis of the share of assets of the financial sector in the economic activity shows that the domestic financial sector from this viewpoint still lags behind the financial sectors of some countries[45] in the broader region.

Figure 3.1.2
Share of assets of the financial sector in GDP



Source: For each institutional segment, the competent supervisory authority (NBRM, SEC, MAPAS, ISA and the Ministry of Finance).

Figure 3.1.3
Herfindahl index for the total assets, by financial sector segment

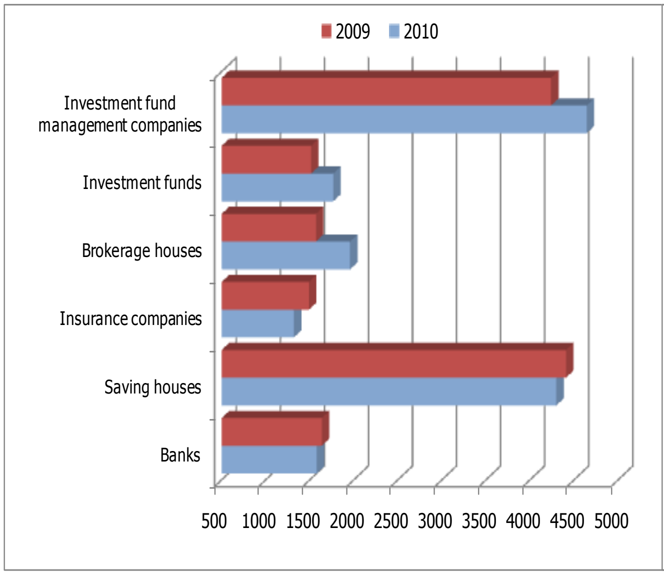
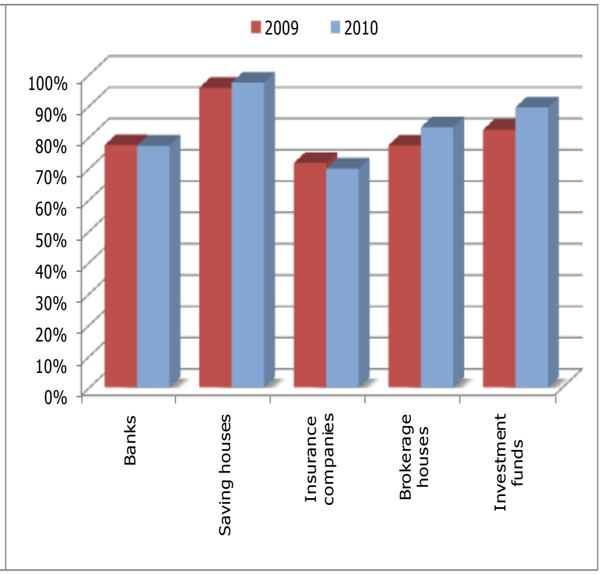


Figure 3.1.4
CR5 ratio for the total assets, by financial sector segment



Source: For each institutional segment, the competent supervisory authority (NBRM, SEC, MAPAS, ISA and the Ministry of Finance).

Analyzing by financial sector segment, the concentration ratio of their assets registered marginal changes that followed the trend of previous years. The concentration measured through the Herfindahl index primarily swings within acceptable boundaries, except for the savings houses and investment fund management companies. The significantly high concentration of savings houses is also confirmed by the fact that 85.5% of the total asset was concentrated in two out of eight savings houses. Also, 70.7% of the total

[45] Total financial system assets to GDP ratio equaled 104.5% in Bosnia and Herzegovina, 110.8% in Croatia, 150.9% in Czech Republic and 194.5% in Slovenia. Data refer to 2009.

assets was concentrated in three of total of fourteen brokerage houses. The concentration level of total assets decreased in the insurance companies and banks. Greater concentration in some institutional segments results from the lower number of institutions, such as the investment funds and brokerage houses.

The dominant share of foreign shareholders in the ownership structure of different institutional segments remained in 2010. The presence of foreign shareholders in the banks' ownership structure increased as a result of the purchase of shares in one bank by another foreign bank[46]. Leasing companies are still distinguished as segment in almost sole foreign ownership, notwithstanding the minimum decrease compared to the preceding year. Also, high percentage of insurance companies is in foreign ownership. On the other hand, the brokerage house capital is mostly in domestic ownership, while the savings houses are in full ownership of domestic entities[47]. The investment fund management companies reported the fastest growth of the share of foreign capital that, unlike the preceding year, dominates their ownership structure in 2010.

Table 3.1.2
Ownership structure of financial institutions

Owners	Banks	Saving houses	Insurance companies	Brokerage houses	Leasing companies	Pension fund mangement companies	Investment fund management companies
Domestic shareholders	***26.9%***	***100.0%***	***23.5%***	***83.2%***	***4.6%***	***49.0%***	***35.6%***
Nonfinancial legal entities	8.6%	84.5%	3.1%	36.1%	4.2%	0.0%	6.9%
Banks	2.3%	0.0%	2.4%	2.7%	0.2%	49.0%	26.8%
Insurance companies	0.1%	0.0%	0.4%	2.8%	0.0%	0.0%	0.0%
Other financial institutions	0.5%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
Natural persons	7.7%	15.5%	11.8%	41.6%	0.2%	0.0%	1.9%
Public sector	7.7%	0.0%	5.8%	0.0%	0.0%	0.0%	0.0%
Foreign shareholders	***72.9%***	***0.0%***	***76.5%***	***16.8%***	***95.4%***	***51.0%***	***64.4%***
Natural persons	2.8%	0.0%	0.4%	5.8%	0.1%	0.0%	3.4%
Nonfinancial legal entities	9.4%	0.0%	76.1%	11.0%	8.9%	0.0%	55.4%
Other financial institutions	60.6%	0.0%	0.0%	0.0%	86.5%	51.0%	5.6%
Unclassified	**0.2%**	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***
Total	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***

Source: For each institutional segment, the competent supervisory authority (NBRM, SEC, MAPAS, ISA and the Ministry of Finance).

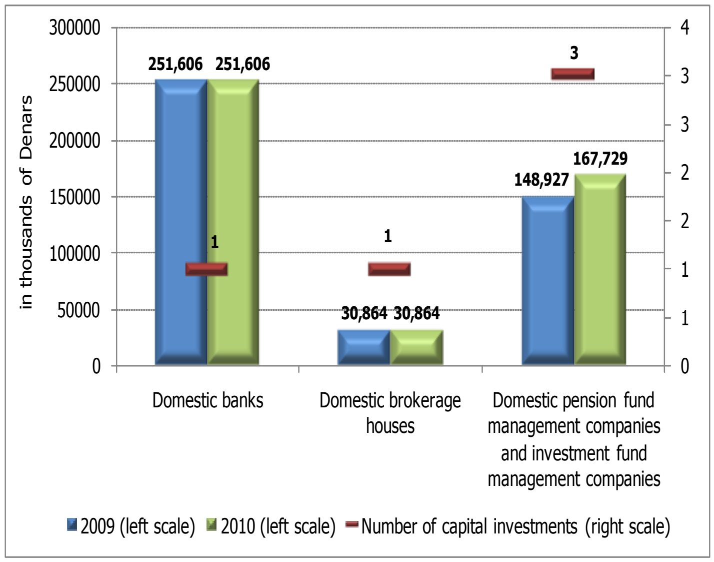
[46] In April 2010, 93.8% of the shares of Stater Bank AD Kumanovo were purchased by the Central Cooperative Bank AD Sofia. The purchased shares were owned by Milestone, Island, under bankruptcy, which since April 2009 has had an undefined status. This purchase tends to decrease the share of entities with undefined status in the structure of common shares.

[47] The regulation allows only for the citizens of the Republic of Macedonia to be owners of savings houses.

1.1. Intersectoral relation of banks with other financial segments

The level of intersectoral relation between institutional segments of the financial sector and the possibility for spilling the risk over from one segment to another, remained relatively high. The low capital relation and supply of relatively simple financial instruments and services are major features of most segments of the financial sector in the Republic of Macedonia. The level of integration among institutional segments of the financial sector, looked through the capital relation, i.e. through the size of mutual capital investment, is insignificant. Within the financial architecture, the banks play the leading role of integration with other financial segments, and therefore largely determine the financial sector developments, and its overall stability. At the end of 2010, banks' capital investments in domestic financial entities remained limited, accounting for merely 0.1% of the banking sector assets. Same as the previous year, capital investments were concentrated in three domestic financial segments as follows: one bank, one brokerage house and three pension or investment fund management companies, and registered no considerable increase[48]. Thus, the level of capital relation between financial sectors registered minimum changes. Except for the pension or investment fund management companies, where the banks account for a significant share of their ownership structure, the remaining institutional segments show low level of cross ownership with the banking system. This is also demonstrated through the investments of other financial institutions in the banks that make up merely 0.6% of the total bank capital.

Figure 3.1.5
Bank capital investments in financial segments



Source: NBRM, based on data submitted by banks.

The business relation between banks and non-depository financial institutions is illustrated through the invested deposits[49] of non-depository institutions in the banking system of the Republic of Macedonia. The interdependence of other financial institutions and banks also arises from the fact that the regulations require the transaction accounts of these institutional segments to be maintained with banks. At the end of 2010, the total assets deposited in the banks by non-depository financial institutions amounted to Denar 8,911 million. As the previous year, in 2010 these deposits were increasing in a slower pace. Thus, the annual growth rate in 2010 equaled 8.0%, which is twice as low compared to the year before. The insurance companies have the highest share in deposits of financial institutions, although it decreases year after year.

[48] Analyzing the share of banks' capital holding in the capital of entity of investment, three investments ranged from 25% to 50% (pension or investment fund management companies) and in two cases (a bank and a brokerage house) the investment exceeded 50% of the capital of the entity of investment.
[49] Invested deposits also include transaction accounts of other institutional segments in the banks.

Figure 3.1.6
Structure of deposits of non-depository financial institutions with domestic banks

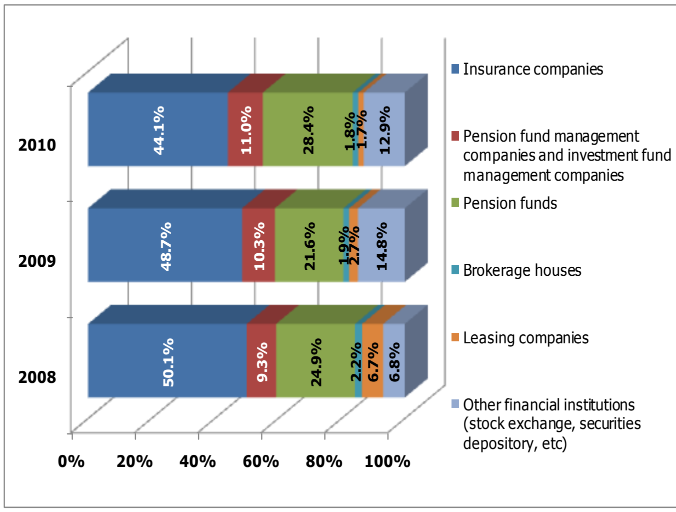
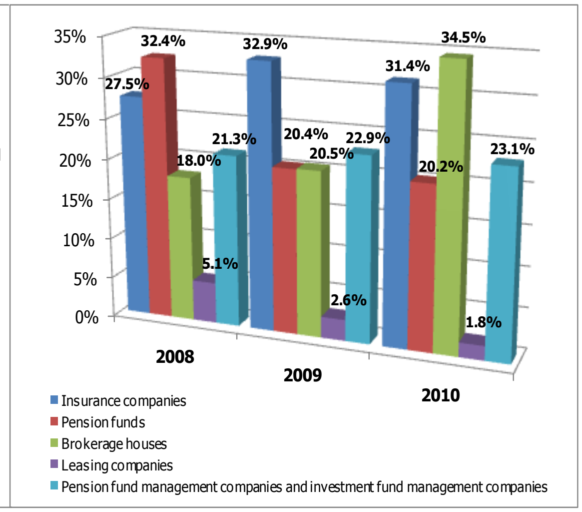


Figure 3.1.7
Share of deposits in the total assets of non-depository financial institutions



Source: NBRM, based on data submitted by banks.

Pension fund management companies and pension funds also followed this trend and increased their share in the total deposits of non-depository financial institutions. In spite of this growth, the deposits of non-depository financial institutions constitute only 3.8% in the total deposit base (of financial and nonfinancial entities) of the banking system. Nevertheless, due to the modest offer of financial instruments on the markets in the Republic of Macedonia, bank deposits are an exceptionally important and safe instrument for the non-depository financial institutions to deposit their assets. They are particularly important to the pension funds and pension and investment fund management companies (making up above 20% of their assets) and to the insurance companies and brokerage houses (accounting for above 30% of their assets). This only proves the relevance of the banking system stability as a crucial link to preserve stability of other segments of the overall financial sector.

Figure 3.1.8
Maturity structure of deposits of non-depository financial institutions

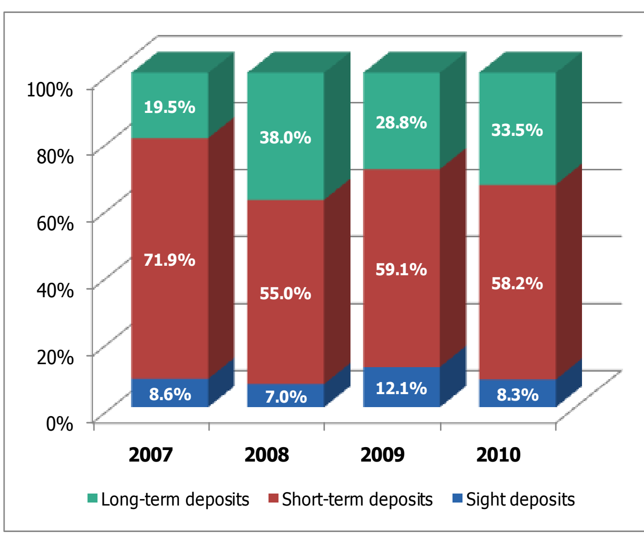
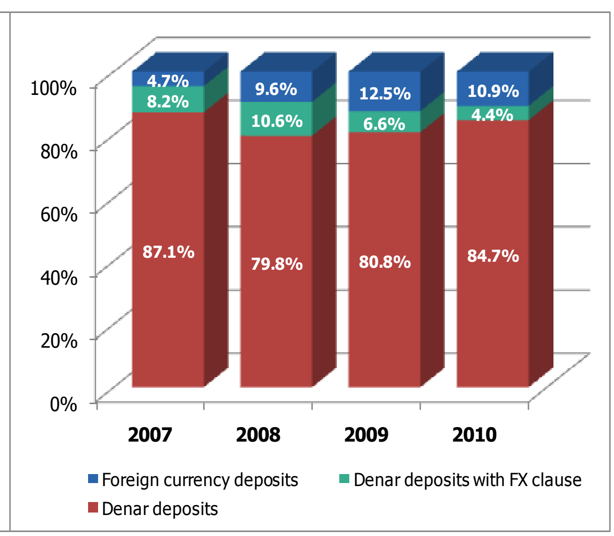


Figure 3.1.9
Currency structure of deposits of non-depository financial institutions



Source: NBRM, based on data submitted by banks.

Observing the maturity, the annual growth of total deposits of non-depository financial institutions solely resulted from the growth of long-term deposits (particularly deposits of the insurance companies, pension funds and brokerage houses), whereas the sight deposits decreased. The maturity transformation tends to extend the maturity gradually. However, besides the extension in maturity, **short-term deposits remained dominant.**

The deposits of non-depository financial institutions are primarily in Denars (most evident in the pension funds' deposits), which on the one hand reflect confidence in the credibility of the monetary authority, but is also connected to higher returns on Denar deposits.

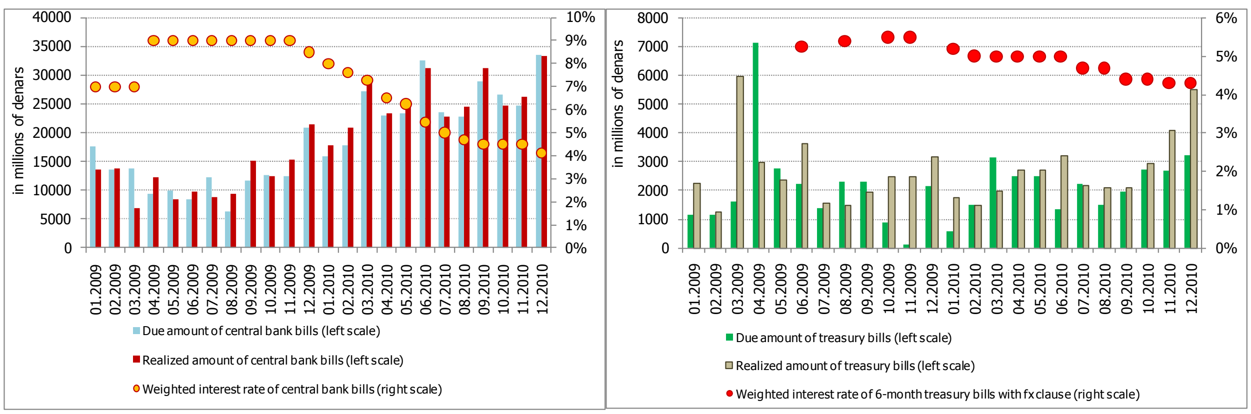
2. Domestic financial markets

2.1. Money and short-term securities market

In 2010, the significance of the money market in the Republic of Macedonia to the financial system was still modest. The limited range of instruments, shallow secondary market and low level of integration to the international financial flows remained major traits of this market. The interbank market of unsecured deposits still remained main money market segment making up 99% of the total turnover. Other market segments (short-term securities and repo markets) played insignificant role, with no derivative market[50], whatsoever.

Basic primary money market instruments include CB bills and government securities. The trading on the secondary market is insignificant. In spite of the cut of interest rate on CB bills for seven times in 2010, the banks showed considerably larger interest in this instrument compared to 2009. Denar 25,942 million were issued at the end of 2010, which is an annual increase of Denar 10,096 million (or 63.7%).

Figure 3.2.1
Due amount, realized amount and weighted interest rate on CB bills (left scale) and treasury bills (right scale)



Source: NBRM.

In 2010, the NBRM did not switch the type of CB bills auction tender[51], and cut the interest rate to the lowest level ever, of 4%. The increased demand for CB bills is due to the higher liquidity of the overall banking system, the features of this instrument, the banks' propensity to invest in low-risk instruments due to the still present uncertainty from the effects of the global financial crisis and the changes in the method of calculating the minimum liquidity rates defined by the National Bank. Since June 2009, banks could use assets placed with the National Bank when calculating the liquidity ratio, either in Denars or in foreign currency[52], also

[50] Information on the secondary money and short-term securities market segments are presented in more details on the NBRM website, in the Money Market of the Republic of Macedonia and the European Union: Comparative Approach, April 2011.

[51] In 2008, the NBRM switched from CB bill interest rates tender auction to volume tender (unlimited) with fixed interest rates, conducted in 2010, as well.

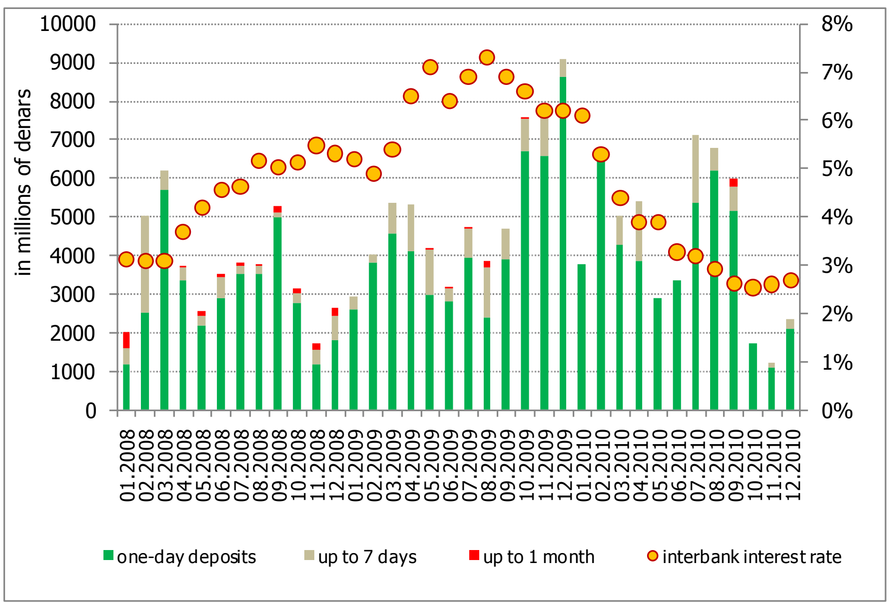
[52] In February 2011, the introduction of new National Bank instrument – 6-month deposit bills, limited this possibility only to deposits with the National Bank based on the new instrument.

due to the confidence in the credibility of monetary policy and exchange rate stability. On the other hand, the downward trend of trade in CB bills over the counter continued in 2010. The traded amount of this instrument equaled Denar 250 million, which is by Denar 90 million (26.5%) less compared to 2009, with merely four trading activities being registered throughout the year, only in the first quarter.

Treasury bills realization growth slowed down compared to previous years, primarily resulting from the lower total supply[53], accompanied with lower demand for treasury bills. However, the amount of treasury bills issued at the end of the year amounted to Denar 19,036 million, which is an annual upsurge of Denar 6,917 million (57.1%). Even though previously the investors were investing exclusively on a shorter run due to the uncertainty from the effects of macroeconomic developments, the long-term investment process started in 2010, due to the stabilization of both global and domestic economy. The structure of treasury bills issued in 2010 was dominated by 6-month treasury bills (90.3%), 89.9% of which with FX clause. In 2010, the total amount of treasury bills traded over the counter decreased by Denar 95 million (22.1%), and reduced to Denar 334 million. Above 62% of the total trade in treasury bills over the counter are treasury bills with residual maturity from three to six months, and the remaining is trade in treasury bills with residual maturity from one to three months.

Considering the low levels of trade in CB bills and treasury bills, the interbank market of uncollateralized deposits remained the major driving force on the money market in the Republic of Macedonia. The total amount traded on this market equaled Denar 52,246 million in 2010, mostly due to deposits with maturity of up to one day (share of 89%). Compared to 2009, the trade on interbank market dropped by Denar 10,361 million, or 16.5%. Unlike the first three quarters of 2010 that witnessed by Denar 8,809 million (23.1%) greater interbank trade compared to the same period of 2009, in the last quarter it significantly decreased.

Figure 3.2.2
Deposits and interest rates on the interbank deposit money



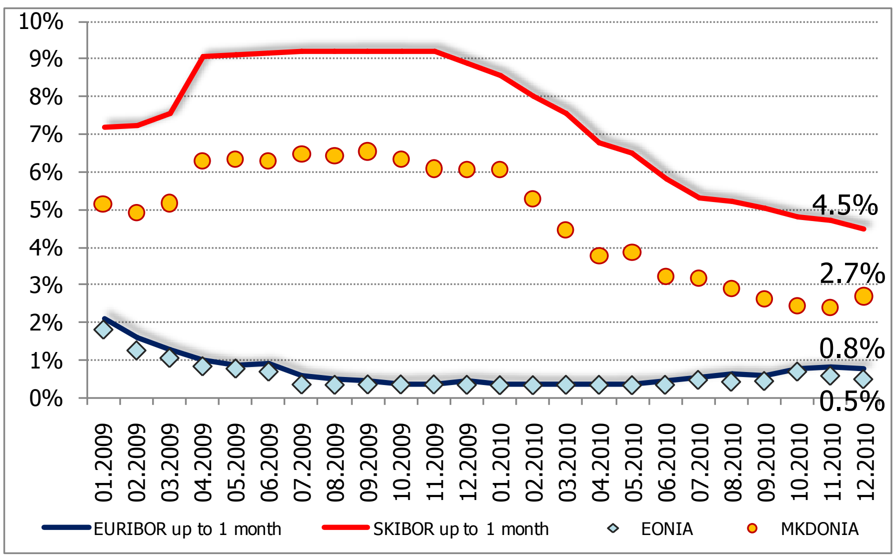
Source: NBRM.

53 In 2010, the Ministry of Finance conducted 21 treasury bill auctions, which is by 18 auctions less compared to 2009, i.e. by Denar 17,488 million (37.7%) lower supply of treasury bills. Most of the auctions (14) were for 6-month treasury bills with FX clause, and 4 auctions were for 6-month bills without FX clause and 3 auctions for 3-month treasury bills without FX clause.

In the fourth quarter of 2010, the trade on interbank market of unsecured deposits went down by Denar 19,168 million (78.5%), compared to the same period of 2009, resulting in annual decrease of the total trade on the interbank market. The lower trade on the interbank market of unsecured deposits is in line with the higher liquidity of the banking system. However, one should take into account that 2009 witnessed the highest volume of interbank trading of the recent years (Denar 62,606 million). Hence, the comparison between the interbank trade in 2010 and in 2008 shows higher total trade of Denar 6,487 million (14.2%).

The permanent relaxation of monetary policy by cutting the NBRM key interest rate in the period when the ECB preserved its key interest rate, in 2010, tended to narrow the interest rate spread between the interest rates of the NBRM and the ECB. The decrease of key interest rate had a transmission effect on SKIBOR[54] and MKDONIA[55]. Conversely, the ECB remained consistent, and did not changed its key interest rate in 2010. Thus, the gap between the one-month SKIBOR and the one-month EURIBOR rate[56] decreased by 4.7 percentage points, p.a. and equaled 3.7 percentage points. Thus the gap between EONIA[57] and MKDONIA also reduced by 3.5 percentage points, and equaled 2.2 percentage points.

Figure 3.2.3
Interest rates on the money market
In the Republic of Macedonia and in the Euro area



Source: NBRM and website of the European Central bank.

In 2010, the share of trade on the foreign exchange market[58] in GDP registered no changes compared to the preceding year (89.2%). The turnover

[54] Skopje Interbank Offer Rate – interbank indicative interest rate introduced in July 2007, for selling unsecured Denar deposits, calculated as arithmetical mean of quotations of reference banks, for four standard maturities (over night, one week, one month and three months).
[55] MKDONIA started being calculated on October 15, 2008, as weighted average interest rate of already concluded over night transactions, with reference banks playing the role of sellers of unsecured Denar deposits.
[56] Euro Interbank Offered Rate – specific interest rate, at which a reference bank on the EU money market is willing to sell deposits to another reference bank, calculated on the basis of indicative interest rates.
[57] Euro OverNight Index Average – effective interest rate on the EU money market, calculated as weighted value of all overnight transactions where the reference bank acts as deposit seller.
[58] The foreign exchange market turnover includes bank transactions with clients, interbank transactions and NBRM transactions with banks–market makers and the NBRM transactions with government authorities.

equaled Euro 6.151 million, which is by 3.1% more compared to 2009. Having in mind the Denar-Euro nominal exchange rate targeting strategy, the NBRM interventions on the foreign exchange market were directed towards net-purchase of foreign currencies.

Figure 3.2.4
Total turnover on foreign exchange market and net interventions on the foreign exchange market by the NBRM

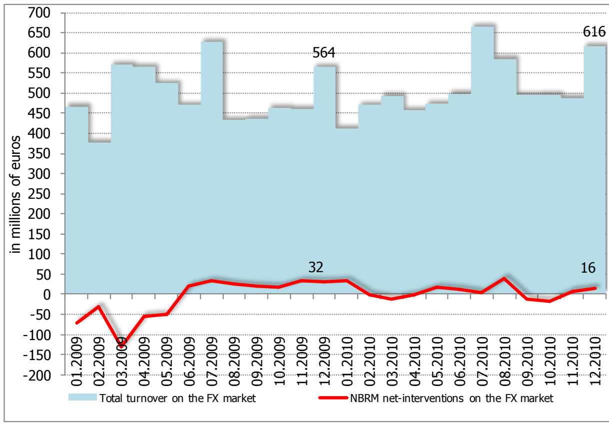
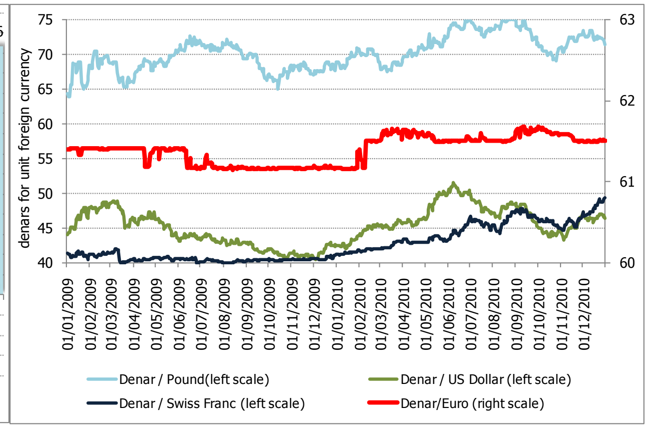


Figure 3.2.5
Official spot rate of the Denar with some relevant currencies



Source: NBRM.

In 2010, the volume of inflows to the current account, related to the financial and trading transactions of companies increased, accompanied by the growth of inflows based on private transfers, resulting in a net-purchase of foreign currencies by the National Bank in the amount of Euro 94.7 million (in 2009, the NBRM sold euro 151 million, net). The Euro steadily depreciated relative to the US dollar, primarily due to higher tensions in the Euro-area, and in the second half it slowly appreciated. Also, the Euro depreciated against the British Pound and the Swiss Franc that made the Denar appreciate against these currencies.

2.2. Capital market

2.2.1. Primary capital market

In 2010, the private sector was less interested in issuing new shares, and therefore the total value of new issues of long-term securities decreased compared to the previous year. The lower interest in new issues of long-term securities was mostly caused by the downward price trend on the secondary capital market, the lower volume of trade on the stock exchange market and decrease in the total stock exchange turnover. There were seven new issues of long-term securities during the year in the amount of Denar 5,175 million, which is by Denar 1,643 million (or by 24.1%) less compared to 2009. Such decrease mostly results from the lower amount of issued shares of nonfinancial companies, which also dominate the total amount of new issues of long-term securities. Nonfinancial companies reported only one new issue of shares by the means of a private bid[59].

Table 3.2.1
Value and structure of issues of long-term securities

Realized issues of long-term securities	2008	2009	2010
Amount of realized issues of long-term government securities	**2,284**	**1,423**	**1,848**
1. two-years continous government bonds	390	10	0
2. three-years continous government bonds	59	0	0
3. Denationalization bonds	1,835	1,413	1,848
Amount of realized issues of long-term, non-government securities	**3,381**	**5,395**	**3,327**
1. Corporate bonds	653	0	0
2. Shares	2,728	5,395	3,327
- Issued by banks	*1,275*	*0*	*414*
- Issued by other financial institutions	*914*	*226*	*17*
- Issued by non-financial legal entities	*539*	*5,170*	*2,897*
Total amount of realized issues of long-term securities	**5,665**	**6,818**	**5,175**

Source: Securities and Exchange Commission, website of the Ministry of Finance, and NBRM calculations. Note on the segment of government securities: On 21.04.2010, the Ministry of Finance issued the ninth issue of denationalization bonds valued at Euro 30 million.

In 2010, the most active issuers of long-term securities were the banks with three new issues of shares, in a value of only 8% of the total amount of issues. In this year, there were no new issues of corporate bonds in the Republic of Macedonia, mostly due to the poor interest of the companies to issue corporate bonds, and the lack of expertise for structuring and promoting of this type of securities.

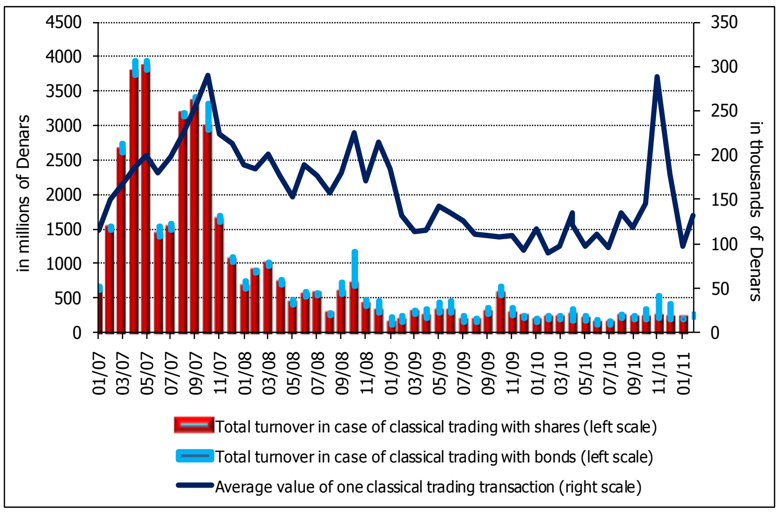
[59] Here we discuss the issue of shares of AD OHIS Skopje, assumed by the Government of the Republic of Macedonia under the Law on Conversion of the Claims of the Republic of Macedonia Based on Administrative Taxes in a Permanent Stake in the Organic and Chemical Industry "Naum Naumovski - Borce" AD Skopje, Joint-stock Company for Researching, Designing, Manufacturing and Constructing Energy and Industrial Facilities with full liability EMO-Ohrid, Tobacco Company AD Prilep and Special Purpose Product Manufacturing Company "11 Oktomvri - Euro-kompoziti" AD Prilep ("Official Gazette of the Republic of Macedonia" no. 159/2008).

2.2.2. Secondary capital market

Notwithstanding the gradual improvement of the domestic economic environment, the downward correction of the turnover on the Macedonian Stock Exchange continued in 2010. Compared to the same period of the last year, the stock exchange turnover was decreasing slowly, almost solely reflecting the lower turnover of shares. The poor shareholder activity on the Macedonian Stock Exchange indicates that they are risk averse. In 2010, in spite of the slightly higher number of foreign investors, their demand for securities on the Macedonian Stock Exchange kept on decreasing. The potential increase of their demand is contingent upon the speed of revival of the global economy and markets necessary to create positive effects on the near surrounding, the permanent and sustainable growth of the domestic economy, the positive performances of domestic corporations and the higher returns on investments in domestic securities. In 2010, the price growth on the capital market tended to decrease the market capitalization of the companies listed on the Macedonian Stock Exchange.

The lower volume of stock exchange trading (lower number of transactions) and the fall of stock exchange turnover, as a result of downward price corrections were major features of the Macedonian capital market in 2010. Compared to the last two years, the decrease of stock exchange turnover decelerated. In 2010, the total turnover in classical trade[60] was valued at Denar 3,270 million (or 0.8% of GDP for 2010[61]), which is by 20.2%, or Denar 829 million less compared to the preceding year. Accordingly, in 2010, the average daily turnover went down by Denar 3.5 million.

Figure 3.2.6
Stock exchange turnover in classical trade and average value of one transaction



Source: Website of the Macedonian Stock Exchange and NBRM calculations.

Yet, the faster decrease of the volume of stock exchange trading, compared to the stock exchange turnover, increased the average value of one transaction in classical trade from Denar 119 thousand in 2009, to Denar 127 thousand in 2010.

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[60] The total turnover in classical trade does not include the turnover from public exchange auctions and reported block transactions.
[61] The GDP for 2010 is according to estimated data.

Figure 3.2.7
Annual growth rates of the stock exchange turnover in classical trade

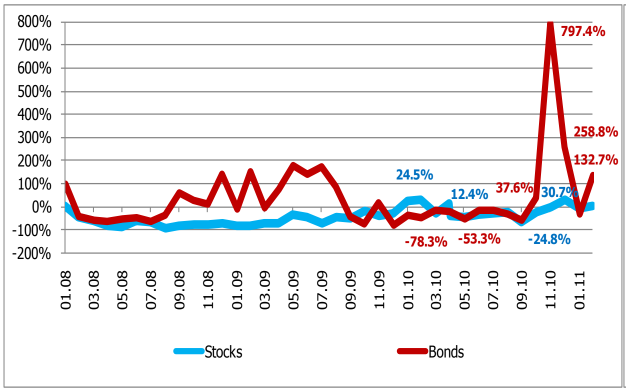
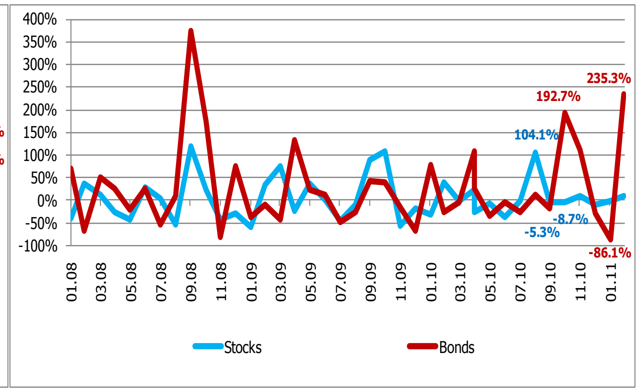


Figure 3.2.8
Monthly growth rates of the stock exchange turnover in classical trade



Source: Website of the Macedonian Stock Exchange and NBRM calculations.

The fall of stock exchange turnover almost solely (93.7%) resulted from the lower trade in shares. Compared to the previous year, the share and bond turnover went down by Denar 777 million, or 27.8%, and by Denar 52 million, or 4.0%, respectively. Same as the preceding year, the structural share of the turnover from the trade in bonds in the total stock exchange turnover kept on increasing (from 31.8% for 2009 to 38.3% for 2010), whereas the share of turnover from trade in shares decreased.

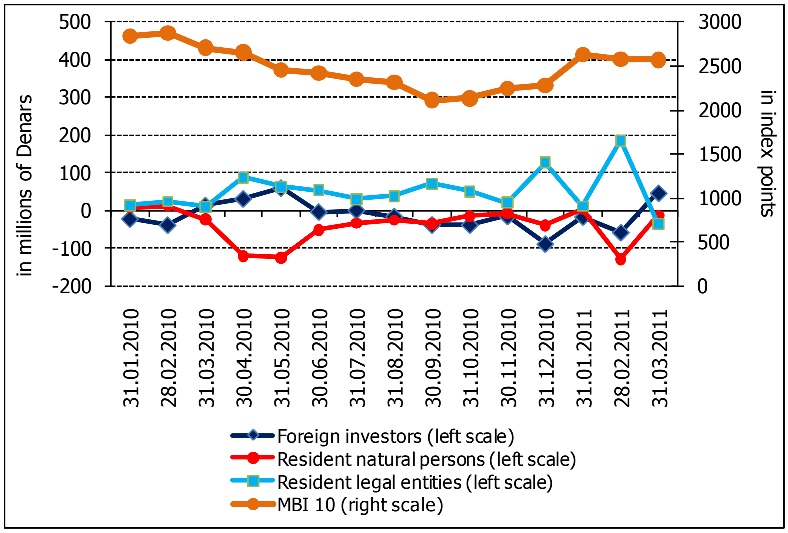
Table 3.2.2
Structure of total stock exchange turnover in classical trade by type of investors

Type of investor	Purchase side of the stock exchange turnover			Selling side of the stock exchange turnover		
	2008	2009	2010	2008	2009	2010
Average share of foreign investors	33.8%	15.6%	23.1%	38.8%	26.2%	27.9%
Average share of resident legal entities	31.9%	39.2%	40.2%	25.5%	27.0%	24.1%
Average share of resident natural persons	34.3%	45.3%	36.7%	35.6%	46.9%	48.0%

Source: Website of the Macedonian Stock Exchange AD Skopje and NBRM calculations.
Note: The estimations do not take into account individual block transactions with shares of some companies, according to the press releases posted on the website of the Macedonian Stock Exchange.

Compared to the previous year, the structure of stock exchange turnover by type of investors registered certain changes. The share of foreign investors on the exchange market slightly increased in 2010, on both the purchase and the sale side of the stock exchange turnover. Yet, the demand of foreign investors for securities on the Macedonian Stock Exchange kept on decreasing in 2010. In environment of lower demand for domestic securities, the foreign investors made a net-sale of securities in the total amount of Denar 148 million. Having gradual revival of the domestic economy, positive signals of the National Bank monetary policy and improved expectations for recovery from the global financial crisis, the poor activity of investors on the Macedonian Stock Exchange indicates that they are risk averse. The increase in the demand and the activities of foreign investors on the domestic capital market, if any, is contingent upon the speed of revival of the global economy and markets necessary to create positive effects on the near surrounding, the permanent and sustainable growth of the domestic economy, the positive performances of domestic corporations and the higher returns on investments in domestic securities.

Figure 3.2.9
Net-effect of the total stock exchange trading of some types of investors and MBI-10



Source: Website of the Macedonian Stock Exchange and NBRM calculations.
Note: The estimations of net-effect of the total stock exchange trading do not take into account individual block transactions with shares of some companies, according to the press releases on the website of the Macedonian Stock Exchange.

Resident natural persons also played the role of net-sellers of securities, with the resident legal entities being the sole net-purchasers of securities. The lower demand of resident natural persons for securities and their slightly higher interest to sell securities resulted in Denar 450 million net-sale of securities of these agents in 2010. The interest of domestic natural persons to invest in securities varied from month to month in the last year, following the economic reasoning when making investment decisions related to stock exchange trading (they purchased and sold shares in line with the changes in MBI-10) throughout most of the year. The last three months of 2010 and beginning of 2011 were exceptions, when the behavior of domestic natural persons was not in line with the capital market developments. Short investment horizons are the major factor that influenced the investment decisions of this category of investors. Taking into account the increase of the average share of domestic legal entities on the purchase side of the stock exchange turnover, and lower average share on the sale side of the stock exchange turnover, these entities made a net-purchase of securities in a total amount of Denar 598 million in 2010. Such behavior of domestic legal entities shows that they seek for long-term investment, so as to maximize the return on the stock exchange trading.

In 2010, there was not any trade in long-term securities over the counter[62]. The main reason behind the volatile nature of trade on this market is the limited offer of trade instruments, primarily due to the poor interest for their issuance by the private sector and nonrenewal of the due government bonds.

As a result of the lower number of Macedonian Stock Exchange members[63] and the structural changes in the stock exchange trading by type of investors, the concentration ratio of the stock exchange turnover, by member, increased. In 2010, the number of Macedonian Stock Exchange members decreased by five (from 25 members on 31.12.2009 to 20 on 31.12.2010). Moreover, the growth of concentration ratios of the total turnover and the turnover in classical trade was triggered by the slight increase of the share of foreign investors in the structure of stock exchange turnover. The foreign investors still use services of few stock exchange members that hold most of the stock exchange turnover. The further increase of the concentration ratio of the stock exchange turnover could adversely affect the development of competitiveness among the exchange members, and accordingly, the supply of high-quality services to clients and the improvement of their overall work efficiency.

Table 3.2.3
Concentration ratios on the secondary capital market in the Republic of Macedonia

Concentration indicators	2008	2009	2010
CR3 for the total stock exchange members' turnover	55.4%	39.3%	65.0%
CR5 for the total stock exchange members' turnover	66.6%	59.1%	74.3%
CR5 for the total stock exchange turnover in case of classical trading	59.0%	52.1%	62.6%
Turnover with the five most traded securities/total turnover	63.3%	74.3%	81.5%
Turnover with the ten most traded securities/total turnover	86.9%	91.9%	93.0%
Share of the five shares with the largest market capitalization in the total market capitalization	50.2%	56.3%	61.9%
Share of the ten shares with the largest market capitalization in the total market capitalization	70.0%	75.1%	80.0%

Source: Website of the Macedonian Stock Exchange and NBRM calculations.
Note: The estimations of CR3 and CR5 for the total exchange turnover and the total turnover in classical trade of the members also include turnover of the brokerage houses and banks that terminated their membership in the Macedonian Stock Exchange in 2010.

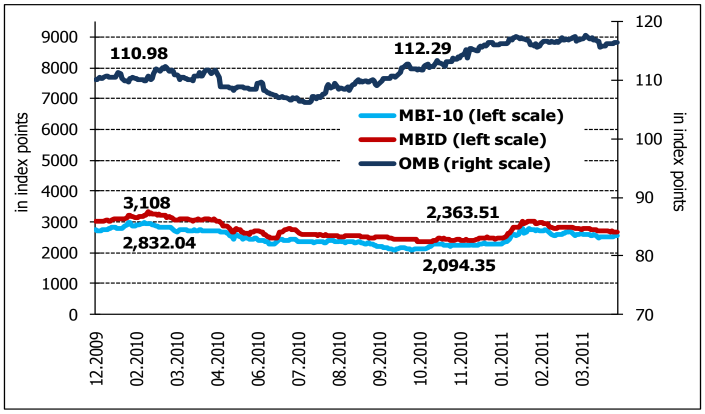
Concentration ratios of the stock exchange turnover of the five/ten most traded securities kept on increasing in 2010, as well. This reflects the restrictiveness of the domestic capital market in the supply of various securities and other products that would contribute to the improvement of the low market liquidity, which prevents the fast and smooth sale of securities. **The indicators for the share of the five/ten shares with the largest market capitalization in the total market capitalization** further increased their relatively

[62] Apart from the Macedonian Stock Exchange, continuous government bonds could be traded over the counter.
[63] The trade on the Macedonian Stock Exchange is conducted through its members. According to the Securities Law, members of the Macedonian Stock Exchange could be brokerage houses, licensed banks and subsidiaries of foreign brokerage houses eligible to become members, under the Regulation on Membership in the Macedonian Stock Exchange.

high value which particularly results from the milder downtrend of the price correction of these shares compared to the price correction of other shares[64].

The lower volume of stock exchange trading and the lower total stock exchange turnover had an adverse effect on the capability of brokerage houses to generate income and on their long-term sustainable profitability (on 31.12.2010, 14 brokerage houses operated on the territory of the Republic of Macedonia[65], which is by 4 brokerage houses less compared to the end of 2009). The total brokerage houses' assets in 2010 went down by Denar 286 million, or 37.9%, and the total income of this financial system segment reduced by Denar 72 million (or 53.3%) compared to the income in 2009. As a result, in 2010 the brokerage houses recognized a loss of Denar 24 million, which is by 2.9% higher compared to 2009[66].

Figure 3.2.10
Development of basic stock exchange indices



Source: Website of the Macedonian Stock Exchange and NBRM calculations.

The slower response of the stock exchange to the gradual recovery of the domestic economy and the stabilization of macroeconomic environment, alongside the deceleration of the stock exchange turnover made an impact on the developments of the three exchange indices[67]. Compared to 31.12.2009, the exchange index **MBI-10** and the Publicly Owned Company Index **MBID** reduced by 17.1% and 19.0%, respectively. In the first two months of 2010, MBI-10 and MBID increased, and in February reached the maximum value for this year. Such changes in the Macedonian exchange indices correspond with the positive developments of the regional exchange indices in early 2010. The trend of gradual downward correction of MBI-1- and MBID started in the second quarter of the year, mostly due to the investors' risk aversion, and the effect of the deterioration of exchange indices of the countries in the region in this period (mostly due to the adverse effects of the debt crisis in Greece). At the end of 2010 and beginning of 2011, MBI-10 and MBID registered upward developments, which could be a sign of a switch of the trend of exchange developments. Thus, MBI-10 as a major indicator for the price levels of the most liquid companies listed on the official Macedonian Stock Exchange dominated the stock exchange turnover in classical trade (76.1%) and the total stock exchange turnover (73.7%).

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[64] Shares that make up the majority of the total market capitalization registered the fastest growth of the average price of shares in 2010, and shares of five legal entities than do not constitute a part of the ten shares with the highest market capitalization registered the most dramatic fall.
[65] In 2010, the Securities and Exchange Commission made a decision on opening a liquidation procedure in four brokerage houses (VIP AD Skopje, Idea Plus Broker AD Radovis, NLB Tutunska Broker AD Skopje and Delta Broker, AD Skopje).
[66] Source: Securities and Exchange Commission and NBRM calculations.
[67] The Index Calculation Methodology and information on their structure are available on the website of the Macedonian Stock Exchange AD Skopje - www.mse.org.mk.

In spite of the developments of these exchange indices, at the end of 2010, the bond index on the Macedonian Stock Exchange, OMB, increased by 5.0% and demonstrated volatility. The second half of 2010 witnessed rapid upward changes of this index, taking into account the downward changes of the key interest rate in the Republic of Macedonia throughout the year. The OMB index developments are also due to the special features of the bonds traded on the Macedonian Stock Exchange (primarily the structural bonds of the Republic of Macedonia for the old foreign currency savings and for denationalization[68]).

Figure 3.2.11
Market capitalization of companies listed on the official stock exchange market

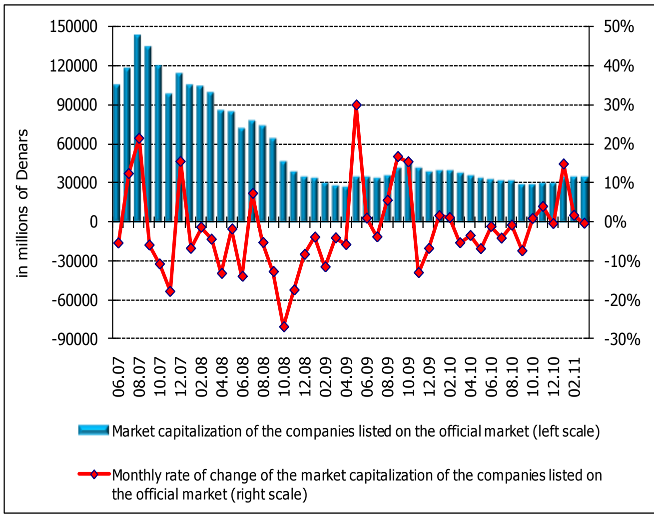
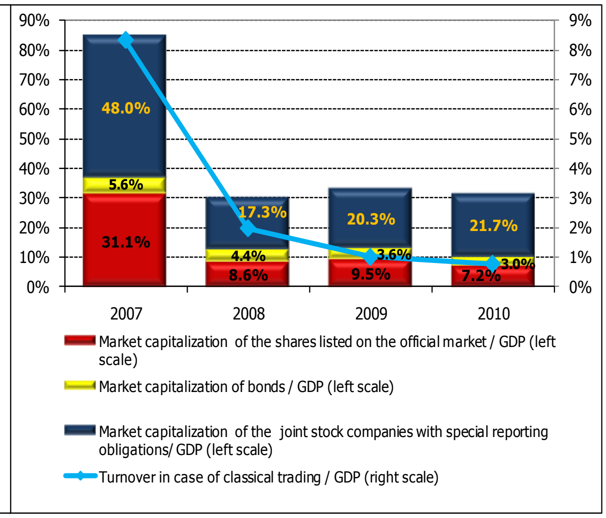


Figure 3.2.12
Market capitalization and turnover on the Macedonian Stock Exchange to GDP



Source: Website of the Macedonian Stock Exchange and NBRM calculations.
Note: GDP for 2010 is an estimated data.

Price developments on the capital market triggered a decrease of the market capitalization of companies listed on the Macedonian Stock Exchange in 2010. Compared to 31.12.2009, the market capitalization of these companies decreased by Denar 8,443 million or by 21.7%, valued at Denar 30,443 million at the end of 2010. As a result, the market capitalization of companies listed on the official market –to- GDP ratio went down by 2.3 percentage points on annual basis. On the other hand, the market capitalization of joint stock companies with special reporting obligations rose by Denar 8,941 million, or 10.7%, increasing the share of this market segment in GDP by 1.4 percentage points.

[68] According to the Law on Issuing Denationalization Bonds, the Republic of Macedonia, since 2002, issues denationalization bonds once a year in the consecutive ten years, and the Government of the Republic of Macedonia specifies the amount of issued denationalization bonds. The revenues from the denationalization bonds are not levied.

Figure 3.2.13
Share of market capitalization of companies listed on the regional stock exchanges in GDP

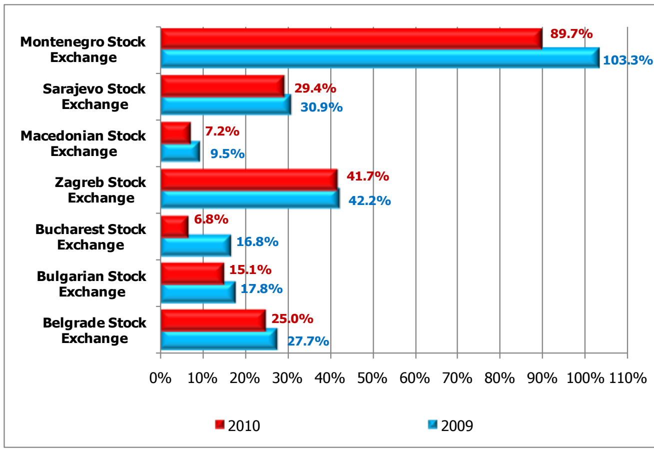
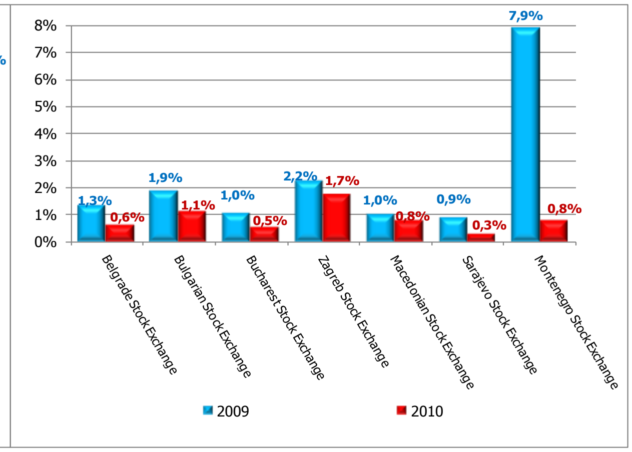


Figure 3.2.14
Share of turnover in classical trade in shares on regional stock exchanges in GDP



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

The developments of stock exchange indices of the countries in the region showed high correlation rate as a result of the higher concentration ratio of the portfolio investors with similar investment propensities in the countries under observation. Same as the Macedonian capital market, the risk aversion, the low liquidity, the relatively small number of investors and poor resilience to external economic shocks are major features of the capital markets of the countries in the region. Index and turnover developments on the regional stock exchange markets went down in 2010, causing lower share of market capitalization of listed companies in GDP in all countries under observation (the fall was most dramatic in the Montenegro and Bucharest Stock Exchange). The share of market capitalization of the shares listed on the official market of the Macedonian Stock Exchange in GDP is lower compared to the share of market capitalization in GDP of other countries.

Table 3.2.4
MBI-10 correlation ratios with the developments of major indices on the stock exchange markets in the region

Stock exchange index	BELEX15	MONEX20	CROBEX	SBITOP	MBI-10
BELEX15	-	67.8%	84.0%	79.7%	75.5%
MONEX20	67.8%	-	74.9%	61.5%	62.8%
CROBEX	84.0%	74.9%	-	87.1%	84.4%
SBITOP	79.7%	61.5%	87.1%	-	90.6%
MBI-10	75.5%	62.8%	84.4%	90.6%	-

Source: Websites of the respective stock exchange markets in the region and NBRM calculations.

Positive price developments in all stock exchange markets in the region were experienced in early 2010, including the Macedonian Stock Exchange, as a result of positive expectations for stabilization of the macroeconomic environment and the gradual revival of economic activities in the analyzed countries. The developments of all regional stock exchange markets deteriorated by the end of the year, as a response to the debt crisis in Greece, Ireland and Portugal, and the uncertainty of whether it could be spilled over in the other European countries.

2.2.3. Investment funds in the Republic of Macedonia

In 2010, the role and influence of the investment funds on the Macedonian Stock Exchange and the financial system of the Republic of Macedonia is still insignificant. The investment funds are still emerging. The low amount of funds of this financial segment results from the still insufficient investors' interest in investment funds, which, in turn, has an adverse effect on the profitability and solvency of the companies managing such funds. Additional reason for the low influence of these funds on the domestic financial market should be sought in the fact that the funds invest most of their assets in foreign markets.

In 2010, four companies operated on the territory of the Republic of Macedonia, managing with six open-end investment funds and eight private fund management companies, managing with thirteen private investment funds. According to the Law on Investment Funds[69], there is no supervision of private funds or licensed private fund management companies in the Republic of Macedonia neither there is an obligation for these funds to report regularly to a competent authority. Therefore, the analysis of this part of the report is focused exclusively on open-end investment funds and on the fund management companies. **The lack of competent regulatory and supervisory authority makes this financial market segment far riskier to the overall financial system and to the investors in these types of funds.**

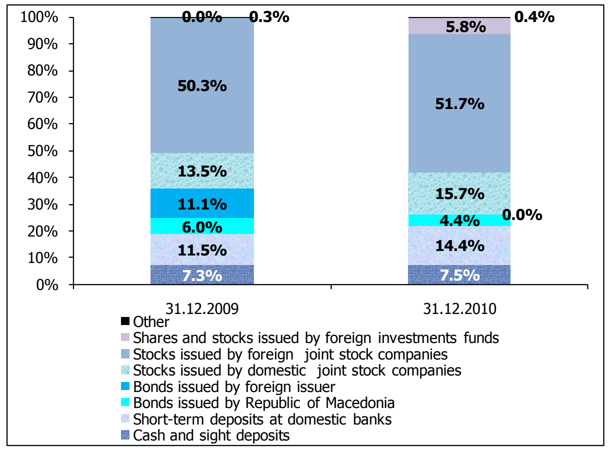
Compared to the previous year, the number of investment fund management companies decreased by one, and the investment funds reduced from eight in 2009 to six in 2010. In early 2010, on request of the founders and shareholders of the fund management company Sava Invest AD Skopje, the Securities and Exchange Commission permanently revoked the license of this company. The liquidation of Sava Invest AD Skopje imposed the liquidation of two open-end investment funds under the management of this company, Sava Invest Balancing Fund and Sava Invest Growing Fund. The decision of the company shareholders to cease the open-end investment funds was not because of the unprofitability of these funds (on the contrary, the funds were making profit) but due to the failure to collect the required amount of funds from the investors to meet the minimum specified by the Law on Investment Funds[70]. Thus, the investors were refunded for their stakes invested in securities at the price on the date of last trading, i.e. the investors in stakes of these two funds, apart from the stakes, also made additional profit.

[69] "Official Gazette of the Republic of Macedonia" no. 12/2009, 67/2010 and 24/2011.

[70] According to Articles 58 and 59 of the Law on Investment Funds ("Official Gazette of the Republic of Macedonia" no. 12/2009, 67/2010 and 24/2011), the minimum funds to be invested in fund stakes should be Euro 300,000 in Denar equivalent and funds should permanently maintain such asset value. Provided that no funds are collected to this amount within the deadlines specified by these articles, no enough funds are raised, they will be returned to investors through the fund's depository bank, and the fund will be liquidated or acquired by another fund.

In 2010, the asset of open-end investment funds kept on increasing, reaching Denar 170 million at the end of the year, which is by Denar 18 million, or 11.6% more compared to 2009. This increase is significantly slower compared to the growth rate in 2009 (81%). Such decrease of the funds' asset growth rate in 2010 arises mostly from the outflow from the cessation of the two investment funds the net-asset of which accounted for 34.5% of the funds' net-asset in 2009. **Most of the investment funds' assets include placements in securities issued by foreign issuers.** Compared to 2009, the share of foreign securities in the total funds' assets went down by 3.9 percentage points. Yet, it still accounts for more than half, i.e. 57.5% of the total funds' investments. The lower share of foreign securities in the total funds' assets is due to the fact that this year they made no investments in foreign bonds. As a comparison, in 2009, Denar 14 million or 11.1% of the total investment funds' assets was invested in these instruments. In the previous year, stakes and shares in foreign investment funds (5.8%), appeared for the first time in the structure of investment funds' placements. The investments in shares issued by foreign joint stock companies also increased (by 1.4 percentage points).

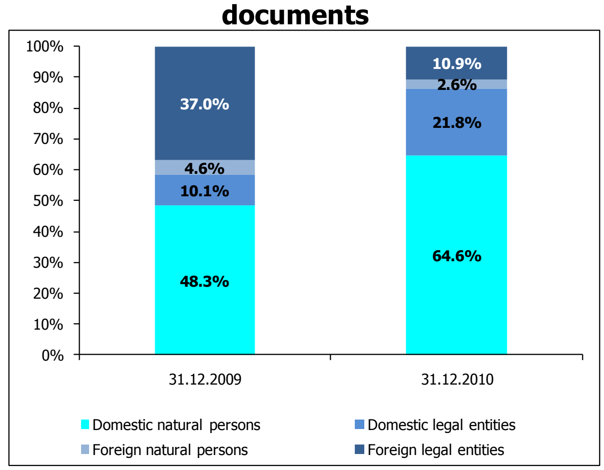
Figure 3.2.15
Structure of net-assets of investment funds



Source: Securities and Exchange Commission.

The structure of funds' investments shows that they mostly face market and liquidity risk. Due to the significant share of investments in securities issued by foreign issuers, these two risks are supplemented by the sovereign risk. The insufficient fund transparency[71] in terms of the type of issuer of foreign securities and the country of origin, the price growth of such securities and foreign markets they are trade on, limits the possibility for adequate assessment of the investment funds' risk level. Considering the marginal share of this sector in the financial system of the Reoublic of Macedonia, its insufficient transparency caused no significant effects on the financial stability. However, one should take into account that the influence of this sector is significant to the natural persons and their (in)ability, as the largest investors in investment funds, to assess the risk they take. The funds' exposure to market risk that arises from investments in domestic securities is lower, particularly due to the lower share of these investments in the structure of net-assets of the investment funds. In this case, as well, due to the lack of publicly disclosed data on the

Figure 3.2.16
Ownership structure of issued stake documents



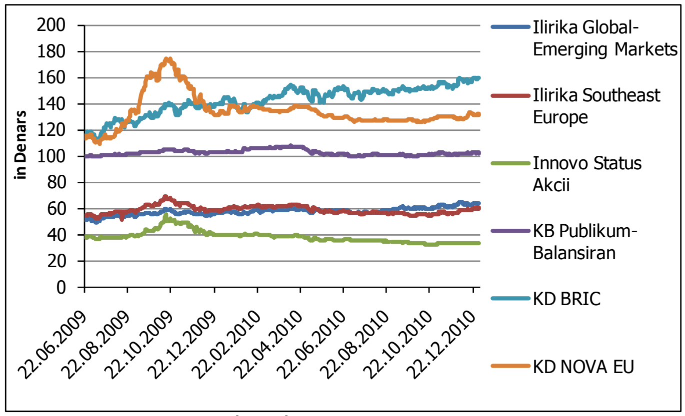
Source: Securities and Exchange Commission.

[71] Some investment funds disclose data on the structure of their investments (e.g. investments by issuer's country), but there is no minimum data to be disclosed neither a possibility for easy comparability of investments and return of the investment funds.

structure of these investments, the realistic level of risk, the investment funds are exposed to, cannot be fully perceived.

The growth of funds' assets is mostly due to the net-inflows from net-sale of stake documents in the open-end investment funds. The funds' net-inflows increased by Denar 16 million, or by 29.0%, and equaled Denar 71 million at the end of the year. **The domestic natural persons remain the largest investors in the open-end investment funds (64.6%).** In 2010, they additionally increased their share in the structure of issued documents for stakes in the investment funds (by 16.3 percentage points). As a result to the increase of their share, and accordingly, the increase of funds' inflows, domestic natural persons make up 76.5% of the funds' net-inflows. The domestic nonfinancial legal entities also registered a higher share in stake documents in the investment funds (by 11.7 percentage points), constituting 21.2% in the funds' net-inflow. On the other hand, the foreign entities reported net-outflow, thus substantially decreasing their share in the total issued stake documents in the investment funds (by 26.1 percentage points). **Even though the funds' assets rose primarily due to the higher net-inflows from sale of stake documents, it also resulted from the increase in the selling price of stakes of the investment funds[72].**

Figure 3.2.17
Daily sale price of stake documents in open-end investment funds



Source: Securities and Exchange Commission.

Despite the increase in the investment funds' assets, the investment fund management companies recognized a loss of Denar 20 million at the end of 2010. Compared to 2009, the loss for the investment fund management companies went down by approximately Denar 7 million, but all companies that manage investment funds recognized a loss. Such situation could trigger the insolvency risk. The funds' assets are still not high enough for the companies to generate income from the management fee they charge, which is a reason behind the unprofitability of these companies. The funds' assets should increase considerably to enable the companies to cover their expenses, and to make profit. Considering that investment funds in the Republic of Macedonia are a brand new form of investment, the households are not sufficiently informed and educated for the benefits of this investment. On the other hand, the lack of transparency of these funds, in terms of investment structure, has negative effect on the decisions of those citizens who understand and are informed on the risks related to this type of investment. This is the reason behind the insufficient trust of the citizens in this financial segment, due to which they still hesitate to increase their investments in investment funds. In addition, uncertainty clouding the global and domestic financial markets and the economic crisis, due to which citizens were not financially powerful or withhold from such type of investment, made its contribution.

[72] Source: Website of the Macedonian Stock Exchange.

3. Depository institutions[73]

In 2010, the depository institutions (banks and savings houses) in the Republic of Macedonia additionally strengthened their dominant position in the financial sector. In 2010, the total assets of the depository institutions registered almost twice bigger annual growth (13.4%), compared to the preceding year. This increase is fully due to the banks' assets growth. As in the previous year, the increase in the banks' total assets conditioned the largest portion (91.4%) of the increase of the entire financial sector. The banks' share in the total assets of the financial sector reached 89.0%, and accordingly they strengthened their position as the largest and the most developed segment of the financial sector. The presence of the savings houses in the depository institutions' total activities, as well as in the activities of the entire financial sector, is still minor.

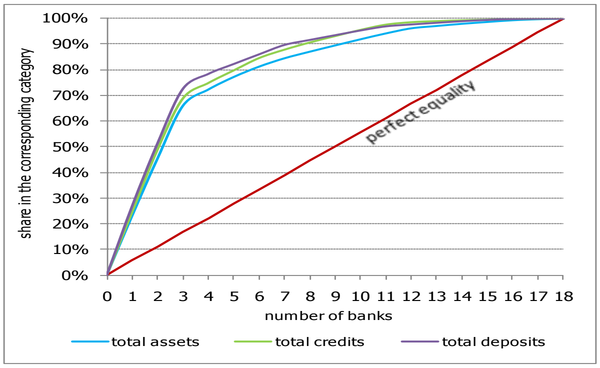
Table 3.3.1
Structure of the depository institutions segment in the Republic of Macedonia

Structural indicators of the depository institutions segment	Years					
	2005	*2006*	*2007*	*2008*	*2009*	*2010*
Number of depository institutions	34	31	30	29	28	26
Banks	20	19	18	18	18	18
Saving houses	14	12	12	11	10	8
Total assets of depository institutions (in millions of Denars)	142,370	176,444	226,545	254,153	271,825	308,276
Banks	140,436	174,117	223,659	250,704	268,543	305,290
Saving houses	1,934	2,327	2,886	3,449	3,283	2,986
Structure of assets of depository institutions	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Banks	98.6%	98.7%	98.7%	98.6%	98.8%	99.0%
Saving houses	1.4%	1.3%	1.3%	1.4%	1.2%	1.0%

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

The concentration of the banking system is presented graphically through the Lorenz curve[74]. In the case of the three largest banks, the concentration level corresponds to the total assets, credits and deposits, while the share of the five largest banks in these three on-balance sheet categories registers minor differences, with the highest concentration degree being registered with the deposits. However, the Lorenz curve is off the perfect equality yield and with severe incline for all categories of bank activities, which points to high concentration degree, where the five largest participants reach the largest cumulative share.

Figure 3.3.1
Lorenz curve for concentration by categories



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

[73] More detailed analysis and data on the depository institutions, as well as for the banking system can be found in the "Report on the Banking System and Banking Supervision in the Republic of Macedonia" in 2010.
[74] The Lorenz curve denotes graphical presentation of the distribution proportionality. The number of banks is presented on **x** axle, while the percentage share of their market activity is presented on **y** axle. The concentration on the market is higher if the line of the percentage share in the market activity inclines to left from the perfect participation line (incline of 45 degrees).

3.1. Banks

3.1.1. On-balance sheet characteristics and sources of risks

The gradual stabilization of the global economic environment in 2010 enabled recovery of the external demand, and thus emergence of **initial recovery signs of the Macedonian economy** from the crisis effects. The trade deficit reduction, the stabilization of the capital flows and the low inflation influenced towards stabilization of the economic agents' expectations for sustainability of the domestic macroeconomic stability. As a result, conditions for monetary policy relaxation were created, especially in the first half of 2010, when the interest rates on CB bills decreased for several times, thus changing the environment the banks operated in. The growth in the domestic sources of financing intensified and served as a basis for intensified bank activities. This is proved also with the **higher degree of financial intermediation in 2010,** which was more apparent according to the assets/deposits correlation with GDP, because of their faster growth compared to the credit growth of the non-financial entities. Hence, the banks remained **restrained in taking risk** and were more cautious in risks assessment. The restrain is due to the present risks not only regarding the sustainability of the recovery of the global economic activity, primarily due to the high levels of public debt and the need for fiscal consolidation in several developed economies, but to the upward trend of the world prices and the global inflation, as well as. This, from its side, can reflect on the domestic economic activity and consequently, to cause negative effects for the banks, because of the possible unexpected oscillations of the external demand and the possible changes in the monetary instruments on both global and domestic level.

Figure 3.3.2
Dynamics of the degree of financial intermediation

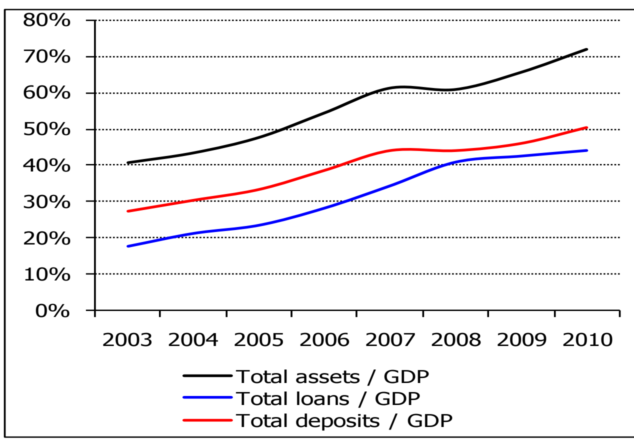
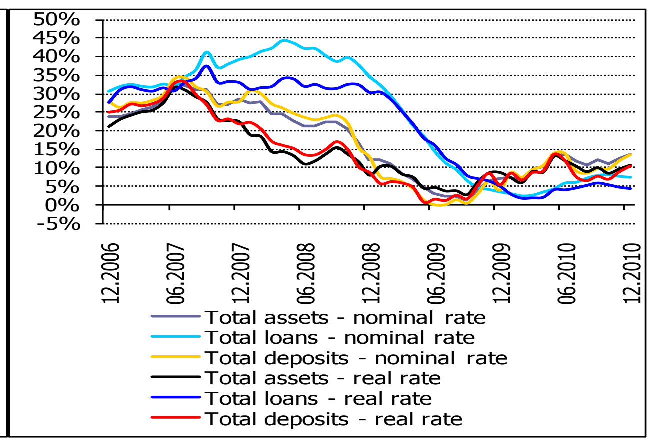


Figure 3.3.3
Nominal and real growth rates of the assets, credits and deposits



Source: NBRM, according to the data submitted by the banks and State statistical office for GDP and annual inflation rates.

The stabilized expectations of the domestic entities contributed to higher increase of the **deposits in 2010** by 3.6 times compared to 2009, which is the **main generator of the increase in the sources of financing** of the banks' activities. Besides, in 2010, **intensified short-term and long-term lending by banks is registered,** which increased by 2.3 times compared to 2009. The credit growth primarily arises from the larger borrowing from the international financial institutions and organizations (annual growth of 73.9%), which determined 45.5% of the total annual growth of the banks' loans. The second element for larger use of borrowings from other banks as a source of funding was the increase in the borrowings from the parent entities, including the new subordinated deposits, which in 2010 contributed to the total loans growth with 33.2%.

Figure 3.3.4
Distribution of the annual absolute change of the sources of financing of the banks' assets by components

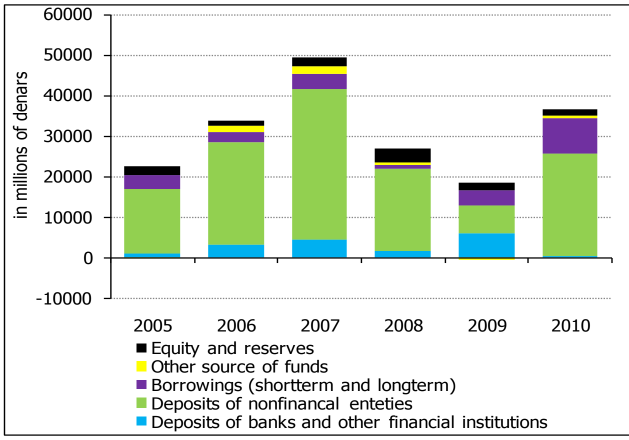
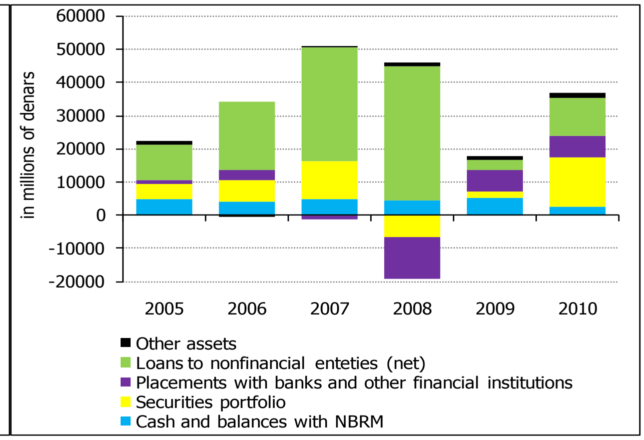


Figure 3.3.5
Distribution of the annual absolute change of the banks' assets by components



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

The banks' restraint for taking additional risks in 2010 resulted in considerable increase in their investments in low-risk securities despite the decrease in their yield. Namely, **the fastest growing component in the banks' assets was that referring to the placements in CB bills and Treasury bills,** which created 44.1% of the increase in the total assets of the banking system. Additionally, assets placed with other banks and financial institutions (mainly foreign banks) increased by 20.0%, annually. All of this, actually, proves that the global economic crisis and its effects on the domestic real sector caused certain changes in the business environment of the domestic banks, mirrored through smaller preference for taking new credit risks and more firm standards when creating new credit exposures to the private sector. However, beside the banks prudence, the annual credit growth of the nonfinancial entities (of 7.4%) was twice higher, compared to 2009 and it participated with about one third in the annual increase in the banks' total assets.

In 2010, **increase in the external financing of the banking sector was registered**, mainly due to the foreign indebtedness and the increase in the subordinated instruments. Simultaneously with the intensification of the external financing, for a second consecutive year, **the claims from non-residents mount, which is mainly due to the higher volume of placements in foreign banks.** On annual basis, the growth rate of the liabilities to non-residents equaled 24.6%, while the growth rate of the claims from non-residents was moderate and it equaled 15.9%. Although in international frames, the consequences from the global financial crisis showed that the organic increase in the bank activities caused smaller risks for the financial stability, compared to the growth based on external sources, or the increase dominantly financed through the market operations, **the dependence of the domestic banks on the external sources, however, is still not such to pose bigger threat to the financial stability** in the Republic of Macedonia. This statement is verified through three elements: 1) moderate share of the liabilities to non-residents in the total banks' liabilities, which equaled 13.2%[75] at the end of 2010; 2) the liabilities of the domestic banks to foreign parent entities with a share of 55.0%[76] dominate in the structure of the liabilities to non-residents, which in general, are considered as more stable source of funds, under condition that the country risk and the inflation expectations are sound and presented through the amount of the risk premium (the difference) of the reference rates in Denars and Euros and 3) liabilities to other financial institutions create 29.5% of the total liabilities to non-residents and mainly consist of liabilities based on used long-term credit lines from foreign international institutions, while the presence of the liabilities to foreign commercial banks is minor, and of financing through issue of securities on the external financial markets is not present at all.

Figure 3.3.6
Dynamics and relative significance of the claims from and liabilities to non-residents of the domestic banking system

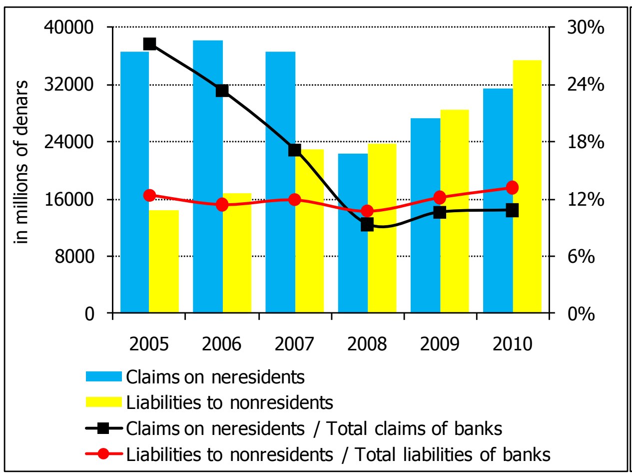
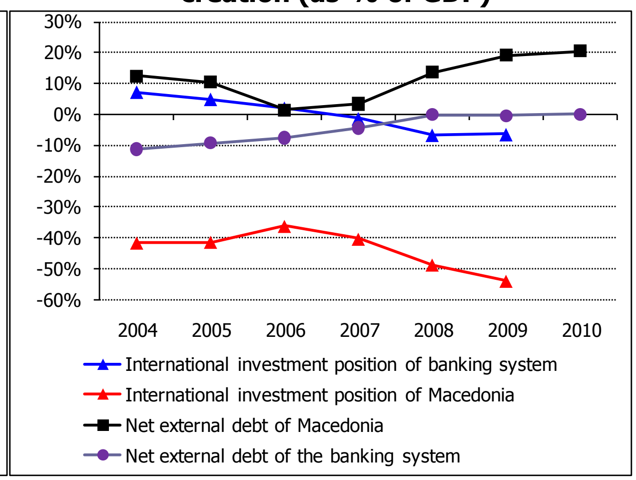


Figure 3.3.7
Dynamics of the net external debt and the international investment position and contribution of the banking sector in their creation (as % of GDP)



Source: NBRM, according to the data submitted by the banks, external statistics of NBRM and SSO.

[75] The share of the liabilities to non-residents in the total liabilities of the banking system at the end of 2010 equaled 11.6%.
[76] The subordinated instruments are also considered as support from the parent entities, which at the end of 2010 participate with 30.8% in the total liabilities to the parent entities, and which are included in the category supplementary capital in the calculation of the banks' own funds, and consequently, in the capital adequacy ratio.

The increase in the liabilities of the banking system to non-residents also poses certain risks, which could materialize in conditions of inadequate managing of their growth, given possible negative shock for the competitive capability of the domestic economy or negative movements of its productivity. **These risks are primarily related to the sustainability of the external position of the country, the increase in the external debt and the deterioration of the international investment position.** Namely, until 2007, the banking system of the Republic of Macedonia was net creditor in the relations with abroad i.e. its net external debt was negative, while the international investment position was positive. But, since 2008, fall in the claims from non-residents was registered, given constant rise in the liabilities to non-residents, according to which the domestic banking system became net creditor. The net external debt of the banking system in 2010 obtained positive mark, in conditions of mounting net external debt of the country, while the gross external debt exceeded the criterion for moderate indebtedness (30%-50% of GDP)[77] reaching the level of 62.4%. These trends in the external position of the Republic of Macedonia and оф the banking system can reflect on the required risk premium for investments in the country. Additionally, the fact that the domestic banks have no direct access to the international capital markets is another indicator for higher strategic risk, because of the limited access to new sources, exclusive dependence on the inflows from the parent entity and having no room for possible larger refunding of the liabilities.

Figure 3.3.8
Absolute increase and deposit structure by currency

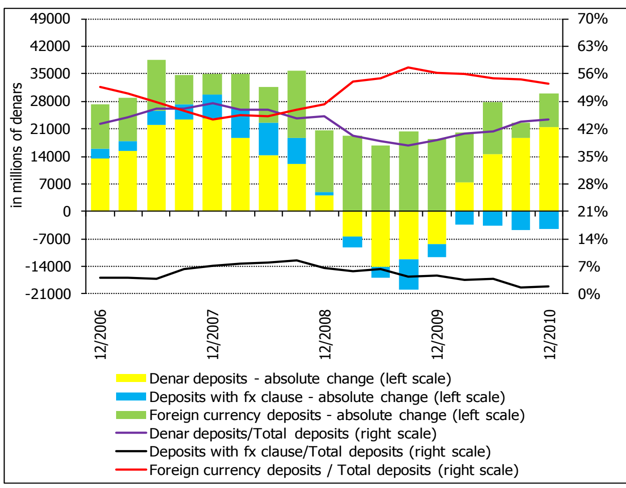
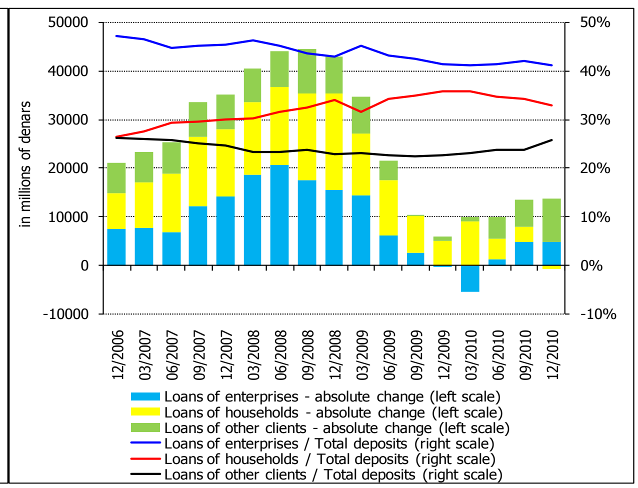


Figure 3.3.9
Absolute increase and credit structure by currency



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

Another characteristic that makes the domestic banking system vulnerable to shocks in the external balance is the high Euroization degree in the domestic economy, which is perceived through considerable presence of the foreign currency component in the banks' balance sheets. However, dominant position of the deposits with currency component in the currency structure of the total deposits, reduced, to certain extent, in 2010, when Denar deposits registered faster increase. This shows that along with the stabilization of the movements on the foreign

[77] The criterion for the moderate indebtedness is according to the methodology of the World Bank for creating indicators for external indebtedness.

exchange market and the demonstrated credibility of the monetary policy of NBRM, change in the currency preference of the domestic depositors towards larger saving in Denars was registered. The level of the banks' credit activity with currency component remained high also in 2010, according which the indirect credit risk still being one of the dominant forms of credit risk which the banks undertake in their operations. The most dynamic annual increase in 2010 of 22.7% was registered with the foreign currency credits, which participated with 69.6% in the total credit growth. The increase in the foreign currency credits is almost fully realized by extending foreign currency credits to residents, intended for payments in the country.

As for the deposits' sector structure, **the households' deposits fixed their dominant position** as main source of financing of the domestic banks' activities, thus creating 86.7% of the total annual deposits growth. In the credits' sector structure, the share of the enterprises' credits is still larger than the share of the households' credits. In 2010, the enterprises' credits registered higher annual growth of 5.7%, as well. **The faster recovery of the lending to corporate sector** is related to the recovery of the external demand and the initial signs of post-crisis recovery of the economic activity. On the other hand, the moderate growth in households crediting is related to the slower growth of the disposable income, as well as to the smaller demand for credits as a result of the larger caution of the households and the slow adjustment to the expectations in conditions of incertitude.

Figure 3.3.10
Absolute increase and deposit structure by sectors

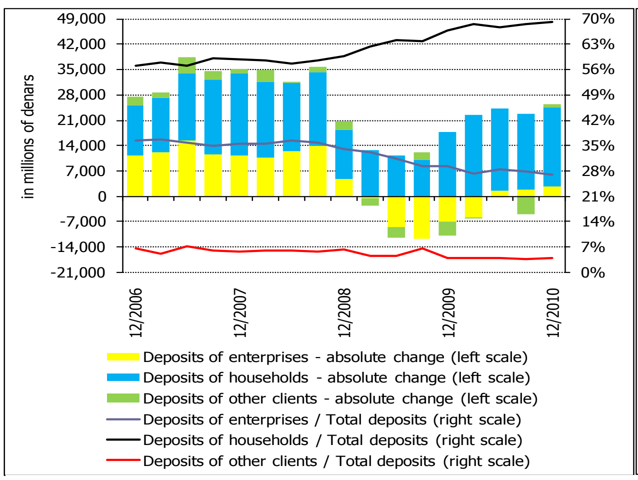
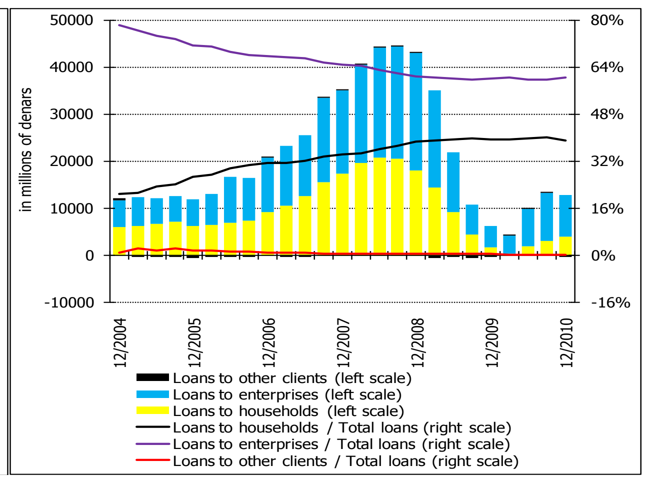


Figure 3.3.11
Absolute increase and credit structure by sectors



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

The assets' structure of the banking system of the Republic of Macedonia according to the level of liquidity in 2010 improved considerably, primarily as a result of the high annual increase in the liquid assets volume of 36.8%. **The main generator of the increase in the liquid assets were the placements in CB bills**, which created 40.7% of the liquid assets growth. The Treasury bills and the assets on the correspondent accounts and the short-term assets in foreign banks registered almost equal share in the annual rise of the liquid assets of 24.6% and 24.3%. Thus the liquid assets growth was not equally allotted between the Denar and the foreign currency component of the liquid assets. Contrary to the Denar liquid assets, which have begun registering annual growth in the second half of 2009 already, the foreign currency liquid assets stagnated within the same period, even registering a decrease occasionally, while in the last quarter of 2010 they accelerated their growth. The high ratio between the change in the Denar liquid assets with the change in the total sources of funds (the average for 2010 is 75%) shows that in 2010, the banks allocated the largest portion of the increase in the sources of funds (regardless of the currency) in Denar liquid assets, mainly

Figure 3.3.12
Dynamics and annual growth of the liquid assets by items

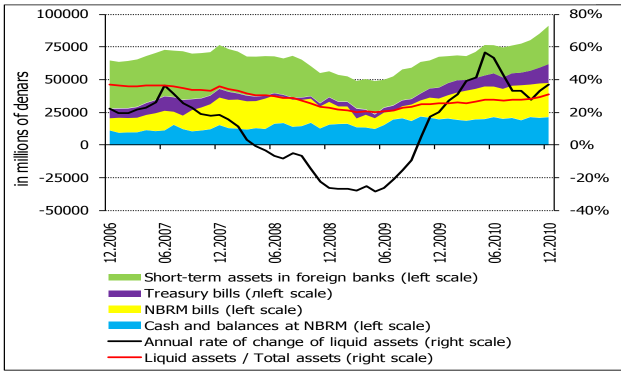
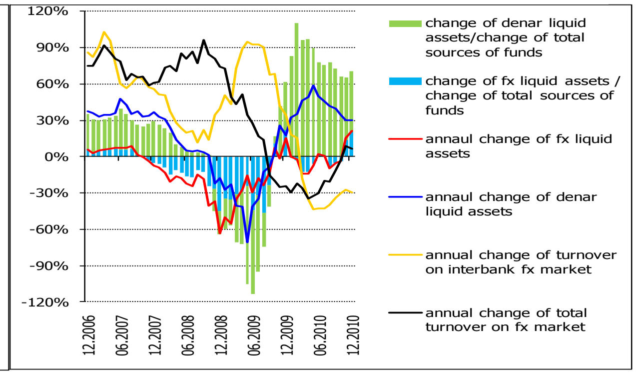


Figure 3.3.13
Annual growth rate of the Denar and the foreign currency assets



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

CB bills and partially Treasury bills. Thee reasons for such movement can be identified: 1) the amendments to the legal framework of NBRM pertaining to the liquidity risk management, according to which in the calculation of the regulatory defined liquidity ratios, the Denar monetary instruments could have been used for meeting the liquidity ratios, regardless of the currency; 2) the higher reserve requirement ratio in Denar with a clause and in foreign currency and the reserve requirement in foreign exchange the banks meet partially in Denars; 3) the attractiveness of these instruments, having in mind the higher anticipated return per unit of taken investment risk, compared to the other available investment alternatives, primarily the foreign currency liquid assets and the credits of the non-financial entities.

In 2010, the interest rate on the CB bills reduced in seven occasions by totally 4.5 percentage points, but nevertheless, the banks' interest in these instruments is still high. In conditions of historically lowest key interest rate of the European Central Bank, the interest rates on the international money markets were extremely low and showed bigger stability compared to the Denar interest rates. Accordingly, in 2010, **substantial narrowing of the spread between the interest rate on the CB bills and the one-month EURIBOR was registered,** as benchmarks for the expected yields of the assets the banks place in NBRM and abroad. This narrowing of the interest rate spreads between the domestic and foreign financial instruments in 2010 did not cause change in the investment preference of the domestic banking sector, neither larger outflows of capital from other sectors of the economy, indicating that their amount is still sufficient to satisfy the preference of the investors and corresponds to the dynamics of the risk premium between the Macedonian Eurobonds and comparable German government bonds.

Figure 3.3.14
Nominal and real interest rates of the domestic and international interbank financial instruments

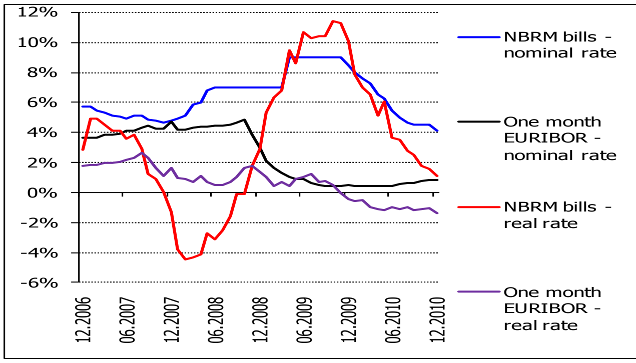
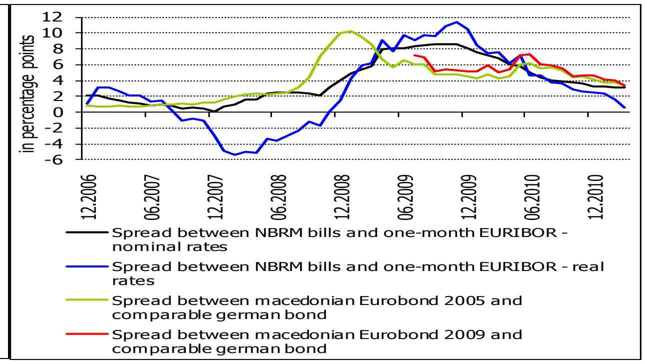


Figure 3.3.15
Spreads between the yield of the CB bills and the one-month EURIBOR and between the Macedonian Eurobonds and comparable German bonds



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

The fact that the real yield of the CB bills in 2010 registered positive values, which was not the case with the yields on the international interbank markets also acted in this direction. However, there are numerous limitations and risks not only for further decrease, but for the sustainability of the spread between yields of the financial instruments in the Euro area and in the Republic of Macedonia, which can ultimately influence on the layout of the instruments of the domestic monetary policy. This is even more significant if take into consideration that under the influence of the increase in the world prices of energy sources and food, at the beginning of 2011, the inflationary pressures increased also in both the Euro area and Macedonian economy, while ECB, for the purpose of stabilization of the expectations, performed upward correction of its key interest rate.

The banks' responsiveness to the downward corrections of the interest rates on the CB bills was moderate. The interest rates on the newly accepted Denar deposits registered decrease, although with far smaller dynamics than the decrease in the interest rate on the CB bills, primarily because of the banks' orientation to keep the deposits of the domestic entities, as main source of financing of activities, and especially because they are "cheaper" compared to the external financing. It reflected also on the movement of the interest rates on the newly extended Denar credits during the year, which also have downward trend, but with smaller dynamics than the decrease in the rates of the CB bills. This shows that the banks still have conservative expectations for the perspectives of the domestic real sector and because it incorporate relatively high risk premium in the interest rates on the newly extended credits. However, due to the inflation acceleration in the second half of 2010, **the real Denar interest rates registered evident decrease.** It contributed to the lessening of the real financial burden of the credit users, and simultaneously to the smaller real yield of the depositors.

Figure 3.3.16
Nominal and real interest rate on the newly accepted deposits by the banks, by currency

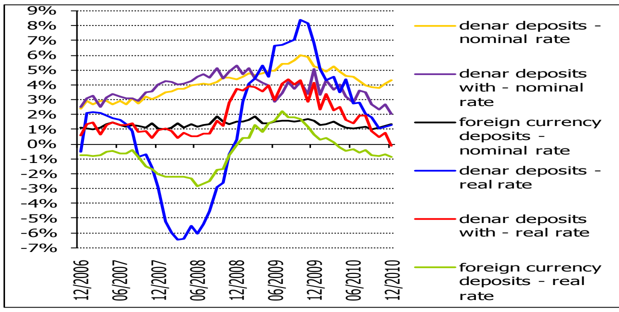
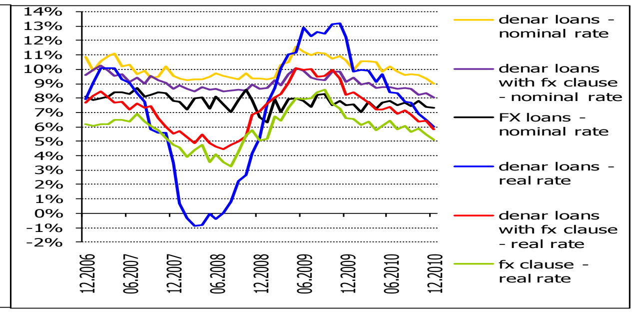


Figure 3.3.17
Nominal and real interest rates on the newly extended credits by the banks, by currency



Source: NBRM, according to the calculations submitted by the banks and internal calculations.

The movement of the interest rates on the newly accepted deposits and the newly extended foreign currency credits in 2010 was relatively more stable, which corresponds to the stable level of the interest rates on the international money market. Much more specific is the movement of the interest rates on the newly accepted deposits with FX clause, which fell in 2010. Although this movement did not correspond to the interest rate dynamics on the international markets, it is, however, expected to certain extent, having in mind that there was substantial difference in the level of the interest rates on the Denar deposits with FX clause and on the foreign currency deposits. Having in mind that the inclusion of the currency clause actually means effective safeguard of the deposit value from any changes in the foreign exchange rate of the domestic currency, this difference should not be large, i.e. the amount of the interest rates on the foreign currency and Denar deposits with FX clause should be almost equal. These differences arises from the fact that the deposits with FX clause are mainly offered to the big depositors from the corporate sector, so the banks persist on maintenance of these deposits by offering attractive yields, which actually reduced to indirect endowment of these large depositors. As a result, until the end of 2008, the interest rates on the newly accepted Denar deposits with FX clause were almost on the same level with the interest rates on the newly accepted Denar deposits. With the introduction of the differenced reserve requirement rate for the banks' liabilities in Denars with FX clause of 20% in 2009, gradual decrease in the interest rates on the newly accepted Denar deposits and their convergence with the interest rates on the newly accepted foreign currency deposits commenced. This was caused also by the movement of **the interest rates on the newly extended credits with FX clause, where trend of their slight decrease and the convergence with the interest rates on the newly extended foreign currency credits was registered**. The inflation growth in the Euro area in 2010 caused fall in the real interest rates on the newly accepted deposits and the newly extended credits in foreign exchange and in Denars with FX clause[78]. It is especially evident that **the real interest rate on the foreign currency deposits was negative** in the largest part of 2010, which corresponds to the change in the currency preference of the

[78] Having in mind the dominant position of the Euro in the structure of the credits and the deposits with currency component (at the end of 2010, almost 90% of the assets and liabilities of the banks with currency component are given in Euros), the real interest rates on the newly extended credit and the newly accepted deposits in foreign exchange and in Denars with currency clause are calculated with correction of the nominal interest rates with annual inflation rate in the Euro area.

domestic depositors and the faster annual increase in the Denar deposits compared to the increase in the foreign currency deposits.

Figure 3.3.18
Interest rate spread between credits and deposits according to their currency structure

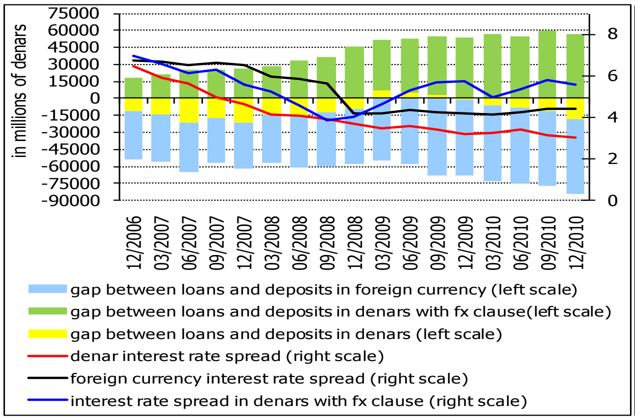
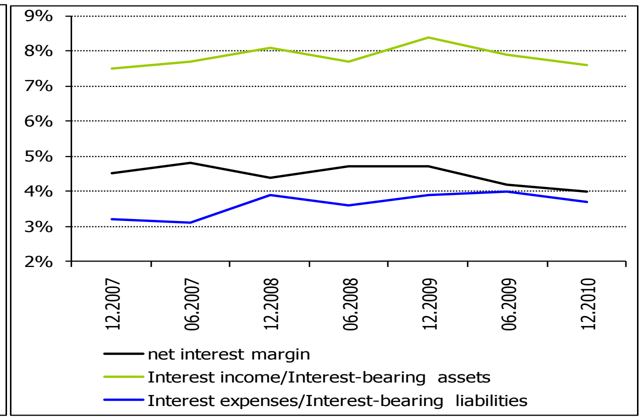


Figure 3.3.19
Net interest rate spread of banks



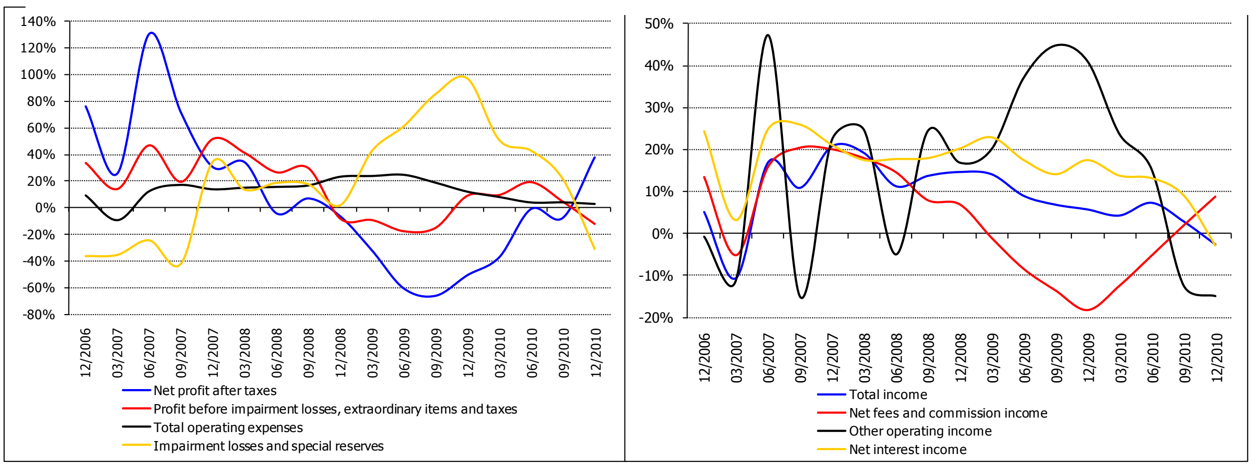
Source: NBRM, according to the calculations submitted by the banks.

In 2010, the banks maintained **relatively stable interest rate spreads between credits and deposits** according to the currency characteristics of the positions, except to bigger variability of the interest rate spread in Denars with FX clause in the first half of the year, Also, **the largest interest rate spread is registered between the credits and the deposits in Denars with FX clause**, and with regard to the relatively larger positive gap between the credits and deposits with FX clause, **this large spread is the main source of net interest income of the banks.** Compared to the pre-crisis period, the interest rate spread in Denars with FX clause widened, opposite to the interest rate spreads between the credits and deposits in Denars and in foreign exchange that registered narrowing.

The yield based on interest assets in 2010 registered larger fall compared to the costs for the interest liabilities. This is primarily a reflection of the decrease in the interest rates on CB bills, the effects of the worsening of the credit portfolio and consequently, decrease in the high interest-bearing assets. Also, slight narrowing of the net interest spread, mainly due to the faster growth of the deposits compared to the credit growth and slightly more evident downward trend of the interest rates of the credits relative to the deposits, were registered.

In 2010, the banks were more profitable compared to 2009, which can be perceived through the annual increase in the net income after taxation of 37.7%. However, **the annual growth of the net income of the banking system in 2010 was not a result of the rise in the banks' income, or improvement of their efficiency, but releasing considerable amounts of impairment due to the performed collection of assets based on uncollected claims.** Thus the cost for the impairment and the special reserve in 2010 registered annual drop of 30.9%. Opposite to the increase in the net gain, **the operational capability of the banks for generating income that covers the operational expenditures, registered a decrease in 2010.** This statement can be perceived through the annual drop in the gain before the allocation of the assets impairment by 11.9%. The reason for this is the annual decline of 2.7% of the bank's total income, which primarily arises from the decrease in the interest income, as a basic component of the banks' income structure. The decrease in the net interest income mirrored the faster growth in the deposit core, and as a result, the interest expenditures (by 7.7% on annual basis), in conditions of slower recovery of the credit activity and decrease in the high interest bearing assets due to the impairment of the credit portfolio, which caused moderate increase in the interest income (of 2.1%, annually). The annual increase in the interest income from the financial institutions of 41.4% should also be mentioned, which fully arises from the investment in the CB bills, even the amount of the interest rates was halved.

Figure 3.3.20
Annual dynamics of the main profitability components



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

Figure 3.3.21
Dynamics of income, expenditures and profit of the banking system

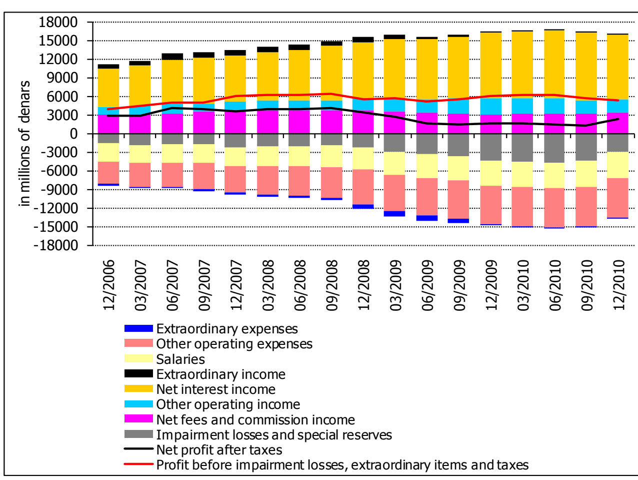
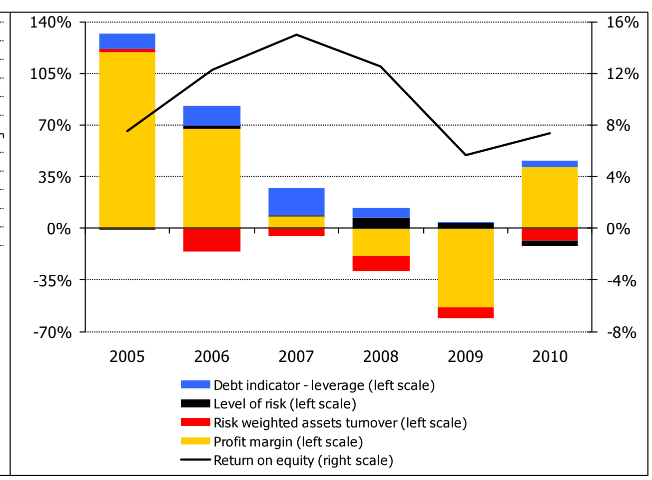


Figure 3.3.22
Contribution of individual components in the creation of the rate of return on equity - ROE



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

The largest influence of the reduced impairment of the assets on the creation of the banks' income conditioned **enlargement of the profit margin of the banks,** which was the main generator of the improvement of the basic indicators for the banks' profitability, return on equity and assets. At the end of 2010, the rate of return on assets equaled 0.8%, while the rate of return on equity equaled 7.3%, registering annual increase of 0.2 and 1.7 percentage points, respectively.

Figure 3.3.23
Relative dispersion of the return on assets - ROA

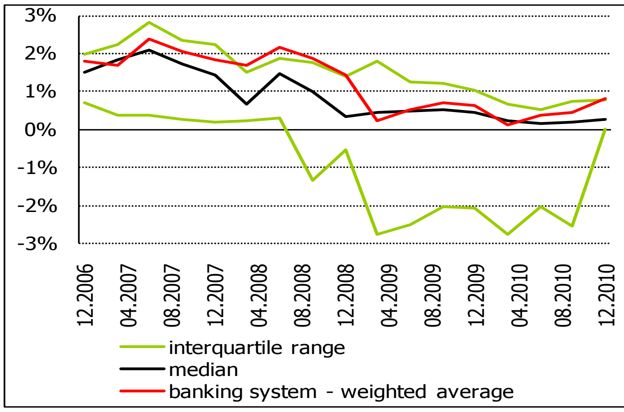
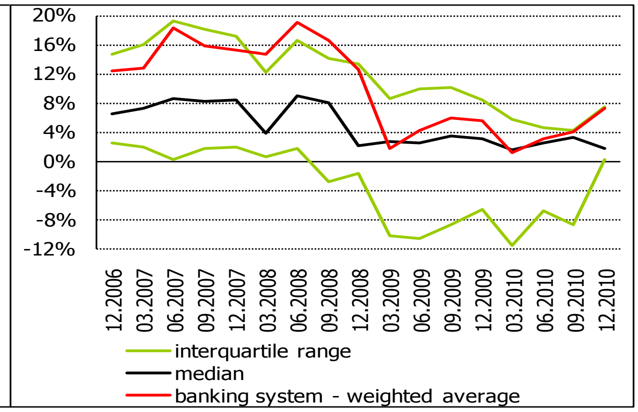


Figure 3.3.24
Relative dispersion of the return on equity - ROE



Source: NBRM, according to the data submitted by the banks. The rate of return on equity = profit margin x turnover of the risk weighted assets x indebtedness x level of assumed risk. The profit margin = gain after taxation/ total regular income. The return on the risk weighted assets = total regular income / risk weighted assets. The indebtedness (leverage) = average assets / average amount of capital and reserves. The risk level = risk weighted assets / average assets.

Figure 3.3.25
Relative dispersion of the profit margin - net gain/total regular income

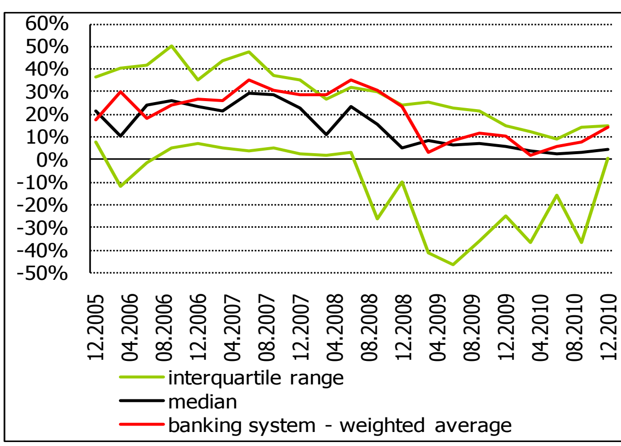
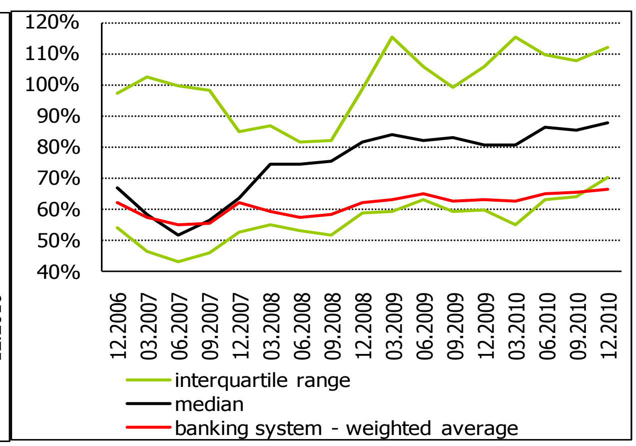


Figure 3.3.26
Relative dispersion of the indicator operating costs/total regular income (cost to income ratio)



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

Oppositely, **the decrease in the banks' income in 2010 resulted in deteriorated operational efficiency,** which is proved with the increase in the total regular income for covering operating costs from 62.8% at the end of 2009, to 66.2% at the end of 2010. Additionally, at the end of 2010, the profitability indicators mainly showed certain signs of dispersion diminishing among individual banks. Thus in 2010, the number of banks that shown loss on annual basis reduced from seven to four banks, whereas the increase in the maximum amount of loss and the maximum amount of gain shown by individual banks. However, the largest asymmetry, which is illustrated with the difference between the median and the weighted average value, can be perceived with the indicator for the correlation between the operating costs and the total regular income, the dynamics of which clearly shows high operational inefficiency with part of the banks. Hence, the need for improved costs management capacity also imposes as an important challenge for the banks.

Figure 3.3.27
Indicators for the labor productivity in the banking system

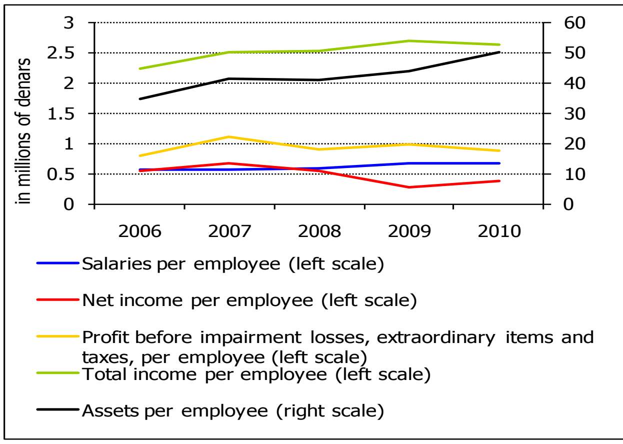
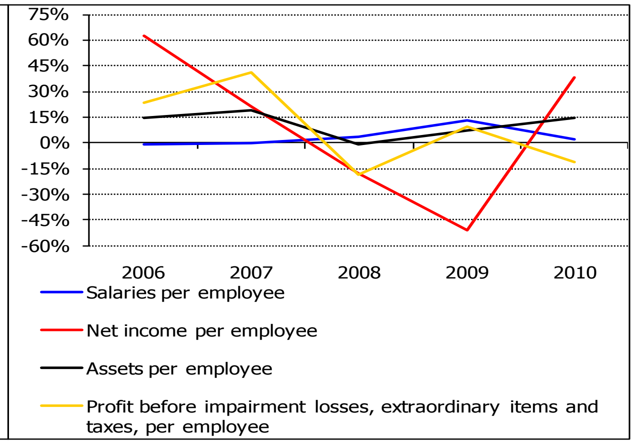


Figure 3.3.28
Annual growth rates of certain on-balance sheet categories by employee



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

The transmission of the consequences from the global financial crisis to the domestic environment, inter alia, reflected on the productivity of the employees in the banking system. Thus **for three consecutive years, the costs for wages per employee registers higher annual growth rate compared to the operational gain per employee, which directly caused fall of the labor productivity in the banking system.** Also the costs for wages per employee are higher than the net gain per employee, as well, which once again points to the need for increase in the operational efficiency in the banking system.

3.1.2. Credit risk

In 2010, the dynamics of the banks' credit exposure in the Republic of Macedonia was influenced by slow, but gradual recovery of the total economic activity, the acceleration of the increase in the domestic sources of financing and adjustment of the monetary policy towards downward corrections of the interest rate on the CB bills. All of this enabled further trend of increase in the total exposure to credit risk, which began in the second half of 2009. Its annual growth rate of 14.4% was higher more than three times than that in the preceding year. However, **despite the partial relaxation of the crediting terms of the private sector, the increase in the credit risk exposure was mainly concentrated in low-risk and liquid instruments,** primarily in CB bills and Treasury bills. Hence, the banks showed moderate preference for taking new credit risk and they were focused on managing exposure with higher risk, which increased by 2.6% in 2010.

Figure 3.3.29
Dynamics and growth rate of credit risk exposure by risk categories

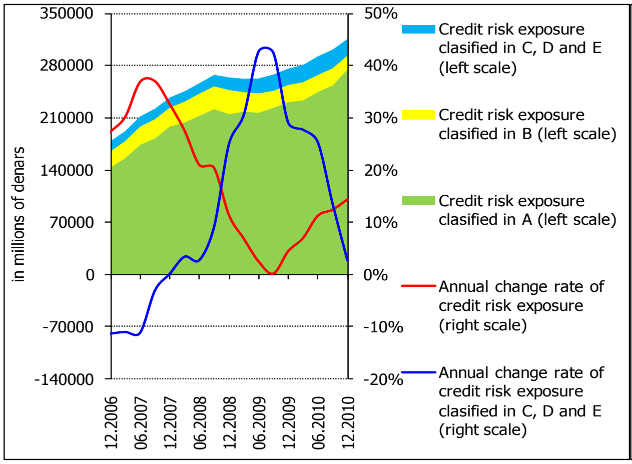
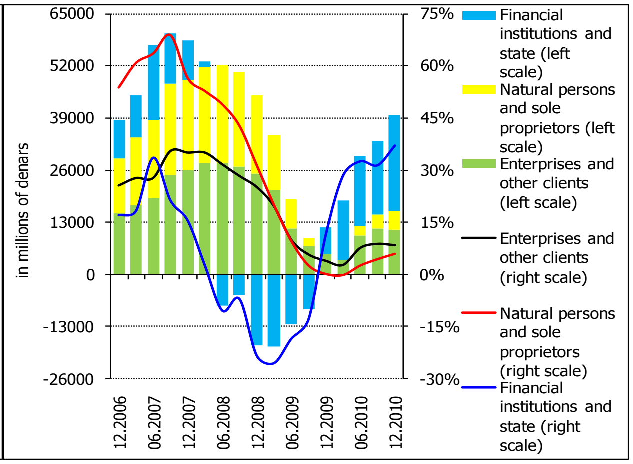


Figure 3.3.30
Annual absolute and relative change of credit risk exposure by sectors



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

In 2010, the exposure to financial institutions and the Government was constantly registering higher annual growth rate compared to the increase in the exposure to corporate sector and households. The further recovery of the economic activity in the Republic of Macedonia is in line with the dynamics of the external demand, with the current developments in Europe gaining higher degree of uncertainty. This, in return, will reflect on the riskiness of the current credit portfolio, as well as the banks' preference for more cautious establishing of new credit exposures.

Commonly, the turning points in the dynamics of the exposure with higher risk and risks arising from the realization of the credit risk, show delayed changes in the banks' credit policy and movements in the total economic activity. This was proven also with the Macedonian banking system. The change in the prevailing business behavior of the Macedonian banks, from focusing towards enlarging the volume of the credit portfolio and ensuring larger market share, towards maintenance of their long-term stability and solvency by increasing the liquid placements, occurred in the last quarter of 2008, influenced by the effects of the international financial crisis, while the turn in the growth[79] of the non-performing loans was registered with a one-year delay. The annual growth rate of the non-performing loans in 2010 was 9.3%. After the fast acceleration which began from the fourth quarter of 2008, this rate registered constant downward trend in the five last quarters. The growth deceleration is evident with the enterprises' non-performing loans, as well as with the households' non-performing loans. In the analysis of the dynamics of the non-performing loans, the remarkable share of the restructured and prolonged credits in the total credits of 10.9% at the end of 2010 should be taken into consideration. Namely, if part of these credits were not restructured, or prolonged, they would probably obtain a non-performing status and would reflect adequately on the movement of the non-performing loans.

Figure 3.3.31
Dynamics of the exposure with higher degree of riskiness, calculated impairment and foreclosures

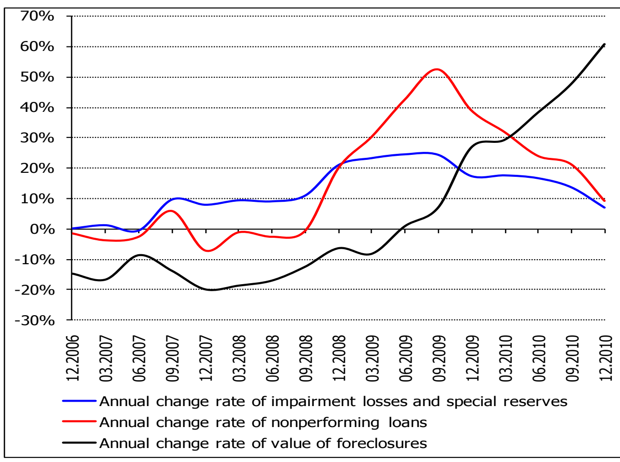
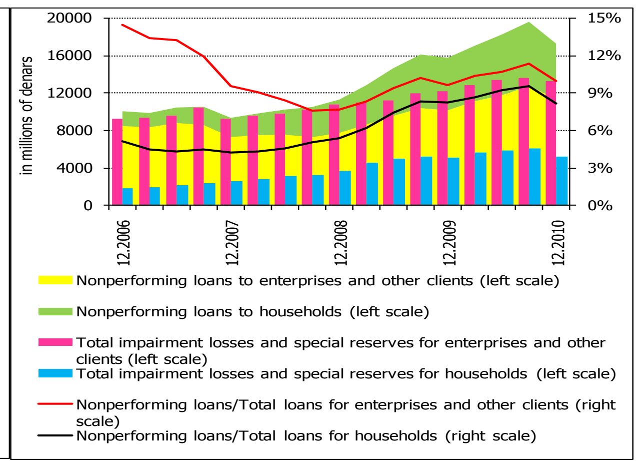


Figure 3.3.32
Sector distribution of the non-performing loans and the calculated impairment and special reserve



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

The calculated impairment losses and special reserve registered slower growth compared to the non-performing loans also in 2010, but still sufficient to enable banks to maintain full coverage of the non-performing loans, which is due to the previously accumulated solid level of total impairment and special reserve. Pursuant to the legal framework pertaining to the credit risk management, the banks calculate the impairment losses and the special reserve on both, individual and group basis (obligatory for portfolios of similar financial instruments which are not impaired on individual basis, and optionally for the small credits portfolios). **The calculation of the impairment losses and the special reserve on group basis is usually based on the application of statistical models, which is followed by the so-called model risk.** Basically, the model risk assumes that the statistical model is not adequate to the purpose it is intended for, i.e. it gives wrong results, including also the determining of the degree of impairment of the group exposure. The model risk refers to the possible theoretical inaccuracies in their creation, as well as to the intentional or unintentional errors in its practical implementation. The statistical models and errors thereof have additional significance for the Macedonian banking system, due to the fact that one part of the banks use systems for calculation of the impairment and special reserve for the credit risk

[79] Deceleration of growth.

exposure on individual basis, which are based on the statistical determining of the percentage of impairment of the claims, primarily on the basis of one criterion - the client's regularity in the servicing of the liabilities. On December 31, 2010, 17.7% of the total exposure of the credit risk are classified on group basis and with calculated impairment smaller than 1%, which is considerably lower level compared to the average risk of the exposure classified on individual basis, as well as the total exposure to credit risk.

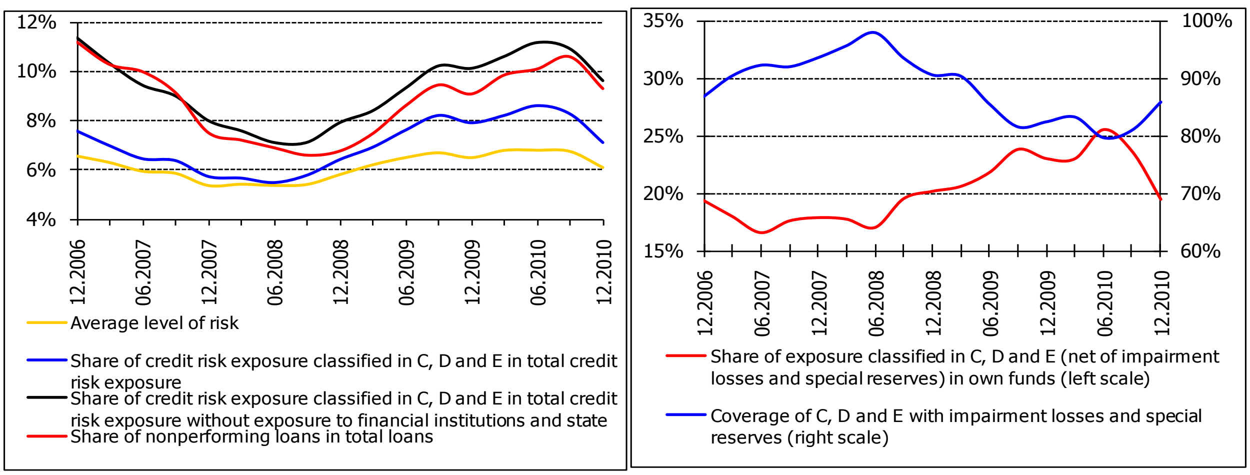
The slowdown in the dynamics of the non-performing loans is also followed by **solid growth of the on-balance sheet value of foreclosures.** In 2010, foreclosures registered annual increase of 60.3%. The main share in their structure accounts for the real estate, which participate with 92.6%. In the moment of foreclosure of the asset, the banks, usually release the impairment losses for the uncollectable claim, without recording any loss because of the impairment of foreclosed asset, thus resulting in improved profitability, with simultaneous decrease in the risk profile of the credit portfolio. **In this manner, the credit risk is actually transformed into risk of change in the value of the foreclosed asset (mostly the prices of the real estate),** i.e. exposure to market illiquidity for the respective asset. Having in mind the degree of (non)development of the real estate market in the Republic of Macedonia, the use of estimated values of the real estate, not only in the process of establishing the legal rights on the real estate in the process of approval of the credit risk exposures, but during the foreclosure of the assets and their subsequent valuation, as well, creates risk for the banks, which arises from the possible differences between the estimated values and the market prices of the real estate. These differences can arise from the too optimistic projections of the cash flows, which are expected from the asset, or due to the invalid discount factor (overestimated value of the collateral). This results in inability for fast sale of the foreclosed asset, at price that would not cause capital losses for the bank, or which would give the expected income. Thus the banks can be stimulated to protract the sale of the foreclosed assets and to face with possibility for one-time allocation of the full loss amount, because of the impairment for certain foreclosed asset, if five years from the moment of foreclosure without being sold, passes[80]. Other default of the implementation of the estimated value of the collateral in case it is being overestimated can be perceived through the lost income of the banks because of the credit user's smaller prospects for debiting by pledging the respective asset. If take into account that the volume of the housing and mortgage crediting of the households in the Republic of Macedonia objectively still lags behind the more developed transitional economies, it is real to expect that in future this segment of the total credit risk exposure of the banks will have more dynamic increase, and thus their potential exposure to this form of risk. On the other hand, the experience of variety of other countries, including the most developed ones, showed that **the misbalances on this market segment are followed by certain financial tremors that can cause severe consequences for the total economy.**

The more dynamic increase in the exposure to the financial institutions and the investments in securities, compared to the crediting of the non-financial entities in 2010,

[80] The banks' requirement for full allocation of losses due to the impairment for the assumed asset not being sold for more than five years and thus reduction of its accounting value to zero is provided in item 9 of the Decision on the accounting and regulatory treatment of the assumed assets based on uncollected claims ("Official Gazette of RM" no. 79/2007). This practice fails to be in full compliance with the International Financial Reporting Standards (the standard that points to this issue is MSS 36 - Impairment of assets) and the period five-year period for reduction of the value of the assumed assets to zero is empirically determined, according to the characteristics of the domestic real estate market, which is used as a very common form of collateral.

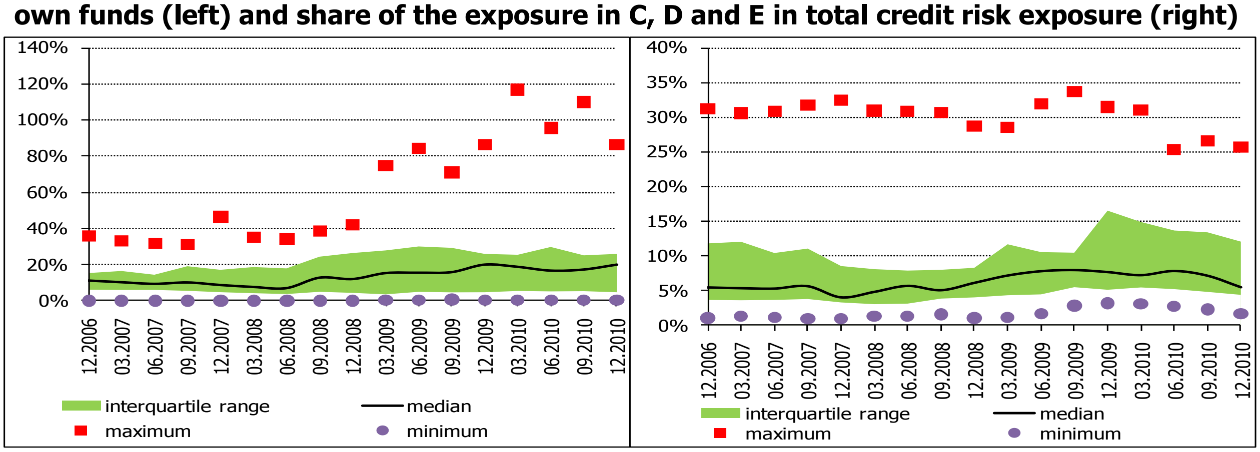
contributed to emergence of the first post crisis positive movements with the credit risk indicators. But, **the indicators for the riskiness of the exposure were largely influenced by the increase in the assumed assets based on uncollected claims, as well as for the write-offs of the claims the banks performed.** As a result, the improvement of the indicators for credit risk should be interpreted with caution, since it does not mean larger variability of the risk profile and risk reduction evidenced with the economic agents. For a comparison, if eliminate the effects of the assumed assets based on uncollected claims and from performed write-offs, the share of the exposure classified in the risk categories C, D and E in the total exposure to credit risk, instead of 7.1% would equal 8.3%. The share of the exposure classified in the risk categories C, D and E, which is not covered with the impairment and special reserve, in the own funds, would equal 21.6%, instead of 19.5%. In addition, **huge differences in the indicators for credit risk with certain banks** are evident, which indicates that for some banks, the idiosyncratic elements play big role in the determining of the risk profile of the credit portfolio.

Figure 3.3.33
Dynamics of the selected indicators for credit risk



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

Figure 3.3.34
Share of the exposure in C, D and E, net of the calculated impairment and special reserve in own funds (left) and share of the exposure in C, D and E in total credit risk exposure (right)



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

The deceleration of the higher risk exposure in 2010 was evident also in the exposure to enterprises and the exposure to households. Hence, the indicators for the credit risk and for the two sectors registered improvement. In this case, the main reason for the
The deceleration of the higher risk exposure in 2010 was evident also in the exposure to enterprises and the exposure to households. Hence, the indicators for the credit risk and for the two sectors registered improvement. In this case, the main reason for the

Figure 3.3.35
Changes in the exposure to credit risk classified in C, D and E to enterprises and households

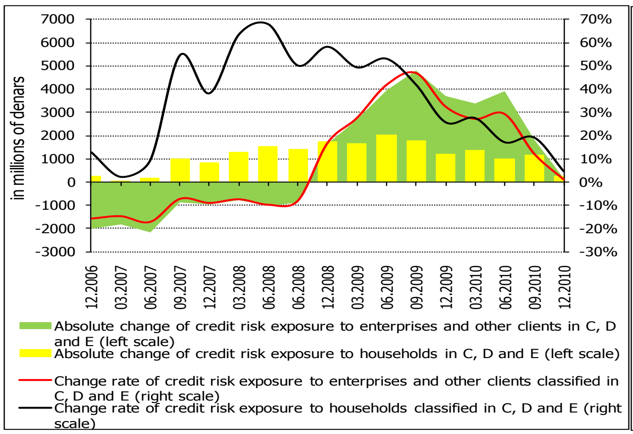
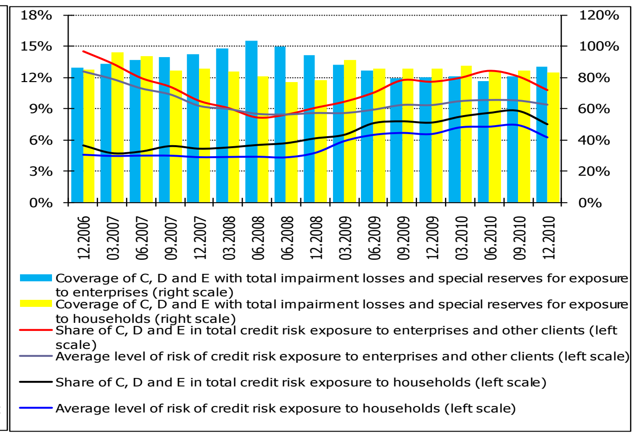


Figure 3.3.36
Indicators for credit risk for the exposure to enterprises and households



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

improvement were the write-offs made and decrease in the exposure with higher risk as a result of the assumption of the collateral because of the collection of the claim. Without the effect thereof, the indicators for the credit risk with both sectors would show deterioration on annual basis. Thus if eliminate the effect of the written off claims in 2010, the average risk of the total exposure would be higher by 0.3 percentage points, while the share of the exposure classified in the risk categories C, D and E in the total exposure to enterprises, would equal 11.3%, instead of 10.8%, while for the exposure to households, this indicator would equal 8.1%, instead of 7.5%.

The amount of the written off claims of the banks in 2010 registered annual decrease, although they still influenced the exposure risk profile and the credit risk indicators. Opposite to the previous years, when the main place in the structure of the written-off claims accounted to the claims of the legal entities, in 2010 the share of the written off claims from natural persons and legal entities is almost equal. The rise in the written off claims from the natural persons is another confirmation for the fast "maturation" of the credit portfolio to the households in the post crisis period, simultaneously mirroring the internal weaknesses of the banks in the credit expansion period, especially the deficiencies in the banks' credit policies, badly designed products and incorrectly set standards within the households' crediting domain.

Figure 3.3.37
Dynamics of the written-off claims of the banks

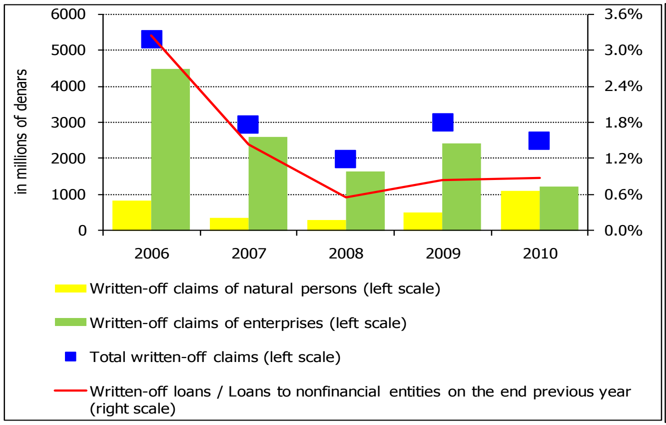
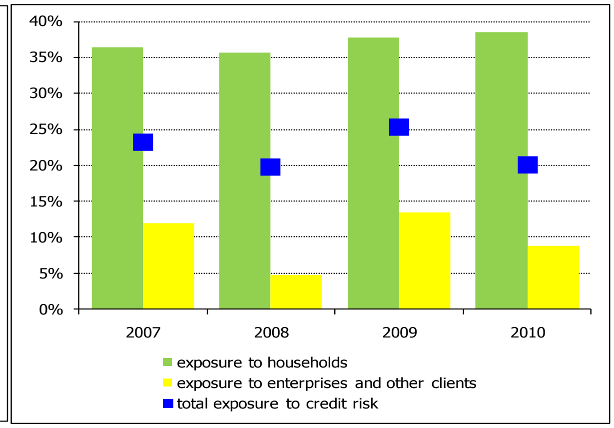


Figure 3.3.38
Share of the uncollateralized exposure in the total exposure

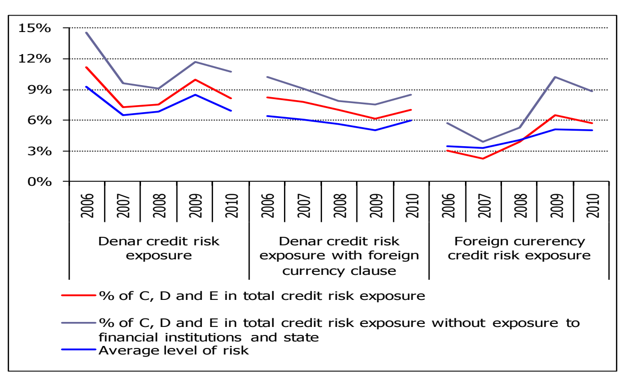


Source: NBRM, according to the calculations submitted by the banks.

The considerable share of the **bullet loans** emerges also as one of the sources of the banks' credit risk. These credits are structured in a way providing single payment of the principal by the credit user on the maturity date of the loan, which basically creates higher nonpayment risk for the banks. On December 31,2010, the bullet loans comprise 15.1% of the total credits on the non-financial entities (16.4% at the end of 2009), and almost all of them are extended to legal entities. The share of these loans in the total enterprises' loans is relatively high and at the end of 2010 it equals 24.4% (24.2% on December 31,2009). **Also, the exposure to the enterprises registers considerably higher concentration level compared to the exposure to households**. Thus at the end of 2010, the share of the exposure to credit risk towards the tenth largest clients in the total exposure to enterprises equals 23.6%, while the concentration level, measured according to this indicator with the households, equals 1.5%. By banks, the level of concentration, according to this indicator, for the exposure to enterprises ranges within 3.6% to 85.1% interval, with median of 33.7%, while the exposure to households within an interval from 0.2% to 14.9, with medial of 3.2%. The larger concentration and the high share of the bullet loans, in combination with the economy's current production structure and the small competitive capability of the domestic corporate sector, very clearly indicate that the main sources of risks for the Macedonian banks will be connected with the realization of the corporate sector in future as well.

One of the key factors for the riskiness of the banks' credit portfolio, and generally for the financial stability, is the **indirect credit risk t**he banks take. At the end of 2010, 45.1% of the credits of the natural persons and 67.5% of the credits of the enterprises were with currency component (foreign currency credits and Denar credits with FX clause, mostly dependant on the Denar exchange rate with the Euro).

Figure 3.3.39
Selected indicators for credit risk exposure by currency structure



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

Besides, 73.3% of the total credits of the non-financial entities accounted to the so-called adjustable interest rates, the level of which can be changed with unilateral decisions of the banks themselves. The use of such clauses creates indirect credit risk due to the possibility for increasing the financial burden of the debtors, given possible change in the Euro - Denar exchange rate, or upward change of the interest rates. Namely, in 2010, 60.7% of the total increase in the credit risk exposure to the non-financial entities (enterprises and households) was with currency component, with the largest portion (almost 90%) of this increase referring to the foreign currency credits, extended to non-export oriented enterprises. The reasons for their borrowing with FX clause attractive for the credit users in a period of strong credit growth[81], once again influence towards their increase - more favorable risks related to this form of financing. In 2010, the indicators for the riskiness of the credit risk exposure from the aspect of its currency structure deteriorated only with the exposure in Denars with FX clause. However, the highest average level of riskiness can be registered with the Denar exposure. In the analysis of the credit risk indicators, the maintenance of the fixed exchange rate of the Denar relative to the Euro as direct objective of the monetary policy should be taken into consideration, it prevents realization of indirect credit risk and accordingly, the changes in the indicators fails to mirror fully the sensitiveness of the credit users of currency risk.

Debt economic crisis in Greece and the possible effects on the Macedonian banking system

The current debt crisis in Greece dated from the last quarter of 2009 and at the beginning of 2010[82], while the unfavorable situation in the public finance of our neighboring country is evident also in 2011. The estimates for the new set of financial support to the Greek government and/or prolongation/restructuring of the current credit liabilities, impacted negatively on the entire European monetary union and on the financial stability in the Euro zone. The creditors of the Greek government (EU, ECB and IMF) condition(ed) the set of financial support with implementation of serious reforms in the country, public consumption cut and implementation of austerity measures by the Greek authorities, which caused deepening of the already commenced recessionary movements in the economy[83]. With the emergence of the social unrests, the credibility of the Greek authorities for implementation of structural and fiscal reforms, was once again put in question, which additionally influence to the increase of doubt of the investment public for the Greek capability to repay its debt and to cause rise in the risk premiums and the yield of the Greek state debt. Besides that, part of the creditors of the Greek government, especially other Euro area member states, have manifested differences regarding the form of the additional packages of assistance to be provided to Greece, especially if take into consideration that there are serious prospects and fears with some of the member states to transform the "financial solidarity" into a permanent transfer of resources from the more developed member states to the poorer member states, which actually transforms the Euro area into a fiscal union. Also, the maturity structure of the Greek public debt (until 2015 Greek securities of over Euro 125 billion will mature) hampers the process of accurate determining of the volume of the necessary financial support and creates uncertainty whether there will be a need for new financial packages in the years to come. Hence, there is objective perception in the international investment public that the Greek debt crisis can end with some of the darkest scenarios - official statement for the Greek's default, forced or voluntary exit of Greece from the Euro area, or debt restructuring with obligatory, or voluntary participation of the creditors from the private

[81] The reasons of the "popularity" of the credits with currency component in the Republic of Macedonia in the period of credit growth were identified in the Annual Report for the Banking System and the Banking Supervision in 2006.
[82] On April 23, 2010, the Greek government officially requested financial support from EU and IMF.
[83] The negative growth rate of GDP in the Greek economy was registered even in the last quarter of 2008 as a result of the global economic and financial crisis and the economy's fall, almost in continuity is followed by increase unemployment.

sector, which could emphasize even more the contagion effect on the international financial markets. It was confirmed by the international credit rating agency "Standard & Poor's", which rated Greece CCC[84] in June 2011, which is the worst class of credit rating of public debt, the so-called sovereign rating, in the world.

The current debt and economic problems of Greece are excellent example for the consequences from improper public finance management on the welfare of the residents of one country. Additionally, these problems practically proved some statements of the critics of the European monetary union - that the transmission of the monetary sovereignty on supra-national standing, with retaining of high degree of the fiscal sovereignty on national level, is combination with high degree of non-functionality. Namely, one of the main criteria when establishing certain monetary union should be that the countries comprising that union are representing an so-called optimal currency area, analyzed from the aspect of the structure and financing of their economic systems. In the case with the Euro area, number of critics, even in the period of its foundation, pointed to the fact that the cultural differences between the countries in Europe are present to such extent to which, in absence of uniform European fiscal policy, there are no arguments for considering this union as the optimal currency area. It seems that the developments with Greece proved these critics and showed that there is need of substantial redesigning of the mechanisms the Euro area functions with, which in certain manner is performed by establishing permanent European stability mechanism-ESM, which should become operative from 2013.

The turbulence in the Greek economy followed by adequate influence on the European monetary union can have appropriate effects also on the Macedonian banking system. These effects can be grouped in direct - those arising from the relations with the Greek entities, including the parent entities of the Greek banks, and indirect - which would arise from the influences on the global and local economic flows from the possible implementation of the reforms in the Greek economy. The credit risk exposure of the Macedonian banking system to the Greek residents is minor and it equals about 0.01% of the total credit exposure of the banking system. In the structure of the credit exposure to the Greek residents, there are no investments in debt instruments issued by the Greek government, while the most present are the off-balance sheet items with a share beyond 90%, as potential credit liabilities of the Greek residents to the Macedonian banks. In case of possible assumption for total non-collectability of the claims of the domestic banks from clients having certain business relations with the Greek economy[85] (and which together comprise about 2.0% of the total exposure to credit risk of the domestic banking system), the capital adequacy ratio at the level of the banking system would reduce to 14.1%. Hence, there is no big danger for the Macedonian banks to suffer direct losses because of the investment in Greek securities or for lending to Greek entities. On the other hand, at the end of the first quarter of 2011, the liabilities of the banking system of the Republic of Macedonia to Greek non-residents[86] equaled about Denar 4.7 billion (or about 1.7% of the total liabilities). In this context, the limitation prescribed in the Banking Law and in the Decision on the exposure limits ("Official Gazette of the Republic of Macedonia" no. 31/2008, 163/2008 and 43/2009) shout be taken into consideration, according to which the total exposure of a bank to individual person/entity which is shareholder with qualified share in the banks (including all legal entities and natural persons which, according to the Banking Law are connected with it) should not exceed 10% of its own funds. It means that the amount of the funds that the Macedonian banks - foreign banks' subsidiaries is limited, and they can place the assets with their parent banks (for example, loans, or other forms of liquidity loans). In the case with the two Macedonian subsidiaries of Greek banks, the allowed maximum amount does not exceed 1.6% of their total assets.

[84]The credit rating of Greece according to the credit rating agency "Moody's" in June 2010 is Caa1.

[85]This category of clients includes: domestic legal entities realizing net export to Greece, domestic natural persons, having liabilities based on credit operations to Greece, domestic legal entities having claims based on credit operations from Greece and claims from Greek residents. The average risk of these claims is relatively low and it equals 2%, which corresponds to the risk category A.

[86] It encompasses the liabilities based on deposits, credits (borrowings) and subordinated instruments to Greek residents, including the parent entities in Greece of the domestic banks.

The liquidity of the Greek banks should be observed also in context of ECB programs for ensuring liquidity of the banks in the Euro area member-states, which means conducting monetary operations and financial transactions with Greek government securities regardless of their credit rating. Possible termination of these operations, whether because of the decision of ECB, or because of the inability of Greece to service its liabilities, will impose serious liquidity challenges for Greek banks, thus making this potential effect the most important for the Macedonian banking system. Additionally, limited capacity of the Greek parent entities for financing of larger growth in the activities or large capital support to their subsidiaries can really be expected. As a result, their subsidiaries in the Republic of Macedonia will have to focus on the domestic deposit market and to the organic growth, which could cause further prudence in taking new credit risk. In final instance, the Greek banks that are present through the subsidiaries in other countries, and in case of possible problems with liquidity, or solvency, can be forced to sale its subsidiaries. In that case, because of the fact that the subsidiaries are separate legal entities in the Republic of Macedonia, they should be sold by adhering to the Macedonian regulations (licensing of new shareholder, transaction on the Macedonian stock exchange[87], adhering to the regulations for the payment operations with abroad etc.), but actually only the legal titular - ownership (shareholder) of the bank will be changed, not endangering their operational functioning.

The financial indicators and the performances of the Greek banks in 2010 registered negative trend, which having in mind the total economic movements in Greece, can be considered as expected. Together with the downgrade of Greece, also the credit rating of the banks in 2010 was downgraded, and according to the "Standard & Poor's" and "Moody's" it enters the high speculative category. However, it should be emphasized that both Greek banks present on the Macedonian market with their subsidiaries are the first, i.e. third largest bank according to the assets volume in Greece, and thus probably having a treatment of the so called systemically important financial institutions - SIFI's in the financial system of our southern neighbour, with which even in case of realization of the worst possible scenarios with the Greek economy or certain idiosyncratic shock, it can easily be subject to capitalization, restructuring, and even nationalizations and to continue their functioning as such.

Table no. 3.3.2
Selected data on foreign banks with subsidiaries in the Republic of Macedonia of higher

BANKS	Total assets (in billions of euros)	Treasurury's (T-bills & T-bonds) as % of assets	Financial result for 2010 (in billions of euros)	CAR / Tier 1 ratio (in percent)	Longterm credit rating and outlook, according to Standard & Poor's/Moody's (june 2011)	Share prices - june 2011	Share prisces - end of 2010	Share prices - end of 2009
Alpha bank Athens - Greece	63,8	8,2%	-56,3	13,6/11,9	CCC negative/B3 negative	3,12 euros	3,8 euros	8,2 euros
National bank of Greece - Greece	96,3	13,8%	-333,6	18,5/18,0	CCC negative/B3 negative	1,38 USD	1,68 USD	4,69 USD
Nova Ljubljanska banka - Slovenia	13,8	10,2%*	-183,0	10,0/6,5	n.a./Baa negative	not listed on stock exchange	not listed on stock exchange	not listedon stock exchange
Societe Generale - France	972,3	0,6%**	1362,0	12,1/10,6***	A+ stable / Aa2 negative	40,53 euros	40,72 euros	48,95 euros

Source: Revised financial statements of individual foreign banks (published on the web site of each bank), Bloomberg and the credit rating agencies "Standard & Poor's" and "Moody's".
*It includes exposure to Slovenian securities (6% of the assets) and to the securities issued by governments of other countries (4.2% of the assets).
**Exposure to Government securities, issued by the so -called peripheral EU countries (Portugal, Ireland, Spain and Greece).
*** The data on the capital adequacy pertain to the parent entity of the banking groups (parent banks), except for

[87] On June 13,2011, the market capitalization of "Stopanska banka" AD Skopje equals Denar 3,659.45 million. On December 24,2010 (when the last transactions with the shares of "Alfa banka" AD Skopje were registered), the market capitalization of "Alfa banka" AD Skopje equaled Denar 929.16 million. The total market capitalization of both banks together equals Denar 4,588.61 million (or approximately Euro 74.61 million).

the "Societe Generale", where the indicators for the capital adequacy are for the banking group.

Despite the direct effects of any scenario for resolving of the Greek debt crisis, indirect effects caused by this crisis are also of especial importance, not only on global and local economic flows, but on the Macedonian economy and the banking system, as well. Although these effects can hardly be quantified, they can most apparently be manifested through the possible "contagion" of other countries with vulnerable fiscal positions, or with big exposure to the Greek government (investments in government securities). On global level, risk reassessment the increase in the risk premiums are quit certain, with which the countries facing with fiscal and debt problems can have additional hurdles in managing public finance. Also, Greece, with its non-credible financial policies, among the global investment public, creates certain negative image for the regional countries, because of which, due to the mounting uncertainty in the business deciding, the risk profile of the Republic of Macedonia also worsens in the perception foreign investors. It can result in higher risk premiums with speculative credit rating (as it is the Republic of Macedonia which is rated with BB+ from "Standard & Poor's") and limiting inflow of direct and portfolio investments and harder funding of the balance of payment deficit. For the Republic of Macedonia, the movements on the capital and financial account of the balance of payments should be the main channel for feeling the negative effects of the Greek crisis. It is real to expect reduced Greek investments in the Republic of Macedonia (in 2009 Greece was the fourth largest foreign direct investor in the Republic of Macedonia) and lower export to Greece (in 2010 on the side of the export, Greece was our fourth largest trading partner), which can go on for a longer period. In this situation, the most impacted would be those domestic enterprises (primarily the subsidiaries of the Greek enterprises in Macedonia) the sale of which is intended to Greek market, or the operating and the finance depend on the available resources of the Greek owners. It can also happen that through gain reinvestment or through crediting (except to already mentioned limitation for the banks), these domestic enterprises to finance their Greek parent enterprises, which beside the undertaking of relatively large credit risk can mean outflow of liquidity from the Macedonian economy to the Greek one. At the end, it should be emphasized that certain positive effects of the decrease in the aggregate demand in Greece are not excluded, and thus the decrease in the income of the Greek households. Namely, there is still certain difference in the price levels of the numerous products and services between Macedonia and Greece, which can be motive for increasing the over border trade, and accordingly, the balance of payments' item "private transfers".

3.1.3. Risks of exposure to market variables

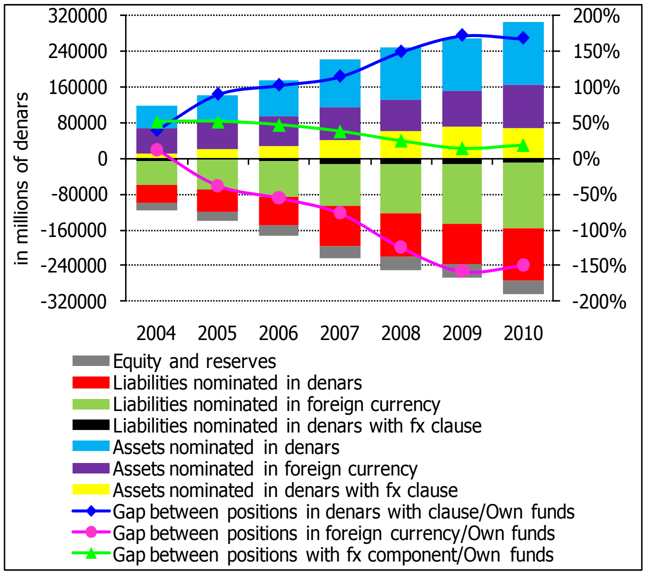
The market risk has minor significance for the banks in the Republic of Macedonia. Namely, the direct exposure of the banks to the movement of the market financial variables is insignificant. The trading book at the level of the banking system participated with less than 0.2% in the total on-balance sheet and off-balance sheet activities. With each of the banks, the amount of the trading portfolio is within the exception envisaged in the methodology for capital adequacy, which envisages instances when the banks are not obliged to calculate the capital requirement for market risk coverage.

On the other hand, the risk of exposure of market variables arises also from the sensitivity of the banking book to the dynamics of the financial variables. However, the banks practice, by incorporating clauses for certain financial instruments, to avoid market risk and transform it into another type of risk, primarily the credit risk, with adequate influence on the level of unmeasurable risks – strategic and reputational risk. Hence, it is additionally proved that the banks incline to avoid risk of change of market variables and to reduce at maximum the influence of the financial markets on the value of their assets and liabilities or on the amount of the expected cash flows. However, it is not practical, neither possible, to avoid fully the exposure to the movement of the market variables in the banking book, the banks' exposure to currency and interest rate risk arise from.

3.1.3.1. Currency risk

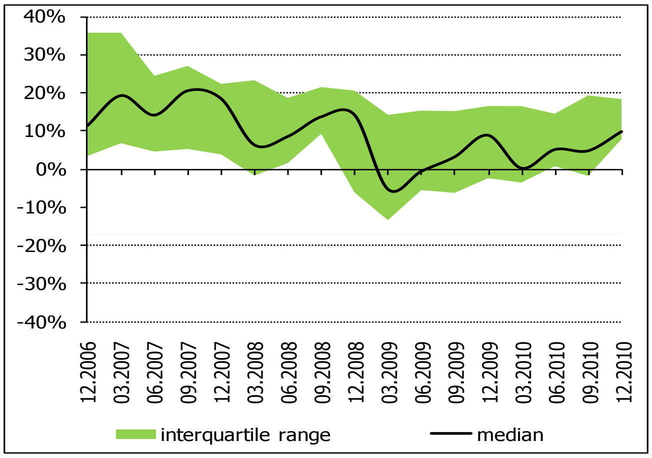
In 2010, **decrease in the share of the currency component in the assets and liabilities of the banks was registered,** because of the more dynamical growth of the Denar assets and liabilities. The main driving force for the faster increase in the Denar liabilities were the stimulating interest rate policies of the banks for Denar savings and consequently, increase in the Denar deposits. The increase in the Denar assets was mainly caused by the increase in the investments in Denar liquid assets. But, beside the more dynamical rise in the Denar assets and liabilities, at the end of 2010 more than half of the assets and liabilities of the banks are with currency component. By individual currencies, almost 90% of the assets and liabilities with currency component are denominated in Euros. In 2010, for the first time in the last five years, the **gap between the assets and liabilities with currency component deepened**, i.e. the increase in the assets with currency component was higher than the rise in the liabilities with currency component. Despite this growth, the share of the gap with currency component in the own funds of the banks is on moderate level of 19.0%. The gap between the assets and liabilities with currency component in the own funds, ranges from -5.3% to 32.9%, by individual banks. During 2010, the banks mainly maintained the exposure to currency risk within the prescribed limit for aggregate foreign currency position.

Figure 3.3.40
Structure of the assets and liabilities of banks with currency component and correlation between the gap and the own funds



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

Figure 3.3.41
Dispersion of share of gap between banks' assets and liabilities with foreign currency component in own funds



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

Deriving implicit currency risk premiums in the banking system of the Republic of Macedonia

Having in mind the fact that the banks in the Republic of Macedonia are active on both Denar and foreign currency credit and deposit market, implicit currency risk premiums from their interest rates layout can be derived i.e. if any, the banks can demand them on the side of assets (from their credit users in Denars), or offer them on the side of liabilities (i.e. they the depositors demand them in Denars).These implicit risk premiums should represent the price for protection from currency risk which is incorporated in the interest rates on the Denar banking products. They are obtained as a difference between the Denar interest rate (on the positions without currency clause) and the adequate foreign currency interest rate[88], especially for the newly extended credits and newly accepted deposits, as well as for the entire amount of credits and deposits.

Figure 3.3.42
Derived implicit currency risk premiums of the credits and deposits

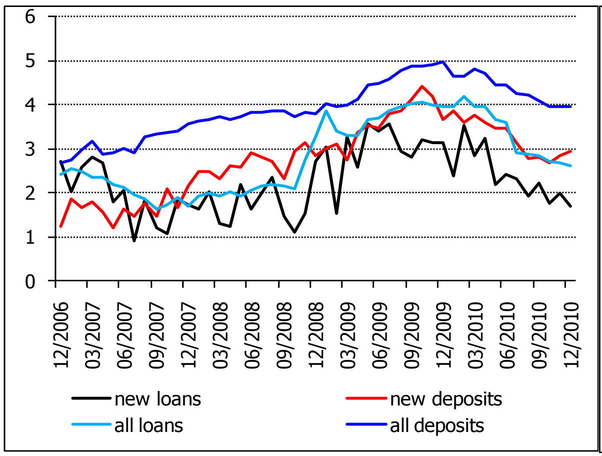
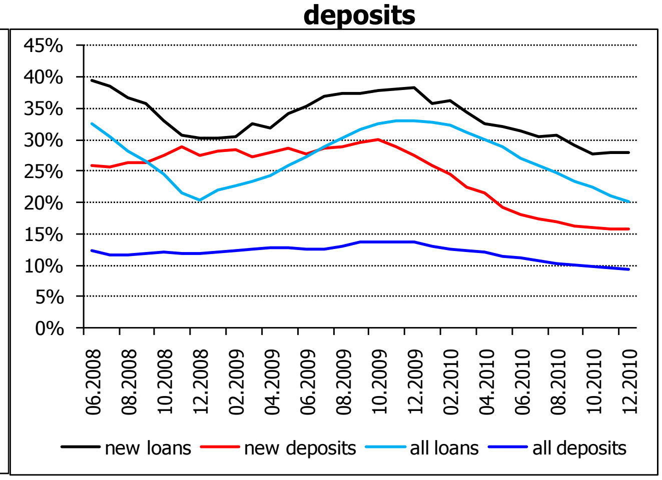


Figure 3.3.43
Variation coefficient of the derived risk premiums for current risk on credits and deposits



Source: NBRM, internal calculations, for the variation coefficient it is calculated by using the monthly time series based on thirty data

When they are interpreted, it should be taken into consideration that they are only approximate values of real currency risk premiums, which in environment of developed financial markets and opulent financial instruments offer, would be obtained by analyzing the market based information. There are no such instruments in the Republic of Macedonia, so currently, the only possibility remained for perceiving the "price" for protection from currency risk is the difference between the interest rates on the bank products. Additionally, the amount and the changes of the interest rates on the bank credits and deposits not necessarily follow the movement of the interest rates on domestic and foreign international markets, but they can be adjusted based on unilateral decision of the banks, which, actually contribute to losing used value of the currency risk premiums, from the aspect of the economic significance. At the end, it should be taken into consideration that weighted interest rates are compared and they are not differentiated by maturity blocks and by currency. Hence, the amount of such obtained currency risk

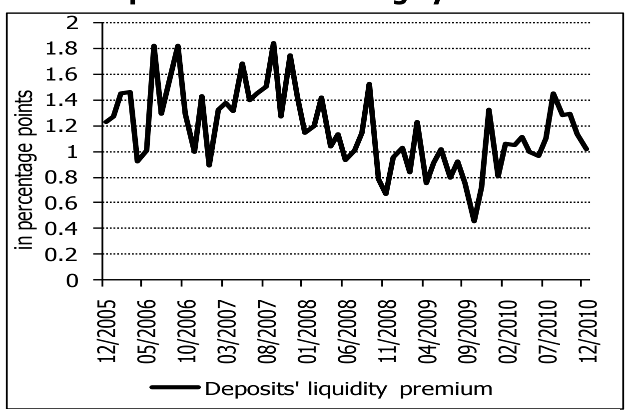
[88] Basically, the domestic banks protect from the currency risk by incorporating currency clauses in the credits, so this premium can be obtained as a difference between the Denar interest rates and the adequate Denar interest rates with FX clause. But, having in mind that on the side of the deposits, the Denar deposits with FX clause are not product that is offered to large number of clients and has minor significance in the total households' saving, more representative premium for currency risk is obtained by using the lending interest rates in foreign exchange. For the purpose of comparability also on the side of assets, foreign exchange interest rates are used, which actually means that the shown premiums on the side of assets, would maybe be slightly lower.

premiums is not so relevant, but their direction of movement, which is downward since the end of 2009, which indicates decrease in the price for currency risk protection.

It can be perceived that the largest currency risk premium is incorporated in the interest rate on the current Denar deposits, which from one hand, can be explained also with the stimulating policy of the banks for attracting Denar deposits for which, by the way, the requirement for the compulsory reserve is the smallest, i.e. they can use the largest portion for funding the yield-bearing activities. But the other significance of the largest currency risk premium with the Denar deposits indicates that the domestic depositors, when decide to save in foreign currency, pay relatively high price for currency risk protection, which is continuously higher that the one the banks incorporate in Denar credits, i.e. they charge for the credit activity. If the secondary market for Denar government securities in the Republic of Macedonia is in more advanced development stage, and if yield curve of Denar interest rate can be derived thereof, the amount of the currency risk premiums of the banking products could be compared with difference of the yields of the domestic and comparative government securities. However, the risk premiums by definition are variable categories, which can be proved also with their relatively high variation coefficients. However, downward trend of the variation coefficient of the implicit currency risk premiums in 2010 can be evidenced, which is sign for lower movements on the foreign exchange market in this period and the stabilization of the expectations of the economic entities.

Another element from this analysis that could be instituted is the so-called liquidity premium, i.e. the difference between the currency risk premiums on the total deposits and the newly accepted deposits. In its essence, this difference shows a kind of implicit premium the banks are willing to pay to the current depositors in order to keep their deposits in their sources of funds, assuming that no change in the currency and maturity preference of the depositors will occur. Although for such a created liquidity premium the same limiting factors as for the currency risk premium are valid, it can be used as a signal for the level of the competitiveness on the deposits market, and thus for the level of liquidity pressure in the banking system, having in mind that the deposits themselves are the main source of financing of the banking activities.

Figure 3.3.44
Derived implicit premiums for holding the deposits in the banking system



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

The thing that mirrors the transformation of the currency risk in other risk forms is the gap distribution between the currency component and the Denar component with FX clause. Namely, the gap with the currency component arises also from the high positive gap between the assets and liabilities in Denars with FX clause and almost similar negative gap in foreign exchange. The main motivation for this occurrence was the simultaneous maturity and currency transformation of the banks' assets in the previous ten-day period, by implementing the banks' policies for larger crediting with FX clause and financing of that credit growth with transformation of the foreign exchange liquid assets from foreign banks in placements in the domestic economy. Hence there is clear connection between the indirect credit risk the banks undertake by extending credits with currency component to residents and deepening of the positive gap between the assets and liabilities in Denars with currency clause and the negative gap between assets and liabilities in foreign exchange.

3.1.3.2. Interest rate risk in the banking book

The presence of the interest rate risk in the banking book in the Republic of Macedonia is moderate, with a share of the total weighted value of the banking book in the own funds of 0.6%. The marginal significance of the interest rate risk in the banking book arises from the banks' practice to use more the adjustable interest rates in most of the key activities (positions) - credits and deposits. These interest rates, at the level of the banking system, take the largest share in the structure of the interest sensitive positions on the side of both, assets (46.0%) and liabilities (60.4%), which actually means that the change in the amount of the interest rates of those instruments is made on the basis of unilateral decision of the banks' adequate body. Oppositely, the variable interest rates, the level of which depends on the movement of the selected reference interest rates, participate with 10.3% and 7.7% in the interest sensitive assets and liabilities, respectively[89].

Reasons for the existence and utilization of the adjustable interest rates by the banks in the Republic of Macedonia

The banks resort to adjustment of the amount of the interest rates for meeting the set profit targets, primarily in conditions when they fails to be fulfilled according to the set plans. By adjusting the interest rate level, the banks, actually, unilaterally and subjectively change the own yield based on crediting, which basically show that they incorrectly assessed the risk when the credits were initially extended. The second reason because of which the banks adjust the interest rates is related to the search of new or maintenance of the current sources of funds, since the adjustable interest rates on the side of the liabilities, unilaterally change the yield of the depositors.

From the aspect of managing interest rate in the banking book, the banks are required to use certain assumptions for determining the probability and the frequency of the change in the interest rates on the positions with adjustable interest rates and accordingly, to disseminate the positions of the banking book into adequate maturity blocks. The analysis of these assumptions shows that the determining of the probability and the frequency of the change in the interest rates by the banks is quite simple, not making any deep analysis of the manner of dependence of the position's currency with its interest rate, or the type of the position and the changes of the interest rates. In other words, it is general conclusion that the banks mainly "adjust" the amount of the interest rates, depending on the following: 1) what is the banks' position regarding the net interest margin, the deviation of the factual from the planned financial result, 2) the need of liquid assets and competiveness pressure by other banks; and 3) what is the size, the direction and the duration of the monetary policy signal, with the reaction of the banks in the monetary policy relaxation being usually smaller and more cautious compared to the reaction in case of monetary policy contraction.

The common practice in the countries with more developed financial markets is to connect the "variability" of the interest rates on the banking products with the implementation of fixed and variable interest rates, but in combination with previously known „rollover period" with the fixed interest rates, or the so called „re-pricing period" with the variable interest rates. The adjustment of the of the interest

[89] The banks in the Republic of Macedonia actually use "adjustable" margin over the selected reference interest rate, on the credit products with variable interest rates placed with the domestic economic entities. This adjustment should differ from the change in the size of the margin with the variable interest rates, as result of irregular payment of the due liabilities by the debtor, or non-adherence by the debtor, or non-adherence to the requirements that arise from the credit agreement. This is enabled by the Law on Obligatory Relations ("Official Gazette of the Republic of Macedonia" no. 18/01, 84/08 и 161/2009), which allows change in the amount of the interest rate to the maximum allowed in instances when the debtor fails to settle the due liabilities on time (Article 389) and according to the economic and financial logic it reflects the higher credit risk in the transactions.

rates according to the banks' unilateral decision is common only with those products failing to have defined payments plan (for example current accounts, transaction deposits, balances on the credit cards, open irrevocable credit lines etc.) and in this context it is considered only as a type of liquidity price the banks ensure to the client. Commonly, the adjustability of the interest rates is related to the fear of the investors, depositors, banks' management about the capability to manage and to maintain macroeconomic stability in certain country, i.e. its is a consequence of the so called „original sin hypothesis". According to this theory, the countries face with inability to borrow in their national currency on a long-term with fixed interest rates, because the creditors have no confidence in their authorities' capacity to maintain the inflation. This theory explains the motive for the adjustment with the Denar interest rates, but in the Macedonian banking the adjustability with the interest rates dominates, regardless of the maturity or the currency of the instruments. Additionally, since its independence, the Republic of Macedonia has clear record as for the inflation, objectively attaining remarkable success in its control, much better than in most of the countries in the region.

The unilateral adjustment of the interest rates is related also to the phenomenon of liberalization of the interest rates. The tenor of the liberalization, which as a process spreads over the transitional countries and the emerging economies since the end of '80 of the previous century, together with the all social developments, was to have the determining of the amount of the interest rates as one of the functions of the financial market, such as in the developed market economies. By liberalizing the interest rates, the Government withdraws from the possibility to directly determine the amount of the interest rates on certain categories of banking (credit and deposit) products. Thus, every market participant would have the possibility to determine the degree of the acceptable risk in the financial transactions and to determine the price of such accepted risk in the transactions (the so called „risk pricing"). In other words, the market participants should have full freedom in determining the amount of the interest rate as a measure for the risk in the market financial transactions, regardless of the direct influence of the Government and its bodies. The final effect should be improvement of the process of distribution of the credit funds and development of sound and functional financial markets and possibility for utilization of open market operations, as an instrument of the monetary policy. The Republic of Macedonia, in the monetary independence and the establishment of the basic conditions for the functioning of the domestic financial system, made the first step - liberalization of the interest rates in the transactions between the financial institutions and the professional investors (other financial institutions and big corporate clients), but it still failed to essentially finalize the entire process of liberalization of the interest rates in the transactions between the financial institutions and clients, through applying adequate regulations, especially those referring to the functioning of the financial system and operating of the financial institutions. Hence, in the Republic of Macedonia, the implementation of the interest rates liberalization process in '90 of the previous century can be better explained as a process of transfer of competencies for administrative determining of the amount of the interest rates on the financial products (use of the so-called adjustable interest rates) from the Government and its bodies, to the banks. This throws new light on the reasons for the (non)functioning of the transmission mechanism of the monetary policy, i.e. for the marginal significance of the money market in the operations of the banks in Macedonia.

The adjustment of the interest rates as unilateral manner of their change should to be perceived also through the prism of the contractual relations and the protection of the consumer rights. Some aspects related to the interest rates are regulated with the Law on Obligatory Relations, but this Law fails to contain provisions that would define the fixed, variable, or adjustable interest rate, neither the manner for changing the interest rates in the already concluded agreements for credits and deposits. But, the Law sets the highest rate of agreed interest, which can be applied in the legal operations. This highest rate on the Denar claims is presented as determined margin over the interest rate on the basic instrument of the open market operations of NBRM (CB bills), i.e. over the one-month EURIBOR for the foreign exchange and the Denar claims with clause. It should be emphasized that regardless of the foreign currency of the credit, for the contractual interest rate, upper limit over the one-month EURIBOR is set. The current solutions in the Republic of Macedonia for limiting the maximum allowed margin in the credit agreements over the interest rate on the CB bills, not only fails to allow the market participants to determine the price of the risk in the transactions, or the price of the sources of funds, but it is a step backwards in the interest rate liberalization process to their administrating, as well. In April 2011, new Law on Consumer Protection of Case of Loan Agreements[90] was adopted, which, for the first time in the Macedonian legislation, the terms such as "interest rate" and "fixed interest rate" are defined. Interest rate is defined as fixed or variable percentage presented on annual basis on the used portion of the loan. According to this Law, "fixed interest rate" means that the creditor and the consumer agreed on one interest rate for the duration of the consumer loan agreement or for several interests on loans for certain periods, presented exclusively in fixed percentage. However, the same Law fails to define the terms "variable interest rate" and "adjustable interest rate. This leaves a possibility for the banks' own interpretation and determining of the meaning of the term "variable percentage" of the interest rate definition is created, and to use it for explaining the adjustment of the amount of the interest rate. Additionally, this Law has relatively limited effect - it refers only to one type of users of credit products and it fails to refer to the rates on the deposits, the housing, or the mortgage credits, which still fails to resolves systematically the possibility for the unilateral adjustment.

The minor share of the interest rate risk in the banking portfolio is due to the layout of the current regulatory environment, which practically allows (it does not ban) the use of the adjustable interest rates in all banking products, and not to the fact that the interest rate risk in the banking book is avoided by netting of the positions with the same interest rate in maturity blocks, or that it is hedged by using derivate instruments on the interest rates. In case of possible changes in the regulations (for example within the domain of obligatory relations, consumer protection, financial services agreement, housing and mortgage crediting, etc.) with which framework for utilization of clauses for unilateral adjustability of the interest rate will be established, the interest rate risk for the banks would acquire different volume and dimension. Namely, given modified regulatory environment, the decisive importance would have the treatment of the current positions with adjustable rate, i.e. whether they would be reclassified as positions with fixed interest rates, or positions with variable interest rates.

Figure 3.3.45
Structure of the interest sensitive assets according to the items they consist of and the type of the interest rate

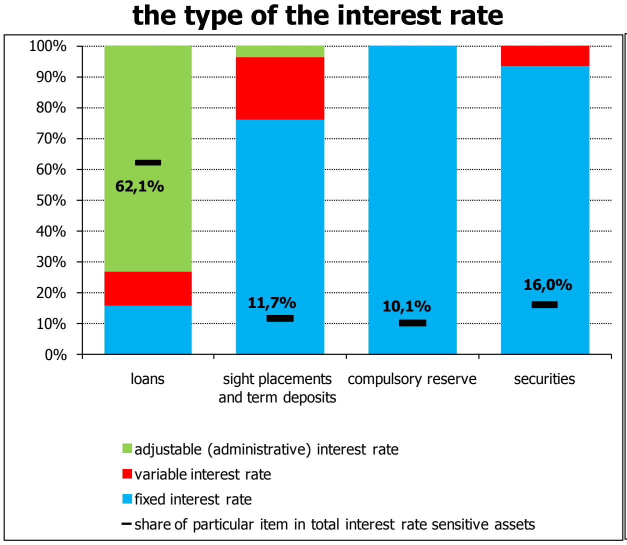
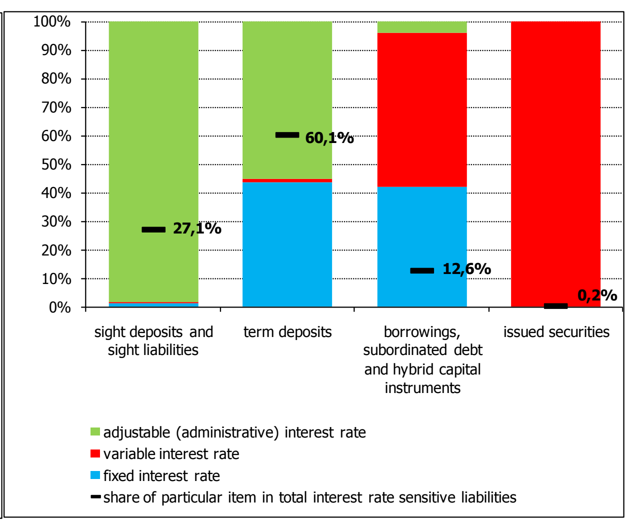


Figure 3.3.46
Structure of the interest sensitive liabilities according to the items they consist of and the type of the interest rate



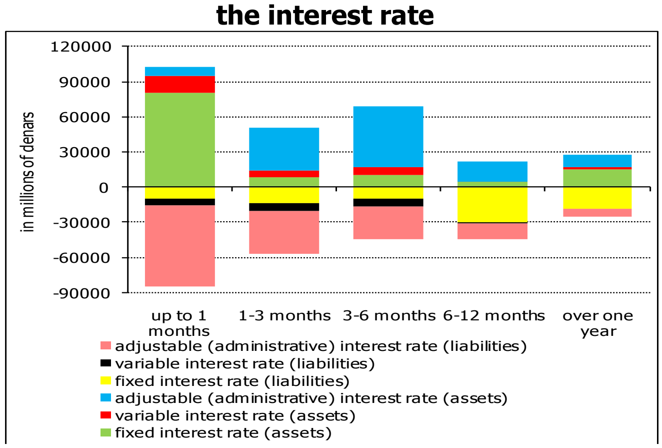
Source: NBRM, according to the data submitted by the banks.

[90] "Official Gazette of the Republic of Macedonia" no. 51/2011.

Analyzed by the items comprising the interest sensitive assets, the dominance of the adjustable interest rates is most apparent with the credits. The credits with adjustable interest rate in the total credits participate with 73.3%, while 99.0% in the total assets with adjustable interest rates. In this manner, in case of upward adjustments of the interest rates, the banks transform the interest rate risk with the credits into indirect credit risk. Regarding the other financial assets, which create 37.9%of the interest sensitive assets, the most evident is the share of the positions with fixed interest rates. On the side of the interest sensitive liabilities, almost full presence of the adjustable interest rates with the sight deposits was registered. Regarding the time deposits, the share of which in the interest sensitive liabilities is the largest and equals 60.1%, beside the adjustable, fixed interest rates as well take considerable share. The variable interest rates are most common with the liabilities based on credits, hybrid capital instruments and subordinated debt.

According to the maturity structure of the interest sensitive assets and liabilities, almost all maturity blocks register high share of the assets and liabilities with adjustable interest rate, followed by the positions with fixed interest rate. Exception from this is the segment of the assets to one month maturity, where the largest position accounts for the assets with fixed interest rate because of the classification in this segment of the monetary policy instruments - reserve requirement in foreign exchange and in CB bills.

Figure 3.3.47
Maturity structure of the interest sensitive assets and liabilities according to the type of the interest rate



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

3.1.4. Liquidity risk

The increase in the banks' liquid assets resulted in **improvement of the indicators for covering different categories of liabilities with liquid assets**. Thus the coverage of the short-term liabilities with liquid assets in 2010 increased by 9.5 percentage points, reaching 47%, which is the highest level after 2007. On the other hand, the sharp downward changes of the liquid assets during the crisis period and the post crisis increase, increased its variability, and starting from the second half of 2009, increase in the VAR calculated for the liquid assets was registered. This measure shows the maximal monthly drop in the liquid assets given selected level of confidence. At the end of 2010, with selected confidence level of 99%, VAR for the liquid assets totals Denar 5,708 million[91].

Figure 3.3.48
Selected indicators for the liquidity risk

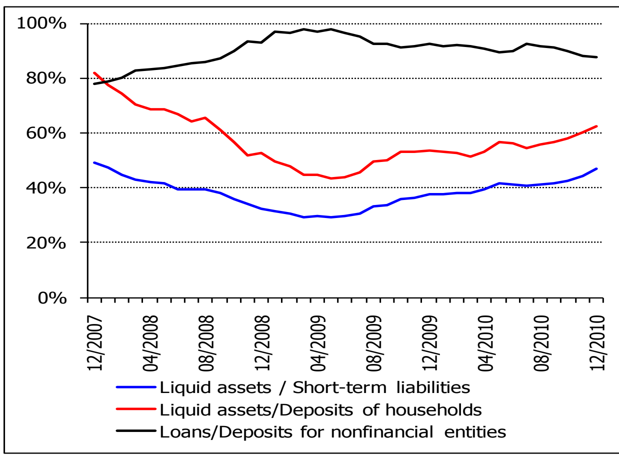
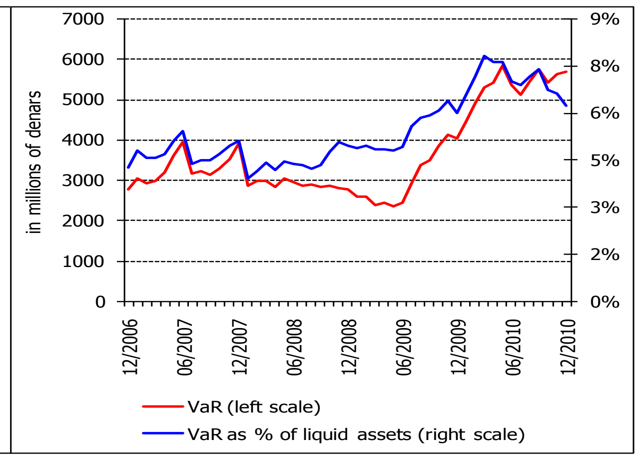


Figure 3.3.49
Value at risk for the liquid assets



Source: NBRM according to data submitted by the banks (for the indicators) and internal calculations of NBRM (for the value at risk) by using time series of monthly data.

High degree of utilization of the deposit potential as a source for funding of the activities is still registered. The correlation between the credits and deposits with individual banks at the end of 2010 ranges between 33.5% and 153.8%, with a median of 88.5%, which shows that there are banks in the system which finance their credit activity growth from non-deposits sources. Thus these banks are relatively more sensitive to external shocks and by trying to attract new deposit sources of funds they can apply more aggressive interest policy. This once again proves the statement that the possible larger revival of the credit activity is inevitably connected to the process of larger domestic savings, which beside further favorable expectations of the depositors for the macroeconomic environment, is also time consuming. It can be proved also with the relatively low variation coefficient (CV) of this indicator (credits/deposits), which points to slow and gradual changes. On the other hand, the

[91] VAR (in English: Var - value at risk) for the liquid assets of the banking system is calculated on the basis of the monthly changes of its composite components (analogy of 4 instruments portfolio), for 30-month period for assessment of the volatility and the correlations among the components. The changes in the liquid assets usually fail to adhere to the standard normal distribution, and therefore lognormal distribution id used, since it better describe the changes of the liquid assets components. If transform the obtained VAR for the liquid assets of the banking system from monthly into annual, than it would equal Denar 19,776 million.

commenced downward trend of the variation coefficient (CV) of the indicators credits/deposits and liquid assets/total assets in 2010, shows that the domestic banks' preference for liquidity stabilizes.

Figure 3.3.50
Dispersion of the indicator credits/deposits in the banking system

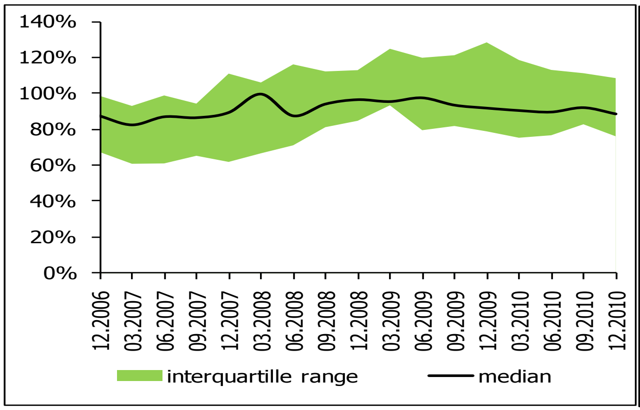
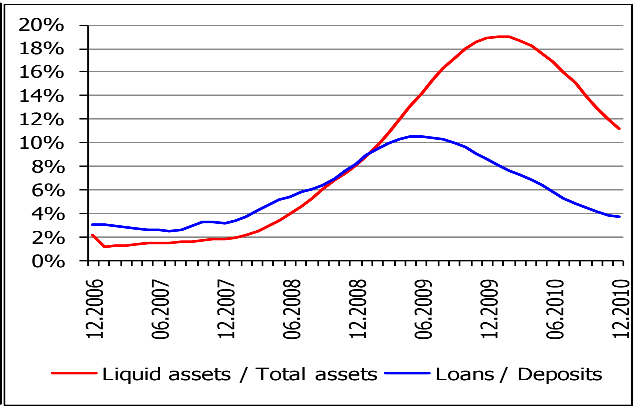


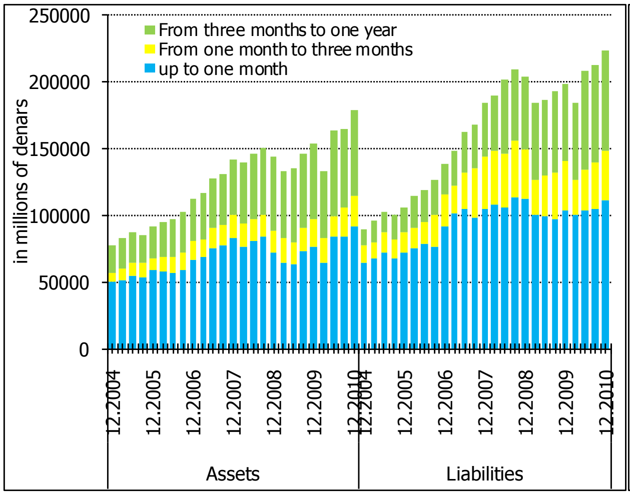
Figure 3.3.51
Variation coefficient of the indicators credits/deposits and liquid assets/total assets



Source: NBRM according to data submitted by the banks and time series of monthly data and moving 30-month average.

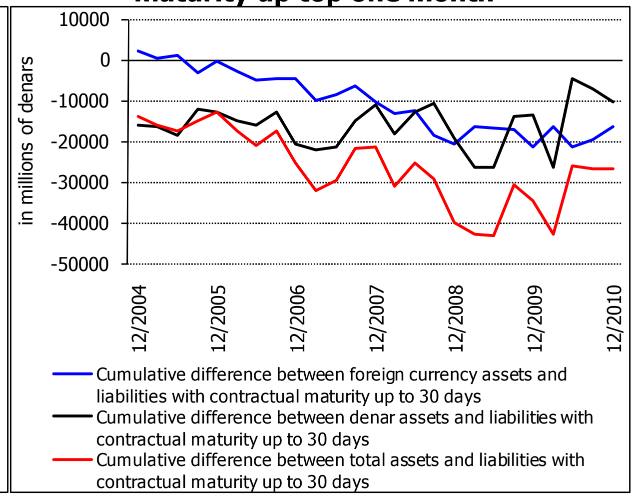
The increase in the assets with residual contractual maturity up to one year mainly arises from the liquid assets growth. The extending of the average maturity of the liabilities is explained through the rise in the short-term time deposits and the foreign exchange loans of the banks within the maturity segment up to one year. Another indicator pointing to reduced level of liquidity risk for the banking system is the gap narrowing (cumulative difference) between the residual contractual maturity of the assets and liabilities in 2010, which is especially evident in the maturity segment up to one year. From the aspect of the currency, with the increase in the investments in CB bills, the cumulative gap up to 30 days between the Denar assets and liabilities contracted, while the foreign currency gap remained relatively stable.

Figure 3.3.52
Residual contractual maturity between assets and liabilities up to one year



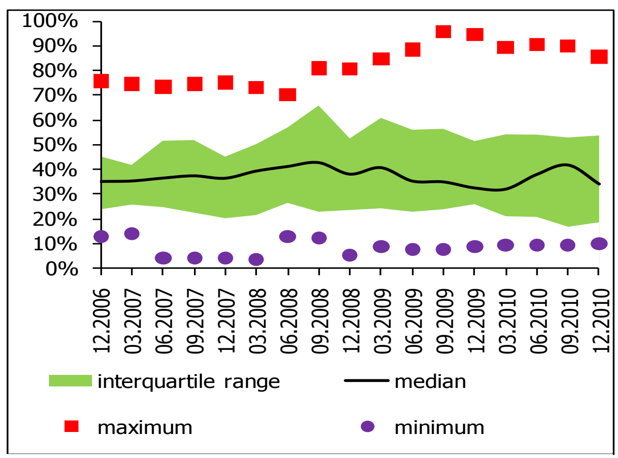
Source: NBRM according to data submitted by the banks.

Figure 3.3.53
Cumulative difference between assets and liabilities according to contractual residual maturity up top one month



Possible source of liquid blows on the banking system in the Republic of Macedonia is the high deposits concentration degree (the 20 largest depositors). Namely, the median of the level of concentration of the banking system in the last several years commonly ranged from 30% to 40% of the deposits. Some of the banks registered quite high concentration, i.e. with one fourth of the banks it equals more than 50%. The high deposits concentration level is additional source of liquidity risk for these banks and it also encumbrance their competitive ability, since, by rule, it reflects on the interest rate policy.

Figure 3.3.54
Concentration level of the deposits



Source: NBRM according to data submitted by the banks.

3.1.5. Capital position (solvency)

In the several previous years, the global banking industry experienced few crisis periods, which had one mutual characteristic - they illustrated the importance of the own funds' quality for dealing with the financial tremors. This was one of the key motives to modify the international rules for determining the banks' capital (Basel 3), which were aimed at intensification (larger quantity, as well as quality) of the banks' solvent position on global level. Opposite to the international developments, the banking system of the Republic of Macedonia enters into group of banking systems which did not require capital infusion from the Government to overcome the crisis period. In 2010, the Macedonian banking system, in conditions of conservative assets investment policy (CB bills were the main growth generator), registered an annual increase in the own funds of 7.6%. The increase in the own funds was a result of the gain reinvestment in 2009, successfully realized new issues of shares, new subordinated instruments and smaller loss presented in 2010. The capital enlargement of some banks through new issues of shares should also be emphasized, which is extremely favorable event for the banking system and its stability. The movements with the own funds' components enabled maintenance of their relatively quality structure. Namely the core capital, with a share of 85%, remains to dominate in the total own funds of the banks in the banking system.

Figure 3.3.55
Annual increase in the own funds, risk weighted assets and core capital (TIER 1)

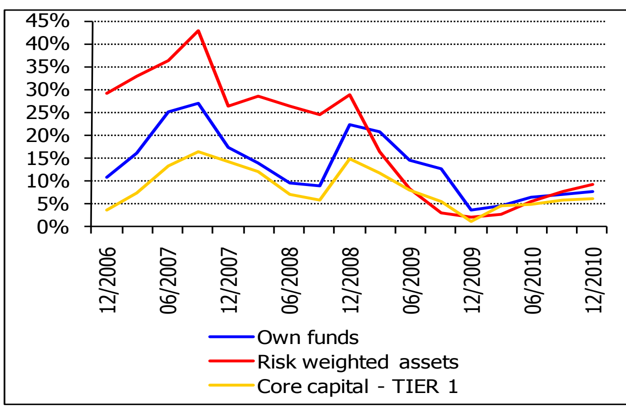
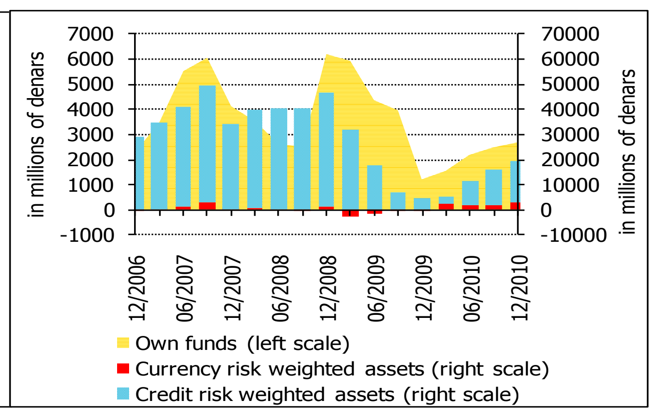


Figure 3.3.56
Absolute annual increase in the own funds and in the components of the risk weighted assets



Source: NBRM according to data submitted by the banks.

The recovery of the banks' credit activity in 2010 and the widening of the gap between assets and liabilities with currency component caused increase in the amount of the capital requirement for risk coverage. At the end of 2010 the share of the capital requirement for risk coverage in the total own funds equaled 49.6% and it registered annual increase of 0.8 percentage points. The fact that just more than a half of the banks' own funds are over the capital level for risk coverage shows that the banking system as a whole has sufficient volume of own funds for absorption of the unexpected losses. The structure of the capital requirement for credit risk coverage is dominated by the capital intended for covering credit risk of the enterprises with a share of 54.2%, followed by the capital requirement of the households' credit risk with a share of 31.5%. These shares are actually mirroring of the basic sector components of the credit exposure.

Figure 3.3.57
Dynamics of the credit risk weighted assets, according to the risk weights

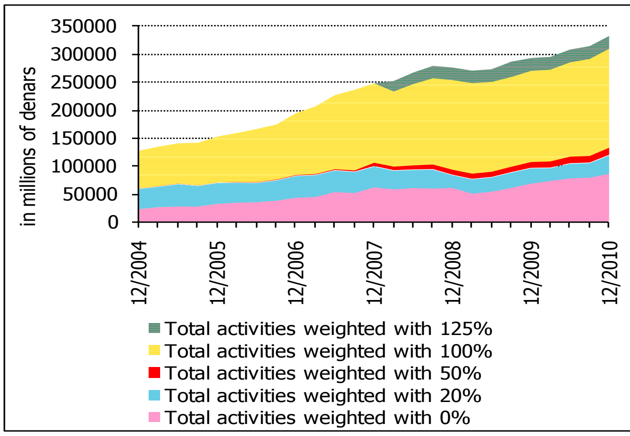
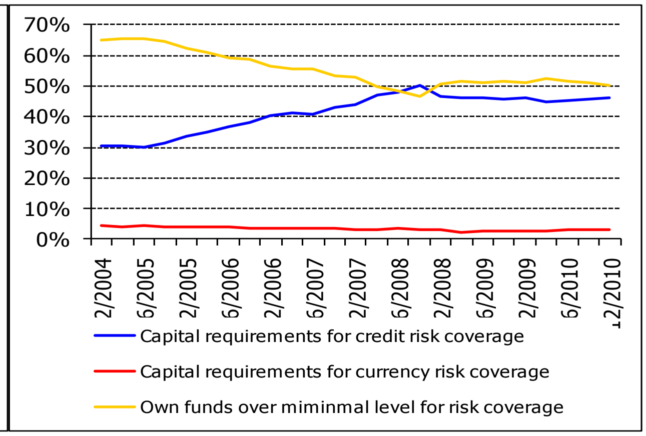


Figure 3.3.58
Distribution of the own funds by risks



Source: NBRM according to data submitted by the banks.

In 2010, the risk weighted assets registered accelerated annual growth compared to the previous year. The increase in the risk weighted assets of 9.2% primarily arises from the rise in the credit risk weighted assets, the share of which in the risk weighted assets equals 94%. The dynamics of the individual components in the risk weighted assets once again proves the statement for bigger caution of the banks in the placement of the assets. Namely, the increase in the risk weighted assets was rather moved towards the items with smaller risk weights. However, neither the increase in the own funds, nor the increase in the risk weighted assets is closer to the volume characteristic for the pre crisis period.

The indicators for the solvency of the banking system in 2010 showed stable movement and they are on satisfactory revel. The capital adequacy ratio equals 16.1% and it registered annual decrease on 0.3 percentage points, while the TIER 1 indicator[92] it equals 13.4%. The stable capital position is additionally proved also with the leverage indicator, which is relatively high for the Macedonian banking system[93].

[92] Tier 1 indicator is calculated as a correlation between the core capital (prior to the deductible items for the core and the additional capital) and the risk weighted assets.
[93] The amendments to the Basel Capital Agreement (the so-called Basel 3) introduce minimum standard for the banks' leverage indicator, defined as a correlation between the capital (core capital) and the on-balancer sheet and off-balance sheet assets (including also the derivatives), which equal 3% and will be calculated as a quarterly average.

Figure 3.3.59
Dynamics of the solvency indicators

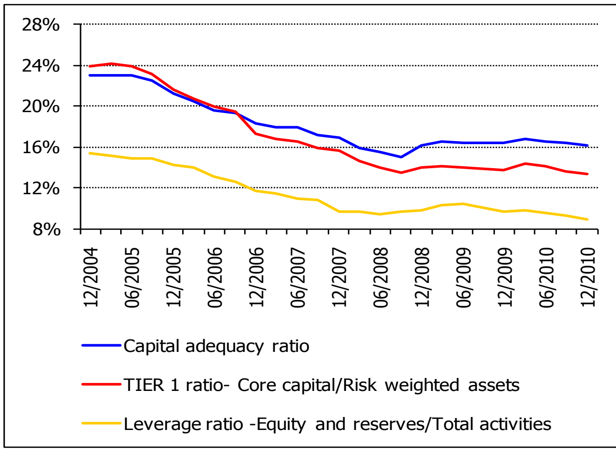
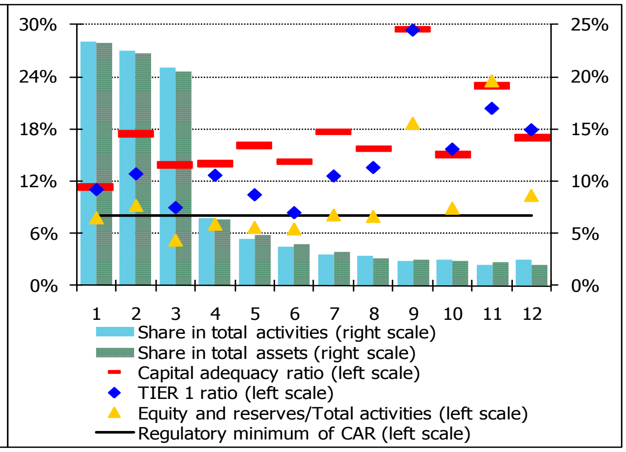


Figure 3.3.60
Indicators for the solvency and leverage of certain banks* on December 31,2010



Source: NBRM according to data submitted by the banks.
*Note: Banks with a share higher than 1% in the total assets at the level of the banking system are presented. For the remaining six banks, with joint share smaller than 1% in the total assets at the level of the banking system, the capital adequacy ranges from 30.3% to 83.7%. Their share in the total assets equaled 3.8%.

However, analyzed by banks, strong inverse connection between the solvent position the volume of the total activities, i.e. the banks' size was registered. In addition, certain banks register considerable presence of additional capital in the own funds' structure, and thus relatively higher leverage, which can indicate larger sensitivity of the solvent position in event of unexpected shocks. Therefore, the velocity for reducing the solvency indicators in the last years, with certain banks was not adequate to the development degree of the risk management systems. With some of the banks, a need of strengthening of the capital position imposed, in correlation with the volume of risk they undertook. Regardless of the stable solvent position, the main challenges for the banks will be directed towards searching new possibilities to improve the solvent position, apart from the two possibilities which are most commonly used - retained gain and capital infusion from the parent entity.

3.1.6. Stress test simulations for the resistance of the banking system to hypothetical shocks as of December 31,2010

On December 31,2010, according to the conducted stress test simulations for the resistance of the banking system and individual banks in the Republic of Macedonia to possible shocks showed that the banking system is still relatively resistant. However, when performing certain simulations, decrease in the capital adequacy with individual banks below 8% is registered.

These stress tests simulations are based on the implementation of eight hypothetical simulations of which:
- three simulations for the isolated credit shock (increase in the exposure to credit risk classified in the risk categories C, D and E of 10%, 30% and 50%),

- fourth simulation as a combination of credit and interest rate shock (increase in the exposure to credit risk in the risk categories C, D and E of 30% and increase in the domestic interest rates of 5 percentage points),
-fifth simulation as a combination of credit and foreign exchange shock (increase in the credit risk exposure in the risk categories C, D and E of 50% and depreciation of the Denar foreign exchange rate relative to the Euro and US Dollar of 20%),
- sixth simulation as a combination of the shocks on the side of the credit risk, the foreign exchange risk and the interest rate risk (rise in the credit exposure in the risk categories C, D and E by 50%, depreciation in the Denar foreign exchange rate relative to the Euro and US Dollar of 20% and increase in the domestic interest rates of 5 percentage points),
-seventh simulation for appreciation of the foreign exchange rate relative to the Euro and US Dollar in the amount of 20%,
-eighth simulation for simultaneous reclassification in the risk category C of the five largest credit exposures to non-financial entities (including the connected entities).

Table 3.3.3
Results of the stress tests simulations for the resistance of the banking system and individual banks to hypothetical shocks, as of December 31,2010

Simulation	CAR for banking system, before simulation	CAR for banking system, after simulation	Bank with lowest CAR, after simulation	Number of banks with CAR after simuation is lower than CAR for banking system after simulation
1	16,1%	15,5%	10,4%	6
2	16,1%	14,2%	9,0%	5
3	16,1%	12,9%	7,6%	7
4	16,1%	14,2%	9,0%	5
5	16,1%	12,8%	7,6%	7
6	16,1%	12,8%	7,6%	6
7	16,1%	16,2%	11,1%	6
8	16,1%	13,4%	7,4%	5

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

Besides, simulation for worsening of the credit exposure risk to non-financial entities was conducted, which represents a migration of certain percentage of exposure of each risk category to both following categories with higher risk degree, where they are distributed in equal amount. Additionally, in case of the simulation, identical level of average risk is assumed for each risk category, as it was before the exposure migration. The objective of the simulation is to determine the negative effect on the capital adequacy and the risk of the exposure to the migration to the credit risk exposure from the current into higher risk categories.

Figure 3.3.61
Dispersion of the decrease in the capital adequacy as a result of the simulation - migration of 30% of the exposure to credit risk from each risk category into the following two categories

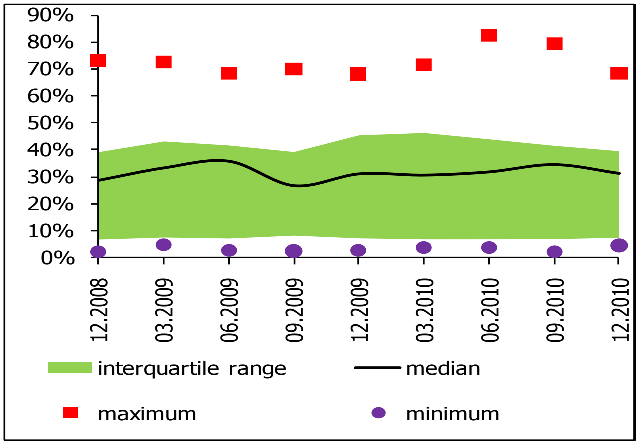
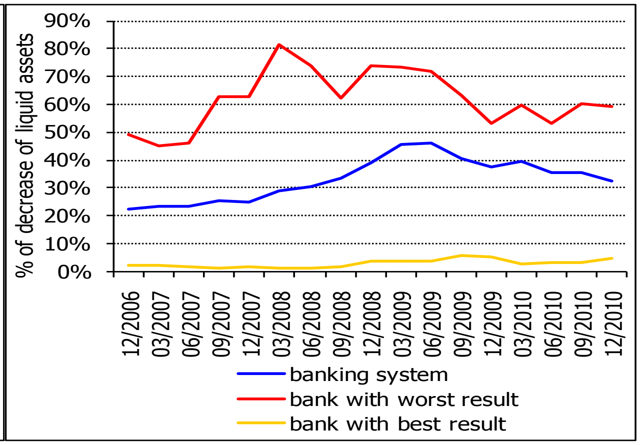


Figure 3.3.61
Results of the simulation for withdrawing 20% of the households' deposits



Source: NBRM according to data submitted by the banks.

If assumes simultaneous redistribution of 10% (first scenario) and 30% (second scenario) of the credit risk exposure to the sectors "enterprises and other clients" (including by individual activities) and "natural persons" (including also by individual credit products), from the categories with lower towards categories with higher risk, the largest deterioration of the quality is registered with the exposure to the activity "industry" and the consumer loans. The capital adequacy of the banking system would register a decrease of 1.9 percentage points in case of first scenario, i.e. 6.4 percentage points in case of the second, more extreme, scenario. In case of such migration, the share of the exposure classified in the risk categories C, D and E in the total exposure to credit risk at the level of the banking system would increase by 2.4 (first scenario), i.e. 7.0 percentage points (second scenario). If take into consideration only the exposure to enterprises and households, i.e. if eliminate the exposure to financial institutions and Government from the simulations, then the share of the exposure classified in the risk categories C, D and E would show a surge of 4.9 and 9.9 percentage points, adequately in the implementation of the adequate exposure migration scenarios. Additionally, also simulation for the banks' resistance to possible larger assumed outflow of the households' deposits is performed. The results show larger resistance of the banking system also to this liquidity shock compared to the preceding year, with all banks having sufficient liquid assets for overcoming such liquidity blow.

3.2. Savings houses

With the insignificant share in all segments of the operations of the deposit institutions in the Republic of Macedonia, and with the relatively limited volume of activities they perform, the savings houses have minor significance for the financial system in the Republic of Macedonia. The number of savings houses registers a downward trend (their number is almost halved in the previous seven years). The amount of the deposits in the savings houses is small (they equal Denar 661 million, or 0.31% of the total deposits and 0.45% of the households' deposits at the level of the deposit institutions). The deposits are insured in the Deposits Insurance Fund, pursuant to the legal regulations[94].

The largest risk in this segment of the financial system arises from the uncertainty about the economic sustainability of the savings houses, because of the difficulties related to the full adherence to the strict and "expensive" standards for banking operations and strong competition from the banks, which in the previous years have developed retail banking, in conditions of limitation of the type and the volume of the activities of the savings houses[95]. Hence the future of the savings houses could be seen in their transformation into financial companies, or acquisition to a bank, or other form of transformation depending on the legal solutions and possibilities.

3.2.1. Structure of the assets and liabilities of the savings houses

In 2010, the assets of the savings houses continued to decrease, with considerably faster dynamics compared of the preceding year. This year, the assets of the savings houses went down by Denar 296 million, or 9.0% (compared to 2009, when it declined by 6.2%). Compared to 2009, when the assets of the savings houses participated with 1.2% in the deposit institutions' assets, in 2010 that share reduced to 1%. The faster dynamics of the decrease in the savings' houses' assets is partially a result of the decrease in the number of savings houses[96].

[94] Pursuant to the Law on the Deposits Insurance Fund ("Official Gazette of the Republic of Macedonia" no. 63/2000, 29/2002, 43/2002, 49/2003, 81/2008 and 158/2010), the Fund insure the deposits of the natural persons in banks, savings houses, foreign banks branch offices, in the amount up to Euro 30,000.

[95] The activities of the savings houses are directed towards collection of Denar deposits of the households, extending credits to natural persons and, in restricted volume, to legal entities. The savings house may collect deposits from natural persons maximum to the double amount of its own funds.

[96] With the decision of the Governor of the National Bank no. 2294 from April 2010, prior approval for termination of the activities of the savings house "Fersped" DOO Skopje was issued - the founding license has been revoked and fulfillment of the terms for initiating liquidation procedure was determined, while with the Decision no. 7580 from November, the savings house "AM" ДОО Biljana was revoked the founding and operating license, determining that the terms for initiating liquidation procedure are fulfilled.

Table 3.3.4
Structure of the assets and liabilities of the savings houses

Balance sheet	Amount in millions of Denars		Structure	
	31.12.2009	31.12.2010	31.12.2009	31.12.2010
Cash, cash balances, gold, balances and placements to NBRM	119	111	3.6%	3.7%
Securities portfolio	40	39	1.2%	1.3%
Placements to financial institutions	138	133	4.2%	4.5%
Placements to nonfinancial institutions (net)	2,775	2,353	84.5%	78.8%
Accrued interest	36	20	1.1%	0.7%
Other assets	20	177	0.6%	5.9%
Fixed and intangible assets	155	153	4.7%	5.1%
Total assets	**3,283**	**2,986**	**100.0%**	**100,0%**
Deposits of households	565	661	17.2%	22.1%
Short-term borrrowings	39	6	1.2%	0.2%
Long-term borrrowings	1,358	1,010	41.4%	33.8%
Other liabilities	95	92	2.9%	3.1%
Provisions	0.3	0.5	0.0%	0.0%
Equity and reserves	1,225	1,216	37.3%	40.7%
Total assets	**3,283**	**2,986**	**100.0%**	**100.0%**

Source: NBRM based on data submitted by the savings houses.

The credits of the non-financial entities in 2010 went down by Denar 422 million and they equaled 2,353 million. The rate of the decrease in the credits of the non-financial entities (15.2%) is twice bigger compared to 2009 (when this rate equaled 7.3%). Such downward movement reduced the share of the credits extended by the savings houses in the total credits at the level of the deposit institutions from 1.7% in 2009, to 1.5% in 2010. However, having in mind the limited type of activities these deposit institutions perform, the credits of the non-financial entities dominate in the structure of their assets (share of 78.8%), while the largest credit user (with a share of 82.9% in the total credits) is households. According to the maturity of the credits, the largest portion accounts for the long-term credits, while the largest portion in the currency structure accounts for the Denar credits with FX clause.

The reduced activities of the savings houses are mostly due to their smaller debiting with the banks. At the end of 2010, the liabilities based on long-term Denar credits with FX clause to banks registered decline (primarily with one savings house) by Denar 408 million, or 30.1%. The largest portion of this decrease is due to the payment of the due liabilities based on credits and the early payment of liabilities based on credits by one savings house. Decline of Denar 29 million was also registered with the liabilities based on short-term Denar credits with FX clause to banks, opposite to the liabilities based on long-term Denar credits to banks, which in 2010 mounted by Denar 60 million. Despite this decrease, the long-term borrowing from the banks, together with the capital and the reserves are still the basic source of funding of the savings' houses activities, which is not in line with the basic activity these institutions should perform, having in mind their title - savings houses.

In 2010, the savings in the savings houses registered certain increase. At the end of 2010, the deposits of the natural persons with the savings houses mounted by Denar 96 million, or 17.0%, which is mostly due to the increase in the time deposits of the natural persons in Denars with one savings house. In 2010, the deposits of the natural persons totaled Denar 661 million, 74.4% of which are short-term.

3.2.2. Insolvency risk

The solvency of the savings houses in the Republic of Macedonia is extremely high. The capital adequacy ratio of these deposit institutions is five times higher than the legally prescribed minimum of 8.0% and it equals 43.0%. This is mainly due to the limited sphere of their activities.

In 2010 the indictors for solvency and capitalization of the savings houses registered certain increase, which is in accordance with the reduced volume of their activities. In environment of larger annual decrease in the risk weighted assets (due to the smaller credit activity) compared to the annual decrease in the own funds[97], the capital adequacy ratio went up annually by 0.9 percentage points. Except one savings house, all other savings houses registered capital adequacy higher than 50%. Annual rise (of 3.4 percentage points) was also registered with the capitalization ratio[98] of the savings houses, which equaled 40.7% in 2010.

3.2.3. Profitability

Adequately to the activities reduction, the profitability of the savings houses in the last years also diminished. The main reason for the lower profitability are the limited alternatives of the savings houses for placement of the uncommitted funds, given possible absence of adequate clients for credit placement. Thus in 2010, on the level of all savings houses, profit in the amount of Denar 36 million was shown, which is less by Denar 14 million, or 27.4% compared to the preceding year. However, the number of profitable savings houses surged. Namely, in 2010, seven out of eight savings houses have shown profit, while at the end of 2009, six out of ten savings houses were profitable.

The total income of the savings houses (total regular income[99] and extraordinary income) registered annual decrease of 5.5%. The decline in the income is exactly due to the lower net interest income (by Denar 35 million, or 10.8%), which was registered in conditions of deposits growth compared to the smaller credit activity of the savings houses. Adequately to the type of activities the savings houses perform, the net interest income is the basic income from their operating despite the decrease in its share in the total regular income of the savings houses from 99.7% in 2009, to 94.2% in 2010. The share of the net income based on provisions in the structure of the total income equals only 2.8%. But opposite to the movements of the net interest income, in 2010 the net income based on provisions registered triple increase. This increase is due, to large extent, to the amendments to the Law on Obligatory Relations[100], which limit the upper limit of the lending contractual and penalty interest rate. Hence, for compensating part of the reduced net interest income, the savings

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[97] The decline in the own funds of the savings houses in 2010 is a result of the structural changes, i.e. reduction of the number of savings houses. If not, at the end of 2010 the own funds of the savings houses would increase, which would have influenced also on the larger increase in the capital adequacy ratio.
[98] Capitalization ratio is a correlation between the capital and the reserves (corrected by the current loss, but not by the current gain) and the total assets of the savings houses.
[99] The total regular income includes: net interest income, net income from commissions and other regular income (net income from exchange rate differentials, income based on collected previously written-off claims and income on other bases).
[100] Law on amending the Law on obligatory relations ("Official Gazette of RM", no. 161/2009), which became effective on February 1, 2010.

houses introduced new category of commission in the crediting area, mostly titled as "management fee", which falls due and it is collected on a monthly basis[101].

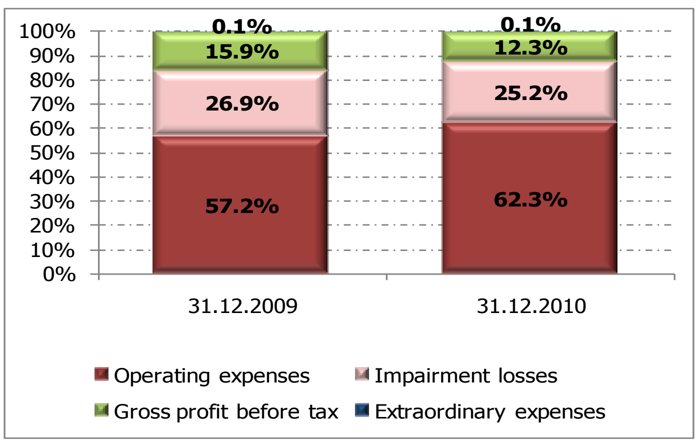
Table 3.3.5
Indicators for the profitability and efficiency in the operations of the savings houses

Indicators	31.12.2009	31.12.2010
Rate of return of average assets (ROAA)	1.5%	1.2%
Rate of return of average equity (ROAE)	4.3%	3.1%
Cost-to-income ratio	57.2%	62.4%
Non-interest expenses/Total regular income	60.5%	65.4%
Labour costs /Total regular income	26.9%	29.3%
Labour costs /Operating expenses	47.1%	47.0%
Impairment losses of financial and non-financial assets /Net interest income	27.0%	26.8%
Net interest income /Average assets	9.5%	9.3%
Net interest income /Total regular income	99.7%	94.2%
Non-interest income/Total regular income	0.3%	5.8%
Net interest income /Non-interest expenses	164.8%	143.9%
Financial result/Total regular income	15.6%	12.0%

Source: NBRM based on data submitted by the savings houses.

In 2010, further increase in the part of the total income of the savings houses used for operating costs coverage[102] was registered. The reason for this is the higher operating costs (by 3.0%, or Denar 5 million), from one hand, and reduced total income (by 5.5%, or Denar 18 million) on another. As a contrast, the smaller impairment in 2010 contributed also to its smaller share in the "spending" of the total banks' income.

Figure 3.3.63
Use of the total income of the savings houses



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

The reduced gain of the savings houses in 2010 influenced also on the basic indicators for their profitability. Compared to 2009, the rate of return on assets (ROAA) plunged by 0.3 percentage points, while the decline in the rate of return on equity (ROAE) equaled 1.2 percentage points. At the end of 2010, they equaled 1.2% and 3.1%, respectively. The higher share of the non-interest income in the total regular income from the insignificant 0.3% in 2009 to 5.8% at the end of 2010, is

[101] This commission actually has characteristics of an interest income, and it should be calculated in the calculation of the effective interest rate, i.e. due claims on this basis (regular monthly debiting of the client) should be recorded within the accounts from group 15 (Claims based on interest), with adequate recognition of the income based on credits, within the accounts from group 66 (Interest income). However, the savings houses basically misstate this income, which can be noticed from the higher net income from commissions.

[102] The operating costs include the costs for employees, depreciation, general and administrative costs, deposit insurance premiums and other expenditures, except extraordinary expenditures.

mainly due to the higher net income from fees and compensations, as a result of the aforementioned new category of provisions – management fee, which matures and it is collected on a monthly basis.

3.2.4. Risk profile

The credit risk is the main risk the savings houses are exposed to in their operating. Having in mind the activities they perform, the liquidity risk is insignificant.

Compared to the previous year, the indicators for the credit portfolio quality of the savings houses deteriorate. These indicators with the savings houses indicate higher level of credit risk exposure relative to the banks. Thus the average level of risk of the credit portfolio of the savings houses, measured as a correlation between the allocated impairment and the total exposure to credit risk, equals 11.2%, which is higher by 2.9 percentage points in comparison with 2009. The exposure of the savings houses classified in the risk categories C, D and E also augmented, which at the end of 2010 equaled Denar 460 million, or 15.0% of the total credit exposure. The nonperforming loans (the share of which in the total exposure of the savings houses equaled 14.4%) registered an increase of 33.9%, while their share in the total credits augmented by 4.4. percentage points. Having in mind the structure of the credit portfolio of the savings houses, the non-performing loans of the houses took the largest share in the non-performing loans (with 85.4%).

Table 3.3.6
Indicators for the quality of the savings houses' credit portfolio

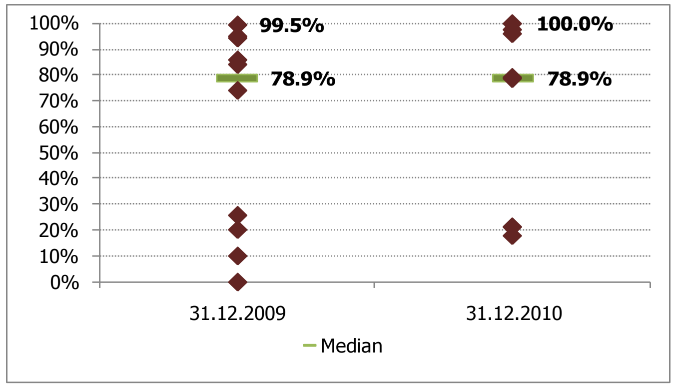
Indicators	31.12.2009	31.12.2010
Average level of risk	8.3%	11.2%
* for legal entities	9.7%	13.4%
* for households	8.6%	11.5%
Share of „C", „D" and „E" in total credit risk exposure	11.2%	15.0%
Share of „C", „D" and „E" (net) in total assets (net)	4.9%	5.8%
Share of nonperforming loans in total loans	10.3%	14.8%
Share of nonperforming loans - legal entities in total loans - legal entities	10.9%	13.5%
Share of nonperforming loans - households in total loans - households	12.0%	15.9%
Share of nonperforming loans in total loans (excluding banks and other financial institutions)	10.7%	15.5%
Share of past due loans in total loans	1.4%	0.8%
Share of past due loans - legal entities in total loans - legal entities	1.4%	0.5%
Share of past due loans - households in total loans - households	1.9%	0.9%
Coverage of „C", „D" and „E" with total calculated impairment losses and special reserves for credit risk	73.9%	74.5%
Coverage of „C", „D" и „E" with impairment losses and special reserves for „C", „D" и „E"	56.7%	62.2%
Coverage of regular loans with impairment losses and special reserves for regular loans	2.5%	2.4%
Coverage of nonperforming loans with impairment losses and special reserves for nonperforming loans	60.2%	63.0%
Coverage of nonperforming loans with total impairment losses and special reserves for credit risk	121.5%	129.2%
Total impairment losses/ Own funds	22.3%	28.7%

Source: NBRM based on data submitted by the savings houses.

On the other hand, **the indicators for the coverage of the exposure with higher degree of risk with calculated impairment and special reserve registered certain improvement.** Namely the allocated impairment enables coverage of 74.5% of the exposure in C, D, and E and more than full coverage of the nonperforming loans (129.2%). Also, the high solvency of the savings house gives surety from the aspect of the possibilities for covering new losses from the exposure to credit risk. Namely, if the extreme scenario for full uncollectability of the exposures classified in risk categories C, D and E realizes, considerable 38.5% of the own funds of the savings houses would be absorbed for loss coverage. Thus the capital adequacy ratio would decrease substantially from the current 43.0% to 26.4%, but it still remains high.

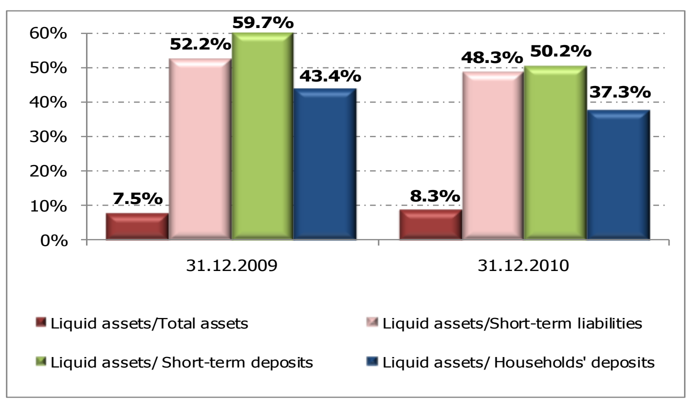
In 2010 the concentration of the deposits in the savings houses, measured through the share of the twenty largest depositors in the total average deposit base of the individual savings houses, registered no substantial change. The share of the twenty largest depositors in the total deposit base with the savings houses ranges from 17.5% to 100%, with the median being set on the substantial 78.9%. This share is smaller than 25% with only with three savings houses, while with five savings houses, the share of the twenty largest depositors in the total deposit base exceeds 78%. The high deposits concentration, by rule denotes high liquidity risk. But its significance is relativized having in mind that with these savings houses the total deposits take about 20,2% of the total assets. On the other hand, it is an indicator also for the poor deposit activity of most of the savings houses, which because of the provisions from Article 154 of the Banking Law[103], formally collect deposits from small number of persons/entities.

Figure 3.3.64
Share of the twenty largest depositors in the total average deposit base of the savings houses



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

Figure 3.3.65
Movement of the indicators for total liquidity of the saving houses



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

The exposure to the liquidity risk is within controlled frames. The liquid assets of the savings houses registered an increase of 0.7 percentage points and at the end of 2010 it equaled Denar 247 million. Despite the small amount of liquid assets (it is only 8.3% of the total assets of the savings houses), it still ensures coverage of 50.2% of the short-term deposits, i.e. 37.3% of the total households' deposits. In 2010, in case of larger increase in the short-term liabilities (of 8.8%), compared to the annual rise in the liquid assets, the coverage of

[103] Pursuant to Article 154 paragraph 1 item 7 of the Banking Law ("Official Gazette of the Republic of Macedonia", no. 67/2007, 90/2009 and 67/2010), nonperforming banking activities (collection of deposits and extending credits) longer than six months is a basis for revocation of the founding and operating license.

the short-term liabilities with liquid assets is smaller by 3.9 percentage points compared to the preceding year and it equals 48.3%.

Stable liquidity position with the savings houses can be perceived also through the realization of the prescribed liquidity ratios for both maturity segments. Namely, all eight savings houses fully meet the liquidity ratios up to 30 and 180 days.

4. Non-depository financial institutions

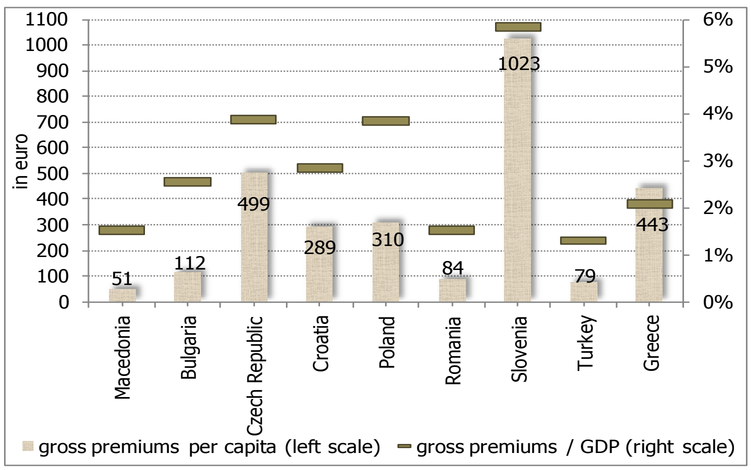
4.1. Insurance sector

4.1.1. Development, structure and activities of the insurance sector

On December 31, 2010, the insurance sector of the Republic of Macedonia is comprised of 11 non-life insurance companies and 3 life insurance companies (by one more compared to 2009), 6 insurance agents companies (one more compared to 2009) and 14 insurance brokerage companies (two more than in 2009). The institutional progress of the sector was followed by the annual increase in the number of employees of 5.7%[104] and higher degree of development of the insurance industry evident trough the increase in the gross policy premiums.

The level of insurance sector development, measured through the density degree (gross police premium per capita) registered annual increase of 4.6%, while the penetration degree (share of the gross police premiums in GDP), compared to 2009 registered no changes. The penetration degree in the Republic of Macedonia (1.5%) was just below the degree registered in the regional countries[105]. At the end of 2010, the density degree equaled Denar 3,149 (Euro 51) gross police premium per capita, which indicates still level of insurance culture in the Republic of Macedonia. Compared to the countries in the region, the density degree in the Republic of Macedonia is on the bottom. Such indicators show bigger potential for growth and development of this segment of the financial system.

Figure 3.4.1
Development of the insurance sector in the Republic of Macedonia and in certain regional countries



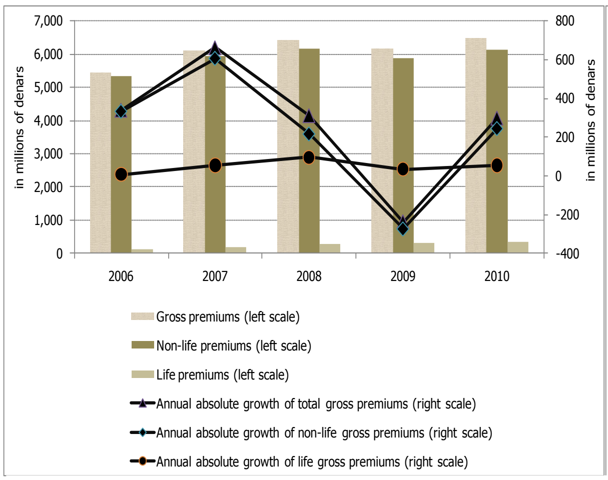
Source: CEA Statistics no. 42.

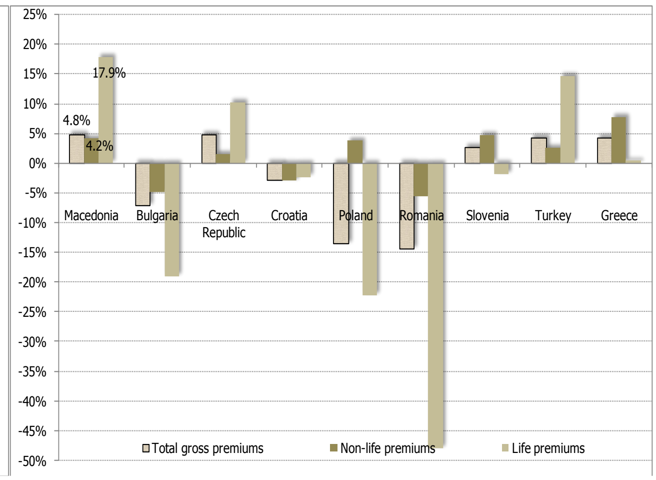
Opposite to certain regional countries[106] where certain stagnation and downward trend in the insurance activity development was registered, in the Republic of Macedonia, the gross police premiums augmented with both insurance groups. Also this year the increase was mostly due to the rise in the gross police premiums with the non-life insurance (which incremented by 4.2%, or Denar 245 million. Their contribution to the annual growth in the total gross police premiums in the sector equaled

[104] At the end of 2010, the total number of employees in the insurance companies equaled 1,356.
[105] Romania registered a penetration degree of 1.5%, Turkey 1.3%, Greece 2.1%, Bulgaria 2.5%, Croatia of 2.8%.
[106] With exception to the Czech Republic, Slovenia, Turkey and Greece, which registered an annual increase in the gross police premiums of 4.8%, 2.7%, 4.3% and 4.1%, respectively, all other analyzed countries registered negative growth rates of the gross police premiums.

81.9%. **The life insurance continued to mount. The gross police premiums of this segment registered the highest relative growth (17.9%, or Denar 54 million), which is primarily due to the low initial position of this segment of the insurance sector. This sector has the largest future development potential especially for connecting of the life insurance with the banks' credit products.**

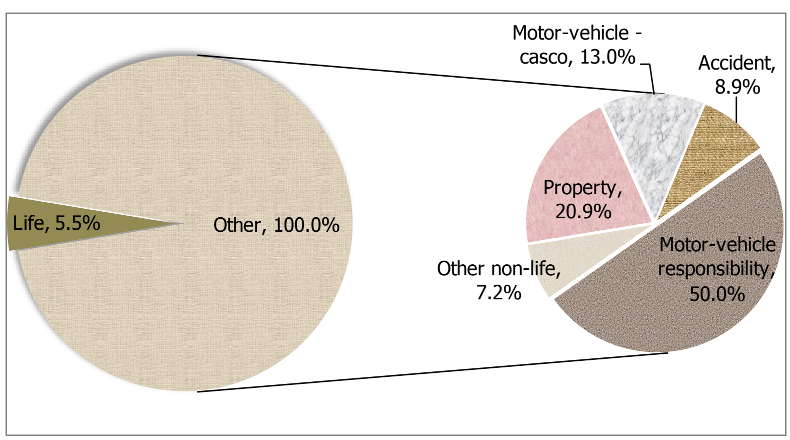
Figure 3.4.2
Movement and annual absolute increase in the gross police premiums in the insurance sector in the Republic of Macedonia (left) and annual relative increase in the gross police premiums in the Republic of Macedonia and in certain regional countries (right)





Source: Supervision Insurance Agency of RM, CEA Statistics No.42

Figure 3.4.3.
Structure of the gross police premiums by insurance classes

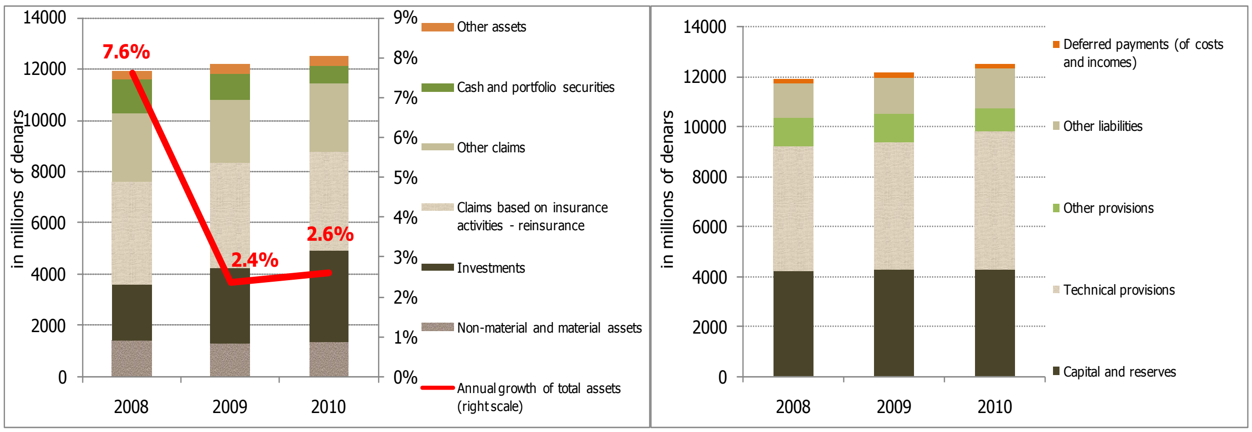


Source: Insurance Supervision Agency of RM and internal calculation of NBRM.

No annual changes in the gross police premiums structure were registered. The non-life insurance remains to be the largest segment in the insurance sector. With the non-life insurance, the largest portion in the sale of polices (shown through the gross police premiums) accounted to the obligatory third party liability insurance (annual increase of 8.9%), which is due to the measure introduced in 2010 for import of used cars (vehicles with EUR 1 - standards), to the smaller number of non-insured vehicles and the complementary measure for obligatory re-registration of the vehicles with foreign registration plates, which stay in the Republic of Macedonia longer than six months.

Regarding the connection of the insurance companies with banks (as a distribution channel of the insurance services), no changes compared to 2009 were registered (0.1% of the gross police premiums of the insurance sector were collected through three banks, fully attributed to the non-life insurance. In 2010 the banks failed to insure the extended credits with the insurance companies (in 2009, only two banks performed credit insurance). This non-integration of both largest segments into the financial system (according to the assets volume), provides limited transfer of potential risks from one segment to another, representing also a limitation of the deepening of the type of services offered by the financial system. On the other hand, the sale of the insurance policies through the agent companies and the insurance brokerage companies rose and the gross placed premiums through this distribution network represents 20.4% of the total gross police premiums of the insurance sector.

Figure 3.4.4.
Structure of the assets (left) and the liabilities (right) of the insurance companies



Source: Insurance Supervision Agency of RM and internal calculation of NBRM.

At the end of 2010, the assets of the insurance companies incremented by Denar 316 million (2.6%) and reached Denar 12,519 million. The claims from insurance-reinsurance operations, which are the generator for the largest portion of the total assets (30.6%), registered a decrease of Denar 258 million, or 6.3%. Such a decrease is estimated as positive, having in mind that these claims are basically sold, but uncollected insurance policies[107]. The occurrence of such uncollected claims is primarily a result of the competitive struggle for clients on small market as our insurance market. The assets growth was mirrored through the annual increase in the investments of the insurance companies in securities with variable interest rate of Denar 444 million. **The invested deposits in the banks equaled 11.1% of the total assets of the insurance companies. On the other hand, they participated only with 0.6% (0.7% in 2009) in the total deposits of the banking sector.** This proves the bigger dependence of these non-deposit financial institutions on the banking system, than other way around.

[107] In December 2010, The Insurance Supervision Agency adopted the Rulebook for the method of evaluation of the on-balance sheet asset items and preparation of the business balances, the implementation of which will commence from January 2011, and which will reduce considerably these claims.

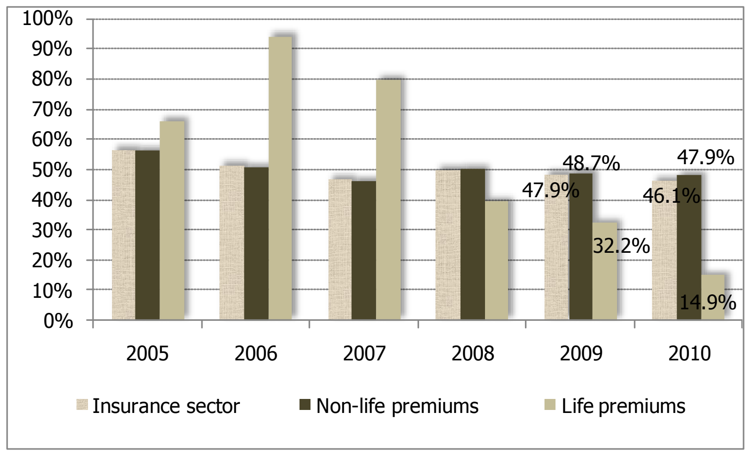
In the liabilities of the insurance companies, the main grow generator were the damage provisions[108] which rose annually by Denar 210 million, or 8.8%. This increase is fully attributed to the non-life insurance. Regarding the life insurance, the mathematical provisions[109] took the largest portion with the liabilities (share of 44.6% in the total liabilities with the life insurance companies) and it registered annual growth of Denar 152 million, or 39%).

4.1.2. Risks in the insurance sector

4.1.2.1. Risk of the companies for basic activity insurance

The risk of the insurance companies when concluding insurance agreements, measured as a correlation between the gross paid claims on the basis if concluded agreements and gross policy premiums (the so-called claims ratio) registered no substantial change compared to the previous five years. Its value in 2010 reduced by 1.8 percentage points, which was due to the small increase in the gross paid claims (of only 0.9%), compared to the higher increase in the gross police premiums (of 4.2%). The nonlife insurance, with registered annual increase in the gross paid claims in the amount of Denar 70 million, or 2.4% was the generator of the growth in the gross paid claims at the level of the sector. In 2010, within this insurance class, 56,144 claims were declared, which is by 3,435 applications more compared to 2009. **Regarding the life insurance, the gross paid claims reduced annually by 45.5% (by Denar 44 million), which paralelly reduced the damage coefficient.** In 2010, in the life insurance class 1,100 claims were declared, which is increase by 535 claims.

Figure 3.4.5
Claims ratio by classes of insurance



Source: Insurance Supervision Agency of RM and internal calculation of NBRM.

Additionally, the safety and stability of the insurance sector in the Republic of Macedonia increased also due to the guarantee fund[110] of the National Insurance

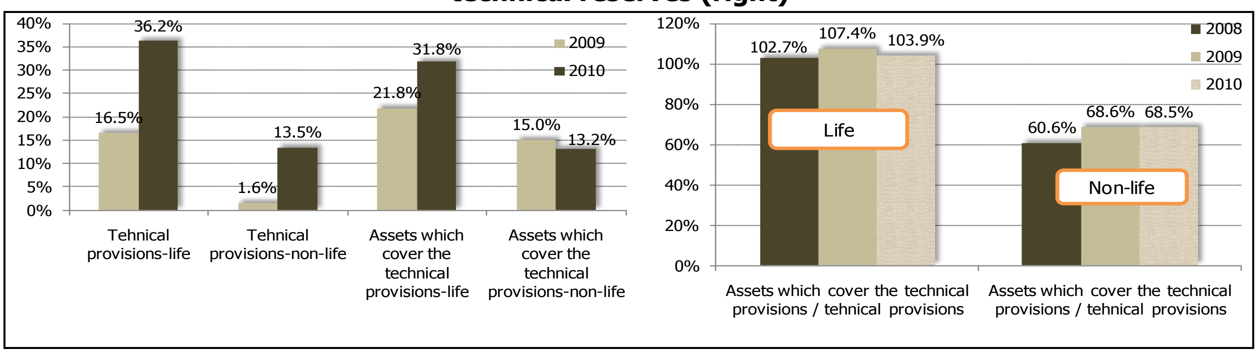
[108] The damage provisions are part of the technical provisions of the insurance company and they are allocated in the amount of their estimated liabilities based on insurance contracts, where the insured event occurred until the end of the calculation period, including all costs arising from the untimely execution of the commitments of the insurance companies on the basis of completed remuneration requests.
[109] 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.
[110] The National Insurance Bureau is required to establish Guarantee Fund intended for payment of claims. The insurance companies which perform operations of obligatory insurance are due to pay funds in the Guarantee Fund in the amount proportionate to the premium realized by individual classes of obligatory insurance in the previous quarter, for the current quarter of the current year.

Bureau[111], mostly in the part referring to the takeover for compensating claims inflicted by unknown and noninsured vehicles, on the basis of motor third party liability insurance and green card. Similar to 2009, the non-life insurance companies, 51.3% of the gross paid claims were in the class of third party liability insurance, 44.3% of which were collected from the guarantee fund of the National Insurance Bureau.

4.1.2.2. Coverage of the technical reserves

The upward trend of the technical reserves[112] (annual increase of Denar 792 million, or 15.6%) in 2010 was followed by increase in the assets that cover the technical reserves of the sector (Denar 578 million, or 15.7%). The coverage of the technical reserves with the assets that cover the total technical reserves at the level of the insurance sector, augmented by 0.1 percentage point and at the end of 2010 they equaled 72.3%. The annual increase in these assets accounts for the non-life insurance this year, as well, where they rose by Denar 417 million. However the assets covering the technical reserves with the life insurance registered the highest percentage growth (39%).

Figure 3.4.6
Annual relative increase in the technical reserves and assets that cover the technical reserves (left) and coverage of the technical reserves with the assets that cover the technical reserves (right)



Source: Supervision Insurance Agency of RM and Internal calculations of NBRM.

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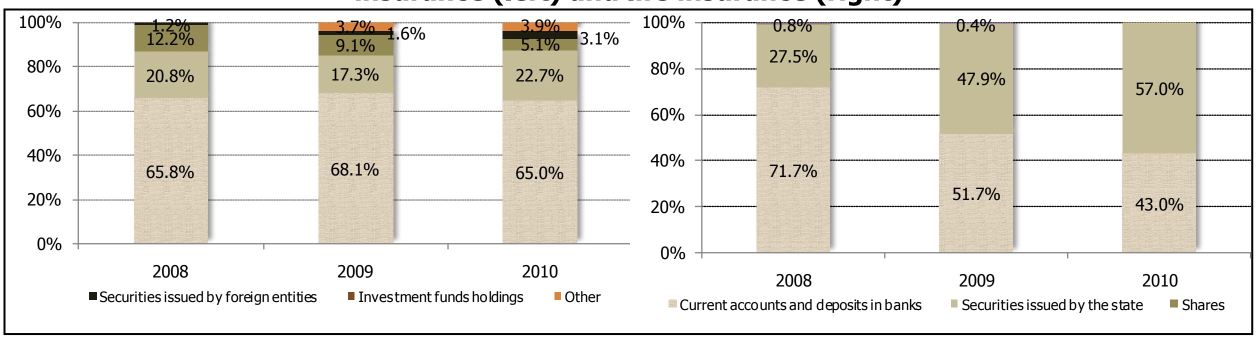
[111] The National Insurance Bureau is established in 1993 by the insurance companies, because of the implementation of the international agreements for insurance of the owners and the users of motor vehicles from liability in traffic (third motor party liability insurance). Pursuant to the Law on Obligatory Insurance in Traffic and the Agreement of the National Bureau, its prevalent activities are the following: issuance of international green cards, execution of activities which are of mutual interest of the insurance companies, assumption of liability for damage payout occurred on the territory of the member-states of the green card system, assumption (by exception) of claims in instance of untimely execution of the liabilities by individual insurance company (members of the Bureau), harmonization of the conditions and the tariffs for motor third party liability insurance, single criterions for assessment of claims, etc.

[112] The technical reserves are created to permanently ensure execution of the liabilities of insurance agreements. They consist of the following: reserves for premiums carried forward (which refer to the residual period to the expiration of the insurance agreement), reserves for bonuses and omissions, provisions for claims (based on estimated liabilities of the company) and other technical reserves (included also mathematical reserves).

As in the previous years, the assets covering the technical reserves[113] with the non-life insurance fail to meet the legally prescribed minimum for full coverage of the technical reserves (these assets coverage 68.6% of their technical reserves, opposite to the life insurance companies here this coverage equaled 103.9%). In 2010, the Supervision Insurance Agency[114] adopted a variety of bylaws, the implementation of which in 2011 is expected to improve this coverage especially with the companies that fail to meet the prescribed minimum.

Figure 3.4.7
Structure of the investments of the assets covering the technical reserves with the non-life insurance (left) and life insurance (right)



Source: Supervision Insurance Agency of RM and Internal calculations of NBRM.

Also in 2010, the insurance sector characterized with conservative policy in the investment of funds covering the technical reserves of the companies. The share of the investments in government securities and deposits in banks in the total investments of the insurance sector equaled 89.7%, which is by 2.3 percentage points more compared to 2009. The main cause for this trend is the non-life insurance companies, where 87.7% of the assets covering the technical reserves are government securities and bank deposits. Regarding the life insurance, 42.9% of the assets covering the technical reserves are bank deposits, while 57.1% are government securities. The largest annual increase with the assets which cover the technical reserves at the level of the sector (Denar 403 million) registered the investments in government securities, 65.7% of which account for the non-life insurance. The investments in shares reduced also this year by Denar 106 million, or 36.7%.

4.1.2.3 Insolvency risk of the insurance companies

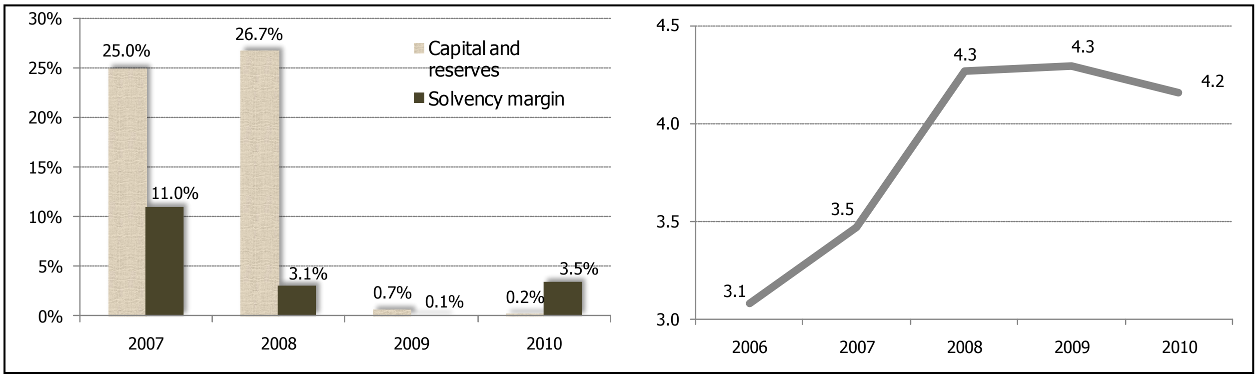
At the end of 2010, the capital and the reserves of the insurance companies in the Republic of Macedonia equaled Denar 4,394 million, 87.5% of which accounts for the non-life insurance companies. All insurance companies are solvent. The insurance sector manages with capital which is higher by 4.2 times than the solvency margin[115].

[113] The assets covering the technical reserves are those used for covering the future liabilities of the insurance company based on insurance agreements, as well as the possible loses from the insurance operations, for which the insurance company is obliged to allocate assets for technical reserves. These assets should be in the amount at least equal to the value of the technical reserves.

[114] In 2010, the Supervision Insurance Agency strengthened the regulatory framework of insurance sector in licensing, accounting, finance and auditing in the area of supervision and reporting.

[115] The solvency margin is calculation category which shows minimal capital level to be managed by the insurance companies, pursuant to the Law on Insurance Supervision.

Figure 3.4.8
Annual relative growth of capital and reserves and the solvency margin of the insurance companies (left) and the share of capital and reserves in the solvency margin (right)

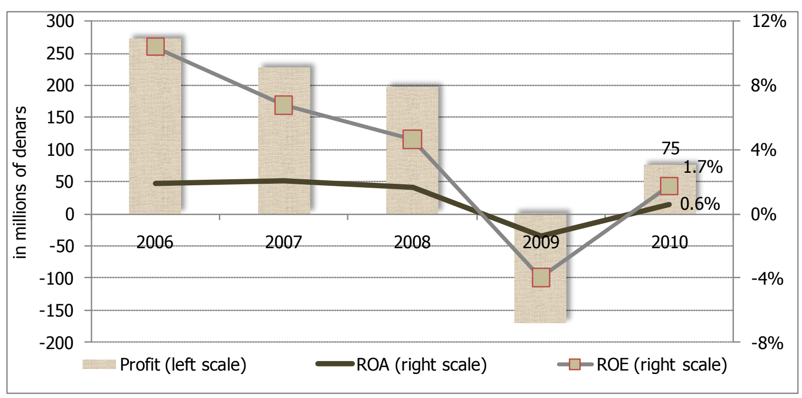


Source: Supervision Insurance Agency of RM and Internal calculations of NBRM.

4.1.2.4. Profitability of the insurance companies

The profitability of the insurance companies in 2010 improved compared to 2009, when they registered loses. The registered gain of the insurance sector equaled Denar 75 million, 57.6% of which accounted for the gain of the life insurance companies. All life insurance companies registered profit in 2010 (in 2009, one of the two life insurance companies registered loss). Regarding the non-life insurance companies, only one company registered loss (in 2009, five companies registered loss). The realized gain with two insurance groups (non-life and life) contributed for better profitability indicators at the level of the entire insurance companies.

Figure 3.4.9
Movement of the gain and the profitability indicator of the insurance sector



Source: Insurance Supervision Agency of RM and internal calculation of NBRM.

4.2. Fully funded pension insurance

The fully funded pension insurance still has small influence on the financial system of the Republic of Macedonia. In 2010 this segment continued to develop and in the future it is anticipated to become more significant for the total financial system. Parallel with the growth in the number of members in the pension funds, the assets of funds rose, which also enabled increase in their investments in securities which are traded on larger markets, outside Republic of Macedonia. This resulted in larger diversification of the securities portfolio of these institutions. But, on the other hand, it resulted in higher risks as well, considering the fact that the placements on the foreign markets consist also of Government securities of countries which are facing deep economic crisis for quite some time. Although, these investments are treated by the regulation as slightly risky investments, still considering the current conditions of the security issuers, measures shall be undertaken as soon as possible (by both, the pension funds management companies and the regulatory body) for limiting further rise in such investments. In the same time, such development creates a need for more quality improvement in the management with the assumed risks, in the process of asset investment.

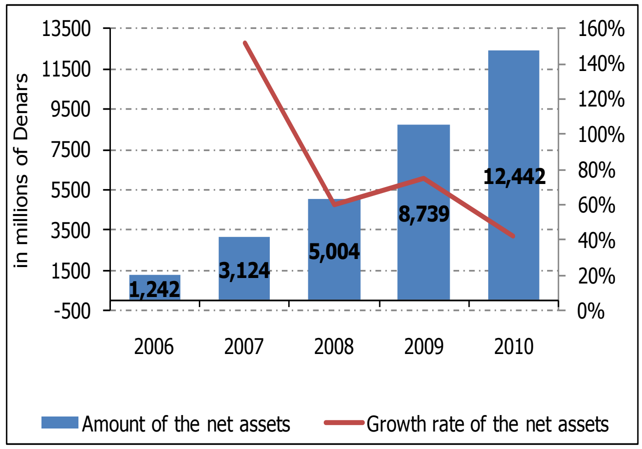
4.2.1 Mandatory fully funded pension funds

In 2010, the number of members of the mandatory fully funded pension funds rose by 28.906 new members, or by 17.1%. Out of total 659,557 employees in the Republic of Macedonia, 30.0% i.e. 198,361 persons are members of the second pension pillar. Despite the fact that this year the economic activity in the Republic of Macedonia improved, the growth rate of the membership in the mandatory pension funds decreased by 14.5 percentage points, or by 28,906 persons, compared to the previous year when it amounted to 31,5%, i.e. 40,615 persons. The higher comparison basis in 2009 is the reason for the lower growth in the number of members of the mandatory pension funds. The high growth in the membership in 2009 is due to the introduction of the concept of "gross wage" which started being applied since January 1, 2009. With this concept, through the new system of the Public Revenue Office (PRO) for integrated collection of social contributions[116] and income tax, the obligation for payment of fees and contributions for pension and disability insurance by the employers, practiced until than, reduced to low base or it was totally canceled. Therefore, with the introduction of this system, through which payment of all social contributions and personal income tax to each employee was enabled, the number of members in the pension funds increased which resulted in considerable growth in the inflows for pension and disability insurance. On the other hand, the growth rate of the membership is still moving much faster relative to the growth rate of the employable population in the Republic of Macedonia, which resulted in higher coverage of the employable population by the mandatory fully funded pension insurance, from 25.7% at the end of 2009 to 28.0% at the end of 2010. Most of the members of these funds are at the age of 27 years, whereas the average age is 30 years.

[116] Contribution for employment, healthcare and pension and disability insurance.

The net assets[117] of the pension funds amount to Denar 12,442 million and they create 2.9% of the gross domestic product. In 2010, they registered slower growth dynamics compared to 2009. At the end of 2010, they rose by 42.4% which compared to the previous year represented slowing down in the growth of 27.8 percentage points. However, in absolute amounts, the rise in the net assets in 2010 (Denar 3,703 million) is almost identical to the growth realized in 2009 (Denar 3,735 million). The slowing down in the growth rate of the net assets of the mandatory pension funds resulted also from the lower value of part of the instruments in which these assets are invested (mainly the common shares issued by domestic issuers and the bond issued by the Government of the Republic of Greece), but it is also due to the lower rise in the paid contributions by the fund members, relative to their growth in 2009. The slower growth in the paid contributions is a logical result from the lower growth rate of the number of members of the mandatory pension funds.

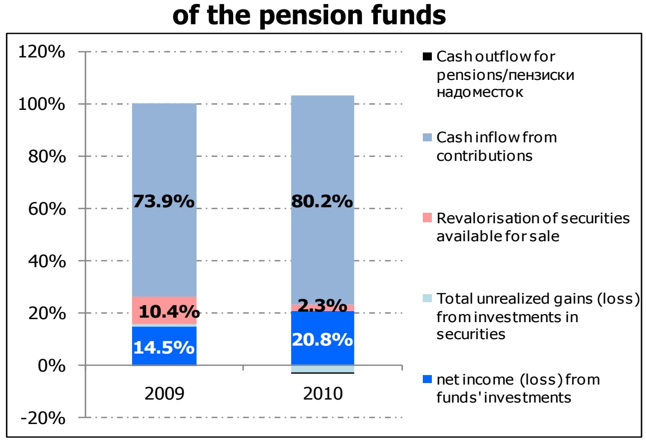
Figure No. 3.4.10
Net assets of the pension funds



Source: Agency for Supervision of Fully Funded Pension Insurance.

The total net assets of the pension funds grow proportionally with the total contributions, with proportionality coefficient of approximately 1[118]. Considering the fact that most of the members of the pension funds are young population, the number of which is constantly rising, the dominant significance of the paid contributions for the growth in the net assets is clear. Opposite to the constant growth in the number of the young population of the mandatory pension funds, the number of retired persons which are paid pension compensation is very small[119] and it registered moderate growth,

Figure No. 3.4.11
Structure of the total rise (fall) in the net assets of the pension funds



Source: Agency for Supervision of Fully Funded Pension Insurance and internal NBRM calculations.

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117 According to Article 83 of the Law on the Mandatory Fully Funded Pension Insurance ("Official Gazette of RM" No. 29/2002, 85/2003, 40/2004, 113/2005, 29/2007, 88/2008, 48/2009, 81/2009, 50/2010, 171/2010 and 36/2011), the net assets of the pension fund are determined as a differential between the value of assets of the pension fund and the liabilities of the pension fund, excluding the liabilities to the members of the pension funds.

118 Source: MAPAS, Report on the conditions in the fully funded pension insurance in 2010.

119 When the reform for the persons with larger probation period was introduced, it was more useful for them to remain in the one pillar system, thus being able to remain the rights obtained so far.

which results in minimal share of cash outflows[120] on the basis of paid pensions in the total changes in the net assets of the pension funds.

The profit of the pension funds at the end of the year amounted to Denar 655 million and relative to the previous year it rose by Denar 66 million, or by 11.2%. The interest income from debt securities still participate mostly in the structure of the total income of the mandatory fully funded pension funds (80.2%).

Figure No. 3.4.12
Results and indicators for the efficiency of the mandatory pension funds

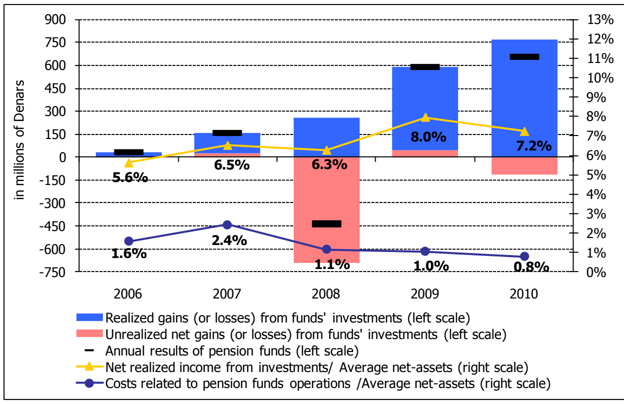
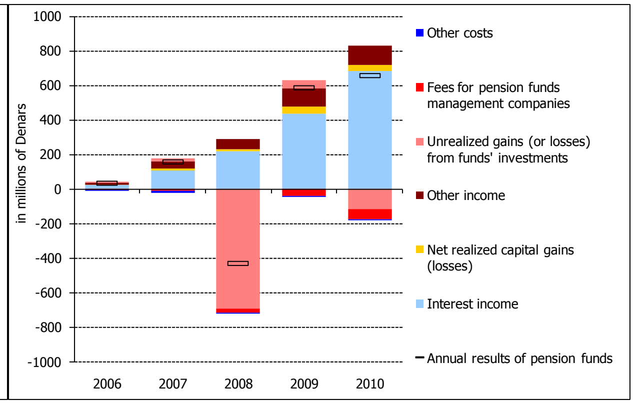


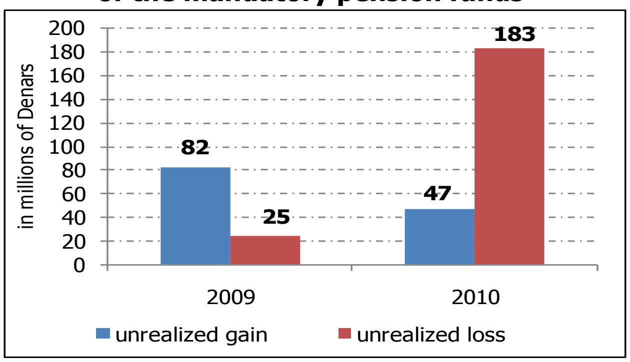
Figure No. 3.4.13
Structure of income and expenditures of the mandatory pension funds



Source: Agency for Supervision of Fully Funded Pension Insurance and internal NBRM calculations.

The interest income result from the investments of the pension funds in Government bonds (50.9%) and deposits with banks (47.4%). **On the other hand, the total expenses register structure change.** Compared to the previous year, when the costs for compensations for the pension funds management companies covered 56.0% of the total costs, this year their participation decreased by 24.3 percentage points, so at the end of the year it reduced to 31.7%. Parallel with the development of the reformed pension system, the pension funds management companies gradually reduced the compensation rate (which is collected as a percentage of the paid compensations), resulting from the fall in the compensations collected by the Government institutions from the companies. Therefore, in 2010, this rate reduced to the legally determined maximum of 5.5% (in 2009 it amounted to 6.5%). On the other hand, **the non-realized capital losses**

Figure No. 3.4.14
Total unrealized gain and total unrealized loss of the mandatory pension funds



Source: Agency for Supervision of Fully Funded Pension Insurance and internal NBRM calculations.

[120] In 2010 the paid pensions as well as their larger stake in the change of the net assets resulted from the returned assets to the Fund of PIOM for payment of disability and family pensions from members of family of late member of the second pillar.

(in amount of Denar 114 million), became a dominant item in the total expenses of the mandatory fully funded pension funds with participation of 57.4%. For comparison, in the previous year the mandatory pension funds showed net unrealized gain of Denar 48 million. More than a half of the growth of the total unrealized losses (or 53.8%) results from the losses with the investments in common shares issued by domestic entities (mainly with the shares purchased until December 31, 2009 which participate with more than 60% in the total unrealized losses of this type of securities). The lower market value of these shares is in accordance with the annual fall in the Macedonian stock exchange index (MBI-10) in 2010 (in 2010, the highest level of the index was registered in the middle of February 2010, but after this period the index started register downward movements (the lowest level was reached up at the end of September 2010). However, despite the considerable fall in the value of shares, the pension funds have not suffered larger capital losses as a result to the small participation of the common shares in the total investments of the pension funds (3.20%). **The investment in bond issued by the Greek government in 2010 is the second type of instrument which considerably contributed to the rise in the unrealized capital loss of the mandatory pension funds.** This bond participated with 40.1% to the rise in the unrealized losses of these funds.

In 2010, in the structure of the assets of the pension funds there are attempts for diversification of the security portfolio. After the initial calming on the financial markets after the world financial crisis, the pension funds management companies gradually started leaving the conservative investment policy, characteristic for the young pension funds, and they become more interested in investments in more risky securities, i.e. in equities. Also, the continuous rise in the assets of the pension funds motivated larger diversification of the security portfolio. But, due to the restricted market for investments in the Republic of Macedonia, the pension funds management companies increased their interest for investing on the foreign capital market. On December 31, 2010, the participation of investments of the pension funds on the foreign markets in the total assets reached up to 11.0%, different from 2009 when it amounted to only 1.5%. The assets that are invested in equities issued by foreign issuers (common shares and stakes in investment funds) increased more intensively

Figure No. 3.4.15
Structure of the unrealized gain of the mandatory pension funds, by the type of instruments

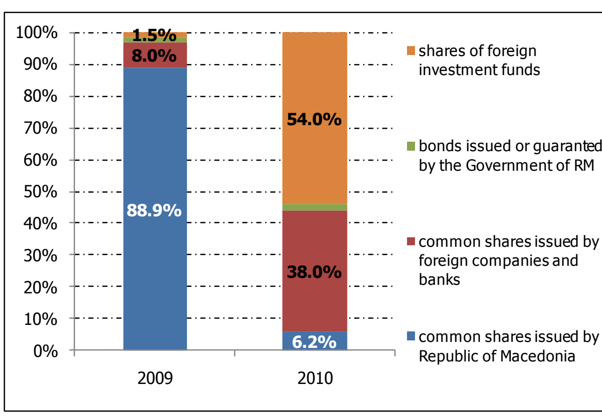
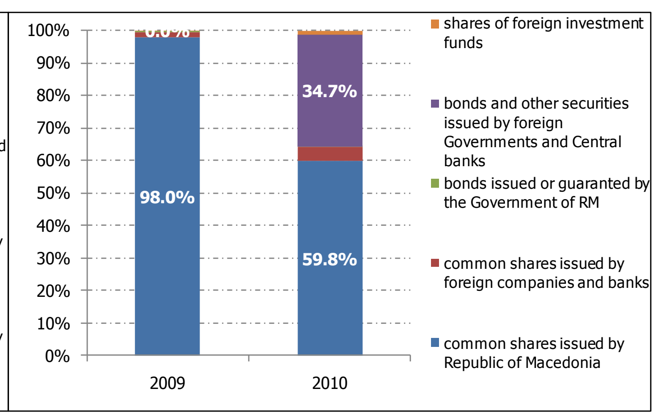


Figure No. 3.4.16
Structure of the unrealized loss of the mandatory pension funds, by the type of instruments



Source: Agency for Supervision of Fully Funded Pension Insurance and internal NBRM calculations.

relative to the previous year (by almost 8 times relative to only 20.5% of growth of this type of investments in 2009).

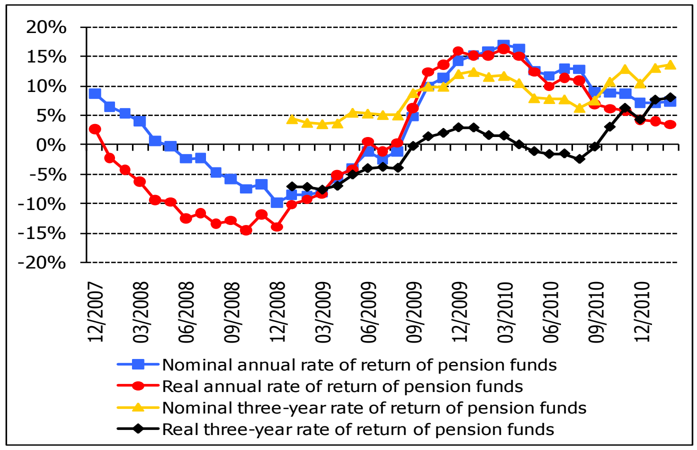
In 2010 the pension funds for the first time invested assets in Government bonds of other countries[121]. **These investments exactly create the largest risk the funds are exposed to, considering the fact that they represent foreign bonds issued from countries which are facing with exquisitely strong debt crisis and the international credit rating of which is worsening.** Despite the information obtained by the announcements of the international rating agencies that the value of bonds issued by the governments of these countries started to decrease since January 2009 and that such trend continued during the whole year, the pension funds management companies still decided to invest part of the assets of the mandatory pension funds in such bonds. It contributed for the already mentioned unrealized loss which results from the bond issued by the Greek government. Considering the fact that the credit rating of Greece, Ireland and Portugal continued to fall in 2011 as well, larger capital losses from funds' investments in bonds issued by governments of these countries can be expected in the future. Despite the fact that the investments in securities issued by Greece, Ireland and Portugal are in accordance with the regulations for fully funded pension insurance, still the pension funds management companies exposed the funds to large risk with such investments. Therefore, the pension funds management companies, and especially their regulator shall introduce larger limitations for such investments.

On the other hand, the rise in the deposits of the pension funds and of the investments in bonds from domestic issuers develops with slower dynamics, so their participation in the structure of the assets of the mandatory pension funds reduces at the expense of the higher participation of the foreign securities. However, the largest share of the assets of the pension funds that are placed in country are still in form of Government bonds (53.7%) and deposits in banks (31.6%). Within the Government bonds, the largest share still belongs to the Eurobonds issued by the Republic of Macedonia.

[121] In 2010, 2.98% of the total assets of the mandatory pension funds were invested in bonds issued by the Government of the three EU member states (Ireland, Portugal and Greece).

After the initial calming down of the financial markets, as well as of the economic developments, the mandatory pension funds showed positive income rates again[122]. Analyzed quarterly, the largest growth of their income is registered in the last quarter of 2009 and in the first quarter of 2010. The upward developments of the price levels of the financial instruments which started to become evident in the second half of 2009 and the change in the manner of evaluation of some financial instruments in which assets of the mandatory pension funds were invested were the main reasons for the large income in this period. Namely, at the end of 2009 the pension funds reclassified certain financial instruments which are held up to maturity in financial instrument available for sale, so reassessment of the objective value of assets was made, according to the official average market prices disclosed on the Macedonian stock exchange. Such reclassification of the financial instruments caused rise in the income of funds, i.e. relatively high correction of the value of the net assets. In the first quarter of 2010, the high income rate was due to the larger market value of the Eurobonds of the Republic of Macedonia which create 43.5% of the total investments of the mandatory pension funds. On December 31, 2010, the nominal annual and three-annual income rate[123]

Figure No. 3.4.17
Annual and three-annual nominal and real income rates of the mandatory pension funds



Source: MAPAS and internal NBRM calculations.

Figure No. 3.4.18
Structure of assets of the mandatory pension funds

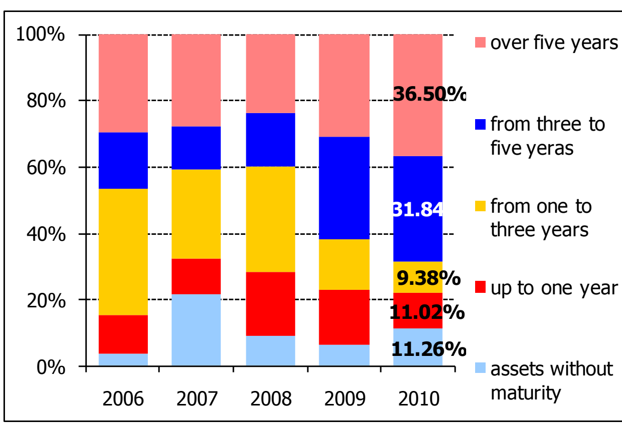
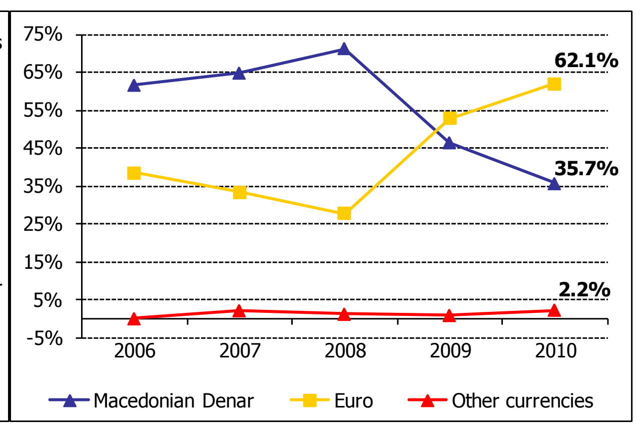


Figure No. 3.4.19
Annual absolute change of certain categories of assets of the mandatory pension funds



Source: MAPAS and internal NBRM calculations.

[122] The income of the mandatory pension fund represents change in percentage between the value of the accounting unit at the last day in the month and the value of the unit at the last day of the month which precedes a 12, 24 or 36-months period, depending on the exact case.

[123] The annual and the three-annual nominal income rate are calculated on the basis of weighting of the income rates of individual pension funds with their net assets.

amount to 7.2% and 10.5% respectively, whereas the real[124] annual and three-annual income rate amount to 4.2% and 4.3%, respectively.

Figure No. 3.4.20
Maturity structure of the assets of the pension funds

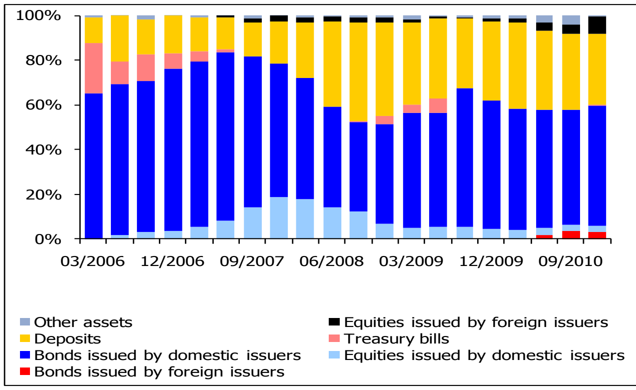
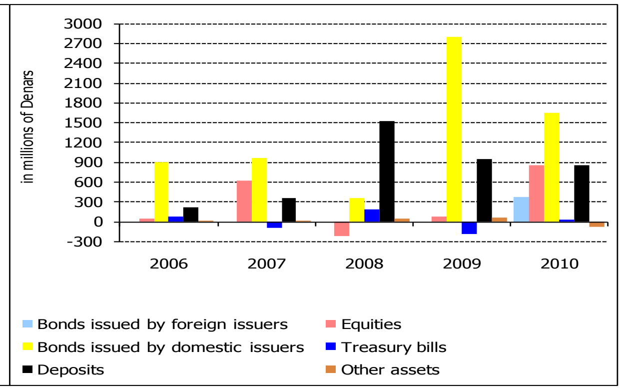


Figure No. 3.4.21
Currency structure of the assets of the pension funds



Source: Agency for Supervision of Fully Funded Pension Insurance and internal NBRM calculations.

In 2010, changes in the maturity structure of the pension funds are registered, which also reflect the changes in the investment policies of funds. In 2010, the

investments in instruments which have higher contractual maturity and in equities, i.e. in securities bearing higher risk, increased. Namely, the instruments with contractual maturity over 5 years (deposits, structural domestic Government bonds and domestic Eurobonds) increased their participation in the maturity structure of assets by 5.5 percentage points, and the assets without certain maturity (shares and stakes in investment funds) registered increase by 5.0 percentage points. This growth is on the account of the lower participation of instruments with shorter maturity, i.e. instruments with maturity up to three years (deposits and continuous domestic Government bonds), by 11.7 percentage points.

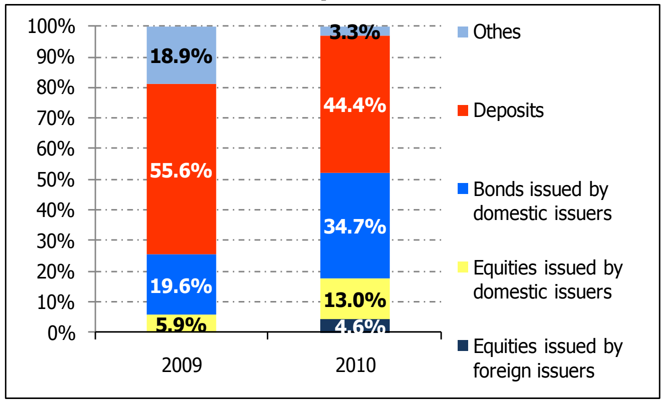
Despite the fact that the investments in deposits in domestic banks are dispersed by maturity, the participation of the deposits with maturity of over 5 years in the total deposits of the pension funds, rose from 2.6% to 11.2%. Such decision of the pension funds management companies can be explained by the fact that the pension funds as young institutions with young membership still have no need of large volume of liquid assets on one side, and on the other, the revival of the banking system encouraged the companies to adopt such decisions.

The currency structure of assets registered further considerable increase of the participation of Euro denominated assets, for the account of the lower participation of Denar denominated assets. Namely, the participation of Euro denominated assets in the currency structure of the assets of the pension funds rose by 9.3 percentage points, thus reaching up to 62.1%. Such rise was mainly due to the growth in the investments in Eurobonds issued by the Government of the Republic of Macedonia. The rise of

[124] The real income rate of the pension funds for certain period is calculates as a differential between the nominal income rate and the inflation rate for the respective period.

these assets contributed with approximately 65% to the growth in the total Euro denominated assets.

Figure No. 3.4.22
Structure of assets of the voluntary pension companies



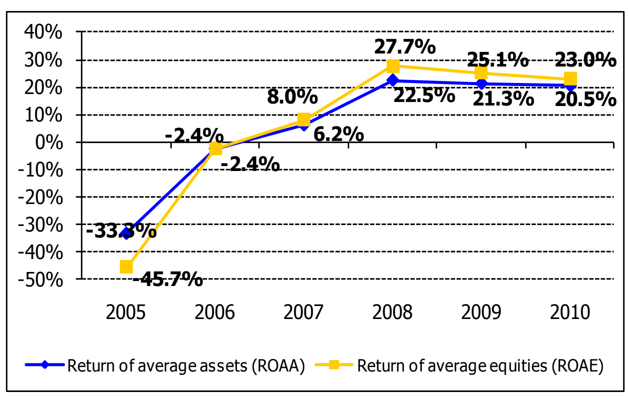
Source: Agency for Supervision of Fully Funded Pension Insurance and internal NBRM calculations.

In 2011, the latest changes to the Law on Mandatory Fully Funded Pension Insurance[125] enabled investments of the assets of the mandatory pension funds in stakes in private investments funds (maximum of 1.5% of their own funds). Despite the legally prescribed limits for investments in such funds, these changes actually created a possibility for assuming larger risks by the mandatory pension funds management companies. Namely, in the Republic of Macedonia there is still no competent body which would monitor and control the work of the private investment funds, i.e. of the authorized private funds management companies.

4.2.2. Voluntary pension funds

The voluntary pension funds in the Republic of Macedonia were formed in the second half of 2009, so they are still at the start of their existence. For period of year and a half, the number of members of these funds reached up to 6,908, out of which 35.9% are members with voluntary individual account, whereas 64.1% are participants in pension scheme with professional account. Same as with the mandatory pension funs, most of the members of these funds are relatively young persons. The average age of the members of the voluntary pension funds is 37 years. The voluntary fully funded pension insurance allows membership for persons who are not citizens of the Republic of Macedonia as well, so 0.07% of the total number of the members are foreigners. The net assets of the voluntary pension funds amount to Denar 44 million, where the deposits and investments in bonds of domestic issuers have the largest participation. Following the example of the mandatory pension funds, in 2010, the voluntary pension funds started to invest in equities from foreign issuers as well (mainly stakes in investment funds, and less in shares). The growth in investments resulted in rise in the net gain of the

Figure No. 3.4.23
Indicators on the profitability of the pension funds



Source: Agency for Supervision of Fully Funded Pension Insurance and internal NBRM calculations.

125 "Official Gazette of the Republic of Macedonia" No. 36/2011.

voluntary pension funds which results from the investments, and although it has small significance, it still started to increase its influence on the total growth of assets of the voluntary pension funds. In 2010, the participation of the net gain from investments in the growth of the total net assets of these funds amounts to 3.0%, whereas in 2009 it was only 0.5%. Such growth contributed to fall in the participation of the inflows on the basis of paid contributions, from 99.6% in 2009 to 97.5% in 2010. The total income from investments amounts to Denar 1.7 million and they result mainly from interests on deposits (58.3%), as well as from domestic bonds (8.0%). On the other hand, the contribution of the unrealized loss and of the fees and compensations which are collected by the pension funds management companies to the total expenses is almost the same and it amounted to 49.1% and 48.1%, respectively. The unrealized losses result mainly from the common shares issued by domestic issuers, mostly as a result of the lower market value of the shares purchased in 2010. The unrealized losses from these shares contribute with 38.9% to the total losses from the domestic shares, while the unrealized losses from shares purchased before December 31, 2009 contributed with 10.1%. The annual nominal income rate of the voluntary pension funds amounts to 4.3%.

Considering the fact that the voluntary pension funds operate for only year and a half, it is still early to asses the efficiency of the management with these funds. But, considering the fact that these funds are managed by the same companies which manage with the mandatory pension funds as well, similar investment policy and management with the assets of these two funds (mandatory and voluntary) can be expected.

4.2.2.1. Profitability of the pension funds management companies

In 2010, the net gain of the pension funds management companies[126] continued to grow. At the end of the year, the growth amounted to 19.2%, so the gain reached up to Denar 75 million. Compared to the previous year, the gain of the pension funds management companies in 2010 increased with smaller dynamics (in 2009, the gain rose by 21.7%). The increased financial result was due to the higher income from compensation from management[127], and less to the income from interest on deposit investments. Certain contribution came from lower costs of funds. The fall (from 6.5% to 5.5%) in the compensation rate collected by the companies from the paid contributions by members of the mandatory pension funds negatively influenced on the income of companies. The income based on compensation from contributions reduced by Denar 25 million or by 27.2%. The higher dynamics of growth of assets and of capital and reserves, opposite to the slower growth dynamics of the net gain of the pension funds management companies resulted in lower rate on return on assets and on return on equity in these companies.

[126] The two companies (NLB "New pension fund" and KB "First pension company") manage with one mandatory pension fund each (NLB "Pension fund" and KB "First open mandatory pension fund") and one voluntary pension fund each (NLB "Pension plus" and KB "First open voluntary pension fund").

[127] The compensation from the managing is calculated as a percentage of the net assets of the mandatory, i.e. voluntary pension fund.

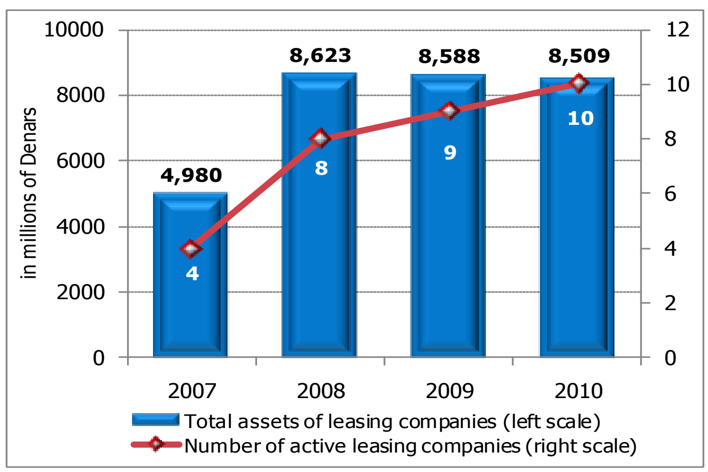
4.3. Sector "leasing"

In 2010, opposite to the tendencies of recovery of the total financial system, the leasing sector continued to feel the negative consequences from the world financial crisis, supplemented by the effects from changes in the regulations which enabled larger import of used vehicles[128]. After the constant growth in the activities of this sector in the previous period (before 2009 it was considered one of the fastest growing segments of the financial system), 2009[129] and 2010 are the first years of fall in its activities. The restricted terms and conditions for offering the financial services of the leasing sector, which are perceived through the higher interest rates and the required participation of the client in the financing, in conditions of larger risks in the operations, resulted in fall in the number and value of the new leasing agreements. The more complicated collection of the claims and the inactive secondary market for sale of the undertaken leasing objects contributed additionally to the negative performances of this sector. Such developments, same as in the previous year, resulted in negative financial result of this sector. The significance of the leasing sector for the domestic economic activity is still relatively small, relative to the other segments of the financial system, as well as to the leasing sectors of other countries. The assortment of services that are offered is still poor (the legal entities are dominant by the type of clients, while the light vehicles are dominant by the leasing object).

4.3.1. Depth and activity of the leasing market

Opposite to the considerable intensification of growth of the total assets of the financial system in 2010, the activities of the leasing sector reduced. At the end of 2010, the assets of this sector reduced by 0.9% compared with the previous year. This represents continuation of the last year interruption of the growth which was realized in the previous years, especially in the period 2005-2008, when the leasing sector was the fastest growing segment of the financial system with respect to the number of the newly formed companies. The deepened negative consequences from

Figure 3.4.24
Total assets and number of active leasing companies



Source: Ministry of Finance.

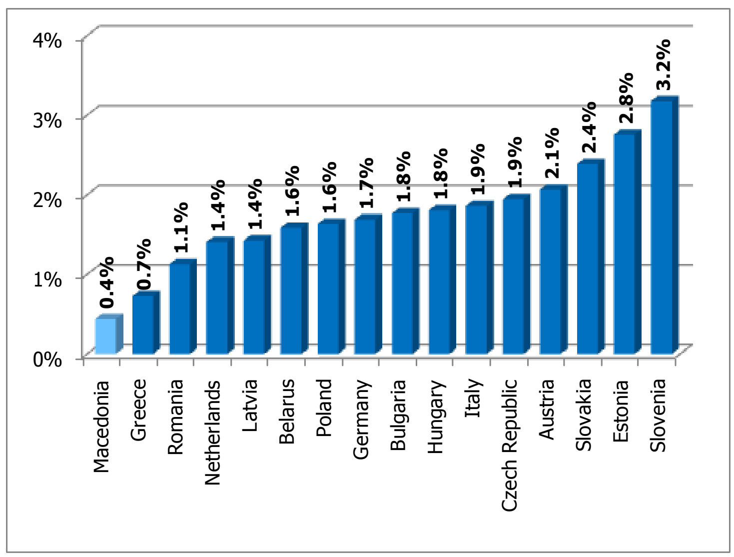
[128] With the amendments to the Excise Law dated March 11, 2010, the excise rates for motor vehicles decreased and progressively change adequately to their value. In the same time, the amendments to the Law on Custom Tariff dated March 12, 2010 reduced the customs duties for import of used motor vehicles from the current 10% to 5%, i.e. the customs duty for new and for old motor vehicles became equal. In the same time, with the temporary measure (from March to September 2010) import of old vehicles up to 15 years was allowed with Euro1 standard. With these changes, in 2010 51.399 used light vehicles were imported, opposite to total of 6.529 imported vehicles in 2009.

[129] The data for 2009 are on the basis of the revised financial statements of the leasing companies.

the world economic and financial crisis (which were reflected through the fall in the investment activities of the legal entities and the higher prudency of the companies in the process of concluding new agreements as a result of the worsened payment discipline in the country), combined with the changes in the regulations which allowed larger import of used vehicles, affected strongly the leasing sector and caused considerable fall in the new placements. Considering the fact that in 2011 the temporary measure for import of old vehicles up to 15 years[130] is not effective, which limits the possibility for massive import of used vehicles, there is a chance for moderate optimism and expectations that the year will be beneficial for the leasing industry. Despite the rise in the number of companies which perform financial leasing (for one company), the significance of the leasing sector for the domestic economic activity is still small (2.0%[131]). In the same time, the share of this segment in the total assets of the financial sector reduced by 0.3 percentage points (2.5% on December 31, 2010) and in the total assets of the non-depository financial institutions by 3.3 percentage points (24.6% on December 31, 2010). The number of employees registered minimal increase relative to 2009 (by 4 persons or by 5.6% to the level of 76 employees).

Compared to the countries from the region, as well as to several member states of the European Union, the leasing sector in the Republic of Macedonia is the least developed. Considerable fall in the activities of leasing companies was registered on the European market as well in 2009, when the share of the value of the new leasing agreements in the GDP almost halved compared to the previous year. However, different from the leasing sector in the Republic of Macedonia which registered fall, this segment in the analyzed countries registered recovery and positive performances in 2010, which were most evident in West Europe and in the Nordic region[132]. The comparison with certain countries from the Balkan region shows that there as well the leasing sector has relatively small significance with respect to both, the share of its assets in the GDP[133], and the value of the new agreements relative to GDP.

Figure 3.4.25
Share of the value of the new leasing agreements in the GDP



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

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[130] The temporary measure for import of old vehicles up to 15 years was effective only in the period March-September 2010.
[131] Participation of the assets of the leasing sector in GDP.
[132] Source: the web page of the European Federation of National Leasing Associations.
[133] The indicator on the share of assets of the leasing sector in GDP amounted to 3.8% in Serbia, 6.7% in Bosnia and Herzegovina, 10.1% in Croatia and 17.6% in Slovenia. The data pertain to 2009.

4.3.2. Value and structure of the financial leasing agreements

In 2010, although with slower dynamics, the number and the value of the new leasing agreements continued to fall, registering decline of 20.9% and 11.2%, respectively. The downward trend in the activities of the leasing companies was opposite to the trend in the banking system, which showed revival of the credit activity, after the slower dynamics in 2009. The tendency registered in some countries in the area, where in the crisis period, most of the credit needs on the market were met by the leasing sector, and not by the banking system, lacked in the Republic of Macedonia. The harder servicing of the debts to the leasing companies can be illustrated through the early termination of the concluded agreements with the clients (242 terminated agreements in 2010, compared to 131 agreements in 2009) which was due to the more complicated collection of the claims and allocation of impairments for the claims. The fall in the value of the new leasing agreements, parallel with the fall in the claims based on financial leasing indicated rise in the unrealized agreements, which caused undertaking of the leasing object (for which the process of secondary sale was generally more complicated) and worsening in the quality of the portfolio of leasing agreements for the whole segment. All this implies larger risks in the operating, which resulted in sharpening of the criteria by the leasing companies, through increasing the interest rates and the required participation of the clients in the financing, accompanied by higher precaution in the process of conclusion of new agreements. The average required participation for the clients in the active leasing agreements for all types of objects amounts to 23.7%, as of December 31, 2010.

Figure 3.4.26
Number and value of the new leasing agreements

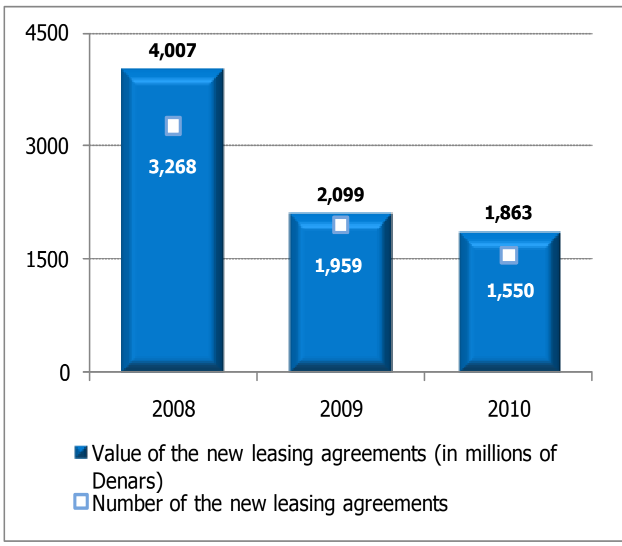
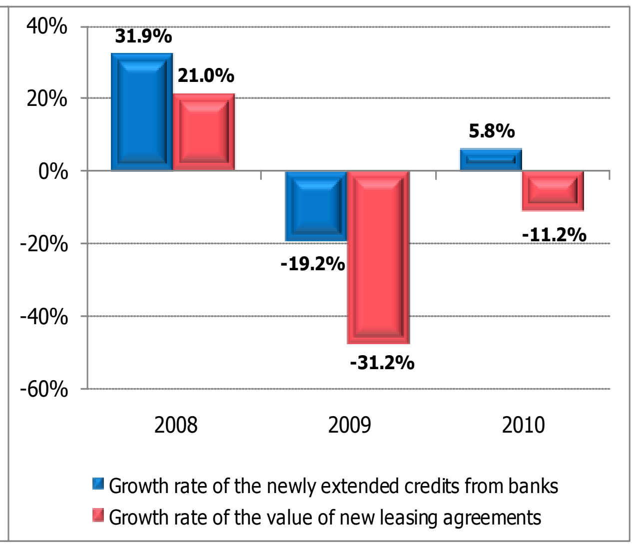


Figure 3.4.27
Comparison of the growth rate of the value of newly extended credits and new leasing agreements



Source: Ministry of Finance.

The value of the new leasing agreements (where natural persons and legal entities are users) registered fall in 2010 as well. The support by the leasing companies to the legal entities was almost twice higher relative to the enabled financial support to the natural persons, so the legal entities are holding the position of dominant leasing users. This was additionally confirmed by the lower share of the value of the new leasing agreements with natural persons in the value of the total new leasing agreements in 2010 (6.6 percentage points), for the account of the rise in the share of agreements with legal entities. The value of the new leasing agreements with legal entities and natural persons diverged from the growth dynamics of the newly extended credits in the banking system for this type of clients. The rise in the newly extended credits was largest in the category "natural persons" (rise of 51.1%), whereas the newly extended credits to legal entities registered insignificant growth. With respect to the value of the active leasing agreements, growth dynamics was registered in the active agreements with legal entities, whereas the natural persons registered fall in the value of the active agreements. This confirms the fact that the legal entities still have the largest share in the structure of the active leasing agreements.

Table 3.4.1
Structure and change in the value of the new and of the active leasing agreements, by type of client

Year	Value of the **new** leasing agreements	Annual change in the value of **new** leasing agreements		Value of the **active** leasing agreements	Annual change in the value of **active** leasing agreements	
		in millions of Denars	**in %**		**in millions of Denars**	**in %**
Legal entities						
2008	2,781	624	28.9%	6,243	1,842	41.9%
2009	1,386	-1,395	-50.2%	6,242	-1	0.0%
2010	1,354	-32	-2.3%	6,968	726	11.6%
Natural persons						
2008	1,225	115	10.4%	3,876	312	8.8%
2009	713	-512	-41.8%	3,812	-64	-1.7%
2010	509	-204	-28.6%	3,634	-178	-4.7%

Source: Ministry of Finance.

The long-term character of the active leasing agreements emphasizes the larger uncertainty and the risks which are assumed by the leasing companies. According to the available data, the number of agreements with payment deadline up to 5 years (without more detailed data on the maturity structure and the values of these agreements) is most dominant. In conditions of downward developments in this segment, the long-term horizon of agreements can influence positively, in direction of recovery of this financial segment in the following years.

Table 3.4.2
Average maturity of the active leasing agreements by types of leasing objects and type of client (by the number of agreements) on 31.12.2010

Type of client	Natural persons		Legal entities					
Type of leasing agreement	Leasing agreements on movables		Leasing agreements on real estate		Leasing agreements on movables			
Type of property	Light vehicle	Other	Residential real estate	Commercial real estate	Equipment	Freight transport vehicle	Light vehicle	Other
up to 5 years	2926	100	2	4	256	604	2038	124
from 5-10 years	2359	55			95	238	1066	93

Source: Ministry of Finance.

Analyzed by the leasing object, the leasing agreements for real estate maintained the insignificant role in the portfolio of leasing agreements. The total number of agreements for such objects rose to six (in 2010 two new agreements were concluded), but their share in the value of the active agreements is still marginal, opposite to the movables which maintained the dominant position with share of 98.3% to the total value of the active agreements. The small participation of the financial leasing for real estate resulted from the tax regulations[134], which make this services less attractive compared to the credit products of banks for such types of objects.

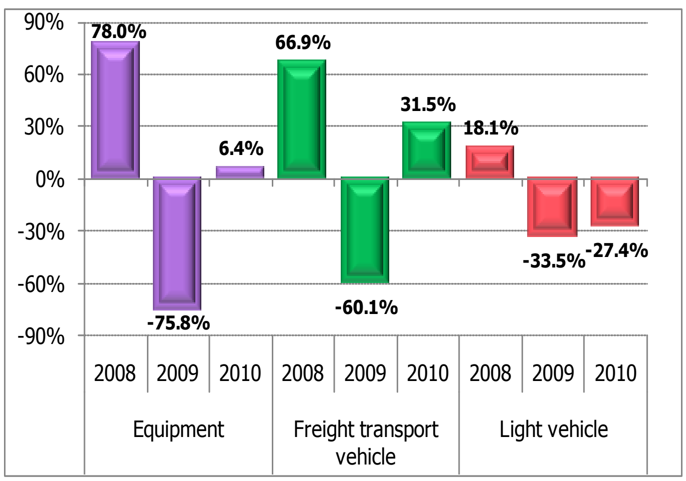
Table 3.4.3
Structure of the leasing agreements for movables (by the number of agreements)

Type of leasing agreement	Equipment			Freight transport vehicle			Light vehicle			Other		
	2008	2009	2010	2008	2009	2010	2008	2009	2010	2008	2009	2010
Number of new leasing agreements	194	47	50	414	165	217	2,554	1,698	1,232	110	49	49
Number of active leasing agreements	338	276	326	902	554	743	7,828	8,696	7,699	367	236	160

Source: Ministry of Finance.

In 2010, the number of new leasing agreements registered rise in all categories, excluding the light vehicles, although they are prevailing in the portfolio of the leasing agreements (with 79.6%). The share of the leasing agreements for light vehicles in the structure of the total number of new agreements registered fall of 7.1 percentage point relative to 2009, at the expense of rise in the agreements for equipment and freight transport vehicles. In the same time, this is the only category of movables which registered absolute fall in the number of new agreements in 2010 (by 466 agreements, or by 27.4% relative to 2009). On the leasing market in Europe the leasing agreements for light and freight transport vehicles participated mostly, with more than a half of the total number of new agreements[135], similar as on the Macedonian market. The registered rise in the number of financial leasing agreements for movables and real estate (excluding the light vehicles) indicates to larger interest of the clients for using the services offered by the leasing companies. The increased financing of freight transport vehicles which is

Figure 3.4.28
Growth rates in the number of concluded leasing agreements for movables



Source: Ministry of Finance.

[134] According to the regulations, the turnover tax is paid twice, first turnover tax is paid by the leasing company when purchasing the leasing object, and than after termination of the leasing agreement, when transferring the ownership, the turnover tax is paid by the leasing user as well.
[135] Source: the web page of the European Federation of National Leasing Associations.

evident trend in the last years, parallel with the high share of the agreements for light vehicles (despite the fall in their number in 2010), indicates to still dominant perception of clients for the leasing as a manner of financing mainly intended for purchasing of vehicles. The share of sold vehicles on leasing in the total sold new vehicles in the Republic of Macedonia in 2010 was recovered and it even exceeded the level of 2008, after the registered fall in the last year, which indicated to false signal that there is a trend of redirecting of clients to use financial leasing. The registered share growth of the concluded leasing agreements in the total new sold vehicles was solely due to the fall of 28.3% in the total number of sold new vehicles (freight transport and light)[136] in 2010 (from 11.692 in 2009 to 8.379 in 2010), determined by the changed legal regulation which caused massive purchase of used vehicles from abroad.

Table 3.4.4
Share of the concluded leasing agreements for vehicles in the number of sold new vehicles in the Republic of Macedonia

Type of vehicles sold on leasing	2008	2009	2010
Light vehicle	16.0%	13.2%	16.3%
Freight transport vehicle	22.7%	12.8%	26.0%
Total	16.7%	13.2%	17.3%

Source: Economic Chamber of the Republic of Macedonia.

4.3.3. Structure of the balance sheets and basic indicators on the performance of the leasing companies in 2010

The structure of the total assets and sources of funds of the leasing companies registered small changes relative to the previous year. In 2010, the indebtedness of the leasing sector was still very high (at the end of 2010 90.1% of the total liabilities of the leasing sector were credit liabilities). The external borrowings additionally strengthened their role as a main source of funding (share of 87.2% in the total assets), whereas the share of borrowings from domestic entities in the liabilities of the leasing companies reduced to 1.6%. The deposits invested in domestic banks reduced and they represent only 1.8% of the total assets of the leasing sector, and inconsiderable 0.1% of the total deposits (of the financial and non-financial entities) with the banking sector. The capital investments which arise from the banking system have marginal share in the capital of the leasing companies (0.2% of the total capital).

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

Table 3.4.5
Structure of the total used loans of the leasing companies

Borrowings' provider	share in %	
	31.12.2009	31.12.2010
Domestic entities	**0.7%**	**1.9%**
Founders		0.2%
Banks	0.7%	1.5%
Other financial institutions	0.0%	
Nonfinancial legal entities		0.2%
Foreign entities	**99.3%**	**98.1%**
Founders	78.8%	80.5%
Banks	3.2%	1.1%
Other financial institutions	17.1%	16.6%
Nonfinancial legal entities	0.1%	0.0%
Total borrowings	**100.0%**	**100.0%**

Source: Ministry of Finance.

Such trends and structures in the balance sheets show very small relation of the leasing sector with the banking system as a dominant segment within the financial system. The dependence of the leasing sector from the stability of the insurance sector is much higher, considering the fact that all leasing objects are by default insured. The small share of the leasing sector in the total financial system, confirms its small significance for the total financial stability.

Table 3.4.6
Balance sheet of the leasing companies

ASSETS	Structure in %		LIABILITIES	Structure in %	
	2009	2010		2009	2010
Cash, cash balances and deposits	3.4%	3.3%	Borrowings	93.5%	88.8%
Claims for financial leasing	68.2%	64.4%			
Short-term receivables	1.4%	3.5%	Accounts payable	1.4%	2.1%
Prepaid expenses	1.1%	0.1%	Provisions for employees entitlement	0.0%	3.3%
Inventory	0.8%	2.3%			
Investments available for sale	0.1%	0.1%	Accrued expenses	0.6%	3.7%
Investments under rent	15.1%	14.4%			
Property and equipment available for sale	0.7%	0.6%	Other liabilities	1.2%	0.7%
Property, plants and equipment	8.1%	9.5%			
Intangible assets	0.5%	0.6%	Equity and reserves	3.4%	1.5%
Assets under operational rent	0.0%	0.3%			
Other assets	0.6%	1.0%			
TOTAL ASSETS	**100.0%**	**100.0%**	**TOTAL LIABILITIES**	**100.0%**	**100.0%**

Source: Ministry of Finance.

The fall in the activities and the bad placements of the leasing sector resulted in larger losses in its operations. The realized loss in 2010 amounted to Denar 141 million and it was larger by almost four times relative to the loss in 2009 (Denar 38 million). The rates on return on assets and equity maintained the negative values and they additionally rose. This segment has difficulties with the realization of profit from the basic activity. Therefore, in 2010, the income from activities based on leasing was not enough for covering the realized costs. Namely, the interest costs based on high amount of used credits represented the largest expenditure item and they contribute to negative financial result. The profitable and stable functioning, as well as the improvement of the competitiveness of the leasing companies in the future can be achieved through: structural transformation of the sources of funding, in direction of increasing the capital as permanent and unredeemable investment of the owners, for the account of the decrease of liabilities based on credits; better organization of the secondary market of movables and real estate in the Republic of Macedonia and eventual alleviation of the tax regulation.

4.3.4. Regulatory and supervisory framework for the leasing sector

One of the weaknesses with this segment of the financial system is located at the regulatory and supervisory function. Despite the basic legal framework for these companies from 2002, there is a still lack of more detailed bylaws, and especially supervision (at least off-site) over the leasing companies. The amendments to the Law on Leasing, made in March 2011, strengthened the supervisory function of the Ministry of Finance, and in the same time introduced an obligation for licensing of the members of management bodies, as well as a criterion for providing minimal capital requirements for founding a leasing company. In June 2011 three rulebooks are planned for adoption based on the amendments to the Law on Leasing, as follows: Rulebook on the contents and structure of the request forms for founding the operations of the issuer of financial leasing and permission for status changes, Rulebook for the type of documents for meeting the requirements for member of financial leasing issuer management body and Rulebook for the form and the structure of the reporting form for financial activities and the conditions and sources of funds.

The operation of the leasing companies is still encumbered as a result of the tax regulations (which considerably increased the prices of the leasing companies services), in the area of turnover tax on real estate (this tax is paid twice, first by the leasing company when buying the leasing object, and than in the process transferring the ownership and termination of agreement, the tax is paid by the leasing user as well) and in the area of the value added tax (the leasing companies are not released from the obligation for paying value added tax, as it is with the banks and insurance companies[137]).

[137] In accordance with the Law on Value Added Tax, the turnover of goods based on leasing agreements represent taxation object, whereas the tax exemptions are enabled for banking and financial turnover, credit granting and intermediation, as well as managing with them by the credit issuer and insurance and reinsurance services, including the services related with them of the insurance brokers and agents.

IV. Financial infrastructure

1. More important legal solutions adopted in 2010

In 2010 several new laws were adopted which influenced the financial system of the Republic of Macedonia:

- Law on the National Bank of the Republic of Macedonia;
- Law on Financial Companies; and
- Audit Law.

Also, changes and/or amendments were made to several existing laws which on direct or indirect manner regulate the operating of certain segments of the financial system, as the following:

- Company Law;
- Law on Money Laundering Prevention and Other Proceeds from Crime and Financing Terrorism;
- Law on Securities;
- Law on the Deposit Insurance Fund; and
- Law on the Mandatory Fully Funded Pension Insurance.

As a result to the need for fulfilling the legal gaps which emerged after the cancelation of certain provisions by the Constitutional Court of the Republic of Macedonia and the need for compliance with the Penal Code of the Republic of Macedonia, in 2010 amendments were made to the following laws[138]: Banking Law, Investment Funds Law, Law on Providing of Fast Money Transfer Services and Insurance Supervision Law.

1.1. Law on the National Bank of the Republic of Macedonia

In December 2010 the new Law on the National Bank of the Republic of Macedonia was adopted, which except for the provisions for national goals and tasks of the National bank, introduced provisions for the tasks and authorizations of the National Bank after the accession of the Republic of Macedonia to the European Union and the tasks and authorizations after the introduction of the Euro as monetary unit in the Republic of Macedonia. The goal of the Law is to design the status and the function of the National Bank as they are designed in the EU member states and according to the principles and standards of the European Union Agreement signed in Maastricht and the Statute of the European System of Central Banks and the European Central Bank. This way the necessary postulates were created for successful inclusion of the National Bank within the institutional framework of the European Union.

[138] These changes envisage that a shareholder with qualified participation in a bank/shareholder with qualified participation in a investment fund management company/money transfer service provider, can not be a person against who additional penalty is stated (1) ban on obtaining a founding and operating license to a bank/on operating of investment fund management company/on performing fast money transfer services; (2) revoking a founding and operating license to a bank/for operating of the investment fund management company/for performing fast money transfer services; (3) ban on founding new legal entities and (4) temporary or permanent ban on performing banking operations/investment fund management operations/fast money transfer service. In the penalty provisions of these laws, in the part pertaining to criminal acts compliance was made with the provisions which regulate the ban on performing a profession, activity or duty of the Criminal Code of the Republic of Macedonia.

The new Law introduced more innovations regarding the design of the national goals and tasks of the National Bank, as the following:

- Despite the basic goal for achieving and maintaining the price stability, a new goal was introduced for the National Bank, which is subordinated to the basic goal - to contribute to maintaining of stable and competitive market oriented financial system;

- The current tasks which were determined by the previous Law are supplemented.

The most important innovation introduced with the new law pertains to the determination of **the second goal of the National Bank -** monitoring and maintaining of the financial stability in the Republic of Macedonia. The National Bank is obliged to collect relevant data on regular basis from the financial supervisory bodies, financial institutions, government administration authorities, public companies and institutions and the trade companies founded by the Government or dominantly owned by the Government and on the basis of the collected data, to prepare periodical statements regarding the stability of the financial system. On such manner, the role of the National Bank in the monitoring of risks in the financial system strengthens, and the current practice for preparing of the Financial Stability Report in the Republic of Macedonia on annual basis, became a legal obligation for the National Bank.

Regarding the tasks of the National Bank, the greatest innovation is the provision on determination of the regime of the foreign exchange rate of the Denar through mutual agreement of the National Bank and the Government of the Republic of Macedonia (previously, the determination of the regime of foreign exchange rate was under exclusive authority of the National Bank). Although the Law explicitly states that the agreeing on the regime of the foreign exchange rate shall not endanger the realization of the basic goal of the central bank (achieving and maintaining of the price stability), still such change represents lower institutional independence of the National Bank. On the other hand, the Law cancels the obligation for agreement between the Governor and the Minister of finance regarding the foreign reserves management, thus stating the financial instruments in which the foreign reserves can be placed and kept, respecting the principles of safety, liquidity and profitability. Other bigger innovation is the full and clear defining of the rights and responsibilities of the National Bank for the safety, stability and efficiency of the payment, settlement and clearing systems, including their monitoring, thus establishing modern legal framework in this area too. The Law confirms the independence of the National Bank in the process of selection of monetary and other instruments, and describes more detailed the conditions under which and the deadline for which the National Bank can grant credit for liquidity of last resort. The issuance of national banknotes and coins is still an exclusive right of the National Bank.

This Law also improves the provisions on the **relations between the National Bank and the Parliament of the Republic of Macedonia**, especially the rights and responsibilities of the National Bank as a banker, financial consultant and fiscal agent of the Government of the Republic of Macedonia. The Law envisages a possibility for the Governor to give an address to the Parliament ant its commissions on their own initiative, and not only upon a request of these institutions. Also the law prescribes for the Governor and the Minister of finance to hold regular meetings on issues regarding the monetary policy, as well as to inform each other on other issues of common interest. According to the Law, the Government is obliged to cooperate with the National Bank in the process of preparing the regulations related with the goals and tasks of the central bank.

Regarding the **management and organization** of the National Bank, the new law kept the total number of nine Council members, but increased the number of executive for the account of the non-executive members. Namely, according to this Law, the National Bank's Council is consisted of the Governor, all three Vice-Governors[139] and five non-executive members. As previously, the Parliament nominates the Council members, and the innovation is that the Government of the Republic of Macedonia suggests the non-executive members, and not the President of the Republic of Macedonia, as it was prescribed with the previous Law. Such decision, according to which, for the first time since the institutionalization of the National Bank as a central bank of the independent Republic of Macedonia, the Government of the Republic of Macedonia suggests Council members, may represent a risk of higher influence of the executive government on the operating of the National Bank. The old decision was kept for the executive members, i.e. the President of the Republic of Macedonia suggests the Governor, and the Governor suggests the Vice-Governors. As in the previous Law, the mandate of the Council members is seven years, with a right for their reselection.

1.2. Law on Financial Companies

In December 2010 the Law on Financial Companies was adopted which prescribes the treatment of that part of the financial system of the Republic of Macedonia which was not subject of full and adequate regulation and supervision[140]. The Law prescribes the founding, operating and supervision on the financial companies as a new type of **non-banking financial institutions in the Republic of Macedonia.** The experiences from the EU member states showed that the level of regulation of the non-banking financial institutions depends on their participation on the financial market and, with respect to this, on the risk they carry. Generally, there are two models of regulating of these institutions - prudent regulating and market behavior, but more countries use a combination of these two models. In the Republic of Macedonia, the participation of the non-banking financial institutions which perform crediting in form of credits, credit cards, guarantees and factoring is inconsiderable and therefore it does not represent a special risk for the stability of the financial system. However, the activities related with issuing of credit cards and guarantees can create a risk with the entities that accept the cards, i.e. on behalf of which the guarantees are issued. Of those reasons, the Law on Financial Companies is based on the combination of both models, where the model of market behavior prevails. From the model of prudent regulating the standards regarding the management body members and the minimal capital requirements for founding are accepted[141]. The limitation of the credit activity of the financial company (the aggregated amount of the

[139] In accordance with the previous law, only two vice-governors were members of the National Bank's Council.

[140] The provisions of the Law pertain to the banks, foreign bank branches and saving houses founded in the Republic of Macedonia, as well as the foundations and associations of citizens and trade companies that land money to other trade companies. Pursuant to the Law, the financial companies perform one or more of the following financial activities: granting credits, issuing and administrating credit cards, factoring and issuing guaranties. Besides these four financial activities, the financial companies can provide consulting services related with such activities and to rent movables and real estate to third persons, including operational leasing as well.

[141] The core principal for founding a financial company is minimum six millions of denars and it must be in cash. For founding and operating of financial company previous approval is required from the Minister of finance, who issues also approval for status change of the financial company and form performing new financial activities, as well as approval for change of a member of managing body of the financial company.

used credits can not be higher than ten times of the amount of the basic principal) and the ban on the financial company to grant credits to its founders and the related persons[142], represents especially important provision from the Law. From the model of market behavior, the monitoring of the behavior of the financial companies and their observing of the laws, mainly trough reporting and penalties for illegal behavior, was accepted.

This way the financial supervision in the country strengthened, equal conditions for founding and operating of certain types of financial institutions were created, the international trends for avoiding the possibility of appearance of so called shadow banking system are met, and the specification of the financial activities which can be performed by these companies enabled larger protection of the users of financial services.

The Ministry of finance is a supervisory body competent for the operating of the financial companies. The Ministry performs off-site supervision on the operating of the companies and their on-site control. The Law envisaged the possibility for the Ministry of Finance to use external experts in the process of on-site control. Also, the Ministry of Finance has a right to undertake measures to the companies in order to remove the determined unlawfulness in type of: written warning, written order with deadline for compliance, temporary ban on performing of part or all financial activities and revocation of the founding and operating license of the company.

1.3. Audit Law

In December 2010 the new Audit Law was adopted which prescribes the conditions of the performance of audit in the legal entities that perform activity in the Republic of Macedonia. The provisions of this law pertain to the legal and agreed auditory engagements which are performed in the Republic of Macedonia.

According to the Law, in order to improve the audit and in order to supervise the audit, the Government of the Republic of Macedonia (in the previous Law, the Minister of finance), upon a suggestion of the Minister of finance founds a Council for improvement and supervision of the audit as a self-governing and independent regulatory body. Generally, the contents of the provisions for functioning of the Council are almost identical with the previous Audit Law. The Council consists of seven members and one of them represents the National Bank. The mandate of the president and the members of the Council is five years (with the previous law, three years), with a possibility for reselection for one more mandate.

According to the Law each auditor can perform legal or agreed audits in the Republic of Macedonia, if it is a member of the Institute for Authorized Auditors[143] (which was the only term in the previous law), but if it also owns a **license for authorized auditor**. The license for authorized auditor is issued on permanent basis to person who is certified auditor and who has at least three years of working experience in audit, out of which two years under surveillance of authorized auditor. Especially significant innovation in this area is the quality control system

[142] The spouses of the founders of the financial company or the persons who live with them in common-law marriage, their children or adopted children, parents and persons under their custody, as well as the related companies according to the Company Law are considered to be related persons. For the needs of the two limitations, the granted credit, issued guarantees, issued credit cards and the assumed claims are considered to be credits.

[143] Institute for Authorized Auditors of the Republic of Macedonia is a professional chamber association of the authorized auditors.

which controls the authorized auditors, the audit companies and the authorized auditors - sole proprietors, for compliance of the auditors' operating with the International Auditory Standards, the Code of Ethics for Professional Accountants and the International Federation of Accountants (IFAC) and the domestic regulations.

The new Law introduced an obligation for the legal entities of public interest[144] to form **auditory board** which shall consist of at least five members and which shall perform the following tasks: monitors the legal audit of the financial reports, monitors the compliance of operating of the public interest entity with the regulations which pertain to accounting standards and financial reports, monitors the process of audit on the public interest entity and assesses the operating of auditory company or of the authorized auditor - sole proprietor, suggests auditory company and monitors the operating and assesses the efficiency of the internal audit and the risk management systems. Besides this innovation, one authorized auditor can perform legal audit on the financial statements of a public interest entity within a period of maximum seven subsequent financial years[145]. After this period, the licensed authorized auditor can not perform audit on the financial statements of the same legal entity of public interest for two years from the day of the termination of its mandate.

1.4. Amendments to the Company Law

In order to comply with the adequate European directives, in March and April 2010 several amendments were made to the Company Law.

The amendments to the Law made in March 2010 are in direction of increasing of the transparency in operating of the joint stock companies that are listed on the stock exchange, removal of the limitations of shareholders in the realization of their rights in the meeting of shareholders and therefore, increase in the control over the managing structures and better corporate governance. The amendments to the Law made a distinction to joint stock companies that are listed on the stock exchange relative to those which are not listed, with respect to the realization of the rights of the shareholders on the meetings of shareholders, personally or through procurators, voting and attending the meeting electronically, voting through correspondence and determining the voting results[146].

The amendments to the Law made in April 2010 enable: establishment of a registry of persons who can not found and manage with trade companies: preventing of possible abuse of own shares (before they are retired or canceled, the own stocks shall be announced for sale transparently); larger responsibility of the management body members in the joint stock companies when they abuse their authorizations and undertake actions which prevent entry of

[144] "Public interest entity" is a joint stock company with special reporting responsibilities pursuant to the Security Law, and that is a company which performed public offer of securities, or which has core principal in the amount of Euro 1.000.000 in Denar equivalent and more than 50 shareholders, or which is listed on the stock exchange.
[145] Although the banks represent public interest entities, they will be subject to the provisions of the Banking Law, rather than the provisions from the Audit Law, that pertain to the auditory board and the number of subsequent audits. Namely, the Audit Law allows excluding of certain entities of its scope, if another law or regulation contains more rigorous provisions than the provisions prescribed with this Law.
[146] The joint stock companies the shares of which are listed on the stock exchange are obliged to integrate electronic systems for realization of the stated rights or to use services for the same goal from specialized companies, as well as to have official web-page stating the accurate responsibilities, what is required and in what period shall it be disclosed on the web-page.

new shareholders and take over of companies; introducing obligation for establishing internal audit service in each joint stock company which is medium or large trader, to company the shares of which are listed on the stock exchange and to company with special reporting responsibilities (resulting from the need of compliance and application of the OECD Principles for corporate governance in the countries from South Eastern Europe).

1.5. Amendments to the Law on Prevention of Money Laundering and other Proceeds from Crime and Financing of Terrorism

In direction of strengthening of the mechanism for prevention of money laundering and financing of terrorism, exceeding the determined practical issues, as well as meeting the requirements stipulated in the European legislature and international standards, in April 2010 the Law on amending the Law on Prevention from Money Laundering and other Proceeds from Crime and Financing of Terrorism was adopted.

This law further regulates and specifies the provisions of the Law that pertain to:

I. procedures for analysis of the client which encompass wide range of activities which shall be undertaken in the process of determining the identity of clients and monitoring their operating;
II. submission of data to the Office for Prevention from Money Laundering and Financing of Terrorism by the authorized entities;
III. strengthening of the system for performing audit on the application of the measures for prevention of money laundering and financing terrorism.

1.6. Amendments to the Securities Law

For further protection of rights and interests of investors, and especially the small investors and shareholders, which represent key term for improvement of the investing climate in the country, as well as further maintaining of efficient capital market, in April 2010 amendments were made to the Securities Law. They further regulate the concept for acquiring **qualified participation in brokerage house, stock exchange for securities and security depositary**, according to which the person who intends to acquire shares the cumulative amount of which exceeds 10%, 20%, 30% and 50% of the total issued voting shares, shall previously be given approval for acquiring qualified participation by the Securities and Exchange Commission. This legal solution overcomes the constant restriction in the Law according to which, a shareholder together with its related persons, can not own more than 10% of the voting shares on the stock exchange and 15% of the voting shares in depositary.

The obligation for the amount of the own funds of the brokerage house not to be lower than the amount of the core principal of the brokerage houses determined in the Securities Law in any moment represents more significant innovation introduced with the amendments to the Law. According to the Law, **the own funds** are funds consisted of the core principal, reserves and other categories of assets calculated by the Rulebook for categories of own funds and the manner of calculating of the amount of own funds of brokerage house[147].

[147] This Rulebook is adopted on meeting of the Securities and Exchange Commission of the Republic of Macedonia held on October 25, 2010.

With the amendments to the Law two funds are established the goal of which is to strengthen the investor position:

1) **Guarantee Fund** which shall be formed by the Securities Depositary. The Guarantee fund shall be consisted of obligatory payments of the members of the depositary (brokerage houses and banks which perform services with securities) which use the settlement services offered by the depositary. The assets cumulated in the Guarantee Fund will be used in case of inability for settlement of the trade transactions with securities, i.e. will be used only if some member of the depositary will not have enough cash for settlement of already agreed trade transaction with securities;

2) **Securities Investor Indemnity Fund** which shall be formed and managed by an institution (fund operator) that shall be approved by the Securities and Exchange Commission. The membership in the fund will be obligatory for the brokerage houses and authorized banks that perform the security services and for the investment funds management companies that manage the funds for the account of individual client – portfolio owner. This fund shall indemnify the security investors in cases when the authorized court will adopt a decision for instigating liquidation procedure over a member of fund or in case when the Commission shall determine that a fund member is not able to fulfill the liabilities to clients, i.e. that it is not able to make repayment of the cash liabilities and/or to return the securities which it kept and/or which it managed for the account of the client and there is not a possibility for the situation to change considerably in the near future.

The amendments to the Law regulated more precisely the types of accounts which the authorized securities market participant can open in the depositary, i.e. authorized participants on the securities market and the custodian banks of the pension and investment funds are enabled to open aggregate account for larger number of clients - non-residents for which they perform the function of custodian bank, which is in direction of fall in their costs and saving time.

1.7. Amendments to the Law on Deposit Insurance Fund

In December 2010 the Law on amending the Law on Deposit Insurance Fund was adopted in order to increase the trust to the banking sector and to provide legal protection of deponents in a bank, foreign bank branch or saving house. The amendments to the law specified part of the existing provisions of the Law and performed compliance with certain provisions from the Banking Law, i.e. it was enabled for the provisions of the Law on Deposit Insurance Fund to pertain to the foreign banks branches as well[148]. In the same time, the deadline for indemnification of the insured deposits reduced from three months to 20 days, and in extraordinary cases maximum up to 30 days and instead of the current two levels of

[148] The branches of banks from the member states of the European Union are excluded from the Law on Deposit Insurance Fund and according to the Banking Law, the deposits of these branches will be included in the scheme for guarantying deposits to the domicile country. But, as according to the Banking Law, until the full membership of the Republic of Macedonia in the European Union, the branches of banks of EU member states have the same treatment as the foreign bank branches, and until than the deposits of the branches of banks from EU members states are subject of insurance of the fund of the Republic of Macedonia.

indemnification (100% of the amount up to Euro 10.000 and 90% of the amount between Euro 10.000 and Euro 20.000), indemnification to all deposits of natural persons in the amount up to Euro 30.000 was introduced. Also, the amendments to the Law specify the cases when the Fund can demand information from the National Bank and the administrators in a bank under administration.

In direction of compliance with the adequate European directives, the Law on amending the Law on Deposit Insurance Fund contains special provisions which shall start being applied as of the day of accession of the Republic of Macedonia to the European Union, and which pertain to the broadening of the coverage of the insured deposits by the deposits of legal entities and to the increase in the amount of the indemnified deposit amount up to Euro 100.000.

1.8. Amendments to the Law on Mandatory Fully Funded Pension Insurance

In order to ensure more efficient functioning of the fully funded pension insurance and protection of interests of its members, in April and in December 2010 amendments were made to the Law on Mandatory Fully Funded Pension Insurance.

The most significant amendments to the Law performed in 2010 pertain to **investment of assets from the mandatory fully funded pension insurance funds**. As a result to the insufficient offer of other instruments on the domestic capital market, the mandatory pension funds are allowed to invest assets also in:

- bonds issued based on approval by the Securities and Exchange Commission and which are listed on the official market of the stock exchange of long-term securities or other organized security market in the Republic of Macedonia, issued by the local government units (despite the bonds issued by banks and other trade companies in the Republic of Macedonia);

- stakes, shares or other instruments issued by authorized investment funds with head office in a OECD member stated (with the previous law the investments were allowed only in investment funds with head office in the European Union, Japan and USA).

Maximum of 50% (instead of 30% as the previous law allowed) of the value of assets of the mandatory pension funds can be invested in instruments of foreign issuers outside the Republic of Macedonia[149], and maximum of 40% of the assets can be invested in bonds and other debt securities issued by the local government units and from domestic joint stock companies[150]. Also, the mandatory pension funds can invest in securities of same issuer up to maximum of 10% of the nominal value of single security issued by that issuer. The bonds and other debt securities issued by same local government unit and same domestic joint stock company, which have limit of 20% of their nominal value, represent an exception of such

[149] Within this limit maximum of 30% of the value of assets can be invested in debt securities and equities issued by foreign companies, banks and investment funds with the main office in EU or OECD member states.
[150] Within this limit, maximum of 10% of the value of assets can be invested in bonds issued by the local government units.

limitation. This decision is aimed at stimulating of issuing corporate bonds, as an instrument which is significant for diversification of the pension funds' assets.

Regarding the investments in bank deposits, the amendments to the Law determined more specifically the maximal amount of this type of investments – 30%[151] of the assets of the mandatory pension funds. The reason for such provision is the fact that these are instruments which can not be traded (have low degree of liquidity), but also the intention to increase the diversification of assets of the mandatory pension funds.

Besides the changes that pertain to the investments of assets of the mandatory pension funds, the changes prescribe the minimal principal of the pension insurance management company, adequately to the increase of the assets of the mandatory pension funds managed by the company, as well as maintaining of minimal amount of own assets depending on the core principal of the company. Also, the amendments to the Law specify and strengthen the terms and conditions for selection of a member of the Management Board and Supervisory Board of the company, specify the definition for independent member of the Supervisory Board of the mandatory pension funds management companies, precisely determine the maximal amount of fees and commissions that can be collected by the company from the contributions paid in the mandatory pension fund that it manages with, and specify the responsibilities of the mandatory pension funds management companies for notifying the Supervision Agency for Mandatory Fully Funded Pension Insurance.

[151] Before the changes this limit amounted to 60%.