# **National Bank of the Republic of Macedonia**



Annual report 2011

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#### Governor's foreword

The beginning of this year gave hope that the world is slowly but steadily emerging from one of the biggest recessions in the past 60 years. All the world's economic analysts and experts in global economic developments estimated that in 2011 the continuity of positive economic achievements will be maintained, the expectations and financial markets will stabilize and the process of sound and sustainable recovery will continue. Unfortunately, 2011 was again 'a **new year, with old problems'.** The world economic setting was once again hit by events that took global economy astray from the path of evident growth, from the possibility for improved economic prosperity, from the possibility to create new jobs and shorten the agony of labor markets. At mid-year the Euro area re-entered another "acute crisis". After the debt problems in the three relatively smaller Member-States, in September the insolvency risk became common for another two systemically more important Euro area Member States. The surfacing of the problems with public finances in Italy and Spain again destabilized the financial markets, increased the risk premium and uncertainty, reduced the confidence and worsened the economic outlook globally. Policy makers in the Euro area responded to these events. Institutional changes in the domain of public finance by establishing the "fiscal compact", outlining the European Stability Mechanism as a permanent mechanism for management in crisis, another liquidity support from the European Central Bank, are part of the measures that were supposed to stabilize markets and expectations. Notwithstanding all this, the problems still persisted and grew, putting in question even the survival of the European Monetary Union in the current form. It is already clear that the exit from the crisis requires much deeper and longer reforms that will provide deeper and more successful integration.

Our economy inevitably suffers the consequences of these tectonic shifts in the global economic arena. For a small economy it is not simple to go through such periods, i.e. to operate in an environment of prolonged uncertainty and turbulent changes produced by the external environment. In such economy, whose growth model is export-driven, the challenges are big both for the private **sector and the policy makers.** Towards the middle of the year, our private sector again faced with shocks, which led to a discontinuity in its recovery. Negative effects from the external environment, certainly hit the export sector first, and then gradually through multiple channels they spilled over to the other segments. The experience from the previous year, when after the first signs of recovery, the economy sank into stagnation again, showed that when the main economic partners are in a state of economic and financial "stress" one must be aware that the outcome in the domestic economy is hardly predictable. This environment is not simple either for policy makers. The hardly predictable path of growth of the world economy and the domestic economy, with high probability for slow recovery is a burden also for **domestic public finance**. In such circumstances, from the aspect of dynamics, the fiscal space becomes more limited, even in conditions of a sound fiscal policy as ours. The uncertainty about growth is transmitted into an uncertain path of public revenues, and also makes the access to additional financing more difficult. Under such conditions, retaining prudence is necessary. But it also means great effort and commitment to continually review the priorities, reduce rigidities, where there are some, take care to ensure balance between sustainability and continuity of commenced reforms.

The continuity of the policy of the National Bank, set up toward maintaining price stability through a stable exchange rate of the Denar and financial stability, was maintained in these conditions of constant turbulence in the environment. The changes that we made last year in the macroprudent framework were a response to the state of adequate liquidity and capitalization of the domestic banking system on the one hand, and the room that macroeconomic situation has left for policy

changes on the other. During the year, we have constantly monitored all risks from the internal and external environment, evaluating the possibility of their materialization and the effects they might have on achieving the objectives of the National Bank. The fact that last year the exchange rate stability and price stability were not even remotely threatened, foreign reserves continued to grow, and the banking system continued to function on healthy foundations, shows that we as carriers of the monetary policy and responsible for the financial stability, were able to contribute to maintain the stability as sine qua non for a healthy economy. Indeed, the developments towards the end of the year confirmed our credibility as a central bank, responsible for keeping the value of the domestic currency. When confidence in the Euro as a currency was seriously disrupted, and there were doubts about its survival, domestic agents resorted to saving in Denars. It showed that the confidence in the domestic currency is high and the expectations for its value stable. Against the backdrop of prolonged crisis and severe challenges, maintaining the confidence and expectations of stability is a tremendous asset and a prerequisite for sustainable recovery.

We, as a central bank, will possibly encounter further challenges, created by the prolonged global downturn. These unusual times, actually caused the need for a fundamental redefinition of the monetary policies of all central banks in the world. The crisis has showed that the model on which the policies of central banks are based should inevitably be upgraded with the concept of financial imbalances. At the same time, they need to be carefully monitored and it should be kept in mind that their accumulation requires a much longer period than the usual time horizon of the monetary policy. Also, the way major central banks around the world deal with the crisis, through massive quantitative easing and increasing their balance sheets, shows that probably in the future also the conventional operational monetary framework will undergo major changes. For us, these global circumstances and the effects that they have on the monetary design are an important lesson and a quideline for the future. In "favorable circumstances" of poor financial integration and lack of large external and internal imbalances, with sound fundamentals we managed to pass through the global downturn relatively steadily. The experience of the now endangered countries shows that if we as policy-makers, want sound basis for development, we must maintain continuity in this domain. Simultaneously, we must continue to work seriously on drafting the framework for successful and timely identification of potential risks in the future and to integrate into the trends of modern monetary economics. We, as a central bank are constantly doing it. Currently, the maintained uncertainty and volatility on an unusually high level, persistent disruptions of trends, current risks to the global economy in conditions of fiscal consolidation and the process of "deleveraging" of the financial sector, largely affect our daily operations and the work on the medium-term agenda. However, the successful accomplishment of the objectives we set, shows that we use our full capacity, to deal at our best with the risks in this turbulent period and to set the policies in an optimal way for these conditions. In this context, I would like to publicly thank the staff at the National Bank. They are making great efforts every day to apply their knowledge in performing their tasks in the best way, and also to upgrade their skills for successful coping with future challenges. Their efforts are part of the improving of the overall institutional capacity of the National Bank, which is a prerequisite for effective accomplishment of our primary goals as a public good for which we are accountable to you all.

Skopje, April 2012

Dimitar Bogov Governor and Chairman of the NBRM Council

# Summary

In 2011, the monetary policy has been conducted in a relatively favorable macroeconomic environment. The domestic economy growth, although preserved and additionally strengthened, was not strong enough to enable closing of the negative output gap, indicating no significant domestic demand pressures. The economy's external **position** remains to be relatively favorable thus enabling increase in the foreign reserves, given the minor widening of the deficit in the current transactions and higher capital inflows based on direct investments and foreign borrowing of the Government. The inflation increased moderately, as a result of the rise in the world oil and food prices and increase in the domestic regulated prices<sup>1</sup>. The conditions on the **labor market** improved as well compared to the preceding year with the fiscal policy also remaining prudent by further maintenance of stable and relatively low budget deficit. **Despite the mainly favorable** macroeconomic performances, 2011 will be remembered as "a year of milestones" with sudden changes with risks from the external setting. Namely, the global economy and world trade growth, accompanied with the further surge in oil and primary products prices, emphasized the "price risks" in the first half of the year. The debt crisis resumption in the Euro area in May terminated these trends, while the focus was once again directed towards the "vulnerable recovery of the real economies, especially in the Euro area countries. The high trade integration of the Macedonian economy meant also a reflection of these trends in the dynamics of the key macroeconomic variables, which imposed a need of higher "vigilance" of the monetary policy in 2011. However, the external environment risks did not cause larger macroeconomic imbalance in the domestic economy, with the reference interest rate of NBRM remaining unchanged during the year. Thus the interest rate on the CB bills remained at 4%, which was assessed as adequate to the current movements and expectations for the following period. In the second half of the year, the NBRM introduced changes within banks' liquidity management, which contributed towards certain relaxation of the conditions and larger disposable liquidity of the banks, and were adequate to the monetary policy ambient in that period. The environment of steady inflation on medium term and stable nominal Denar exchange rate against the Euro, as intermediary monetary objective, was successfully preserved also in 2011.

The recovery of the Macedonian economy continued also in 2011. The real GDP growth equaled 3%, which is almost twice higher rise in comparison with the **previous year.** The registered growth rate arose mainly from the developments in the first half of the year. The gradual increase in the global economic growth, the favorable conjunction on the world market for our export products and more optimistic expectations of the economic entities had positive impact on the domestic economic activity. The stimulus of the government capital investments also contributed for positive performances. In line with the mainly favorable environment, the domestic entities increased the propensity to consume, which was adequately underpinned by the intensified credit activity and moderate increase in the employment. These factors resulted in high average increase in the domestic economy of 5.2% in the first half of the year. In the second half, the macroeconomic trends worsened. The reemergence of the debt crisis in the Euro area stirred new wave of uncertainty, new tensions on the financial markets and resulted in constant downward revisions on the growth rates of the most important trading partners. The fall in the foreign demand had negative impact on both the domestic industry and the export sector. The elevated uncertainty reflected also on the expectations of the domestic entities and resulted

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<sup>&</sup>lt;sup>1</sup> In January 2011, the price of the heating energy increased by 3.7%, while in March, the price of electricity augmented by 5.5%.

in higher propensity for saving and restrain from consumption. As a result of these factors, the increase decelerated and equaled 1.2%, on average in the second half of the year.

Despite the intensified economic activity growth (especially in the first half of the year), in 2011 the domestic economy was below the potential and pointed to absence of inflationary pressures through the demand channel. However, the inflation in 2011 accelerated moderately and equaled 3.9%, on average. The increase in the price level was led by supply side factors, i.e. by the further surge of the world food and energy prices, as well as by the rise in the domestic regulated prices. The inflation dynamics corresponded, to great extent, to the changes in the external environment - faster growth in the first half of the year and its stabilization in the second half. The riots in North Africa and on the Middle East, as well as the natural disasters<sup>2</sup> (which reduced the corn and grain yields) contributed to upward pressures on the world oil and food prices at the beginning of the year. These performances, accompanied with the increase in the regulated prices, reflected on the domestic inflation, which registered average annual increase of 4.4% in the first half of the year. The gradual exhaustion of the global inflationary pressures, as well as the administrative and tax measures<sup>3</sup> contributed for deceleration of the domestic inflation in the second half of the year to 3.4%.

In 2011, the external position of the Macedonia economy was relatively favorable despite the increased risks in the global economy. The deficit in the current account increased moderately (0.6 p.p. of GDP on annual basis) and it equaled 2.8% of GDP. Such small worsening of the deficit is mostly due to the larger trade deficit. During the year, the still weak domestic demand failed to cause substantial import pressures. Such performances, in conditions of favorable conjunction on the metal market resulted in narrowing of the non-energy trade deficit. However, the enlarged energy needs and the elevated energy prices worsened the energy trade balance, which was the main factor for the trade deficit widening. The private transfers continued to mount, especially at the end of the year, mainly as a result of the improved confidence in the domestic currency, and simultaneously to the smaller credibility of the Euro currency, stirred by the deteriorated perceptions for the Euro area. The capital inflows in 2011 were sufficient for financing the current deficit and for additional increase in the foreign reserves. Substantial part of the inflows arose from the intensification of the investments in the country, which exceeded the current account deficit almost by double. The inflows contributed for registering the historically highest level of the foreign reserves at the end of the year of Euro 2,069 million, which meant, from the aspect of the monetary policy, larger capacity for buffering of the potential pressures on the foreign exchange market and preserving the stability of the Denar exchange rate.

In 2011, both the monetary and credit aggregates registered an increase, although with slower pace compared to the preceding year. The intensified activity in the real sector, the intensification of the credit flows in the domestic economy, as well as the favorable position of the balance of payments enabled further increase in the total money supply, which went up by 9.7% annually. The banks' deposit potential continued to mount in 2011 and reached 10.6%, but with slower dynamics though, in comparison with the previous year (13%). The largest contribution in the creation of the

<sup>&</sup>lt;sup>2</sup> Hebling, Thomas and Shaun Roache. "Rising Prices on the Menu". *Finance & Development-IMF*. March 2011. Vol. 48. No. 1 http://www.imf.org/external/pubs/ft/fandd/2011/03/pdf/Helbling.pdf

<sup>&</sup>lt;sup>3</sup> In March 2011, the Government of the Republic of Macedonia adopted a decided on selling 40.000 tones of mercantile wheat from the commodity stocks, at market price. In April, the Government adopted a decision on temporary ban on export of flour until September 15. Additionally, on July 30,2011, the Government of the Republic of Macedonia adopted a decision on introducing a measure for wheat and flour market protection. With the latest amendments to the Law on VAT from October 30, 2011, a privileged VAT rate of 5% for the import and the turnover of oil for production of food was introduced.

deposit base accounted for the household savings, while the analysis of the currency structure indicates larger preference for domestic currency, i.e. intensification of the "denarization" process. This process especially intensified at the end of the year as a result of the escalation of the debt crisis in the Euro area, which led to larger conversion of the Euro into Denar deposits. In 2011, the banks continued to increase the credit support to the domestic economy. At the end of the year, the loans to the private sector increased by 8.5%, compared to the end of 2010 (7.1% in the preceding year). The credit dynamics did not stay "immune" to the changes in the macroeconomic environment. Namely, in the first half of the year, in line with the favorable movements in the domestic and global economy, the activity on the credit market increased with relatively higher pace, as a combination of positive impulses of the supply and demand for credits. The larger uncertainty in the second half of the year and reduced domestic activity resulted in restrain of the banks for crediting and the credit growth decelerated. From the aspect of the sector structure, this year is characterized by faster growth of the household credits, which is positive signal having in mind the three-year constant decrease of the households' placements share in the total credit growth. Despite these movements the contribution of the enterprises credits is still dominant, while the contribution was also preserved by the FX credits, despite their substantial decrease compared to the previous year.

# I. International economic developments

The global economic activity continued to grow in 2011, however at a slower pace. Thus, global growth in 2011 was 3.8%, compared with 5.2% in the previous year. The same dynamics was registered also in the global trade, whose volume increased by 6.9% after the growth of 12.7% achieved in 2010. The slowdown in growth was common for the second half of the year. Slower growth of the activity in the global economy was a reflection of the weaker performance of the advanced economies. Growing unemployment, risk aversion caused by fears of new recession, problems of sustainability of public finances (especially in the Euro area) and the occurrence of natural disasters were the main factors that caused another deterioration of the situation in these economies. In contrast, growth in emerging economies and developing countries remained relatively high and resistant to global uncertainties in most of the year. Despite the weak performances in terms of growth, average inflation rose globally and reached 5% (3.7% in 2010). Such movements in inflation were driven by a rebound in world prices of food and energy, present in the first half of the year.

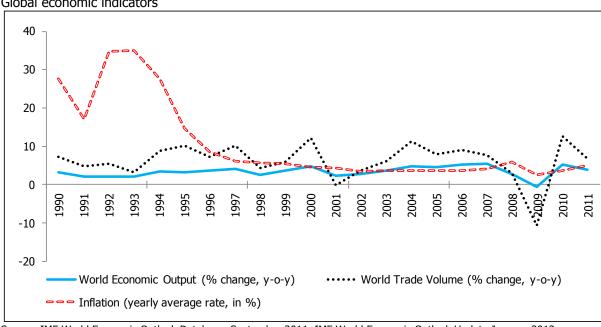
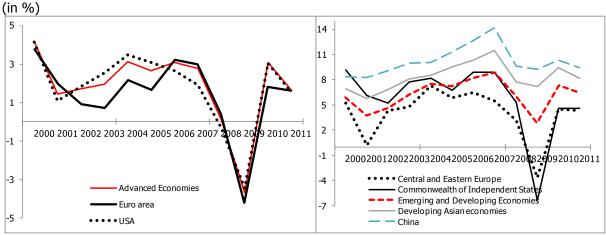


Figure 1 Global economic indicators

Source: IMF World Economic Outlook Database, September 2011, IMF World Economic Outlook Update January 2012

Slower growth of global economy, is in part explained by factors that were previously expected. This primarily refers to the slowdown in production and trade, after their fast growth during 2010. However, key factors of the weaker pace of growth during 2011 were not previously assumed. Thus, in the first half of the year growth slowed down under the influence of unexpected shocks on the supply side, caused by the catastrophic earthquake in Japan and the events in the Middle East and North Africa. Furthermore, a fundamental limiting factor of growth was the slow growth in private consumption. The gradual exhaustion of the effects of fiscal stimuli in advanced economies was not followed by a recovery of private consumption with the expected intensity. Also, problems in the banking sector and the debt crisis in the Euro area during 2011 gained unexpected dimensions. Growing tensions in financial markets, deteriorating balance of public and private sector and the weaknesses of labor and real estate markets led to further deterioration of global economic trends in the second half of the year.

Figure 2 Real GDP growth



Source: IMF World Economic Outlook Database, September 2011, IMF World Economic Outlook Update January 2012

The pace of growth also in 2011 was unsynchronized between individual groups of countries. Contrary to developed countries, where economies still remained with unused capacities, in emerging and developing economies risks of "overheating" emerged. Thus, the main carriers of global growth in 2011 were Asian emerging economies (China, India and ASEAN-5<sup>4</sup>) and the countries of Central and Eastern Europe (CEE). Moreover, within these groups of countries leading factor of growth was domestic demand, fueled mainly by coordinated stimulating policies, while in Asian economies additional factor was that of the fast credit growth and strong labor markets. Simultaneously, though less stable, capital inflows remained high in these countries, due to higher nominal interest rates, expectations of appreciation of the currencies and relatively good macroeconomic fundamentals. In addition, the economies of countries exporting raw materials were in a favorable position because of the favorable movements in the prices of primary products during 2011. In advanced economies, the process of recovery of the economic activity was disturbed after the reemerging of the tensions on the global financial markets and deteriorating confidence of consumers and firms. The growth of the economic activity in these countries has largely been based on increased investment in machinery and equipment and slower reduction in inventories, while private consumption remained "anemic." High unemployment, inert wages and harmful effects of the still unstable real estate markets in some developed countries on the wealth of households, are among the main reasons for this lag in the growth of private consumption.

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<sup>&</sup>lt;sup>4</sup> Indonesia, Malaysia, Philippines, Thailand and Vietnam.

Table 1 Indicators for the world economy

	2007	2008	2009	2010	2011*
Gross Domestic Product, Global real growth rate	5.4	2.8	-0.7	5.2	3.8
Advanced economies	2.8	0.1	-3.7	3.2	1.6
USA	1.9	-0.3	-3.5	3.0	1.8
Euro-Area	3.0	0.4	-4.3	1.9	1.6
Japan	2.4	-1.2	-6.3	4.4	-0.9
United Kingdom	2.7	-0.1	-4.9	2.1	0.9
Newly Industrialized Asian Economies	5.9	1.8	-0.7	8.4	4.2
Emerging and developing economies	8.9	6.0	2.8	7.3	6.2
China	14.2	9.6	9.2	10.4	9.2
India	10.0	6.2	6.8	9.9	7.4
Central and Eastern Europe	5.5	3.1	-3.6	4.5	5.1
CIS	8.9	5.3	-6.4	4.6	4.5
World Trade Volumes (growth rate)	7.7	3.0	-10.7	12.7	6.9
Inflation rate, Global average annual rate (in %)	4.0	6.0	2.5	3.7	5.0
Developed Countries	2.2	3.4	0.1	1.6	2.7
USA	2.9	3.8	-0.3	1.6	3.0
Euro-Area	2.1	3.3	0.3	1.6	2.5
Japan	0.0	1.4	-1.4	-0.7	-0.4
United Kingdom	2.3	3.6	2.1	3.3	4.5
China	4.8	5.9	-0.7	3.3	5.5
India	6.4	8.3	10.9	12.0	10.6
Central and Eastern Europe	6.0	8.1	4.7	5.3	5.2
CIS	9.7	15.6	11.2	7.2	10.3
Commodity Prices					
Oil	10.7	36.4	-36.3	27.9	31.9
Nonfuel	14.1	7.5	-15.7	26.3	17.7
	- /·-		(% of GDP)		=
Savings Rate	24.2	24.1	21.8	23.3	24.2
Investments	23.8	23.8	21.7	22.9	23.6
Nominal Exchange Rate (U.S. Dollar/EUR)	1.3705	1.4708	1.3948	1.3257	1.3920

<sup>\*</sup> Assessment

Source: IMF World Economic Outlook Database, September 2011, IMF World Economic Outlook Update January 2012

The recovery of the economic activity in the Euro area began last year and it continued in 2011, at a slower pace, with the realized growth rate being 1.4%. The main feature of this period was the growing financial instability and escalation of the debt crisis in Greece, Ireland and Portugal. The problems with public finances that countries of the Euro area faced with, reflected in increased interest rate spreads on their bonds to the extent that in certain countries it was no longer consistent with the sustainability of their public debt. Regardless of the established mechanisms for financial support to these countries by the European Council and the application of unconventional monetary measures by the ECB, the concerns of investors increased, and their "appetite" for risk reduced, which accompanied by the deterioration of consumer and corporate confidence had an adverse effect on economic growth.

During the year, growth in the Euro area, important for the Macedonian economy as the main trading partner, generally followed a downward path. Namely, after the fast growth in the first quarter, in the second and third quarters it registered a considerable slowdown. In the last quarter, European economy declined for the first time since 2009<sup>5</sup>. Re-entry into the negative zone is mainly explained by the decline in private consumption. The pressure of high prices of primary products on the disposable

<sup>&</sup>lt;sup>5</sup> Pertains to the quarterly growth rate adjusted for seasonal influences and working days.

income, reduced confidence and more difficult access to financing through bank loans, were limiting the consumption of households. An additional factor was the tightening of fiscal policy. However, the negative impact of these factors on growth was offset by the positive contribution of net exports in conditions of depreciated value of the euro against the USD in the second half of the year. Furthermore, the moderate increase in gross investments had a positive contribution to the overall activity. The main feature of growth in the Euro area in 2011 is its imbalance in individual Member States. Thus, the highest growth rates were registered in Estonia, Finland and Germany, while in the countries most affected by the debt crisis, Portugal and Greece, a reduction or further decline in the economic activity was registered. Slower economic growth was also reflected in a moderate deterioration of the conditions in the labor market in the Euro area in 2011. Namely, although minimal, the unemployment rate rose to 10.2% (from 10.1% in 2010), while employment risks were mainly downward. **Consumer prices** in 2011 were mainly "fueled" by the rising prices of primary products and the increase in indirect taxes in most Member States. Hence, despite the weaker economic growth, inflation rate exceeded last year's level and was also over the medium-term target, averaging 2.7% annually<sup>6</sup>. In December, the rate of core inflation reached 2%, versus 1.2% in January, which is the highest level since 2008. This contributed the average core inflation in 2011 to rise from 1% as it equaled in the previous year, to 1.7%.

Bearing in mind this setting, in 2011, the European Central Bank, basically **conducted an accommodative monetary policy.** However, during the year the changes were in a different direction. Thus, while in the first quarter the key interest rate was kept at the former level of 1%, in April and July it was increased to 1.25% i.e. 1.5% in response to the continued upward inflationary pressures in the Euro area. However, in the last two months of the year decisions were made in the opposite direction, whereby the interest rate returned to the level of 1%. These decisions were a reflection of lower inflation expectations, gradual deterioration of economic activity and reemerged volatility of financial markets. Besides acting through the interest rate, at the end of the year the ECB took unconventional measures to restore confidence in financial markets that were aimed at supporting the banks' lending on the one hand, and encouraging their activity in the money market, on the other. Some of these unconventional measures were related to the implementation of two long-term refinancing operations with maturities of 36 months at low interest rate<sup>7</sup>, one of which was carried out on December 21, 2011 in the amount of Euro 489.2 billion, while the second one took place on February 29, 2012 and amounted to Euro 529.5 billion. Also, in response to the spillover of tensions over the sustainability of public debt in Spain and Italy, the ECB continued to implement the Securities Market Program through which it began to purchase both Italian and Spanish government bonds on the secondary market, and extended the foreign currency swap line with the Bank of England which was concluded in 2010 as a precautionary measure in case of increased demand for British pounds from the Irish banking system.

<sup>&</sup>lt;sup>6</sup> The methodological change in the treatment of seasonal categories in the consumer basket affected the published rate of inflation to some extent. These are products that are subject to sale after the end of the season such as clothing and footwear. It is estimated that if this change is excluded, the rate of inflation in the Euro area would be higher by 0.1 percentage points. Source: Implementation of Commission Regulation (EC) No 330/2009 on the treatment of seasonal products. Information on the treatment of seasonal products. European Commission, Eurostat, March, 2012.

<sup>&</sup>lt;sup>7</sup> The interest rate on these operations is defined as the average of the rates on basic refinancing operations during the duration of individual operations, which are currently extremely low (1%).

Table 2
Economic indicators for the advanced economies

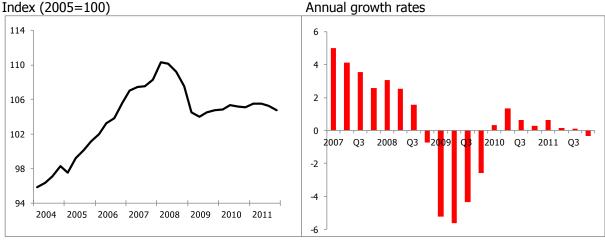
	GDP			Average Inflation Rate				rent Acc		Consc	lidated	_	Unemployment Rate			
	(real growth rate in %)		e in %)	(in %)				(% of GDF		(	Balance of GDF)		(in %)			
	2009	2010*	2011**	2009	2010	2011	2009	2010*	2011**	2009	2010*	2011**	2009	2010*	2011**	
Advanced Economies	2.1	3.3	4.5	0.0	0.0	0.0	-0.2	-0.2	-0.3	-8.7	-7.5	-6.5	8.0	8.3	7.9	
USA	-0.7	3.3	5.5	0.0	0.0	0.0	-2.7	-3.2	-3.1	-12.8	-10.3	-9.6	9.3	9.6	9.1	
Japan	4.7	5.3	5.2	0.0	0.0	0.0	2.8	3.6	2.5	-10.3	-9.2	-10.3	5.1	5.1	4.9	
United Kingdom	11.2	7.2	10.3	2.1	0.0	0.0	-1.7	-3.2	-2.7	-10.3	-10.2	-8.5	7.5	7.9	7.8	
Euro area	10.9	12.0	10.6	0.0	0.0	2.7	0.1	0.3	0.1	-6.3	-6.0	-4.1	9.6	10.1	10.1	
Germany	-5.1	3.7	3.0	0.2	1.2	2.5	5.6	5.7	5.0	-3.1	-3.3	-1.7	7.7	7.1	6.0	
France	-2.7	1.5	1.6	0.1	1.7	2.3	-1.5	-1.7	-2.7	-7.6	-7.1	-5.9	9.5	9.8	9.5	
Italy	-5.1	1.5	0.5	0.8	1.6	2.9	-2.1	-3.3	-3.5	-5.3	-4.5	-4.0	7.8	8.4	8.2	
Greece	-3.3	-3.5	-5.5	1.3	4.7	3.1	-11.0	-10.5	-8.4	-15.5	-10.4	-8.0	9.4	12.5	16.5	

<sup>\*</sup> Assessment

Source: IMF (IMF World Economic Outlook Database, September 2011, IMF World Economic Outlook Update January 2012) and Eurostat (inflation in the Euro area).

The slowdown of the economic activity in most of the major trade partners of the Republic of Macedonia was reflected also in the slowdown of foreign effective demand<sup>8</sup> for Macedonian products. In 2011, it achieved a minimum average growth of 0.1% versus 0.6% in 2010. The foreign effective demand remained in the positive zone mainly as a result of the economic growth in Germany, Bulgaria and Serbia, which has offset the strong influence of the deep decline in Greece.

Figure 3
Foreign effective demand



Source: NBRM calculations.

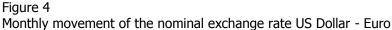
In 2011, the nominal exchange rate USA Dollar/Euro was characterized by marked instability. This was largely due to the uncertainties regarding the coping with the debt crisis in the Euro area, political disagreements in the USA regarding the raising of the ceiling on federal debt, lowering the credit rating of the countries of the Euro area and the USA (where for the first time in history the country has lost the highest rating<sup>9</sup>), and the weakening of the economic activity in the Euro area and the USA. The average annual nominal exchange rate USA Dollar /

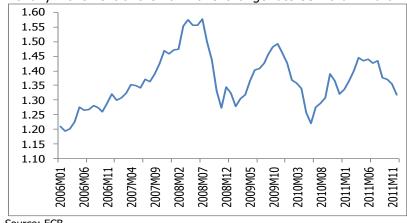
<sup>\*\*</sup> Projection

<sup>&</sup>lt;sup>8</sup> Foreign effective demand is calculated as the sum of the weighted indices of gross domestic product of most important trade partners of the Republic of Macedonia. The weights are calculated on the basis of the participation of these countries in the Macedonian export. Data on gross domestic product of countries that are trade partners of the Republic of Macedonia are from the database of Eurostat (New Cronos database). The calculation of the index included Germany, Greece, Italy, Netherlands, Belgium, Spain, Serbia, Croatia and Bulgaria.

<sup>&</sup>lt;sup>9</sup> On August 05, 2011, the credit rating agency Standard & Poor's lowered the credit rating of the USA for one degree, from AAA to AA+.

Euro reached 1.39 USA Dollar per Euro, representing appreciation of the Euro by 4.9% compared with the previous year. Analysis of the dynamics shows that there are two different paths of movement of the exchange rate. Namely, in the first four months of the year, the Euro constantly appreciated against the USA Dollar, and in April it was exchanged for 1.44 USA Dollars, which was its highest value since December 2009. Strengthening of the Euro in this period can be explained by reduced concerns about the sustainability of the fiscal policy of certain countries in the Euro area and the growing interest rate differencials in favor of the Euro which attracted capital inflows from international investors. During the summer, the Euro exchange rate oscillated without any particular trend, registering depreciation in May and July, and appreciation in June and August, which reflected the changing perceptions of economic trends in the Euro area. From September until the end of the year the Euro had a downward trend, reflecting the increased risk aversion and reemerged problems with public debt servicing in the troubled countries in the Euro area, especially Greece. Thus at the end of 2011, one Euro was worth 1.32 USA Dollars.



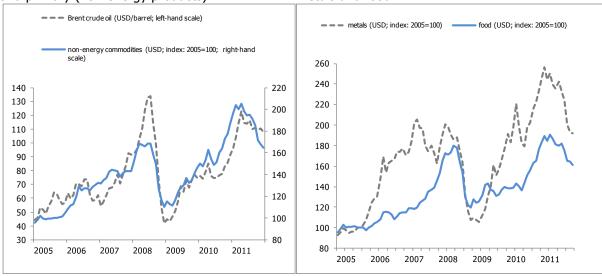


Source: ECB

In 2011, prices of primary products increased significantly in line with growing demand in emerging economies and the emergence of certain shocks on the supply side. The price of crude oil "Brent" grew by 39.3% and averaged USA Dollars 110.9. As a result of geopolitical tensions in the Middle East and North Africa (particularly Libya) and increasing demand relative to the supply in developed and developing countries, oil price grew more intensively in the beginning of the year, reaching the highest level of USA Dollars 123.2 per barrel in April, for the first time since 2008. However, upward pressures calmed down, and in the second half of the year, oil price was continually falling. This was largely due to the slowdown of global economy, appreciation of the USA Dollar and increased production of the members of OPEC (especially Saudi Arabia) which, coupled with the previous release of 60 million barrels from the strategic oil reserves by the International Energy Agency, has resulted in removing the gap between the supply and demand of oil. Stock exchange prices of non-energy primary products have followed the movement of oil prices and registered an annual growth of 17.8%. The average food prices registered higher growth than the prices of metals. As for metals, in 2011, the largest increase was noted in the prices of copper, iron ore and sheet metal, of 17%, 14.4% and 12.5%, respectively. with the growth of prices of all metals being significantly slower compared to 2010. During the year, a change of trends in the prices of metals was registered. Despite the increase in the initial months, starting from the second quarter of the year they started to decline. The main reason for this movement was the reduction of global consumption of base metals as a result of the lower activity of metal processing sectors, especially in China<sup>10</sup>, and part was due to the negative effects of the massive earthquake in Japan. During 2011, food prices followed a downward trajectory, which was particularly noticeable in the second half when they moved into the zone of negative changes on a quarterly basis. Key factors for this movement were the gradual reduction of demand in conditions of adverse expectations about future global economic activity, and partially the stabilization of oil prices towards the end of the year.

Figure 5
Monthly movement of the price of crude oil and primary (non-energy products)

Monthly movement of the prices of metals and food

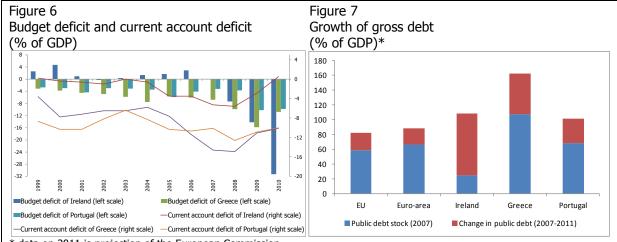


Source: IMF monthly data base.

Annex 1: The debt crisis in the EU

The global economic crisis of 2008-2009, contributed to a significant deterioration in the public finances of EU Member States. Such changes in public finances were, on the one hand, direct fiscal implications from the implemented plans to rescue their economies, and on the other, they were a consequence of previous non-cautionary budgetary policies. In the absence of economic growth, this inevitably resulted in a sharp increase in their public debt as a percentage of GDP, and in some Member States their viability has been put in question. Gross debt rose from 59% of GDP in 2007 to 82.5% of GDP in 2011 at the level of the European Union, and from 66.3% to 88% at the level of the Euro area, which is significantly more than the threshold of 60% stipulated by the Stability and Growth Pact.

<sup>&</sup>lt;sup>10</sup> China's participation in global consumption of metals is 40%, whence derives the strong influence of the activity of its industrial capacities on world prices of metals.



\* data on 2011 is projection of the European Commission.

Source: Eurostat and European Commission.

Countries in which the state of public debt has grown into a crisis, and which therefore called for "rescue" packages from international institutions were Greece, Ireland and Portugal. The source of the debt crisis in these countries was different. While in Greece and Portugal the main reason for debt accumulation was the continuing and growing fiscal imbalance, in Ireland the source was in the banking sector and the necessary government assistance to prevent its failure. By taking advantage of the common currency, expressed primarily through lower interest rates for borrowing, in the pre-crisis period Greece led an expansionary fiscal policy, with a deficit that averaged 5% of GDP in the period 1999-2007, taking into account the possibilities for its cheap financing. This policy, accompanied by the sharp increase in real wages and credits acted toward rapid growth in domestic demand and achieving a significant growth in GDP, despite the deterioration of the competitiveness of the economy and expanding current account deficit. Persistent deficits have led to increased public debt at 107.4% of GDP in 2007 from 94% as it was in 1999. The borrowed funds were not used for productive investments that would create the basis for their return, but were mainly intended to finance the high ongoing expenditures that could not be covered by tax revenues. Additionally hindering was the fact that the continued deterioration of public finances was not visible to the public due to the serious drawbacks of the Greek budgetary statistics<sup>11</sup>. In such conditions, under attack by the global crisis, chronic fiscal and external imbalances in the Greek economy further deteriorated, attracting the attention of credit rating agencies, which, after a number of lowerings, in the mid-2011 reduced the Greek credit rating to a level that is close to denoting a state of bankruptcy<sup>12</sup>. International investment community reacted quickly to the unfavorable information, raising sharply the interest rates on the Greek government debt to unacceptable levels, by which Greece was completely denied the access to the international capital market. This situation, in conditions of galloping public debt which reached 162.8% of GDP in 2011, created a real threat of possible bankruptcy of the state, which in turn adversely affected the stability and credibility of the euro as an international reserve currency.

<sup>&</sup>lt;sup>11</sup> With the coming to power of the new government of Greece in 2009 it was revealed that the amount of the budget deficit is significantly underestimated. Hence, the evaluation of the budget deficit was revised upwards from 6.7% to 12.7% of GDP, while the final data for 2009 was -15.8%.

<sup>&</sup>lt;sup>12</sup> According to the credit agency Standard & Poor's credit rating of Greece was lowered down to CC (current high vulnerability), according to Fitch to CCC (significant credit risk), while according to Moody's to Ca (high speculativeness).

Similarly to Greece, Portugal has also conducted a policy of relaxed public finances, expressed through achieving continuous budget deficits<sup>13</sup>. Additionally, in the years before the crisis (1999-2007), Portugal was characterized by weak economic growth of 1.8% on average, and non-competitiveness of the economy expressed by low productivity and rising unit labor costs<sup>14</sup>. This contributed to achieving sustained current account deficits and, consequently, high public and private debt. Given the state of Greece, similar structural problems led to a reduction of the Portuguese credit rating several times during 2010 and 2011. These events prompted the same reaction among international lenders, which expressed their growing doubts regarding the sustainability of the fiscal policy of Portugal through raising interest rates on its debt to a level which made impossible its further own funding. Unlike Greece and Portugal, Ireland had a low level of public debt, an average of about 32% of GDP in the period 1999-2007, and budget surplus of 1.6% over the same period. Additionally, Ireland experienced fast economic growth, averaging 6%, in part due to the successful process of convergence, for which it received the title Celtic Tiger. However, the main vulnerability of the Irish economy was that this growth was not based on strong macroeconomic fundamentals. The economic growth was driven by the fast growth in residential loans, construction and consumption, in conditions of underestimation of risk and low real interest rates. All this led to a significant "inflating" of the prices on the real estate market, despite the sharp increase in the indebtedness of households and enterprises funded by banks mainly through foreign loans. When the price "bubble" burst and the financial crisis hit the Irish banking sector, the state had to intervene and save the endangered banks through the redemption of private debt, which effectively meant their nationalization. These have helped the country to move from a state of slight budget surplus in 2007 to a state of deficit of 10.3% in 2011, and to face a fourfold increase in public debt from 24.8% to 108.1% of GDP, which due to high costs for servicing, became unsustainable. As a result of these developments, Greece, Ireland and Portugal were forced to seek help to finance the government debt from the so-called "Troika" and the amount of received financial packages reached 112%, 43% and 46% of GDP, respectively<sup>16</sup>. However, the granting of aid to these countries by the "Troika" was conditioned by the implementation of strict austerity measures, which should affect the return of investor confidence, and by reducing interest rates to enable the return of their debts in a sustainable way. While the implementation of these measures gave a certain result in Ireland and Portugal, it was not the case with Greece. Thus, due to further deterioration in the debt, Greece was forced to address the "Troika" for the second "rescue" package amounting to Euro 130 billion, which was accompanied by implementation of a program of voluntary writeoff of part of the debt held by private investors in an amount of about Euro 107 billion 17. Final approval of the disbursement of funds was conditioned by the acceptance of additional rigorous measures of fiscal consolidation which, together with the implementation of the privatization program and structural reforms should enable reduction of the Greek debt at 120.5% by 2020. This emphatic support of the finances of these countries in the Euro area together with the new mechanisms for fiscal coordination and consolidation which have in the meantime been agreed within the EU<sup>18</sup> should permanently stabilize the Economic and Monetary Union and the Euro, which currently face the greatest challenges after their establishment.

<sup>&</sup>lt;sup>13</sup> At the time of entry of Portugal into the EU (1986) budget deficit amounted to 7.4% of GDP, while the average for the period 1986 to 2011 was 5%. During this period, Portugal never had a budget surplus.

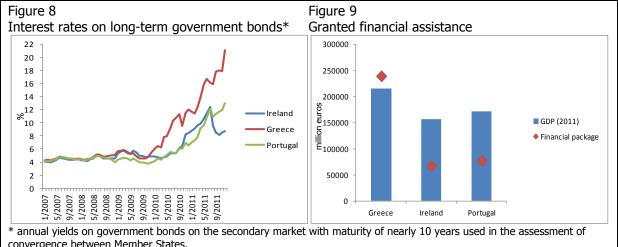
<sup>&</sup>lt;sup>14</sup> Unit labor costs rose by 24% in 2007 compared with 1999.

<sup>&</sup>lt;sup>15</sup> European Commission, ECB and IMF.

<sup>&</sup>lt;sup>16</sup> Data on Greece include both financial packages, while data on Ireland do not include the amount of Euro 17.5 billion that was provided from own funds.

 $<sup>^{17}</sup>$  In March 2012, Greece implemented a for debt exchange program by which private debt was reduced by 53.5% on a voluntary basis.

<sup>&</sup>lt;sup>18</sup> Excluding the United Kingdom and the Czech Republic.

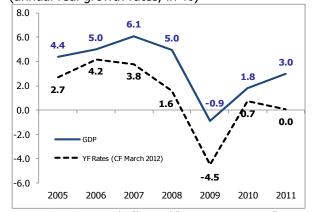


# II. Economic developments in the Republic of Macedonia

## 2.1. Economic activity

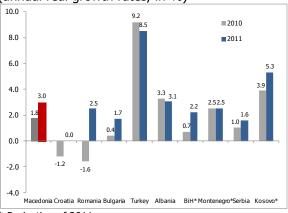
The economic activity in the Macedonian economy continued to grow during 2011. Real GDP growth was 3%, which is nearly double the rate of growth compared with the previous year. Favorable movements were present in the first half of the year when the economy recorded an average growth of 5.2%. The gradual increase in the foreign effective demand, favorable conditions on the world market for our more important export products, reduced risk aversion of domestic and foreign investors had a strong positive effect on the domestic economic activity. An additional incentive was given by the growth of government capital investments. This economic environment influenced the creation of favorable expectations of the domestic economic agents, leading to an increased propensity to consume, which was supported by increased lending activity and increased employment. However, towards the middle of the year the negative effects of the debt crisis in the European Union, as our most important trading partner, became evident. Stagnation and later decline in foreign demand in the last two quarters had a negative impact primarily on the domestic industry and export sector, and then on domestic demand, leading to a strong slowdown in the second half of the year (1.2% on average in the second half of the year).

Figure 10 GDP and foreign effective demand (annual real growth rates, in %)



Source: State Statistical Office and "Consensus Forecast", March 2012. Data on GDP for 2010 are previous and data for 2011 are estimated.

Figure 11
GDP\* growth by country
(annual real growth rates, in %)



\* Projection of 2011.

Source: Eurostat, IMF, World Economic Outlook database September 2011 and state statistical offices or central banks of relevant countries.

Positive growth rates were typical for the countries of the region, while in 2011, for the first time since the beginning of the crisis, the economies of some countries exited the zone of negative growth. However, as in Macedonia, in most of them acceleration of growth was noticed. Given the factors that have generated growth, they differ in different countries, but it can still be concluded that net exports and investment have a dominant role. From a viewpoint of the dynamics, in almost all countries a significant reduction of the economic activity starting from the third quarter was registered, caused primarily by exports, which corresponds to the slowdown in global activity. In 2011, Macedonian economy was among those countries in the region which registered higher growth rates. In fact, Macedonia is the third country with the highest growth rate in 2011, following Turkey and Kosovo. In Turkey, as in the previous year, fast growth was recorded (8.5%), again driven by the growth in private and

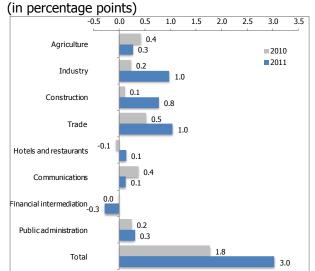
investment consumption. However, starting from the second quarter, domestic consumption slowed down, so in 2011 the total growth was less intense than in the previous year. Besides Turkey, slower growth was observed also in Albania (growth of 3.1%), with significant slowing of the industrial activity in the country. All other countries registered improvement, with Croatia and Romania being the countries which in 2011 emerged from recession. Moreover, Romania recorded the highest improvement in growth of about 4 percentage points, achieving a growth rate of 2.5%, with significant growth in gross investments. In contrast, in Croatia in the first quarter of the year economic activity was still declining. Consequently it started to register positive growth rates amid recovered private consumption and positive contribution of net exports due to increased exports and downward adjustment of import demand. In the last quarter, negative growth rate was recorded again, so overall in 2011 Croatia registered stagnation of the economic activity. Bulgaria and Serbia had moderate growth rates of 1.7% and 1.6% respectively. In Serbia, the net export demand was the main driver of growth, while in Bulgaria the export sector was the generator of growth in the first half of the year. In the second half of the year, exports slowed down, but domestic consumption was strengthened, which contributed to sustaining growth.

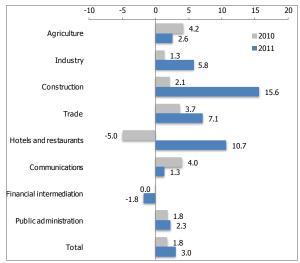
#### 2.1.1. Aggregate supply

Improved global economic and financial conditions created more favorable economic environment also in the domestic economy and led to increased utilization of domestic capacities. Despite the dispersed growth of economic activity, in 2011 the main carriers of growth were three activities, i.e. industry, **trade and construction.** The growth of foreign demand and retained favorable trends in the prices of major export products on world markets were the main factors stimulating greater use of industrial capacities, in one part of the year. Furthermore, the increased activity of the new export capacities created an additional impetus for the total supply. The favorable economic environment also created favorable perceptions among domestic economic entities regarding future income, which was translated into growth of domestic demand and increase in total domestic trade. Simultaneously, economic growth was supported by investment stimulus by the government, primarily in the area of construction activity. Analyzing the dynamics, the distribution by quarters is different. Industry is an activity with the largest contribution to growth in the first two quarters, while in the rest of the year its contribution was negative. In contrast, construction and trade registered a positive contribution throughout the year, but the growth in these activities slowed down in the second half of the year.

Figure 12 Contributions of the components to the GDP growth







Source: State Statistical Office and NBRM calculations.

Source: State Statistical Office.

Data on GDP for 2010 are previous and data for 2011 are estimated.

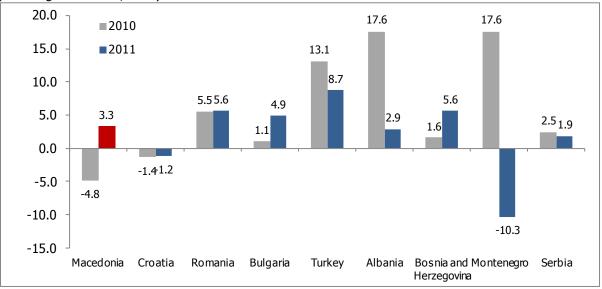
In 2011, the annual growth of the industrial activity accelerated from 1.3% in 2010 to 5.8% <sup>19</sup>. Favorable global developments at the beginning of the year led to increased production in the export-oriented sectors, especially in metal and textile industries. Deteriorating global economic environment has caused slight deceleration of growth in the second quarter, and in the last two quarters industrial activity registered a decline on an annual basis. From a viewpoint of individual industries, growth was observed in thirteen out of twenty-seven industries, which comprise almost two thirds of the total index. The largest positive contribution is that of the production of electrical equipment, which increased by 2.2 times, largely reflecting the effect of the operations of a new production plant. More significant positive contribution is that of the increased production of clothing, tobacco products, other transport equipment and metals. On the other hand, energy production registered the largest negative contribution. The unfavorable hydrological situation in the country caused a reduced production of electricity, while the production of oil derivatives reported lower utilization of the production capacities in the second half of the year<sup>20</sup>.

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<sup>&</sup>lt;sup>19</sup> At the same time, the physical volume of industrial output registered an annual growth of 3.3%.

<sup>&</sup>lt;sup>20</sup> The oil refinery made a structural change aimed at greater import of oil derivatives for the expense of their lower production.

Figure 14 Index of the volume of industrial output by country (annual growth rates, in %)



Source: Eurostat and statistical offices of the relevant countries.

Comparative analysis of the index of industrial output shows that Macedonia, with growth of 3.3% is among the countries that experience rapid growth. Acceleration of growth in the industrial output is also registered in Romania and Bulgaria, which had higher growth than the Republic of Macedonia. The growth of Turkey, which recorded a high growth rate last year, slowed down, but it is still the highest in the region (8.7%). Weaker performances than the Republic of Macedonia are those of Serbia and Albania, whose industrial growth also slowed down in 2011. On the other hand, negative growth was noted only in Montenegro, where the physical volume of industrial output dropped by 10.3%, and in Croatia, which has registered decline in the activity in the industry for three years in a row.

Figure 15 Contributions (in percentage points) of specific activities to the change in industrial output

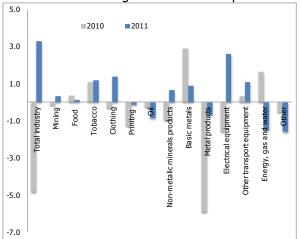
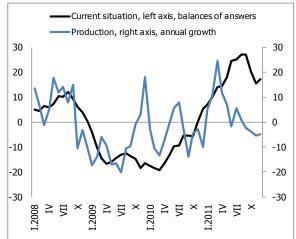


Figure 16 Industrial output and assessments of managers about the current conditions



Source: State Statistical Office and NBRM calculations

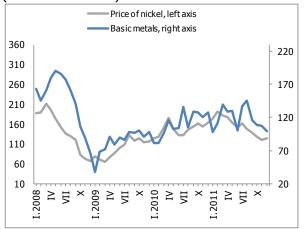
Source: State Statistical Office.

Balances of the responses displayed on the left scale, show the movement of indicators, not the actual size, i.e. they indicate improvement or deterioration. Balances of the responses are obtained by weighting individual responses. The responses of managers are qualitative (good, bad, growth, decline, etc.), not quantitative.

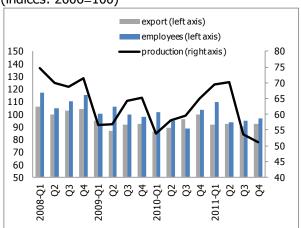
Assessments of company managers in manufacturing industry<sup>21</sup> for 2011 are more favorable compared to those for 2010. Thus, assessments of the economic situation of companies, which were negative in nearly all of 2010, in 2011 show continuous improvement since the beginning of the year until the last quarter. Assessments for the production volume have similar movement with the industrial output, i.e. they registered deterioration in the middle of the year. In terms of average capacity exploitation, it was higher than the previous year and was relatively stable throughout the year. Insufficient foreign and domestic demand, as well as the financial problems, remain the most important limiting factors for increasing the production.

Figure 18

Figure 17
Manufacture of basic metals and price of nickel (indices: 2005=100)



Manufacture and export of textile and textile industry employees (indices: 2006=100)



Source: State Statistical Office.

Source: State Statistical Office and IMF.

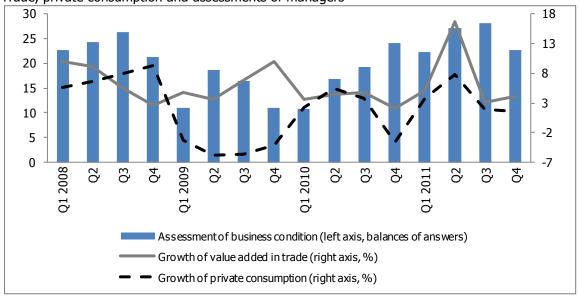
In 2011, value added in trade continued to grow at a rapid pace, achieving growth of 7.1% (3.7% in 2010). The fastest growth during the year, of 16.6%, was realized in the second quarter, when the level of trading activity reached historical maximum. Annual dynamics is consistent with the growth of private consumption, backed by increased credit support to the households, increased number of employees and favorable expectations. The assessments of managers of commercial enterprises about current business and financial condition, on average for the whole year, are significantly more favorable than the previous year. In terms of limiting factors, the influence of the weak demand of buyers has reduced, although it is the most important factor, while increased competition and rising labor costs have become more important<sup>22</sup>.

<sup>21</sup> Survey on business tendencies in the manufacturing industry of the State Statistical Office, from December 2011.

<sup>22</sup> Survey on business tendencies in trade of the State Statistical Office, fourth quarter of 2011.

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Figure 19
Trade, private consumption and assessments of managers



Source: State Statistical Office.

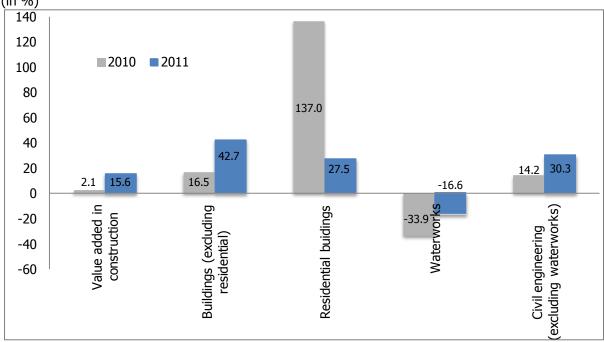
Favorable trends in construction, which started late last year, continued during 2011, at a faster pace. So, after a longer period, construction registered a double-digit annual growth, which in 2011 equaled 15.6% (2.1% in 2010). Favorable developments in the global economy and reduced risk aversion among investors in terms of increased government capital spending, stimulated investment and construction activity. In terms of the structure of construction activities, most of the construction activity was directed towards high-rise construction, and particularly high growth was achieved in the field which is not intended for residential construction<sup>23</sup> (real growth of almost 43%). One third of the growth of the performed construction work arises from civil construction works, which in conditions of decline in hydro construction, is a result of the increased construction of road infrastructure. The achievements in construction are in accordance with the assessments of the managers of construction companies in terms of current business and financial condition<sup>24</sup>, which are more favorable compared with the previous year.

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<sup>&</sup>lt;sup>23</sup> The fast growth arises from the construction activity associated with the project Skopje 2014, and construction of other buildings such as multi-storey car parks.

Survey on business tendencies in construction of the SSO, fourth quarter of 2011.

Figure 20
Real annual growth rates in construction and nominal growth by individual building types

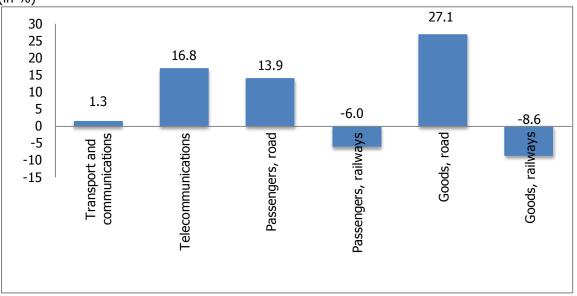


Source: State Statistical Office.

In 2011, growth in the activity "transport, storage and communications" slowed down to 1.3% (growth of 4% in 2010). Regarding the types of transportation, growth was observed in all types of transportation, except railways. Growth was registered also in the telecommunications sector, in conditions of increased mobile lines traffic and further reduction of the land line traffic. In terms of transportation, increased industrial activity, particularly in the export-oriented sectors, generated positive effects on cargo passenger transport. At the same time, increased travel needs of residents, and the increased number of foreign tourists in the country were part of the factors that led to an increase in passenger road transport. The increased number of foreign tourists and overnight stays<sup>25</sup> had a positive effect on the **catering sector** in the country, which is confirmed by the increased foreign exchange inflows from travel services. Moreover, after two years of consecutive decline in the activity in the catering industry, in 2011, fast growth of 10.7% was achieved.

<sup>&</sup>lt;sup>25</sup> According to the data of the State Statistical Office, the number of foreign tourists in 2011 increased by 25.1%, while the number of overnight stays by foreign tourists increased by 35.1%, as opposed to the decline in the number of domestic tourists and overnight stays. Namely, after a longer period, at the end of the second and during the third quarter of 2011, larger organized groups of tourists from the Netherlands were registered.

Figure 21 Real growth rates in the activities of the sector "transport and communications" in 2011 (in %)

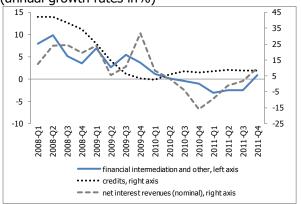


Source: State Statistical Office.

Agricultural activity also had a positive contribution to the overall economic growth. In 2011, it grew by 2.6%, which is a slight slowdown compared with the previous year. The total purchase and sale of agricultural products, which grew by almost 54%, also indicated positive movements. The largest increase was noted in agricultural products, in particular industrial plants and cereals, and significant growth was registered in the purchase and sale of milk and grapes. After the stagnation in the previous year, in 2011, the activity in "financial intermediation, real estate activities and other business and service activities" decreased by 1.8%. Moreover, this is the only economic branch which has a negative contribution to growth. However, indicators of *financial intermediation* (which constitutes about one quarter of the total activity<sup>26</sup>) point to more favorable trends compared with the entire branch. The negative dynamics in net income of banks constantly decelerated in the first half of 2011, while in the second half the trend was changed, and in the last quarter high growth was recorded. Thus, net income reached almost the same level as last year.

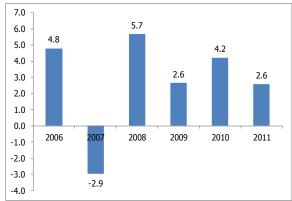
<sup>&</sup>lt;sup>26</sup> The data refers to the participation calculated on the basis of SSO data on GDP in 2009.

Figure 22 Added value in financial intermediation, etc., loans and net interest income (annual growth rates in%)



Source: State Statistical Office and NBRM.

Figure 23
Annual real growth rates in agriculture (во %)



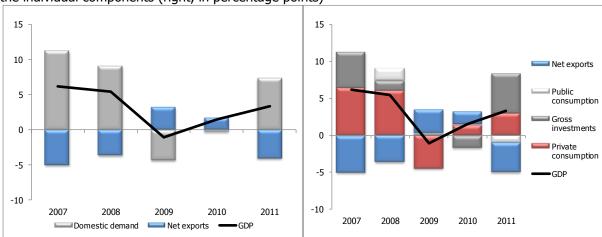
Source: State Statistical Office.

### 2.1.2. Aggregate demand

Retained favorable global conditions in 2011 created positive direct and indirect effects on demand in the domestic economy. Direct effects were felt in the export sector through increased demand for products of the export capacities. Under these conditions, export demand experienced positive growth rates continuously during the year, albeit with significantly slower pace in the second half. The favorable performance of the export sector, in a small and open economy such as the Macedonian, produce also indirect effects by creating positive expectations about future income, favorable shifts in the labor market, encouragement of the investment activity, facilitated access to financing. Also, in 2011, reduced uncertainty and global growth have opened room for an influx of foreign investments, which meant more capital in the domestic economy and opportunity for additional financing of demand. The growth of government investments also had a significant stimulating effect on domestic demand in 2011. Amid generally favorable environment, in 2011, domestic investment, private consumption and export demand registered growth and had a positive contribution to the overall growth<sup>27</sup>. However, they caused pressures on imports, so in 2011 net exports had a negative contribution to the growth of the economy.

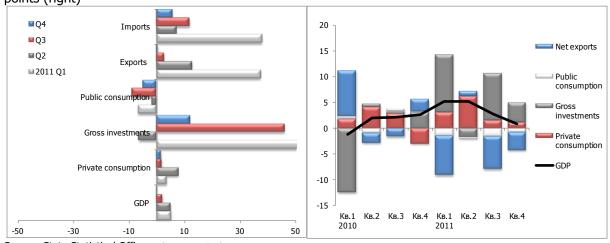
<sup>&</sup>lt;sup>27</sup> The largest positive contribution was that of investments, followed by the contribution of exports and private consumption.

Figure 24
Contribution of domestic demand and net exports to GDP growth (left, in percentage points) and of the individual components (right, in percentage points)



Source: State Statistical Office and NBRM calculations.

Figure 25
GDP by expenditure components: annual growth rates (left) and contribution to growth in percentage points (right)



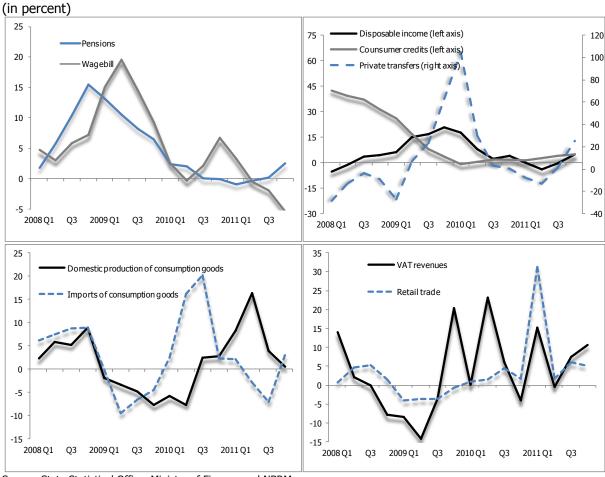
Source: State Statistical Office and NBRM calculations.

Recovery of private consumption continued in 2011 with more intensive dynamics, and the volume of consumption approached the level of the pre-crisis 2008. Thus, after the modest growth of 1.7% in the previous year, in 2011, the annual growth of private consumption accelerated to 3.7%. Positive growth rates were typical for the whole year, and particularly high growth rate of 7.8% was recorded in the second quarter. However, in the second half of the year, the growth of households' consumption slowed down significantly. Namely, at the beginning of the year, amid positive impulses from the global economy and fast growth in the domestic export sector, favorable perceptions and expectations for domestic economic entities were created. Positive perceptions, favorable shifts in the labor market and the growth of the permanent part of disposable income contributed to the acceleration of the consumption growth. Favorable expectations about future economic growth and consumer confidence have enabled easier access to credits and growth in the demand<sup>28</sup>, mainly for long-term consumer loans. Hence, the credit activity of banks represented an additional source of consumption financing in 2011. However, unfavorable movements in the real sector because of the debt crisis in the

 $<sup>^{\</sup>rm 28}$  Survey on the credit activity of the NBRM conducted in April and in August 2011.

Euro area, changed the expectations about future developments, led to downward movements in the labor market and to a decline in the wage bill in the second half of the year. In such macroeconomic climate of deteriorated perceptions and reduced income, in the second half of the year, consumption growth slowed down.

Figure 26
Annual real growth rates of the sources of financing private consumption and related categories of private consumption

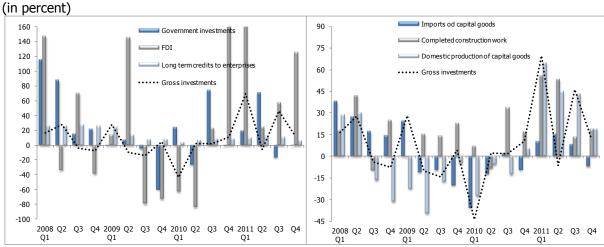


Source: State Statistical Office, Ministry of Finance and NBRM.

In 2011, gross investments registered growth of 22.7%. Such a fast growth was partly due to the low comparison basis from the previous two years. However, the positive shifts in several factors that determine investments had **the dominant effect.** During the year, the pace of growth was erratic and varied from quarter to quarter, ranging from rapid growth in the first and third quarters to a slight decline in the second quarter. Thus, in the first quarter, the more favorable global environment, given the positive perceptions of economic growth, led to reduced risk aversion of domestic and foreign investors and greater propensity to invest. The growth of government capital investments, and increased long-term lending to the corporate sector also stimulated the investment activity in the first guarter. Investments strengthened the construction activity, which registered fast growth, and they also stimulated domestic production and imports of capital goods. Similar shifts in these economic factors with almost the same intensity were registered also in the second quarter, indicating the growth of investments in fixed assets. However, gross investments in this period declined, probably due to the decline in inventories. The fast investments growth in the third quarter was mostly driven by investments in machinery and equipment, and to a smaller extent by

investments in construction and growth in inventories. In the last quarter, amid worsening of the global economic conditions, growth in investments slowed. In this period, slower growth of long-term lending to enterprises and domestic production of capital goods, as well as lower imports of capital goods and drop in government investments were registered.

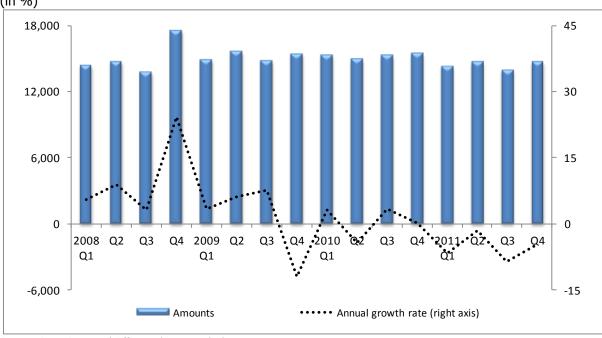
Figure 27
Annual real growth rates of sources of financing investments (left) and related categories of investments (right)



Source: State Statistical Office, Ministry of Finance and NBRM.

Public spending throughout 2011 experienced negative growth, so that by the end of the year, its cumulative real decline was 5.5%. The smallest annual decline of 1.6% was registered in the second quarter, reflecting the increased spending associated with the parliamentary elections in June 2011. Overall, the total annual decline was mainly due to reduced spending on goods and services.

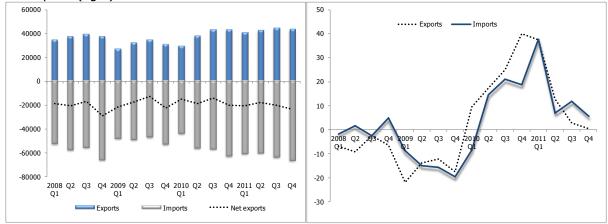
Figure 28
Real amount of public spending (in millions of denars) and annual growth rates of public consumption (in %)



Source: State Statistical Office and NBRM calculations.

The trend of growth in export demand, which started in the previous year, continued during 2011. However, the pace of growth was less intense compared to the previous year, which is consistent with the slowdown in global growth and world trade. Furthermore, the high comparison base, i.e. the cyclical response of exports in the second half of 2010, and the greater activity of part of the new export capacities, had an additional effect. In 2011, exports and imports registered annual real growth rates of 11.3% and 14.1%. The dynamics of import demand, generally followed the trajectory of exports and domestic demand. From a viewpoint of the dynamics, the growth of foreign demand and retention of favorable trends in world prices of our major export products in the first quarter acted towards greater utilization of the existing and the new industrial facilities. All this influenced the increase in exports, which represented the most significant factor for the growth of overall economic activity in the first quarter. Growing export and domestic demand caused fast growth in imports, so in the first quarter, net exports had a negative contribution to growth. Negative effects of the developments in the Euro area, in the form of stagnant foreign demand and slower growth in metals prices began to be experienced in the second quarter. However, given the faster slowdown in imports, with slower growth of imports of raw materials for export and reduced imports for private consumption, net exports had a positive contribution. The slowdown of export demand continued in the second half of the year, which was not fully followed by imports due to increased imports of energy and raw materials. Simultaneously, investment activity was back into the zone of rapid growth, which created additional pressure on imports. In such conditions, in the second half of the year net exports had a high negative contribution to the overall economic growth.

Figure 29
Real amounts of exports and imports, in millions of denars (left) and annual growth rates of exports and imports (right)



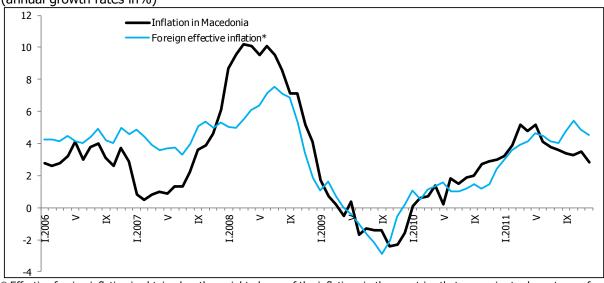
Source: State Statistical Office and NBRM calculations.

#### 2.2. Inflation

The average annual inflation in 2011 was 3.9%, versus 1.6% in 2010. As in the previous year, during 2011 the increase of the price level was driven by factors on the supply side, i.e. by the further increase in world prices of food and energy. The main driver of the inflation growth during the year was the food component, further supported by the growth of energy prices and rising domestic regulated prices. From a viewpoint of the dynamics, in the first half of the year, accelerated growth of domestic inflation was recorded. During this period, the protests in North Africa and Middle East, as

well as natural disasters<sup>29</sup> (which reduced the yields of maize and wheat) had upward pressure on world prices of oil and food. Transmission effect of import on domestic prices and the growth of regulated prices<sup>30</sup> reflected also in domestic inflation, which in the first half of the year registered an average annual growth of 4.4%. The gradual exhaustion of global inflationary pressures, and the administrative and tax measures of the Government contributed to the slowdown in domestic inflation in the second half of the year to 3.4%.

Figure 30
Domestic inflation and foreign effective inflation\*
(annual growth rates in%)



\* Effective foreign inflation is obtained as the weighted sum of the inflations in the countries that are major trade partners of RM.

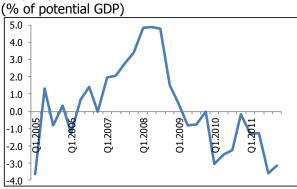
Source: State Statistical Office, Eurostat and calculations of NBRM.

Despite the more intensive growth of the economic activity in the first half of the year, the domestic economy in 2011 remained below potential, indicating the absence of inflationary pressures through the channel of demand. This is seen also through the dynamics of core inflation, which excludes the impact of food and energy prices and represents an important indicator for the monetary policy. Although the average annual growth of core inflation in 2011 accelerated to 1.1% from 0.2% in the previous year, it still remained relatively low. Additionally, since the end of the third quarter there has been a downward trend of long-term inflation component, which confirms the ascertainment about inflationary pressures through the demand.

<sup>&</sup>lt;sup>29</sup> Hebling, Thomas and Shaun Roache. "Rising Prices on the Menu". Finance & Development-IMF. March 2011. Vol. 48. No. 1 http://www.imf.org/external/pubs/ft/fandd/2011/03/pdf/Helbling.pdf

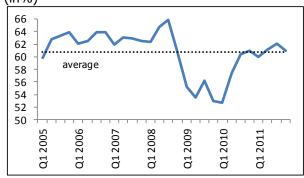
<sup>&</sup>lt;sup>30</sup> In January 2011, the price of thermal energy was increased by 3.7%, while in March the price of electricity was increased by 5.5%.

Figure 31 Output gap



Source: State Statistical Office and NBRM calculations.

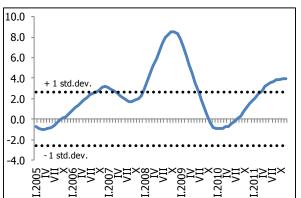
Figure 32
Average capacity utilization in the enterprises



Source: State Statistical Office and NBRM calculations.

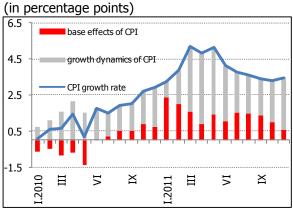
Unlike last year, when domestic inflation was entirely due to the new growth in prices, in 2011, the growth of inflation was in part a transmitted effect from the last year. These changes are expected, given that external price shocks that occurred in 2010, were gradually exhausted later this year. Despite the growth of inflation and its different dynamics throughout the year, generally, as in the previous year, it was characterized by relatively high degree of stability. Namely, although during 2011 external shocks had a dominant effect on domestic prices, they were not of intensity as in the period 2007-2009. In such conditions the variability of domestic inflation in 2011 was relatively low, indicating a more stable price environment.

Figure 33 Standard deviation of annual inflation (12-month moving average)



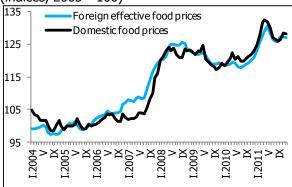
Source: State Statistical Office and NBRM calculations.

Figure 34
The influence of base effects and the price dynamics on inflation



Source: State Statistical Office and NBRM calculations.

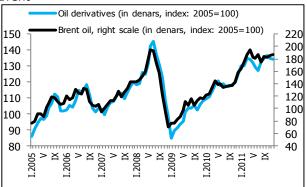
Figure 35
Effective foreign\* and domestic prices of food (indices, 2005 = 100)



<sup>\*</sup> Effective foreign prices of food are derived as the weighted sum of the prices of food in the countries that are major trade partners of RM.

Source: State Statistical Office, Eurostat and calculations of NBRM.

Domestic prices of petroleum products and crude oil Brent

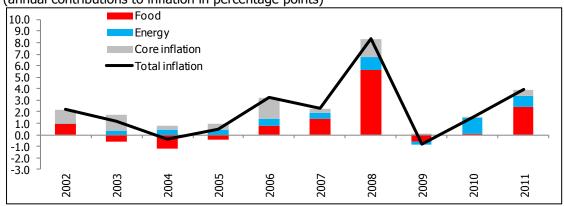


Source: SSO and IMF, a database of prices of primary products.

Analyzing the structure of growth of domestic inflation by component, in 2011 the food component had the highest contribution to the average annual growth of consumer prices. Relative to 2010, the total annual growth of food prices was 6.4% (with a contribution of 2.4 percentage points to total inflation). Analysis of subcomponents shows that higher prices of processed food (mainly bread and pasta and vegetable fat) and, to a lesser extent, the growth of prices of fresh food (meat, cereals, milk and eggs) made upward pressures on overall inflation. Moreover, their growth was more intense in the first half of the year, in conditions of growth in the world food prices. In order to mitigate the inflationary pressures of this component on the overall inflation, the Government implemented several administrative and tax measures<sup>31</sup>. Introduced measures, together with the seasonal decline in prices and downward adjustments in world food prices contributed to a slowdown in the annual growth in the second half of the year. The dynamics of domestic food prices corresponded with the movement of foreign effective food prices, whose average growth rate in 2011 was by 0.3 percentage points higher than domestic.

<sup>&</sup>lt;sup>31</sup> In March 2011, the Government of the RM decided to sell 40,000 tons of mercantile wheat from commodity reserves under market price. In April, the Government decided to ban temporarily the export of flour until 15 September. Additionally, on July 30, 2011, the Government adopted a Decision (Official Gazette no. 106/2011 of August 04, 2011) on the introduction of measures to protect the market of wheat and flour, by conditioning the quantities of imported wheat and flour which was in force until November 30, 2011. With the latest amendments to the Law on the VAT of October 03, 2011, a preferential VAT rate of 5% was introduced for imports and trade of crude oil for production of food for human consumption. This change contributed to reducing the retail price of cooking oil in this quarter.

Figure 36 Variable (food and energy) and long-term component of inflation (annual contributions to inflation in percentage points)



Source: State Statistical Office and NBRM calculations.

Regarding energy prices, the average annual growth and contribution to overall inflation was largely stable during the year (6.9% average annual growth, 0.9 percentage points average contribution to inflation). As with the food component, price pressures were caused by import prices and regulated prices. However, unlike food prices, the dynamics of the energy component of inflation did not vary and it had almost constant contribution of about 0.9 percentage points throughout the entire period. Moreover, according to the growth of world prices of Brent oil and the depreciation of the Euro, the rise in prices of oil products was 13.4% (partially mitigated by the Government decision<sup>32</sup> to reduce excise duties) and contributed with 0.5 percentage points to overall inflation. Upward adjustments in prices of electricity<sup>33</sup> and central heating<sup>34</sup> contributed with 0.3 and 0.2 percentage points, respectively, to the growth of inflation in 2011.

Table 3 Individual categories of prices (annual change in%)

	2007	2008	2009		20	10		- 2010		- 2011			
	2007	2008	2009	Q1	Q2	Q3	Q4	- 2010	Q1	Q2	Q3	Q4	2011
Consumer price index - all items	2.3	8.3	-0.8	0.4	1.1	1.8	2.9	1.6	4.1	4.7	3.6	3.2	3.9
Food	3.9	15.4	-1.6	-2.4	-1.0	1.2	3.3	0.3	7.1	8.4	5.4	4.7	6.4
Fresh food	3.8	19.7	-0.6	-3.0	-2.4	0.2	1.6	-0.9	4.6	6.7	2.0	3.1	4.1
Processed food	4.1	12.0	-2.2	-1.9	0.4	2.0	4.7	1.3	8.5	9.9	8.4	6.3	8.3
Energy	4.7	9.3	-2.0	12.6	11.8	9.9	10.3	11.2	7.1	6.9	6.8	7.0	6.9
Fuels and lubricants	1.4	14.6	-20.9	26.0	23.5	13.1	14.6	19.3	18.4	10.9	12.0	12.2	13.4
Electrical power	8.0	2.6	10.8	9.9	9.8	9.8	9.9	9.8	1.8	5.4	5.4	5.4	4.5
Heating power	2.2	16.0	-0.9	6.4	5.3	7.2	7.1	6.5	6.3	5.7	4.2	5.0	5.3
Food and energy (volatile prices)	4.1	13.9	-1.7	1.1	2.1	3.3	5.1	2.9	7.1	8.0	5.7	5.3	6.5
Goods	3.0	9.2	-0.8	0.6	1.4	2.0	3.5	1.9	4.5	5.4	4.4	3.8	4.5
Services	-0.3	5.1	-0.7	-0.2	-0.2	0.6	0.0	0.1	1.0	1.1	0.2	0.6	0.7
Core inflation (inflation excl. food and energy)	0.6	2.6	0.3	-0.2	0.1	0.2	0.6	0.2	1.0	1.2	1.3	0.9	1.1
*Industrial producer prices	2.5	10.1	-7.2	7.3	10.5	8.4	8.6	8.7	13.6	11.6	10.2	9.1	11.1

Source: State Statistical Office and NBRM calculations.

**Movement of domestic inflation corresponded with the dynamics of effective foreign inflation** (Figure 30). The average annual growth of effective foreign prices in 2011 accelerated to 4.3%, compared with 1.3% in 2010. The comparison of domestic and foreign inflation shows faster growth of the domestic component in the first

<sup>&</sup>lt;sup>32</sup> On April 14, 2011 a temporary measure was issued for reducing the excise on petrols and diesel fuel (by 4 Denars and by 2 Denars, respectively) and to reduce the fee for mandatory oil reserves (by 0.5 Denars and by 0.2 Denars, respectively), valid for four months (until August 10).

<sup>&</sup>lt;sup>33</sup> In March 2011, the Energy Regulatory Commission increased the price of electricity by 5.5%.

<sup>&</sup>lt;sup>34</sup> In 2011 (in January, August and November), the Energy Regulatory Commission made three upward adjustments in the price of thermal energy (on average by 3.7%, 0.5% and 8.3%, respectively) which caused an average annual growth of 5.3% of the cost of central heating.

half of the year. In the third quarter a slowdown in both components was registered, while in the last quarter domestic inflation continued to decelerate, despite the intensified growth of foreign inflation.

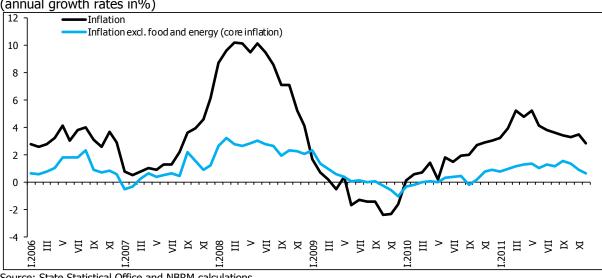
Table 4 Annual contributions to inflation (in percentage points)

	2007	2000	2008 2009		20	10		- 2010		2011			
	2007	2008		Q1	Q2	Q3	Q4	2010	Q1	Q2	Q3	Q4	2011
Consumer price index - all items	2.3	8.3	-0.8	0.4	1.1	1.8	2.9	1.6	4.1	4.7	3.6	3.2	3.9
Food	1.4	5.9	-0.7	-1.0	-0.4	0.4	1.3	0.1	2.7	3.2	2.0	1.8	2.4
Fresh food	0.6	3.5	-0.1	-0.6	-0.4	0.0	0.3	-0.2	0.8	1.2	0.3	0.5	0.7
Processed food	0.8	2.5	-0.5	-0.4	0.1	0.4	1.0	0.3	1.7	2.0	1.8	1.3	1.7
Energy	0.6	1.2	-0.3	1.5	1.4	1.2	1.3	1.4	0.9	0.9	0.9	1.0	0.9
Fuels and lubricants	0.1	0.6	-0.9	0.7	0.7	0.4	0.5	0.6	0.6	0.4	0.4	0.5	0.5
Electrical power	0.5	0.2	0.6	0.6	0.6	0.6	0.6	0.6	0.1	0.4	0.4	0.4	0.3
Heating power	0.1	0.5	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2
Food and energy (volatile prices)	2.0	7.1	-0.9	0.5	1.1	1.7	2.6	1.5	3.6	4.1	3.0	2.7	3.4
Core inflation (inflation excl. food and energy)	0.3	1.3	0.2	-0.1	0.1	0.1	0.3	0.1	0.5	0.6	0.6	0.5	0.5

Source: State Statistical Office and NBRM calculations.

Transmission effects of the rise in energy prices (which are evident with a certain time lag) contributed to the growth of the long-term component of inflation. Thus, during 2011, the growth of core inflation, which started in the second quarter of 2010, continued. In the second quarter of 2010, core inflation began to rise moderately. In late 2011, the dynamics of increase of this component slowed down, with the core inflation being reduced down to 1.1% on average for the entire year. In terms of subcomponents, the movement of the core inflation rate was due to the increased prices of utility and dwelling services<sup>35</sup>, detergents, catering services, medicines and clothing and footwear, while evident decrease was observed in the prices of telecommunication services and culture and entertainment.

Figure 37 Inflation and core inflation (annual growth rates in%)



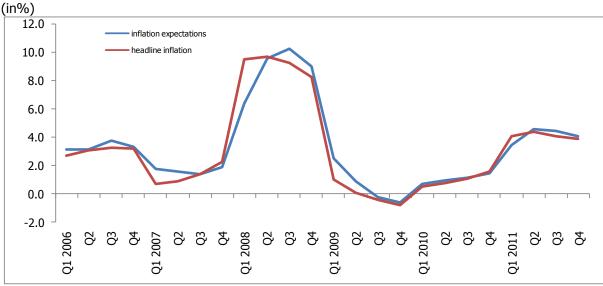
Source: State Statistical Office and NBRM calculations.

Achievements in inflation during 2011 were consistent with the **expectations of economic agents.** According to the results of the four surveys conducted by the NBRM, the largest is the percentage of economic entities that had expectations for inflation growth (on average 51% of respondents). One quarter (25%) of

<sup>35</sup> Part of the increase of prices in this category is due to the increasing cost of services for water supply and disposal of wastewater in the Municipality of Stip in February.

the respondents had stable inflationary expectations, while 17% expected it to reduce. The rest of the respondents failed to assess inflation. The analysis of the dynamics of inflation expectations suggests that the highest percentage of respondents who had expectations of inflation growth was in the second quarter (67%), in line with the faster growth in world prices of oil and food. With the exhaustion of inflationary pressures, the inflation expectations in the second half of the year were stabilized, and the last quarter was dominated by stable inflation expectations. According to the economic entities, the main factors which in 2011 acted in the formation of inflation expectations, were the global geopolitical situation, i.e. the unrest in North Africa and Middle East, the debt crisis in Europe, growth in world prices of food and energy, and then the growth in domestic regulated prices of electricity, central heating and oil derivatives, as well as the expectations for slower domestic and global economic activity.

Figure 38 Average annual inflation as of the current quarter and expectations for the average annual inflation by year end



Source: State Statistical Office and the Survey on the inflationary expectations of the NBRM.

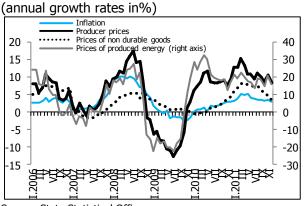
Selling prices of producers of industrial products in the domestic market continued to register growth also in 2011, in line with the growth of world prices and prices of imported raw materials. During 2011, production prices registered growth of 11.1% (in 2010 their growth was 8.7%), largely influenced by the growth in the prices of oil products, food products, metals, and higher electricity prices. Relative to 2010, the higher contribution of producer prices of food products is at the expense of the lower contributions from the prices of oil derivatives, metals and electricity, products that were the main drivers of growth in sales prices in 2010. Other price categories had a small positive effect on the growth in prices, as opposed to the selling prices of clothing and non-metal minerals which had a negative, although small, contribution to the annual change in the total index of producers selling prices. In terms of producer prices affecting the domestic component of consumer prices, they showed little acceleration and grew by 12.7%<sup>36</sup> in 2011. This growth was due to the rapid growth of prices of consumption goods<sup>37</sup> (6.5% versus 1.3% in 2010), in conditions of slower growth in energy prices (18.2% versus 22.5 % in 2010).

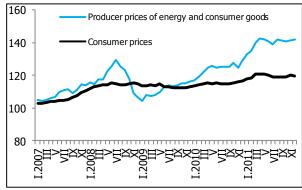
<sup>&</sup>lt;sup>36</sup> Refers to the prices of energy and non-durable and durable consumer goods.

<sup>&</sup>lt;sup>37</sup> Durable consumer goods marked growth of 4.0%, while non-durables, which have greater weight, had increased by 6.6%.

Figure 39
Inflation and prices of producers of industrial products

Figure 40
Production prices that affect consumer prices (indices, 2005=100)



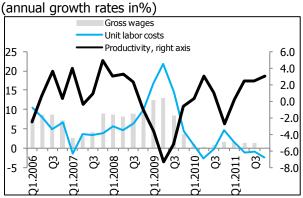


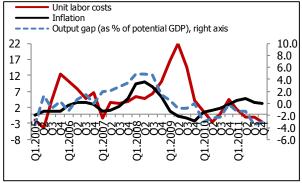
Source: State Statistical Office Source: State Statistical Office

After the moderate growth in 2010 (of 0.7%) in 2011 unit labor costs decreased annually by 0.8%. This decline in costs results from higher productivity growth (of 2.0%) than the growth of wages (by 1.2%). Having in mind such dynamics, in 2011, no major inflationary pressures through the labor market could be registered.

Figure 41 Unit labor costs, productivity in the economy and gross wages

Figure 42 Inflation, labor costs (annual growth rates in %) and output gap (as % of potential GDP)





Source: State Statistical Office and NBRM calculations.

Source: State Statistical Office and NBRM calculations.

In 2011, in the countries of Southeast Europe, the level of consumer prices continued to rise and the inflation in these countries experienced moderate acceleration. In line with global inflationary trends, the average rate of inflation in the countries of Southeast Europe was 4.9% and was higher than the average recorded in the previous year (3.0%). The highest inflation rate was recorded in Serbia (11.2%) and relatively high inflation rates compared to other regional countries were registered also in the economies of Kosovo, Turkey and Romania (7.4%, 6.4% and 5 8%, respectively). In other countries of the region and in the Euro area, the inflation rate was moderate and ranged between 2.2% (Croatia) and 3.9% (Macedonia). In general, inflation rate in the region accelerated in relation to 2010 (with the exception of Turkey, Albania and Romania). Analyzed by quarters, there is a downward trend in inflation in these countries, particularly pronounced at the end of the year (except in Turkey and Croatia). The slowdown in inflation is due to the exhaustion of inflationary pressures in the first half of the year, when world food and oil prices grew significantly.

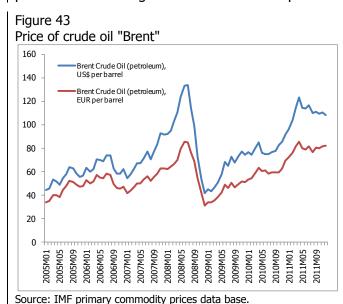
Table 5
Inflation in the Euro area and in Southeast Europe

(,0)					Inflation (	CPI index)	-	Inflation (CPI index)										
		(average annual growth rate, in %)																
	2006	2007	2008	2009	2010	2011			2011									
	2006	2007	2008	2009	2010	Q 1	Q 2	Q 3	Q 4	2011								
Euro area	2.2	2.1	3.3	0.3	1.6	2.5	2.8	2.7	2.9	2.7								
South East Europe	4.9	4.1	8.4	2.3	3.0	5.5	6.0	4.5	3.6	4.9								
Albania	2.5	2.9	3.4	2.3	3.6	4.0	4.1	3.2	2.5	3.5								
Bosnia and Herzegovina	6.1	1.9	7.7	-0.3	1.8	3.0	3.8	4.1	3.3	3.6								
Bulgaria	7.4	7.6	12.0	2.5	3.0	4.5	3.4	3.1	2.5	3.4								
Montenegro	2.9	4.2	8.5	3.4	0.5	2.3	3.6	3.3	3.0	3.1								
Croatia	3.2	2.7	5.8	2.2	1.1	2.2	2.3	2.0	2.4	2.2								
Kosovo	0.6	4.4	9.4	-2.4	3.5	9.2	10.1	6.1	4.2	7.4								
Macedonia	3.2	2.3	8.3	-0.8	1.6	4.1	4.7	3.6	3.2	3.9								
Romania	6.6	4.9	7.9	5.6	6.1	7.5	8.3	4.2	3.4	5.8								
Serbia	11.7	6.4	12.9	8.1	6.1	12.6	13.6	10.6	7.9	11.2								
Turkey	9.6	8.8	10.4	6.3	8.6	4.3	5.9	6.4	9.2	6.4								

Source: Eurostat and national statistical offices.

# Annex 2: Comparison of recent global price shocks and their impact on domestic consumer prices

In recent years the world economy faced two major price shocks. The first significant increase in global prices pertains to the period from mid 2007 to mid 2008, while the second price surge occurred during the second half of 2010 to early 2011. The purpose of this Annex is to compare the causes, structure and intensity of growth of prices in these two periods. The focus is on oil and food prices because these prices have a strong direct and indirect impact on domestic inflation.



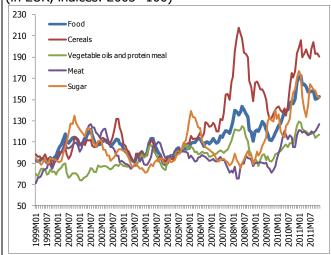
Starting from mid 2007 to 2008, oil prices registered **continuous growth.** The main factor for the sudden increase in oil prices was the high demand by emerging economies of Asia, mainly China and India. Insufficient manufacturing capacities of petroleum exporting countries, the low elasticity of the supply of oil in terms of price also the decreased increase, but extraction of oil from the North Sea and Gulf of Mexico (due to unfavorable weather and damage from hurricanes) were additional reasons for the sharp rise in the price of oil. The increase in daily production guota by the OPEC Member States by 1.7 million barrels during that

period was not sufficient to alleviate the pressures of the demand.

The emergence of the global economic and financial crisis prompted strong downward adjustment in world oil prices. Reduced demand and the uncertain prospects of getting out of recession led to a reduction of the price level below the one common for the period before the price boom. With the first signs of global recovery, the price level of oil began to rise gradually. In mid 2010, oil prices again started to move along a sharp upward trend. Geopolitical tensions in the Middle East and North Africa (particularly Libya, an

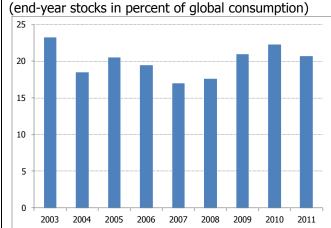
OPEC Member State) and the growth of demand in developed and developing countries were the main factors for such price dynamics.

World prices of food, total and by components (in EUR, indices: 2005=100)



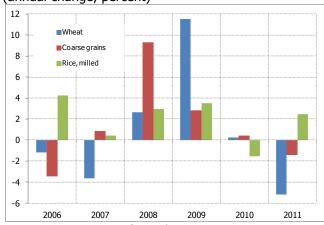
Source: IMF primary commodity prices data base.

Figure 45
Global stocks of wheat



Source: U.S. Department of Agriculture.

Figure 46
Global production of cereal crops (annual change, percent)

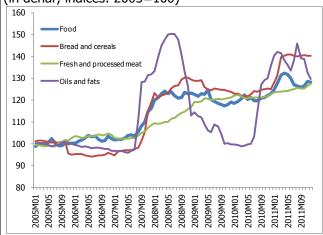


Source: U.S. Department of Agriculture.

the main factors for such price dynamics. However, despite these developments, oil price approached, but did not exceed the previous level of the price shock in 2007-2008.

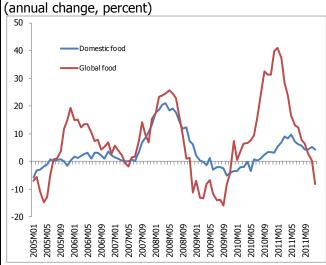
prices Food generally followed the path of oil prices. Their growth between 2007 and 2008, same as that of oil, was mostly driven by the increased demand from emerging economies and the factors on the supply side. In such conditions there was a reduced share in the global inventories of wheat relative to total consumption (Figure 45). The demand for biofuels had an additional impact on the markets of food products. High oil prices and policies for support of the use of biofuels, increased the demand for these products, used as a substitute fuel for transportation, especially in developed economies and in some emeraina This demand, economies. in stimulated the demand for raw materials such as wheat, corn and soybeans. In conditions of inability to expand the volume of production of these crops, there was a conversion of production from crops for food into crops for production of biofuels. In addition to these indirect effects, high oil prices also had a direct effect on the costs for food production. Growth in food prices was interrupted by the emergence of the global crisis. Moreover, after the sharp decline at the beginning of the crisis, world food prices generally were stable until the end of June 2010. In the second half of 2010, bad weather around the world has reduced yields of crops and generated high growth of food prices, increasing inflationary risks and affecting the most vulnerable economies. Floods in Australia, Pakistan and parts of India and droughts in China, Argentina and Eastern Europe fostered the growth of food costs. Droughts and fires in Russia, Ukraine and Kazakhstan have caused decline in wheat production. As a result, global wheat harvest in 2011 fell by more than 5%<sup>38</sup> (Figure 46). Then, unfavorable summer weather led to lower than expected harvest of maize in the USA. However, the reaction of global prices was not due solely to lack of supply. An important factor were the imposed restrictions on the export of wheat in Russia and Ukraine. Such responses to supply shocks with protectionist trade policy, were also observed in the previous price wave of food products between 2007 - 2008. Unlike the previous shock when the growth of food prices came only from the prices of corn and oils, this time the high prices of sugar had an additional impact (Figure 44). **All these factors have caused food prices to significantly exceed the previous price shock between 2007 and 2008.** 

Figure 47
Domestic prices of food, total and by components (in denar, indices: 2005=100)



Source: State Statistical Office.

Figure 48
Domestic and world prices of food



Source: State Statistical Office and IMF primary commodity prices

The increase in world prices of food and oil caused growth of food prices and overall inflation in most economies in the world in 2008 and 2011. The effects were larger in emerging and in developing economies, where the share of food in consumption basket is higher than in advanced economies. The domestic economy also was not immune to higher world prices. The growth of world prices was transmitted in the growth domestic prices. Transmission effects were felt directly through the food component (which represents about 40% of the total index of consumer prices). direct and indirect effect domestic prices of oil derivatives had an additional impact.

The sharp growth of domestic food prices in late 2007 and throughout 2008 was mostly a result of the prices of wheat products and cooking oil, which fully corresponds with the high price growth of these products globally. Domestic food prices reacted also to the second global food price shock, with growth of the same components as in the previous price surge. However, the latest rise in domestic food prices caused less noticeable response relative to the previous shock. The less intense growth in the level of food

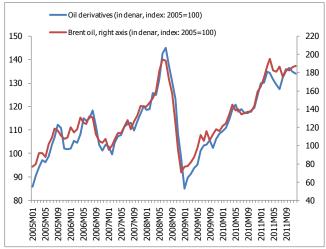
prices in the second price shock relative to the world price level may be explained by several factors. First, this last movement of food prices was a result of the smaller downward adjustment of domestic prices after the first price shock (world prices decreased more rapidly, while domestic prices remained generally on the same level). The second additional factor was the phase of the business cycle during this period, i.e. the absence of pressures

 $^{\rm 38}$  Annual crop yields of wheat refer to the period from July 1 to June 30.

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from domestic demand in 2011, which was not the case in 2008 when the economy operated above the potential. Another factor that may be indicated is the reaction of the Government with the undertaken administrative and tax measures $^{39}$ . Possible additional factor that acted toward lower intensifying of domestic food prices compared with that in the world, was the more favorable domestic supply amid fast growth of domestic production of cereals during  $2011^{40}$ , and simultaneous slowdown in the growth of exports of this category.

Figure 49
Domestic prices of petroleum products and crude oil
Brent



Source: State Statistical Office and IMF primary commodity prices data base.

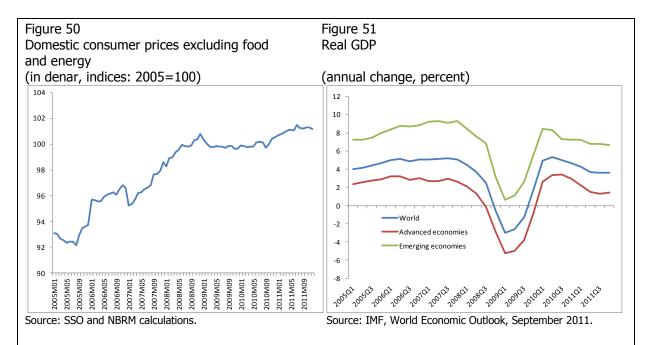
Growth in world oil prices fully reflected on the movement of domestic prices of oil derivatives, which are an integral part of the index of consumer prices (Figure 50). At the first price shock domestic prices were adjusted to the world prices. The second external price shock was also mirrored in the domestic prices of oil derivatives. Exception is the period from April to August, which corresponds with the reduced excise on oil derivatives that temporarily alleviated the inflationary pressures through this channel.

The secondary effects of the growth of the volatile components of consumer prices (food and energy) can be evaluated through the long-term

component of inflation, i.e. core inflation. In periods of fast growth in world prices of food and oil there is also an adequate response of core inflation. Greater response was evident during the first than during the second price surge, which corresponds to the intensity of the reaction of domestic prices to external shocks, and to the increased pressure from domestic demand when the economy was growing above the potential.

<sup>&</sup>lt;sup>39</sup> Government measures to prevent the growth of prices in 2011 pertained to the sale of wheat under the market price from the commodity reserves, ban on the export of flour, reduction of duty on imports of white sugar (in circumstances when this product had strong growth in world markets), reduction of excise duty on petroleum products (in order to prevent direct and indirect effects on the prices of food and other products and services) and the preferential VAT rate of 5% for imports and trade of crude oil. In 2008, measures were related only to the use of commodity reserves of cooking oil and wheat.

<sup>&</sup>lt;sup>40</sup> According to the SSO data regarding the purchase and sale of agricultural products, the increase in the purchase and sale of cereals in 2011 was 68.9%, and in 2007 and 2008 it grew by 1.2% and 11.9%, respectively. Higher domestic supply in 2011 compared to 2008 is confirmed by the higher exports of cereals and cereal preparations (growth of 26.2% in 2011 versus 19.6% in 2008).



To summarize, the global price shocks in recent years were largely related to temporary factors such as weather conditions. However, the main reasons for the growth in the demand for food and oil reflect the structural changes in the global economy, i.e. the disparity between growing demand and limited supply. At the time of the first price shock, demand pressures were much more pronounced than during the second shock, which appeared in the period of gradual post-crisis recovery. Both global price shocks caused inflationary pressures in most economies in the world. They were more pronounced in emerging and developing economies, including the Macedonian economy. In the domestic economy, more explicit reaction to external price movements was observed in the first rather than in the second global price surge. The reasons for this are numerous, and mainly related to the phase of the business cycle, the intensity of downward adjustment of domestic prices to the fall in world prices at he beginning of the crisis, the domestic measures taken, as well as the changes in domestic supply.

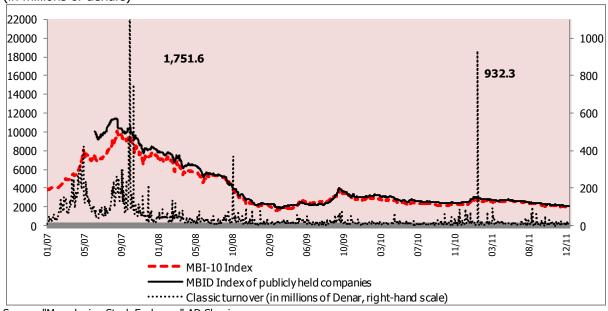
# 2.3. Stock exchange indices and indices of real estate

Movements in the domestic capital market in 2011 corresponded with the changes of basic macroeconomic indicators. So, the stock exchange index reacted positively to the favorable economic performances earlier this year and the then relatively favorable outlook for the next period. On the other hand, the reemerging of the debt crisis in the Euro area and the slowdown in the domestic economy had a negative effect on prices of the stocks of domestic companies. Thus, the dynamics of the Macedonian Stock Exchange Index (MBI-10) in the first half of the year was characterized by a stable and favorable movement, while starting from the beginning of the second half, MBI-10 registered a continuous downward trend. Similar dynamics was evident in the regional stock exchange indices, which in 2011 registered a significant annual decline. Real estate prices during 2011 were characterized by a minimal downward movement, generated by the shifts in supply and demand in the real estate market.

The adverse movement of the Macedonian Stock Exchange Index (MBI-10) continued in 2011, and on average, this index recorded an annual decline of 2.4%. In terms of the dynamics, during the year two sub-periods may be distinguished.

Thus, in the beginning of the year, MBI-10 had generally increasing trend, which in January reached its highest level in 2011<sup>41</sup>. Then, by mid-June, the index generally followed a stable trajectory, which was in line with the favorable trends in the overall economic activity in the country in this time of year. Since the beginning of the second half of the year, MBI-10 followed a continuous downward trend, and at the end of December, it reached its lowest level in 2011<sup>42</sup>. Deteriorated economic performances of the domestic and global economy, deteriorated expectations, the rebound of uncertainty and risk aversion are factors that determined the path of this index in the second half of the year. The index of publicly owned companies - MBID<sup>43</sup> during 2011, followed the daily movements of the MBI-10, and on average it registered an annual decline of 6.7%.

Figure 52 MBI-10, MBID and stock exchage turnover with classic trading (in millions of denars)



Source: "Macedonian Stock Exchange" AD Skopje.

Movements on the capital markets in the group of SEE countries during the year were characterized by variable dynamics. Such dynamics was mainly caused by the information regarding the economic performances and prospects for the next period and the debt crisis in the Euro area. The analysis shows that regional stock exchanges began the year 2011 with positive trends, which corresponded with the favorable economic performances and the gradual return of foreign investors in these countries. These factors have led to an increased turnover on the regional capital markets and a rise in stock prices. However, starting from the middle of the year, continuous downward trend in regional stock indexes was noted, as a result of growing restraint of investors amid the escalation of the debt crisis in Greece and the increased volatility on the financial markets in the Euro area. The slowdown in the global economic activity and growth in the Euro area, and the growing uncertainty and constant downward revisions of the growth for 2012, were additional risk factors. This negative economic information for most of 2011, caused these countries to finish the year with deteriorated indices compared with the end of 2010. Thus, regional stock exchange indices registered a significant annual decline of over 10%, with the highest decline being observed in Ljubljana

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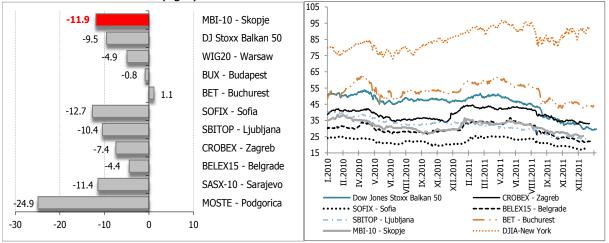
<sup>&</sup>lt;sup>41</sup> MBI-10 reached its highest level of 2827.6 index points on January 27, 2011.

<sup>&</sup>lt;sup>42</sup> MBI-10 reached its lowest level of 1939.6 index points on December 23, 2011.

<sup>&</sup>lt;sup>43</sup> Non-weighted price index, whose constituent elements are selected taking into account the number of days of trading and the turnover between two revisions of the index.

SBITOP<sup>44</sup> of 30.7%, Warsaw VIG20 of 21.9% and Belgrade BELEKS of 23.4%. Macedonian indices MBI-10 and MBID also significantly decreased on annual basis by 13.3% and 15.2% respectively, while the index OMB achieved annual growth of 4.3%.

Figure 53
Annual growth rates of national and composite regional indices<sup>45</sup> (left) and comparison of the movement of stock indices (right)



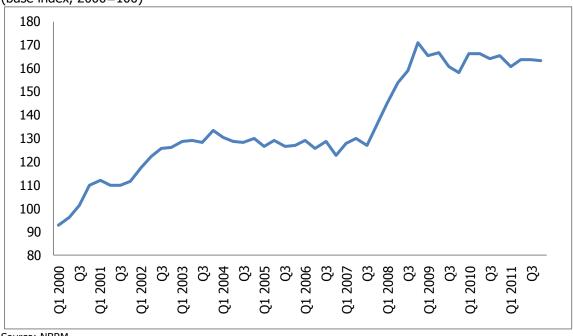
Source: Bloomberg, "Macedonian Stock Exchange" AD Skopje, national stock exchanges.

**After the rise in 2010, property prices registered minimal reduction during 2011.** The real estate prices fell earlier in the year (quarterly decline of 2.8% in the first quarter), and until the end of the year they remained stable. The average price of apartments in 2011 compared to their average price in 2010 registered a minimal decrease of 1.7%. Also, at the end of 2010, compared to the end of the last year, housing costs were lower by 1.3%. Regarding the possible factors for such movement of real property prices, favorable shifts were observed on the supply side, associated with the high annual growth (29%) of the value of residential buildings constructed in the first three quarters of 2011. Regarding the indicators of demand, in 2011, housing loans grew at a similar anual rate, as in the previous year (13.1% versus 11.8% in 2010), indicating further increase in the demand, too. The upward adjustment of both the supply and the demand correspond to the relative stability of real property prices during 2011.

<sup>&</sup>lt;sup>44</sup> Perceptions of increased risk of investors were most obvious in the countries of the region which are members of the EU and Euro area.

<sup>&</sup>lt;sup>15</sup> "Dow Jones Stoxx Balkan 50" includes stocks of 50 largest and most liquid companies from eight Balkan stock exchanges.

Figure 54 Index of prices of appartments<sup>46</sup> (base index, 2000=100)



Source: NBRM

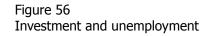
# 2.4. Labor market and wages

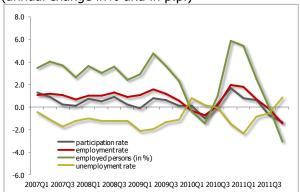
Changes in the pace of economic growth had transmission effects on the movements in the labor market. Thus, on average for the whole year, the main parameters showed improving conditions in the labor market. The acceleration of growth in late 2010 and in the first half of 2011, contributed to encouraging the process of creating new jobs. The average employment rate rose by 0.2 percentage points compared to 2010 and reached 38.9%. The unemployment rate, amid simultaneous growth of both the supply and demand for labor in 2011 decreased by 0.7 percentage points and equaled 31.4%. The reduction of the rate of unemployment in 2011 corresponds to the structure of GDP growth. Namely, according to the International Labor Organization<sup>47</sup>, the faster growth of investments in the economy relative to the overall economic growth is usually an indicator of growth that leads to a reduction in unemployment in the economy. Given that in most of 2010 and 2011, the revival of the overall investment activity was more intense than the total annual economic growth, it may be concluded that this structure has contributed to reducing unemployment.

<sup>&</sup>lt;sup>46</sup> Hedonic price index of apartments, prepared by the NBRM on the basis of notices of sale in the capital city, released by real estate agencies. The price of the apartment is a function of the size, the neighborhood in which it is located, the floor, whether the apartment has central heating and whether the apartment is new.

<sup>&</sup>lt;sup>47</sup> Source: Global trends in employment, 2012, a publication of the International Labor Organization.

Figure 55 Indicators of trends in the labor market (annual change in% and in p.p.)





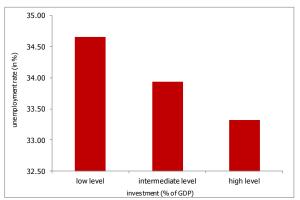


Figure 56 shows the average unemployment rate which corresponds to different levels of investment activity (approximated with the participation of investments in GDP). The investment activity is categorized as high, low and medium according to whether the share of investments in GDP is above, below or at the level of the average share for the period 2005-2011. At a higher level of investment activity higher unemployment rate than average is recorded and vice versa.

Source: State Statistical Office and NBRM calculations.

Despite the generally favorable trends in the labor market compared with the previous year, the dynamic analysis during the year shows a gradual shift of the positive trend. Namely, after the excessively large increase in the number of employees in the second half of 2010, over 2011 a gradual decrease on a quarterly basis was observed. This adjustment led to stagnation in the number of employees in the third quarter and their reduction in the fourth quarter on an annual basis. The downward adjustment of employees relative to their maximum at the end of 2010, can partly be explained by the gradual deterioration of global economic prospects, emphasizing the downward risks regarding the economic growth, expectations of negative transmission effects on the domestic economy and actual significant slowdown in domestic economic growth in the second half of the year. In terms of unemployed persons, in the first half of the year their number declined continuously. However, in the second half of the year these movements changed, and the number of unemployed persons began to grow. Consequently, the unemployment rate which in the third guarter gravitated around 31.2%, sharply deteriorated in the fourth quarter and positioned at 31.8%. Simultaneously, during 2011, the unemployment rate was continuously maintained at the level which exceeds the historical minimum of 30.9% achieved in the last guarter of 2010.

The analysis of the labor market through demand and supply of labor shows annual growth in both categories. Thus, the number of employees as an indicator of demand had similar growth rates as in the previous year and increased by 1.1% annually. Demand for labor may be approximated also by an index constructed on the basis of the responses from surveys on business tendencies in the manufacturing industry, construction and trade. Namely, this index is an aggregate index of expectations for the movement of employment in these three activities, which are sensitive to the business cycle<sup>48</sup>. During 2011, the index points to strengthening of the optimism regarding the movement of employment, indicating the growth of the demand for labor. For comparison, during the recession and post-recession years (2009 and 2010), the curve of expectations generally indicated a decline in the demand for labor.

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<sup>&</sup>lt;sup>48</sup> This index is constructed by applying the appropriate weighting of the results which are balance of positive and negative responses.

Figure 57 Employment prospects in the activities sensitive to business cycle49



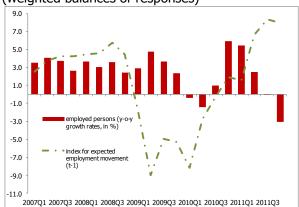
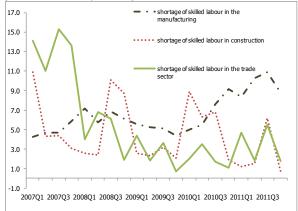


Figure 58 Lack of trained staff in the activities sensitive to business cycle

(balance of responses)



Source: State Statistical Office, calculations of NBRM. Source: State Statistical Office.

The index of expectations for the movement of employment in activities sensitive to the business cycle is a weighted average of the responses of managers of enterprises in manufacturing industry (51%), construction (15%) and trade (34%) regarding their expectations about the movement of employment for the next quarterly period. The weighting structure is derived from the normalized shares of the number of employees in these sectors in 2010.

In the surveys of business tendencies, the respondents are asked to give qualitative statement that requires a positive, neutral or negative attitude about the changes that have occurred regarding the current situation, i.e. in terms of expectations associated with a range of issues. Namely, for each question the percentage of respondents who reported improvement (positive response), the percentage of respondents who reported deterioration (negative response) and the percentage of respondents who took a neutral position, or who have declared unchanged assessment or expectations, is calculated. In calculating these three percents, the answers are not weighted, so the difference between "positive" and "negative" percentages represents the balance of responses for the appropriate question.

Surveys of business tendencies include an additional aspect, which refers to the labor market. Managers are required to give a statement also with regard to the limiting factors for improving the current business situation of enterprises, which include lack of trained staff. This aspect of the surveys gives an indication of the structural problems present in the labor market which are due to the existence of unsatisfied demand for labor, i.e. demand for which there is no suitable offer. The significance of this factor as a constraint to improve the current business situation of enterprises had a growing tendency in 2011, which is a continuation from the previous year. On the other hand, during the crisis in 2009, managers gave less importance to this factor, compared to the previous period. Namely, during the recession year 2009, the pessimism of many employers regarding the lack of skilled labor decreased, but at the expense of the insufficient demand, which in that period was indicated as the dominant limiting factor for improving the business conditions. Reemerged importance of the lack of trained staff as a limiting factor in some way leads to a gradual normalization of the flows in the economy. Namely, with the economic recovery, structural rigidities become important again, amid gradual reduction of the restrictions imposed by the economic crisis.

Employment growth in 2011 was accompanied by an increase in the **aggregate supply of labor**<sup>50</sup>. The active population registered an annual growth of 0.2%. However the total working age population recorded stronger growth, suggesting that unemployed persons were less interested in seeking work. The average rate of activity in 2011 decreased by 0.1 percentage points compared to 2010 and amounted to 56.8%.

<sup>&</sup>lt;sup>49</sup> According to the Surveys by the State Statistical Office on business tendencies in the manufacturing industry, construction and trade. 50 Total active population.

Figure 59
Working age population, labor force and inactive population

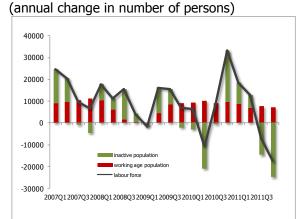
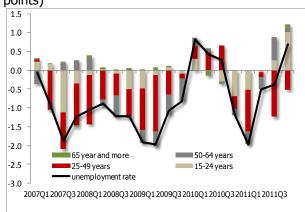


Figure 60
Unemployment rate - age
(contributions to annual changes in percentage points)



Source: State Statistical Office.

In terms of age groups, the results from the Labor Force Survey showed continuing downward trend in unemployment in the age group of 25-49 years of age, while among those aged 15-24 and 50-64 the rate of unemployment is higher relative to the previous year. However, movements during the year were divergent. Thus, in the first half of the year all age groups registered a reduced rate of unemployment. In the third and fourth quarters unemployment changed the direction, i.e. among young population and among persons aged 50-64 the rate of unemployment increased.

Regional comparison, generally showed further worsening of the problem of unemployment in most countries. The exception is Macedonia, where in 2011, there was a reduction in unemployment and Montenegro and Romania, where unemployment stagnated. Such movements create risks that current higher unemployment rates could be maintained for a longer period. The regional comparison shows that during the crisis and in the post-crisis period, Macedonia was the only country that avoided an increase, i.e. registered a decline in the rate of unemployment. Also, unlike countries in the region, Macedonia registered a greater downward adjustment in the number of worked hours per employee, which may partly explain the smaller adjustment in unemployment. Within the analyzed countries, the highest cumulative growth rate of unemployment (as the difference between the highest<sup>51</sup> registered rate of unemployment during the crisis or in the post-crisis period and the lowest unemployment rate before the crisis) was registered in Bulgaria (an increase of 7 percentage points). Within the region, Macedonia is a country with the smallest loss of GDP (calculated as the percentage difference between the lowest<sup>52</sup> level of GDP recorded during the crisis and the highest level of GDP recorded in the pre-crisis period), which corresponds to the movements on the labor market.

<sup>&</sup>lt;sup>51</sup> The highest unemployment rate in Bulgaria in the post-crisis period was registered in the first quarter of 2011 and equals 12%, and the lowest unemployment rate of 5% was recorded before the crisis, i.e. in the fourth quarter of 2008, so that the cumulative growth rate of unemployment as a consequence of the crisis is 7 percentage points.

<sup>&</sup>lt;sup>52</sup> The lowest level of GDP in the Republic of Macedonia during the crisis was registered in the second quarter of 2009 and the highest level of GDP before the crisis was registered in the third quarter of 2008, observed on a seasonally adjusted basis. The percentage difference between the fixed lowest and highest level of GDP represents loss in GDP as a consequence of the crisis and equals -3.1%.

Figure 61 GDP and unemployment rate - regional comparison

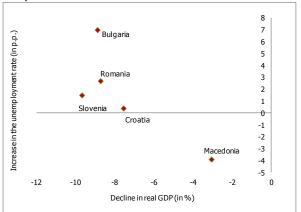
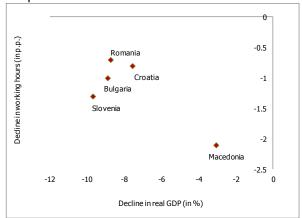


Figure 62 GDP and number of hours worked<sup>53</sup> - regional comparison

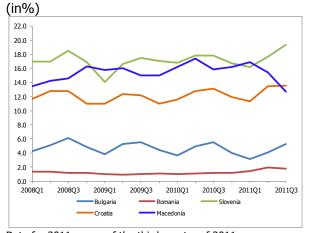


Source: State Statistical Office, Eurostat. NBRM calculations.

Data used for the analysis are those from the quarterly Labor force surveys, and quarterly seasonally adjusted GDP at prices of 2005 for the period from Q1 2008 to Q3 2011. a) for the rate of unemployment, the change in percentage points between the lowest unemployment rate before the crisis and the highest registered rate of unemployment during the crisis or in the post-crisis period is considered. b) for the number of hours worked, and for the real GDP the rate of decline during the crisis relative to the highest level in the pre-crisis period is considered.

**During 2011, in Macedonia a reduced share of temporary employees in the total number of employees was registered.** The data show that during the recession year 2009 and in the first year of post-crisis recovery, i.e. in 2010, the need for labor in Macedonia was fulfilled through the growth of temporary employment. In other countries in the region, with the exception of Bulgaria, where this ratio since 2009 has been continuously decreasing, the relative share of temporary employment, after the fall of 2009, in the subsequent two-year period registered continuous upward movement. Also, in the group of analyzed countries, Macedonia is immediately behind Slovenia as a country with the largest share of temporary employees.

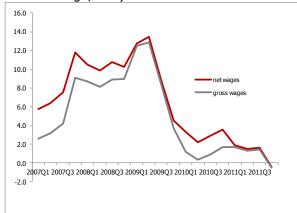
Figure 63
Share of temporary workers in the total number of employees



Data for 2011 are as of the third quarter of 2011.

Source: Eurostat.

Figure 64
Average nominal net and gross wages
(corrected for the methodological change, annual change, in%)



Source: State Statistical Office

Growth in the average net wage continued throughout 2011, however at a slower pace. The average nominal net wage in 2011 reached Denar 20,847 and was

<sup>&</sup>lt;sup>53</sup> Average number of hours worked per employee in the course of one week.

higher by 1.4% relative to the previous year. In 2011, the nominal average gross wage<sup>54</sup> increased by 1.2% compared to 2010 and amounted to Denar 30,602. Amid cumulative inflation rate of 3.9%, net and gross wages registered real decrease of 2.4% and 2.6% respectively. In terms of social security contributions, there were no changes in 2011<sup>55</sup>.

**Moderate growth in nominal net wages was observed in almost all countries of the region.** The exception to this trend is Croatia, where the nominal net wages register a slight decline, and Serbia, where more significant increase was registered. However, intensification of inflation in the region caused a decline in real net wages in majority of the analyzed countries. With the exception of Slovenia, where wages almost stagnated in real indicators, real growth was registered only in Bulgaria and in Serbia. Changes in the effective share of the allocations for personal income tax and social security contributions in the gross wage were registered in Bosnia and Herzegovina (increased share), as well as in Macedonia, Croatia, Montenegro and Slovenia (reduced share). The downward movement of the relative share of the allocations for personal income tax and social security contributions in the gross wage in Macedonia, amid unchanged rates of contributions and rate of personal income tax, can be explained by increasing the amount of tax exemption<sup>56</sup>.

Table 6 Wages per country

		2010	2011	nominal increase of wages, in %	real increase in wages, in %	personal income tax an contributions, % od th average gross wage		
					70	2010	2011	
	average gross wage	491	497	1.2	-2.6	32.0	31.9	
Macedonia	average net wage	334	339	1.3	-2.5	32.0	31.9	
	unemployment rate	32.1	31.4	-0.7				
	average gross wage	1495	1525	2.0	-0.1	35.3	35.2	
Slovenia	average net wage	967	987	2.1	0.1	33.3	33.2	
	unemployment rate	7.3	8.1	0.8				
	average gross wage	1054	1049	-0.5	-2.7	30,4	30.2	
Croatia	average net wage	733	732	-0.2	-2.3	30.4	30.2	
	unemployment rate	11.8	13.2	1.4				
Bulgaria	average wage	328	357	8.8	5.2	-	-	
_	unemployment rate	10.2	11.1	0.9				
Bosnia and	average gross wage	625	638	2.1	-1.4	34.2	34.4	
Herzegovina	average net wage	411	419	1.9	-1.6	34.2	34.4	
nei zegovilia	unemployment rate	29.1	29.2	0.1				
	average gross wage	461	518	12.3	1.0	28.0	28.0	
Serbia	average net wage	332	373	12.4	1.1	20.0	20.0	
	unemployment rate	19.2	23.0	3.8				
	average gross wage	714	722	1.0	-2.1	33.0	32.9	
Montenegro	average net wage	479	484	1.0	-2.1	33.0	32.9	
	unemployment rate	19.7	19.7	0.0				
	average gross wage	460	480	4.2	-1.5	27.4	27.4	
Romania	average net wage	334	348	4.2	-1.6	27.4	27.4	
	unemployment rate	7.3	7.3	0.0				

Wages are expressed in euros.

Source: State Statistical Office, Eurostat and national statistical offices.

<sup>&</sup>lt;sup>54</sup> Total paid gross wages include: paid net wages for the reporting month, paid personal income tax and paid contributions (for pension and disability insurance, health insurance, employment, professional diseases and water supply). The data are related to wages paid.

<sup>&</sup>lt;sup>55</sup> Namely, after their decline in 2010, with the Law Amending the Law on the contributions from compulsory social insurance from December 22, 2010, the rates for 2011 remained at the level from 2010, and the time period for their reduction was extended to 2013. Additionally, with the Law Amending the Law on contributions from compulsory social insurance from December 30, 2011, the period of validity of the rates of 2010 was prolonged until the end of 2013.

<sup>&</sup>lt;sup>56</sup> The Ministry of Labor and Social Policy, determines the tax exemption each year, in nominal terms. Thus, in 2011, tax exemption was Denar 7,316 per month, compared to Denar 7,035 in 2010.

In conditions of faster growth in gross domestic product than the growth in employment, in 2011<sup>57</sup> labor productivity increased by 2%. Productivity growth in 2011, which comes as a continuation of the minimal growth in 2010, was not sufficient to offset the loss in the overall level of productivity in the economy that occurred during the recession year 2009. Consequently, in the fourth quarter of 2011, productivity was lower by 2% compared to the pre-crisis level (i.e. the average level in 2008). As for the unit labor costs, after the moderate growth in the previous year, in 2011 their minimal downward adjustment was registered. Thus, unit labor costs declined by 0.8%, conditioned by the faster growth of productivity relative to the growth of gross wages.

Figure 65 Labor productivity (annual change, in %)

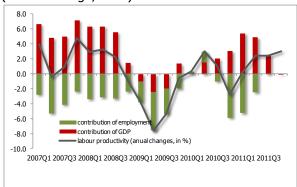
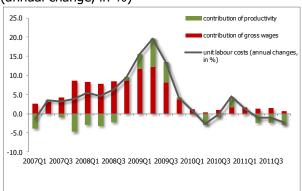
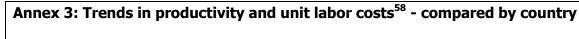
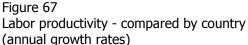


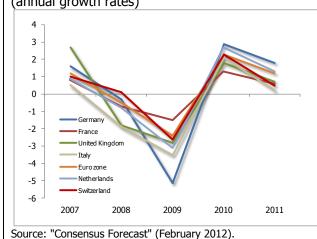
Figure 66 Unit labor costs (annual change, in %)

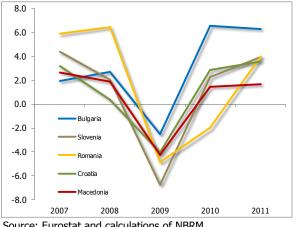


Source: State Statistical Office and NBRM calculations.









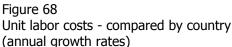
Source: Eurostat and calculations of NBRM.

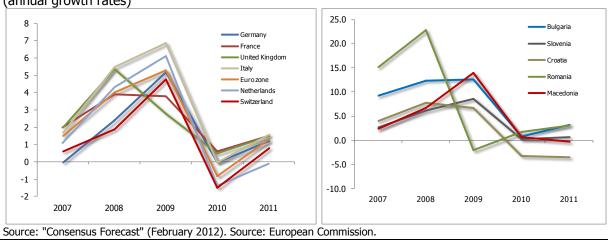
<sup>57</sup> Productivity and unit labor costs for the whole economy are calculated on the basis of data on GDP, for the total number of employees, according to the Labor Force Survey of the State Statistical Office and according to the data on the average gross wages.

<sup>&</sup>lt;sup>58</sup> The data on the countries of Western Europe are from the "Consensus Forecast" (February 2012) with the data on productivity and unit labor costs for 2011 being approximate estimates based on the assessments about the movement of GDP and employment for 2011. For the countries of the region, data on productivity are calculated by using data on GDP and employment by EUROSTAT until the third quarter of 2011, while data on unit labor costs are a projection of the European Commission for 2011.

After the increase in 2010, largely driven by the economic recovery, in 2011, western European countries registered slowing in the pace of productivity **growth.** The slower growth resulted from both the shift of employment in the zone of positive change, and the deceleration of the economic activity in 2011. There were noticeable differences between the individual economies in terms of the magnitude of this effect, due to differences in the extent of recovery of the economic activity and employment. In 2011, the Euro area is expected<sup>59</sup> to have productivity growth of 1.2%, following the growth of 2.3% in 2010. On the other hand, in the countries of the region, productivity growth has further intensified. The productivity growth rates range from 1.7% in Macedonia to 6.3% in Bulgaria. Unlike western European countries where both the economic activity and employment, without exception, experienced positive changes in 2011, in the countries of the region, with the exception of Macedonia, employment has further deteriorated. Consequently, at similar average growth of the economic activity in both regions, the countries of Southeastern Europe registered higher average productivity growth (of 3.9%) compared with the expected productivity growth in 2011 for the group of analyzed Western European economies.

In 2011, in western European countries, unit labor costs shifted from negative into a zone of positive change, which is explained by the more intensive growth of wages than the productivity growth. Unit labor costs in the Euro area are expected to grow by 1.3%, which comes after the fall of 0.8% in 2010. Simultaneously, in the entire region, with the exception of Croatia and Macedonia, all other countries are expected to register further acceleration of the growth of unit labor costs. According to these shifts, for 2011, on average for the region, unit labor costs are expected to increase by 0.7%, after the stagnation in 2010.





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<sup>&</sup>lt;sup>59</sup> According to projections of the "Consensus Forecast" (February 2012).

<sup>&</sup>lt;sup>60</sup> According to projections of the "Consensus Forecast" (February 2012).

# 2.5. External sector

# 2.5.1. Balance of payments

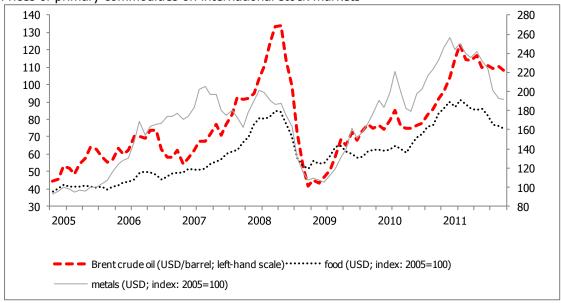
In 2011, the current account deficit insignificantly widened, mostly due to the wider trade deficit, caused by the deterioration of energy trade balance, given the higher domestic needs for energy and rise of global energy prices. On the other hand, the favorable conjuncture on the metal market and the higher level of exploitation of some new export capacities, but still weak domestic demand, tended to reduce the non-energy trade deficit. In 2011, large portion of the trade deficit was covered by inflows from private transfers that kept on increasing. The higher confidence in domestic currency, and simultaneously, the lower credibility of the euro currency had an outstanding effect on the private transfer growth. The widened current transaction deficit implied higher need for its financing. In 2011, capital inflows provided current deficit financing and additional accumulation of foreign reserves. The rise of non-debt creating sources of funding is a positive sign, and is attributable to the higher foreign investments in the country. In 2011, their amount was almost twice as high as the current transaction deficit. Additional capital inflows were created through the external borrowing, contributing to higher gross external debt. Yet, the debt position of the country remains relatively favorable.

Table 7
Gross external financing

Gross external financing								
	2004	2005	2006	2007	2008	2009	2010	2011
				in millions	of euros			
Funding needs	1,149.8	932.4	1,032.3	1,961.8	2,182.3	1,867.0	1,715.6	2,159.8
Current account deficit	361.8	122.5	23.4	421.2	862.2	457.1	150.4	201.1
Medium/long-term debt due	158.4	135.8	283.4	409.3	157.5	167.7	236.6	309.4
Short term debt due	629.6	674.2	725.5	1,131.3	1,162.6	1,242.2	1,328.7	1,649.4
Funding sources	1,149.8	932.4	1,032.3	1,961.8	2,182.3	1,867.0	1,715.6	2,159.8
Capital account	-3.8	-1.7	-0.8	3.7	-12.2	20.2	12.9	20.9
FDI and portfolio inflows, net	268.3	275.8	417.4	621.0	358.7	240.9	96.0	259.8
Medium- and long term borrowing	185.4	218.5	240.0	271.6	442.9	208.5	302.6	768.0
Short-term borrowing	701.1	793.1	668.3	1,200.1	1,341.6	1,510.0	1,346.4	1,449.9
Errors and omissions	14.7	-5.3	5.1	-32.8	-0.3	-43.2	19.5	-7.4
Net reserves (- indicates increase)	-15.9	-347.9	-297.6	-101.8	51.6	-69.4	-61.7	-331.3
Main non debt creating funding sources	133.4	164.6	372.1	493.2	198.5	5.2	131.4	377.0
FDI and portfolio inflows, net	133.4	164.6	372.1	493.2	198.5	5.2	131.4	377.0
Main non debt creating funding								
sources/current account deficit	0.4	1.3	15.9	1.2	0.2	0.0	0.9	1.9
FDI, net / current account deficit	0.3	1.0	13.0	0.9	0.3	0.1	1.0	2.0

Source: NBRM.

Figure 69
Prices of primary commodities on international stock markets



Source: IMF database.

#### 2.5.2. Current account

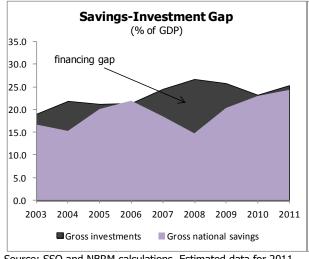
After the narrowing in the last two years, in 2011 the current account deficit broadened marginally. In 2009 and 2010, as a response to the global crisis, the exports and domestic demand dropped drastically, while imports registered severe downward adjustment. In fact, the higher uncertainty and the growing risks resulted in higher savings in the economy, and slowdown in the investment dynamics. Such developments significantly reduced the negative current account balance. Amid relatively slow pace of post-crisis recovery of the global economy, in 2011, savings in the economy kept on growing. On the other hand, the domestic economy experienced acceleration of investment activity, spurred by the higher government investments. Domestic sources were insufficient to cover them financially, causing minor broadening of the negative gap between savings and investments and higher need of external funding. Thus, in 2011, the current account deficit totaled Euro 201.1 million, or 2.8% of GDP<sup>61</sup>, which is by Euro 50.7 million, i.e. 0.6 percentage points of GDP more compared to the preceding year.

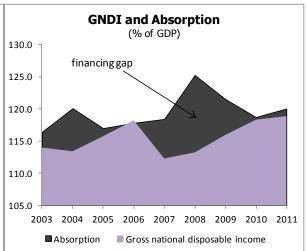
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<sup>&</sup>lt;sup>61</sup> The nominal GDP for 2011 is an estimated SSO data.

Figure 70 Savings-investments gap (% of GDP)

Figure 71 **GNDI** and absorption (% of GDP)



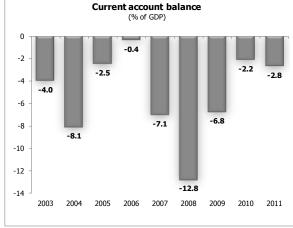


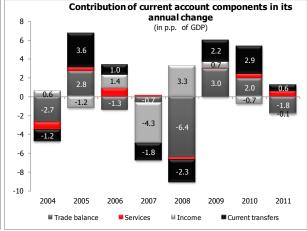
Source: SSO and NBRM calculations. Estimated data for 2011.

Observing current account components, the change in 2011 is almost solely attributable to the deterioration of negative trade balance of 1.8 percentage points of GDP, owing to the deterioration of energy trade balance of 2.7 percentage points of GDP, in environment of narrowing non-energy trade deficit by 0.9 percentage points of GDP. In 2011, most of the trade deficit was funded by net inflows from private transfers that went up by 0.6 percentage points of GDP, owing to the higher net purchase on the currency exchange market. Analyzing other current account components, services surplus kept on increasing (by 0.6 percentage points of GDP), whereas the income deficit registered minor annual enlargement (of 0.1 percentage point of GDP).

Figure 72 Current account (% of GDP)

Figure 73 Contribution, by component, to the change in current account (in percentage points of GDP)





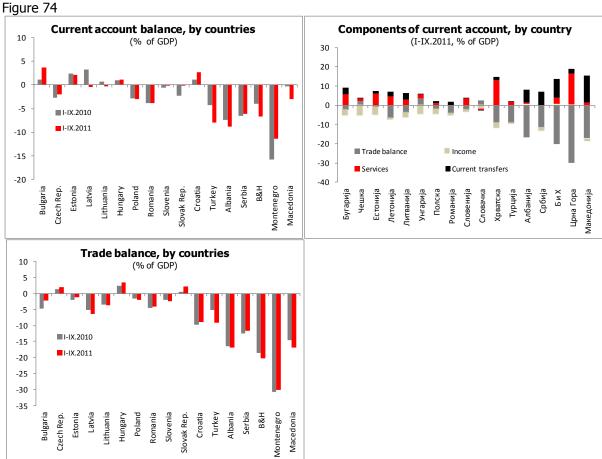
Source: NBRM.

Current account balance<sup>62</sup> of some countries in the region also deteriorated. Thus the enlargement of negative balance of Turkey and Bosnia and

<sup>62</sup> The comparative analysis of the countries in this paragraph refers to annual changes for the January - September 2011, as last available data.

Herzegovina results from the enlarged trade deficit in these countries due to the greater domestic demand, whereas major reason behind the wider deficit in Albania is the deteriorated services balance and lower current transfer inflows. Other countries from the region reported improvement of current account balance, particularly Bulgaria and Serbia, due to the further narrowing of their trade deficit, and Croatia and Montenegro due to the higher services surplus. Current account balances of CEE countries are either the same or slightly improved, except for the Baltic countries (which experience higher real GDP growth rates). In environment of still fragile recovery of the EU countries, and hence, of the domestic demand, most counties reported improvement of trade balance. The comparative analysis shows that in the period under observation Macedonia's trade deficit makes up 17% of GDP, which is above the average of CEE countries (1.3% of GDP) and the countries in the region (14.2% of GDP). Additionally, Macedonia registered the sharpest deterioration (in percentage points of GDP) of trade deficit among all countries under observation, after Turkey. Most of the trade deficit is covered by net inflows from current transfers (14% of GDP), which also represent a significant source of current account inflows of Bosnia and Herzegovina, Albania and Serbia.





Source: NBRM, EUROSTAT, central banks of Albania, Serbia, Bosnia and Herzegovina and Montenegro and WEO, October

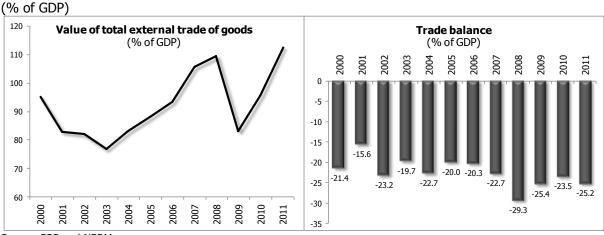
#### 2.5.2.1. Foreign trade

Amid further acceleration of global trade developments, in 2011, the total foreign trade in the Macedonian economy increased by 24.5%<sup>63</sup> on annual basis.

<sup>&</sup>lt;sup>63</sup> According to the Foreign Trade Methodology, export data are presented on f.o.b. basis, and the import data are presented on c.i.f. basis.

Additionally, the openness ratio, measured as a share of foreign trade in GDP, kept on increasing and indicates faster trade integration of the domestic economy. **Observing by trade component, both the exports and the imports increased annually.** The favorable conjuncture on the global metal market, and the higher utilization of one of the export capacities in the free economic zone are the major reasons behind the higher export activity in 2011. On the other hand, the high import of raw materials as an export component and the dependence of the domestic economy on import of energy accelerated the growth of import demand. **In line with the dynamics of the change of export and import component, in 2011, the trade deficit accounted for 25.2% of GDP, being higher by 1.7 percentage points of GDP compared to the preceding year.** 

Figure 75 Foreign trade and balance



Source: SSO and NBRM.

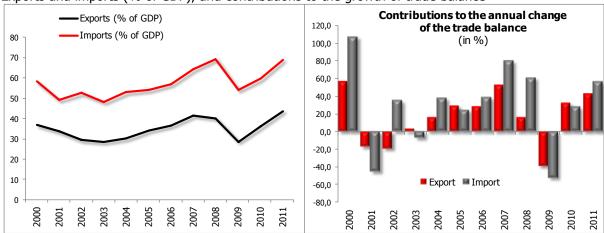
Dominant contribution to the change in the trade<sup>64</sup> deficit in 2011 was made by the deterioration of energy balance and the higher deficit of products **classified by material.** As to the latter category, major factor for the wider deficit was the higher negative non-ferrous metals trade balance, the effect of which was partially mitigated by the higher surplus in the trade in iron and steel. Additional contribution, although at significantly slower pace, was made by the higher trade deficit in food and raw materials, primarily metal ore and metal waste. Conversely, balance on trade in chemical products and machinery and transport equipment significantly improved, followed by the trade in wearing apparel and tobacco. In 2011, taking into account the effect of rising energy prices on the net position in the foreign trade and the effect of acceleration of the activity of some new export capacities, simulations have been conducted that **isolate these effects.** The results from simulations<sup>65</sup> show that isolation of abovementioned factors results in trade deficit of 22.8% of GDP or by 2.4 percentage points less compared to performances. Also, according to this simulation, the export and import growth rates equal 16.2% and 12.2%, respectively, being by 11.8 percentage points and 10.1 percentage point, respectively, lower than the actual ones.

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<sup>&</sup>lt;sup>64</sup> Foreign trade analysis is based on the Standard International Trade Classification (SITC).

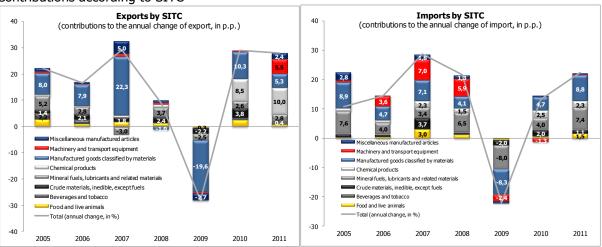
<sup>&</sup>lt;sup>65</sup>Simulations have been conducted by excluding the exports and imports of one export capacity that had greater effect on the export and import side in 2011 and by applying the assumption for preservation of export and import energy prices in 2011 at the average level of the first half of 2010, i.e. prior to the beginning of the growth trend.

Figure 76 Exports and imports (% of GDP), and contributions to the growth of trade balance



Source: SSO and NBRM.

Figure 77
Contributions according to SITC



Source: SSO and NBRM.

In 2011, export of goods increased at a pace similar to the previous year. Thus the total export activity accelerated annually by 28%, in nominal terms, whereby the total export amounted to Euro 3,197.7 million. Having in mind the gradual recovery of external demand, the exports of almost all segments increased. However, the category analysis points to the export of chemical substances and products as being the main factor for the export growth in 2011. Such structure of export growth results from the higher utilization of one export oriented capacity in the free economic zones. Export of iron and steel also made an outstanding contribution to the growth, due to the higher prices on the global stock markets, but also to the greater demand for these products. The export of spare parts for the car industry (within the category of machinery and transport equipment) by one larger industrial capacity in the free economic zone also spurred the growth of total exports. Concerning the energy exports, the export of oil derivatives also made a positive contribution to the export growth, as a mixed effect of the rise of export prices and the enhancement of export volume.

Table 8
Exports according to SITC

exports according to SITC	in millione	in millions of EUR		0/	percentage	0/
	in millions	OF EUR	of EUR	%	points	%
Total	2,497.5	3,197.7	700.1	28.0	28.0	100.0
Food and live animals	248.8	267.3	18.6	7.5	0.7	2.6
of which:						
- meat and meat preparations	27.9	31.4	3.5	12.7	0.1	0.5
- cereals and cereal preparations	36.3	43.2	7.0	19.2	0.3	1.0
- fruits and vegetables	137.3	141.0	3.7	2.7	0.1	0.5
Beverages and tobacco	153.5	169.7	16.3	10.6	0.7	2.3
- beverages	60.0	58.5	-1.5	-2.5	-0.1	-0.2
- tobacco and tobacco preparations	93.5	111.2	17.8	19.0	0.7	2.5
Crude materials, inedible, except fuels	196.4	206.6	10.1	5.2	0.4	1.4
of which:						
- metalliferous ores and metal scrap	153.5	157.9	4.4	2.9	0.2	0.6
Mineral fuels, lubricants and related materials	195.1	265.9	70.8	36.3	2.8	10.1
of which:						
- petroleum and petroleum products	164.9	229.4	64.5	39.1	2.6	9.2
- electric energy	26.2	31.8	5.6	21.5	0.2	0.8
Animal and vegetable oils and fats	8.4	12.8	4.4	51.8	0.2	0.6
Chemical Products	288.2	537.6	249.4	86.5	10.0	35.6
of which:						
- medical and pharmaceutical products	57.8	59.8	2.0	3.4	0.1	0.3
- chemical materials and products	172.5	398.2	225.6	130.8	9.0	32.2
Manufactured goods classified by materials	749.8	883.4	133.6	17.8	5.3	19.1
of which:						
- iron and steel	589.2	725.5	136.3	23.1	5.5	19.5
- non ferous metals	6.1	5.6	-0.6	-9.6	0.0	-0.1
- manufactures of metals	42.4	46.0	3.6	8.5	0.1	0.5
Machinery and transport equipment	115.6	253.4	137.8	119.2	5.5	19.7
of which:						
and machine parts, n.e.s.	33.6	88.1	54.5	162.5	2.2	7.8
and electrical parts thereof	36.4	113.7	77.2	3,1 times	3.1	11.0
- road vehicles	22.4	22.8	0.4	1.8	0.0	0.1
Miscellaneous manufactured articles	539.9	598.9	59.1	10.9	2.4	8.4
of which:						
- furniture and parts thereof	25.8	30.0	4.3	16.5	0.2	0.6
- articles of apparel and clothing accessories	424.4	472.8	48.4	11.4	1.9	6.9
- footwear	56.7	58.7	2.0	3.6	0.1	0.3

Source: SSO and NBRM.

In 2011, the gradual recovery of domestic and export demand, and the rise of import prices tended to increase the import demand. In 2011, the total imports registered a nominal annual growth of 22.3%, which is a significant acceleration compared to the preceding year (13.3%). Dominant factor for the growing import demand in 2011 were the increasing needs for import of raw materials for the production process of the export industries, and the increased needs for energy imports. Thus the import growth was particularly determined by the higher import of non-ferrous metals, as raw materials of one larger industrial capacity in the free economic zone<sup>66</sup>. The increase of energy imports also made an exceptional contribution, particularly the import of oil and oil derivatives, attributable to the higher prices on the global stock markets and the higher imported quantities of these energy sources. In 2011, there was a higher import of electricity<sup>67</sup>, given the fall of domestic electricity generation by the hydropower plants and reconditioning of the existing capacities and higher domestic needs for this type of energy. Additional contribution was made by the higher import of raw materials and intermediate

<sup>&</sup>lt;sup>66</sup> In 2011, the high import of non-ferrous metals is due to the low base effect of 2010, when the company's capacities were underutilized. In 2011, most of the non-ferrous metals imports were concentrated in January and September. Apart from non-ferrous metals, this capacity also uses (imports) nonorganic chemical products in its production process, but in 2011 the import of these products was lower compared to 2010, which was the highest ever.

<sup>&</sup>lt;sup>67</sup> In 2011, the quantitative growth of electricity imports equals 73.2%.

goods used in the metal manufacturing and textile industries. The import of food also increased, with the greatest contribution being made by the meat and grains<sup>68</sup>. Analyzing the category of machinery and transport equipment, the import of industrial and electric machinery increased markedly, which is in line with the revival of the overall investment activity, while the import of vehicles registered divergent movements. In 2011, there was lower import of vehicles, partially due to the high base effect of the preceding year, when the law permitted import of used automobiles.

Table 9

Imports according to SITC

Import of goods	2010	2011	y-o-y change		contributions	
	in millions		in millions of EUR	%	percentage points	%
Total	4,119.1	5,038.5	919.4	22.3	22.3	100.0
Food and live animals	420.6	483.2	62.7	14.9	1.5	6.8
of which:						
- meat and meat preparations	94.8	111.2	16.5	17.4	0.4	1.8
- cereals and cereal preparations	59.7	75.1	15.4	25.7	0.4	1.7
- fruits and vegetables	50.7	56.9	6.2	12.1	0.1	0.7
- sugar, sugar preparations and honey	45.3	50.7	5.5	12.0	1	0.6
- coffee, tea, cocoa, manufacturers there of	50.7	55.8		9.9		0.5
Beverages and tobacco	43.7	49.3	5.6	12.8	0.1	0.6
of which:						
- beverages	25.1	27.8		10.6	-	0.3
- tobacco and tobacco preparations	18.6	21.5	2.9	15.7	0.1	0.3
Crude materials, inedible, except fuels	218.3	263.0	44.7	20.5	1.1	4.9
of which:						
- metalliferous ores and metal scrap	155.5	193.7	38.2	24.6	0.9	4.2
Mineral fuels, lubricants and related materials	729.3	1,033.9	304.6	41.8	7.4	33.1
of which:						
- petroleum and petroleum products	563.5	758.1	194.6	34.5	4.7	21.2
- natural or industrial gas	55.9	73.6	17.7	31.6	0.4	1.9
- electric energy	85.9	165.3	79.4	92.5	1.9	8.6
Animal and vegetable oils and fats	39.1	54.5	15.4	39.4	0.4	1.7
Chemical Products	500.1	596.0	95.9	19.2	2.3	10.4
of which:						
- inorganic chemical products	96.5	79.1	-17.4	-18.0	-0.4	-1.9
- dyeing and tanning extracts	29.8	68.4	38.6	129.3	0.9	4.2
- medical and pharmaceutical products	104.5	117.3	12.8	12.2	0.3	1.4
- chemical materials and products	48.1	74.0	25.9	53.9	0.6	2.8
Manufactured goods classified by materials	1,039.0	1,403.5	364.5	35.1	8.8	39.6
of which:						
- textile yarn, fabrics, and related products	305.1	341.3	36.2	11.9	0.9	3.9
- non metallic mineral manufactures	96.3	118.6	22.3	23.1	0.5	2.4
- iron and steel	267.2	313.9	46.8	17.5	1.1	5.1
- non ferous metals	127.0	344.6	217.6	171.2	5.3	23.7
- manufactures of metals	74.8	91.3	16.5	22.1	0.4	1.8
Machinery and transport equipment	825.9	841.4	15.5	1.9	0.4	1.7
of which:						
- general industrial machinery and equipment, n.e.s., and ma	97.4	137.5	40.2	41.2	1.0	4.4
- electrical machinery, apparatus and appliances	141.7	181.5	39.7	28.0	1.0	4.3
- road vehicles	280.3	250.5	-29.8	-10.6	-0.7	-3.2
Miscellaneous manufactured articles	299.3	309.7	10.5	3.5	0.3	1.1
of which:						
- furniture and parts thereof	29.8	28.0	-1.8	-6.0	0.0	-0.2
- articles of apparel and clothing accessories	48.8	47.8		-2.0		-0.1
- footwear	25.0	25.7	0.7	2.8		0.1

Source: SSO and NBRM.

<sup>&</sup>lt;sup>68</sup> The grains import growth had quantitative and price effect, with the effect of the price increase being present only in the first half of the year, and the quantitative effect being present in the last two months of 2011, owing to the abolishment of the Decision on introducing a protection measure on the wheat and flour market, conditioning the quantities of the import of wheat and flour with the purchase of wheat produced in the Republic of Macedonia ("Official Gazette of the Republic of Macedonia" no. 106/2011), as of November 1, 2011 (based on the Decision on amending the Decision on introducing a protection measure on the wheat and flour market, conditioning the quantities of the import of wheat and flour with the purchase of wheat produced in the Republic of Macedonia ("Official Gazette of the Republic of Macedonia" no. 148/2011)).

Table 10
Import of energy - effect of the change in quantities and prices

IMPORT OF ENERGY	2010	2011	annual ch	nange	contributions t	
					from quantity	from price
	in EUR million		in EUR million	%	in percenta	nge points
- oil and oil derivatives	563.5	758.1	194.6	34.5	3.2	31.4
- gas - natural or industrial	55.9	73.6	17.7	31.6	11.7	19.9
- electric energy	85.9	165.3	79.4	92.5	73.2	19.3

Source: SSO and NBRM.

The switch in the performances and in the structure of production and exports during 2011 affected the trade balance, analyzing by both country and region. In 2011, the external trade of the Republic of Macedonia, analyzed by trade partner, indicates wider deficit in the trade with the European Union (EU), the emerging markets and the EFTA countries, mostly due to the higher needs for energy, given the insufficient domestic generation of energy and the operations of some of the new production capacities, which presented relatively modest net positive effect in 2011 due to their utilization below maximum. Thus the trade deficit with the EU went up by Euro 144.7 million on annual basis, or by 22%. The trade balance with fifteen member states deteriorated, particularly with the Great Britain, Greece and Bulgaria<sup>69</sup>. On the other hand, net exports to Germany improved, primarily owing to the higher export of catalysts<sup>70</sup>. Analyzing developing countries, higher deficit was registered in the trade with Russia<sup>71</sup> and Turkey<sup>72</sup>. The wider negative balance with EFTA almost solely reflects the growth of import of electricity from Switzerland. On the other hand, the trade with other developed countries registered favorable developments, i.e. annual narrowing of trade deficit. Also, the positive trade balance with the Western Balkan countries slightly improved, generally owing to the higher trade surplus with Kosovo. Note that in 2011, a part of the exports to some European countries (Greece, Belgium, Spain, Romania and Great Britain) was readdressed to Ukraine and Asian markets (such as China, Taiwan, South Korea and India). Such developments indicate that the Macedonian exports cast net over new markets, so as to ensure secure placement of export commodities, amid high uncertainty related to the economic perspectives of the European Union.

<sup>&</sup>lt;sup>69</sup> The higher negative balance with the Great Britain results from the import of non-ferrous metals (platinum) by a production capacity in the free economic zone. The higher import of oil derivatives and electricity widened the deficit with Bulgaria, while the higher import of oil derivatives is the reason behind the deterioration of the trade balance with Greece.

<sup>&</sup>lt;sup>70</sup> Relates to the abovementioned export of chemical substances and products, as a result of the activity of one industrial capacity in the free economic zone.

<sup>71</sup> The enlarged deficit with Russia mainly arises from the increased import of crude oil and natural gas.

The enlarged deficit with Turkey results from the higher import of ores and cotton from this country.

Table 11 Balances by trade partner

	2010	2011	2010	2011	y-o-y ch	ange	contribut	tions
	Structure of trade (ii		Trade Ba in millions во милион	of EUR	in millions of EUR	%	percentage points	%
Total	100.0	100.0	-1,621.6	-1,840.8	-219.2	13.5	13.5	100.0
European Union	56.2	56.8	-656.2	-800.9	-144.7	22.0	8.9	66.0
Germany	14.9	17.2	60.0	369.3	309.3	515.8	-19.1	-141.1
Greece	7.9	6.8	-150.3	-253.1	-102.8	68.4	6.3	46.9
Bulgaria	6.8	6.7	-5.9	-107.4	-101.5	1,718.0	6.3	46.3
United Kingdom	3.9	5.7	-168.8	-392.3	-223.5	132.4	13.8	102.0
Other developed countries*	3.3	3.4	-177.4	-116.6	60.8	-34.3	-3.7	-27.7
EFTA	1.4	1.8	-59.5	-105.0	-45.5	76.5	2.8	20.8
Western Balkans	18.8	17.6	296.4	305.6	9.2	3.1	-0.6	-4.2
Developing countries**	19.6	19.5	-985.0	-1,086.8	-101.8	10.3	6.3	46.4
Low income countries	0.7	0.8	-39.9	-37.1	2.8	-6.9	-0.2	-1.3

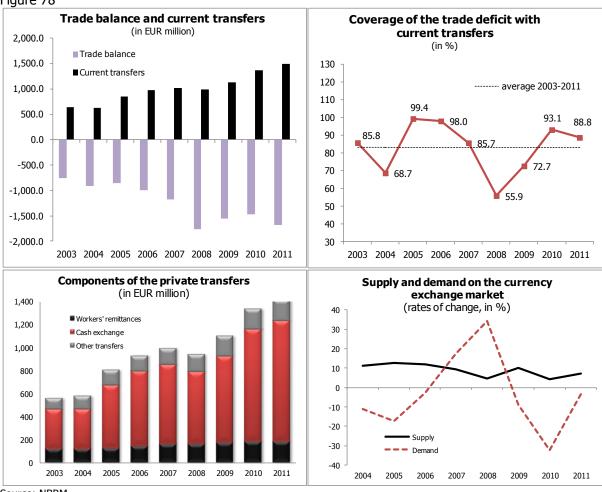
<sup>\*</sup> USA, Japan and other developed countries.

### 2.5.2.2. Other current account components

In 2011, net inflows from current transfers continued increasing and reached the highest historical level in the amount of Euro 1,492.6 million or 20.4% of GDP. Compared to the previous year, they were higher by 9.2% or 0.6 percentage points of GDP, which is a substantial slowdown of the growth compared to the two preceding years. Current transfers are a category overwhelmingly sensitive to the developments in the domestic and global economy and the expectations of economic agents. In 2011, this component changed under the severe effect of uncertainty and numerous speculations about the future of the European currency, arising from the concerns related to the debt crisis in the euro area that became pronounced in the second half of the year. In the Macedonian economy, current transfers are major traditional source of funding the trade deficit (around 85% on average for the 2003-2011 period). In 2011, the rate of trade deficit coverage with current transfers remained relatively high, notwithstanding the slight annual reduction.

<sup>\*\*</sup> Russia, Ukraine, Turkey and other developing countries.



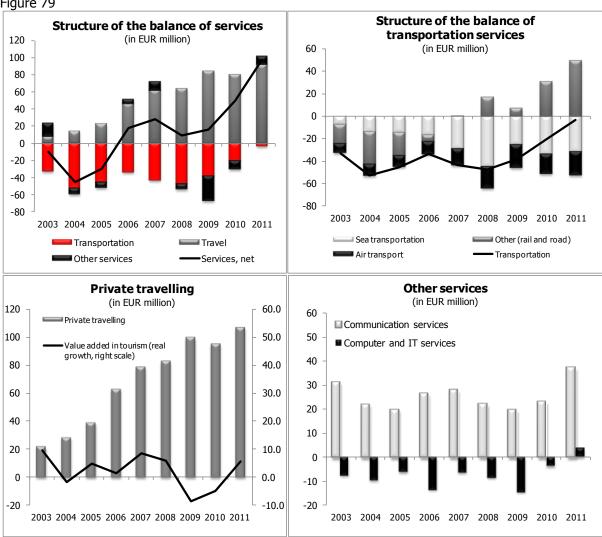


Source: NBRM.

Observing the current transfers structure, the favorable dynamics of this component largely arises from current transfers, with the share of official transfers being lower. Observing *private transfers*, the official remittances and other transfers (rents, pensions, etc.) registered no significant annual change. Hence, the change in private transfers is almost solely due to the net cash performances on the currency exchange market. This major component of private transfers reached historically highest level of net inflows of Euro 1.053.6 million or 14.4% of GDP. There was a high net purchase of foreign currency on the currency exchange market, given the increased supply of and lower demand for foreign currencies (by 7.1% and -3.4%, respectively, on annual basis). In the first half of the year, this component reduced on annual basis, and in the second half it started increasing, particularly notable at the end of the year, when under the influence of uncertainty clouding the resolution of the euro area debt crisis, the preferences to hold domestic currency significantly strengthened. In 2011, official transfers registered a relatively high net inflow of Euro 76.5 million (1% of GDP), which is the second highest amount since 2003. Compared to the previous year, they increased by Euro 44.5 million particularly at the end of the year, related to the drawdown of funds from the pre-accession IPA funds.

The uptrend of services surplus continues for a third consecutive year, indicating gradual strengthening of this category as a current account inflow component. In 2011, the positive services balance reached Euro 97.4 million, or 1.3% of GDP, which is almost twice as high compared to the previous year. Such improvement arises from all three categories of services. Main and almost equal contribution was made by both the improved other services trade balance and the lower transport services trade deficit. Observing the *other services* category, the growth of positive communication services balance was the fastest, followed by the computer and IT services balance that registered trade surplus for the first time ever. The construction services trade surplus, which traditionally reports solid net inflows in the economy, stood still this year and remained relatively low, same as the previous year<sup>73</sup>. The **transport services** deficit narrowed owing to the enlarged trade surplus of road transport services. Improvement was also registered in the *travelling services* (higher inflows from traveling of foreign tourists), which still make the greatest contribution to the services surplus. In 2011, the number and overnight stays of foreign tourists increased annually by 25.1% and 35.1%, respectively, and the added value in the tourism registered a positive growth rate, unlike the negative contribution to the economic growth in 2010.





Source: NBRM.

In 2011, the income balance reported a deficit of Euro 109.5 million or **1.5% of GDP.** Compared to the preceding year, the income balance is more negative by

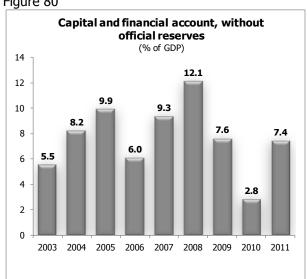
<sup>&</sup>lt;sup>73</sup> In 2011, the value of completed construction works abroad is by 11% lower on annual basis, owing to the loss of markets in Poland and Slovakia, and emergence of new markets in France and Montenegro the share of which is considerably lower. The presence on the Ukraine market still dominates (roughly 70% of the completed works abroad) and additionally strengthens in 2011. Source: SSO.

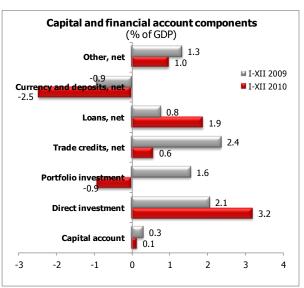
Euro 10.3 million, or 0.1% of GDP. The deficit enlarged primarily owing to the higher net outflows based on interest rate on foreign borrowings disbursed to companies and government, and to some extent, owing to the net change in the income from direct investments<sup>74</sup>. These flows were only partially offset by higher net inflows from employee compensations and portfolio investments.

# 2.5.3. Capital and financial account

In 2011, the capital and financial account (excluding official reserves) reported net inflows of Euro 539.8 million, or 7.4% of GDP. Such capital and financial flows ensured full current account deficit financing and additional foreign reserves accumulation. The annual growth of net inflows of 2.8 times (or 4.6 percentage points of GDP) is mostly due to the increased external government borrowing and foreign direct investments. The trade credit inflows markedly decreased, whereas the currencies and deposits outflows increased. Isolating the effect of external government borrowing, the net private sector inflows to the capital account amount to Euro 173.8 million (2.4% of GDP), which is an annual growth of 12.2%.

Figure 80





Source: NBRM.

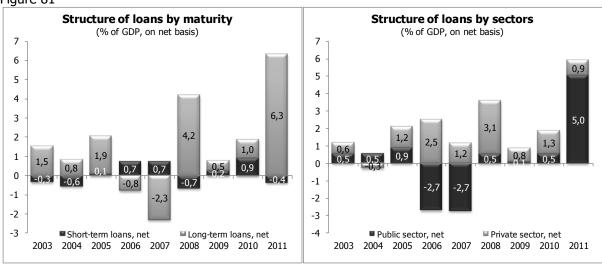
In 2011, the total net inflows from borrowings reached Euro 432.5 million, which is by 3.4 times more compared to the preceding year. The sector-by-sector analysis shows that as much as 85% of total borrowings are long-term government borrowings, while the private sector reduced its net external debt by 27.9% on annual basis. Most of the public sector debt consists of drawdowns from the IMF Precautionary Credit Line and the World Bank-backed loan from Deutsche Bank and City Bank. On the other hand, the private sector debt decreased due to the intensive repayments of short-term credits, with this intensity being slower with the banks<sup>75</sup> and faster by other sectors, which is opposite to the upward trend of short-term liabilities based on external borrowings by the private sector over the last two years. Observing maturity structure, the growth of long-term sources of private sector funding is noticeable, along with the 52% increase of newly drawn long-term credits compared to 2010. This is an indication that, given the slight global markets

<sup>&</sup>lt;sup>74</sup> The changes in this category result from the expectations for higher income of companies with FDIs in 2011 compared to 2010, according to the Survey on the financial result of companies with significant FDIs in March 2012.

<sup>&</sup>lt;sup>75</sup>Banking sector also includes the MBDP's net borrowing based on EIB credit line.

stabilization, the private sector prefers longer-term, and consequently, less risky sources of external funding, and accordingly, reduces the short-term loans.

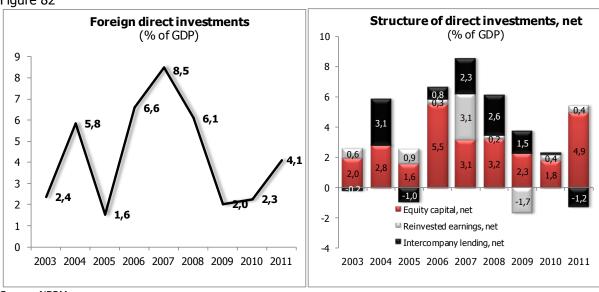
Figure 81



Source: NBRM.

Capital and financial inflows from foreign direct investments dramatically increased and equaled Euro 301.9 million in 2011, which is close to the average level of FDIs prior to the crisis. Compared to 2010, there was a steep growth of 91.5% or by 1.8 percentage points of GDP. The improved perception for the investment environment and risks in the economy attracted more foreign investments, particularly in the form of equity. The increase of this most stable form of foreign capital of nearly three times annually, and the increase of reinvested profit are additional signals that macro environment in the economy improved in 2011. The effect of high inflows of these categories was mildly reduced due to the repayments of intercompany debt. Thus on net basis, the FDIs growth is solely due to the inflows that do not generate additional external debt.

Figure 82

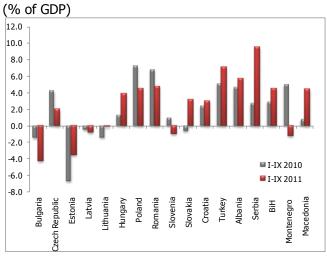


Source: NBRM.

On the other hand, in 2011, trade credits decreased, and currencies and deposits kept on reducing. Trade credits amounted to Euro 7.5 million, which is an

annual fall of 88.3%. Net outflows based on currencies and deposits registered the highest level of Euro 233.5 million (or 3.2% of GDP) in 2011, reporting an annual growth of 37.4%. Uncertainty clouding the future of Euro and the outcome of the euro area debt crisis, mostly evident in the second half of the year, made the households intensively withdraw their foreign currency cash from the domestic banks. Foreign cash outflows outside the banking sector corresponded with the higher supply of foreign cash on the currency exchange market and the increase of current transfers in the current account of balance of payments. The increase of currency and deposit outflows was also caused by the net outflows from banks, due to the decrease of nonresident deposits with domestic banks. **The portfolio investments also reported lower net outflows of 31.8%, and reduced to Euro 42 million in 2011.** These changes primarily result from the investment decisions of domestic institutional investors and their lower interest to invest.

Figure 83
Financial account balance by country, without official reserves



The comparative analysis<sup>76</sup> shows divergent capital flows 77 in some countries of Central and Eastern Europe and the region. The increase of net capital inflows is typical for the region, including Turkey. The solid performances of this group of countries, the reorientation of investors from riskier to less risky European economies, the high vields in some countries, the higher needs to finance governments are some of the factors that triggered the further acceleration of capital flows. highest contribution improved position of financial account of these countries was made by the foreign direct investments that register

steep annual growth in most of the countries from the region. Moreover, Serbia experiences faster change in portfolio investments, due to the government external borrowing by issuing the first Eurobond, in the amount of one billion US Dollars. Montenegro also reported high portfolio investments based on the Eurobonds issued by the Government for two consecutive years<sup>78</sup>. Observing the developments of other financial account components, Montenegro departs from the general trends in the region. Inflows from foreign direct investments, notwithstanding their high level, fell on annual basis. Yet, together with the high inflows from portfolio investments, they were not sufficient to offset outflows based on other investments. In such circumstances, Montenegro is the only country in the region that recognized net outflows in the financial account.

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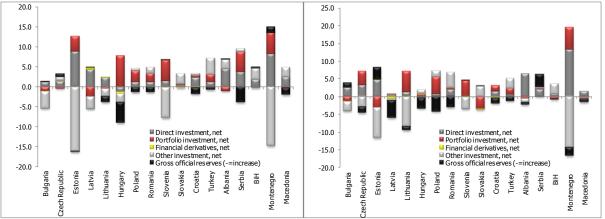
 $<sup>^{76}</sup>$  Comparative analysis of countries in this paragraph refers to the January-September 2011 period, as last available data on all countries.

<sup>&</sup>lt;sup>77</sup> The term "capital flows" is associated with financial account flows. The changes in official reserves are not included in the analysis.

<sup>&</sup>lt;sup>78</sup> The first ten-year Eurobond in the amount of Euro 200 million was issued in 2010, and the five-year Eurobond of Euro 180 million was issued in 2011.

Figure 84
Financial account components, by country ( I-IX 2011, % of GDP)

Figure 85
Financial account components, by country ( I-IX 2010, % of GDP)



Source: NBRM, EUROSTAT, central banks of Albania, Serbia, Bosnia and Herzegovina and Montenegro and WEO, October 2011.

On the other hand, countries from Central and Eastern Europe experienced faster net outflows of the capital and financial account in 2011, when the risk of debt crisis in the euro area was extremely pronounced. Thus the financial account of Bulgaria<sup>79</sup>, Estonia, Latvia and Slovenia still registers net outflows, while the high inflows in the preceding year in the Czech Republic, Poland and Romania decelerated in 2011 (to 2.7 percentage points of GDP in Poland). Only the Baltic countries reported an outstanding annual growth of foreign direct investments, which could indicate higher confidence of investors after the deep recession in 2009, but also results from the low base effect of the preceding year, when the economic activity in these countries was pretty low and the risk perception was quite low. Hence, the development of FDIs in the countries of Central and Eastern Europe is primarily due to the base effect and the generally improved performances in 2010 in some countries (except for the Baltic economies) when the FDIs increased under the influence of favorable expectations and lower risks in the EU. Nevertheless, the structural reforms in these economies after their accession to the EU also made an effect. The convergence process made these countries less attractive for foreign investors, initially due to the increase of labor costs and the decrease of investors' yields, which also explains the readdress of some FDIs from the CEE countries to the countries in the region. Deceleration of the financial account inflows was caused by the lower external private sector borrowing, initially due to the higher funding costs and increasing risks. Still, some countries (Bulgaria, Estonia, Latvia and Slovenia) reported higher outflows from private sector's claims on abroad based on currencies and deposits (rise of private sector deposits with foreign banks), and higher service of liabilities in this category (lower nonresident deposits with domestic banks).

#### 2.5.4. Price competitiveness

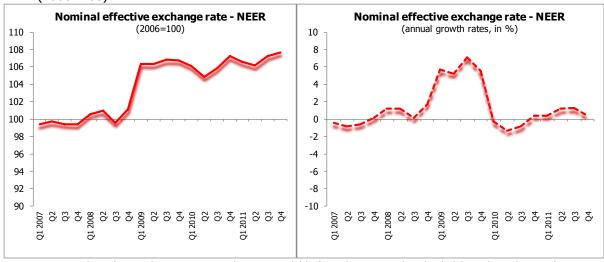
In 2011, the indicators for the change of price competitiveness of the domestic economy indicate divergent movements. Thus the CPI-deflated real effective exchange rate (REER) registered slight depreciation on annual basis, and the PPI-deflated REER reported moderate annual appreciation. Observing by component, conversely to the depreciation in the previous year, in 2011, the nominal effective exchange rate (NEER) marginally appreciated. The changes in relative prices were

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<sup>&</sup>lt;sup>79</sup> While Bulgaria is a part of the countries in the region, due to its economic similarities it has been included in the analysis of CEE countries.

drastic, compared to the dynamics of nominal exchange rate. The relative consumer prices still press for REER depreciation, and the relative producer prices press for REER appreciation.





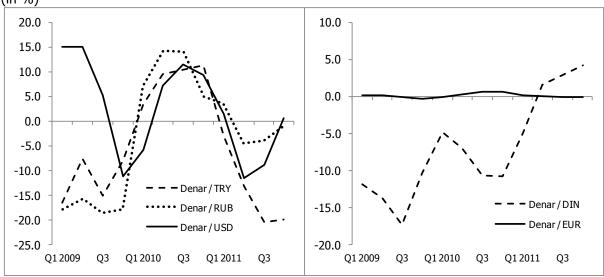
Source: NBRM and IFC for March 2012. Country data not available from the IFC are downloaded from the websites of respective central banks or from EUROSTAT.

In 2011, NEER appreciated by 0.8% given the Denar appreciation against most currencies included in the NEER calculation, and depreciated against the Serbian Dinar. The appreciation of Euro against the US Dollar explains most of the appreciation of Denar against other currencies, considering the fixed exchange rate regime of the Denar against the Euro. The Euro appreciation tendencies that prevailed in the first half of the year were exhausted by the end of 2011. Depreciation pressures were triggered in the second half of 2011, mostly due to the resumption of tensions on the financial markets as the debt crisis in the euro area deepened, which as such implied higher uncertainty about the future of Euro. However, the total NEER appreciation in 2011 was under the dominant influence of the Denar appreciation against the Turkish Lira and the Russian Ruble. During the year, only the Serbian Dinar appreciated against the Euro and consequently against the Denar. Thus the depreciation of Denar against the Serbian Dinar partially offset the NEER appreciation that stemmed from the developments related to other currencies in the basket.

Figure 87

Annual changes of bilateral rates – Denars per foreign currency\*

(in %)

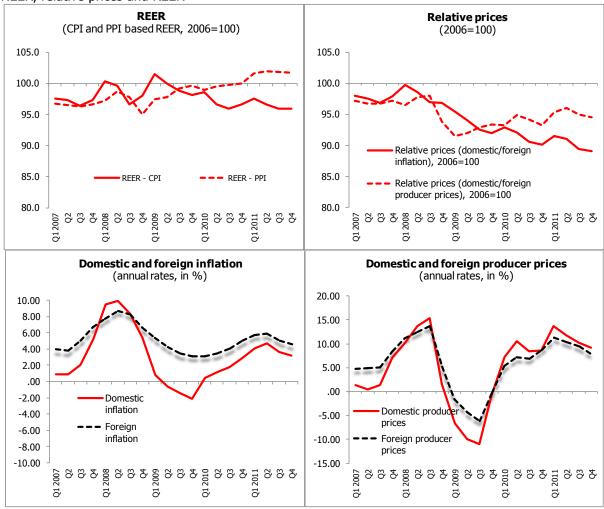


\*Upward change implies Denar depreciation against the selected currency.

Source: IFS and NBRM.

In 2011, the CPI-deflated Denar real effective exchange rate registered moderate annual depreciation of 0.5%. In conditions of NEER appreciation, such dynamics of CPI-deflated REER fully results from the favorable price ratio. The foreign effective inflation was faster compared to the domestic one, due to the higher price levels in Serbia, Russia, Turkey and Bulgaria, where the prices increased faster compared to the domestic prices. On the other hand, other countries included in the index calculation reported a slower increase of price levels compared to the domestic price levels. Compared to the CPI-deflated REER, the PPI-deflated REER appreciated by 2.2% annually. Its appreciation is a combination of the faster domestic producer price increase compared to foreign producer prices, and the NEER appreciation.

Figure 88 NEER, relative prices and REER



Source: NBRM, IFC, March 2012 and SSO of the Republic of Macedonia. Country data not available from the IFC are downloaded from the websites of respective central banks or from the EUROSTAT.

#### 2.5.5. Net debt position of the Macedonian economy

At the end of 2011, the net debt of the Macedonian economy totaled Euro 960.1 million (13.1% of GDP), thus decreasing compared to December 31, 2010 (by 22.6%, or 4.8 percentage points of GDP). Accordingly, this is the second consecutive year of improvement of the net debt position. Such dynamics of net external debt arises from the faster growth of gross external claims compared to the increase of gross external debt. In 2011, most of the increase of gross claims (76.9%) resulted from the higher claims of monetary authority based on deposits and bonds within the foreign reserves and placements in reverse repo agreements<sup>80</sup>, and to a lower extent, to the short-term commercial credits approved by other sectors in the economy<sup>81</sup>.

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<sup>&</sup>lt;sup>80</sup> In the second quarter of 2011, the NBRM commenced concluding repo and reverse repo transactions.

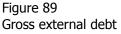
<sup>&</sup>lt;sup>81</sup> Other sectors category includes nonbanking financial intermediaries, nonfinancial trade companies, households and nonprofit institutions.

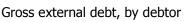
Table 12 Gross and net external debt

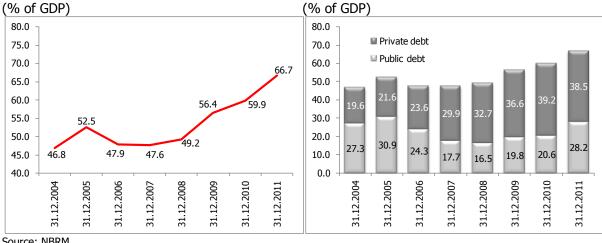
Gross and net external debt								
	31.12.2004	31.12.2005	31.12.2006	31.12.2007	31.12.2008	31.12.2009	31.12.2010	31.12.2011
				EUR ı	million			
Gross External Debt	2,080.2	2,528.2	2,503.4	2,841.1	3,304.2	3,780.4	4,133.8	4,874.8
General Government	1,016.5	1,282.8	1,065.6	897.7	906.3	1,055.8	1,112.9	1,463.3
Monetary Authorities (NBRM)	55.5	62.8	52.0	9.0	9.2	71.7	76.4	310.8
Banks	123.2	192.0	269.9	387.9	384.1	468.2	576.0	564.6
Other Sectors	600.4	721.0	786.7	1,115.7	1,321.9	1,347.0	1,418.8	1,645.6
DI: Intercompany lending	284.5	269.6	329.3	430.8	682.7	837.6	949.7	890.4
Memorandum items:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Public debt	1,211.4	1,487.9	1,270.4	1,057.4	1,109.9	1,324.9	1,424.3	2,060.2
Public debt excluding debt of the Monetary Authorities from repo arrangements	1,211.4	1,487.9	1,270.4	1,057.4	1,109.9	1,324.9	1,424.3	1,827.6
Private debt	868.7	1,040.3	1,233.1	1,783.7	2,194.2	2,455.5	2,709.5	2,814.6
Short-term debt	629.6	674.2	725.5	1,131.3	1,162.6	1,242.2	1,328.7	1,649.4
Long-term debt	1,450.5	1,854.1	1,777.9	1,709.8	2,141.6	2,538.1	2,805.2	3,225.5
Gross External Claims	1,530.0	2,026.2	2,427.4	2,634.9	2,392.1	2,498.5	2,893.6	3,914.7
General Government	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Monetary Authorities (NBRM)	664.7	1,040.5	1,327.0	1,416.3	1,361.2	1,366.9	1,482.5	2,268.0
Banks	619.6	635.9	668.3	648.1	390.6	496.8	572.7	603.1
Other Sectors	197.8	253.9	336.5	447.4	507.0	440.2	572.6	722.6
DI: Intercompany lending	48.0	95.9	95.6	123.1	133.3	194.6	265.8	321.0
Net External Debt	550.2	502.0	76.0	206.2	912.1	1,281.9	1,240.2	960.1

Source: NBRM.

As of December 31, 2011, the gross external debt reached Euro 4,874.8 million, or 66.7% of GDP, which is an annual increase of 17.9%, or 6.8 percentage points of GDP. Note, however, that significant part of this growth (roughly one third) was generated from short-term repo agreements<sup>82</sup> which the NBRM started concluding in the second guarter of the year. Excluding repo transactions, the gross debt constitutes 63.5% of GDP, rising by 12.3%. Compared to the recent years when the private sector debt was a dominant factor for the rise of total debt, in 2011 the increase was primarily due to the rise of the public sector debt.







Source: NBRM.

<sup>82</sup> Conclusion of repo transactions produces liabilities (classified under loans) that contribute to the increase of the gross external debt. The NBRM simultaneously conduct matched conclusion of repo and reverse repo agreements, in almost identical amount, so that during the conclusion of reverse repo agreements, the created claims contribute to the increase of gross claims. Overall, since they are concluded concurrently, these transactions have neutral net effect, i.e. they appear in almost identical amount on the side of both payables and claims, thus having no effect on the total net external debt.

In 2011, the gross public sector debt<sup>83</sup> made a paramount contribution (85.8%) to the increase of gross debt. Most of the half of public external debt growth resulted from the increased long-term **government** borrowing under more favorable conditions than those offered on the market, from the IMF (drawdowns from the Precautionary Credit Line) and from foreign commercial banks (World Bank-backed Policy Based Guarantee - PBG loan, in December). The monetary authority debt is additional factor for the higher gross external debt, which is solely due to the growth of liabilities based on repo transactions which increased the gross external debt by Euro 232.5 million, thus making paramount contribution to the growth of total short-term debt, followed by the debt of the Macedonian Bank for Development Promotion (MBDP) based on the European Investment Bank (EIB) credit line for support of small and medium-size companies and the debt of public companies. The growth of private sector debt84 that makes up 14.2% of the growth of total gross external debt is solely due to the increased needs for funding other sectors in the economy (corporate sector), while the debt of banking sector and the intercompany debt decrease compared to the preceding year. The higher other sectors' liabilities include short-term borrowings in the form of trade loans, followed by long-term loans. On the other hand, loans among connected entities decreased due to the lower long-term liabilities of some companies, once they received capital by their foreign direct investors. The gross debt also decreased due to the reduction of banking sector liabilities based on nonresident deposits, the effect of which was substantially offset by the indebtedness in the form of long-term loans<sup>85</sup>.

Figure 90 Contribution to the annual growth of gross debt in 2011, by sector (in percentage points)

Intercompany lending
Other Sectors
Banks
-0.3

Monetary Authorities (NBRM)

General Government

8.5

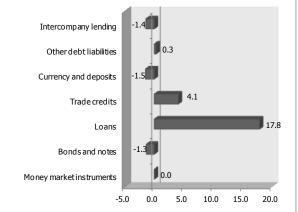
0.0

-5.0

5.0

10.0

Figure 91
Contribution to the annual growth of gross debt in 2011, by instrument (in percentage points)



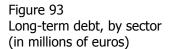
Source: NBRM.

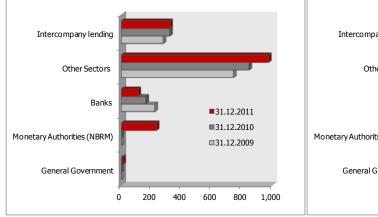
<sup>&</sup>lt;sup>83</sup> Public sector debt includes the debt of central government and funds, monetary authority, public companies and the Macedonian Bank for Development Promotion.

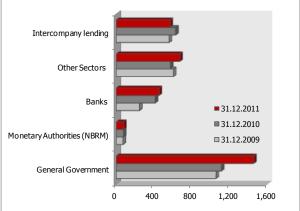
<sup>&</sup>lt;sup>84</sup> Private sector debt includes the debt of banks (excluding the Macedonian Bank for Development Promotion), the debt of other sectors (excluding public enterprises) and the intercompany debt.

<sup>&</sup>lt;sup>85</sup> The growth of long-term loan liabilities arises primarily from the new borrowings of the Macedonian Bank for Development Promotion i.e. they make a part of the borrowing of the public sector of the economy.

Figure 92 Short-term debt, by sector (in millions of euros)







Source: NBRM.

Analyzing external debt indicators, it could be concluded that according to most of the indicators, the Republic of Macedonia remains within the "safe" zone. The indicators for gross external debt solvency, measured under the World Bank methodology<sup>86</sup>, indicate higher external debt. However, this should be interpreted with certain reservation, taking into account the low base effect of almost all indicators. The average was determined using performances in the last three years. In a part of this period, the economy, particularly exports, was hit by the global economic crisis. The gross debt -toexports ratio registered the most significant deterioration (by 13.9 percentage points), while debt repayment -to- exports ratio registered negative change (of 2.6 percentage points). On the other hand, the interest repayment -to- exports ratio shows improvement of the external position compared to the end of the preceding year. These indicators position our country among less indebted countries, and only the indicator for the share of gross external debt in GDP place our country in the group of highly indebted countries. At the end of 2011, the gross debt -to- GDP ratio reached 69.9%, which is a deterioration of 8.9 percentage points, given the faster gross debt growth rate compared to the domestic economy growth rate. The gross external debt liquidity indicators are generally favorable. Foreign reserves still cover almost the full short-term debt<sup>87</sup>, and its share in the total gross external debt (of 33.8%) slightly increased, however remaining under control. Besides, note that the structure of short-term debt consists of roughly 70% of liabilities based on imports (commercial credits) or on connected entities (intercompany debt) implying lower external vulnerability of the economy than indicated by the aggregated indicator.

-

<sup>&</sup>lt;sup>86</sup> World Bank methodology includes three-year moving GDP averages of both export of goods and services and other inflows (including inflows from investment income, employee compensation and remittances), as denominators in the calculation of indicators. This methodology also defines debt criteria, as indebtedness reference values.

<sup>87</sup> Excluding repo transactions, the short-term debt coverage with foreign reserves equals 1.46.

Table 13
External debt indicators

LXCCITIAL GCDC III						Solvency												
External debt indicators	payments/ Exports of goods and goods and		oss debt/ Debt service/ xport of Gross debt/ Exports of oods and GDP goods and services services			Foreign reserves/ ST debt at remaining maturity*	ST debt/ Total gross debt											
		in	%	ratio	ratio	in %												
31.12.2004	2.24	120.1	49.3	11.5	1.14	0.89	30.3											
31.12.2005	2.33	128.5	56.3	9.7	1.67	1.04	26.7											
31.12.2006	2.88	109.8	51.8	18.2	1.95	1.34	29.0											
31.12.2007	2.38	102.3	53.2	16.6	1.35	1.08	39.8											
31.12.2008	2.30	101.1	55.3	8.8	1.29	0.95	35.2											
31.12.2009	2.10	113.3	58.5	10.2	1.29	0.94	32.9											
31.12.2010	2.79	122.2	61.0	12.0	1.29	0.89	32.1											
31.12.2011	2.71	136.2	69.9	14.6	1.25	0.92	33.8											
Moderate																		
indebtedness criterion	12 - 20%	165 - 275%	30 - 50%	18 - 30%														

The criterion for moderate indebtedness within the solvency indicators is taken under the World Bank methodology for development of indebtedness indicators that includes three-year moving averages of GDP and the export of goods and services and other inflows, as denominators in the calculation of indicators. Liquidity indicators have been developed under the External debt statistics: Guide for compilers and users, issued by the IMF.

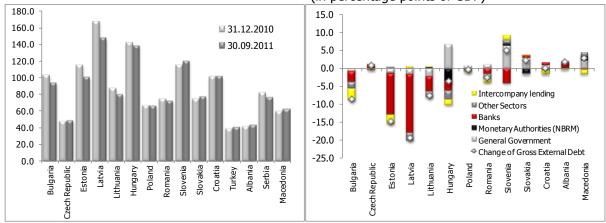
Source: NBRM.

According to the comparative analysis of the share of gross external debt in GDP of some Central and South East European countries and the Baltic region, the Republic of Macedonia is considered to be lower indebted country relative to the average in the countries under observation. Thus, as of September 30, 2011, together with Turkey, Albania, the Czech Republic and Poland, the indebtedness ratio of our country, according to this indicator, was positioned well below the average of 84.4%. In 2011, the external indebtedness of most of the countries (nine of fifteen) decreased compared to the end of the preceding year. Such change generally reflects the lower banking sector debt (measured as share in GDP), with the fall being the most dramatic in Latvia and Estonia. Croatia is an exception, where intercompany debt contributed the most to the debt reduction, same as in Bulgaria. On the other hand, other countries, including ours, reported external debt increase. Higher government debt is the main reason behind the increase of gross debt in Slovenia (issue of Eurobonds) and Slovakia, whereas the rise of the banking sector debt generated most of the higher debt share in GDP in the Czech Republic and Albania.

<sup>\*</sup>According to the Greenspan-Guidotti rule, the country needs to preserve full coverage of short-term debt (residual maturity) with foreign reserves.

Figure 94
Gross external debt, by countries (% of GDP)

Contributions to the change in gross external debt, by country (in percentage points of GDP)



Source: NBRM, EUROSTAT, websites of central banks and WEO, September 2011.

## 2.6. Fiscal policy

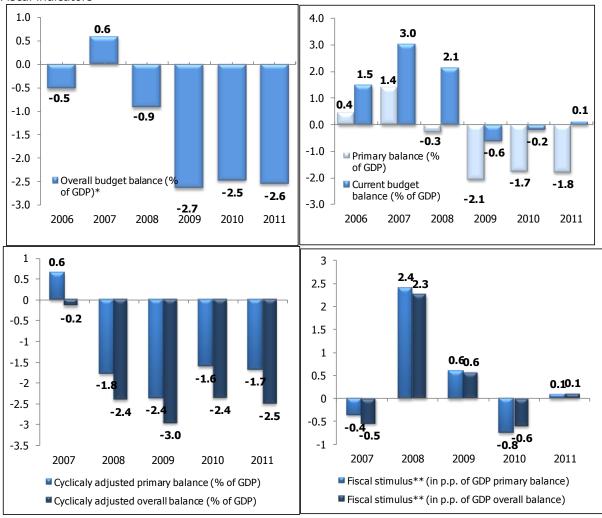
The fiscal policy remained prudent in 2011, preserving stable and relatively low budget deficit and relatively low, although rising, level of public debt. In 2011, the total budget deficit equaled 2.6% of GDP, and was within the projected level. The finance of deficit moderately increased the public debt, which remained relatively low, at 28.6% of GDP. Taking into account these developments, the comparative analysis of fiscal indicators with a number of countries still shows improved performances of the Macedonian economy, (see Annex 4). The fiscal deficit reached 2.6% in 2011, and shows no significant change compared to the deficit of 2.5% of GDP in the preceding year. The primary budget balance<sup>88</sup>, as a more realistic indicator for the current fiscal policy course, registers similar developments. In 2011, the deficit equals 1.8% of GDP compared to 1.7% of GDP in the preceding year. The current budget balance<sup>89</sup> improved annually by 0.3 percentage points of GDP<sup>90</sup> and after two years of deficit, it resumed reporting positive values, due to the further decrease of current revenues (as a percent of GDP) and faster downward correction of current expenses. The Macedonian budget deficit remained almost unchanged, while worldwide, there was a general trend of deficit narrowing. These pace differences during the year are explained by the different initial conditions. In most of the countries, the problems with the medium-term sustainability of public debt created a need of fiscal consolidation. On the other hand, in Macedonia, the public finances continuously follow the path of low deficits and indebtedness, thereby after the crisis there was no need of major corrections in the fiscal setup.

<sup>&</sup>lt;sup>88</sup> The primary budget balance is the difference between total budget revenues and total budget expenses, less the servicing of current liabilities based on loans (interests). This fiscal indicator is considered more adequate in the analysis of current policy course, due to the fact that it does not incorporate fiscal costs related to the past behavior of fiscal policy concerning the public debt.

<sup>&</sup>lt;sup>89</sup> Current budget balance is the difference between current revenues (tax revenues and contributions and nontax revenues) and current budget expenses (for wages and compensations, goods and services, transfers and interests).

<sup>&</sup>lt;sup>90</sup> In 2011, methodological changes were made concerning the recognition of Telecom dividend in the Budget, which is now recorded in the category of capital revenue (previously, these revenues were recognized in the category of nontax revenues). For the purposes of data comparison, the calculation of current balance in the period before 2011, current revenues were adequately adjusted, under the recent methodological changes (reallocation of the received Telecom dividend from nontax revenues to capital revenue). All subsequent calculations include this change.

Figure 95 Fiscal indicators



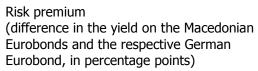
\*In the calculations of current budget balance in the historical data, the Telecom dividend has been excluded from nontax revenues and has been included in capital revenue (according to the methodological changes in 2011).

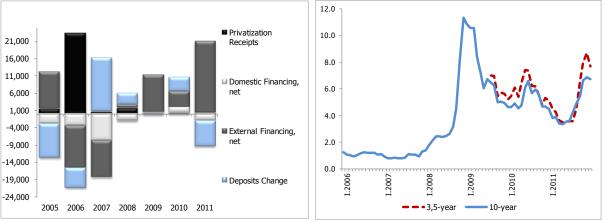
Structural fiscal indicators show positive fiscal stimulus through the discretionary fiscal policy in 2011. However, the fiscal stimulus is relatively weak, indicating that there are still restrictions for the discretionary fiscal policy to support the demand appropriately. The worsened global environment brings higher uncertainty about the possibilities to finance the budget deficit, and accordingly, requires higher prudence. In fact, in 2011, the conditions for budget deficit financing on the international capital market were still unfavorable. The deepened European debt crisis, the series of downgrades of several international banks, the stock market volatility, and the uncertainty clouding the future US budget deficit policies seriously undermined the investors' confidence worldwide. Such global risk aversion pressed for higher risk premiums even in countries with stable public finances, such as Macedonia. Thus, in the first half of the year, the spread between the yield on the Macedonian Eurobonds and the yield on the respective German Eurobonds on the secondary market remained relatively stable, and in the second half of the year it started increasing. In such environment, in 2011, budget deficit was financed using loans

<sup>\*\*</sup>Fiscal stimulus is the difference between the cyclically adjusted balance in the previous year and the current year. Source: Ministry of Finance of the Republic of Macedonia and NBRM calculations.

from official international creditors<sup>91</sup> and borrowings from the domestic market, which is a departure from the initial plan for issuing Eurobond.

Figure 96 Structure of budget balance financing (on a net basis, in millions of denars)





<sup>\*</sup>Difference between total inflows based on continuous and structural securities (treasury bills and bonds) and total outflows based on domestic debt repayment.

**Analyzing the savings - government investments gap**, the budget deficit remained almost the same as the previous year due to the nearly identical growth (in percentage points of GDP) of both components. The government savings<sup>92</sup> increased annually which, amid reduction of total government income<sup>93</sup> (share in GDP), is due to the drop of public consumption. Still, government savings are substantially lower compared to the pre-crisis period, principally due to the lower disposable income under unfavorable economic conjuncture. Government investments<sup>94</sup> resumed going up (after the fall in 2009), and reached 3.9% of GDP in 2011, which is lower compared to the pre-crisis period, but above average of the past decade. Such savings and investments developments point to improved public finances quality in 2011, achieved by cutting nonproductive spending and increasing capital investments.

<sup>\*\*</sup>Positive change in government deposits implies their withdrawal from account with the NBRM. Source: Ministry of Finance of the Republic of Macedonia.

<sup>-</sup>

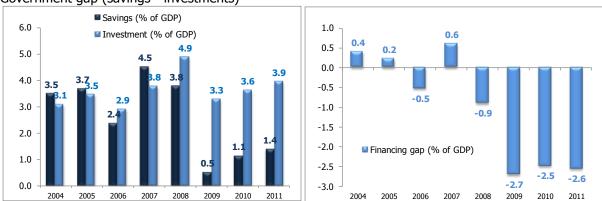
<sup>&</sup>lt;sup>91</sup> Drawdowns from the IMF's open credit line in the first quarter of the year and the loan under the Policy Based Guarantee Program between the Republic of Macedonia and the World Bank at the end of the year.

<sup>&</sup>lt;sup>92</sup> Savings is a residue when the disposable income is deducted from public consumption (current expenditures less transfers less interest repayments).

<sup>&</sup>lt;sup>93</sup> Total government income is the difference between total budget revenues and transfers and interest payments.

<sup>&</sup>lt;sup>94</sup> Data on government investments for this purpose refer to capital budget expenses. They integrate government spending for procurement of fixed assets and capital transfers.

Figure 97 Government gap (savings - investments)



Source: NBRM calculations based on data from the Ministry of Finance and the Republic of Macedonia.

In 2011, total budget revenues made up 30.5% of GDP, or 92.4% of the projections, which is an annual increase of 3.8%. Given the acceleration of economic activity, total tax revenues went up by 7.2% on annual basis, mostly owing to the improved **VAT collection**, the share of which in GDP rose to 9.4% (8.7% of GDP on average, in the previous three years). Such VAT trends correspond with the increase of personal consumption, particularly in the first half of the year, and to some extent, they could be attributed to higher inflation rate compared to the preceding year. The income taxes also increased, and after the decline in the past two years, in 2011, profit tax revenues experienced an annual increase of 5.4%, maintaining stable share in GDP of 0.9%. On the other hand, **import revenues** decrease annually for three consecutive years, which, in environment of higher imports, reflects the effects of gradual reduction of customs duties (under the Agreement with the World Trade Organization - WTO and the Stabilization and Association Agreement with the EU<sup>95</sup>), and the additional cut of some customs duties by the government (see Annex 5). In 2011, in conditions of unchanged contributions rates, the total **contributions** went up by 2.8% probably because of the higher gross wages during the year.

 $<sup>^{95}</sup>$  "Official Gazette of the Republic of Macedonia" no. 165/2010 - Decision on harmonization and changing of customs tariff for 2011. In 2011, the average non-weighted rate equals 8.75%, compared to 8.77% in 2010. The average weighted rate in 2011 equals 1.24%, compared to 1.82% in 2010.

Table 14
Consolidated budget (central government and funds)

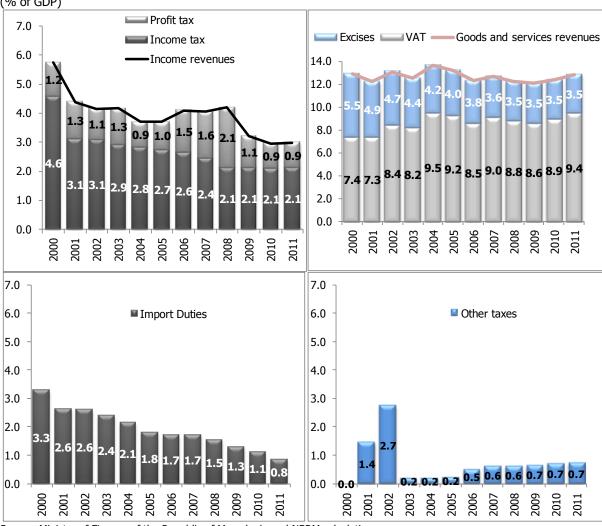
	2010	2011	:	2010	2011	2010	2011	2010	2011	2010	2011	percentage of
	in millions	in millions of denars		share (in %)		% of GDP		annual changes in p.p. of GDP		annual changes (in %)		realization in terms of the Plan
TOTAL REVENUES	132,150	137,166	1	100.0	100.0	31.1	30.5	-0.2	-0.6	2.8	3.8	92.4
Regular revenues	130,169	135,300		98.5	98.6	30.6	30.1	-0.3	-0.6	2.5	3.9	93.8
Current revenues	126,497	131,513		95.7	95.9	29.8	29.2	-0.3	-0.5	2.5	4.0	95.0
Taxes and Contributions	112,440	118,669		85.1	86.5	26.5	26.4	-0.3	-0.1	2.3	5.5	97.0
Taxes	72,938	78,206		55.2	57.0	17.2	17.4	-0.1	0.2	3.1	7.2	98.4
Contributions	38,687	39,759		29.3	29.0	9.1	8.8	-0.3	-0.3	-0.4	2.8	93.9
Non Tax Revenues	14,057	12,844		10.6	9.4	3.3	2.9	0.0	-0.5	3.5	-8.6	79.9
Capital Revenues	3,672	3,787		2.8	2.8	0.9	0.8	0.0	0.0	2.9	3.1	65.0
Foreign Donations	1,459	1,087		1.1	0.8	0.3	0.2	0.1	-0.1	75.2	-25.5	20.6
Revenues from repayment of loans	525	779		0.4	0.6	0.1	0.2	0.1	0.0	2,2 пати	48.4	0.0
TOTAL EXPENDITURES	142,692	148,649	1	100.0	100.0	33.6	33.1	-0.3	-0.5	2.4	4.2	92.9
Current Expenditures	127,358	130,939		89.3	88.1	30.0	29.1	-0.7	-0.9	1.1	2.8	94.2
Wages and Allowances	22,638	23,147		15.9	15.6	5.3	5.1	-0.2	-0.2	-0.3	2.2	99.3
Goods and Services	14,681	13,958		10.3	9.4	3.5	3.1	-0.5	-0.4	-9.5	-4.9	81.5
Transfers	86,865	90,363		60.9	60.8	20.5	20.1	-0.1	-0.4	2.7	4.0	94.6
Interest payments	3,174	3,471		2.2	2.3	0.7	0.8	0.2	0.0	29.8	9.4	112.4
Capital Expenditures	15,334	17,710		10.7	11.9	3.6	3.9	0.3	0.3	14.2	15.5	84.4
BUDGET DEFICIT/SURPLUS	-10,543	-11,483				-2.5	-2.6	0.2	-0.1			99.1

Source: Ministry of Finance of the Republic of Macedonia and NBRM calculations.

In 2011, **nontax revenues** went down annually by 8.6%, mostly due to the lower property tax revenues. The effects of the discretionary measure related to the purchase of construction land (yard)<sup>96</sup>, although still valid, was exhausted in 2011, but made its greatest contribution to the growth of this category of revenues in 2010. **Capital revenues** surged by 3.1% annually once the Government received the Telecom dividend, in the same amount as in the previous year.

<sup>&</sup>lt;sup>96</sup> "Official Gazette of the Republic of Macedonia" no. 115/2009, "Decree on amending the Decree on the fee for privatization of construction land subject to privatization, the method and procedure for collection of the construction land privatization fee". This Decree reduced the fee for privatization of individual and collective housing, public institution buildings, sports and recreation facilities and infrastructural facilities to Denar 61 for 1m2. "Official Gazette of the Republic of Macedonia" no. 46/2010, "Decree on amending the Decree on the fee for privatization of construction land subject to privatization, the method and procedure for collection of the construction land privatization fee". The amendment to the Decree reduced the fee for privatization of construction land of commercial and business buildings, and of economic and output facilities in April 2010. After the end of initially set deadline, in February 2011, the Government extended the deadline for privatization of construction land under the same terms and conditions to the end of 2012.

Figure 98 Tax revenues (% of GDP)



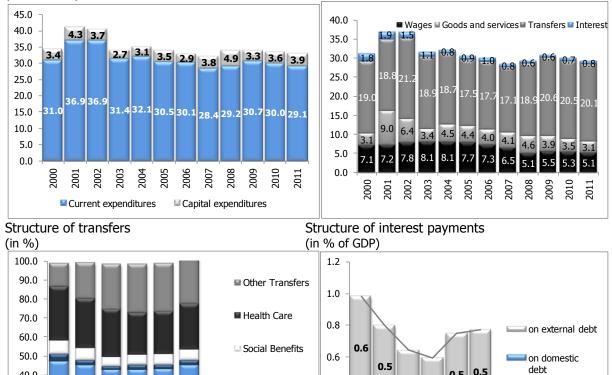
Source: Ministry of Finance of the Republic of Macedonia and NBRM calculations.

**1.2011, the total budget expenses constituted 33.1% of GDP and were by 4.2% higher on annual basis.** Observing the total expenses, their structure and quality have improved with the further increase of share of **capital expenses**, which in 2011 went up annually by 15.5%, and reached 3.9% of GDP (3.6% of GDP in 2010). The share of capital expenses in total expenses rose to 11.9% in 2011 compared to 10.7% in 2010. Same as the preceding year, this year reported execution of most of the projected capital expenses (84.4%). In 2011, **current expenses** registered a moderate annual growth of 2.8%, but as a percent of GDP they were lower, and equaled 29.1%. Having moderate annual growth of **expenses for wages and compensations** and lower outlays for **goods and services**, the growth of current expenses was mostly driven by the increase of social budget component (rise of **social transfers** of 5.3% on annual basis). Analyzing the social transfers, higher outlays were reported by PIOM (given the regular adjustment of pensions and slight annual increase of pension users), the Health Fund and the social welfare payments, while the transfers through the Employment Agency were marginally higher

<sup>&</sup>lt;sup>97</sup> The retirement pension is adjusted according to the changes in the CPI in the amount of 80% and the changes in the average paid net wage of all employees in the Republic of Macedonia in the amount of 20%. The adjustment is made on January 1 and July 1 every year according to the percent which is a sum of the changes in the CPI in the previous half of the year and the percent of the changes in the average paid net wage of all employees in the Republic of Macedonia in the previous half of the year relative to the preceding half (Law on Pension and Disability Insurance).

compared to the preceding year. Other transfers went up by 2.4% annually, given the farmers' subsidies and the regular transfers to local government in the form of block dotation. According to the regular service of public debt liabilities, in 2011 the total **interest** payments went up by 9.4% on annual basis, and remained below 1% of GDP. 2011 reported 94.2% execution of total projected current expenses.

Figure 99 Structure of expenses (in % of GDP)



0.5

0.2

2006 2007 2008 2009 2010 2011

Interest

Source: Ministry of Finance of the Republic of Macedonia.

2006 2007 2008 2009 2010 2011

In 2011, most of the budget deficit was financed through external **borrowing.** Notwithstanding the unfavorable global environment, in 2011 the structure of new external borrowing could be regarded as favorable considering the relatively favorable debt servicing costs<sup>98</sup>. The unfavorable conditions on the international capital market and the expectations for early elections in the country postponed the planned issue of Eurobond. In such circumstances, in March 2011, the Government drew Euro 220 million from the IMF's Precautionary Credit Line aimed to regular budget execution<sup>99</sup>. In the period that

0.4

0.2

0.0

0.3

Агенција за

Pension and

Disability

вработување

Insurance Fund

40.0

30.0

20.0

10.0

0.0

<sup>&</sup>lt;sup>98</sup>In 2011, the average weighted interest rate on the new borrowing equals roughly 3% (1.4% interest rate on funds drawn from the IMF's Precautionary Credit Line and 4.8% interest rate on the loan under the Policy Based Guarantee Program between the Republic of Macedonia and the World Bank).

<sup>&</sup>lt;sup>99</sup> IMF approved a Precautionary Credit Line to the Republic of Macedonia in January 2011 in the total amount of SDR 413.4 million or around Euro 475.6 million, constituting 600% of the IMF quota for the Republic of Macedonia. This arrangement was concluded for a period of two years, with 500% of the quota being available for the first year and additional 100% of the quota for the second year of the arrangement period. The interest rate charged on the drawdown from the credit line of up to 300% of the quota will equal the cost rate specified by the IMF. The interest rate charged on the drawdown of above 300% of the quota will equal the cost rate specified by the IMF, increased by 2 percentage points. For the amounts that have not been

followed, with the boost of the European debt crisis, global capital market conditions deteriorated, thus making the government fully abandon the budget deficit financing plan through Eurobond on the international capital market. The funds required to cover budget deficit were provided through additional loan under the Policy Based Guarantee Program between the Republic of Macedonia and the World Bank at the end of the year. In December, within this Program, the Republic of Macedonia borrowed Euro 130 million from two foreign commercial banks<sup>100</sup>, Euro 100 million of which backed by the World Bank. The World Bank approves policy-based guarantee to countries that conduct successful macroeconomic policy. Most of the funds of this loan remained unspent, intended to be used for financing a portion of the budget deficit in 2012.

Table 15 Budget deficit financing

	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
		in m	illions of de	nars		% of GDP				
BUDGET BALANCE	2,153	-3,811	-10,895	-10,543	-11,483	0.6	-0.9	-2.7	-2.5	-2.6
Financing	-2,153	3,811	10,895	10,543	11,483	-0.6	0.9	2.7	2.5	2.6
Inflow	19,303	10,788	18,939	18,024	19,584	5.3	2.6	4.6	4.2	4.4
Privatization revenues	661	1,652	0	0	0	0.2	0.4	0.0	0.0	0.0
Foreign loans	3,643	2,672	13,040	7,177	23,718	1.0	0.6	3.2	1.7	5.3
Deposits	15,401	3,328	-274	4,012	-7,315	4.2	0.8	-0.1	0.9	-1.6
Treasury bills	-464	3,038	6,098	6,796	2,906	-0.1	0.7	1.5	1.6	0.6
Sale of shares	62	97	75	40	276	0.0	0.0	0.0	0.0	0.1
Outflow	21,456	6,977	8,044	7,482	8,101	5.9	1.7	2.0	1.8	1.8
Principal repayment	21,456	6,977	8,044	7,482	8,101	5.9	1.7	2.0	1.8	1.8
External debt	14,188	1,879	2,356	2,590	3,098	3.9	0.5	0.6	0.6	0.7
Domestic debt	7,268	5,098	5,688	4,892	5,003	2.0	1.2	1.4	1.2	1.1
Domestic financing, net	-7,732	-2,060	410	1,904	-2,097	-2.1	-0.5	0.1	0.4	-0.5
Foreign financing, net	-10,545	793	10,684	4,587	20,620	-2.9	0.2	2.6	1.1	4.6
Government deposits	15,401	3,328	-274	4,012	-7,315	4.2	0.8	-0.1	0.9	-1.6
Inflows from privatization and sale of government shares	723	1,749	75	40	276	0.2	0.4	0.0	0.0	0.1

Source: Ministry of Finance of the Republic of Macedonia.

In 2011, additional funds were attracted through the domestic primary government securities market for financing the budget deficit. In 2011, the total performance on this market segment equals 12.7% of GDP, compared to 7.8% of GDP in the preceding year. In 2011, analyzing the new issues, three-month Denar bills were offered the most (roughly 50% of the total treasury bill transaction), and the average interest rate on all short-term government securities (with various maturity)<sup>101</sup> moderately decreased (by 0.5 percentage points) compared to 2010, and was reduced to 4.2%. In 2011, after a oneyear break, the government resumed issuing long-term securities 102 with average interest rate of 5.6%. Although the volume of transactions increased compared to 2010, taking into account the payments of due government securities, the net effect of the domestic

drawn, the Republic of Macedonia shall be charged only an annual fee of 0.15% on the first 200% of the quota and 0.3% on the amount of above 200% of the guota that have not been drawn.

<sup>100</sup> Law on borrowing of the Republic of Macedonia from Deutsche Bank and City Bank under the Policy Based Guarantee Program of the International Bank for Reconstruction and Development - the World Bank ("Official Gazette of the Republic of Macedonia" no. 160/2011). The loan, with base interest rate of 4.25%, which together with the one-time fee costs to the World Bank of 0.5% p.a. and 1.3% one-time fee costs to Deutsche Bank and City Bank equals 4.8%, will be paid utterly, five

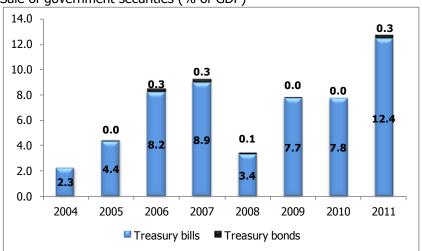
years of the drawdown date.

101 In 2011, besides three-month Denar treasury bills, auctions were held of three-month Denar treasury bills with FX clause, six-month Denar treasury bills with FX clause and six-month Denar treasury bills.

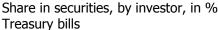
<sup>&</sup>lt;sup>102</sup> In 2011 (September and December), four auctions were held of five-year government bonds (two in Denars and two with FX clause), selling total of Denar 1.168 million.

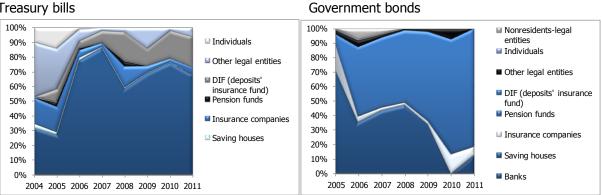
government borrowing was less significant compared to the previous year, and the continuous government securities (treasury bills and government bonds) increased annually by Denar 2,706 million (Denar 6,311 million, in 2010). Accordingly, in 2011, the government presence on the domestic financial market was lower compared to the previous year, leaving larger room for financial support of the private sector.

Figure 100
Primary government securities market
Sale of government securities (% of GDP)



Net effect of the issue of government securities\* Average weighted interest rate\*\* (in millions of denars) (in %) 11.0 8,000 10.0 7,000 10.0 6,000 9.0 5,000 4,000 8.0 8.6 3,000 7.0 2,000 1,000 6.0 5.8 5.0 -1,000 4.0 -2,000 -3,000 3.0 2004 2005 2006 2007 2008 2010 2011 2005 2006 2007 2008 2009 2010 2011 ■ Treasury bills Treasury bonds Treasury bills





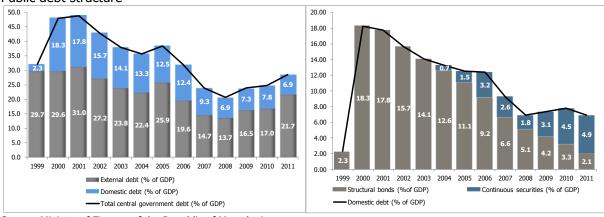
\*Changes in government securities in the current year compared to the previous year (difference between new issues of securities and repayment of due securities over the year).

Source: NBRM and the Ministry of Finance of the Republic of Macedonia.

<sup>\*\*</sup>Refers to interest rate on all securities (with different maturity). Calculations made by the NBRM using data from the Ministry of Finance.

Taking into account the external and domestic borrowing, in 2011, the central government debt<sup>103</sup> increased by 22.1% compared to 2010 and reached Euro 2,089 million. The share of central government debt in GDP equals 28.6%, compared to 24.8% of GDP in 2010.

Figure 101 Public debt structure



Source: Ministry of Finance of the Republic of Macedonia.

The annual increase of public debt results solely from the higher external borrowing (by 34.8%), while the domestic debt decreased by 5.6% annually. Such changes shifted the total debt structure, increasing the external debt share, which equaled 21.7% of GDP in 2011 (17% of GDP in 2010). In 2011, the domestic debt decreased owing to the lower structural bonds, which was only partially offset by the rise of continuous securities. The last installment of the old foreign currency savings bond<sup>104</sup> was repaid in October 2011, thereby completing the process of indemnification of citizens with old foreign currency savings from the former SFRY. On the other hand, denationalization bonds were additionally issued (Tenth issue) in the amount of Euro 11 million. These developments tended to lower the share of debt arising from structural bonds (by 12.1 percentage points on annual basis) in the total domestic debt.

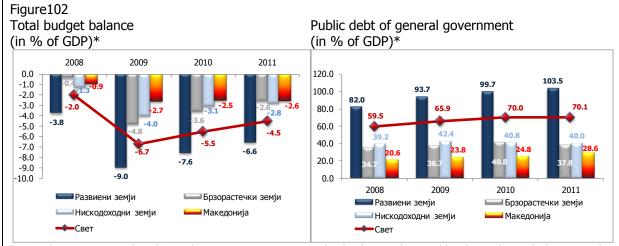
#### Annex 4: Fiscal Policy in the Republic of Macedonia vis-a-vis global developments

Globally observed, 2011 was marked with continuation of the fiscal consolidation process that started in 2010. This was particularly evident in the developed countries, primarily the European Union, as a response to the public finances deterioration in this region during the global financial and economic **crisis in 2007-2009 period.** The global financial and economic crisis had immediate harsh effects on the public finances in almost all economies worldwide, through two channels: decrease of public revenues under the influence of economic recession and increase of public expenses through automatic stabilizers. On the other hand, the developed European economies, as countries that are most directly exposed to adverse shocks, also implemented substantial stimulating packages (aimed to support economic activity and to preserve financial sector stability), which resulted in additional deterioration of their fiscal positions. In such circumstances and relatively weak initial conditions (high budget deficits and high public debt before the crisis) several European economies in the 2010-2011 period were

 $^{103}$  Consolidated debt of the central government and the funds.

<sup>104</sup>The first bond installment was paid on April 1, 2002. This is a 10-year bond, repaid in 20 semiannual installments, on April 1 and on October 1. Interest on the nominal value of bonds was 2% p.a. In 10 years, Euro 576 million was paid out of the Budget of the Republic of Macedonia for this purpose, Euro 512 million of which principal and Euro 64 million of interest. Annually, Euro 52 million was repaid for the two installments.

fiscally more vulnerable and suffered severe public finances crisis that created a need of massive fiscal adjustments such as decrease of budget deficit, programs for public debt reduction to levels consistent with the fiscal medium-term sustainability principles and strengthening the institutional capacity for public finances management.



\* 2010 data are estimated, and 2011 data are projections, except for the data on the Republic of Macedonia which are actual data. Public debt data for the Republic of Macedonia refer to consolidated debt of the central government and the funds. Source: IMF Fiscal Monitor Update, January 2012 and the Ministry of Finance of the Republic of Macedonia.

In the Republic of Macedonia, fiscal indicators deteriorated mildly compared to many countries, under the influence of global crisis, while the budget deficit and public debt were preserved at moderate level. Although several discretionary anti-crisis measures were undertaken during the crisis, they were not sufficiently robust to cause serious public finances deterioration. Additionally, the long period of prudential fiscal policies created sufficient "fiscal room" for moderate countercyclical fiscal response during the crisis, without jeopardizing the fiscal medium-term sustainability. Thus in 2009, the budget deficit deteriorated moderately to 2.7% of GDP (0.9% of GDP in 2008), and in 2010, slightly improved to 2.5% of GDP. In 2011, the budget deficit remained relatively stable and equals 2.6% of GDP. The public debt increase at a faster pace and in 2011, equaled 28.6% of GDP (20.6% of GDP in 2008), which is still relatively low. Such fiscal performances indicate that the fiscal policy remained prudent during the crisis, which is important benefit, taking into account the current, highly uncertain global environment, caused by the euro area debt crisis and risks of reoccurrence of adverse shocks to the Macedonian economy in the period ahead.

The relatively favorable fiscal performances during the crisis and the subsequent maintenance of public finances sound and stable in the Republic of Macedonia are also confirmed through the assessment of several relevant international institutions. Thus the World Bank, in its South East Europe (SEE) Regular Economic Report<sup>105</sup>, of November 2011, makes assessment of the potential sources of macroeconomic vulnerability in the SEE countries. It also ascertains that unlike other countries from the region that need to make effort to decrease the budget expenses and to carry out preventive fiscal consolidation, the Republic of Macedonia is the only SEE country that has sufficient room for fiscal policy so as to support the business cycle in the following period, in case of materialization of adverse risks surrounding the fiscal consolidation and fiscal stability in the euro area. Furthermore, the International Monetary Fund (IMF), in the Regional Economic Outlook for Europe, of October 2011<sup>106</sup>, warns for further fiscal

<sup>106</sup> IMF Regional Economic Outlook, October 2011.

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<sup>&</sup>lt;sup>105</sup> World Bank South East Europe Regular Economic Report, November 15, 2011.

vulnerability of several developing countries in Europe. Fiscal vulnerability indicators stated in the Report show improvement of performances of almost all areas in the Republic of Macedonia in 2011 (budget balance, public debt and short-term public debt, according to residual maturity) compared to average values, calculated on the basis of performances of 50 developing countries worldwide<sup>107</sup>. In the concluding statement on the occasion of the mission within Article IV Consultations of December 2011108, the IMF recognizes that the projected fiscal policy course for 2012 is adequate, reflecting the need of balancing between the need to support economic activity and employment, on the one hand, and the need of proper budget deficit adjustment in line with the availability of sources for its funding and debt maintenance at moderate level, on another. However, in a medium run, the IMF recommends fiscal consolidation and reduction of budget deficits to ensure public debt maintenance at sustainable level and ample room to respond to any adverse shocks on the business cycle in the period ahead.

In 2011, the Republic of Macedonia was given relatively favorable ratings for fiscal performances by international rating agencies. Thus, in August 2011, the international rating agency Standard & Poor's downgraded the credit rating of the Republic of Macedonia from BB+ to BB, with stable outlook concerning foreign and domestic currency, which, according to the explanation given by the Agency, is a result of the revision of their methodology<sup>109</sup>. In its Report, the Agency states that the credit rating of the Republic of Macedonia reflects the moderate public debt level and the perspectives for EU membership, as a nominal anchor for continuation of the reform processes. In October 2011, the international rating agency Fitch confirmed the credit rating BB+, with stable outlook concerning foreign and domestic currency<sup>110</sup>. In its Report, Fitch indicates that public finances are a significant advantage for the rating of the Republic of Macedonia, particularly in comparison with most of the European countries. Yet, according to the Agency, risks arising from fiscal sector vulnerability exist, and they primarily relate to the availability of sources for funding budget deficit in the forthcoming period. Hence, as noted by the Agency, fiscal discipline will have to be exercised in the period ahead.

#### Annex 5: Discretionary fiscal measures in 2011

In 2011, several measures were adopted aimed to support macroeconomic stability and to improve the overall economic environment. Thus, given the sharp increase of food and oil prices on the global stock markets since early this year, and their transmission to the domestic economy, the Government, in order to mitigate the price effects on the living standard, intervened on the market with 40.000 tons of mercantile wheat from the commodity reserves at subsidized price of Denar 15,5 per kilogram<sup>111</sup>, and subsequently, introduced an interim measure for decreasing

<sup>1</sup> 

 $<sup>^{107}</sup>$ The Republic of Macedonia reports worse performances relative to the average only in the indicator for public debt exposure to currency risk.

<sup>108</sup> Macedonia – 2011 Article IV Consultation- Concluding Statement of the Mission, Skopje, December 13, 2011, www.imf.org.

<sup>&</sup>lt;sup>109</sup>Standard and Poor's, Global Credit Portal, Ratings Direct, Republic of Macedonia, August 24, 2011.

<sup>&</sup>lt;sup>110</sup> Fitch Ratings, Macedonia Full Rating Report, November 9, 2011.

<sup>&</sup>lt;sup>111</sup> "Official Gazette of the Republic of Macedonia" no. 27/2011 dated March 3, 2011, Decision on amending the Decision on sale of mercantile wheat from commodity reserves.

the oil derivative excise<sup>112</sup>. Moreover, yet another interim measure for decreasing the white sugar import duty from 30% to 5% 113 was introduced to support the domestic confectionary industry. In July 2011, a new package of economic measures was adopted, which, inter alia, decreased the price of compulsory insurance on passenger and freight motor vehicles (so called "green card"), reduced value added tax from 18% to 5% for tourist services and for the turnover and import of non-refined oil used for production of cooking oil 114 and fully exempted, from profit tax liability, taxpayers whose total income generated in the previous year on all bases, reach up to Denar 3 million<sup>115</sup>. These measures were aimed to improve the business environment and companies' opportunities, and to improve the standard of living. This package of measures also included a Draft-Law on Subsidizing Housing Loans<sup>116</sup>, aimed to provide government assistance to middle and lower class citizens, whose housing issue has not been solved yet. Under the Government Program of Activities concerning the customs tariff and support of business environment, amendments to the Law on Customs Tariff were proposed in October 2011, allowing for reduction of customs duties on hundreds of products, primarily manufacturing supplies and raw materials used in the industry, starting from January 2012.

<sup>&</sup>lt;sup>112</sup>An interim measure was adopted on April 14, 2011, for reducing the petrol and diesel fuel excise (by 4 denars and by 2 denars, respectively) and for reducing the compensation for compulsory reserves of oil (by 0.5 Denars and by 0.2 denars, respectively), valid for four months (to mid-August). This measure became effective by the Decision of ERC adopted on April 15, 2011 ("Official Gazette of the Republic of Macedonia" no. 56/2011).

<sup>&</sup>lt;sup>113</sup> An interim measure for reducing the customs import duty on white sugar from 30% to 5% was adopted on January 18, 2011, valid in the period from February 1 to October 31, 2011 (Decision on reducing import duties on white sugar, "Official Gazette of the Republic of Macedonia" no. 8/2011).

114 Law on amending the Law on Value Added Tax, "Official Gazette of the Republic of Macedonia" no. 135/2011.

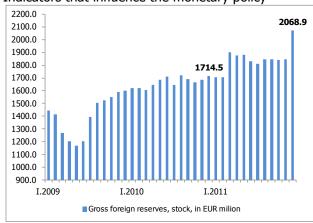
 $<sup>^{115}</sup>$  Law on amending the Law on Profit Tax, "Official Gazette of the Republic of Macedonia" no. 135/2011.

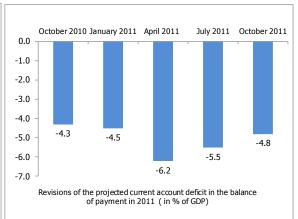
<sup>&</sup>lt;sup>116</sup>Decree for promulgation of the Law on Subsidizing Housing Loans, "Official Gazette of the Republic of Macedonia" no. 158/2011, valid from January 1, 2012.

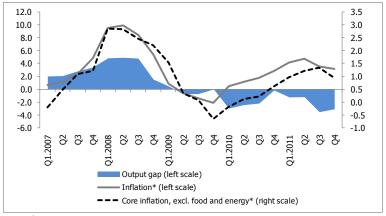
## III. Monetary policy

After the continuous decrease in the previous year, in 2011 the CB bills interest rate remained 4% and considered to suit the current developments and expectations in the period ahead. Generally speaking, this year experienced favorable monetary policy environment, but clouded with various risks. Thus, in the first half of the year, one of the major risks was the acceleration of inflation and uncertainty about its future development, without having considerable influence on the expectations of economic agents. In addition, notwithstanding the acceleration of economic recovery, the utilization was below the potential, causing no larger pressures on the external sector. Hence, the currency exchange market developments were relatively favorable, indicating stable expectations for the inflation and the exchange rate. Foreign exchange market experienced pressures in April and June, partially owing to one-off effect factors<sup>117</sup>. These pressures were alleviated through the National Bank interventions on the foreign exchange market by a net sale of foreign currency. In spite of the interventions, the foreign reserves registered no significant change and were preserved at adequate level, mostly due to the drawdown of funds from the IMF's Precautionary Credit Line in the first quarter.

Figure 103 Indicators that influence the monetary policy







\*Average annual inflation in the guarter.

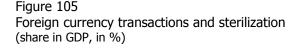
Source: National Bank of the Republic of Macedonia and State Statistical Office.

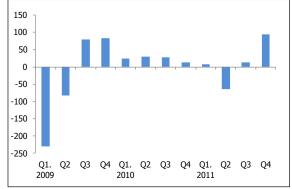
In the second half of the year, monetary policy risks were transposed from the inflation to the external sector. At the end of the first half of the year, the

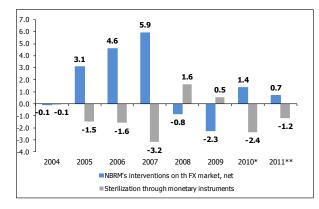
<sup>&</sup>lt;sup>117</sup> Payment of large value dividend to foreign investor.

uncertainty clouding economic outlook of the majority of EU countries, as our most important trading partner, increased. Fears from transmission of the debt crisis effects to other European countries became pronounced. The alarming situation in the real euro area economy also hit financial markets, with the risk of potential outburst of new global crisis. Thus the adverse risks to the domestic economy exacerbated primarily in the external sector. In spite of the exceptionally uncertain macroeconomic environment, the balance of payments position was favorable. Also, the inflation pressures abated and the core inflation was relatively stable. The foreign exchange market witnessed relatively positive developments, among which the unexpectedly high net purchase of foreign currency in December. The high uncertainty about the future of Euro pending the EU Summit in the first ten days of December resulted in temporary growth of demand for Denars and high foreign currency inflows on the currency exchange and foreign exchange markets. Such developments, together with the inflows from government external borrowings and from foreign direct investments, tended to increase foreign reserves, and at the end of the year they exceeded the expectations and reached the highest historical level. In the second half of the year, the NBRM made changes to the liquidity management by banks<sup>118</sup>, easing the requirements and increasing the available liquidity for banks, in consistence with the monetary policy environment in that period.

Figure 104 Net purchase and net sale of foreign currency by the NBRM on the foreign exchange market (aggregate amount in the quarter, in millions of euros)







\*Estimated GDP data. \*\* GDP projections.

Source: National Bank of the Republic of Macedonia and State Statistical Office.

In conditions of *de facto* fixed nominal exchange rate strategy, the change in the relevant foreign interest rate is a crucial indicator in the conduct of domestic monetary policy. The wide interest spread of domestic and foreign interest rates (risk premium) could impact the interest-sensitive foreign currency inflows and outflows, thus affecting the foreign exchange market and the pressures on the exchange rate. In 2011, in conditions of unchanged domestic interest rate, and changed euro area monetary policy, the interest spread also changed. In April, for the first time in two years, the ECB increased the reference interest rate, followed by further monetary policy contraction in July. The reference interest rate was increased on two occasions by total of 0.50 percentage points and equaled 1.5%. Such monetary decisions were induced by the faster upward risks to the price stability, considering that the inflation in the euro area in December 2010 was constantly preserved above the 2% target. On the European financial market, EURIBOR followed the ECB's decision and was constantly increasing since the beginning of the year to July. On the other hand, given the unchanged

<sup>&</sup>lt;sup>118</sup> See chapter discussing monetary instruments.

NBRM reference interest rate, the SKIBOR<sup>119</sup> registered generally stable developments on the domestic money market. Hence, the interest spread between EURIBOR and SKIBOR narrowed.

Figure 106
Interest spread between 28-day CB bills and ECB reference interest rate

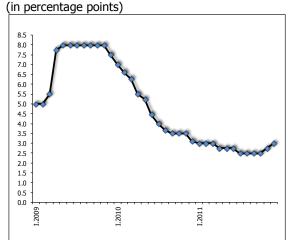
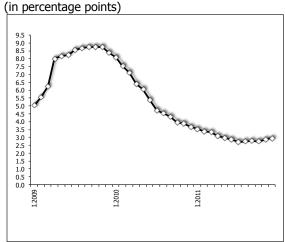


Figure 107
Interest spread between one-month SKIBOR and one-month EURIBOR



Source: National Bank of the Republic of Macedonia, European Central Bank and Central Bank of Finland.

The debt crisis that erupted in the third quarter, severely stroke the European financial system liquidity, decreased the confidence and created high risk aversion. Such tensions deteriorated the expectations for the euro area outlook and made the EURIBOR rise in August and September. Additionally, given the so called process of bank deleverage, the credit activity markedly slowed down. Expecting that the inflation pressures are under control in a medium run, the ECB responded by easing the monetary conditions. The reference interest rate was reduced on two occasions during the last quarter, returning to the level of the previous year (1%) at the end of the year. EURIBOR followed this signal and declined during the last quarter. Given the unchanged NBRM interest rate and the stable SKIBOR developments, the spread between the domestic and foreign interest rates widened. Notwithstanding the changes in the interest spread during the year, the changes in the interest differential caused no significant oscillations in the capital flows. This is partially attributable to the relatively poor portfolio of interest sensitive financial instruments on the financial markets in the country. Nevertheless, such trends also indicate high confidence in the domestic currency, and still attractive yields on domestic instruments.

#### Annex 6: Banking sector liquidity in 2011

**In 2011, banking sector liquidity was generally preserved at adequate level.** Liquidity was mainly created through government transactions, i.e. the NBRM purchased foreign assets from the government (1.5% of GDP), while Denar government deposits had almost neutral effect on the annual liquidity. Observing the dynamics, the government created most of the liquidity in the second quarter, when government foreign currency deposits were used to finance the increased budget deficit<sup>120</sup>. This year, liquidity was also created through the NBRM foreign currency transactions with market makers, purchasing foreign currency in the total amount of 0.7% of GDP. At the end of the year, the

 $^{119}$  Interbank Denar deposit interest rate calculated using reference banks' quotations.

 $<sup>^{120}</sup>$  The second quarter of the year witnessed the highest budget deficit, accounting for 35% of the total budget deficit for 2011.

dynamics of foreign currency transactions with market makers was also under the influence of some psychological factors caused by the developments in the euro area in this period. Given the intense speculations for escalation of the European debt crisis and uncertainty about the future of Euro, in December, the demand for Denars significantly accelerated, making the banks sell large amount of foreign currency. During the year, the created liquidity was mostly withdrawn through CB bills, sterilizing liquid assets of 1.4% of GDP in 2011. Liquidity was further withdrawn (0.6% of GDP) through the currency in circulation. Apart from the seasonally higher demand for cash, its dynamics at the year-end was under the influence of the abovementioned factors.

Table 16
Changes in bank reserves \*
(in millions of denars)

			Total		
	I	II	III	IV	2011
Banks' accounts with NBRM	-577	-661	-2,435	4,759	1,086
Government deposits	2,071	261	-2,103	-887	-658
Treasury account	2,295	196	-2,121	-625	-255
Health care treasury account	-196	173	-29	-131	-184
Foreign aid and FFD	-28	-108	47	-131	-220
Currency in circulation	1,429	-1,391	-222	-2,410	-2,594
F/X market interventions Banks Other	-1,846 492 -2,338	1,930 -3,950 5,880	1,448 762 686	8,287 5,772 2,515	9,820 3,076 6,744
CBbills	6,077	657	-1,275	-11,760	-6,301
Bills of 6-month deposits with the NBRM	-8,590	-2,190	-265	11,045	0
Other items	283	72	-19	484	820

<sup>\*</sup> Positive change – increase of reserves; negative change – reduction of reserves. Bank reserves include liquid assets of the overall banking sector (all banks and savings houses).

Source: National Bank of the Republic of Macedonia.

At the end of December 2011 compared to the end of the preceding year, reserve money<sup>121</sup> went up by 10.3%, given the significantly faster increase of demand for cash compared to the banks' liquid assets. Thus Denar liquid assets increased by 6.9% annually, while the demand for cash was by 12.9% higher. Analyzing the NBRM balance sheet, in December 2011 compared to the end of the preceding year, the net foreign assets increased by Denar 21,894 million, whereas the net domestic assets decreased by Denar 18,213 million.

<sup>&</sup>lt;sup>121</sup> Refers to reserve money, excluding reserve requirement on foreign currency deposits. If this component is included, the annual growth of reserve money would equal 9.5% in 2001.

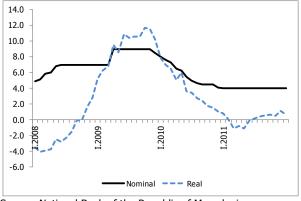
Table17								
NBRM review								
(in millions of denars)								
	As of	As of Quarterly changes						
	31.12.2010	I	II	III	IV	Total	31.12.2011	
Reserve money <sup>/1</sup>	35,832	-2,005	730	-2,213	7,169	3,681	39,513	
Currency in circulation	16,958	-1,014	1,097	145	2,123	2,350	19,308	
Banks' accounts with NBRM	15,659	-577	-661	-2,435	4,759	1,086	16,746	
Cash in vaults	3,215	-414	295	77	287	245	3,460	
Net foreign assets	100,610	11,548	-3,922	815	13,453	21,894	122,504	
Foreign assets	105,495	11,424	3,317	-1,095	22,483	36,129	141,624	
Foreign liabilities	4,886	-125	7,239	-1,910	9,030	14,235	19,121	
Net domestic assets	-64,777	-13,554	4,652	-3,028	-6,284	-18,213	-82,991	
1.Banks, net credit	-26,850	-1,604	-1,566	-1,540	-653	-5,364	-32,214	
- credit	16	0	0	0	0	0	16	
-monetary policy instruments <sup>/2</sup>	-26,866	-1,604	-1,566	-1,540	-653	-5,364	-32,230	
2. Net Government position at the NBRM/3	-3,516	-11,685	7,110	779	-6,131	-9,927	-13,443	
-Claims to the Government	5,493	13,547	-290	572	776	14,605	20,098	
-Government deposits	-9,008	-25,232	7,400	207	-6,907	-24,532	-33,541	
3. Other items,net	-34,410	-265	-892	-2,267	500	-2,923	-37,334	

<sup>&</sup>lt;sup>1</sup> Excluding reserve requirement on foreign currency deposits.

## 3.1. Monetary instruments

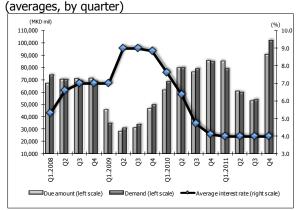
In 2011, CB bills were a basic instrument in the operational framework of the NBRM monetary policy. CB bills are primarily used for liquidity management in the banking system and indirect prevention against any pressures of the demand for foreign currency on the foreign exchange market. In 2011, the NBRM considered that there is no need to change the CB bills interest rate, and accordingly, it remained 4%. Also, the NBRM did not change the CB bills tender and continued applying volume tender (unlimited) and fixed interest rate. In 2011, the demand for these securities was relatively high.

Figure 108 CB bills interest rate (in % p.a.)



Source: National Bank of the Republic of Macedonia.

Figure 109 CB bills matured amount, demand and interest rate



Analyzing the dynamics, the intensity of investing in these instruments was changeable, quarter after quarter, partially due to the changes in the NBRM set of monetary instruments. **In February, the NBRM introduced a new instrument – six-month bill** 

<sup>&</sup>lt;sup>2</sup> Includes CB bills and six-month deposit with NBRM. CB bills are presented at discounted value.

<sup>&</sup>lt;sup>3</sup> Includes the entry of PCL.

Source: National Bank of the Republic of Macedonia.

of deposit<sup>122</sup>, which is of a prudent nature and aimed towards supporting the **financial stability in the country.** It is a six-month deposit instrument with an interest rate equal to the six-month EURIBOR rate, increased by 0.5 percentage points. Funds are deposited in Denars, on a special account with NBRM, with a possibility to be withdrawn before the maturity date (at a lower rate). Funds invested in this short-term instrument were included in the amounts for fulfilling the Denar and foreign currency liquidity rates of the banks, under the Decision on managing banks' liquidity risk. Moreover, the banks were allowed to use CB bills and Denar reserve requirement only to fulfill the Denar liquidity requirement rate, rather than to meet the foreign currency liquidity requirements, as before. Hence, the switch in the dynamics of CB bills and the bill of six-month deposit with NBRM in the first quarter reflects banks' adjustment to the changes in the liquidity risk management. Thus, in the first quarter, the banks, in order to meet the foreign currency liquidity ratios, placed Denar 8,590 million in the new instrument, thus reducing the demand for CB bills and subsequently, decreasing the demand by 7.2% relative to the matured amount. In the first quarter, CB bills created liquidity in an aggregate amount of Denar 6,077 million. In the second quarter, banks kept on demanding six-month deposit in the amount of Denar 2,190 million, making the demand for CB bills lower by 1.1% than the matured amount and creating liquidity of Denar 657 million. The third quarter reported lower investments in the new instrument (Denar 265 million), when given the higher demand (by 2.4% of the matured amount), CB bills were used to withdraw liquidity in the amount of Denar 1,275 million. The lower demand for six-month deposit in September was a response to the announced changes in the liquidity risk management regulation. On September 15, 2011, the NBRM amended the Decision on managing banks' liquidity risk, that somewhat eased the liquidity requirement for the banks. 123 These amendments to the Decision allowed the banks for integrated liquidity monitoring, irrespective of the currency, by maintaining a single liquidity rate, rather than fulfilling liquidity ratios separately for Denar and for foreign currency. The purpose of this amendment was to facilitate liquidity management by the banks, and to encourage credit support of the domestic economy. These amendments made the demand for CB bills increase by 13.1% compared to the matured amount, and the withdrawn liquidity on this basis totaled Denar 11,760 million. Simultaneously, the six-month deposit acted towards creating liquidity at almost the same amount (Denar 11,045 million). In late-October, banks did not have any investment in this instrument.

In 2011, the monetary instrument of reserve requirement remained the same as in from the preceding year. The reserve requirement rate on banks' Denar and foreign currency liabilities equals 10% and 13% respectively, and the reserve requirement rate on banks' Denar liabilities with FX clause equals 20%. The average fulfillment system still applies to the Denar reserve requirement<sup>124</sup>, where the banks are allowed to use fully, on a daily basis, the reserve requirement to meet their liquidity needs. The fixed fulfillment system applies to foreign currency reserve requirement, where the funds are not available to the banks on a daily basis. Additionally, the banks allocate a portion of the foreign currency liability for reserve requirement, in Denars<sup>125</sup>. In 2011, this instrument's setup remained unchanged, but on September 15, 2011, the NBRM Council adopted decisions to change the monetary instrument setup, which will become effective

 $<sup>^{122}</sup>$  See Decision on bill of six-month deposit with the NBRM, "Official Gazette of the Republic of Macedonia" no. 14/2011, for the features of this instrument.

<sup>&</sup>lt;sup>123</sup>For more details see the Decision on managing banks' liquidity risk ("Official Gazette of the Republic of Macedonia" no. 126/2011 and on www.nbrm.mk)

<sup>&</sup>lt;sup>124</sup> Reserve requirement fulfillment period is the period from the 11<sup>th</sup> day in the current month to the 10<sup>th</sup> day in the following month.

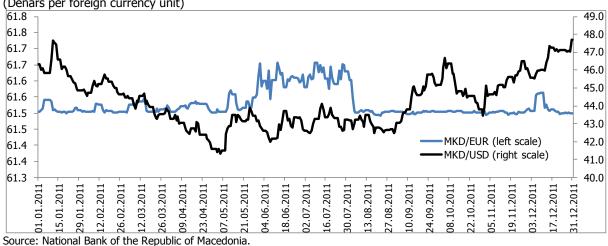
<sup>&</sup>lt;sup>125</sup> For more details see the Decision on reserve requirement, "Official Gazette of the Republic of Macedonia" no. 66/2009.

**as of January 2012.** Moreover, the major amendment<sup>126</sup> was that the banks were relieved from allocating reserve requirement (introduction of reserve requirement rate of 0%) on banks' liabilities to natural persons based on term deposits with contractual maturity of above two years, and on liabilities based on Denar repo transactions. The aim of this amendment was to stimulate long-term savings by natural persons and to encourage the development of repo market as a money market segment. Also, the amendments are expected to release a portion of the banks' funds placed in reserve requirement which will create additional banks' lending source to the private sector. Additional amendment to the decision refers to the period for fulfilling the reserve requirement according to which the period will be determined using indicative calendar of periods of fulfillment of reserve requirement for the current year which will be disclosed at the National Bank website at least a month prior to the beginning of the current year. The period for fulfilling the reserve requirement by the savings houses will be calculated as an average of liabilities for each day of the last calendar month in the quarter that precedes the first of the three fulfillment periods.

### 3.2. Foreign reserves and exchange rate

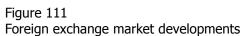
**2011** reported continuation of stable inflation and stable nominal exchange rate of Denar against the Euro, as an intermediate monetary objective. The temporary mismatch between the supply of and demand for foreign currency on the foreign exchange market during the year was addressed through NBRM interventions, aimed to preserve stability of the nominal Denar value. Hence, the Denar – Euro exchange rate on the foreign exchange market, in spite of the minor oscillations in the period from May through July, was preserved at relatively stable level and equaled Denar 61.53 per one Euro on average during the year (Denar 61.51 per one Euro in 2010). In addition, the exchange rate on the currency exchange market was Denar 61.46 per one Euro on average, compared to Denar 61.45 per one Euro on average in 2010, which indicates stable expectations of domestic agents for the exchange rate for the year. While the value of Denar against the Euro was stable, the exchange rate of the Denar against the US Dollar was contingent upon the changes in the US Dollar/Euro exchange rate, which was under the influence of various perceptions and developments on the stock exchange markets during the year.

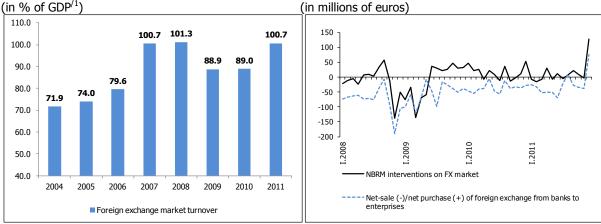




<sup>&</sup>lt;sup>126</sup> For all changes in the setup of monetary instrument of reserve requirement, see the Decision on reserve requirement, "Official Gazette of the Republic of Macedonia" no. 126/2011.

The relatively favorable macroeconomic environment in the country during the year, and the increased uncertainty about the developments in the euro area at the end of the year, had an effect on both the currency exchange and foreign **exchange markets.** In the first half of the year, the currency exchange market witnessed continuous net purchase of foreign currency, indicating that the higher inflation rate, which was still present in that period, had no significant effect on the expectations of economic agents. During the second half of the year, the net purchase registered faster growth owing to the unexpectedly high supply of foreign currency in December, mainly driven by psychological factors. Given the uncertain forecasts for the euro area and the endurance of Euro, domestic agents preferred to hold denars, causing higher supply of foreign currency on the currency exchange and foreign exchange markets. In 2011, the currency exchange operations induced historically highest net purchase in the total amount of Euro 1.076.1 million. The notable increase of supply of foreign currency (of 7.1% on annual basis), amid moderate fall of the demand (of 3.4%), accelerated the total turnover on this market by 5% (compared to the decline in 2010<sup>127</sup>), valued at Euro 1,701 million. In 2011, the turnover on the foreign exchange market totaled Euro 7,361.4 million, and compared to the preceding year is by 19.7% more. In the transactions of banks with clients 129, the turnover increased owing to the significant rise of supply of compared to the demand for foreign currency, thus decreasing the volume of total net sale of foreign currency from banks to clients (by 27.6%), reducing it to Euro 315 million. Nevertheless, the transactions of banks with companies in this market segment indicate wider gap between the supply of and the demand for foreign currency by the companies (the previous year this gap narrowed), which is in line with the balance of payments developments related to the companies' trade and financial transactions. In 2011, the turnover on the interbank segment increased by 32.8% annually.





<sup>1</sup>Estimated GDP data for 2010 and GDP projection for 2011. Source: National Bank of the Republic of Macedonia.

In spite of the oscillations during the year, at the end of 2011, the foreign reserves went up annually and reached historically highest level of Euro 2,069 million. Analyzing the dynamics, the second quarter reported quarterly decrease of foreign

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<sup>&</sup>lt;sup>127</sup> In 2010, the restrained behavior of economic agents typical during the crisis, kept on diminishing, and contributed to further decrease of the demand for foreign currency (32.5% on annual basis) and of the turnover.

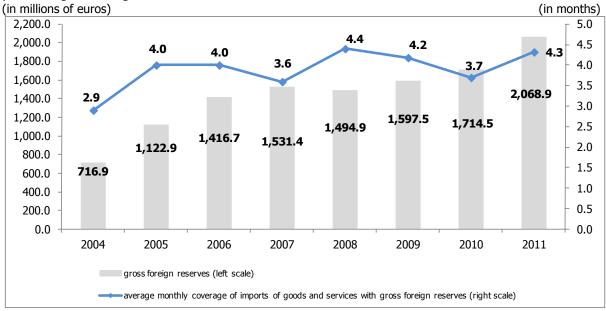
<sup>&</sup>lt;sup>128</sup> Refers to transactions executed on the foreign exchange market among banks, among banks and clients and among NBRM and banks and ministries.

<sup>129</sup> Includes transactions with companies, currency exchange agents, nonresidents and natural persons.

The supply partially increased due to the high purchase of foreign currency from nonresidents in the last month of the year.

reserves, with the fastest rise being registered in the first and the last quarter, due to the government drawdown of a portion of the IMF's Precautionary Credit Line (in March) and the loan under the Policy Based Guarantee Program between the Republic of Macedonia and the World Bank (in December). Additional contribution to the increase of foreign reserves was made in December through NBRM interventions, i.e. high net purchase of foreign currency on the foreign exchange market. Thus the net purchase of foreign currency on the foreign exchange market, including the government borrowing from abroad, had a positive effect on the foreign reserves. Having a strategy for maintaining stability of the nominal value of Denar against the Euro, the rise of foreign reserves means substantial improvement of the domestic economy resilience and strengthened monetary policy capacity to address any adverse shocks in the future. Reserve adequacy indicators for 2011 demonstrate satisfactory level of foreign reserves. Thus, as of December 31, 2011, the gross foreign reserves ensure coverage of the import of goods (f.o.b.) and services for 4.3 months of the following year and coverage of the domestic monetary system liabilities to the private sector of 50% (gross foreign reserves -to- broadest money supply M4 ratio). The indicator for the coverage of external short-term debt at residual maturity with foreign reserves also demonstrates satisfactory level of foreign reserves, which as of December 31, 2011, equaled 0.9.

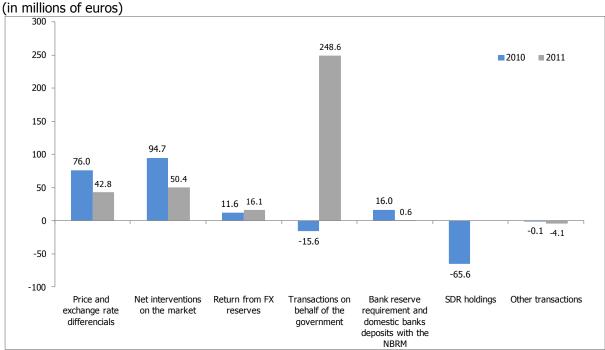
Figure 112
Gross foreign reserves and monthly coverage of import of goods (f.o.b.) and services of the following year with gross foreign reserves \*



<sup>\*</sup>Data on import of goods (f.o.b.) and services of the following year for the 2005-2011 period are based on actual amounts, and for 2012 they are projected.

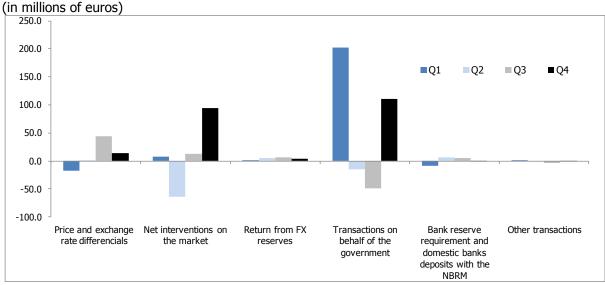
Source: National Bank of the Republic of Macedonia.

Figure 113
Change factors of the gross foreign reserves in 2010 and 2011



Source: National Bank of the Republic of Macedonia.

Figure 114
Quarterly distribution of change factors of the gross foreign reserves in 2011



Source: National Bank of the Republic of Macedonia.

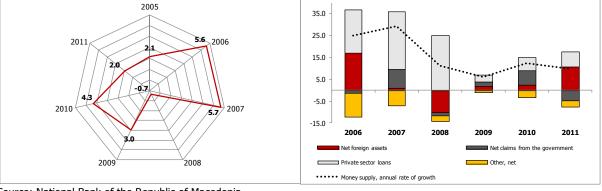
## 3.3. Monetary aggregates

The increased activity in the real sector, and the intensification of credit flows in the domestic economy allowed further increase in total money supply. Thus, in 2011, the broadest money supply M4 registered annual growth of 9.7%, with all its components being moved into the zone of positive annual changes. Creating additional money supply in the economy corresponds with the growth of economic activity, the increase in the general price level, the acceleration of credit activity and the favorable position of the balance of payments. However, the pace of growth of the money

supply in 2011 was slightly slower compared with the previous year. Regarding the factors of the money supply creation, such dynamics can partly be explained by the structure of net inflows within the balance of payments. Namely, in 2011, the improvement of the external position of the economy was a result of the large external government debt, which in part remained sterilized on the account of the government with the NBRM. Also in 2011, the nominal growth of money supply was faster than the nominal annual GDP growth, whereby the uptrend of monetization rate was maintained, although it was slower. In 2011, it reached 56.7%, versus 54.8% in 2010.

Figure 115 Monetization rate Annual change in percentage points

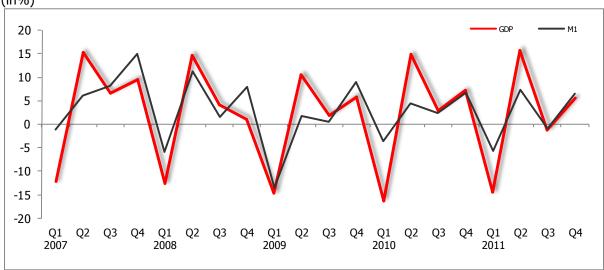
Figure 116
Contribution to the annual growth of M4
(in percentage points)



Source: National Bank of the Republic of Macedonia.

In terms of the individual components of money supply, in 2011, the growth of assets for transaction purposes continued. Thus, the monetary aggregate M1 (currency in circulation and demand deposits) registered an annual growth of 6.8%. The positive dynamics of the monetary aggregate M1 from the previous year continued, and corresponded with the growth of the economic activity. The data show an extremely high correlation between the changes in this monetary aggregate and the changes in the nominal GDP, pointing to the importance of this component as an indicator of money demand for transaction purposes. However, the growth of the monetary aggregate M1 in 2011 was slightly slower than in the previous year, and also a moderate decrease was noted in its contribution to the growth of the total money supply. Thus, the contribution of the monetary aggregate M1 in the annual growth of the M4 money supply was 17.5%, versus 20.3% in the previous year. Lowering of the contribution of this component at the expense of the growing importance of the deposit potential in creating the overall money supply is an indicator of increased preferences for saving. Such movements generally indicate positive perceptions and favorable expectations regarding the stability of the economic environment and safety of the banking system. The analysis of the maturity structure of the deposit base confirms this conclusion. Namely, although in 2011 the contribution of long-term savings in the total monetary growth fell from 38.4% in 2010 to 32.7%, most of it was due to movements in the last month. During this period, the lack of confidence in the Euro sparked growth in the demand for Denar cash and short-term Denar deposits. If we exclude this shock, we may say that the role of longterm savings for the creation of money supply during the year was generally higher compared with the previous year.

Figure 117
Quarterly change in the nominal GDP and money supply M1



Source: National Bank of the Republic of Macedonia.

Table 18
Components of monetary aggregates

(in millions of denars)

in millions of acrid	,	Current			Annual chance	ie.	Contributio	n in annual gi	owth of M4
	31.12.2009	31.12.2010	31.12.2011	31.12.2009	31.12.2010	31.12.2011	31.12.2009	31.12.2010	31.12.2011
	in millions of denars	in millions of denars	in millions of denars	in %	in %		in %	in %	in %
Currency in circulation	16,266	16,958	19,297	-7.6	4.3	13.8	-11.4	2.7	10.4
Demand money	35,957	40,404	41,991	-1.5	12.4	3.9	-4.8	17.6	7.1
M1	52,223	57,362	61,288	-3.5	9.8	6.8	-16.2	20.3	17.5
Short term denar deposits	45,735	51,296	58,293	-7.8	12.2	13.6	-32.8	22.0	31.2
Short term foreign currency	88,025	92,921	97,101	17.1	5.6	4.5	109.4	19.3	18.6
M2	185,983	201,579	216,682	4.0	8.4	7.5	60.5	61.6	67.3
Long term denar deposits	8,791	15,118	21,966	10.0	72.0	45.3	6.8	25.0	30.5
Long term foreign currency	12,488	15,872	16,372	44.4	27.1	3.2	32.7	13.4	2.2
M4	207,262	232,568	255,020	6.0	12.2	9.7	100.0	100.0	100.0

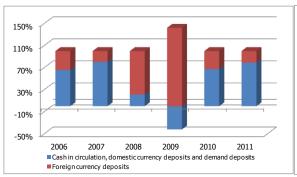
Source: National Bank of the Republic of Macedonia.

The year 2011 was marked by a relatively high growth of currency in circulation, with the annual growth rate of the cash currency in December being **13.8%.** The dynamics of the annual growth in the currency in circulation exceeds the growth of nominal GDP, and also the growth rate is the highest in four years. Such an increase in the intensity of currency in circulation is mainly a result of some extraordinary factors. Namely, due to the escalating debt crisis in the Euro area and ensuing speculations about the "survival of the Euro", households responded with increased conversion of Euros in Denars, which culminated in the first decade of December, before the EU summit. These developments have contributed to the growth in the demand for currency in circulation. Such movements represent a combined effect of the conversion of the savings into Euro from "under the mattress" into Denars, and the possible diversion of part of foreign exchange deposits into Denar cash. Increased demand for currency in circulation has led to some shifts in the contribution of individual components in the structure of the M1 growth in the direction of greater contribution of currency in circulation relative to demand deposits, unlike in 2010 when the contribution of the demand deposits was more pronounced. **The** uncertainty about the situation in the Euro area reflected also on the currency structure of deposits, with the emphasized preference for saving in Denars. Under these conditions the contribution of the Denar component of M4 money supply (currency in circulation, demand deposits and Denar deposits) for its overall growth in 2011, was higher

than in the same period last year. Thus, the "denarization" of the money supply continued during 2011, with faster pace in the last month of the year.

Figure 118
Share of the growth of individual components in the annual growth of the money supply M4 (in %)

Figure 119
Degree of euroisation expressed through participation of foreign currency deposits in the broadest money supply

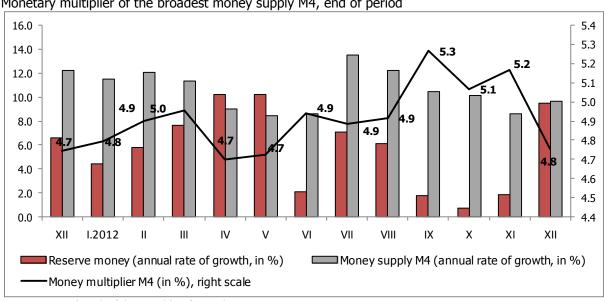




Source: National Bank of the Republic of Macedonia.

In conditions of more intensive growth of the money supply relative to the growth of reserve money, in 2011, the process of monetary multiplication accelerated. Thus, the average multiplier of the broadest money supply M4 in 2011 was 4.9, versus 4.7 in the previous year. The volatility of the monetary multiplier during the year was slightly higher than in the previous year, but generally it was low. Moreover, in most of the year monetary multiplication was below average, except for the period from September to November. In September, the process of monetary multiplication accelerated, due to a significant reduction in the level of Denar liquidity within the reserve money. Namely, in this period, in line with the changes announced in the Decision on liquidity risk management, part of the banks temporarily reduced liquidity due to investment in treasury bills. Later, liquidity positions were corrected by reducing the investments in the six-month deposit, whereby the monetary multiplier gradually stabilized.





Source: National Bank of the Republic of Macedonia.

The analysis of the changes in the broadest money supply in the countries of the region and in the Euro area, generally indicates lower annual growth at the end of 2011 compared with the previous year. Within the analyzed countries, the highest annual growth in the broadest money supply was registered in Bulgaria, Serbia and Macedonia of 12.5%, 10% and 9.7% respectively. The slowdown in the annual growth dynamics of the broadest money supply could be explained by the changes in the economic activity in the second half of the year, the movements on the labor market and the dynamics of lending activity. Increased uncertainty and slowdown in the economic activity in the Euro area in the second half of the year affected also the regional economies in terms of slowing down the economic growth and worsening the conditions on the labor markets that led to slower growth of savings. Namely, the slower economic activity in the second half of the year affected the lower growth of money supply in Albania and Serbia, while in Romania, Croatia, Bosnia and Herzegovina, Serbia and the Euro area a significant effect on the slower growth of the money supply was that of the reduced savings of the population as a result of rising unemployment and annual reduction in real wages in some of these countries. In Croatia and Serbia additional factor that acted on the annual slowdown in the growth of the broadest money supply was the lower credit growth in 2011 compared with the previous year. Regarding the structure of the components that contributed to the growth of the broadest money supply in 2011, in all countries analyzed, dominant was the contribution of the growth of deposits relative to the growth of the narrower money supply M1.

Annual growth rates of M4 by country

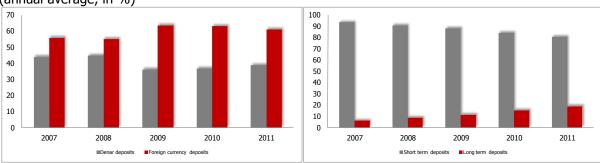
(in %)		
Macedoni	a	T

	2005	2006	2007	2008	2009	2010	2011
Macedonia	15.0	25.0	29.3	11.2	6.0	12.2	9.7
Romania	33.8	28.1	33.5	17.5	9.0	6.9	6.6
Albania	13.9	16.3	13.7	7.7	6.8	12.5	9.2
Croatia	10.5	18.0	18.3	4.3	-0.9	4.4	3.5
Bosnia and Herzegovina	18.2	24.2	21.7	3.5	2.1	7.4	4.8
Bulgaria	23.9	26.9	31.2	8.8	4.2	6.2	12.5
Serbia	42.1	38.3	42.5	9.8	21.5	12.9	10
Euro-zone	8.6	9.4	11.4	8.4	-0.4	2.0	1.6

Source: IFS.

Deposit potential of banks (without demand deposits) continued to rise in 2011, but at a slower pace compared with the previous year. The total annual growth of deposits was 10.6%, versus 13% in the previous year. **Sectoral analysis shows** dominant contribution of the household savings in expanding the total deposit base. These movements are common and in accordance with the surplus nature of this sector. However, common for 2011 is the significant reduction in the share of growth of household deposits in the total deposit potential. On the other hand, the saving of the corporate sector grew in 2011, after two years of decline, contributing positively to the growth of total deposits. In terms of the shares of deposits of individual sectors in the total deposits, in 2011 the share of deposits in the structure of total deposits grew and reached 75.9%, with almost unchanged share of deposits of enterprises compared with the previous year.

Figure 121 Share of major components in the total deposits (annual average, in %)



Source: National Bank of the Republic of Macedonia.

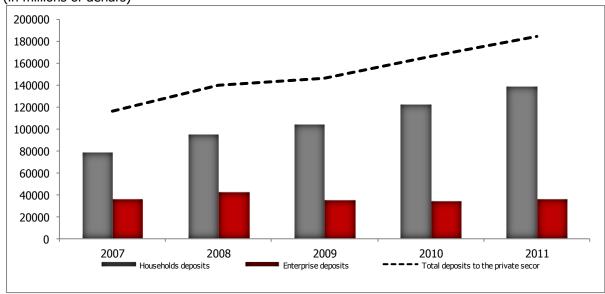
Table 20 Structure of total private sector deposits

in millions or den	Current				Annual change			Contribution in annual growth of total deposits		
	31.12.2009	31.12.2010	31.12.2011	31.12.2009	31.12.2010	31.12.2011	31.12.2009	31.12.2010	31.12.2011	
	in million denars	in million denars	in million denars	in %	in %	in %	in %	in %	in %	
Total deposits of the private sector	155,039	175,206	193,732	9.6	13.0	10.6	100	100	100	
Maturity structure Short term deposits Long term deposits	133,760 21,279	144,217 30,989	155,394 38,338	7.2 27.9	7.8 45.6	7.7 23.7	66.0 34.0	51.9 48.1	60.3 39.7	
Currency structure Denar deposits Foreign currency deposits	54,526 100,513	66,414 108,793	80,259 113,473	-5.3 19.9	21.8 8.2	20.8 4.3	-22.4 122.4	58.9 41.1	74.7 25.3	
Sector structure Enterprises Households	34,437 111,783	34,353 131,105	37,354 146,979	-12.4 12.8	-0.2 17.3	8.7 12.1	-35.8 93.1	-0.4 95.8	16.2 85.7	

<sup>\*</sup> deposits exclude demand money

Source: National Bank of the Republic of Macedonia.

Figure 122 Average deposits of private sector excluding demand deposits (in millions of denars)



Source: National Bank of the Republic of Macedonia.

The growth dynamics of total household deposits (excluding demand deposits), gradually decelerated during 2011 and in December it reduced to

**12.1%, versus 17.3% at the end of 2010**<sup>131</sup>. Growth of household deposits in 2011 was lower compared with 2010, making their contribution to the growth of total deposits decrease by 10.1 percentage points, reducing to 85.7%. The gradual slowing of the growth in household deposits, and the smaller amount of newly created deposits (including demand deposits) are explained by movements in the underlying fundamentals that determine the income of the population. The gradual slowing of the annual growth in nominal net wages, pensions, and the slowing of the annual growth rate in the number of employees, are factors that contributed to the reduction of the growth dynamics of the household savings. Additional factors that affected the slower growth of savings are also the gradual reduction in deposit interest rates (domestic and foreign currency), and reduced inflow of funds on the basis of private transfers in the first half of the year.

200000 35.0 180000 30.0 160000 25.0 140000 120000 20.0 100000 15.0 80000 60000 10.0 40000 5.0 20000 0 0.0 2005 2006 2009 2011 2007 2008 2010 Currency in circulation and transaction accounts of households Households deposits Coefficient of the two components (right scale)

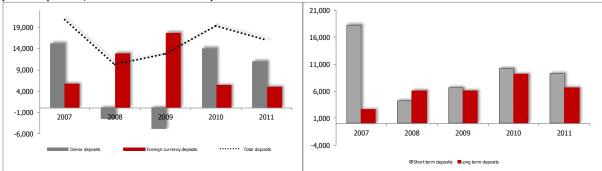
Figure 123
Ratio GPO + transaction deposits / household deposits

Source: National Bank of the Republic of Macedonia.

Regarding the maturity structure of household deposits, in 2011 reorientation of the households from long to short-term savings was observed, which was a result of the developments in the last month of the year. Uncertainty created by the problems in the Euro area has led to reorientation of the households to shortterm savings due to the lower risk, in conditions of keeping the interest margins between long-term and short-term foreign currency deposits at nearly the same level as in 2010. Under these conditions, the growth of long-term household deposits significantly slowed from 48.7% at the end of 2010 to 23.7% at the end of 2011, while the slowing of the growth of short-term deposits was more moderate (from 10.9% in 2010 to 9% in 2011). Accordingly, the contribution of short-term deposits in the growth of the total household deposits increased by 5.6 p.p. and reached 58.3%. However, if one excludes such a shock that occured in December 2011, we may say that the contribution of long-term household savings for the creation of the total deposits during the year was higher relative to the contribution of short-term savings. Currency structure of household deposits shows increased preference for saving in domestic currency, which was most pronounced in December 2011, due to the escalating debt crisis in the Euro area, leading to increased conversion of savings deposits of households from Euros into Denars.

<sup>&</sup>lt;sup>131</sup> Same annual pace of slowing the growth of household deposits is obtained also if household demand deposits are included.

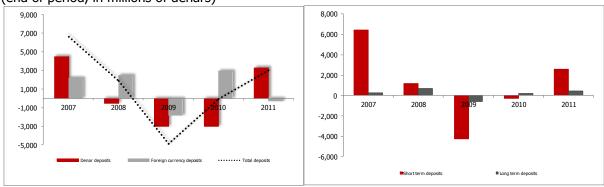
Figure 124
Annual change of the main components of household deposits (end of period, in millions of denars)



Source: National Bank of the Republic of Macedonia.

Despite the decline in the previous two years, in 2011, corporate deposits (excluding demand deposits) registered an annual growth of 8.7%. Higher level of corporate deposits in 2011 corresponds with the intensification of the economic activity in the country, the improved financial performance of the business sector, increased lending by banks and the increase in the external financial inflows in the domestic corporate sector. During the year, corporate deposits generally followed a rising path. However, in April their greater reduction was registered due to the payment of a higher amount of dividend of a domestic company to both the Government and the foreign investor. Regarding maturity, in 2011 enterprises were focused on short-term saving, so that the share of short-term deposits in the growth of total deposits of enterprises reached 85.6%. Namely, unlike in 2010, when short-term deposits declined on an annual basis, in 2011 they increased by 7.9%. In terms of currency, corporate deposits registered a significant change. The deposit growth was driven exclusively by the newly created Denar deposits, while deposits in foreign currency declined on an annual basis. The change in the currency structure of the newly created corporate deposits can be explained by deepening of the deficit in the foreign trade of goods in the balance of payments, as the enterprises used part of the foreign currency deposits for payment of purchases from abroad. In line with this change in the currency structure of the newly created corporate deposits, the share of Denar deposits in the total deposit structure of enterprises increased by 5.7 p.p. in 2011 and reached 44.7%.

Figure 125
Annual change of the main components of the corporate deposits (end of period, in millions of denars)

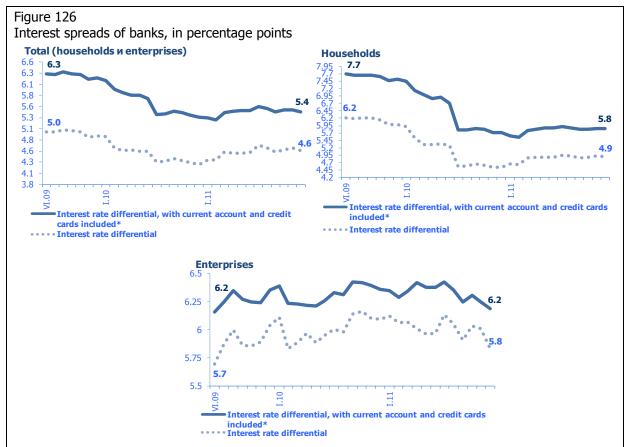


Source: National Bank of the Republic of Macedonia.

# Annex 7: Analysis of the effect of the interest rates on current accounts and credit cards on interest rate spreads of banks

As of January 2012, NBRM supplemented the current methodology for calculating the interest rates of banks, which resulted in an expanded and qualitatively enriched database on interest rates in the Macedonian banking system. The amendment initiated calculation of the interest rates on current accounts (lending and deposit) and interest rates on credit cards, for which data are available from June 2009. These new categories of interest rates are published as a supplement to the regular set of interest rates and are not included in the calculation of the total aggregate interest rates that banks claim/owe on the total domestic and foreign currency loans/deposits. This is because it is a specific category of most liquid instruments whose interest rates are essentially different from the interest rates on other credit/deposit instruments. On the other hand, banks' activities related to current accounts and credit cards, greatly affect the level of interest income that banks realize from their lending/deposit activities. This Annex analyzes the dynamics of the interest rate spreads of the banks, with and without the included effect of interest rates on current accounts and credit cards, in order to obtain a clearer picture on the ability of the banking sector to generate interest income based on the total lending/deposit activities with the private sector.

Deposit/lending services to the private sector occupy a significant portion of the total activities of the Macedonian banking system. Thus, the share of total loans and total deposits in the total assets and liabilities of banks in the last five years has averaged 55% and 62%, respectively. Hence they are expected to have significant contribution in generating the total net interest income of banks. On the other hand, according to the statistics of interest rates, overdrafts on current accounts and credit cards in the period June 2009 - December 2011 covered, on average, 11% of total loans to households and enterprises, while on the liabilities side, current accounts for the same period had an average share of 18% in the total deposits of households and enterprises. Moreover, considering the fact that on the assets side, banks on average charge the highest interest rates on credit cards and overdrafts on current accounts, while on the liabilities side, interest rates on current accounts are lowest on average, it is expected that by including these new categories, interest rate spread will widen. Thus, as shown by Figure 124, if we include the effect of interest rates on current accounts and credit cards we obtain wider interest rate spread, which within the entire analyzed period (June 2009-December 2011) is maintained at a level higher by about 1 percentage point, on average. This difference is largely driven by the household sector, given that the population is the dominant user of banking services related to using overdrafts on current accounts and credit cards. With the enterprises, the difference between the interest rate spreads with and without the included effect of interest rates on current accounts and credit cards is negligible and the average for the analyzed period was 0.3 p.p. Based on the dynamics of the two alternative measures for the interest rate spreads, it may be concluded that through the banking services related to the offer of current accounts and credit cards, banks obtain in an interest rate spread one more percentage point, on average, and that is at the expense of the household sector.

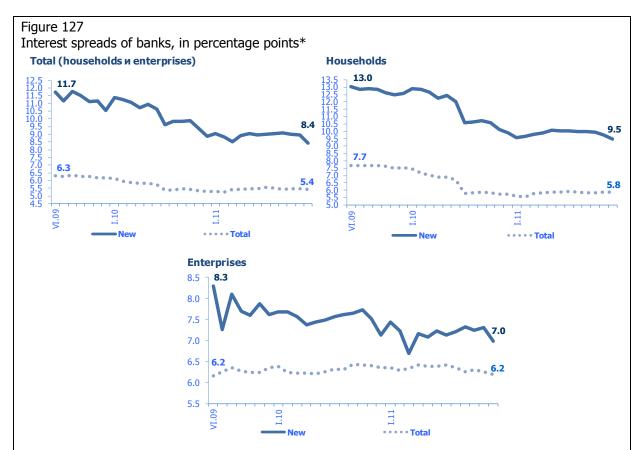


Spreads are calculated as the difference between total interest rate loans (domestic and foreign currency) and the total interest rate of deposits (domestic and foreign currency).

\* Calculations of the Research Directorate.

Source: NBRM.

Furthermore, we analyze the interest rate spreads of banks, with included effect of current accounts and credit cards, using two different criteria: 1) interest rate spread calculated as the difference between interest rates on total loans and total deposits (weighted by the stock of total loans and total deposits in a given period), and 2) interest rate spread calculated as the difference between interest rates on newly granted loans and newly accepted deposits (weighted by the amount of newly granted loans and newly accepted deposits in a given period). Moreover, it is important to note that both approaches to calculate the interest rate spreads have their drawbacks, which should be taken into consideration when drawing conclusions on the dynamics of the interest rate spreads in the domestic banking sector. The interest rate spread based on the interest rates on total loans and total deposits may show a tendency to illustrate the effects of past activities of banks, given that in the calculation of total lending and deposit interest rates the stocks of total loans and total deposits are used as weights. This is particularly apparent in conditions of significant changes in the dynamics of deposit and credit activity or significant changes in the principles of defining the cost of loans and deposits by banks. In this context, interest rate spreads calculated on the basis of interest rates on newly granted loans and newly accepted deposits may serve as a suitable indicator of ongoing changes in the dynamics of the interest income of banks. On the other hand, the drawback of the interest rate spread calculated on the basis of the new activities of banks is that it may be heavily influenced by the revolving activities of banks, i.e., its dynamics may be predominantly determined by short-term lending activities.



\* Calculations of the Research Department: Interest rate spreads include interest rates on current accounts and credit cards. Total - interest rate spreads are calculated as the difference between the total interest rate on loans (Denar and foreign currency) and the total interest rate on deposits (Denar and foreign currency).

New - interest rate spreads are calculated as the difference between the interest rate on newly granted loans (Denar and foreign currency) and the interest rate on newly received deposits (Denar and foreign currency).

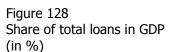
Source: NBRM.

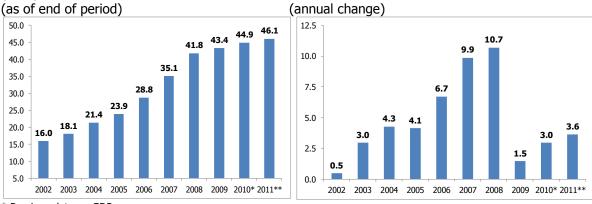
Figure 125 shows the movement of interest rate spreads of banks, with included effect of interest rates on current accounts and credit cards, calculated according to both approaches. Moreover, the period June 2009 - December 2011 is characterized by a process of narrowing of the interest rate spreads, both for the total and the new activities of banks. Interest rate spread of the new activities of banks within the entire period is maintained at a higher level, but with a tendency for more intense narrowing compared with the interest rate spread of the total activities of banks. This is especially pronounced in the household sector as a result of the reduction in lending interest rates in this period (largely influenced by the amendments to the Law on Obligations of 2010, which prescribed the manner of regulating the maximum contractual interest rate<sup>132</sup>) amid simultaneous smaller reduction in the deposit interest rates. These developments contribute to narrowing the gap between the interest rate spreads calculated on the basis of new activities and the interest rate spreads based on the total activities, which in December 2011 amounted to 3.6 p.p. and 0.8 p.p. in the household sector and the corporate sector, respectively (versus 5.4 p.p. and 2.1 p.p., respectively in June 2009).

<sup>&</sup>lt;sup>132</sup> With the Law Amending the Law on Obligations, applied from February 1, 2010, a change was made in the manner of determining the penalty interest rate, and also an obligation was set out that the contractual interest rates on bank loans may not exceed the penalty interest rate. The penalty interest rate shall be determined for each half-year period, in the amount of the interest rate on CB bills as valid on the last day of the half-year period preceding the current half-year period, increased by ten percentage points in trade agreements and contracts between merchants and persons of public law, i.e. increased by eight percentage points in contracts in which at least one person is not a merchant (previously this interest rate was determined according to the discount interest rate of the NBRM). NBRM is obliged to announce its key interest rate on its Internet site every second of January and every first of July, and it is applied in the current six months (until the end of the half-year period).

#### 3.4. Placements and interest rates of banks

During 2011, banks continued to increase the credit support to the domestic economy. At the end of the year, loans to the private sector were higher by 8.5% compared to the end of 2010. However, the annual growth of loans was moderately slower compared to the previous year, indicating deceleration of the recovery of the credit market. This conclusion is confirmed also by the changes in the indicators of the degree of financial intermediation. The share of loans in GDP in 2011, increased by 0.6 p.p. on annual basis and accounted for 3.6% of GDP, unlike the previous year when the share doubled and amounted to 3%. The analysis of the dynamics during the year shows sensitivity in the behavior of the banks to the signals from the external economic environment, to the available indicators for the domestic economy and to their expectations for the next period.





\* Previous data on GDP.

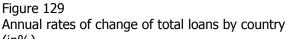
\*\* Estimated data on GDP. Source: NBRM and SSO.

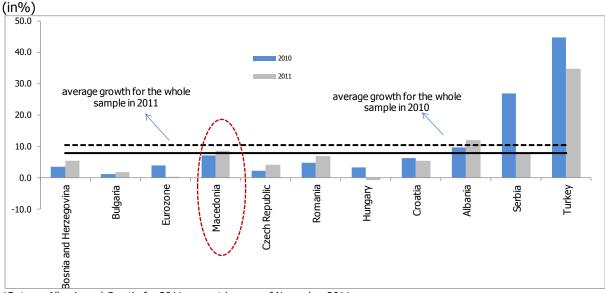
When analyzing the movements on the credit market, two periods may be differentiated. In the first half of the year, the activity on the credit market grew at a relatively faster pace. The volume of new lending in this period reached about 80% of the growth of loans for the entire 2010. Such shifts in the credit market segment were a combination of the positive impulses from both the supply of and the demand for loans. Accelerated pace of recovery of the credit market in the first half of the year is explained by domestic and external factors. Thus, in this period the domestic economy grew at pre-crisis growth rates, which meant a favorable economic environment and generally improved expectations. On global and European level, the signals were also more positive and indicated that the risk of escalation of the debt crisis and its spillover into a systemic risk is within a controlled framework. An additional positive element was the improvement of the fundamentals of the European banking sector and its capacity to absorb shocks (evident, for example, from the aggregated indicators of profitability, solvency and capitalization of banks)<sup>133</sup>. However, the favorable expectations about macroeconomic and financial conditions were surrounded by predominantly negative risks that materialized in the second half of the year. During this period, the debt crisis in the Euro area intensified, bringing into question fiscal sustainability in several **European countries.** In such conditions, sources of funding for banks in the international

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<sup>&</sup>lt;sup>133</sup> ECB, Financial Stability Review, June 2011.

capital market narrowed, and the cost of financing the banking activities increased. These factors led to a process of "deleveraging" of the Western European banks, thereby reducing the credit support for the real economy. The negative relation between the public and the financial sectors meant deteriorated performance of the real sector and a significant deterioration of the economic prospects of European and global economy for the next period. The process of "deleveraging" of the Western European banks had an adverse effect also for the other European countries and countries in the region, given the generally high participation of Western European banks in their banking sectors. Credit growth in these countries was maintained relatively low, and in some of them a slowdown in growth rates was also registered, partly as a reflection of the external influences, but also of the changes in the dynamics of the deposit potential, domestic economic activity and expectations.

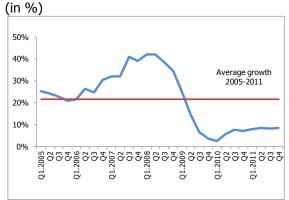


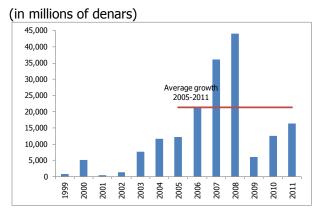


\*Data on Albania and Croatia for 2011 present loansas of November 2011. Source: Eurostat, NBRM and the websites of respective central banks.

In the second half of the year, the Macedonian economy also experienced the effects of the global developments, primarily through reduced export demand for domestic products and worsened expectations of domestic actors. Under these conditions, the behavior of domestic banks was more restrained, and lending slowed down. The slower activity of the credit market was a result of factors on the supply side due to the more conservative behavior of banks, but also of the reduced demand for loans compared with the first half of the year. The uncertainty about the future income position of the households and future financial flows of enterprises reduced the "appetite" for more borrowing.

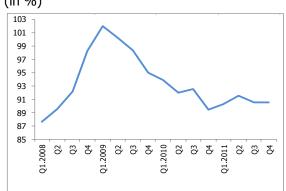
Figure 130 Annual change of total loans





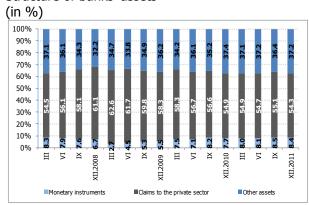
Source: National Bank of the Republic of Macedonia.

Figure 131 Loans to deposits ratio (in %)



Source: National Bank of the Republic of Macedonia.

#### Structure of banks' assets



The aversion of the banks toward accepting greater risks in an unstable environment, the focus on quality credit demand and on maintaining the quality of the loan portfolio, led to further decrease in the degree of utilization of the deposit potential. Thus, during 2011, loans to deposits ratio continued to follow the generally downward path and averaged 90.2%, versus 92.6% in 2010. But given the more restrained credit policy in 2011, one portion of the financial capacity of banks, predominantly composed of deposits of the domestic private sector, was directed towards investments in risk-free instruments (CB bills and Treasury bills) and maintenance of relatively high liquidity position. Such investment preferences of banks resulted in reduced average share of loans to the private sector in the total assets at the expense of the increased share of the investment alternatives bearing lower risk.

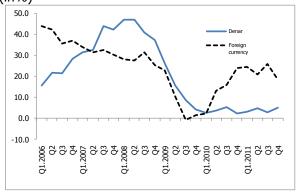
Table 21
Total loans to banks
(in millions of denars)

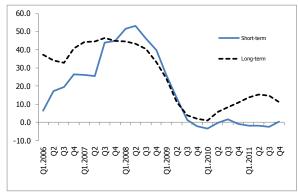
	Balance as of	Balance as of	Annual change		Share in the annual growth of total credits	
	31.12.2010	31.12.2011	in Denar mil.	in %	2010	2011
Total credits	190,816	207,113	16,297	8.5	100%	100%
Denar*	142,457	149,800	7,343	5.2	25.8	45.1
Foreign currency**	48,359	57,313	8,953	18.5	74.2	54.9
Short-term	52,565	52,690	125	0.2	-4.1	0.8
Long-term	118,954	132,106	13,152	11.1	91.7	80.7
Doubtful and contested claims	17,284	20,074	2,790	16.1	12.4	17.1
Households	75,525	81,640	6,115	8.1	29.0	37.5
Denar	70,452	75,093	4,641	6.6	19.0	28.5
foreign currency	5,073	6,546	1,474	29.1	10.0	9.0
short-term	16,814	16,346	-469	-2.8	-6.3	-2.9
long-term	51,231	57,658	6,427	12.5	32.7	39.4
Doubtful and contested claims	6,219	6,206	-13	-0.2	2.9	-0.1
Enerprises	115,109	125,072	9,963	8.7	70.9	61.1
Denar	71,858	74,342	2,484	3.5	6.6	15.2
foreign currency	43,251	50,730	7,479	17.3	64.3	45.9
short-term	35,705	36,329	624	1.7	2.3	3.8
long-term	67,592	74,066	6,473	9.6	58.9	39.7
Doubtful and contested claims	11,061	13,868	2,807	25.4	9.5	17.2

<sup>\*</sup> Denar credits include credits with FX clause.

Source: NBRM.

Figure 132
Annual rates of change of loans in terms of currency structure (left) and maturity structure (right) (in%)





Source: National Bank of the Republic of Macedonia.

The perceptions of banks about the general economic situation, the quality of credit demand and the risk level are basic factors that influenced both the price of credits and the main cost of banks financing (price of deposits). Hence, in the first half of the year, along with the favorable sentiment, the interest rate policy of banks was aimed at a moderate relaxation and lending support. This policy mainly concerned the Denar lending in circumstances where the price of foreign currency loans remained stable throughout the year. Also, in this period, downward adjustment was reported in the interest rate on deposits. In the second half of the year, uncertainty and increased risk acted toward mainly unchanged cost of credits<sup>134</sup>, and the movement in the interest rates on deposits was also more stable. At the end of 2011, total interest rate on

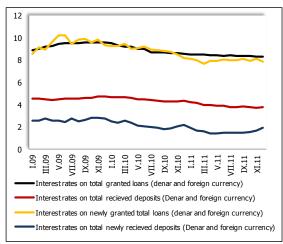
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<sup>\*\*</sup> Foreign exchange categories are valued at current exchange rate.

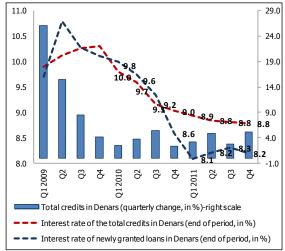
<sup>&</sup>lt;sup>134</sup> In this regard were the banks' perceptions given in the lending surveys for this period, where the risk of customers and economic situation were the main factors for restraint from a larger change in credit conditions.

deposits (Denar and foreign currency) was 3.8% (4.3% at the end of 2010), while the total interest rate on loans (Denar and foreign currency) was 8.3% (8.6% at the end of 2010).

Figure 133
Interest rates on total loans and deposits (in %)

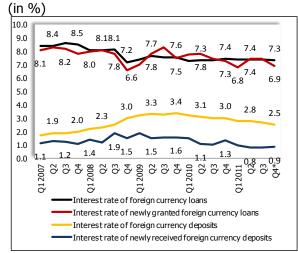


Lending Denar interest rate and total Denar credits

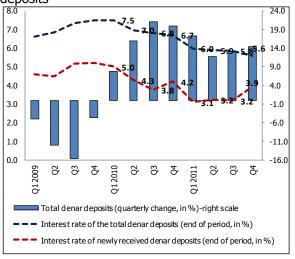


Source: National Bank of the Republic of Macedonia.

Interest rates on foreign currency loans and deposits



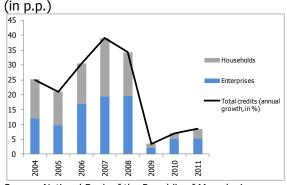
Deposit Denar interest rate and total Denar deposits



In terms of the sector structure, during 2011, banks increased their activity also in the segment of lending to households and in the corporate segment. However, common for this year was the faster pace of growth of household loans, while the growth of corporate loans slowed down. The accelerated growth of credit support of the households led to an increase in its contribution to the overall credit growth. Thus, in 2011, loans to households increased their contribution to the annual growth of total loans to 37.5%, versus 29% in the previous year. The movements in 2011 signaled a gradual change in the banks' perceptions of the risk profile of the household sector, which corresponds to the generally better economic environment and more favorable perceptions and expectations for the next period. Moreover, this change occurs after three years of continuous decrease of the relative importance of the household credit growth for total credit growth. The emergence of the global economic and financial crisis has created perceptions with banks for relatively increased risk of the households. Such perceptions partly reflect the precrisis less

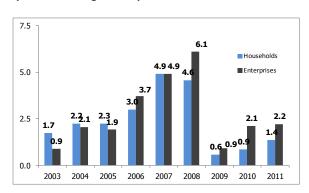
conservative approach to lending to the households, thus increasing the risk of negative feedback effects on the banking sector through this segment. Under these conditions, and amid the usual policy of keeping the business relationship with the corporate segment, as well as the focus of government measures on the credit support to the corporate sector<sup>135</sup>, the sectoral contribution to credit growth, from nearly balanced before the crisis, changed in favor of the corporate sector. The contribution of corporate loans remained dominant in 2011, although reduced, given the positive developments in the household loans.

Figure 134
Contribution to the growth of total loans, by sectors



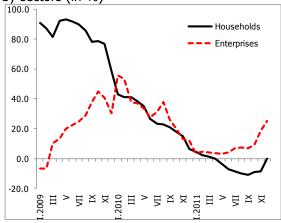
Source: National Bank of the Republic of Macedonia.

Share of loans by sectors in GDP (annual change in %)

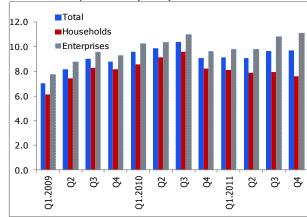


The more favorable perceptions of banks for the household sector are partly explained by the improved quality of the loan portfolio of this sector, as measured by the share of doubtful and contested claims to total loans. Namely, during the year this indicator had a predominantly downward trend, and in December it equaled 7.5%. For comparison, the dynamics of this indicator in the corporate segment showed deterioration, especially in the second half of the year, and in December it was 11.4%.

Figure 135
Annual growth of doubtful and disputed claims by sectors (in %)\*



Participation of doubtful and disputed claims in total loans by sectors (in %)



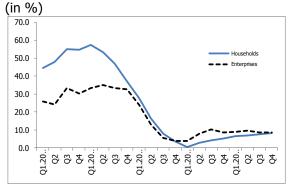
\* Part of the fast growth in the doubtful and contested claims in December was a result of the comparison basis Source: NBRM

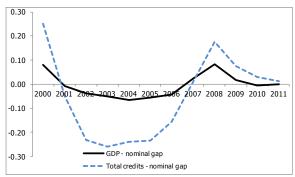
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<sup>&</sup>lt;sup>135</sup> Using a credit line from the EIB for financial support of the corporate sector.

Figure 136 Annual rates of change of loans in terms of sectoral structure

Dynamics of total loand and the economic cycle\*





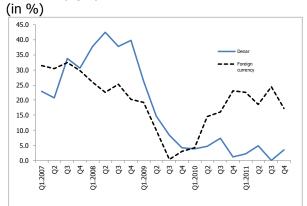
<sup>\*</sup> Nominal gaps of loans by sector and GDP are calculated on the basis of nominal amounts of loans and GDP, according to the following formula:  $GAP = (H^a - X^p) / X^p$ , where GAP represents the corresponding nominal gap,  $H^a$  is the realized level of the corresponding variable, while  $X^p$  is the potential level of the corresponding variable. To calculate the potential levels, HP-filter is used.

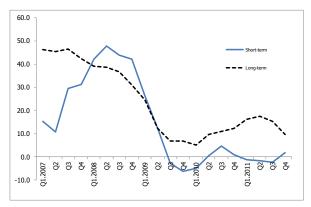
Source: NBRM.

In 2011, the annual growth of lending to the corporate sector amounted to 8.7%. On the supply side, banks abstained from major changes in the credit policy towards this sector, and also signs of tightening were present. On the demand side, there was an increased interest of the companies in bank loans during the entire year 136. In terms of currency, lending was mainly in foreign currency (contribution of 75.1%), whose annual growth rate was 17.3%. Factors that are usually associated with the bigger interest in foreign currency loans are the needs to meet the payments for imports, rationalization of costs (given the lower interest rate on these loans versus loans in Denars) and the use of part of the funds from the EIB credit line (European Investment Bank) in foreign currency. In terms of maturity, as before, also in 2011, banks credited the corporate sector, mainly in the long run. The growth of long term loans on an annual basis was 9.6%, and a modest growth of 1.7% was registered also in the short-term lending. On the demand side, according to the Lending Surveys, during the year, companies applied for loans, mainly for investment in inventory and working capital, investment in fixed assets and debt restructuring. Regarding the cost of enterprises for obtaining loans, interest rate on Denar loans registered a downward trend and for the year it averaged 8.6% (9.1% in 2010), while the interest rate on foreign currency loans was stable and averaged 7 5% and 7.3% for short-term and long-term foreign currency loans, respectively. As to the cost of the banks for collecting corporate deposits, downward adjustment is reported in both Denar and foreign currency deposits of 4.9% and 1.8% on average in 2010 to 4.4% and 1.4%, respectively in 2011. Thus, the interest rate margin on average remained unchanged.

<sup>&</sup>lt;sup>136</sup> Lending Surveys conducted in 2011.

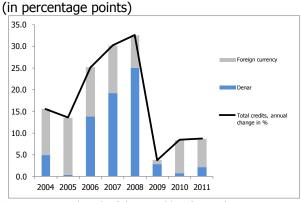
Figure 137
Annual growth rates of loans to enterprises in terms of currency structure (left) and maturity structure (right)

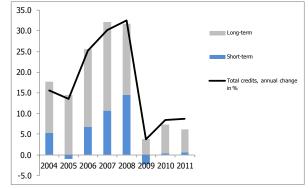




Source: National Bank of the Republic of Macedonia.

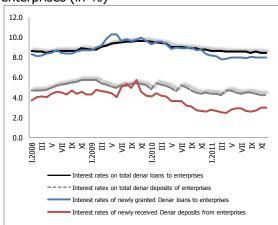
Figure 138
Contributions to the annual growth of loans to enterprises



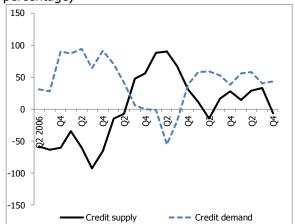


Source: National Bank of the Republic of Macedonia.

Figure 139 Lending and deposit interest rates of enterprises (in %)



Changes in supply and demand for loans (net percentage)\*

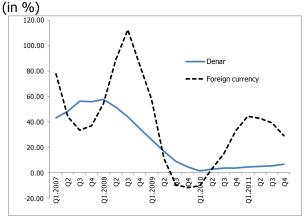


<sup>\*</sup> Changes in the credit supply pertain to the net percentages of banks' responses to the question about the change in the terms of lending. The increase in the net percentage means tightening of the credit conditions and consequently reducing the credit supply and vice versa. Changes in credit demand are related to the net percentages of the answer to the question about the direction of the change in the credit demand. Increase in the net percentage denotes an increase in the credit demand and vice versa.

Source: Lending Survey, NBRM.

The households segment registered an annual credit growth of 8.1%, with favorable movements in both the supply and the demand for loans. In terms of currency, as before, lending was mainly in Denars, with a contribution of 75.9% in the annual growth in the total loans to households. In terms of maturity, as in the previous year, lending was entirely in the long run. The increased lending to the households segment was supported by the lowering of the interest rate, especially on Denar loans (from 10% on average in 2010 to 9.2% on average in 2011), which corresponds to the decrease in the yield on Denar deposits (which averaged 6.3%). Unlike last year, more pronounced reduction of the interest rate on deposits compared to that on loans was registered. The absence of greater competition and the high concentration of banks probably allowed greater reduction in the yields from savings of households. However, the analysis of the dynamics by month shows that in parallel with the rising uncertainty regarding the crisis in the Euro area, in recent months of the year growth was registered in the yield on the new saving of households, which constitutes nearly 70% of the deposit base of banks.

Figure 140
Annual growth rates of loans to households in terms of currency structure (left) and maturity structure (right)



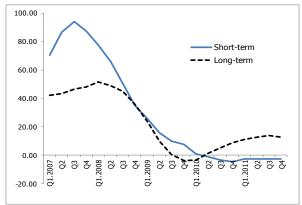
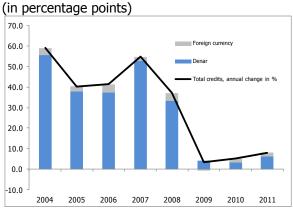
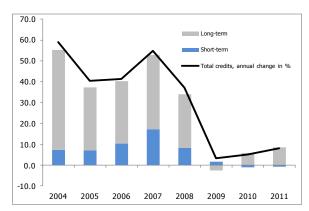


Figure 141 Contributions to the annual growth of loans to households



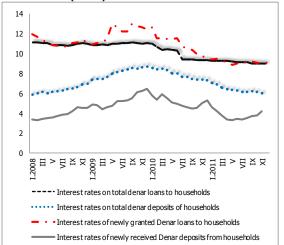


Source: National Bank of the Republic of Macedonia.

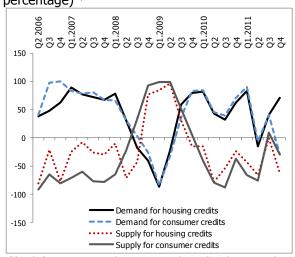
Regarding the purpose, most of the loans in this market segment are in the form of consumer loans, with a contribution of 76% to the annual growth in total loans to households and annual growth of 18.7%. The dynamics of the movement of these loans, together with other loans that support consumption, such as overdrafts on current accounts, corresponds with the dynamics of private consumption. Thus, in the first half of the year, the growth in these loans was faster compared with the second half when it slowed down.

According to the Lending Surveys, the demand for consumer loans, on average for the entire year, was supported by the confidence and savings of the consumers, as well as by spending on durables. On the supply side, during the first half of the year banks' perceptions for eased terms for these loans prevailed, while in the second half, the conditions were largely unchanged. As for the other types of loans, housing loans had the second largest share in the growth of total loans to households, and on an annual basis they were higher by 13.1%. Their growth is a combined effect of the increase in both the demand and the supply. Regarding the demand, factors that supported the demand for housing loans during the year were the confidence and savings of the consumers. Categories which continued to decline during 2011, were car loans and credit cards (22% and 6.1%, respectively, on an annual basis).

Figure 142 Lending and deposit interest rates of households (in %)



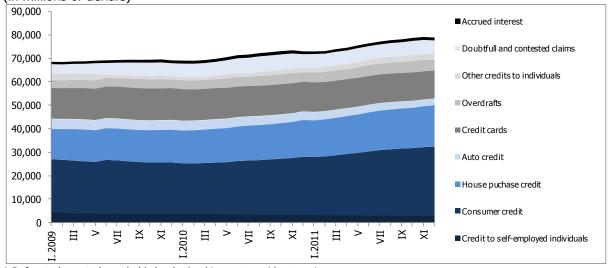
Changes in supply and demand for loans (net percentage) \*



<sup>\*</sup> Changes in the credit supply pertain to the net percentages of banks' responses to the question about the change in the terms of lending. The increase in the net percentage means tightening of the credit conditions and consequently reducing the credit supply and vice versa. Changes in credit demand are related to the net percentages of the answer to the question about the direction of the change in the credit demand. Increase in the net percentage denotes an increase in the credit demand and vice versa.

Source: Survey on the lending activity, NBRM.

Figure 143
Loans to households by purpose \*
(in millions of denars)



<sup>\*</sup> Refers to loans to households by the banking sector without savings. Source: NBRM.

# Annex 8: Panel autoregressive-vector analysis of the link between economic and credit activity in the countries of Southeast Europe

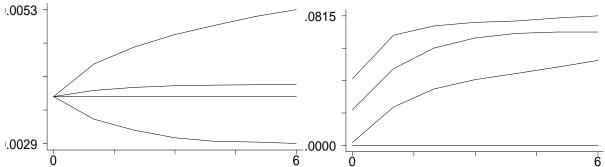
The process of acceleration of the economic growth in the countries of Southeast Europe (SEE) is accompanied by a process of financial deepening. Within that particular group of countries there are differences in the initial conditions of financial intermediation, the speed of credit and economic growth, the starting point of more intense financial deepening, as well as in the synchronization of the phases of the economic and credit cycles. However, the recent global economic and financial crisis has produced a common feature of these economies. In all of them, the crisis has caused serious adverse effects on the real sector capacity and serious disruption of the financial flows on credit markets. Given the relatively high credit growth before the crisis and the impediments to access to funding after the commencement of the crisis, the common issue that arises is "how financing through loans contributed to the acceleration/deceleration of the growth of the economies." However, the link between loans and economic growth is not one-way. Namely, in accordance with the theoretical and empirical literature, the level of economic activity also affects banks' lending activity through demand for and supply of loans.

The essence of the link between the economic activity and the demand for loans may be explained by the households' income, the financial performance of enterprises and the expectations of private sector about the future developments in the economy. In conditions of an economic growth and periods of economic expansion, the models of Bernanke and Blinder (1988 and 1992) envisage an increased demand for loans by the households based on several factors: a) increase in the households' current income, b) improved perceptions of the households about the movements in the economy in the future and expectations of increasing their income in future and c) increase in the value of the collateral that households can offer and on that basis to obtain loans in a higher amount. Regarding the demand for loans by enterprises, the higher economic activity is also expected to act positively, as amid growth of the aggregate demand in the domestic economy, and in conditions of increased export demand, the financial performances of enterprises improve. It provides conditions for more funding based on bank loans. **On the** part of banks' credit supply, models of Bernanke and Blinder (1988 and 1992), upgraded by Ehrmann et al. (2001), suggest that there is a mutual and positive relationship between the economic activity and credit supply. First, in conditions of economic growth, sources of financing the banks from the domestic economy are increasing because in conditions of growth of households' income and improved financial performance of the business sector, banks face higher deposit inflows. Second, in conditions of economic growth, financial performances of the banks are improved through increased interest and non-interest income, but also through smaller allocations for loan loss provisions, because the loan portfolio of banks is expected to improve as a result of the reduced risks. In such circumstances, commercial banks in the domestic economy and abroad are assessed as less risky on the basis of which they can have an easier access to external financing.

Monitoring of the data on the economic and credit activity of individual countries, and the analysis of the results of the available lending surveys may provide indications about the question of their mutual link. In order to empirically investigate the relationship among countries in Southeast Europe and their mutual conditionality, in this Annex we apply a panel vector-autoregression

**in a reduced form.**<sup>137</sup> By the application of this method by the covariance of the matrix of residuals by Choleski, it is examined how a single shock in the level of economic activity affects the level of credit activity and vice versa - how a single shock in the level of credits affects the level of economic activity. The analysis uses quarterly data for the level of real GDP and the actual amount of loans to the private nonfinancial sector obtained from the IFS and central banks of the countries included in the sample (Albania, Bulgaria, Macedonia, Romania, Serbia and Croatia), for the period 2000 - 2011. Since we use the panel method for vector-autoregression, in order to obtain unbiased and consistent results, we remove the so-called "fixed effects" from the variables, i.e. we remove the immeasurable specific effects for each individual unit by removing the average value of variables and by the so-called Helmert transformation. Furthermore, when examining the statistical significance of the impact of shocks on the level of economic activity and credits, we use standard errors of +/-5% obtained by Monte-Carlo simulation with 200 replications. The results from the panel vector-autoregression are presented in the Figure below.



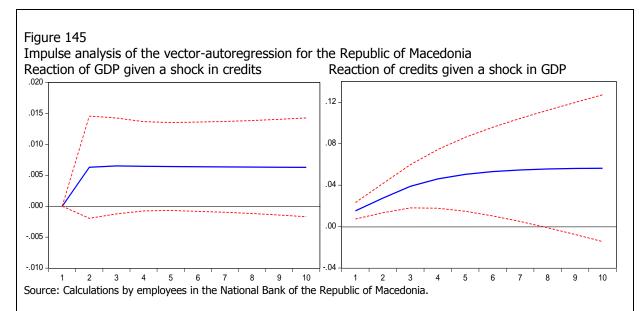


The results indicate that a positive shock in the level of economic activity (increase the level of economic activity) on average in the countries of the region, acts positively on the level of credits (credit activity) and this effect is statistically significant at the level of 5%. The period of transmission of the maximum effect of the shock in the economic activity on the credits, covers three quarters. The results for the transmission of shocks from the level of lending activity to the level of economic activity is relatively small and positive, but it is statistically insignificant, indicating that among this group of countries changes in the level of credits still has no significant impact on the level of economic activity.

The results of vector-autoregressive analysis in a reduced form, made separately for the Republic of Macedonia are consistent with the results of the panel vector-autoregression for the countries of the region. According to the covariance of the matrix of residuals by Choleski, the results indicate that the shock in the level of economic activity has a positive effect on the level of credit activity and is statistically significant at the level of 5%. The maximum effect of the transmission of a one-time shock on the level of lending activity takes place with a time lag of four quarters. In the case of the Republic of Macedonia, a shock in the level of banks' credit activity on the level of GDP also has a statistically insignificant effect, which is consistent with the results obtained from the panel vector-autoregression.

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<sup>&</sup>lt;sup>137</sup> The panel vector-autoregression is conducted in the STATA software by using the codes developed by Inessa Love from the World Bank and they are applied in the paper Love, I. and Ziccino, L. (2006), "Financial Development and Dynamic Investment Behaviour: Evidence from Panel VAR", *The Quarterly Review of Economics and Finance*, Vol. 46, pp. 190-210.



The results of this analysis indicate that in the countries of Southeast Europe, including the Republic of Macedonia, changes in economic activity have a **significant impact on banks' lending.** These results are expected, given the high sensitivity of the credit markets to the information on the realized and expected movements in the real sector of the economy. In fact, the latest global crisis has shown that the reaction of our banking sector to the risks of the macroeconomic environment is extremely fast. Thus, with the emergence of the global crisis, deteriorating perceptions of banks regarding the existing and future capacity of the corporate sector and the households for servicing their obligations, were quickly translated into a reduced supply of loans. The first signs of economic recovery, gave the first signals for activity of the credit market. On the other hand, in the second half of 2011, there was another increase in the risks from the global economic environment, reemerging of the debt problems in some European countries, reduction in foreign demand and slowdown of the domestic growth. Such a macroeconomic context seemed limiting to the further increase in the credit flows in the economy and the same trend was present in most countries in the sample. The analysis showed that the reaction of the economic activity to the changes in the credits is not statistically significant. The absence of linkage between the banks' credit activity and the real economy may be a result of the still relatively low degree of financial intermediation in this group of countries, but also of the impact of other factors that limit the importance of bank loans as factors of growth. The presence of foreign investors, financially independent from the domestic banking sector, the direct borrowing by the corporate sector abroad in some countries, the greater role of the government in some countries (e.g. Albania) in the financing of investments, the significant role of the own funds for financing consumer and investment decisions, are probably some of the factors that may explain these results.

## IV. Monetary policy in 2012<sup>138</sup>

In 2012, monetary policy continues to be oriented towards maintaining price stability as the main monetary objective. Denar nominal exchange rate is maintained as a nominal anchor, whereby the exchange rate stability remains an **intermediate target of the monetary policy.** Maintaining price stability is an important segment of the overall macroeconomic stability and it is the best contribution of the monetary policy in creating a favorable environment for consumer and investment decisions. Taking into account the characteristics of the Macedonian economy, the stable nominal value of domestic currency against the Euro is considered a key prerequisite for maintaining low and stable level of prices. The exchange rate has continuously proved to be an important anchor, which plays an important role in stabilizing inflation expectations and thereby contributes to the absence of major inflationary pressures. From an operating perspective, also during 2012, the operational monetary framework is set on a flexible basis, and any changes will be aimed at increasing the efficiency in meeting the monetary targets.

During 2012, the monetary policy is expected to be conducted in a relatively stable environment, however with present risks. Debt crisis in the Euro area remains the major external factor that defines the global economic environment. Problems arising from the condition with the public finances in several European Monetary Union Member States have deteriorated the confidence of the private sector and led to tightening of credit conditions in the Euro area. Such circumstances are expected to lead to delays in the process of recovery of some of our most important trading partners. These estimates mean potential spillover of the negative effects on the domestic economy through trade and financial relations. However, possible negative repercussions are not expected to be of such a strong intensity as the one in the beginning of the global crisis. In fact, current estimates for the external position of the Macedonian economy are **relatively favorable.** Current account deficit is expected to deteriorate moderately, but mainly as a consequence of the expected slowdown in the growth of private transfers. On the other hand, the projection of the capital and financial account shows a level of net foreign exchange inflows in 2012 similar to that of the last year, which is enough to finance the current account deficit and further increase the level of foreign reserves. In 2012, further gradual exhaustion of the inflationary pressures created in late 2010 and early 2011 due to fast growth in import prices, is expected. Moreover, in 2012 the average annual inflation is expected to be low and to equal around 2%, so that it will not 'stimulate' inflationary expectations.

The risks concerning the baseline macroeconomic scenario for 2012, mainly result from external factors. The main risk relates to the assumptions for the economic results of the European economy. Possible weaker than expected effects of the assumed monetary and fiscal measures on the confidence and perceptions for risk of the economic entities, may mean worse results in terms of growth. The consequences for the Macedonian economy from this scenario relate to weaker export performances, greater restraint of domestic entities, tighter financing conditions in the international capital market, and weaker than expected capital inflows. This scenario means worse than expected conditions for conducting monetary policy. On the other hand, as a consequence of the continuous undertaking of measures for reduction of the problems in the Euro area within a controlled framework, there is a chance for a better than expected response of the real

<sup>&</sup>lt;sup>138</sup> According to the macroeconomic projections of the NBRM from January 2012.

sector and financial markets and better economic performance of the European economy. An additional risk is the movement of the world oil price, whose dynamics can hardly be predicted and which is not always driven by economic fundamentals. Given the energy dependence of the Macedonian economy, possible variations in this factor may cause changes in the estimates for import prices and thus in the rate of inflation dynamics. It should be borne in mind that global economic fundamentals are significantly improved compared with those from the beginning of the crisis.

The decline in inflation present in the second half of 2011 is expected to continue throughout 2012. The average inflation rate is forecast to be 2%, assuming the absence of major shocks to international prices and the absence of pressures on the demand side. Namely, in 2012, amid the prolonged recovery of developed economies, world prices are not expected to notice a greater change. Furthermore, the negative output gap is expected to close late in 2012, suggesting that pressures on inflation from the demand side are not yet expected. One part of the expected inflation in 2012 can be explained by the changes in the administered domestic energy prices, i.e. the prices of heating and electricity. If this direct effect of domestic energy prices is excluded, the rate of inflation would be around 1.2%. Risks to inflation are assessed as balanced. These mostly pertain to the slower/faster than expected recovery of the global and domestic economy and thus slower/faster growth of world and domestic prices. Uncertain dynamics of oil prices also poses risks to the projected inflation dynamics.

Macedonian economy is expected to continue growing in 2012, but at a slower pace compared to 2011. GDP growth for 2012 is estimated at 2.4%, driven by the positive dynamics of domestic demand, despite the negative contribution of net exports. Considering the deteriorating outlook for global economy and expectations for reducing foreign demand, in 2012, a significantly slower growth of export demand is expected. Additionally, the rebound of uncertainty, the expected stagnation in the labor force market, the moderately lower financial support through bank loans and the increased propensity to save, are expected to lead to slower growth of private consumption. The reduction of export activity and increased risk aversion of domestic and foreign investors would presumably cause a certain delay of part of the planned investment projects. However, projected growth in public investments and estimates for additional inflows through foreign direct investments will provide support to the investment activity. Hence, a slowdown is expected also in investments, but they still remain the component with the largest positive contribution to overall growth. In 2012, public consumption is expected to give a positive impetus to the growth of domestic economy. The risks regarding the projections for growth are mainly located in the current assumptions about the pace of economic activity of our major trading partners. Deviations from the assumption of foreign effective demand in a downward or upward direction may cause direct and indirect negative/positive effects in the domestic economy and thus lead to deviations from the projected pace of economic growth.

During 2012, banks are expected to continue to lend to the domestic economy which will provide solid support for the economic growth in the country. Annual growth in credits in 2012 is expected to be 7.6%. However, the volume of new credits that are expected during the year is moderately lower compared to 2011, mainly due to enhanced negative risks in the Euro area, which appeared late in 2011, and the prospects for their maintenance during 2012. Hence, factors that are expected to act in the direction of slowing down the credit growth are banks' perceptions of potential worsening of the risk profile of the domestic private sector. An additional factor is the potential narrowing of the room for external financing, given the initial conditions on the

global financial market in the beginning of the year, marked by renewed tensions, increased volatility and reduced investor confidence. Although the Macedonian banks are not highly dependent on external sources of funding, however some indirect effects on credit growth through banks' perceptions of credit risk are possible. Restraint from lending is expected to prevail also on the side of the credit demand, where given the sluggish economic activity and uncertain income position of the households, reduced "appetite" for more borrowing may be expected. Along with the assessments for slower growth of the economy, in 2012 moderate slowdown in monetary growth is expected. However, given the stable inflationary expectations and confidence in the domestic currency, we expect that growth would be appropriate and would strengthen the financial capacity of domestic banks for lending. Risks in this area are mainly related to the credit market, and their materialization will depend on the condition of international finance and performances in the real sector of the economy.

The external position of the economy, seen through the balance of payments, for 2012 is assessed as favorable. Thus, the movements in the current account in 2012 are not expected to lead to significant deterioration of the external imbalance. Our latest projections indicate a moderate expansion of the current account deficit from 2.8% to 4.5% of GDP. Moreover, in the trade balance no any major change is foreseen compared to the previous year, due to the influence of factors acting in the opposite direction. Thus, on the one hand, the strong rise in world prices of metals is not expected to continue, taking into account the recent deterioration of the prospects for the global economy. This is expected to adversely affect the countries that are major exporters, thereby reducing the surplus in the trade with metals. Moderate deterioration is expected in the energy trade balance. Domestic demand, especially its investment component, is also expected to cause some pressure on imports. On the other hand, the negative effects of these factors are expected to be compensated by the intensified activity of the new foreign export-oriented investors. The balance of current transfers is expected to have the largest contribution to the expansion of the current account deficit. The exhaustion of the last years' one-time effect, and the assumption of a gradual reduction of the cash held "under the mattress" are expected to result in a reduction of their share in GDP. The expected inflows in the capital and financial account in 2012 are sufficient to finance the current account and to increase foreign reserves, which will continue to maintain an adequate level. The current projection does not foresee major growth in capital inflows compared to the previous year, in line with the estimates for the still uncertain global environment. Moreover, as in the previous year, government borrowing and foreign direct investments are expected to be the main sources of financing. The risks regarding the projection of the balance of payments are mainly related to the assumptions about the global recovery, the dynamics of world import prices and the assumption of capital inflows, which are variable and hardly predictable. Deviations from the projected position of the balance of payments will mean changes in the projected path of movement of foreign reserves. In this context, the National Bank will monitor the developments in the economy on a continuous basis and will take appropriate action if greater deviation from goals is assessed.

## V. Foreign reserves management in 2011

Pursuant to the Law on the National Bank of the Republic of Macedonia, one of the main tasks of the National Bank is managing the foreign reserves of the Republic of Macedonia (hereinafter: foreign reserves). Foreign reserves management is a complex and highly responsible activity of the central bank, which contributes to achieving the main objective of monetary policy, and to maintaining the stability of the financial system and the economy of the Republic of Macedonia.

Foreign reserves management is a continuous process that ensures:

- Providing liquidity for maintaining the stability of the domestic currency amid monetary strategy of a de facto fixed exchange rate;
- Providing liquidity for timely and regular servicing of current payments and external debt, which indirectly maintains the credibility of the Republic of Macedonia in international financial markets;
- Investing funds aimed at diversification and preservation of their value in the broader sense of maintaining the national wealth.

In line with these objectives, basic principles of foreign reserves management are **safety** of the invested funds and providing an appropriate level of their **liquidity**. The third most important principle in managing foreign reserves is **maximizing the return** on investment.

Hence, the process of foreign reserves management is set in a way that provides clear objectives of the investment strategy, detailed distribution of levels of decision making and individual responsibility and a high level of control mechanisms at every point of investing. Proper foreign reserves management, with the appropriate level of transparency and success contributes to strengthening the confidence and increasing the credibility of the central bank.

## 5.1. Basic guidelines for managing foreign reserves in 2011

At the end of 2010, the foreign reserves management framework for 2011 was formulated, and several established elements of investing the foreign reserves were adhered to:

- Maintaining a currency structure dominated by the Euro, where also the US Dollar is present, but to a limited extent;
  - Maintaining a stable level of gold within the foreign reserves;
  - Managing two portfolios with different priorities:
- **Liquidity portfolio,** for providing sufficient liquidity to carry out planned and unplanned outflows, anytime.
- **Investment portfolio,** where despite the safety and liquidity of assets, investment objective is maximizing the return on investment.

At the same time, an appropriate framework was defined for limiting the exposure to various market risks when managing foreign reserves:

- In terms of <u>liquidity risk</u>, taking into account the level of liabilities for servicing the external debt of the Republic of Macedonia and their distribution by months in 2011, on the one hand, and the projections for relatively stable trends in the domestic foreign exchange market, on the other, it was decided the level of short term deposits to be lower by about 24% relative to the previous year. This measure however does not cause reduction in the

liquidity of the assets, as an even distribution of the maturity of invested assets (of both deposits and securities) is envisaged, which provides additional liquidity in the event of unforeseen liquidity needs. At the same time, investment in securities for which there are most liquid markets even in conditions of turbulent market movements, allows rapid mobilization of funds at low transaction costs.

- The <u>credit risk</u> management retained the established framework of prudent investing only in financial assets issued by countries with the highest rating. In this direction, an opportunity was envisaged for making larger investment in Germany, so besides investing in government securities, investment was envisaged also in securities issued by several German federal states (Baden Württemberg, Bavaria and Nord Rhine Westphalia). Additionally, changes were made in the way of monitoring the credit exposure, i.e. the original exposure method was replaced with a current exposure method.
- In terms of <u>currency risk</u>, the quantitative restrictions on the participation of the US Dollar were revised both in the liquidity as well as the investment portfolio. For providing ongoing liquidity in the payments of the country abroad and in other currencies, maintenance of minimum levels of several other currencies<sup>139</sup> as part of the liquidity portfolio, was planned.
- <u>Interest rate risk,</u> whose importance was emphasized in conditions of divergent movements in international financial markets, was scheduled to be limited in two ways, through:
  - Maintaining a relatively short target modified duration and investment portfolio in Euros and in US Dollars, which on a strategic level were determined at 0.75 and 0.67 years, respectively.
  - Maintaining a certain level (approximately 20% of investments in securities) of securities that will be held to maturity.

Dynamic movements on the international financial markets, which dramatically changed the conditions for investing during the year, imposed more intensive monitoring of the risk exposure of foreign reserves, and appropriate adjustment of the investment process. In this regard, during 2011, several measures to ensure the appropriate management in accordance with new conditions, were taken:

- In March, the investment decision on the level of securities held to maturity was revised, for the purpose of limiting the effect of negative price changes in conditions of recognizing the opportunity for higher yields as a result of the intentions of the ECB to increase the reference interest rate due to the rising inflation.
- In April, a decision was taken to increase the permitted deviation of the investment portfolio in US Dollars, given the influx of funds in US Dollars in the disbursements from the precautionary credit line with the IMF.
- In July, developments on the international markets were intensively monitored, and in conditions of high fluctuations in exchange rates is was decided to apply active currency risk management, which allowed realization of positive exchange rate differences from foreign currency arbitrage.
- In September, the National Bank Council adopted a new *Policy for keeping and managing the foreign reserves of the Republic of Macedonia* ("Official Gazette of RM" no.126/2011), whereby the strategic framework in the process of investing foreign exchange reserves was revised and modernized. In this sense, new elements in the Policy were the following: a) defining the scope and objectives of the foreign reserves, b) establishing the minimum required level of credit rating (A-/A3 or equivalent) for the financial institutions and the countries where foreign reserves are invested, c) defining the assets in which to

<sup>&</sup>lt;sup>139</sup> Other currencies include: Australian Dollar, Canadian Dollar, Swiss Franc, Danish Krona, Norwegian Krona, British Pound, Japanese Yen, Swedish Krona and Special Drawing Rights.

invest, and defining the transactions in the investment, d) defining the basic risk management framework, and e) defining the decision making levels and the responsibilities in the process of foreign reserves investment.

#### 5.2. Conditions for investment in the international financial markets

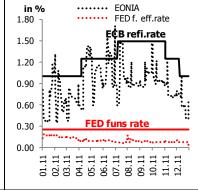
The beginning of the year was marked by a moderate level of optimism on the international financial markets. When making investment decisions, the investors began to include the gradual strengthening of the economic activity in developed economies in their calculations, so that demand for riskier investments increased, leading to growth in stock prices.

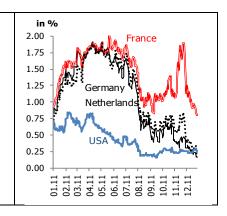
Figure 146 Movement of stock exchange indices

Figure 147
Reference rates on the money market

Figure 148 Yield of 2-year bonds







Source: Bloomberg.

On the other hand, yields on government securities rose too, but as a result of the expected higher real yields due to perceptions of future tightening of the monetary policy in conditions of higher expected inflation<sup>140</sup>. The inflation rate in the Euro area rose to around 2.8% at the end of the first quarter, prompting the ECB to increase the interest rate in early April (by 25 basis points, from 1% to 1.25%) to curb future inflationary expectations. After a break of two months, in July the ECB again increased the key interest rate by 25 basis points. In such circumstances, the yields on government securities in the Euro area had a more significant increasing trend in the first half of the year. At the same time, amid higher interest rate differential in favor of the Euro, its value against the US Dollar increased and reached a maximum level in early May.

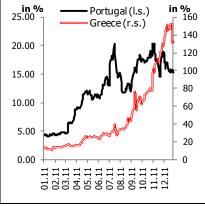
<sup>&</sup>lt;sup>140</sup> Rising inflation expectations were due not only to improved prospects for economic growth, but also the growth in prices of agricultural products, the growth in oil prices due to the escalation of the political tensions in North Africa and the Middle East, and the growth in the prices of many products because of disruption in global production chains (especially in automotive and computer industry), following the natural and nuclear disaster in Japan.

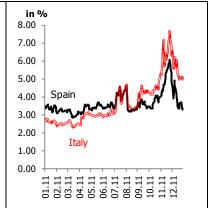
Figure 149
Price of gold and U.S.
Dollar/Euro ratio

Figure 150 Yield of 2-year bonds

Figure 151 Yield of 2-year bonds







Source: Bloomberg.

In the second quarter of 2011, the focus of market participants gradually began to redirect from the macroeconomic indicators to the fiscal problems of countries in the Euro region. Namely, in April, Portugal became the third member of the Euro area requesting financial assistance. In conditions of further deterioration of market opportunities for borrowing by Greece, reflected in strong growth in the yields on its securities, in July, approval of a second package of financial aid to Greece was agreed. Additionally, the leaders of the Euro area agreed on reduction of the interest rates on the loans for Greece, Ireland and Portugal, approved from the European Financial Stability Facility. But these measures were not enough to calm the tensions in financial markets. Additionally, amid the perceptions of limited financial opportunities of the European Financial Stability Facility, there was gradual spillover of the crisis to the much larger Spain and Italy, which resulted in a more significant growth of the yields on their securities<sup>141</sup>.

Movements in the international markets were influenced also by the occurrence of indicators during the summer period, pointing to the fact that the economic activity in the Euro area is not as strong as originally expected. In such a constellation of market and macroeconomic conditions, the demand for financial instruments that are traditionally considered secure investment alternatives significantly increased. As a result, yields on government securities of USA and the countries of the northern Euro area registered a sharp decline. Also, the price of gold, which had a growing trend, reached a historically highest level in the third quarter of 2011. On the other hand, the value of US Dollar experienced strong growth, demonstrating that the US currency has retained its place as the most reliable international currency amid financial crisis, despite the signs of the need for fiscal consolidation in the USA<sup>142</sup> and the additional monetary measures for economic stimulus<sup>143</sup>.

By the end of the year, movements in financial markets were characterized by high demand for secure investments, which caused growth in their prices and decline in yields. On the other hand, the yields on the Greek and Portuguese government securities continued to rise, reflecting the difficulties of these countries in meeting the fiscal targets in conditions

<sup>&</sup>lt;sup>141</sup> In such circumstances, in August, ECB reactivated the program for repurchase of securities (Securities market programme) and for the first time since the introduction of the program Italian and Spanish government securities were purchased.

<sup>&</sup>lt;sup>142</sup> In the beginning of August, the President of the United States signed an agreement for reduction of the planned budget spending, while increasing the statutory ceiling on government borrowing. Despite this measure, the rating agency S&P cut the credit rating of the United States, from AAA to AA.

<sup>&</sup>lt;sup>143</sup> Federal Reserves, at the meeting in September announced a new measure for purchasing long term government debt while selling short-term government bonds, intended to reduce long-term interest rates, and to revive economic activity in the United States.

of a significant economic recession. In circumstances of a reduction of the ratings and political instability, market participants dictated higher yields also on the Spanish and Italian government securities, as compensation for higher risk.

#### Annex 9: Movements in the credit ratings of the European Union Member States

In 2011, rating agencies followed the developments related to the debt crisis and accordingly corrected the ratings of countries that were influenced by the effects of the crisis or have had certain macroeconomic imbalances, affecting economic growth and stability of countries.

January <u>Greece - BBB- to</u> <u>BB+</u>	February Cyprus - Aa3 to A2 Ireland - A to A-	March Greece - Ba1 to B1 Portugal - A1 to A3 Spain - Aa1 to Aa2 Spain - BB+ to BBB- Portugal - A+ to A- Greece - BB+ to BB- Cyprus - A to A- Portugal - A- to BBB-	April Ireland - Baa1 to Baa3 Portugal - A3 to Baa1 Portugal - A- to BBB- Ireland - A- to BBB+	May Greece - BB+ to B+ Cyprus - AA- to A- Greece - BB- to B	June Greece - B1 to Caa1 Greece - B to CCC
July Bulgaria - Baa3 to Baa2 Greece - Caa1 to Ca Cyprus - A2 to Baa1 Portugal - Baa1 to B Ireland - Baa3 to Ba1 Greece - B + to CCC Estonia - A to A+ Romania - BB+ to BBB- Greece - CCC to CC Ireland - Baa3 to Ba Cyprus - A- to BBB+	BBB Estonia - A to AA- Czech Republic A to AA-	September Malta - A1 to A2 Slovenia - Aa2 to Aa3 Slovenia - AA to - AA- Italy - A+ to A	October  Italy - Aa2 to A2  Spain - Aa2 to A1  Italy - AA- to A+  Spain - AA+ to AA-  Cyprus - BBB+ to BBB  Slovenia - AA to AA-  Spain - AA to AA-	November Cyprus - Baa1 to Baa3 Hungary - Baa3 to Ba1 Portugal - BBB- to BB+ Belgium - AA+ to AA	December Belgium - Aa1 to Aa3 Slovenia - Aa3 to A1 Hungary - BBB- to BB+
egend: <u>Fitch</u> , <u>Moody's</u> , <u>S</u>	<u> </u>	European Union N			_
Moody's Aaa Fitch AAA Standard & Poor's AAA	Aaa Aaa AAA AAA	Aaa Aaa AAA AAA	Aaa Aaa AAA AAA	Aaa A2 AAA A-	A1 Baa1 A+ BBB

The rating of the Republic of Macedonia was stable and remained at the level BB (Standard & Poor's) i.e. BB + (Fitch).

All these events caused intensification of the political attempts to resolve the debt crisis, which resulted in the adoption of several measures at the summit in late October (recapitalization of European banks, initiatives to strengthen financing mechanisms, increasing the economic cooperation and new measures toward Greece). Additionally, at the European Council meeting, on December 8 and 9, it was decided to strengthen the fiscal rules for the Euro area Member States and for the other EU Member States, which agreed with the suggestions for increasing the prudence of fiscal policies. Simultaneously, it was decided to activate the European Stability Mechanism-ESM in July 2012, and grant funds from the countries of the Euro area in an amount of Euro 200 billion to the IMF for strengthening the capacities to deal with the debt crisis.

At the end of the year, ECB allowed easing of the tensions by reducing the key interest rate in November and December, and by introduction of three-year operations for providing liquidity, conducted for the first time in December. However, the low value of the

common currency of the Euro area<sup>144</sup> indicates high uncertainty and volatility of market movements in the future.

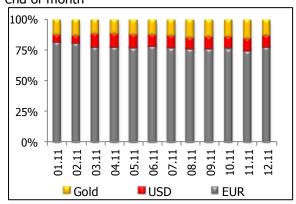
## 5.3. Foreign reserves investment

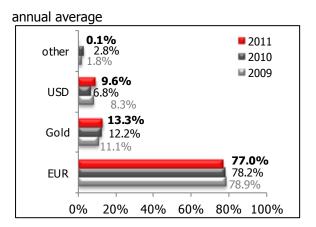
The following of the directions given by the foreign reserves management determined the structure of investments, which provided low exposure to currency, credit, liquidity and interest rate risk.

#### 5.3.1 Currency structure

Given the policy of a "de facto" fixed exchange rate of the Denar against the Euro, the National Bank maintained a stable currency structure of foreign reserves, with the share of the Euro being the highest (annual average of 77% of foreign reserves).

Figure 152 Currency structure of foreign reserves end of month





The share of the US Dollar did not have significant fluctuations during the year, with the exception of the higher inflow for the account of the Government during March. A portion of the funds from the precautionary credit line from the IMF were denominated in US Dollars. In order to maintain the currency structure of foreign reserves in accordance with the currency structure of future liabilities on the basis of the public debt, the assets were invested in financial instruments within the investment portfolio in US Dollars. As a result, the average share of US Dollars in the foreign reserves was higher by 3 percentage points compared with the previous year.

In conditions of maintained steady amount of gold, fluctuations in the value of gold were a result of the movements in the price on the international financial markets. Moreover, given that the price of gold rose by  $12\%^{145}$  on an annual basis, the average share of gold in the foreign reserves increased by 1.1 percentage points.

 $^{144}$  At the end of 2011, the Euro stood at 1.2939 US Dollars and was 3% lower compared to the value at the beginning of the year.

year.  $^{145}$  The price of gold from US Dollars 1,405 per ounce at the beginning of the year rose to US Dollars 1,574 per ounce at the end of 2011.

In accordance with the currency structure position, exposure of the foreign reserves to cross-currency changes was kept low. Thus, according to the "value at risk" concept, as of December 31, 2011, the exposure of foreign reserves to currency risk was 1.61% (Euro 33.41 million), which was mainly caused by the movements in the price of gold (77.36%) and the changes in the value of the US Dollar against the Euro (22.51%).

## Annex 10: Analysis of the possibilities for diversification of the investments of the National Bank in other currencies

The growing tensions in the international financial markets, the intensified need for public debt consolidation and greater fiscal discipline, the increased interventionism of central banks and projections for slower economic growth in the Euro area and the USA in the next period, point to the need for ensuring safety and preservation of the purchasing power of the foreign reserves of the Republic of Macedonia, through the dispersion of the investments by currency and appropriate risk management, while ensuring optimal profitability in the long run.

The strategic goal of diversification of part of the foreign reserves into other currencies significantly increases the risk of exchange rate differences, due to the greater volatility of other currencies relative to the Euro.

The analysis of currency diversification, prepared by the National Bank in the fourth quarter of 2011, led to a conclusion that in conditions of increasing volatility in financial markets, diversification of investments is necessary for the purpose of limiting the exposure to individual countries and currency areas. Simultaneously, it was identified that in terms of security of investments, and for the purpose of achieving higher yields, most acceptable is the investment in government bonds of countries such as Australia, Norway, Sweden and Canada. These four countries have the highest credit ratings, and market indicators for their credit standing, expressed through premiums on CDS, indicate market observations for low exposure to risk of the investments in these countries. Simultaneously, data on public finances in these countries point to the conclusion that these four countries are in much better fiscal shape compared to the USA and Euro area countries.

Within the analysis, and for the purpose of limiting the level of currency risk, by using the Markovic portfolio theory, the optimal share of these currencies in the foreign reserves was determined, as a combination which offers the best possible return for a given level of exchange rate risk.

In the beginning of 2012, the National Bank expanded its investments into instruments in the national currencies of Australia, Norway, Sweden and Canada.

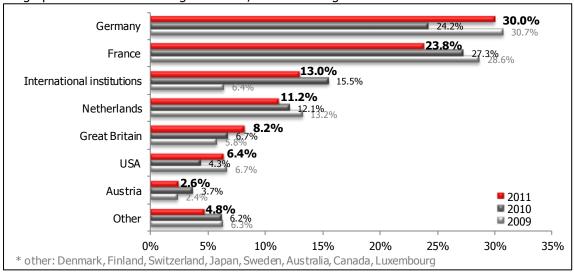
#### 5.3.2 Credit exposure and liquidity of investments

Continuing negative effects of the debt crisis in Europe during the year, caused risk aversion among market participants and high demand for secure financial instruments. In such conditions, the National Bank directed the foreign reserves investment to countries which provided low credit exposure. Thus, largest part of the reserves (65%) were invested

<sup>&</sup>lt;sup>146</sup> Value at risk indicates the maximum possible change in foreign reserves (with a probability of 99%), which can occur as a result of fluctuations in prices and exchange rates, for an interval of ten days. For calculating the value at risk for a particular date, historical data on the movement of prices and exchange rates within one year ago are used, relative to the date for which the calculation is made.

in Germany, France and the Netherlands, and the share of investment in the UK and USA was substantial. Compared with the previous year, investments in Germany registered considerable growth, while the funds placed in France, the Netherlands and international financial institutions were decreasing. Namely, in accordance with the investment guidelines, at the beginning of the year part of the proceeds of the maturing securities were reinvested in securities issued by the federal states of Germany. The increased placements in German federal securities was due to their high reliability, which stems from the close connection between the federal states and the central government, and the comparative advantage over government securities, in terms of yields.

Figure 153
Geographical structure of foreign reserves, annual average



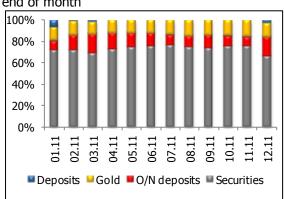
Regarding the credit exposure to financial institutions, given the uncertain market conditions, the National Bank also in 2011 did not place time deposits with foreign commercial banks<sup>147</sup>. Monetary gold was deposited with the Bank of England and the Bank for International Settlements, thus allowing low credit risk, in conditions of increased risks on the international financial markets.

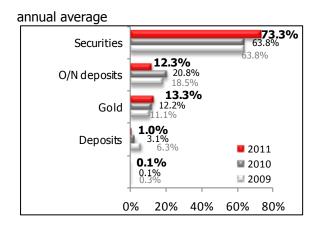
The liquidity of foreign reserves was primarily provided by maintaining a liquidity portfolio in Euro and in US Dollars. The liquidity portfolio provided foreign currency in the most liquid form for interventions on the foreign exchange market aimed at ensuring stability of the Denar exchange rate, as well as funds for execution of current payments and regular and timely settlement of the liabilities of the government abroad. The liquidity portfolio was held in short-term liquid assets, the most frequent of which were sight deposits, with an average annual share of 12.3% and short-term deposits up to one month with 1% of the foreign reserves. The liquidity of foreign reserves is provided also through investments in securities, which are dominant within the structure of foreign reserves by instruments. The significant level of investments in high quality securities contributes to the flexible liquidity management and appropriate management of the credit exposure of foreign reserves.

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<sup>&</sup>lt;sup>147</sup> Single exposure to foreign commercial banks was the amount on the current accounts with these institutions, which is used for transaction operations on behalf of the government.

Figure 154 Structure of investments by instruments end of month





Most of the investments in securities, or 77.5%, annually on average, were directed towards government securities, for which demand was kept high and which provide possibility for rapid mobilization of funds by their selling on the secondary markets.

Figure 155 Structure of the securities by issuers, annual average

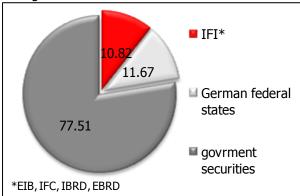
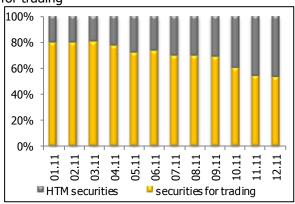


Figure 156 Structure of securities, in terms of opportunities for trading



On the other hand, the securities portfolio was exposed to price fluctuations caused by movements in international financial markets. To limit the effects of price fluctuations, foreign reserves were invested in securities with relatively short basic modified duration, which was revised during the year. Thus, in the first quarter, the modified duration for the investment portfolio in Euros was nine months, in the second quarter it was six months, and for the rest of the year it was set at five months. The modified duration for the investment portfolio in US Dollars equaled eight months in the first half of the year and six months in the second half. The exposure to the risk of price changes was kept low, and according to the "value at risk" concept, as of December 31, 2011 it amounted to approximately Euro 0.28 million. Exposure to changes in the prices of the instruments in Euros equals Euro 0.17 million, while exposure to changes in the prices of the instruments in US Dollars equals Euro 0.11 million.

Additionally, part of the securities portfolio, or an average of 21.8% was invested in securities held to maturity<sup>148</sup>. Investments in these securities in the first quarter were at the level of 2010, but the trend of growth in yields, i.e. the decrease of prices in the second

<sup>&</sup>lt;sup>148</sup> In accordance with the international accounting practices, investments in securities held to maturity are reported at amortized value at cost, using the method of effective interest rate and are not subject to unpredictable adverse price changes.

quarter of 2011, was the reason for their increased share. In that regard, at the end of 2011, the portfolio of securities held to maturity reached a level of 47% of total investments in securities.

According to the previously established operational framework, starting from the second quarter of 2011, the National Bank began concluding repo transactions with foreign commercial banks. These are transactions of securities lending through concomitant conclusion of repo and reverse repo transactions, receiving securities that meet the criteria for investment of foreign reserves as collateral for the loaned securities. Transactions for lending of securities represented an investment opportunity for using the portfolio of securities to provide additional revenue.

## Annex 11: Activities to improve the interest rate risk management

The National Bank has been developing the methods for improved and more flexible risk management, on an ongoing basis. In this regard, during 2011, a process of analysis and study of the bond futures and deposits for improved interest rate risk management was initiated.

Futures contract is a standardized contract that is traded on the stock exchange and allows purchasing or selling a fixed amount of the underlying assets, following a predetermined price on a future date. Depending on the type of underlying assets, there are several groups of futures contracts: 1) interest rate futures contract (assets: government bond and a money market instrument), 2) foreign exchange futures, 3) stock futures, 4) commodity futures, 5) "exotic" futures (of pollution, weather forecast), etc.

Bond futures belong to the group of interest rate futures and represent an obligation to buy or sell the bond on a future date, at a predetermined price. The buyer of the futures opens a long position, while the seller opens a short position. When opening a futures position, contracting parties are obliged to pay only an initial margin and usually positions are closed before maturity, so that funds engaged in these transactions are low. Bond futures may be applied as:

- **hedging instrument** by enabling adjustment of the modified duration and market risks management;
- **instrument for taking a position,** depending on the expectations about market movements;
- arbitration instruments, by simultaneously taking a long position in a financial instrument and a short position in futures for which basic assets is the same instrument (cash-and-carry) and taking a short position in a financial instrument and a long position in futures for which basic assets is the same instrument (reverse cash-and-carry);

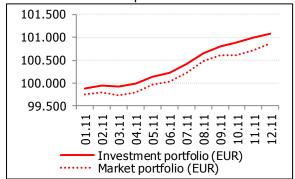
The analysis of the pros and cons of this type of transactions indicates that the National Bank could use the bond futures primarily for fast and easy management of the modified duration of investment portfolios. In this regard, in the future the possibilities for establishing an operational framework for implementation, monitoring and recording of these transactions will be examined.

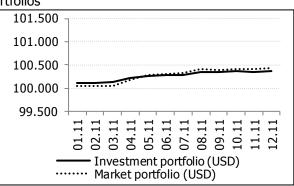
### 5.4. Results from the foreign reserves investment

Developments in the international financial markets and the high demand for safe government securities acted toward maintaining low rates of return on investments.

Thus, the rate of return on the reference market index<sup>149</sup> for Euros stood at 0.871%. The realized rate of return on the investment portfolio of the National Bank in Euros was higher compared with that of the reference portfolio by 21 basis points, i.e. it equaled 1.081% (in 2010 it was 0.844%). The relatively better results are due to the selection of instruments and the structure of the investment portfolio in Euros, which beside government bonds issued by European Union Member States is made up of many kinds of high quality securities (bonds with an explicit government guarantee, securities issued by the federal states of Germany and bonds issued by multilateral development banks). In the past year, these securities registered relatively higher rates of return compared with the government debt securities issued by the Euro area Member States with highest credit rating (Germany, France, Netherlands, Austria and Finland), of which the reference index is composed.

Figure 157
Return on investment portfolios and on reference portfolios





The rate of return on the investment portfolio of the National Bank in US Dollars equaled 0.374% (in 2010 it was 0.604%) and it was relatively lower than the overall rate of return on the reference portfolio in US Dollars (0.426%). The difference in the realized returns is due to the structure of the reference portfolio, which is entirely composed of government debt securities issued by the USA and their relatively better results in the past year compared to the other debt securities within the investment portfolio in US Dollars.

#### Annex 12: Change in the reference portfolio in Euros

For the purpose of appropriately monitoring the results of foreign reserves management, in 2011 changes were made to the reference portfolio, in the context of which the results of the management of the investment portfolio in Euros were monitored. Namely, by 2010, for the reference portfolio in Euros, an external composite index was applied, comprised exclusively of government debt securities issued by Germany, which inadequately reflected the position of the invested foreign reserves, given that the quantitative restrictions by countries set by the foreign reserves management strategy, do not allow full exposure of foreign reserves to a single country.

In order to overcome these restrictions, the existing external index was replaced with a new composite index comprised of government debt securities issued by the Euro area Member States with highest credit rating. The characteristics of the new reference portfolio are closer to the characteristics of the investment portfolio in Euros, and the geographic

<sup>&</sup>lt;sup>149</sup> To monitor the performance of the selected investment strategy, results of investment portfolios are compared with the performance of a composite index of relevant financial instruments (securities and money market instruments) with modified duration that corresponds with the modified duration of the investment portfolio.

distribution of the index roughly reflects the quantitative limits of the National Bank by country. Thus, the application of the new index provides increased consistency, representativeness and measurability of results from investing the foreign reserves.

In order to actively manage the currency risk, the National Bank also applied transactions of currency arbitrage. Thus, beside the realized interest income<sup>150</sup>, amounting to Euro 22.9 million, during 2011, income was realized from foreign exchange differences from arbitration, which enabled the total income from the foreign reserves management to amount to Euro 26.4 million. The rate of return from managing foreign reserves, calculated on the basis of realized revenues, equaled 1.44% annually, (in 2010 it was 1.32%), while the total rate of return, which includes the estimated price changes, equaled 1.06% annually (in 2010 it was 0.70%).

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<sup>&</sup>lt;sup>150</sup> This category includes revenues from interest on deposits from coupon securities and realized price changes of securities.

#### VI. Other activities of NBRM

## **6.1. Payment system in the Republic of Macedonia**

Payment systems are one of the most vital components of the financial and economic infrastructure. The proper functioning of the payment systems contributes for the financial system stability, enabling efficient allocation of financial resources, reduction of the transaction costs in the economy, improves the liquidity on the financial market and facilitates the monetary policy conduct. Pursuant to the Law on the National Bank of the Republic of Macedonia (Article 7, indent 8), NBRM, as a central bank "establishes, promotes, registers and oversees safe, sound and efficient payment, settlement and clearing systems". As a result, the NBRM performs several functions in the payment systems:

- Operational manages with the real time gross settlement system;
- Registration maintains registry of the payment, settlement and clearing systems;
- Development it is a catalyst and promoter of the payment systems development;
- Oversight- it oversees the payment systems functioning in line with the basic principals of the system important payment systems, towards elimination and minimization of possible risks arising from the payment systems functioning.

In 2011, the payment systems in the Republic of Macedonia enabled smooth execution of the payment transactions. The NBRM, as owner and operator of the Macedonian Interbank Payment System (MIPS), used for performing real time gross settlement, has been performing its operational function in the payment system successfully. Also the other components of the payment systems: the clearing house "Clearing Interbank Systems" AD Skopje (hereinafter referred to as: KIBS) and the banks' internal systems, contributed, through their functioning, towards stable, smooth and efficient execution of the payment transactions in the Republic of Macedonia.

#### 6.1.1. The NBRM role in the payment operations

Within the realization of the operational function, the NBRM manages the settlement system - MIPS. In 2011, MIPS operated in real time with accessibility of 99.91% of the envisaged working time during the entire year. The process processed averagely 20,346 transactions per day, while, the maximal number of processed transactions per day equaled 62,140. The continuous introduction of the most modern technical and technological solutions in the MIPS infrastructure, conditioned efficient execution of all transactions without any queuing that due to technical reasons.

MIPS participants are banks (including the NBRM), the clearing institutions, the brokerage houses, the Ministry of Finance of the Republic of Macedonia and the Health Insurance Fund of Macedonia. At the end of 2011, the total number of direct participants in MIPS equaled 25.

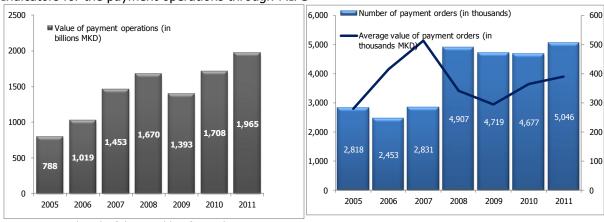
In 2011, the NBRM received and processed 6,320 enforcement orders and decision on enforced collection, 1,220 of which are returned to court or bailiff for further processing, with the remaining part being fully or partially executed, or blocked because of the short debtor's position, and postponed by the body that adopted them.

#### 6.1.2. Indicators for the functioning of the payment system of the Republic of Macedonia

#### 6.1.2.1. Macedonian Interbank Payment System

In 2011, total of 5,045,886 payment transactions were settled through MIPS, with the average value per transaction being equal to Denar 389,438,00. The value of the payment operations through MIPS in 2011 increased by 15.1% compared to the preceding year.

Figure 158
Indicators for the payment operations through MIPS



Source: National Bank of the Republic of Macedonia.

If analyzing the structure of the total turnover through MIPS, 52.5% are interbank turnover realized by the carriers of the payment operations - banks, while 47.5% are turnover realized upon order of government institutions (NBRM, Treasury system of the Ministry of Finance and the Treasury system of the Health Insurance Fund of Macedonia), the clearing and the brokerage houses.

Table 22 Concentration index in MIPS for 2011

	Payment transaction number	Payment transaction value (in billions MKD)		
5 banks*	1,145,403	829		
Share (in %)	23	42		
Total	5,045,886	1,965		

\*banks accounting for the largest shares in terms of payment transaction number and value Source: National Bank of the Republic of Macedonia.

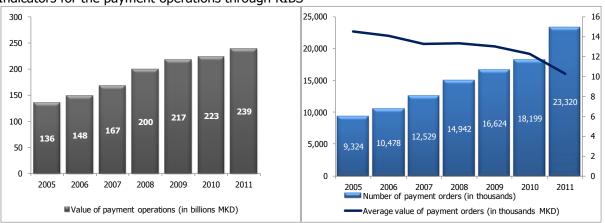
The concentration index in MIPS system shows that the share of the five banks having the largest share according to the number of transactions equals 23% of the total number of transactions. The share of the five banks having the largest share according to the transaction value equals 42% of the total value of the transactions.

#### 6.1.2.2. Clearing house KIBS AD Skopje

In 2011, 23.3 million transactions through the KIBS system were carried out, with the average value of one transaction being equal to Denar 10,255.00. Compared to 2010,

the number of payment transactions in 2011 executed through KIBS increased by 28.1%, while the value of the payment transactions increased by 7.2%.

Figure 159
Indicators for the payment operations through KIBS



Source: National Bank of the Republic of Macedonia.

The concentration index in KIBS shows that the five banks with the largest participation by the number of transactions participate with 75% in the total number of transactions, while the five banks with the largest share by transaction value participate in the total transaction value with 74%.

Table 23 Concentration index in KIBS for 2011

	Payment transaction number	Payment transaction value (in billions MKD)		
5 banks*	17,418,464	177		
Share (in %)	75	74		
Total	23,320,177	239		

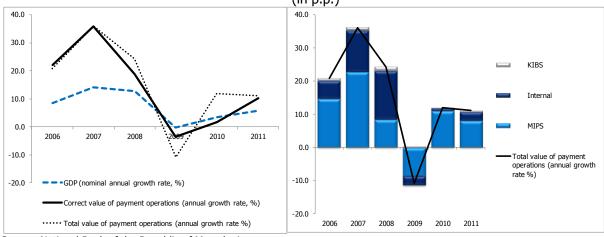
<sup>\*</sup>banks accounting for the largest shares in terms of payment transaction number and value Source: National Bank of the Republic of Macedonia.

#### 6.1.2.3. Analysis of the statistical data from the payment systems area

Pursuant to the Decision on submitting payment operations data ("Official Gazette of RM" no. 146/07), the National Bank of the Republic of Macedonia collects, within previously set deadlines, statistical data from the carriers of the payment operations and the legal entities that are not carriers of the payment operations, processing of the obtained data, as well as their publishing in aggregate form on the official web site of the National Bank.

Figure 160 Value of the payment operations and GDP

Figure 161 Contributions by payment systems (in p.p.)



Source: National Bank of the Republic of Macedonia.

In 2011, the total value of the payment operations registered an increase of 11.1%, annually, mostly due to the intensified payment operations through MIPS. The corrected value of the payment operations (without the transactions of CB bills, the six-month deposit bills and the treasury account), which can be treated as an indicator for the economic activity, registered an increase of 10.3% on annual basis, which is more intensive increase than the growth of the nominal GDP.

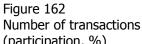
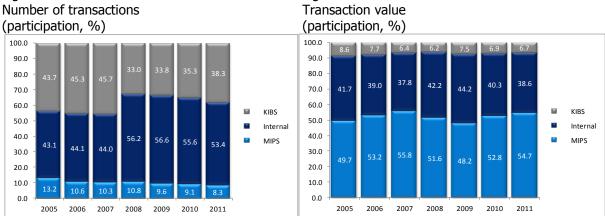


Figure 163 100.0



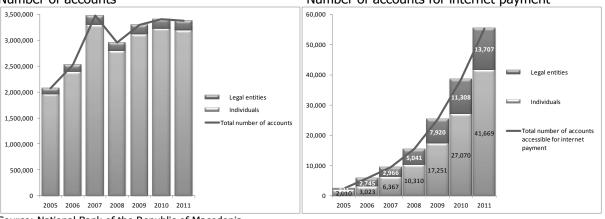
Source: National Bank of the Republic of Macedonia.

Analyzed by the structure, in 2011, the share of the transactions realized through KIBS in the total number of transactions registered an increase, while the share of the transactions realized through the internal payment systems of the banks fell. From the aspect of the value of the payment operations, the movements in the structure were towards higher share of the payment operations through MIPS for the account of the lowering of the payment operations share through the internal payment systems of the banks.

The solid increase in the opening of electronic payment accounts that began in the previous years continued also in 2011 (with annual growth rate of 44%). Namely, 75.3% of the total number of accounts for internet payment as of December 2011, are accounts are owned by natural persons, while 24.7% are accounts of legal entities.

Figure 164 Number of accounts

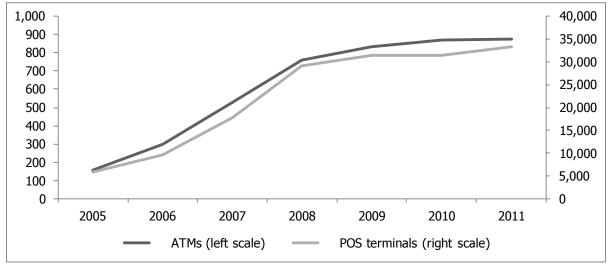
Figure 165
Number of accounts for internet payment



Source: National Bank of the Republic of Macedonia.

In December 2011, the total number of ATMs is 876, 88.70% of which are ATMs owned by banks, while 11.30% are leased ATMs. The number of POS terminals for the same month equals 33,435, 21.44% of which are imprinters (mechanical payment devices), while 78.56% are EFTPOS (electronic) terminals.

Figure 166 Number of card devices



Source: National Bank of the Republic of Macedonia.

In December 2011, the total number of cards in circulation equals 1,450,340 cards, 75.8% of which are debit cards, while 24.2% are credit cards. The share of the debit cards in the total value of the card transactions equals 85.1%, compared to the credit cards having a share of 14.9% in the total card-based transactions turnover based on cards in the Republic of Macedonia.

Figure 167 Cards by their function

1,600 1,400

1,200

1.000

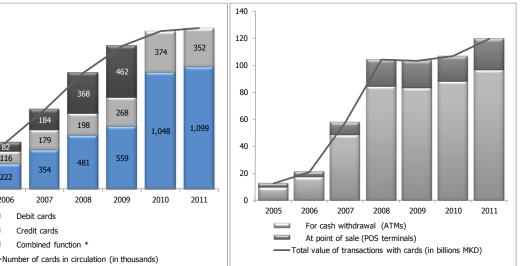
800

600

400

200

Figure 168 The value of the card-based transactions



Source: National Bank of the Republic of Macedonia.

184

2007

Debit cards

Credit cards

116

### 6.2. The development role of the NBRM in the payment systems

In 2011, the National Payment Systems Council of the Republic of Macedonia was focused on the implementation of the Payment System Development Strategy of the Republic of Macedonia 2007-2011. Through the National Payment System Council, the NBRM played its role as a catalyst in the payment systems.

## 6.3. Oversight role of the NBRM in the payment systems

The oversight of the payment systems in the Republic of Macedonia has been performed pursuant to the Law on the National Bank and the Law on Payment Operations (Article 44). The manner and the methodology of performing oversight are prescribed by the NBRM Council<sup>151</sup>. The National Bank oversees the following payment systems:

- 1. MIPS as a sole real time gross settlement system (RTGS) for processing large and urgent payments;
  - 2. KIBS ddeferred net settlement system; and
  - 3. CASYS ddeferred net settlement (DNS) for card payments processing.

The oversight tasks include monitoring of these systems, assessment of their compliance with the internationally accepted standards and monitoring of the implementation of the recommendations arising from the performed oversight. To assess the systems subject to the oversight, the basic principles for the systemically important payments systems prescribed by the Bank for International Settlement in Basel<sup>152</sup> are used.

<sup>\*</sup> Since January 2010, the combined function cards are divided into credit and debit cards.

<sup>&</sup>lt;sup>151</sup> The manner and the methodology for performing oversight are regulated by the following decisions of the National Bank Council: Decision on the manner and the methodology for payment systems oversight ("Official Gazette of RM" no. 159/07) and Decision on the criteria and standards for payment systems operations ("Official Gazette of RM" no. 159/07). The methodology has been elaborated in details in the Instructions for assessment of the payment systems compliance with the basic principles (no. 6309 from October 3,2008) which is prescribed by the Governor of the National Bank.

<sup>&</sup>lt;sup>152</sup> Basic principles for systemically important payment systems prescribed by the Bank for International Settlement in Basel are integral part of the Decision on the criteria and standards for payment systems operations as internationally accepted standards for payment systems functioning.

#### 6.3.1. Risk analysis, payment systems classification and results of the oversight activities

The risk analysis and the classification of the payment systems has been implemented according to the previously defined criteria<sup>153</sup> for each payment system.

According to the payment systems classification criteria, the KIBS has been classified in the category **important payment system**<sup>154</sup>, while CASYS, in the category **other payment systems**<sup>155</sup>.

Table 24 presents the results from the conducted oversight of CASYS in 2011 and the monitoring of the implementation of the recommendation from the conducted oversight of KIBS in 2010. The recommendation obliged KIBS to establish an organizational unit responsible for internal audit and to enable, during the external audit, an audit from the aspect of payment system IT security. According to Table 24, it can be perceived that both retail payments systems in the Republic of Macedonia as of 2011, operate in line with the basic principles (internationally accepted standards for payment systems defined by BIS<sup>156</sup>).

Table 24
Assessment of CASYS and KIBS compliance with the basic principles

Basic principles no.	Short description of the basic principle	2011 CASYS	2010 KIBS	2011 KIBS
1	Legal basis			
2	Understanding of financial risks			
3	Management of financial risks			
4	Prompt final settlement			
5	Settlement in multilateral netting systems			
6	Settlement assets			
7	Security and operational reliability			
8	Efficiency			
9	Access criteria			
10	Governance			

Scale for assessment of the system's harmonization:



6.4. Vault operations

#### 6.4.1. Issued currency in circulation

As of December 31, 2011, the issued currency in circulation equaled Denar 22,767 million, which is an increase of Denar 2.6 billion, or 12.9% compared to the end of 2010.

1

<sup>&</sup>lt;sup>153</sup> Criteria for each payment system are defined pursuant to the Decision on the criteria and standards for payment system operations.

<sup>&</sup>lt;sup>154</sup> Pursuant to the Decision on the criteria and standards for payment system operations, the payment systems classified in the category **important payment systems** should comply with the basic principles no. 1,2,7,8,9 and 10.

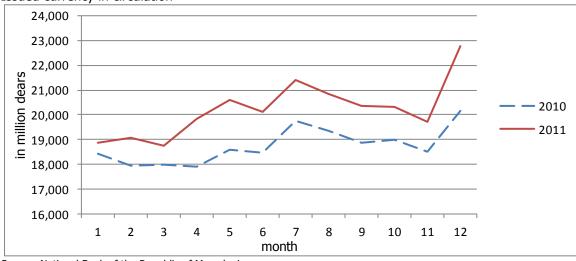
<sup>&</sup>lt;sup>155</sup> Pursuant to the Decision on the criteria and the standards for payment system functioning, the payment systems classified in the category **other payment systems** should comply with the basic principles no. 1,2,7,9 and 10.

<sup>&</sup>lt;sup>156</sup> CPSS (Committee on Payment and Settlement Systems). 2001. Core Principles for Systemically Important Payment Systems. Bank for International Settlements. Basel, Switzerland (January).

On December 31,2011, the structure of the issued currency in circulation indicates that the share of the banknotes and coins equal 97.7% and 2.3 %, respectively, registering no significant changes compared to the previous 2010, i.e. there was minor rise in the share of the coins in the value structure of issued money from 2.0% to 2,3%.

The structure by the number of pieces shows participation of banknotes and coins in the issued currency in circulation of 27.0% and 73.0%, respectively. However, there are total of 62.9 million pieces of banknotes and 170.1 million coins in circulation.

Figure 169
Issued currency in circulation

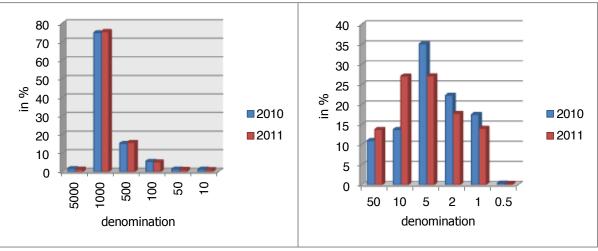


Source: National Bank of the Republic of Macedonia

The largest share according to the value, accounts for the banknotes in denomination of Denar 1000 and 500. The denomination of Denar 1000 participates with 75.5% (on December 31,2010 with 74,8%), while the banknotes in denomination of Denar 500 participates with 15.8% in the value of the banknotes in circulation (15.3% on December 31,2010). The other banknotes with smaller denomination structure participate with 8.7% in the total value of the issued banknotes in circulation.

Figure 170 Value of the participation of banknotes by the denomination in circulation

Value of the participation of coins by the denomination in circulation

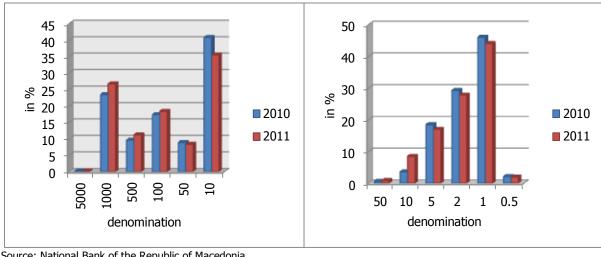


Source: National Bank of the Republic of Macedonia

The largest participation in the value of the coins accounts for coins of the Denar 5 (27.1%) and Denar 10 (27.0%). The denomination of Denar 2 participates with 17.7% in the value of the coins, Denar 1 with 14.0%, and the coins in denomination of Denar 50 with 13.7% in the value of the coins.

Figure 171 Quantitative share of banknotes by denomination in circulation

Quantitative share of coins by denomination in circulation



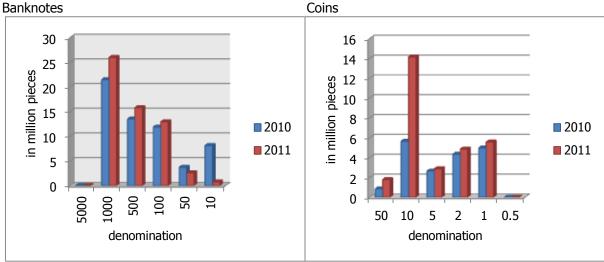
Source: National Bank of the Republic of Macedonia

The largest share according to the number of pieces accounts for the banknotes in denomination of Denar 10, 100 and 1000. The share of Denar 10 equals 35.4% (on December 31,2010, with 40.7%), the denomination of Denar 100 participates with 18.3% (17.3% on December 31,2010), while the denomination of Denar 1000 participates with 26.7% in the total number of banknote pieces (23.4% on December 31,2010). The other banknotes participate with 19.6% in the total quantity of banknotes in circulation. The largest quantity of the coins in circulation accounts for the denomination of Denar 1 (44.0%).

#### 6.4.2. Supply of banks with banknotes and coins

The central vault of the National Bank and the sub-units for cash operations in the Republic of Macedonia, in 2011 supplied the banks with cash in the amount of Denar 35.6 billion (increase of 19.1% compared to 2010), having realized 3,077 transactions (58.0 million banknotes and 29.2 million coins were issued). Simultaneously, cash in the amount of Denar 33.0 billion was received from the banks, through performed 5,126 transactions. The analysis of the denomination structure of the banknotes and coins indicates that in 2011, during the issuance and receipt, the largest share accounts for the denomination of Denar 1000 with the banknotes (44.7% in 2011, i.e. 36.6% in 2010) and denomination of Denar 10 of 48.5% with coins.

Figure 172
Issued quantity of banks' cash



Source: National Bank of the Republic of Macedonia

#### 6.4.3. Processing and destroying of banknotes and coins

In 2011, the quality control process of banknotes that have been in circulation covered all banknotes received in the central vault and the cash operations subunits in the Republic of Macedonia. Out of the total processed banknotes, due to wear-out or damage, 18.2 million were destroyed (17.2 million banknotes in 2010). The largest share of destroyed banknotes accounts for the denomination of Denar 10, 100 and 1000 (72.8%). In 2011, all received coins in denomination of Denar 1, 2, 5, 10 and 50, were processed, and 359 thousand pieces were selected as damaged.

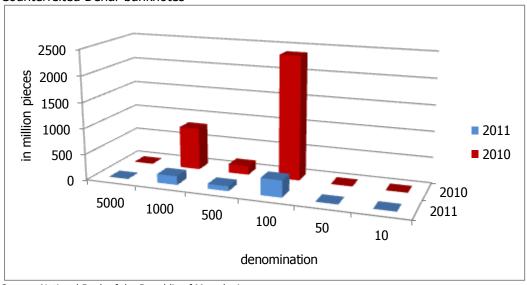
#### 6.4.4. Expertise on suspicious money / money counterfeits

Within its competence as the sole authorized institution, the National Bank performs the function of expertise on Denar and foreign currency counterfeits. For the purpose of precise defining of all details on how to proceed with money counterfeits in the process of their detection, as well as the procedure for their withdrawal, the identification of the involved institutions in the this process and their mutual cooperation and the procedure in the preparation of professional opinion - expertise, including the regulation of the public relations regarding the emergence of new types of counterfeits, Decision on determining the procedure for detecting and withdrawal of money counterfeits ("Official Gazette of RM", no. 42/2011) was adopted. In this period, within strengthening of the legal framework and institutional adjustment to the European administrative structures, the Decision on establishing central investigation office in the area of money counterfeit combat ("Official Gazette of RM" no. 61/2011) within the Ministry of Interior was adopted. The National Bank maintains close cooperation with the Central Investigation Office within the area of detection and prevention of counterfeiting and it is regulated by the Memorandum of Understanding signed by both institutions.

In 2011, total of 596 Denar counterfeits were found, detected by the commercial banks or confiscated in Republic of Macedonia by the Ministry of Interior (MOI), which is a decrease of 82.4% of the total number of counterfeited banknotes compared to 2010. Out of the total number of detected money counterfeits, in 2011 the denomination of Denar 100 dominated (total of 324 pieces, or 54.4% of the total number of counterfeits), followed by the denomination of Denar 1000 (total of 170 pieces, or 24.2% of the total number of

counterfeits) and the denomination of Denar 500 (total of 94 pieces, or 15.8% of the total number of counterfeits). The total value of the Denar counterfeits in 2011 amounted to Denar 249,710 and it has marginal share relative to the total value of the currency in circulation.

Figure 173 Counterfeited Denar banknotes



Source: National Bank of the Republic of Macedonia

In comparison with the foreign currency counterfeits, in 2011, expertise on 392 counterfeited foreign currency banknotes was made (the data from March 31, 2011 are data from the Ministry of Interior where expertise on total of 68 banknotes was performed). Regarding the participation structure, the most common are the Euro counterfeits with 246 counterfeited banknotes, or 62.7% of the total quantity of counterfeited banknotes, followed by the Swiss Frank with 101 counterfeits, or a share of 25.8% and US Dollar with 45 counterfeited banknotes, or share of 11.5%.

Type of currency	EUR	SFr	USD	Total in 2011
Quantity in	246	101	45	392
Participation in %	62.7	25.8	11.5	100

It is general assessment that the production quality of the counterfeited banknotes is bad, which enables easier detection. The expertise of the counterfeited banknotes preparation technique showed that they were made mainly by computer (scanning and printing), or by using a copying machine, producing photocopies on regular paper without protection marks.

In 2011, the sale of the current collection the National Bank continued. In conditions of constant increase in the gold price on the international stock exchanges and reduced demand for jubilee coins, 159 pieces were sold, 126 of which were gold and 33 silver jubilee coins (in 2010, total 341 pieces, or 266 gold and 75 silver jubilee coins).

#### 6.5. Internal audit

Through the realization of the Operating Program in 2011, the Internal Audit Department was fulfilling its ultimate task aimed at improving the NBRM activities through systematic and regular assessments of the risk management process, the internal controls system and the management and operating processes. This goal has been achieved by giving an assurance to the management bodies of NBRM that the risk management, the internal control systems and the managing processes, designed and implemented by the management, are adequate and that they function in a manner that enables: credibility and integrity of the financial and other information, an operating that with the laws and bylaws, the internal policies and the operating procedures, safeguarding of assets, and rational and efficient resource employment.

The largest part of the regular activities pertains to the regular audits, the performance of which was planned, not only from the aspect of the level of inherent, business risks, but also of the importance of the functions performed, the interval from the last audit performed, as well as the changes made in the operating processes. The audit reports provided an opinion on the adequacy of the established internal audit system, on which the NBRM management was regularly informed. Recommendations were given for overcoming the identified weaknesses, if any, monitoring also the fulfillment of the given recommendations presented in the audit reports.

In 2011, 15 regular and three extraordinary audits were conducted, while the implementation of the recommendations given in the audit reports was monitored on a regular quarterly basis, which should have been completed in 2011. The information obtained from the monitoring mainly showed that the recommendations were generally observed and implemented within the given deadlines. The audits on 44 work processes in NBRM in 2011, resulted in 55 recommendations for improvement of the internal control system.

Besides the regular, the internal audit undertook also some other activities aimed at improving its own operation quality and efficiency through further implementation of the international standards for professional internal audit. From this aspect, in 2011 the following activities were performed: revision of the Policy and Rulebook for operating of the Internal Audit Department in NBRM, implementation of the Internal and External Program on Assessment of the Internal Audit Operating Quality, development of ARS application (risk-based internal audit system, or Audit Risk System) in cooperation with ITD, and continuation of the technical cooperation with the internal audit of the Central Bank of the Netherlands in the area of IT audit improvement.

## 6.6. Improvement of the NBRM institutional capacity

6.6.1. Activities towards building the institutional capacity through human resources development

The further building and strengthening of the current professional and work capacities of the employees of the National Bank is extremely important objective of the National Bank. The providing of adequate level of skill of the National Bank staff for quality execution of the tasks imposes the need of continuous acquiring of new knowledge and skills.

The professional development of staff in 2011 was performed through realization of professional trainings in the country and abroad. For the National Bank staff participating in the specialized training programs organized by the other central banks, international financial institutions or training centers, besides the training, the possibility for exchange of experience with the representatives of the central banks from other countries, training participants, is of great importance.

Within the realized professional training for 2011 the National Bank provided also funds for completion of the professional education of several employees, for the purpose of acquiring higher qualification degree.

#### 6.6.1.1. Professional training with external organizers

In 2011, the number of visited professional trainings abroad is almost equal to that in 2010 (decrease of 3.4%), while the number of realized professional trainings in the country reduced by 34%. The total number of professional trainings in 2011 fell by  $11.2\%^{157}$  compared to 2010.

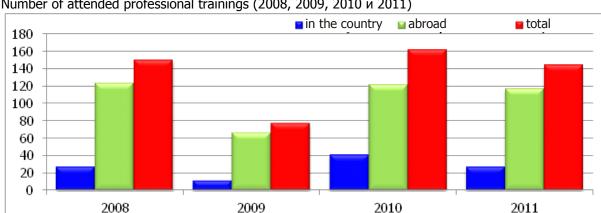


Figure 174 Number of attended professional trainings (2008, 2009, 2010 и 2011)

**The main organizers** of the professional trainings of the employees of the National Bank in 2011 were the central banks of other countries. It is significant that large number of the total number of trainings are realized and organized by the International Monetary Fund (Joint Vienna Institute with 15.3%, while IMF - Washington with 4.2%). The largest number of the seminars was realized on the basis of the annual training programs of the Europeans central banks, most of them organized by the Central Bank of Germany, with a share of 11.1% in the total number of seminars. The central banks of Austria, Poland, the Netherlands and the European Central Bank participate with 4.2% each.

#### Priority areas referring to professional training of the staff

Most of the professional trainings in 2011 were realized in the area of monetary policy, macroeconomic projection and central banking operations (28.4%), the statistics (21.5%), supervision (13.8%), financial stability and banking regulations (8.3%). Smaller share accounts for: internal audit, legislation, human resources management, cash

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<sup>&</sup>lt;sup>157</sup> In 2010, technical assistance grant from the European Central Bank within the supervision domain was obtained, thus increasing the number of realized trainings. Regarding the financial assets intended for professional training, in 2011 funds higher by 24.4% than the funds in 2010 were spent.

management, financial and accounting operations, payment systems, Eurointegration processes, information technologies, etc.

It should be emphasized that the larger number of the professional trainings are directed towards building of institutional capacities of the central bank for the fulfillment of its main functions. The other areas are included in the realization of the professional training, but with smaller share in the total fund of realized professional trainings.

#### 6.6.1.2. Professional training organized by the National Bank

The organization of trainings in the premises of the National Bank became even more popular method of professional training of the employees from the aspect of smaller expenses for professional training, as well as simultaneous attendance of higher number of employees, as a target group, for acquiring new specific knowledge necessary for execution of the tasks. The internal trainings principle will be applied more in the following period.

In 2011, total of 45 employees from the National Bank participated in the seminars and workshops for professional training organized by the National Bank, with total 4 professional trainings being organized, as well as one international conference. The events organized by the National Bank in 2011 are stated below:

- Seminar: "Project revision and project management"
- o Work-shop: "IT Projects Management"
- Seminar: "Licensing of banks' shareholders"
- Work-shop: "UNCTAD United Nations Conference on Trade and Development"
- Fourth international conference on the "Payment systems and the securities settlement systems"

#### 6.6.2. Activities towards building of institutional capacity through technical assistance

In 2011, the established bilateral cooperation of the National Bank of the Republic of Macedonia at the level of technical cooperation with the central banks from the region and wider, continued. The cooperation from technical assistance area and most of the projects for 2011 were realized with the central banks of the Netherlands, Germany, Slovenia and Poland, as well as within the bilateral cooperation with Serbia.

The National Bank had the most intensive cooperation with the Central Bank of the Netherlands, a project which commenced in 2000 and continued its successful implementation also in 2011. The project covered large part of the basic functions and activities of the National Bank of the Republic of Macedonia.

In 2011, the administrative capacity of the employees in the Supervision, Banking Regulations and Financial Stability Sector has continuously been strengthening through organizing several trainings for the employees by using technical assistance from the central banks of Germany and the Netherlands, the TAIEX program, as well as ATTF - from Luxemburg and Toronto Center.

In 2011, the two-year IPA Project "Strengthening macro and micro-prudential supervision" was finalized. It enabled establishing bilateral cooperation with the Central Bank of Slovenia, on the basis of which activities for revising the supervisory approach for assessment of the banks' risk profile towards introduction of the fourth level of assessment of the quantity and quality management with each risk, were undertaken, determining of

the influence on the estimation for the inherent risk level and the assessment of the risk management quality in the determining of the estimation for the aggregate risk level and quantifying the influence of the individual elements the estimation is based on.

In 2011, representatives of the National Bank took active participation in the Technical Assistance Project of the State Statistical Office financed through the Instrument for Pre-Accession Assistance intended for EU candidate states – IPA 2007. Cooperation and training with several central banks of the EU member states through the instrument for pre-accession assistance of the EU candidate countries -TAIEX was organized.

Within the accounting operations, technical assistance within TAIEX program for analysis and perception of the practical aspects of the implementation of the accounting rules of the European Central Bank was used. Technical cooperation with the Central Bank of the Netherlands for improving the planning process and monitoring of the implementation of the integrated accounting system was used.

#### 6.6.3. Building of institutional capacity in the management area

Within the building of institutional capacity of the National Bank, in 2011, for the first time since its establishing, the non-executive members of the Council has been included in the regular operations of the professional task groups. Namely, per one non-executive member has been engaged in the operations of the Investments Committee, Operational Monetary Policy Committee and Asset and Liabilities Management Committee of the National Bank, while three non-executive members comprise the Audit Committee of the National Bank. Such an operating policy contributes to even larger efficiency, straightforwardness and transparency in the Bank's operating.

#### 6.6.4. Building of institutional capacity in the statistics area

The National Bank is one of the authorized movers of the statistical researches within the national statistical system in the Republic of Macedonia. The statistical function of NBRM is stipulated in the Law on the National Bank of the Republic of Macedonia and the Law on State Statistics. The Statistical Research Program, as the basic document for the competence of individual institutions for the statistical researches in the country, defines the researches, primarily in the monetary and the external statistics area, the NBRM is entitled to collect data about, and it is obliged to disseminate data based thereon. The statistical activities of the NBRM within the data dissemination area are used for informing the public about the financial and the macroeconomic trends in the Republic of attainment of the NBRM basic functions.

Currently, the NBRM generates comprehensive and complex sets of data on monetary and statistics of interest rate, balance of payments, international investment position, direct investments, external debt and receivables, foreign reserves and foreign liquidity. As source of data, the NBRM uses a variety of direct and indirect reports from the financial institutions and non-financial trade companies, as well as from the institutional reporters, such as the Central Securities Depositary, or the Customs Administration of the Republic of Macedonia (about the foreign trade of goods).

The National Bank, within the statistical researches within its competence, performs continuous activities for monitoring and harmonization with the international statistics standards. In that regard, it continuously cooperates with the International Monetary Fund, the World Bank, the Bank for International Settlements, through regular submission of

statistical data, from one hand, and continuously improvement of the quality of the available data, from another.

Closer cooperation between the main carriers of the national statistical systems has been realized within the Memorandum of Understanding in the area of macroeconomic statistics, between the Ministry of Finance, the State Statistical Office and the NBRM. Adhering to the Statistical Research Program, this Memorandum nominates the primary bearers of the individual macroeconomic statistical researches, simultaneously defining the manner of cooperation and the mutual submission of data necessary for preparation of the individual statistical researches. This important document was prepared within the process of approximation of the national statistical system to the European national statistical systems.

In 2011, the Republic of Macedonia applied SDDS - Special Data Dissemination Standard of IMF. The National Bank, together with the State Statistical Office (coordinator) and the Ministry of Finance, was one of the main pillars in the process of qualitative and time-adjustment of the national statistics with the international standards. With the implementation of this globally the highest data dissemination standard, except affirming the high quality of the statistical data, facilitation of the access of the domestic entities to the financial markets was enabled, strengthening also the availability of timely and comprehensive statistical data as a contribution towards conducting steady macroeconomic policies. The national summary data page for the Republic of Macedonia can be found at the following web site: <a href="http://www.stat.gov.mk/sdds/nsdpmon111.htm">http://www.stat.gov.mk/sdds/nsdpmon111.htm</a>. These data can be accessed also through the IMF DSBB website, where the methodological explanations for the published statistical data, as well as the advance release calendar, are published.

Furthermore, in 2011, as institution competent for collection and dissemination of the statistical data for the foreign direct investments, the National Bank joined the Coordinated Direct Investment Survey - CDIS of IMF, which is another proof for the quality and the harmonization of the foreign direct investments statistics with the international standards.

Within the activities for establishing investment and private pension funds statistics, in July 2011, the National Bank adopted new bylaws including the non-bank financial intermediators in the reporting system in order to attain adequate scope and structure of financial assets and liabilities on this market segment, which registers constant rise in the last few years, and thus on the financial sector as a whole.

In 2011, substantial qualitative improvements in external debt and external receivables statistics, as well as in the balance of payments statistics, were made, attained through the methodological harmonization of the manner of evaluation of the "loans" instrument pursuant to the international standards. In these reports, starting from the reporting 2010, the loans are calculated according to the accrual interest principle.

In October 2011, the regular annual revision of balance of payments data showed adequate presentation of the data on import and export of financial intermediation services - measured indirectly (FISIM) in 2003-2011.

During the year, the National Bank continued to improve the quality of the current statistical researches, analyzing also the possibilities for introduction of new ones. The activities for adherence to the European legislation and the statistical requirements of the European institutions continued in that direction.

#### 6.6.5. Activities towards building of the institutional capacity through IT development

Keeping up with the fast IT development in 2011, the National Bank undertook numerous activities to enlarge the possibilities and the operating efficiency of the employees, as well as to improve the performances, the capacity, the functionality and the safety of the information system.

In conformity with the Operating Program of the National Bank for 2011, development of new, or modification of the current applications for the needs of several organizational units was made.

In 2011, the IT infrastructure enlarged its physical capacity thus giving the information system of the National Bank better possibilities for functioning of the current applications, as well as development of new, more extensive applications. The introduction of virtualization in the server infrastructure enabled better flexibility and efficiency of the information system of the National Bank, as a trend that will pursue also in the forthcoming years.

In 2011, the National Bank paid special attention to the activities referring to the replacement of the current operational versions of the information systems with new, higher and more sophisticated versions. The operational system of the PCs was upgraded, as well as the Active Directory, Microsoft Exchange, IPS/IDS. The new versions of the operating systems increased the robustness, availability and the capacity of the information systems and enabled better user interfaces, higher performances, new administrating tools, adequate updating, regular functioning, etc.

Besides, as a supplement to the e-mail system, a Blackberry service was introduced, enabling the employees a connection through the mobile Blackberry telephones to the e-mail. Thus, using the world-known Blackberry service, larger mobility in the operations and the constant connection to the e-mail is enabled.

For the purpose of improvement of the information system security of the National Bank, in 2011, integrated audit trace system on the servers and other devices (SIEM) was launched. This system provides collection of audit traces on central location, harmonization with the international standards and best practices, monitoring of the irregularities in the maintenance of servers, net equipment and other devices, as well as monitoring of possible malicious attacks by users through regular monitoring. When introducing this system, several modifications in 2011 were made, for the purpose of better configuration and monitoring of the monitored processes.

#### 6.6.6. Building of the institutional capacity within financial and accounting operations domain

In 2011, the National Bank continued with the accounting record consolidation through introduction of integrated accounting system. The integrated accounting system should be improved considerably, in order to attain better efficiency, larger productivity, to be better organized with easy access to the related documents, to enable better automation in the recording of the transactions and to ensure easier use of various types of information

for any needs. In July 2011, procurement agreement for purchase and implementation of modern software for integrated accounting system was concluded. The last four months of 2011 were used for preparation of the project, pilot phase of testing of the functionality of the new system, analysis and development of business plan (Business Blue Print - BBP). The realization of the project continues in 2012, working substantially on the adjustment and introduction of the new integrated accounting system.

In 2011, activities for improvement of the planning process were also undertaken, with a draft-rulebook for organization management, the competencies, the procedures, the documents and the information for development of the three-year Strategic Plan, operating guidelines, Financial Plan, Investments Plan and the Procurements Plan of the National Bank, their form, contents and the manner of monitoring of the performances being developed.