

**National Bank of the Republic of Macedonia**



**Quarterly Report  
January, 2013**



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## Introduction

**During the last quarter of the year, monetary conditions remained unchanged, i.e., the maximum interest rate on CB bills auctions was maintained at the level of 3.75%. During this period, economic and financial conditions called for monetary policy relaxation, but due to the high uncertainty about their continuity no changes in the interest rate were made. Monetary policy was relaxed through the instrument reserve requirement, but it only targeted banks with credit activity directed towards sectors whose growth reduces the external vulnerability of the economy<sup>1</sup>.** In the last quarter, data on inflation showed a slowdown in the growth of domestic prices. In conditions of concurrent downward adjustments to the estimates for future growth of import prices, these developments signaled reduced risks to domestic inflation. NBRM continued its interventions in the foreign exchange market with purchasing foreign exchange, and the growth of foreign reserves during the quarter showed that the balance of payments creates foreign exchange inflows higher than expected. Indicators of foreign reserves adequacy remained favorable, with assessments for a relatively comfortable level for absorbing potential unexpected shocks. Economic activity indicators showed a slight improvement, which was still insufficient for a sound and sustainable economic recovery. Against the background of a relatively weak economic performance and deterioration in their loan portfolio quality, in the last quarter banks continued to adjust their balance sheets, increasing the low-risk investments in government securities, while lending to the private sector slowed significantly. In such environment, despite the unchanged monetary stance, NBRM did not exclude the possibility of relaxing the monetary policy, if the trend of inflation stabilization and favorable movements in the foreign exchange market are retained. **Hence, in circumstances when the December data on inflation and movements in the foreign exchange market in the second half of December, indicated retaining of the favorable performances, in the beginning of January 2013, the NBRM decided to reduce the maximum interest rate by 25 basis points.**

**Recent macroeconomic projections supported the possibility for a more relaxed monetary policy. They confirmed the estimates of lower inflation in the next two years than previously expected and a greater capacity to generate foreign exchange inflows through the balance of payments, amid simultaneous moderately weaker economic growth and slower credit flows than previously expected.** In the period between the two projections, the economic outlook for our most important trading partners deteriorated again. Repeated downward revisions indicated further maintenance of the environment of uncertainty and inherent risks in conditions of continuous prolongation of the debt crisis in the Euro area. **However, despite these changes in the environment, the new projections for the balance of payments showed no deterioration of the external position.** *Latest estimates for 2012 show a higher current account deficit compared to previous expectations (3.2% of GDP, compared to 2.8%), due to higher than expected import pressures, partly due to one-off factors.* On the other hand, inflows from private transfers again exceeded the expectations, indicating confidence in the domestic currency and stable exchange rate expectations. The gap in the current account is fully financed through capital flows in the economy, which provided further accumulation of foreign reserves. The stock of foreign reserves at the end of 2012 exceeded the projections, referring to better initial conditions and better capacity for cushioning shocks. *Latest estimates still indicate likely widening of the current account deficit in 2013 and 2014 (3.8% of GDP and 5.4% of GDP), with the deficit in 2013 being unchanged compared to the previous projection, while in 2014 a smaller deficit is expected compared to*

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<sup>1</sup> For details see the section on monetary policy.



*the previous projection.* One of the factors for the current account deterioration is the gradual decrease in the relative importance of the inflows from private transfers. This is particularly evident in the projections for 2013, when the effects of the emphasized conversion of foreign currency into denars are expected to exhaust and thereby the inflows through this channel to stabilize. The trade deficit in 2013 is expected to be relatively stable compared to the previous year. Moreover, with the gradual recovery of external demand and assessments for the absence of large price shocks, export activity is expected to grow. On the other hand, in conditions of still weak domestic demand, pressures on imports are not expected to be strong enough to cause a widening of the trade deficit. Already in 2014, more visible effects of the new direct investments and the growth of domestic demand on imports are expected, which would result in temporarily more negative trade gap. *Moderate current account deficits in 2013 and in 2014 are still expected to be fully financed through capital inflows, which would provide further growth of international reserves.* As in previous projections, larger capital inflows are mainly expected from the government external borrowing and foreign direct investment. *Compared with the previous projection, the cumulative capital inflows for the next two years are not substantially altered.*

**The relatively "moderate" expected scenario for the external position is in line with the estimates for the gradual economic recovery in the next two years. In conditions of deteriorated external environment, economic recovery is expected to take place at somewhat more moderate pace than previously expected, with estimates that the economy will be below potential until mid-2014.** The most recent indicators of economic activity are in favor of the previous assessments for economic stagnation in 2012. For the next two years, the new projections indicate a gradual economic recovery. Global environment is expected to be sufficiently stimulating to gradually revitalize the export sector, and further increase the utilization of the potential of new export capacities, which will lead to growth of export activity. Such environment is expected to stimulate domestic investors' propensity to take risks, which together with the expected impetus of public and foreign investment would lead to amplification of the investment cycle and its retention during the time horizon of the projections. The recovery of the corporate sector and the better environment are assessed to have positive transmission effects on the labor market and consumer confidence, which will lead to increased consumption. Amid such assumptions, in 2013 and in 2014, GDP growth of 2.2% and 3%, respectively, is expected, supported by growth in domestic demand, with a negative contribution of net exports.

**Forecasts for gradual economic recovery are supported by current estimates of moderate intensification of banks' lending activity in 2013 and in 2014.** Domestic loans grew also in 2012, but their pace was continuously slowing down during the year, with the volume of new lending being lower than expected. Deteriorating perceptions of banks' future risk, the simultaneous increase of the credit risk in the system and the possible deleveraging of parent banks are the likely reasons for such trends in the credit market. Although these factors may be limiting to the higher credit growth in the next period, projections still indicate possible moderate acceleration of credit growth in 2013 and 2014, but at a slower pace than previously expected. Economic recovery and stabilized environment are expected to provide growth of the deposit potential and stabilize the expectations of banks and other entities. In conditions of solid liquidity and solvency of banks, these factors, along with the more relaxed monetary stance, would provide higher financial support to the domestic economy through the banks.

**Latest macroeconomic projections point to a decrease of the inflation risks, leading to a downward revision of the inflation projection for the next two years.**



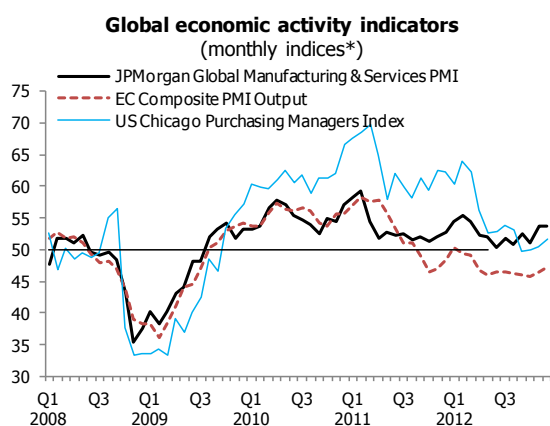
In the period between the two projections, inflation growth significantly slowed down, with the December price level being below projections. Amid such lower starting conditions and concomitant downward revision of estimates for the import prices in the next two years, the expected average inflation for 2013 has been revised downwards from 3.5% to 3.2% and for 2014 from 2.6% to 2.3%. In any case, the baseline scenario assumes a relatively moderate inflation under controlled framework. Thus, the expected retention of the negative output gap by mid-2014 excludes the risk of pressures on domestic prices through the demand channel.

**In summary, the new NBRM projections show a relatively stable inflation outlook, favorable external position, with the capacity to create new foreign exchange inflows and growth of foreign reserves, gradual, but still slow economic recovery and slight lending acceleration.** Hence, the new macroeconomic scenario does not differ significantly compared to previous projections. However, it points to the likelihood of lower inflation pressures and faster growth of foreign reserves, and thus more favorable monetary environment. **The risks are still present and largely conditioned by the fulfillment of the assumptions arising from the external environment.** The possible deterioration of the economic outlook for the European economy and the repeated increase in the risks aversion, may act as a limiting factor for the realization of projections for export growth and capital inflows. Also, in spite of the reduced inflation risks, the possibility of more pronounced second-round effects and uncertainty about the dynamics of import prices is still present. **Given such macroeconomic conditions and risks for the forthcoming period, and amid the monetary easing conducted earlier this year, the present monetary policy stance is assessed as appropriate.** In any case, the NBRM will closely monitor the developments also in the forthcoming period, and will make the appropriate changes in the monetary policy, if necessary for the successful realization of the monetary goals.

## I. Macroeconomic developments

### 1.1. International economic environment<sup>2</sup>

***Indicators for the global economy point to better economic performances towards the end of the year, against the background of strengthened economic activity in emerging economies and still unfavorable trends in developed countries. The growth of emerging economies was supported by stimulating monetary and fiscal policies that have resulted in enhanced domestic demand, which to some extent offset the negative effects of the weak external demand. On the other hand, the growth of developed countries was still limited as a result of the continuously low confidence level of firms and households, weak labor markets and further correction of the public and private balance sheets. In the forthcoming period it is expected that the global economy will continue to strengthen gradually, although the process of recovery will remain fragile. Global inflation followed a downward path in the months of the fourth quarter, with no significant changes in the perceptions for its further deceleration.***

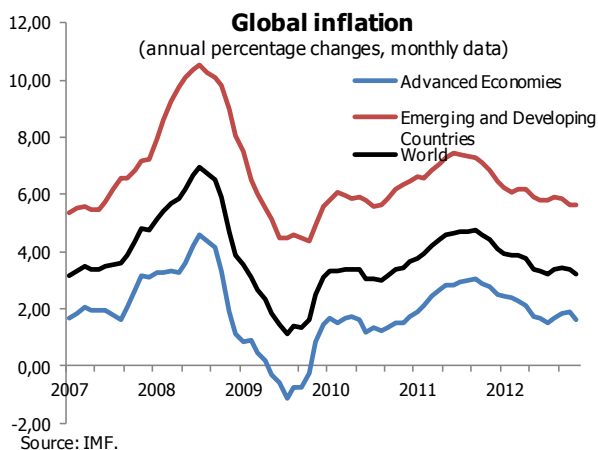


\*The PMI index reflects the percentage of respondents that reported better business conditions compared to the previous month and it can take values between 0 and 100. PMI=50 is considered as a reference value, indicating unchanged economic conditions. A PMI value over 50 is taken to indicate that the economy is expanding, while a PMI value below 50 suggests that the economy is contracting.  
Source: Bloomberg.

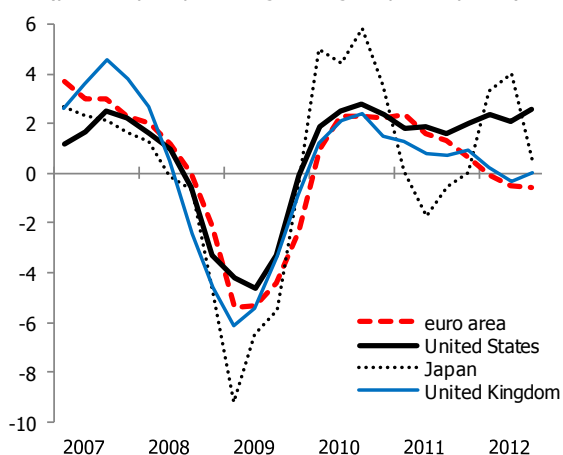
After the slowdown in global growth in the first half of the year, economic results indicated improvement in the global economic activity towards the end of the year. According to the high-frequency survey indicators of economic activity - PMI,<sup>3</sup> in the fourth quarter, the global economy achieved accelerated growth compared to the previous quarter. Thus, the global composite PMI rose to 52.8 index points (51.7 index points in the third quarter), due to the faster growth in the service sector and improved performances in the manufacturing industry. Moreover, the data suggest continued economic growth in the U.S., unlike the Euro area economy, which dropped again and thus negatively contributed to global growth. In the next two years, global growth is expected to accelerate gradually. Despite the fact that the challenges that advanced economies face in terms of the need for faster sector restructuring and need for further improvement of the balance sheets of public and private sectors will limit the pace of growth of the world economy, still the more favorable expected economic situation in emerging economies is considered to act toward supporting growth. This assessment stems from the expectations that emerging countries will face a stronger economic growth, as a result of the combined effects of their relaxed monetary and fiscal policies and

<sup>2</sup> The analysis is based on the ECB's monthly bulletin, November and December, 2012; reports of "Capital Economics"; weekly reports of the National Bank of Greece and press releases of "Markit Economics".

<sup>3</sup> PMI (Purchasing Managers Index - PMI) are based on surveys of a representative sample of companies from the manufacturing and service sectors, and are often used as high frequency indicators of current and future economic activity.

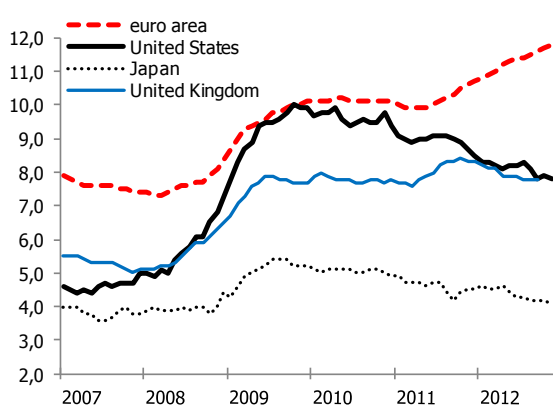


**Real GDP growth in advanced economies**  
(year-on-year percentage changes; quarterly data)



Source: Eurostat.

**Unemployment in advanced economies**  
(in percent; seasonally adjusted monthly data)



Source: Eurostat.

improvement in global financial conditions. Also, the global economy will be supported by the resolving of the crisis with the fiscal "cliff" in the United States in early 2013, which thus escaped a recession caused by the sudden tightening of public finances. However, despite the fact that the fiscal compromise<sup>4</sup> initially infused optimism in global markets, uncertainty will still exist in the future given that the deadline for resolving other key issues related to automatic spending cuts was postponed to February 2013.

**In the two months of the fourth quarter, global inflation<sup>5</sup> remained on the same level of the previous quarter, on average.** However, the monthly inflation followed a downward path, as opposed to the temporary growth that was registered in some of the summer months (August and September). Thus, the realized inflation in November slowed to 3.3%, compared with 3.4% as it was in September and October. By groups of countries, reduced inflation rates were achieved in emerging and developing economies (5.6% on average in October and November, compared to 5.8% in the third quarter), while inflation in the advanced economies was unchanged compared to the third quarter and stood at 1.7%.

**In the third quarter, the economy of the Euro area recorded a second consecutive quarterly decline this year, as the region entered into a new technical recession after the one in 2009.** Namely, after the GDP decline of 0.2% on a quarterly basis in the second quarter, in the third quarter a negative growth of 0.1% was realized, with the annual rate of decline reaching -0.6%, thus being in the zone of negative changes for the third consecutive quarter. These performances are mainly due to adverse movements in domestic demand and in the change in inventories. Namely, the reduction of the households' disposable income, as a result of the negative employment growth and rising inflation have contributed to the reduction in private consumption, while declining business confidence, worsened expectations for the demand, declining

<sup>4</sup> The main elements of the compromise achieved are:

- An increase in income tax rates for income above USD 450,000 i.e. USD 400,000 a year, for households and individuals, respectively. For other taxpayers temporary tax cuts translate into permanently lower rates;
- Capital gains taxes for high-income taxpayers are increasing;
- Additional benefits for the unemployed who have that status for a longer period continue to apply for another year;
- The application of the automatic spending cuts is postponed for two months.

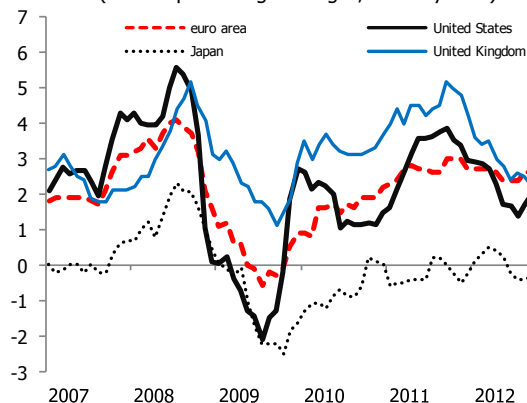
<sup>5</sup> Data source is the International Financial Statistics database of the IMF.





level of capacity utilization of the business entities and the unfavorable conditions in the credit supply adversely affected private investment. Public consumption also declined as a result of further implementation of the fiscal consolidation process. On the other hand, net exports continued to have a positive contribution to the growth, due to higher export growth, which in this period was driven mainly by stronger demand in the United States.

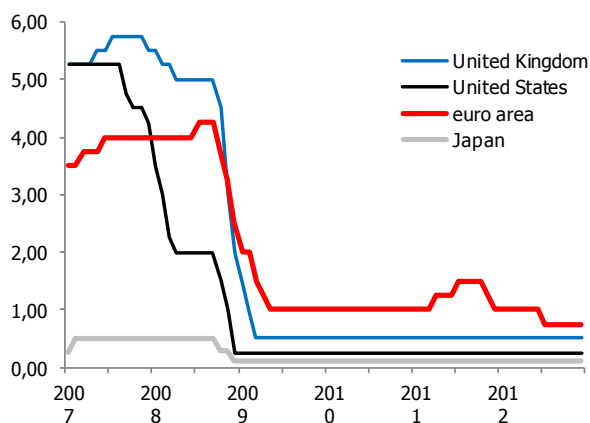
### Inflation in advanced economies (annual percentage changes; monthly data)



Source: Eurostat and national statistical offices.

**Inflation in the Euro area in the fourth quarter was moderately lower compared to the previous quarter and equaled 2.3%.** Observed through the individual components, the slower growth of consumer prices was mainly due to significantly lower growth of the energy component of the index (6.3% vs. 8% in the previous quarter), which is consistent with the slower annual growth of oil prices expressed in euros. Core inflation, which, in line with the weak domestic demand, decreased moderately and equaled 1.5%, also acted in this direction. On the other hand, the increase in the food component was relatively stable and amounted to 3.1%.

### Policy rates in advanced economies (in %)



Source: Central banks.

**In the fourth quarter, ECB, Fed and the Bank of England made no change to their historically lowest key interest rates.** The only significant decision of the ECB taken in the light of the increase in Greece's credit rating by Standard & Poor's, was to re-qualify Greek government securities as eligible collateral in the conduct of credit operations within the Eurosystem. At the same time, the Fed decided to keep the key interest rate within the range of 0 to 0.25% until the unemployment rate is higher than 6.5%<sup>6</sup>, and the projected rate of inflation over the next two years is less than 2.5%. With this, the Fed for the first time established a target for unemployment, thus acting in accordance with its dual mandate to ensure full employment and price stability. Regarding the unconventional monetary measures, during this quarter the Fed continued to implement the third program for quantitative easing by purchasing mortgage-backed bonds in the amount of US Dollar 40 billion each month, and also continued to implement the plan for extending the average maturity of the assets in its balance sheet through the purchase of long-term Treasury bills in the amount of US Dollar 45 billion each month. Through these actions the Fed seeks to put downward pressure on long-term interest rates to support the mortgage market and affect the facilitation of the financial conditions in the domestic and global economy. Also, in order to

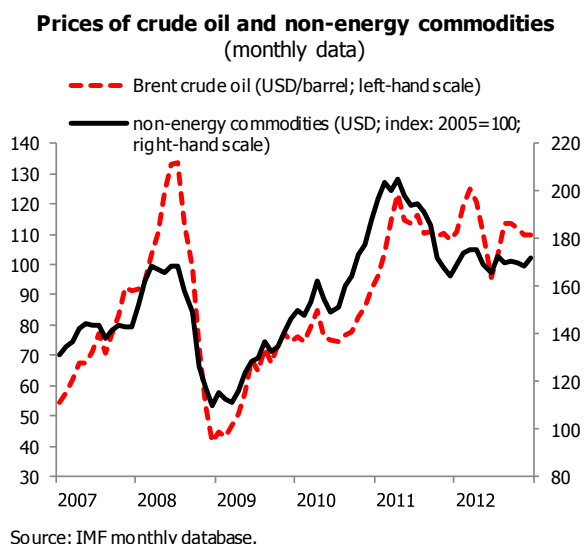
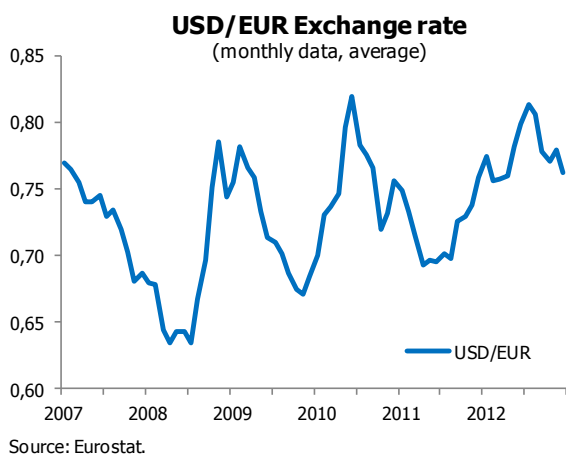
<sup>6</sup> For information, the unemployment rate in the USA in the fourth quarter was 7.8%.





improve liquidity in the credit market, the Bank of England continued to implement the asset purchase program through which it purchases government securities and private securities, such as high-quality commercial papers and corporate bonds.

**In the fourth quarter, the nominal exchange rate of the Euro against the US Dollar appreciated on a quarterly basis, for the first time in five quarters. During this period, the euro strengthened by 3.7% on average, with a higher value of the currency being recorded on a monthly basis also in two months of the quarter.** Thus, in October, the value of the Euro increased by 0.9% compared to the previous month, while in December the appreciation was even higher and amounted to 2.3%. Only in November, depreciation of the Euro by 1.1% was registered. In general, the reasons for such movements relate to the increased uncertainty about the resolution of the crisis with the fiscal "cliff" in the United States and the implementation of the third program of quantitative easing by the Fed, which contributed to the depreciation of the Dollar, on the one hand, and the agreement reached on the new tranche of financial aid to Greece which acted toward reducing the tensions over the European debt crisis and toward supporting the Euro, on the other. In December, one Euro was exchanged for 1.31 US Dollars, which is by about 2% more than its value in September, while compared to December 2011, the Euro depreciated by 0.5%.

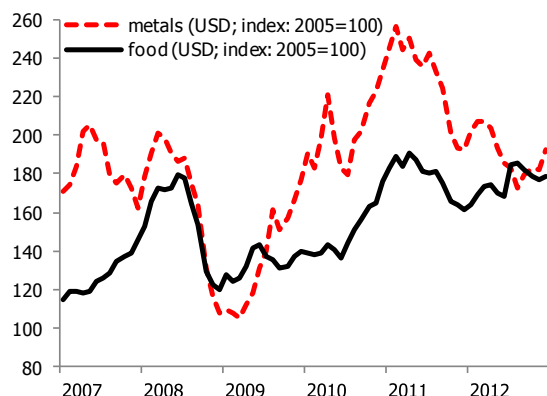


**In the fourth quarter, the price of "Brent" oil noted minor upward change compared with the previous quarter.** During this period, the suppressed demand for oil, due to the still fragile global economy and uncertainties about the debt crisis in the Euro area and the fiscal "cliff" crisis in the USA put no pressure on oil prices. On the other hand, concerns regarding the supply of oil, caused by rising geopolitical risks in the Middle East<sup>7</sup> during this period, and the depreciated Dollar exchange rate had an upward impact on the price. In such conditions, the average oil price in the last three months of the year remained at the level of the previous quarter of around US Dollar 110 per barrel, i.e. it registered a quarterly growth of 0.4% (1% on an annual basis). **On the other hand, the index of**

<sup>7</sup> This refers to the escalating conflicts between Israel and Palestine and Turkey and Syria, civil war in Syria, the political turmoil in Egypt and further tensions between the West and Iran.

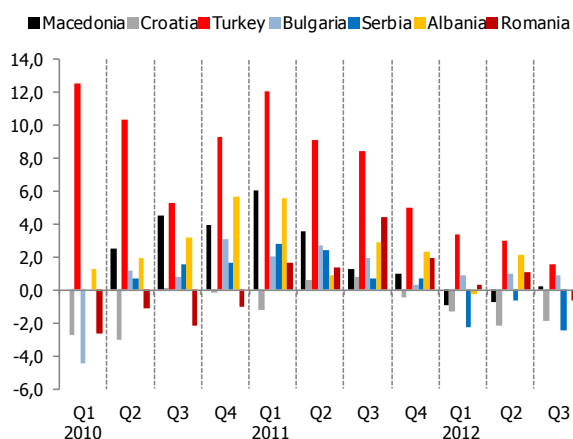


**Prices of food and metals**  
(monthly data)



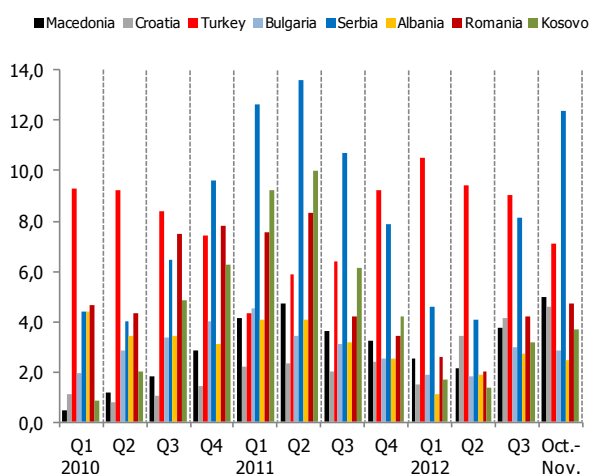
Source: IMF monthly database.

**Real GDP growth in countries from the region**  
(annual percentage changes, quarterly data)



Source: Eurostat and national statistical offices.

**Inflation in countries from the region**  
(annual percentage changes)



Source: Eurostat and national statistical offices.

**non-energy primary commodities<sup>8</sup> in the last quarter had a quarterly decline of 0.5%, which was mainly caused by a reduction in food prices.** Namely, after their fast growth in the previous quarter due to summer drought, food prices declined by 3.3%, largely due to significantly slower growth in wheat prices and a fall in the price of corn<sup>9</sup>. In contrast, prices of industrial metals increased by 4.2% in the fourth quarter, which was mainly caused by the strengthening of China's industrial activity as the world's largest consumer of metals.

**In the third quarter of 2012, some of the countries in the region had negative economic growth, while in the others the economic slowdown continued.** The economic activity continued to decline in Croatia and Serbia, while Romania registered a decline for the first time since the fourth quarter of 2010. Main factors for the decline of the Romanian economy were the significant decrease in private consumption due to reduced disposable income, slower growth in investment activity due to declining business confidence and lending, and the negative contribution of net exports. Serbia and Croatia register a GDP decline for the third, i.e. fourth consecutive quarter, with realized negative growth rates in all components of domestic demand, but with a positive contribution of net exports. On the other hand, Turkey's economy slowed significantly in the third quarter, as a result of the fall in consumption and investment, with the economic growth still being created only through dynamic export activity.

**In the period from October to November, the countries of the region registered converse movements in inflation. Thus, in Croatia, Romania, Kosovo and Serbia inflation accelerated, while in Bulgaria, Albania and Turkey inflation decelerated.** The trend of faster consumer price growth was particularly noticeable in Serbia, which registered a double-digit inflation rate, mainly due to the growth of food prices and the increase in VAT<sup>10</sup> and administered prices, which caused growth also of core inflation. Inflation accelerated also in Croatia, which was mainly due to the increase in the prices of food and energy. By contrast, Turkey registered the most significant

<sup>8</sup> Price index of primary commodities includes: the prices of food, beverages, agricultural raw materials and metals.

<sup>9</sup> Such movements in these prices were the result of the more favorable conditions on the supply side and the reduced industrial demand in this period.

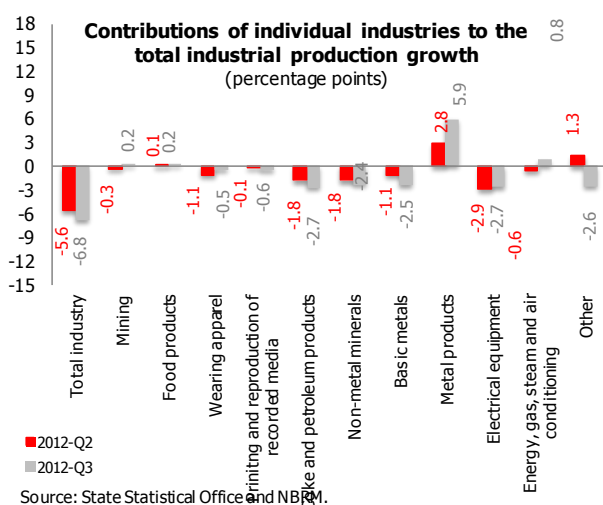
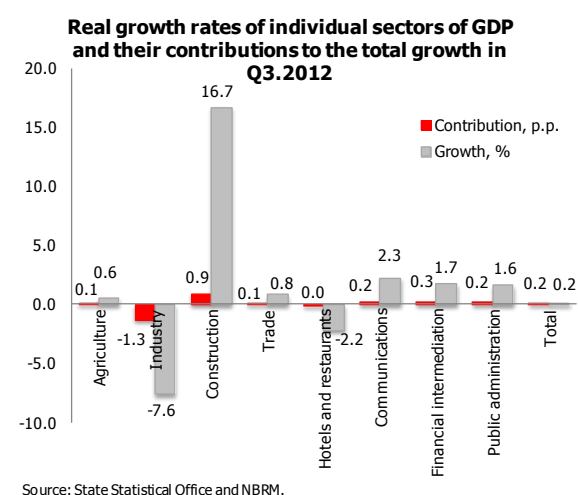
<sup>10</sup> Starting from October 1, 2012 the VAT rate in Serbia increased from 18% to 20%.



price deceleration, due to lower food inflation and declining core inflation. Similar factors have contributed to the slowing of inflation in Bulgaria.

## 1.2. Domestic supply

*The annual decline in activity of the Macedonian economy in the first half of 2012 was interrupted in the third quarter. Thus, in conditions of a positive quarterly movement, GDP registered an annual growth of 0.2% in the third quarter. With the exception of the "industry" and "catering" sectors, the activity in all other sectors registered an annual growth. The largest positive contribution to the annual growth of the economy was that of the construction activity, in part stimulated by foreign investment in the construction of real estate. Reduced industrial activity in the third quarter continued to reflect negatively on the domestic economy. In conditions of adverse global macroeconomic outlook and a decline in foreign effective demand, industrial activity has registered an annual decline for four consecutive quarters, thus restricting the degree of capacity utilization and the number of employees in this sector.*

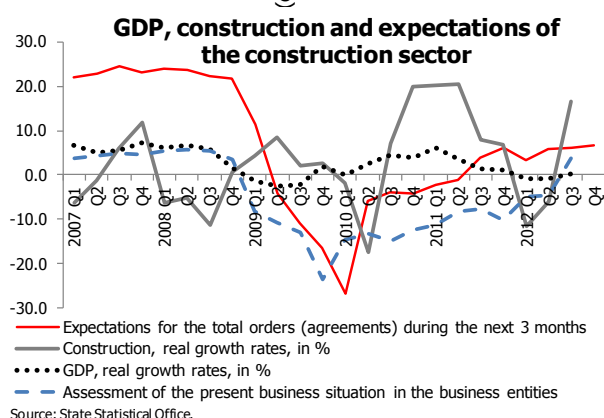
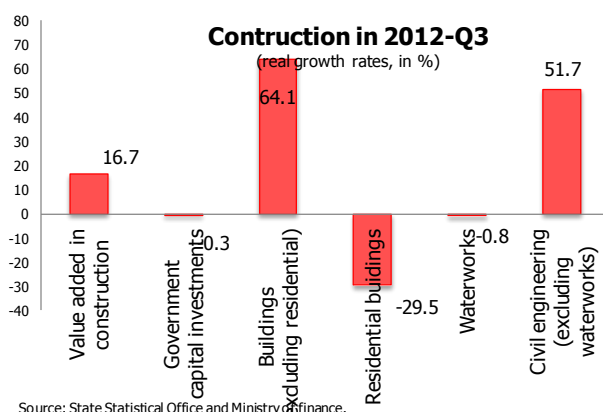


In the third quarter of 2012, the gross domestic product<sup>11</sup> registered a quarterly growth of 0.5% (seasonally adjusted), following the growth of 0.3% in the second quarter and the fall of 1.8% in the first quarter. On annual basis, the decline in domestic production from the first half of the year stopped, with GDP registering a small annual growth of 0.2%. The improved quarterly performance in the third quarter, for the most part, was associated with the growth of value added of "construction" and "transport and communications", with a simultaneous significant drop in trading activity. Regarding the annual dynamics, the biggest contribution to the annual growth of domestic production was the double-digit growth<sup>12</sup> of the "construction" sector, which in the first half of the year had a negative effect. Value added of the "trade" sector also recovered from the decline in the first half of the year. In the third quarter, better performances were registered in almost all sectors, with the exception of **industry and catering**. In fact, the decline in industrial activity, which has been in the zone of negative changes for four consecutive quarters, largely offset the growth of value added of other activities of the domestic economy.

**In the third quarter, construction activity increased on a quarterly and annual**

<sup>11</sup> GDP data for 2011 and 2012 are estimated data of the SSO.

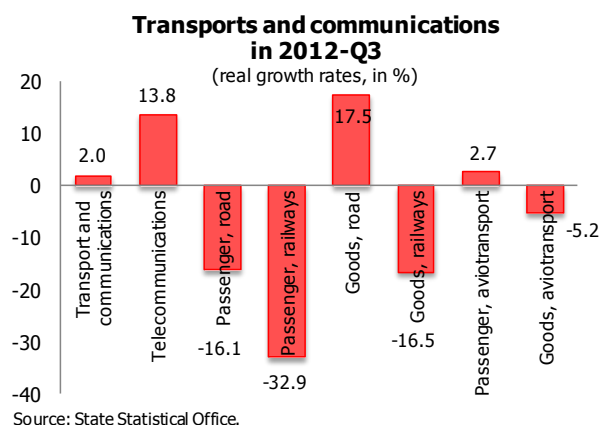
<sup>12</sup> The real value of this sector is historically the second largest, and if the seasonal effect is removed, the value added of construction in the third quarter is historically the highest.



**basis.** Intensive quarterly growth<sup>13</sup> followed the moderate growth in the second quarter and the decline in the construction activity in the first quarter, due to the extremely cold weather during the winter months. Moreover, the cumulative performances for the nine months exceed the performances of the same period last year. The Business Tendency Survey in the **construction** and improved assessment of the current economic situation indicates an increased optimism among business entities, which corresponds with the improved perceptions as regards the problem of lack of equipment and materials, and in terms of financial costs. Also, for the third consecutive quarter, the positive outnumber the negative perceptions regarding the financial situation of enterprises. Regarding the expectations of the managers<sup>14</sup> of construction companies for the next three months, boosted optimism in relation to the previous quarter was registered in the expectations for signing new contracts and the possible period for the provision of work, with simultaneously lower expectations for selling prices and the number of jobs.

	annual growth rates, in %								contributions to GDP growth (in p.p.)							
	Q1 2011	Q2 2011	Q3 2011	Q4 2011	2011	Q1 2012	Q2 2012	Q3 2012	Q1 2011	Q2 2011	Q3 2011	Q4 2011	2011	Q1 2012	Q2 2012	Q3 2012
Agriculture	9.5	2.7	-9.1	6.0	<b>1.4</b>	-0.4	2.2	0.6	0.8	0.3	-1.1	0.7	<b>0.1</b>	0.0	0.2	0.1
Industry	16.5	6.5	0.5	-3.9	<b>4.2</b>	-8.6	-7.2	-7.6	2.9	1.1	0.1	-0.7	<b>0.7</b>	-1.6	-1.3	-1.3
Construction	20.1	20.6	8.0	6.8	<b>12.3</b>	-11.5	-6.0	16.7	0.7	1.0	0.4	0.4	<b>0.6</b>	-0.4	-0.3	0.9
Trade	2.9	14.4	0.9	2.0	<b>5.0</b>	-0.4	-2.3	0.8	0.4	2.0	0.1	0.3	<b>0.7</b>	-0.1	-0.4	0.1
Hotels and restaurants	3.4	5.5	12.2	6.3	<b>7.3</b>	3.1	5.4	-2.2	0.0	0.1	0.2	0.1	<b>0.1</b>	0.0	0.1	0.0
Communications	6.2	2.4	5.6	0.3	<b>3.4</b>	3.4	-1.9	2.3	0.6	0.2	0.5	0.0	<b>0.3</b>	0.3	-0.2	0.2
Financial intermediation	-0.3	0.9	0.0	3.2	<b>1.0</b>	3.4	4.0	1.7	0.0	0.2	0.0	0.5	<b>0.2</b>	0.6	0.6	0.3
Public administration	1.0	0.7	-0.8	-2.5	<b>-0.4</b>	0.3	1.0	1.6	0.1	0.1	-0.1	-0.3	<b>-0.1</b>	0.0	0.1	0.2
Value Added	6.6	5.7	0.2	0.6	<b>3.1</b>	-1.8	-1.6	0.1	5.8	4.9	0.2	0.5	<b>2.6</b>	-1.6	-1.4	0.1
Net taxes on products	2.2	-8.1	6.7	3.0	<b>1.1</b>	5.0	4.8	0.4	0.3	-1.1	0.9	0.5	<b>0.2</b>	0.6	0.6	0.1
<b>Gross Domestic Product</b>	<b>6.1</b>	<b>3.6</b>	<b>1.3</b>	<b>1.0</b>	<b>2.8</b>	<b>-0.9</b>	<b>-0.7</b>	<b>0.2</b>	<b>6.1</b>	<b>3.6</b>	<b>1.3</b>	<b>1.0</b>	<b>2.8</b>	<b>-0.9</b>	<b>-0.7</b>	<b>0.2</b>

Source: State Statistical Office and NBRM calculations.

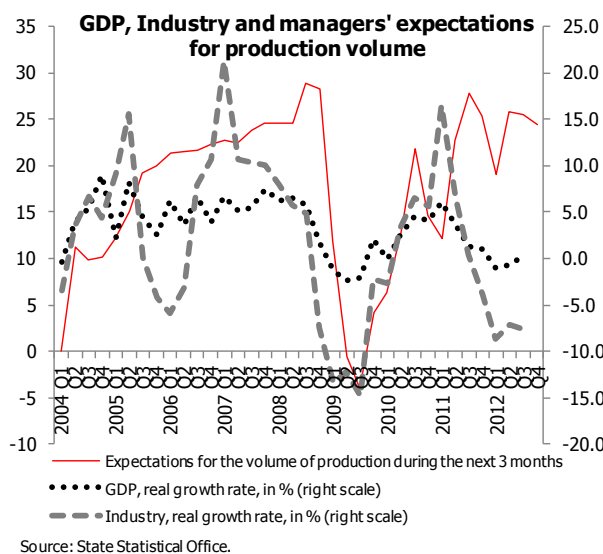
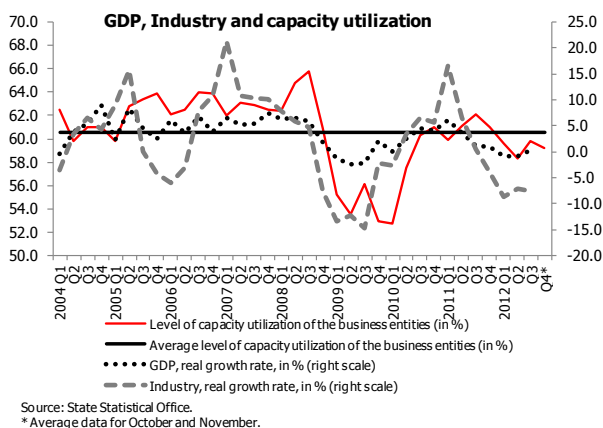
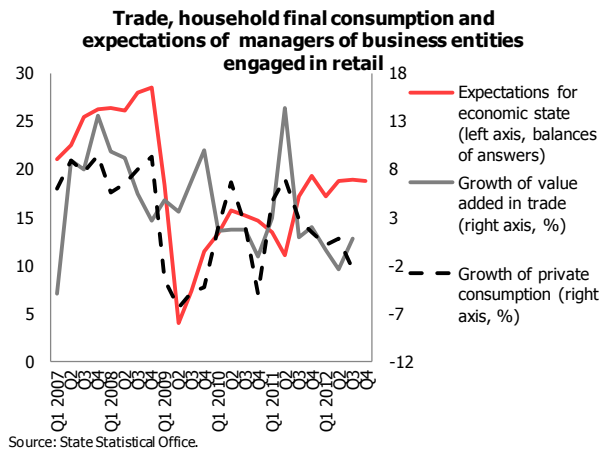


**Annual growth of trade in the third quarter followed two quarters of annual decline.** Namely, the trade in the third quarter declined on a quarterly and grew on annual basis, with a positive contribution to the annual growth of the gross domestic product. In conditions of reduced private consumption on an annual basis, decreased retail trade and motor vehicles trade, the growth of value added of trade in the third quarter was caused by the high annual growth of wholesale trade, which since February 2011 has registered double-digit growth rates. Weaker performances in retail trade are also evident from the survey among the managers in **retail trade**<sup>15</sup>,

<sup>13</sup> Analyzed on a seasonally adjusted basis.

<sup>14</sup> From the Business Tendency Survey in construction, of the SSO, for the third quarter of 2012.

<sup>15</sup> From the Business Tendency Survey in retail, of the SSO, for the third quarter of 2012.



whose assessments indicate annual deterioration of the current business and financial condition of enterprises. According to their perceptions, there is an increased limiting impact of weak demand from buyers, higher labor costs and increased supply in the market. Expectations of the managers of commercial enterprises in terms of the orders for the next three months are almost unchanged, with reduced optimism regarding the number of employees and the business situation in the next six-month period.

### **Industrial activity in the third quarter of 2012 again registered a quarterly decline.**

Against the background of adverse global macroeconomic outlook and reduced foreign effective demand, industrial activity has declined on an annual basis since September 2011. The largest contribution to the annual decline in the third quarter is that of the manufacturing industry which reflects the weaker performances of the export-oriented facilities and reduced production of oil derivatives. Weaker performances in the industry are partly confirmed by the Business Tendency Survey in the **manufacturing industry**. Namely, the average capacity utilization in the third quarter registered a minor quarterly recovery, while on an annual basis it continued to decline. Thus, for the third consecutive quarter, the capacity utilization has been below the historical average of the past eight years. At the same time, a deterioration is registered in the assessments of the current production volume, as well as the perceptions about the current economic situation. As for the factors that limit the increase in production, the Survey indicates the increasing importance of financial problems and lack of equipment. The survey results for the first two months of the fourth quarter point to an increase in the volume of production and reduced limiting influence of the financial position, domestic demand and lack of equipment. On the other hand, the surveys assessed increased limiting influence of the foreign demand, which reflects in the unfavorable assessments of managers regarding the production in the next three months.

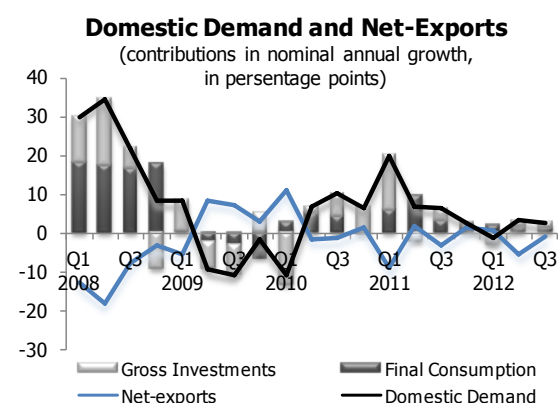
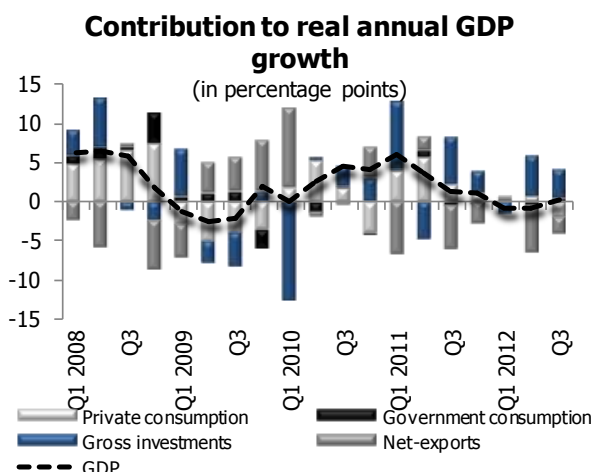
## **1.3. Aggregate demand**

**Annual growth of economic activity in the third quarter of 2012 was generated by domestic demand factors. Gross investments, as in the previous quarter, are a component with the largest positive contribution to GDP growth. Such movement in investments is in large part related to the increased construction activity. In addition to investments, public consumption also gave positive contribution. In contrast, amid a decline in households' disposable**





**income, household consumption registered downward adjustment. Export of goods and services also entered the zone of negative annual growth rates, amid a decline in external demand and fall in export prices. The decline in the export sector and the weaker growth in domestic demand caused a slowdown in imports growth, with net exports registering a negative contribution to growth also in this quarter, but with lower intensity.**



In the third quarter of 2012, economic activity increased on a quarterly basis (by 0.5%<sup>16</sup>) for the second consecutive quarter. This movement led to a minor annual growth of 0.2%, whereby the economy returned to the zone of positive growth rates, in contrast to the decline in the previous two quarters. The annual GDP growth in the third quarter was entirely due to the positive contribution of domestic demand, with a negative contribution of net exports. Investments, although with slower growth, were the main generator of GDP growth. Public consumption, which returned to the zone of positive rates of change, also had positive contribution. Private consumption is the only component within the domestic demand which has registered a negative growth rate, for the first time in six quarters of increase. The long trend of positive growth rates was interrupted also in the export of goods and services, amid stronger adverse developments in the global economy. Growing imports had an additional contribution to the negative net exports. However, the intensity of import growth slowed significantly in circumstances of slower growth in domestic demand and a decline in exports.

### Real annual growth rates (%)

	2010-Q1	2010-Q2	2010-Q3	2010-Q4	2010	2011-Q1	2011-Q2	2011-Q3	2011-Q4	2011	2012-Q1	2012-Q2	2012-Q3	2012-Q4	2012
Private consumption	2.0	6.7	2.1	-4.9	1.3	4.6	7.0	2.8	1.5	3.9	0.1	0.8	-2.4	0.0	0.0
Government consumption	-0.6	-7.1	0.7	-0.8	-2.0	0.6	5.1	-2.8	-0.1	0.7	1.7	-2.3	2.3	0.0	0.0
Gross investment	-44.0	1.7	14.9	10.0	-4.3	54.4	-19.1	28.8	8.6	12.3	-6.6	25.8	14.6	0.0	0.0
Exports of goods and services	10.0	17.7	24.8	40.0	23.6	37.2	12.7	3.0	0.2	11.2	0.0	0.7	-2.9	0.0	0.0
Imports of goods and services	-10.2	12.8	18.8	16.0	9.5	36.6	6.1	11.3	4.7	13.2	-0.3	9.6	1.2	0.0	0.0
Domestic demand	-8.3	3.5	4.0	-0.8	-0.4	10.5	1.3	6.7	3.1	5.2	-0.9	4.5	1.8	0.0	0.0
Net exports*	-35.1	3.6	2.9	-16.3	-13.8	35.4	-7.6	38.0	14.7	17.9	-0.9	32.6	11.2	0.0	0.0
<b>GDP</b>	<b>0.0</b>	<b>2.5</b>	<b>4.5</b>	<b>4.0</b>	<b>2.9</b>	<b>6.1</b>	<b>3.6</b>	<b>1.3</b>	<b>1.0</b>	<b>2.8</b>	<b>-0.9</b>	<b>-0.7</b>	<b>0.2</b>	<b>0.0</b>	<b>0.0</b>

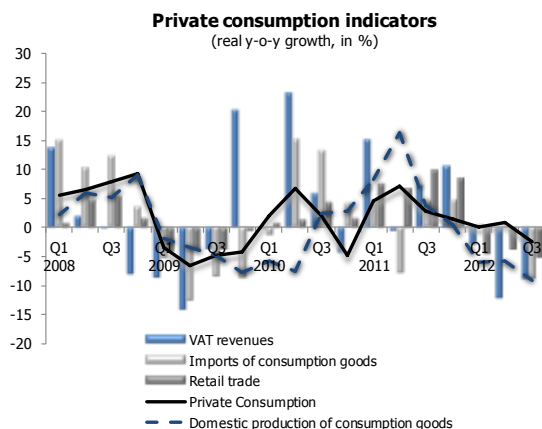
\*decrease represents lower deficit

Source: SSO and NBRM calculations.

<sup>16</sup> Seasonally adjusted.



### 1.3.1. Private consumption



In the third quarter of 2012, the private consumption registered a quarterly decrease (by 6.2%, seasonally adjusted), with an annual decline of 2.4% being recorded. The negative shift in private consumption was in line with the fall in households' disposable income, driven primarily by the decline in the wage bill. Inflation acceleration in the third quarter deepened the real wage decline, which in conditions of a small positive annual change in the number of employees, contributed to the acceleration of the decline in the wage bill. At the same time, higher inflation contributed to slowing the growth of real pensions, while significantly slower growth was registered in the private transfers from abroad. At the same time, deceleration was registered also in the banks' credit activity aimed at the households, primarily in consumer loans, with a tightening of credit conditions and lower demand growth<sup>17</sup>. Lower private demand is reflected by enhanced real annual decline in retail trade, in conditions of reduced domestic production and imports of consumer goods.

**Indicative available data<sup>18</sup> for the last quarter of 2012 point to a small growth of private consumption.** Thus, positive shifts were registered in the imports and in the domestic production of consumer goods, which in the last quarter of 2012 registered a significant slowing of the decline. Net revenues from VAT registered annual decline, which however may be due to the higher VAT return in accordance with the process of Government repayment of the liabilities to the private sector. In contrast, the trend of decline in the retail trade, present since the beginning of the year, continued also in the last quarter with enhanced dynamics. Managers of commercial enterprises, whose expectations for the fourth quarter are less favorable compared to the previous quarter in terms of orders and number of employees, also point to such downward movements in the trade<sup>19</sup>. In terms of financial factors, some of them point to a slight increase in consumption. Thus, lending, which grew slightly, points to stronger consumption, which is in line

<sup>17</sup> From the Bank Lending Survey, conducted by the NBRM in October, 2012.

<sup>18</sup> Data on domestic production of consumer goods, pensions, VAT, import of consumer goods and household credits are as of November, while the data on wages and retail trade are as of October.

<sup>19</sup> From the Business Tendency Survey in retail trade, of the SSO, conducted in the third quarter of 2012.





with banks' expectations<sup>20</sup> for increased optimism regarding the credit demand by households, amid unchanged credit conditions. Additionally, the financial data point to slower growth of household deposits in October and November, indicating a possible greater allocation of funds for consumption from households' disposable funds. Namely, disposable income is expected to register accelerated decline, amid a decline in all categories, especially in private transfers. Given the inflation growth, real wages show an accelerated decline, while the expectations of managers in industry, construction and trade regarding the number of employees in the fourth quarter are less favorable<sup>21</sup>. Hence, in the last quarter, the wage bill would register a decline, and a small real annual fall is registered also in the pensions.

### *1.3.2. Public consumption*

**In the third quarter of 2012, public consumption grew in real terms both quarterly (by 1% seasonally adjusted) and on annual basis (by 2.3%), despite the decline in the previous quarter.** The annual growth in the third quarter was mainly due to the category "other transfers", and in a small part to the higher expenditures for goods and services, which is partially due to the payment of part of the outstanding government arrears to the private sector. Paid wage bill, as one of the major components of public consumption still registers real decline, with simultaneous decline in real wages and employees in public administration and defense. Government announcements for full repayment of the arrears by the end of February 2013, are reflected in the real growth of the expenditures of goods and services in the period from October to November, so that **for the last quarter real annual growth of public consumption is estimated.**

## **Appendix 1: Fiscal policy**

**In the period January-November 2012 total revenues of 25.5% of GDP<sup>22</sup> (26.8% of GDP in the same period of the previous year) were generated in the Budget of the Republic of Macedonia (central budget and budgets of the funds).** Nominally, the amount of revenues generated in this period on an annual basis is higher by 0.3%. In conditions of prolonged adverse performances in the economic activity in this period, total tax revenues decreased by 2.9%

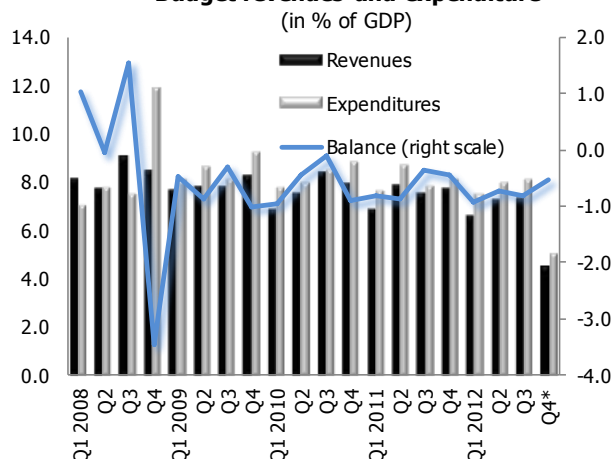
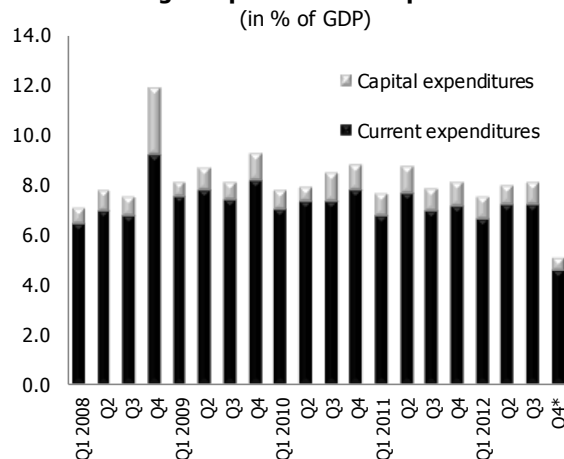
<sup>20</sup> From the Bank Lending Survey, conducted by the NBRM in October, 2012.

<sup>21</sup> From the Business Tendency Survey in retail trade, of the SSO, conducted in the third quarter of 2012.

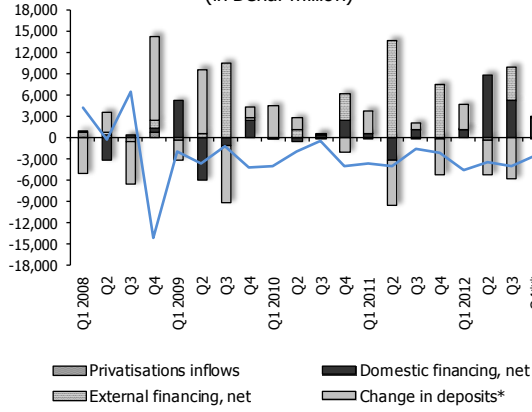
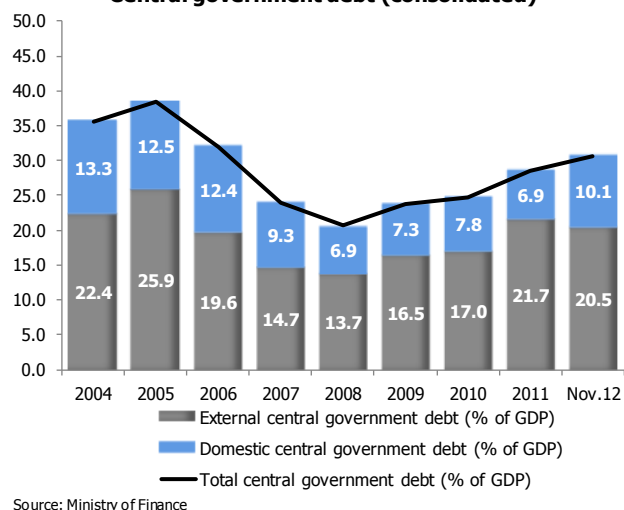
<sup>22</sup> Within the analysis, for the nominal GDP for 2012 the projection of the Ministry of Finance is used.



annually, which was mostly due to lower generation of revenues from VAT, which on an annual basis were lower by 8%. Reduction was reported also in the profit tax revenues (of 4.6%), while income tax revenues and revenues from import duties and excise taxes increased annually by 0.8%, 8.9% and 5.4%, respectively. Total contributions were higher by 2.9% on an annual basis, with a simultaneous increase in non-tax revenues of 0.2%.

**Budget revenues and expenditure****Budget expenditures composition**

**Total budget expenditures in the period January-November 2012 amounted to 28.5% of GDP, which is slightly below the level of the budget expenditures from the same period of the previous year (29.1% of GDP). Nominally, compared to the same period last year budget expenditures were higher by 3.4%. Within the expenditures, current expenditures registered an annual growth of 4.3%, predominantly driven by higher expenditures for transfers (by 5.5% annually). Capital expenditures were lower by 3.9% on an annual basis.**

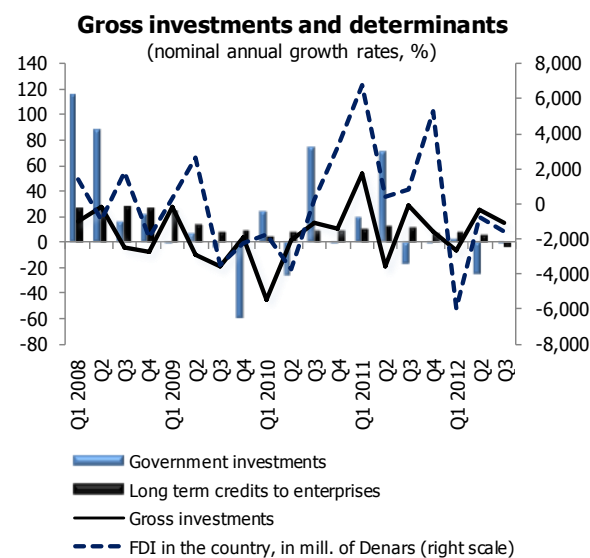
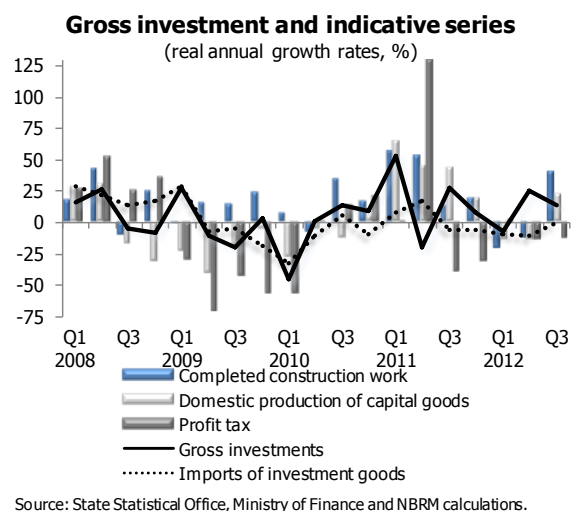
**Budget balance financing****Central government debt (consolidated)**

**In the January-November 2012 period, the realized budget deficit amounted to Denar 14,613 million or 3% of GDP, while the projected budget deficit for 2012 is 3.5% of GDP.** Financing of the budget deficit in this period was mostly done by borrowing on the domestic market through new issues of government securities. Additional inflows were generated through government borrowing abroad by a loan from Deutsche Bank in the amount of Euro 75 million in July 2012. Net inflows from the total government borrowing were higher than the budget deficit realized in this period, which provided additional accumulation of deposits on the government account with the



NBRM (a total of Denar 7,410 million). According to the latest available data, the central government debt (consolidated) as of November 30, 2012 amounted to 30.7% of GDP.

### 1.3.3. Investment consumption



For two quarters in a row, gross investments register quarterly and annual growth and at the same are the component with the largest positive contribution to GDP growth. Thus, in the third quarter of 2012, investments registered high quarterly growth (by 26.6%, seasonally adjusted), while the annual growth is 14.6%. The annual growth is mostly explained by the increased construction activity, which in the previous two quarters registered a reduction. At the same time, government capital spending, after the sharp decline in the previous quarter, registered an upward movement, reaching the level of the third quarter of 2011. Positive trends were observed also in the production and import of capital goods. Namely, after two quarters of sharp decline, production had high real annual growth, while imports nearly stagnated, which points to the interruption of the trend of decline present for four consecutive quarters. Other factors were in the direction of reduced investment activity. Thus, long-term lending to enterprises recorded real annual decline, for the first time in a long time, with the demand for loans for investments in fixed assets registering a decline<sup>23</sup>. In addition, the foreign direct investments in the country registered a net outflow of capital in the third quarter, thus recording a significant decrease on an annual basis. **In the fourth quarter of 2012, the growth of investments is expected to continue, in accordance with the signals obtained from the available data<sup>24</sup>.** Namely, in the last quarter, government investments registered real annual growth, while the value of completed construction works in October had a small real decline. However, expectations of managers in the construction for the fourth quarter are more favorable, in terms of total orders, thus the number of months for which the work is provided is increased<sup>25</sup>. It may be linked to the planned activities on the road Demir Kapija - Smokvica, reconstruction of the railroad Kumanovo - Beljakovce and the construction of the high-rise

<sup>23</sup> From the Bank Lending Survey, conducted by the NBRM in October, 2012.

<sup>24</sup> Data on completed construction works and foreign direct investments are given as of October, while the remaining data are given as of November.

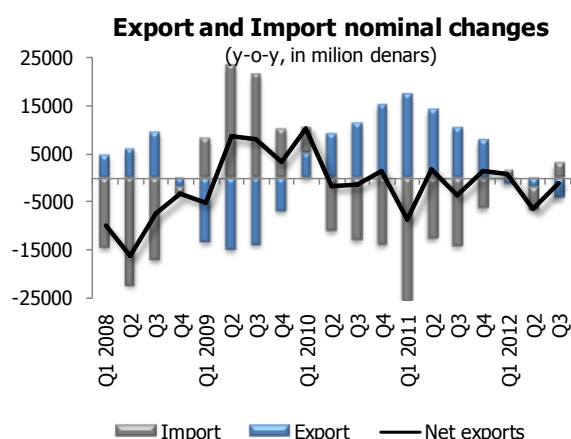
<sup>25</sup> From the Business Tendency Survey in construction, of the SSO, conducted in the third quarter of 2012.



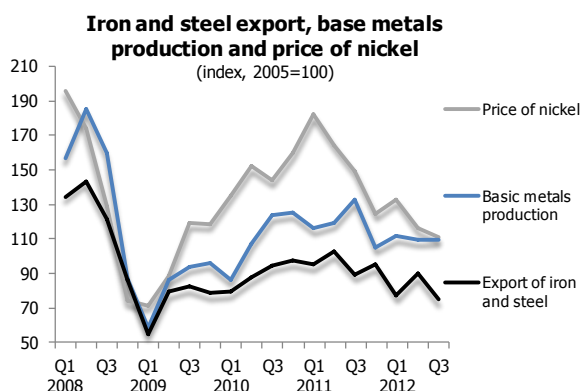
buildings in Skopje, as more significant projects. The growth of imports and domestic production of capital goods also point to increased investment activity. In contrast, long-term lending to enterprises and foreign direct investments again register annual reduction in real terms.

#### 1.3.4. Net export demand

**Deteriorating global environment had a negative impact on the domestic industry, particularly on the export sector, which for the first time since 2010 has registered a real annual decline. Imports of goods and services grew again, but at a slower pace, in circumstances of downward movements in both the domestic and export demand. In such conditions, in the third quarter of 2012, net exports again had a negative contribution to the annual change in GDP, but with less intensity.**



Source: State Statistical Office .



Source: State Statistical Office, IMF monthly database and NBRM calculations.

In the third quarter of 2012, exports registered a quarterly decline (of 4.8%, seasonally adjusted), which is a decline in two consecutive quarters. Such trends reflected on the annual change, with the export sector for the first time since 2010 having registered an annual fall of 2.9%. Negative developments arise primarily from the worsened global environment, amid accelerating decline in foreign demand. In addition, the economy was facing internal insolvency, so that the financial problems of the enterprises in industry were increasingly emphasized as a factor which limits the industrial output<sup>26</sup>. All this has led to lower capacity utilization and acceleration of the annual decline in the industry in which the export-oriented sectors have the largest contribution to the decline. In the third quarter, imports also registered a quarterly decline (of -1.5%, seasonally adjusted), and a significant slowdown in the annual growth of 1.2% (9.6% in the second quarter), caused by the slowdown in the annual growth of domestic demand and the decline in exports.

In the last quarter of 2012, economic activity of our trading partners is expected to continue to have an unfavorable influence on Macedonian exports, in conditions of downward revisions of growth expectations. In the same direction are the expectations of managers in the manufacturing industry for the future production volume that are at the September level, when a significant deterioration in expectations was

<sup>26</sup> From the Business Tendency Survey in manufacturing industry, of the SSO, conducted in November 2012.

registered<sup>27</sup>. However, in accordance with the data on foreign trade, which for the period October-November show slower nominal decline, amid a decline in producer prices of industrial products on foreign markets<sup>28</sup>, in the last quarter of 2012, a stagnation of exports would be expected. Import is expected to grow in the last quarter, in line with the expectations for increased domestic demand and export growth. This is confirmed by the data on foreign trade, which in the October - November period show nominal annual growth of imports. Hence, **in the last quarter of 2012, continuation of the negative contribution of net exports to GDP annual change is expected.**

#### 1.4. Employment and wages

*In the third quarter, for the first time in three quarters, the employment registered slight quarterly decline. However, in circumstances of more intensive decline in the total workforce in relation to the fall in the number of employees, in the third quarter the number of unemployed reduced, too. In the third quarter, the quarterly decrease in the unemployment rate continued, moving closer to the historically lowest level, registered in 2001. On an annual basis, employment recorded moderate growth again. The increased resistance of the employment to the decelerated economic activity in the first half of the year, could partly be explained by the usual time lag in the response of the labor market. The process of gradual increase of labor in trade, after the fall in the previous year, as well as the positive externalities from the increased construction activities on the sectors associated with the construction works, had an additional significant contribution to the offsetting of the negative effects on the labor market. At the same time, the new production facilities also mitigate the effect of the negative achievements of economic activity on the labor market. In terms of labor cost, there has been a small nominal annual growth of wages, and further intensification of their real decline. In terms of future developments on the labor market, according to the signals from the Business Tendency Surveys, there is a general weakening of the optimism about the number of employees for the next quarter. This tendency reflects the risks associated with the developments in the global economy.*

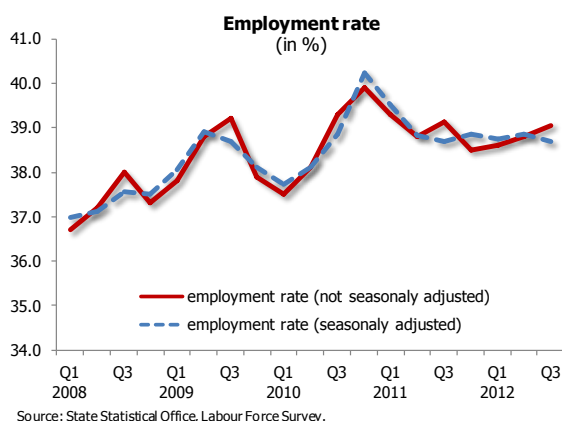
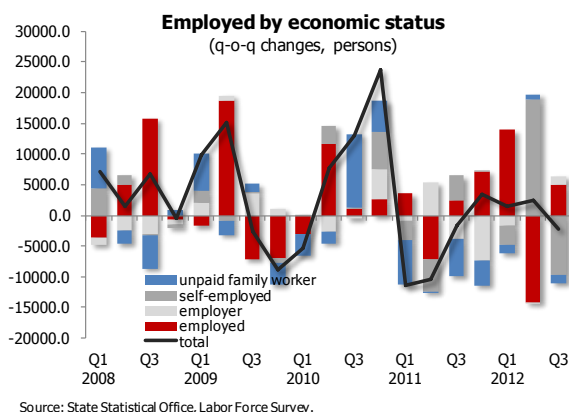
**For the first time in three quarters, the number of employees registered a slight downward movement or quarterly<sup>29</sup> decline of 0.3%<sup>30</sup>.** In terms of the economic status, the

<sup>27</sup> From the Business Tendency Survey in manufacturing industry, of the SSO, conducted in November 2012.

<sup>28</sup> Data on producer prices of industrial products in foreign markets are given as of October 2012.

<sup>29</sup> The analysis of the quarterly dynamics of employment, unemployment and total active population is made with seasonally adjusted data.

<sup>30</sup> Starting from January 2011, the State Statistical Office has been applying the new National Classification of Economic Activities (NACE rev. 2) for compilation of data on the labor market (wages and employment).



quarterly decline in employment is entirely a result of the lower number of self-employed workers and unpaid family workers. Analyzed by activity, the decline in employment is most associated with agriculture and manufacturing industry. **On annual basis, the number of employees increased by 0.6%, which is a slight slowing of the positive dynamics.** At the same time, the employment rate remained at the level of the same period of the previous year, i.e. at the level of 39.1%. Analyzed by activities, annual employment growth is almost entirely associated with the services, of which mostly with "trade" and "activities related to real estate." In the last two quarters, the "trade" showed signs of recovery of the labor force, which was significantly reduced in 2011. In addition to this observation are the results of the Survey on job vacancies<sup>31</sup>, according to which in the third quarter about 14% of the newly opened jobs or job vacancies were in the trading business. In parallel, service activities related to construction, i.e. "activities related to real estate" play the role of a buffer for the negative effects on employment from the decline in economic activity in the first half of the year. Employment growth in this segment is largely a positive externality of the enhanced construction activity, because the growth is identified in architectural activities, as well as services to buildings and landscape activities<sup>32</sup>. At the same time, new production facilities also absorb some of the negative effects on the labor market after the weak performances of economic activity. In terms of future developments on the labor market, according to the signals from the Business Tendency Surveys<sup>33</sup>, it can be concluded that there is a generally weakening optimism regarding **labor demand for the next three-month period.** This tendency reflects the risks associated with the developments in the global economy.

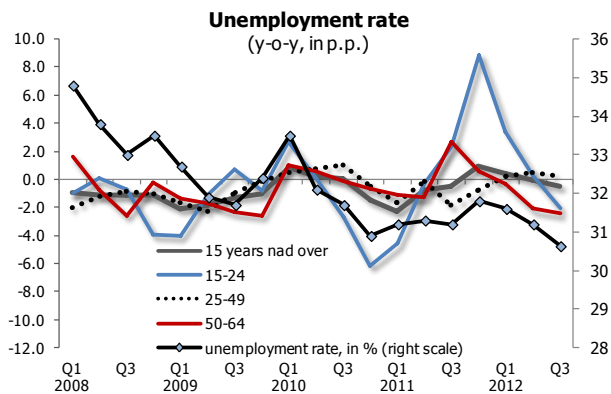
### **The fall in demand was accompanied by a quarterly decrease of labor supply.**

<sup>31</sup> In 2012, the State Statistical Office for the first time began to conduct a Survey on Job Vacancies as part of the labor market research. The purpose of the Survey is quarterly information on job vacancies in the enterprises in the Republic of Macedonia as an important indicator of the macroeconomic trends and labor market policies.

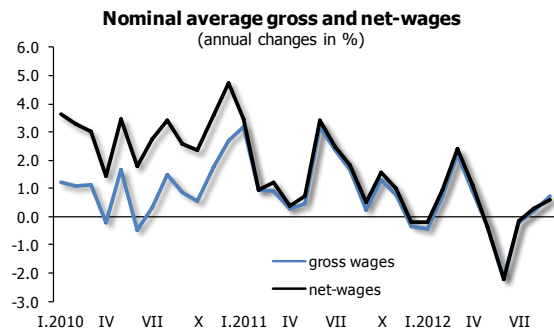
<sup>32</sup> The working engagement that municipalities offered to 4,000 people to perform public works for a period of six months, has a positive influence on employment in this sector. These are people who are unemployed, with low qualifications or older. This Government measure aims to improve the material condition of the employed persons, and to enable them acquire new skills necessary for establishing a permanent employment.

<sup>33</sup> Source: State Statistical Office, Business Tendency Surveys in manufacturing industry (November 2012), construction (third quarter of 2012) and trade (third quarter of 2012).





Source: State Statistical Office, Labor Force Survey.



Source: State Statistical Office.

**Annual changes in average paid net wage by sectors in Q3.2012**  
(in %)

	nominal changes	real changes
Agriculture, forestry and fishing	6.4	2.5
Mining and quarrying	-0.7	-4.3
Manufacturing	0.8	-2.8
Electricity supply	1.8	-1.9
Water supply	-0.3	-4.0
Construction	2.0	-1.7
Trade	1.8	-1.9
Transportation and storage	-1.7	-5.3
Accommodation and food service activities	-0.4	-4.0
Information and communication	1.9	-1.8
Financial and insurance activities	-0.4	-4.0
Real estate activities	-1.3	-4.9
Scientific activities	10.0	6.0
Administrative activities	-7.8	-11.2
Public administration and defence	-0.3	-4.0
Education	-0.1	-3.7
Health and social work	3.1	-0.6
Arts, entertainment and recreation	-8.5	-11.8
Other service activities	1.1	-2.6

Source: State Statistical Office.

Namely, in the third quarter, for the first time in four quarters, the active population dropped by 0.7%. **Total active population declined by 0.2%, thus re-entering the zone of negative annual change.** Amid a decline of the active and substantial growth of the inactive population, the activity rate recorded moderate downward adjustment, being reduced to 56.3%. Hence, for five consecutive quarters the activity rate is moving in the zone of negative annual change.

**In terms of stronger decline in the supply compared to the demand for labor, unemployment registered downward quarterly movement.** Thus, the number of unemployed registered continuous decline for three consecutive quarters. The total number of unemployed persons recorded quarterly fall of 1.5%. Amid growth in demand and a decline in supply of labor, the number of unemployed persons decreased by 1.9% on an annual basis. At the same time, an annual decrease of 0.5 p.p. was registered also in the unemployment rate, which with the reduction to level of 30.6% moved closer to the historically lowest level registered in 2001.

**In terms of labor cost, in the third quarter there was a small annual growth of average nominal wages.** The nominal net and gross wages increased by 0.2% on an annual basis. Upward wage adjustments is registered in all three sectors of economic activities, but the growth intensity is the strongest in the agriculture. On a quarterly basis, nominal net and gross wages increased by 0.4%. Real net wage recorded quarterly growth of 0.4% compared to the decrease of 1.9% in the previous quarter. Given the stagnation of the average net wage in the service sector, the quarterly growth is entirely associated with the positive shifts recorded in agriculture and industry. **Acceleration of inflation in the third quarter led to a deepening of real wage decline.** Thus, the average real net wage is lower by 3.4% on an annual basis, with the real wage registering an annual decline in seven consecutive quarters. Movement of nominal wages at a slower pace than the inflation rate for a longer period of time, with positive results in total employment, suggests that in the third quarter, employers selected the wage channel as one of the ways to create savings in conditions of increased risks for the future economic activity.

**Labor productivity continued to decline on an annual basis, but with a more moderate pace compared to the previous**





**quarter.** The decline in productivity of 0.6% reflects the more intensive employment growth compared with the growth of economic activity. After two quarters of downward movement, productivity grew on a quarterly basis due to increased production, amid lower number of employees. **The annual decline in productivity growth in conditions of growth in gross wages led to an upward adjustment of the unit labor costs (growth of 0.9%), however without further intensification of their dynamics.** On the other hand, the quarterly comparison indicates a reduction of unit labor costs, at a pace identical to that registered in the previous quarter.

## Appendix 2: Is Okun's law applied in Macedonia?

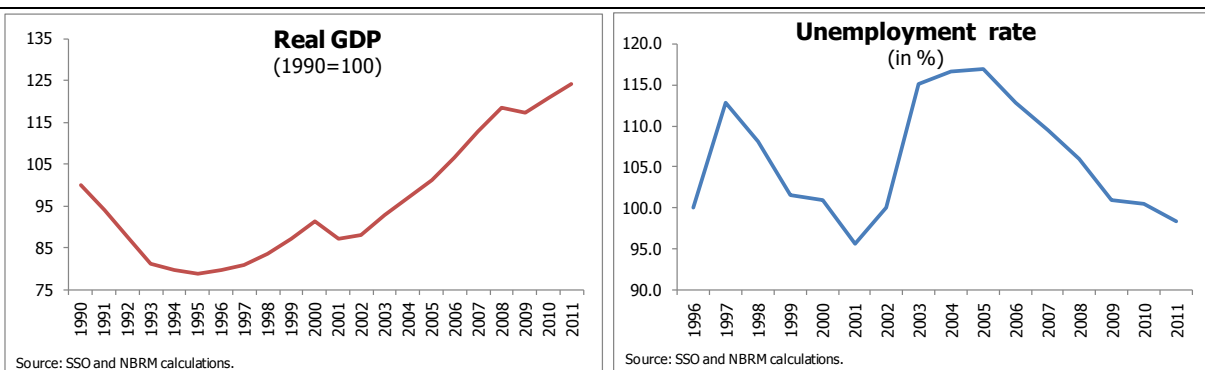
In the economy it is generally known that employment, i.e. unemployment reacts to the total economic activity. Usually, the slowdown in the economy is followed by a rise in unemployment. The negative relationship between economic growth and unemployment rate in the economy is known as Okun's law. Namely, in 1962, the economist Arthur Okun was the first to notice this pattern on the basis of analysis of the data for the United States. The analysis showed that the estimated negative coefficient was around 0.2 - 0.3. This means that the decline in economic activity of 2% - 3% contributes to the growth in unemployment rate by one percentage point. However it should be noted that Okun's law is not based on theoretical grounds, but rather is a statistical relation, which can be proven empirically. In addition, many economists believe Okun's law is a useful tool for monetary policy because it may refer to the space that policy makers have at their disposal to increase the economic activity through further reduction in unemployment.

Hence, the purpose of this Annex is to establish whether the Okun's law is applied in Macedonia. First, we will give a brief overview of the domestic labor market and the economic growth, then we will make an empirical analysis based on Macedonian data. Thereby, we want to determine whether in the period of decline in the economic activity, the value of Okun's coefficient decreases as the ECB analyses suggest<sup>34</sup>.

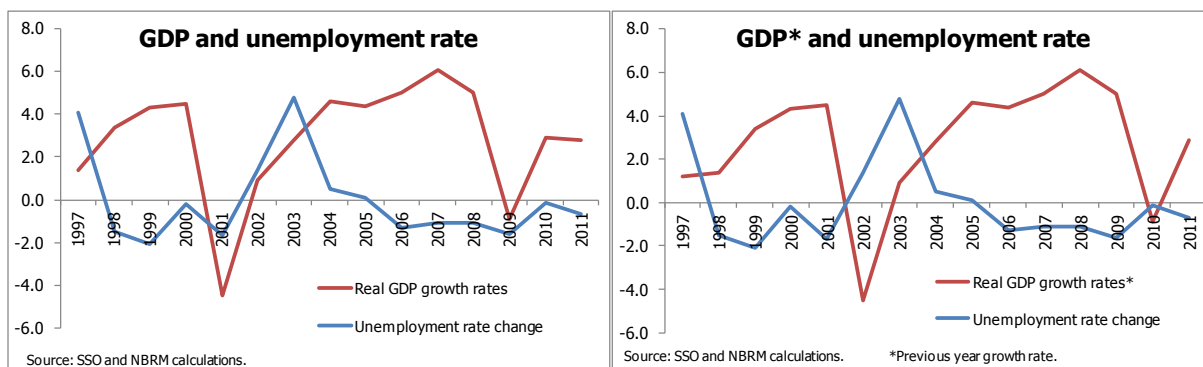
In the initial period after the independence in 1991, Macedonia's economy went through a process of transition, with the total economic activity experiencing a significant depreciation. With the consolidation and stabilization of the economy, and in conditions of increasing openness to foreign markets, positive growth rates were generated in the second half of the 90s. This positive trend was briefly interrupted by the events of 2001, and already in the period 2004-2008 continuously high growth rates were recorded, which averaged 5%. However, these positive developments in the economic activity were not fully reflected in the labor market. The inherent high unemployment rate of transition time is still maintained at a level of over 30%. However, there are some positive developments. Thus, according to the data from the Labor Force Survey, the downward trend in the unemployment rate, which started in 2006, is still present, and since 2009 the level has been reduced below 32%<sup>35</sup>.

<sup>34</sup> For more details see the ECB's monthly bulletin from July 2012 and June 2011.

<sup>35</sup> Unemployment rate below 32% had been reported previously in 2001, however it was not a result of the economic factors, but one-time effect associated with the events of 2001 when a larger number of young unemployed people were engaged within the security forces of the Republic of Macedonia, as well as the activation of the unemployed persons from the reserve army and police, which contributed to the increase in the labor force in 2001.



Movements in GDP and the unemployment rate suggest that the labor market does not react immediately to the changes in the overall economic activity, as is the case in developed countries. This is confirmed by recent examinations of the domestic labor market. The analyses suggest that employment, and consequently unemployment, react to changes in GDP with a time lag of about one year<sup>36</sup>. This connection can be confirmed by the correlation coefficient between the actual annual GDP growth rate and the annual change in the unemployment rate, which in the case of simultaneous changes is positive, while with four lags it is negative and amounts to about 40%<sup>37</sup>.



In his article dated back in 1962, Okun presented two simple empirical equations that link economic growth and the unemployment rate, although over time they were complemented or modified by other economists. One is an equation in gap-form (gap version), while the other represents an equation in differences (difference version).

a) **gap version equation** (or equation in level) shows the relationship between the deviation of unemployment from its natural rate (at full employment) and the deviation of economic growth from its potential.

(1)

where  $u_t$  is the unemployment rate,  $y_t$  is the logarithm of real GDP, and the variables marked with \* are their long-term levels, that is, the natural rate of unemployment and potential GDP. The shortcoming of this equation is in the method of computing the natural rate of unemployment and potential GDP, given that there are more ways to compute them, and the overall results depend on that.

b) **difference version equation** represents the relationship between the change in the unemployment rate and the change in real GDP.

(2)

<sup>36</sup> In the macroeconomic forecasting model MAKPAM used in the NBRM it is estimated that the labor market reacts with four quarters lag.

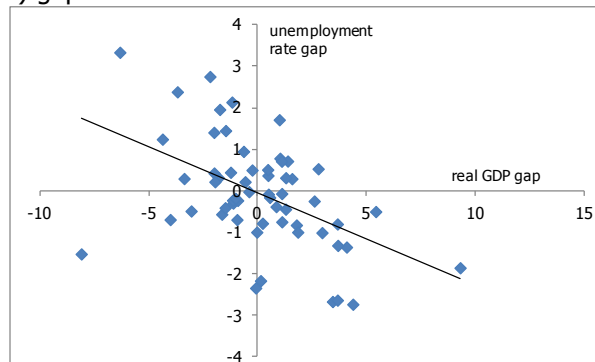
<sup>37</sup> Correlation coefficient is calculated on the basis of quarterly data for the period Q1 1998-Q2 2012.

where  $u_{t-1}$  is the rate of unemployment from the previous period, and  $y_{t-1}$  is the real GDP in the previous period. This equation arises from the previous equation (1), assuming that the natural rate of unemployment is unchanged and potential GDP grows at an unchanged rate. However, for developing and emerging countries it is difficult to assume a constant growth rate of potential GDP or a constant unemployment rate, according to the time variations in the natural rate of unemployment and changes in the potential of the economy caused by structural changes.

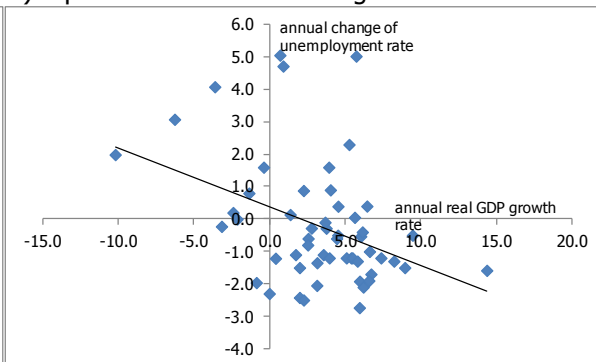
Within this analysis we will estimate both equations, which may provide insight into the stability of the coefficients. For their estimation we used quarterly data on real GDP and the unemployment rate<sup>38</sup> for the period Q1 1997-Q2 2012, and the estimation is done by the method of least squares (OLS). At the same time, certain adjustments were made to the characteristics of the Macedonian economy, with the economic growth variable being included with four quarters of lags (in both equations). At the same time, in order to simplify the analysis, of the different methods of obtaining long-term potential GDP and unemployment levels, in the gap version equation we used the usual practice by applying Hodrick-Prescott filter<sup>39</sup>, while in the difference version equation we followed the example of the ECB, which takes the annual rate of change, rather than the quarterly as the equation (2) suggests<sup>40</sup>.

#### Okun's coefficients

##### a) gap version



##### b) equation with annual changes



The results of the estimated equations empirically confirm Okun's law, indicating a negative relationship between unemployment and economic activity, and the two equations give similar values of Okun's coefficient, which can be seen in Figure 3. The equation in level shows a slightly higher coefficient of 0.22, while the equation in differences shows coefficient of 0.18. The results obtained are in the framework of the estimated coefficients in the IMF publication "World Economic Outlook" of October 2012, and relate to the developing and emerging countries, with the coefficient in the gap version equation is - 0.17, while for the equation in differences is -0.29. The results indicate that the deviation of GDP of 1% above (below) its potential will cause a deviation of the unemployment rate by about 0.2 percentage points below (above) its potential, of course with a lag of four quarters. For example, given that in 2012 GDP is 2.3% below potential, as it is on average in the first half of the year, according to these calculations, this implies that the unemployment rate would be about 0.5 percentage points above its potential level.

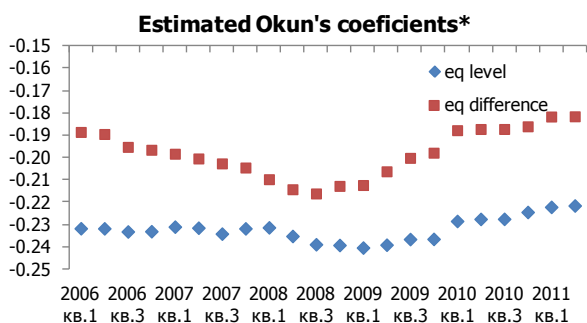
<sup>38</sup> To obtain a series of quarterly data for the entire period, part of the unemployment data is interpolated, since official quarterly data start from 2004.

<sup>39</sup> The assumption that the filtered unemployment rate is the natural rate of unemployment should be taken with great caution. Namely, with this approach the potential unemployment rate is being derived from data on a relatively high realized unemployment rate, whose objectivity is not reliable.

<sup>40</sup> Estimates of equation (2) with the quarterly change were also done, but the results are not statistically significant and have the wrong sign in front of the estimated coefficient.



In order to determine the stability of Okun's coefficient and whether it varies over time, attempts have been made to re-estimate the equations by reducing the period of estimation. Both equations show that there are no major variations in the coefficient, with the changes in the coefficients in the two equations following a similar path. Moreover, it was established that if GDP falls, the reaction of unemployment to changes in GDP of four quarters before is lower, as determined



\*Estimated coefficients are moved by four quarters backwards in order to get better insight for the reaction of unemployment to GDP fall.

in the analyses of the ECB. Namely, although the changes are not large, however, with the growth of the economy, Okun's coefficient continuously increases the value, while after 2010 the value registers a certain decrease. The lower response in this period can be explained by the fact that during the crisis employers initially do not lay off employees, but tend to use other measures, such as part-time employment or forced leave, and it is likely that government measures give some contribution to increasing employment, thus mitigating the effects of the crisis on the labor market.

From this analysis it can be concluded that Okun's law finds an empirical support in the Macedonian data, and the estimated coefficient of -0.2 is within the expected coefficient for developing and emerging countries.

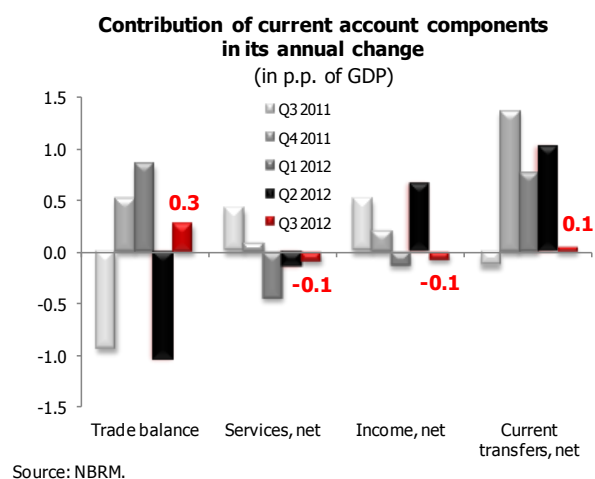
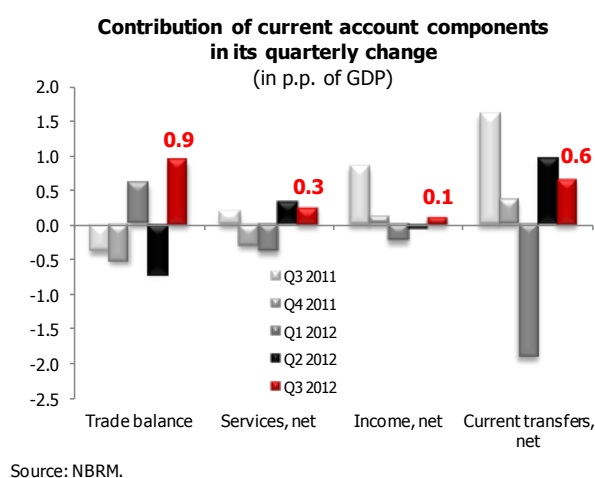
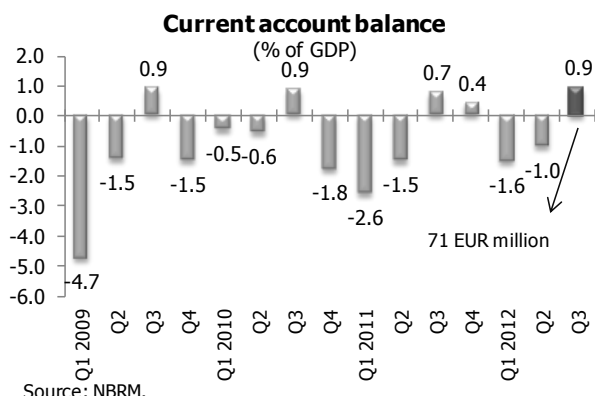
## 1.5. Balance of payments

***In the third quarter of 2012, given the usual seasonal dynamics, the current account balance registered a surplus. Compared with the previous quarter, a significant improvement was registered, resulting from positive quarterly changes in all individual current account components. Most significant generator of the change is the trade deficit, whose contraction is caused by the reduction of import of raw materials for the industry<sup>41</sup>, with simultaneous stagnation of total exports. Narrowing of the trade deficit is yet another most significant factor for the positive annual change in the current account balance compared to the third quarter of 2011. In addition, both the export and the import side were lower, which is expected, given the declining domestic economic activity and reduction of foreign effective demand. There is improvement of current transfers as well, due to the private transfers in cash i.e. high net purchase of foreign cash on the currency exchange market, sufficient to offset the negative trends in income and services. Deteriorating perceptions of risk and uncertainty clouding the international markets had an impact on the capital and financial account in the third quarter. Reduction of liabilities of domestic companies based on foreign trade operations and lending of some companies with foreign capital to their parent investors, triggered capital outflows. At the same time, the banks' foreign assets, after declining in the previous quarter to finance the payment of a significant amount of dividend, increased in the third quarter. The external debt of the country had positive effect on the capital and financial account in the third quarter, but the amount was not sufficient to offset other outflows. However, the current account surplus exceeded net outflows in the capital and financial account, which led to higher foreign reserves in the third quarter and their maintenance at adequate level.***

<sup>41</sup> During the second quarter of 2012, the domestic industry made an extremely high import of products and raw materials.



### 1.5.1. Current account

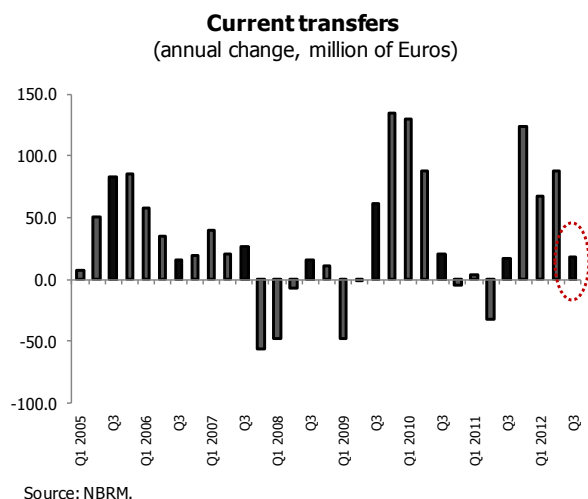


In the third quarter of the year, the current account of the balance of payments registered a surplus of Euro 71.3 million or 0.9% of GDP. Current account improvement of 2 percentage points of GDP compared to the previous quarter is partly due to the typical seasonal factors that lead to surplus in current transfers and services. However, the analysis by component indicates that the narrowing of trade deficit made the greatest contribution to the positive quarterly change in the current account (contribution of 0.9 percentage points of GDP). The quarterly reduction of trade deficit is caused by rapid decline in imports of industrial raw materials and export stagnation. The remaining current account components further enlarged the surplus, with more pronounced positive quarterly change being noticed in net inflows of current transfers, whose positive input of 0.6 percentage points of GDP mainly resulted from private transfers in cash (high net purchase of cash on the currency exchange market). The seasonal component of growth usually arises from the return of Diaspora in the summer and the growing number of foreign tourists due to the high tourist season. Improved performances in tourism are also the most important factor for the positive contribution of the services<sup>42</sup> to the current account surplus.

Analysis on an annual basis points to higher surplus in the third quarter, compared with the same period last year. Slight increase in the surplus of 0.2 percentage points of GDP principally results from the performance of the trade balance, while the improved performances in current transfers were largely offset by the unfavorable movements in services and income. The annual reduction of trade deficit was due to the faster slowdown of imports and significantly milder decline in export activity. The faster decline in imports largely stems from the high base effect of the previous year which experienced extremely high import of raw materials for export branches and high energy imports. However, after three consecutive quarters of decline in exports, the import side<sup>43</sup> is expected

<sup>42</sup> According to the data released by the State Statistical Office, in the third quarter of 2012 the number of foreign tourists increased by 21.1% on a quarterly basis.

<sup>43</sup> Besides the drastic reduction of energy imports, further decline was reported in the import of raw materials by the industry and import for private consumption. Annual growth was registered only in the investment component of imports.



to experience appropriate adjustments. Higher performances in current transfers (by 0.1 percentage points of GDP) are achieved through higher private transfers in cash, evident through the higher purchase of net cash. Changes in the foreign exchange market compared to the previous year are due to the lower demand for foreign currency<sup>44</sup> and a slight growth of foreign cash offered for sale. Reduction of net inflows from compensation of employees, along with the higher outflows in investment income caused an insignificant annual deficit widening in the item "income". Negative change in services is due to the increased deficit in the balance of transport services, while the higher net inflows in tourism services generated from the improved season<sup>45</sup> were not sufficient to offset outflows from other types of services. According to the **latest balance of payments data, October** registered current account deficit, which is an annual deterioration. The annual change is caused largely by the expansion of the trade deficit<sup>46</sup>, as well as negative changes in services and income. On the other hand, higher net inflows of private transfers contributed to mitigating the negative annual change.

### Appendix 3: Foreign trade<sup>47</sup> of goods and movement of the nominal and real effective exchange rate (NEER and REER)

In the third quarter of 2012, the foreign trade of the Republic of Macedonia slowed down. This movement is due to the decrease in exports and imports, which declined by 0.5% and 6.5%, respectively, on a quarterly basis. The decline in imports led to a narrowing of the negative trade balance of 15.8%, largely reflecting lower non-energy deficit. The most significant contribution to these movements in non-energy balance is made

<sup>44</sup> Declining interest in purchasing foreign currency is visible in the third quarter, which in conditions of a slight increase in the supply of foreign cash in exchange offices, was the driving factor for the annual increase in the net purchase and thus the total current transfers in the balance of payments. What is noticed as a change in the third quarter was the negative contribution of the purchase of Euros in the annual growth of the total purchase of foreign cash on the currency exchange market. These developments point to a slowdown of the trend of dramatic conversion of Euros into local currency, which started in December last year. The slowdown was mainly due to the high base effect in the third quarter of 2011.

<sup>45</sup> In the third quarter, the country was visited by 7% more foreign tourists compared to the same period in the previous year. Namely, in the third quarter of 2012, Macedonia was visited by 125 663 tourists, compared to 117 416 registered in the third quarter of 2011, according to data of the State Statistical Office.

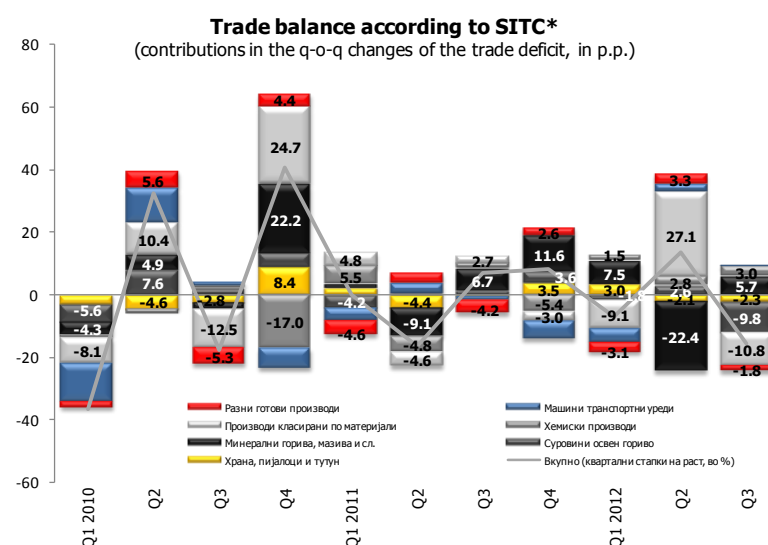
<sup>46</sup> The expansion of trade balance is due to the unsynchronized changes in exports and imports. Notably, despite the faster decline in exports in October, imports increased on an annual basis due to the higher import of energy and investment goods.

<sup>47</sup> According to the foreign trade methodology, data on exports of goods are published on f.o.b. basis and data on imports of goods are published on c.i.f. basis.





by the net trade of inputs for the industry<sup>48</sup>, which is particularly evident in the raw materials. Namely, the third quarter registered significantly lower import of ores<sup>49</sup>. Important factor for the quarterly narrowing of trade deficit are the products classified by material, given the reduced imports of non-ferrous metals (due to the high base effect<sup>50</sup>) and textiles, amid decline in industrial production of clothes, but also due to the usual seasonal dynamics of import of these raw materials. On the other hand, the quarterly decline in export of iron and steel (especially to the United States and other EU member states), and the higher imports, contributed to a decrease of trade surplus of these products. In terms of consumption goods, improvement of balance is a result of increased exports of clothing, mainly to Germany. Despite such developments, the trade in products for investment moderately contributes to the increase in the deficit due to higher imports of machinery on a quarterly basis, which corresponds to the growth of investment spending. Energy balance contributed to the expansion of trade deficit of goods, in terms of a significant increase in imports of oil derivatives, which is both quantitative and price effect<sup>51</sup>, while simultaneously reducing the export of this energy source, which is generally not typical for the third quarter of the year. On the other hand, trade balances in electricity<sup>52</sup> and gas<sup>53</sup> improved.



Source: DZS and NBRM.

\* Negative sign indicates contribution to the narrowing of the trade deficit.

<sup>48</sup> Comments are made on the basis of four types of categories: private consumption, industry, energy and investments, which represent an appropriate combination of categories of the Standard International Trade Classification (SITC).

<sup>49</sup> In the third quarter, imports of nickel ore from certain Asian countries significantly reduced, particularly Indonesia.

<sup>50</sup> April witnessed high monthly import of non-ferrous metals (input component in the manufacturing process of an important company in the industrial zone).

<sup>51</sup> The third quarter registered import of insignificant quantities of crude oil and reduced activity of the domestic oil refinery, and the reorientation towards an increase in imports of oil derivatives intended for the domestic market, on the other hand. At the same time, exports of oil derivatives is declining, which is not a usual seasonal dynamics.

<sup>52</sup> Lower quarterly deficit in electricity was mainly due to increased exports of this energy to Slovenia.

<sup>53</sup> The analyzed quarter registered lower gas imports, which is a sole quantitative effect.

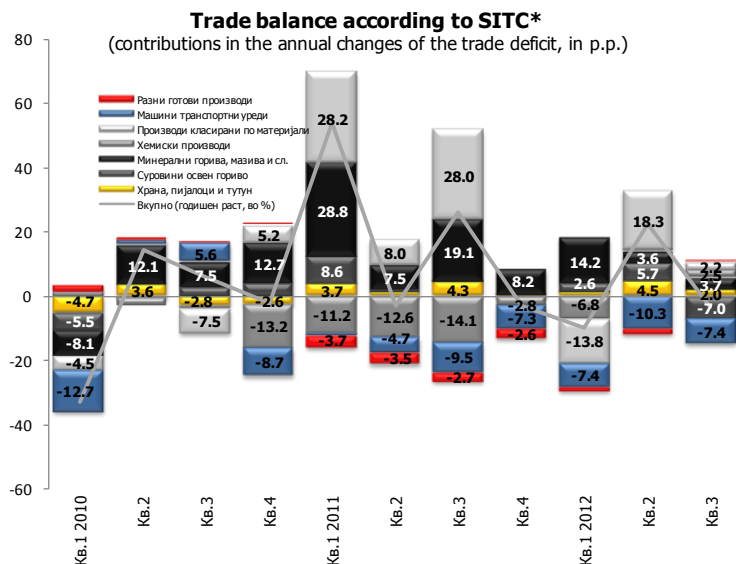




	in millions of EUR		in tons/GWh		in millions of EUR	%	quantities %	quantity percentage points	price percentage points
ENERGY IMPORT	Q1 2012	Q2 2012	Q1 2012	Q2 2012	quarterly change			contributions in the quarterly change	
- petroleum and petroleum products	148.4	186.5	237,149.5	275,512.3	38.1	25.7	16.2	16.2	9.5
- natural or industrial gas	23.1	13.1	39,331.1	18,746.3	-10.0	-43.1	-52.3	-52.3	9.2
	Q2 2011	Q2 2012	Q2 2011	Q2 2012	annual change			contributions in the annual change	
- petroleum and petroleum products	199.9	186.5	330,927.7	275,512.3	-13.4	-6.7	-16.7	-16.7	10.0
- natural or industrial gas	11.6	13.1	18,695.2	18,746.3	1.5	13.2	0.3	0.3	13.0
ENERGY EXPORT	Q1 2012	Q2 2012	Q1 2012	Q2 2012	quarterly change			contributions in the quarterly change	
- petroleum and petroleum products	43.6	33.1	65,074.5	50,707.8	-10.5	-24.1	-22.1	-22.1	-2.0
- natural or industrial gas	0.8	0.7	574.1	388.3	-0.2	-21.4	-32.4	-32.4	10.9
	Q2 2011	Q2 2012	Q2 2011	Q2 2012	annual change			contributions in the annual change	
- petroleum and petroleum products	71.5	33.1	109,412.2	50,707.8	-38.4	-53.7	-53.7	-53.7	-0.1
- natural or industrial gas	0.9	0.7	783.5	388.3	-0.2	-26.8	-50.4	-50.4	23.6
	Q1 2012	Q2 2012	Q1 2012	Q2 2012	quarterly change			contributions in the quarterly change	
EXPORT OF IRON AND STEEL	187.1	162.9	188,536.7	156,910.0	-24.2	-12.9	-16.8	-16.8	3.9
IMPORT OF IRON AND STEEL	84.7	75.5	163,297.2	141,693.1	-9.2	-10.8	-13.2	-13.2	2.4
	Q2 2011	Q2 2012	Q2 2011	Q2 2012	annual change			contributions in the annual change	
EXPORT OF IRON AND STEEL	176.5	162.9	187,702.3	156,910.0	-13.6	-7.7	-16.4	-16.4	8.7
IMPORT OF IRON AND STEEL	86.3	75.5	155,381.5	141,693.1	-10.8	-12.5	-8.8	-8.8	-3.7

Source: SSO and NBRM.

**In the third quarter, the trade deficit narrowed by 3.3%, on an annual basis, which, given the further decline in exports (4.6%), is due solely to the reduction in imports (by 4.2%). The annual analysis also illustrates that non-energy balance solely contributes to the improvement of deficit. On the other hand, the energy trade balance continues to expand annually.** Within the non-energy balance, the greatest contribution to the narrower deficit was made by the net trade in industrial input components, i.e. reduction of import of ores followed by the growth of export of tobacco. Important factor for the narrowing of the negative trade balance is the lower deficit in consumption goods, caused by the fall in import of vehicles, whose influence is partially neutralized by the increase in food imports. In terms of investment goods, the favorable effect on the balance by the higher annual exports of industrial machinery by some



Source: SSO and NBRM.

\* A negative sign indicates contribution to the narrowing of the trade deficit.

companies from the economic zone is almost offset by the higher import of other types of machinery and equipment. On the other hand, the negative energy trade balance drove up because of the decline in exports of oil derivatives, while the increased exports of electricity<sup>54</sup> contributes to the narrowing of deficit. **October and November** data show a 20.9% annual widening of the trade deficit, primarily attributable to the trade in energy, iron and steel, tobacco, machinery and clothing, while the ore balance helps to improve the trade balance.

<sup>54</sup> On annual basis, an increase was registered in the electricity exports to Slovenia and Greece.



Trade balance, Goods	Q3 2011	Q2 2012	Q3 2012	y-o-y change		q-o-q change		contributions to the annual change	
	in millions of EUR			in millions of EUR	%	in millions of EUR	%	percentage points	%
<b>Total</b>	<b>-444.7</b>	<b>-510.5</b>	<b>-429.9</b>	<b>14.8</b>	<b>-3.3</b>	<b>80.6</b>	<b>-15.8</b>	<b>-3.3</b>	<b>100.0</b>
<b>Food and live animals</b>	<b>-45.7</b>	<b>-58.6</b>	<b>-61.0</b>	<b>-15.2</b>	<b>33.3</b>	<b>-2.4</b>	<b>4.1</b>	<b>3.4</b>	<b>-102.8</b>
- meat and meat preparations	-26.0	-21.4	-28.9	-2.9	11.2	-7.5	35.0	0.7	-19.6
- cereals and cereal preparations	-5.2	-14.9	-6.8	-1.7	31.9	8.1	-54.3	0.4	-11.2
- fruits and vegetables	30.1	24.5	29.7	-0.4	-1.2	5.2	21.5	0.1	-2.5
<b>Beverages and tobacco</b>	<b>32.2</b>	<b>24.4</b>	<b>38.5</b>	<b>6.4</b>	<b>19.8</b>	<b>14.1</b>	<b>57.9</b>	<b>-1.4</b>	<b>43.0</b>
<b>Crude materials, inedible, except fuels</b>	<b>-12.8</b>	<b>-31.6</b>	<b>18.5</b>	<b>31.3</b>	<b>-1.4 times</b>	<b>50.1</b>	<b>-158.5</b>	<b>-7.0</b>	<b>211.2</b>
- metalliferous ores and metal scrap	-10.1	-27.0	21.5	31.5	-2.1 times	48.5	-179.6	-7.1	213.1
<b>Mineral fuels, lubricants and related materials</b>	<b>-181.7</b>	<b>-168.9</b>	<b>-198.0</b>	<b>-16.3</b>	<b>9.0</b>	<b>-29.1</b>	<b>17.2</b>	<b>3.7</b>	<b>-110.1</b>
- petroleum and petroleum products	-128.4	-104.8	-153.4	-25.0	19.5	-48.6	46.3	5.6	-169.0
- natural or industrial gas	-10.7	-22.2	-12.5	-1.8	16.6	9.8	-43.9	0.4	-12.0
- electric energy	-31.1	-33.2	-21.6	9.5	-30.6	11.6	-35.0	-2.1	64.4
<b>Animal and vegetable oils and fats</b>	<b>-10.5</b>	<b>-11.4</b>	<b>-10.7</b>	<b>-0.1</b>	<b>1.2</b>	<b>0.7</b>	<b>-6.5</b>	<b>0.0</b>	<b>-0.8</b>
<b>Chemical Products</b>	<b>-18.1</b>	<b>-14.1</b>	<b>-29.4</b>	<b>-11.2</b>	<b>61.9</b>	<b>-15.3</b>	<b>108.7</b>	<b>2.5</b>	<b>-75.8</b>
- inorganic chemical products	-13.7	-9.5	-16.4	-2.7	19.8	-6.9	72.6	0.6	-18.3
- dyeing and tanning extracts	-11.7	-10.1	-16.1	-4.5	38.3	-6.0	59.7	1.0	-30.1
- chemical materials and products	71.6	74.3	67.7	-3.9	-5.4	-6.6	-8.9	0.9	-26.2
<b>Manufactured goods classified by materials</b>	<b>-133.1</b>	<b>-198.1</b>	<b>-143.0</b>	<b>-9.8</b>	<b>7.4</b>	<b>55.1</b>	<b>-27.8</b>	<b>2.2</b>	<b>-66.4</b>
products	-61.7	-81.8	-61.5	0.2	-0.3	20.3	-24.8	0.0	1.3
- iron and steel	90.2	102.4	87.4	-2.8	-3.1	-15.0	-14.6	0.6	-18.6
- non ferrous metals	-83.5	-129.3	-86.4	-2.9	3.5	42.9	-33.2	0.7	-19.6
<b>Machinery and transport equipment</b>	<b>-154.6</b>	<b>-118.2</b>	<b>-121.5</b>	<b>33.1</b>	<b>-21.4</b>	<b>-3.4</b>	<b>2.8</b>	<b>-7.4</b>	<b>223.4</b>
- general industrial machinery and equipment, n.e.s., and machine parts, n.e.s.	-12.8	0.3	3.9	16.6	-130.2	3.6	14.1 times	-3.7	112.4
- telecommunication apparatus and equipment	-19.1	-27.0	-25.4	-6.3	33.2	1.6	-5.9	1.4	-42.7
- electrical machinery, apparatus and appliances, n.e.s., and electrical parts thereof	-15.1	-11.1	-17.9	-2.7	18.0	-6.8	60.9	0.6	-18.4
- road vehicles	-71.3	-42.2	-37.3	34.0	-47.7	4.9	-11.7	-7.6	229.6
<b>Miscellaneous manufactured articles</b>	<b>80.1</b>	<b>68.2</b>	<b>77.2</b>	<b>-2.9</b>	<b>-3.6</b>	<b>9.0</b>	<b>13.2</b>	<b>0.6</b>	<b>-19.5</b>
- articles of apparel and clothing accessories	108.4	96.2	104.9	-3.6	-3.3	8.7	9.0	0.8	-24.1

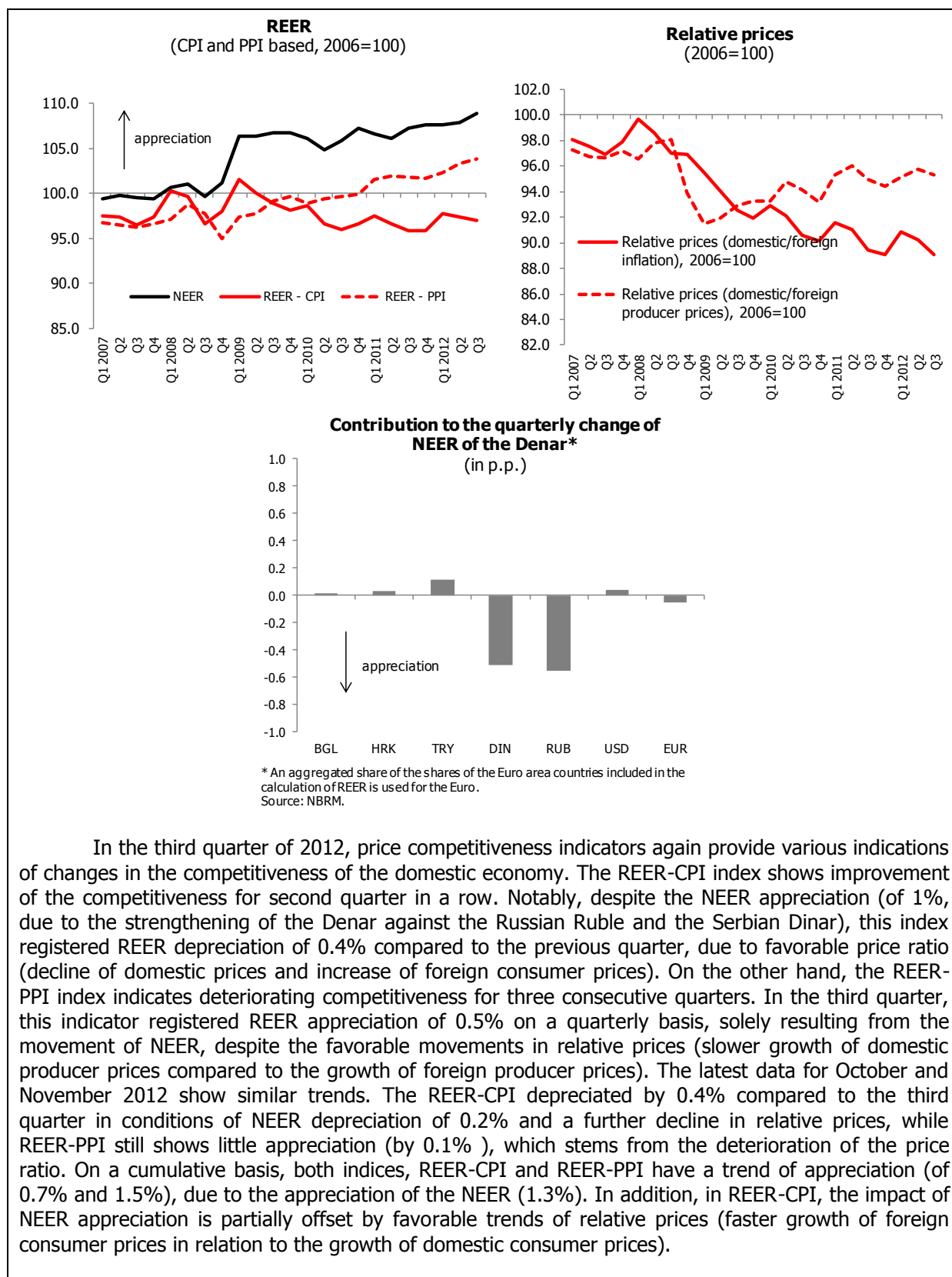
Source: SSO.

Analysis of foreign trade of the Republic of Macedonia, by trading partner, suggests that the narrowing of the annual negative trade balance is mainly due to the improved position of the Republic of Macedonia in the trade with the developing countries, unlike the net trade with the member states of the European Union and countries in the region. The trade deficit with developing countries experienced a significant reduction compared to the same quarter of the previous year due to changes in the import side, i.e. the lower import of crude oil from Russia. The trend of diversification of exports made additional contribution to the narrowing of the deficit of this group of countries and in this context, the increase in exports of ferronickel to China. In addition, the trade balance with other developed countries improved, while the exports of some domestic companies in the metal industry are further redirected to some Asian countries<sup>55</sup>. Despite such developments, the negative trade balance with the EU expanded on an annual basis due to changes on the import side, mainly increased imports from Greece<sup>56</sup>. The trade with the Western Balkan countries registered a decline in net exports annually, which mostly stems from the reduced exports to Kosovo<sup>57</sup>. The latest foreign trade data show that the trade balance with the countries from the EU and the Western Balkans further deteriorates, contrary to the narrowing of trade deficit with developing countries and other developed countries.

<sup>55</sup> The growth of ferronickel exports to South Korea is particularly significant.

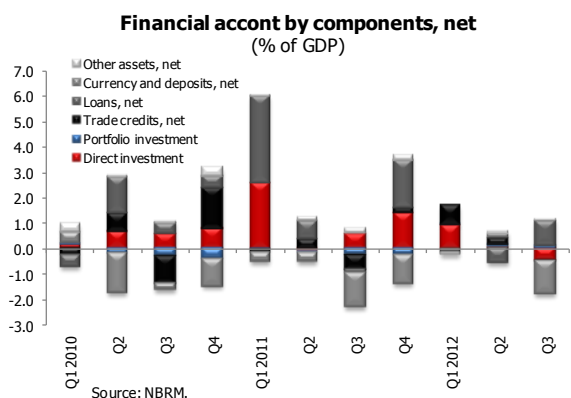
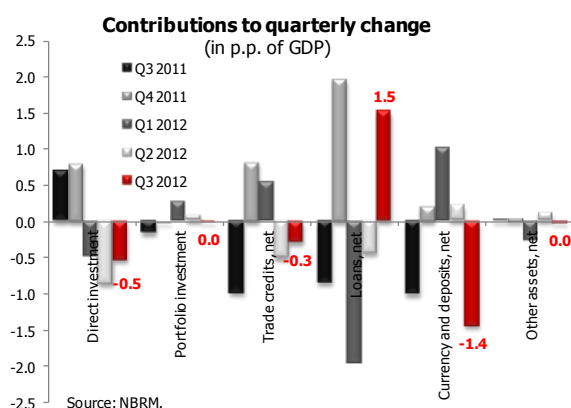
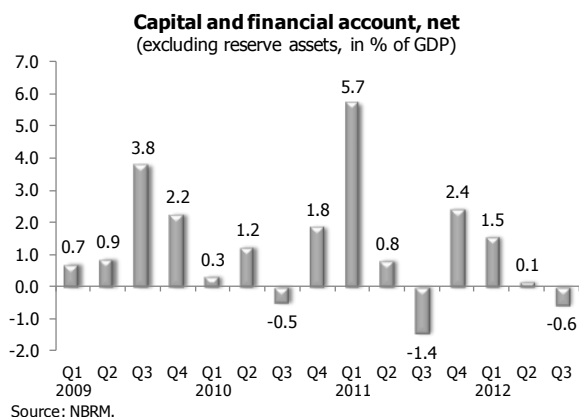
<sup>56</sup> Annual growth of import of oil derivatives from Greece.

<sup>57</sup> Annual decline of export of oil derivatives to Kosovo.



### 1.5.2. Capital and financial account

**In the third quarter of 2012, the capital and financial account (without changes in official foreign reserves)**



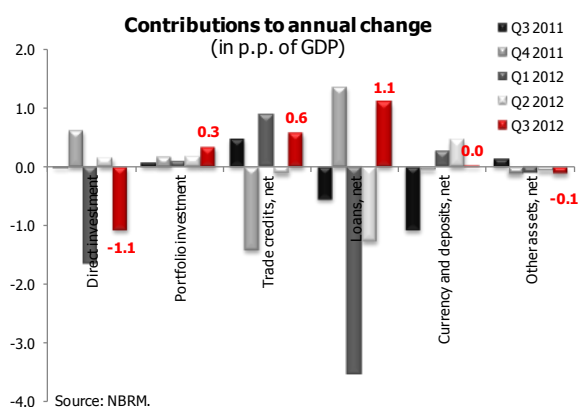
**registered net outflows of Euro 43.7 million or 0.6% of GDP.** Negative net capital flows were fully offset by the surplus in the current account, while the foreign reserves registered additional growth on a net basis. Net outflows are dispersed in multiple categories, mostly in the category of currency and deposits, and less in foreign direct investments and commercial credits. Deficit generated by currency and deposits in the amount of Euro 101.2 million, or 1.3% of GDP, is due to net outflows in both the household and banking sectors. The trend of net outflows of household currency and deposits continue this quarter, though at a slower pace, while banks showed reversible behavior compared to the first half of the year. Namely, after the reduction of foreign currency deposits in foreign banks during the second quarter, driven mainly by increased demand for foreign currencies intended for payment of dividends of foreign-owned companies, in this quarter, the banks replenished a portion of withdrawn deposits. On a cumulative basis, in the first three quarters of the year, banks' currency and deposits still have a positive effect on the balance of payments. Net outflows of trade credits and FDIs are due to the reduction of external liabilities arising from foreign trade operations and outflows of companies with foreign capital to finance the parent companies. High net outflows were mitigated by the higher government external borrowing<sup>58</sup>, amid still anemic private sector funding from abroad.

**In the third quarter of the year, the capital and financial account balance deteriorated on a quarterly basis, and compared to the same period last year it improved.** The quarterly analysis points to a decline<sup>59</sup> in capital flows by 0.7 percentage points of GDP<sup>59</sup>, due to adverse changes in currency and deposits, commercial credits and foreign direct investment, while higher external borrowing of the government is the only factor that partially mitigates these negative quarterly movements. Change on an annual basis (by 0.9 percentage points of GDP) indicates moderate outflows of the capital and financial account, compared with the third quarter of 2011. Positive deviations are registered in most categories, with especially high contribution of loans<sup>60</sup>, whereby the change of

<sup>58</sup> In July, the government, as previously announced, borrowed from the "Deutsche Bank", drawing a loan of Euro 75 million.

<sup>59</sup> During the second quarter of 2012, the capital and financial account registered inflows on a net basis.

<sup>60</sup> Positive annual change in loans is due to the high external indebtedness of the country in the third quarter of 2012.

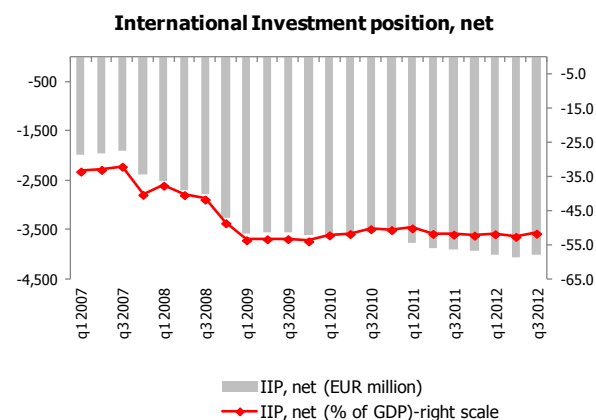


portfolio investments<sup>61</sup> and commercial credits is also important. Direct investments, which were an important source of capital inflows in the third quarter of the previous year, are the only component of the capital and financial account with severe negative annual change.

**In October 2012**, the capital and financial account registered net inflows of Euro 42 million. Inflows based on external borrowing in the form of commercial and financial loans were higher, coupled with net inflows of foreign direct investment. Net outflows were registered only in currency and deposits, due to the continued growth of the banks' deposits abroad.

*At the end of the third quarter of 2012, **gross foreign reserves** stood at Euro 2,103.6 million.* Relative to the end of the previous year, foreign reserves went up by Euro 34.7 million, as a result of the high net purchase by the NBRM on the foreign exchange market and the positive currency changes and changes in the gold price. Outflows on the basis of transactions for the government account and lowering of banks' reserve requirements in foreign currencies were significantly lower, which led to increase of foreign reserves and their further maintenance at an adequate level. *At the end of December 2012, foreign reserves amounted to Euro 2,193.3 million, which is an increase of Euro 89.7 million compared with the end of the third quarter.* Increase in foreign reserves is mostly due to the high net purchase made by the NBRM in the foreign exchange market, and the growth of foreign currency deposits of banks with the NBRM and other transactions.

### 1.5.3. International investment position<sup>62</sup> and gross external debt



After continuous growth over the past seven quarters, in the third quarter of 2012, the net liabilities of the Republic of Macedonia to the rest of the world declined on a quarterly basis by Euro 73 million (0.9 percentage points of GDP). Thus, **at the end of the third quarter, the**

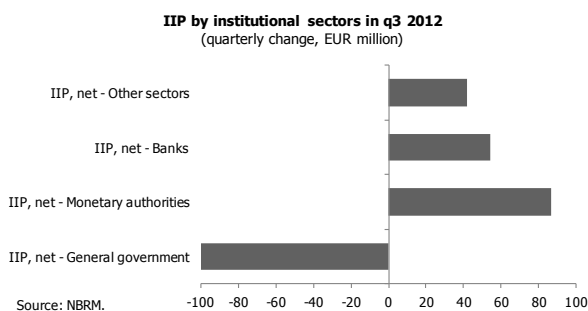
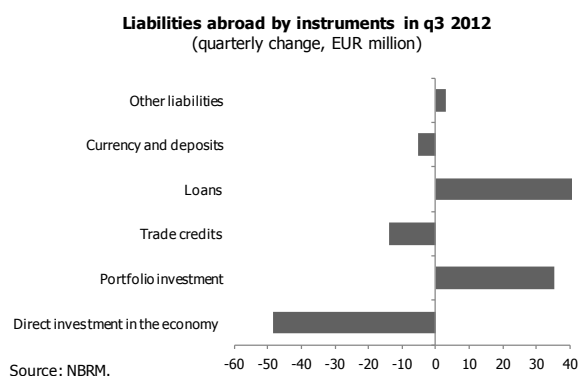
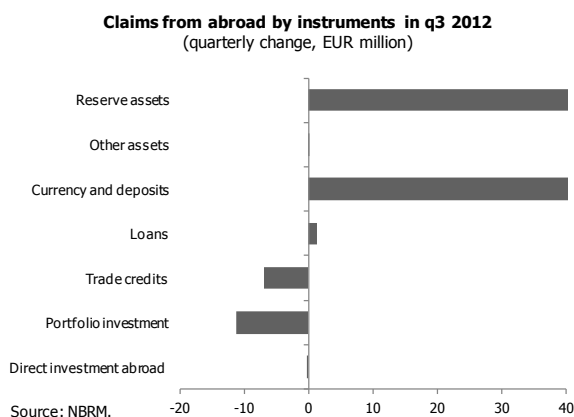
<sup>61</sup> Annual change in portfolio investments is a result of the change in trading with both government Eurobonds. In the third quarter of 2012, domestic entities sold a part of government securities they held, which led to increased flows in the balance of payments.

<sup>62</sup> In September 2012, the NBRM started disclosing data on the international investment position (IIP) of the Republic of Macedonia, by quarter. IIP data are available at the NBRM website: ([www.nbrm.mk/statistika/eksterni\\_statistiki](http://www.nbrm.mk/statistika/eksterni_statistiki)).



**negative net IIP reduced to Euro 4,012 million, or 51.6% of GDP.<sup>63</sup>**

The decrease stems from the faster growth of financial claims on nonresidents, relative to the increase of liabilities to nonresidents. Namely, at the end of the third quarter of 2012, **international assets** (claims on nonresidents) reached Euro 3,640 million and increased by Euro 112 million compared to the previous quarter. This increase is due to the rise in gross official reserves, as well as banks' deposits abroad that increased for the first time this year. At the same time, **international liabilities** (liabilities to nonresidents) increased by Euro 39 million and amounted to Euro 7,653 million. The largest contribution to the growth was made by the new government borrowing from a foreign commercial bank<sup>64</sup> (in the amount of Euro 75 million) and increased government liabilities to nonresidents based on debt securities due to the sale of Eurobonds issued by the Republic of Macedonia by resident holders.



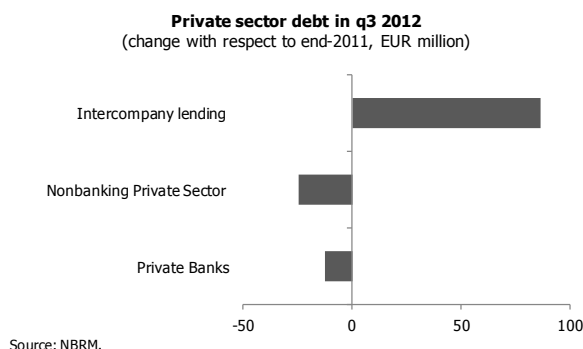
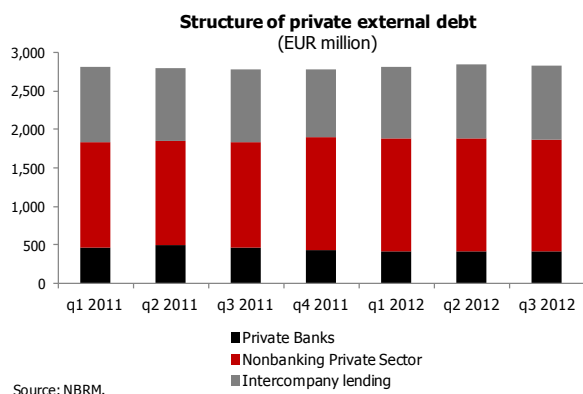
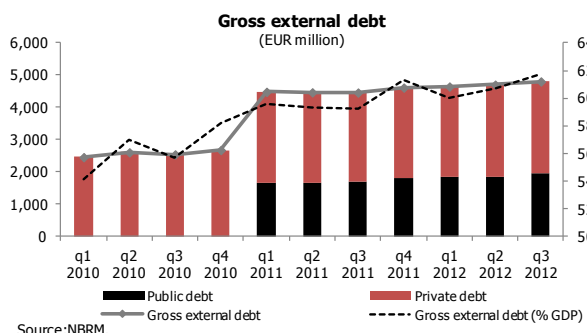
**Analysis of IIP at the level of institutional sectors** refers to the monetary authority, banks and other sectors as sectors with the largest contribution to quarterly improvement of negative net IIP in the third quarter, offsetting the effect of higher government net liabilities. However, most of the negative IIP balance derives from other sectors (mainly nonfinancial companies)

**At the end of the third quarter of 2012, the gross external debt (including repo transactions) amounted to Euro 5,070 million, or 65.3% of GDP,** which is about 125 million, or 1.6 percentage points of GDP more, compared to the previous quarter. Excluding repo transactions, gross debt amounted to Euro 4,804 million (61.9% of GDP), which is a quarterly increase of Euro 99 million, or 1.3 percentage

<sup>63</sup> In the second quarter of 2011, the NBRM started concluding repo and reverse repo transactions. The conclusion of repo transactions produces liabilities (classified under the category of loans) that contribute to the increase of the gross debt. The conclusion of reverse repo transactions creates claims that contribute to the increase of gross claims. The NBRM simultaneously conducts matched conclusion of repo and reverse repo agreements, in almost identical amount. 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 liabilities and claims, thus having no effect on the total net IIP and the net external debt. *Therefore, data presented further in the text are presented without repo transactions, unless otherwise indicated.*

<sup>64</sup> See "Official Gazette of the Republic of Macedonia" no. 84 of July 4, 2012.





points of GDP<sup>65</sup>. This change is due to the increase in public sector debt, while the debt of the private sector slightly decreased<sup>66</sup>. The increased external liabilities of the central government based on long-term bonds and loans led to a quarterly increase of **public debt** by Euro 104 million. On the other hand, the **private sector debt**, which accounts for about 60% of total external debt, noticed slight downward movement (down by Euro 4 million). Moreover, the effect of reduction of liabilities of nonconnected nonbank entities mainly based on commercial credits and on liabilities of banks based on deposits of nonresidents was largely neutralized by the increased intercompany borrowing (debt of connected entities to direct investors). **In terms of maturity**, growth of long-term debt fully explains the change in the gross external debt

**Compared to the end of 2011, the negative net IIP increased by Euro 81 million** (as a percentage of GDP, IIP improved by 0.6 percentage points). This is due to higher liabilities (Euro 151 million), which are only partially offset by increased receivables (by Euro 70 million). On the liabilities side, the largest input to the change was made by liabilities based on debt instruments (loans and bonds) and direct investment in the country (investments in equity capital and reinvested earnings). Sector-by-sector analysis indicates that the increase in net liabilities of the country in this period stems from higher net liabilities of the government and the banks. **Compared to the end of 2011, the gross external debt is higher by Euro 189 million, or by 0.4 percentage points of GDP.** Most of the increase, or almost 75%, comes from the public sector and reflects the effects of the new long-term indebtedness of the government and the sale of government Eurobonds from residents to nonresidents. The remaining part of the debt increase is attributable to the private sector, which is a favorable aspect of the government borrowing, given that emerging liabilities are concentrated to direct investors. Moreover, the majority (70%) of the gross debt growth is the growth of new long-term liabilities, which contributes to maintain the favorable maturity structure of the debt of the domestic economy.

<sup>65</sup> Overall, further analysis refers to the gross external debt without liabilities of the monetary authority based on repo transactions.

<sup>66</sup> The public sector debt includes: debt of central and local government, public funds, monetary authorities, public enterprises and the Macedonian Bank for Development Promotion, while the private sector debt includes: debt of banks (excluding MBDP), debt of other sectors (excluding public enterprises) and intercompany lending.





EXTERNAL DEBT INDICATORS	Solvency			
	Interest payments/ Exports of goods and services	Gross debt/ Export of goods and services	Gross debt/ GDP	Debt service/ Exports of goods and services
	in %			
31.12.2004	2.24	120.1	49.3	11.5
31.12.2005	2.33	128.5	56.3	9.7
31.12.2006	2.88	109.8	51.8	18.2
31.12.2007	2.38	102.3	53.2	16.6
31.12.2008	2.30	101.1	55.3	8.8
31.12.2009	2.10	113.3	58.5	10.2
31.03.2010	2.78	112.6	55.9	11.9
30.06.2010	2.78	118.7	58.9	11.9
30.09.2010	2.78	116.0	57.6	11.9
31.12.2010	2.78	121.1	60.1	11.9
31.03.2011	2.70	124.9	63.2	14.5
30.06.2011	2.70	124.4	63.0	14.5
30.09.2011	2.70	124.2	62.9	14.5
31.12.2011	2.70	128.5	65.1	14.5
31.03.2012	2.56	114.2	62.4	14.6
30.06.2012	2.56	115.6	63.2	14.6
30.09.2012	2.56	118.1	64.5	14.6
Moderate indebtedness criterion	12 - 20%	165 - 275%	30 - 50%	18 - 30%

\*The moderate indebtedness criterion is according to the World bank's methodology of calculating indebtedness indicators, which implies 3-year moving averages of GDP and exports of goods and services in the calculation of the indicators. Data for 2012 are according to BoP projection July 2012.  
Source: NBRM.

EXTERNAL DEBT INDICATORS	Liquidity		
	Foreign reserves/ ST debt	Foreign reserves/ ST debt at remaining maturity*	ST debt/ Total gross debt
	ratio	ratio	in %
31.12.2004	1.14	0.89	30.3
31.12.2005	1.67	1.04	26.7
31.12.2006	1.95	1.34	29.0
31.12.2007	1.35	1.08	39.8
31.12.2008	1.29	0.95	35.2
31.12.2009	1.29	0.94	32.9
31.03.2010	1.36	0.92	31.0
30.06.2010	1.36	1.00	31.2
30.09.2010	1.41	0.94	30.4
31.12.2010	1.31	0.90	32.0
31.03.2011	1.46	1.05	29.1
30.06.2011	1.40	1.00	29.3
30.09.2011	1.42	0.99	29.1
31.12.2011	1.53	1.06	29.4
31.03.2012	1.49	0.94	29.9
30.06.2012	1.40	0.91	30.7
30.09.2012	1.49	0.96	29.4
Criterion	1.00		

In compliance with "External debt statistics: Guide for compilers and users," published by the IMF.

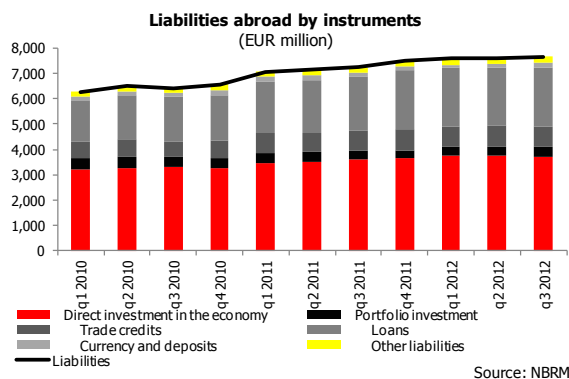
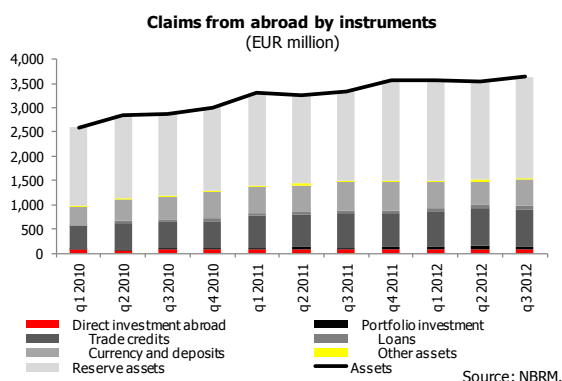
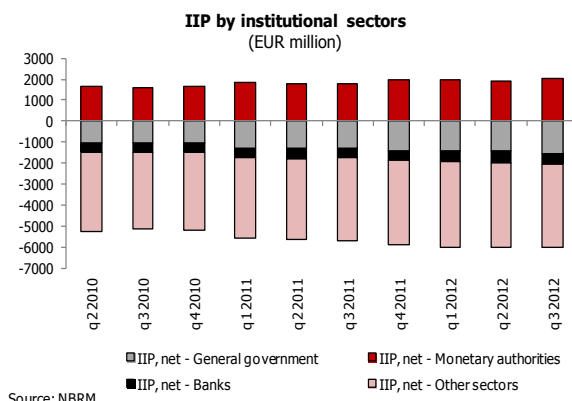
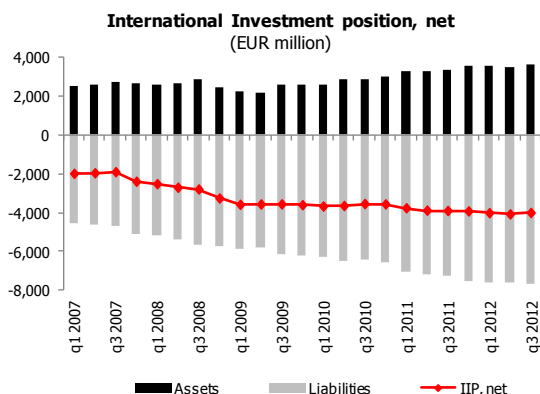
\*According to the "Greenspan-Guidotti rule", a country should maintain full coverage of short-term debt at remaining maturity with gross foreign reserves.

Source: NBRM.

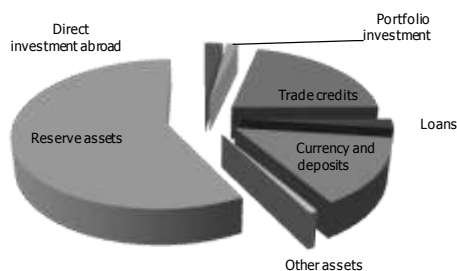
On annual basis, the negative net IIP of the country increased by Euro 103 million (but has 0.3 percentage points lower share of GDP), while gross external indebtedness is higher by Euro 343 million, or 2.4 percentage points of GDP.

**Indicators of solvency of the national economy** relative to external liabilities<sup>67</sup> continue improving, compared to the end of 2011. Compared to the referent values for the degree of indebtedness, most indicators show that our country still belongs to the group of *low indebted countries*, with the exception of the *gross external debt to GDP ratio*, which shows *high indebtedness of the country*. Moreover, at the end of the third quarter of 2012, this indicator deteriorated relative to the previous quarters of the year. So far, changes in **liquidity ratios** in the period under observation do not indicate an increased vulnerability of the economy. Moreover, the indicator for coverage of short-term debt (remaining maturity) with foreign reserves, which, since the beginning of the year, has been maintained at slightly lower level relative to the full coverage rule, at the end of the third quarter slightly improved.

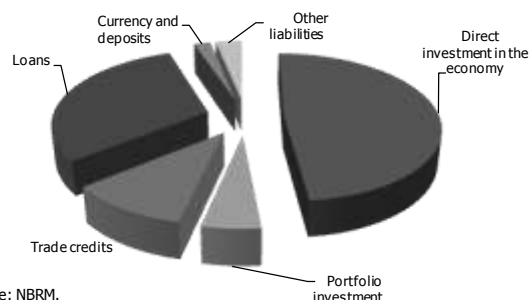
<sup>67</sup> The indicators are calculated according to the methodology of the World Bank, which involves using of three-year moving averages of GDP and export of goods and services and other receipts (which cover: inflows based on investment income, compensation of employees and remittances), as denominators in the calculation of the indicators. This methodology also defines debt criteria as reference values for the level of indebtedness.



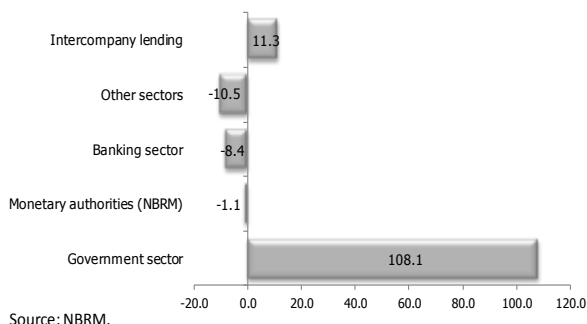
**Claims from abroad by instruments in q3 2012**  
(EUR million)



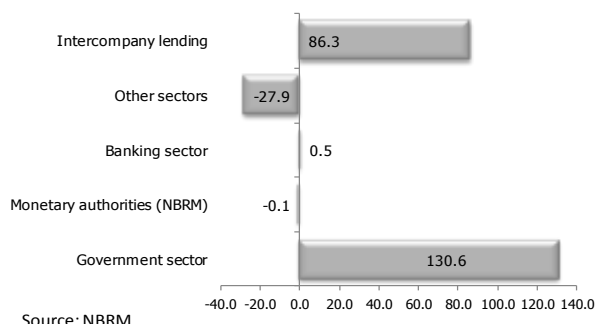
**Liabilities abroad by instruments in q3 2012**  
(EUR million)



**Contribution to the quarterly change of the gross external debt, by sectors**  
(in EUR million)



**Contribution to the change of the gross external debt with respect to end-2011, by sectors**  
(in EUR million)

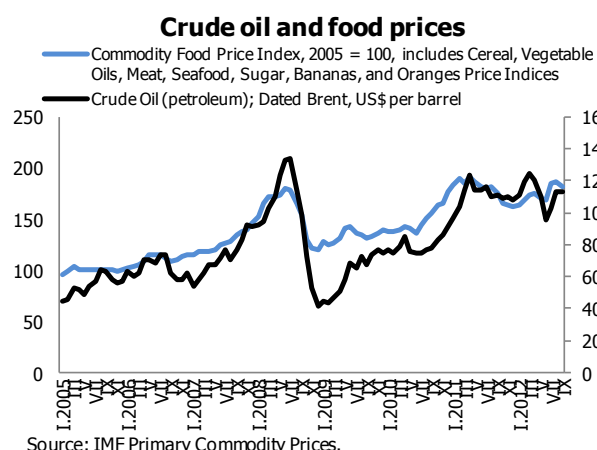


## 1.6. Inflation

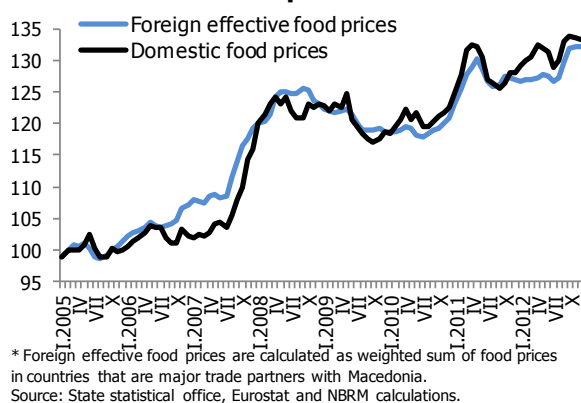
**Domestic inflation continued to rise during the last quarter of the year. The average quarterly growth, seasonally adjusted, equaled 1.6%, which is identical to the quarterly increase in the previous quarter. The growing food component of consumer prices is still the main factor for this quarterly change, as an effect of**



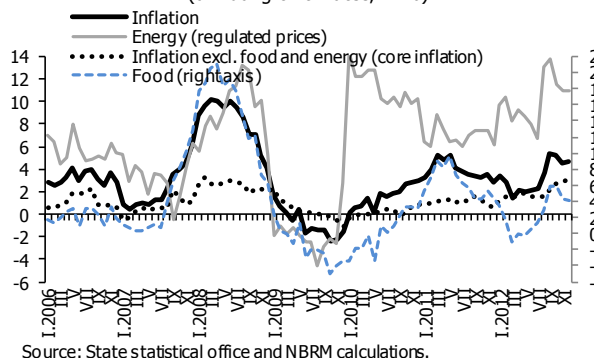
**changes in global prices and of the lower supply of domestic agricultural products. The growth of regulated prices as well as accelerating growth of core inflation had an additional effect at the end of the previous quarter. However, the quarterly increase of inflation is basically a transmission effect from the previous quarter, while during the last quarter, the price level was relatively stable. The annual inflation rate in the last quarter of the year equaled 4.9% (3.8% in the previous quarter). However, in the last quarter, core inflation experienced further strengthening of the annual dynamics and reached 2.9%. Given the still weak demand, strengthening the long-term component of inflation is in part associated with the rising prices of food and energy in the past, but for the most part it is explained by the impact of one-off factors, which are likely to be exhausted in the next period.**



**Foreign effective food prices\* and domestic food prices**



**Inflation and volatility of food and energy**  
(annual growth rates, in %)



**In the fourth quarter, inflation continued to grow at the same quarterly pace as in the previous quarter.** Thus, on a quarterly basis, prices rose by 1.6%, seasonally adjusted. Quarterly growth of domestic prices is largely due to rising food prices (2.2%), with simultaneous growth of fresh and processed food<sup>68</sup>. Increase in the prices of food component is influenced by the increased prices of inputs, due to the movements in the global prices of food and energy, as well as by the limited domestic supply of agricultural products, due to the adverse weather conditions. Foreign effective food prices registered accelerated quarterly increase, and in the last quarter increased by 2.7%, which is the highest growth recorded in the last seven quarters. Additional impact on seasonally adjusted quarterly increase of consumer prices was also made by footwear prices, prices of oil derivatives, as well as the rise in the price of electricity<sup>69</sup>.

**Seasonally unadjusted data also point to the quarterly consumer price increase of 1.6%.** Such quarterly price increase stems from almost the same price subcomponents of consumer prices, which indicates that the rise of prices is not caused by the seasonal component.

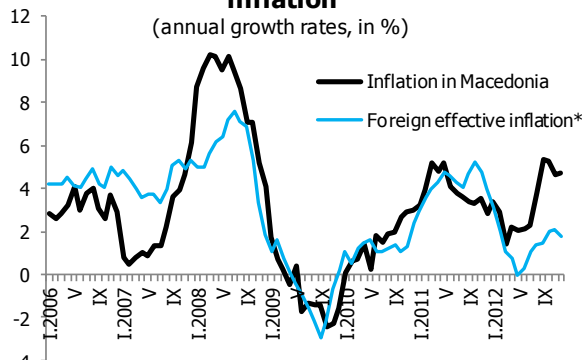
**The enhanced inflation growth on a quarterly basis lead to acceleration of the annual growth, which reached 4.9% in the last quarter (3.8% in the previous quarter).** Thus the average inflation rate for 2012 equals 3.3% (2.8% in the first nine months). Intensification of the annual inflation rate is explained entirely by increased contributions of the growth of food and

<sup>68</sup> Analyzing subcomponents, most significant contribution to the quarterly, seasonally adjusted, growth of prices was made by the prices of fresh meats, eggs and fruit, as well as the price of cooking oil.

<sup>69</sup> On average, the price of electricity in the fourth quarter was higher than the third quarter, as the Energy Regulatory Commission raised the price in the middle of the third quarter, more precisely in August 2012.

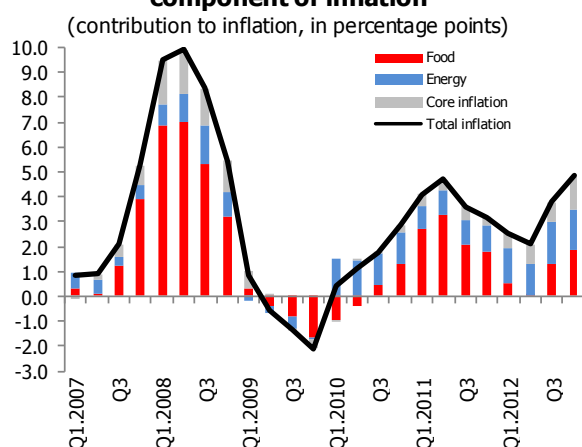


### Domestic inflation and foreign effective inflation



\* Foreign effective inflation is calculated as weighted sum of inflations in countries that are major trade partners with Macedonia.  
Source: State statistical office, Eurostat and NBRM calculations.

### Volatile (food and energy) and long-term component of inflation



Source: State statistical office and NBRM calculations.

### Price categories

	(annual growth rates, in %)										(contributions to annual growth rates, in p.p.)									
	2011					2012					2011					2012				
	Q1	Q2	Q3	Q4	2011	Q1	Q2	Q3	Q4	2012	Q1	Q2	Q3	Q4	2011	Q1	Q2	Q3	Q4	2012
<b>Consumer price index - all items</b>	4.1	4.7	3.6	3.2	3.9	2.5	2.1	3.8	4.9	3.3	4.1	4.7	3.6	3.2	3.9	2.5	2.1	3.8	4.9	3.3
Food	7.1	8.4	5.4	4.7	6.4	1.4	0.2	3.4	4.7	2.4	2.7	3.2	2.0	1.8	2.4	0.6	0.1	1.3	1.9	1.0
Fresh food	4.6	6.7	1.7	2.9	4.0	0.7	-0.4	6.2	7.4	3.5	0.8	1.2	0.3	0.5	0.7	0.1	-0.1	1.1	1.3	0.6
Processed food	8.5	9.9	8.4	6.2	8.3	2.0	0.6	1.1	2.6	1.6	1.7	2.0	1.8	1.3	1.7	0.4	0.1	0.2	0.6	0.3
Energy	7.1	6.9	7.0	7.2	7.1	9.4	8.7	11.2	11.1	10.1	0.9	0.9	0.9	1.0	0.9	1.4	1.2	1.6	1.6	1.5
Fuels and lubricants	18.4	10.9	12.2	12.4	13.5	7.9	10.5	8.0	5.1	7.9	0.6	0.4	0.4	0.5	0.5	0.4	0.5	0.4	0.2	0.4
Electrical power	1.8	5.4	5.4	5.4	4.5	11.5	7.7	14.9	18.4	13.1	0.1	0.4	0.4	0.4	0.3	0.8	0.5	1.0	1.3	0.9
Heating power	6.3	5.7	4.2	4.9	5.3	7.6	7.7	7.7	4.0	6.7	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2
Food and energy (volatile prices)	7.1	8.0	5.8	5.4	6.6	3.5	2.4	5.5	6.5	4.5	3.6	4.1	3.0	2.7	3.4	1.9	1.3	3.0	3.5	2.4
Core inflation (inflation excl. food and energy)	1.0	1.2	1.1	0.7	1.0	1.4	1.8	1.8	2.9	2.0	0.5	0.6	0.6	0.5	0.5	0.6	0.8	0.8	1.3	0.9

Source: State Statistical Office and NBRM calculations.

long-term component, which is a result of higher import prices and their transmission effect on domestic consumer prices, and probably of the reduced supply of domestic agricultural products. Contribution of the energy component to total inflation remained the same as in the previous quarter, due to the faster increase of regulated prices (electricity and heat) and the slowing growth in the prices of oil derivatives. Annual growth rates of foreign effective inflation also accelerated (2.0% compared to 1.3% in the previous quarter).

**In addition, annual growth of long-term inflation component accelerated in the fourth quarter.** Thus, core inflation (price component excluding food and energy) reached 2.9% in the fourth quarter. In the absence of pressure from domestic demand<sup>70</sup>, the growth of this component in one part is explained as a transmission effect of the increase in the prices of energy and food in the previous period, but still, for the most part it is associated with the impact of one-off factors, such as growth of culture and entertainment costs, and the increase in the prices of footwear. Core inflation is moderate for the entire 2012, amounting to 2%.

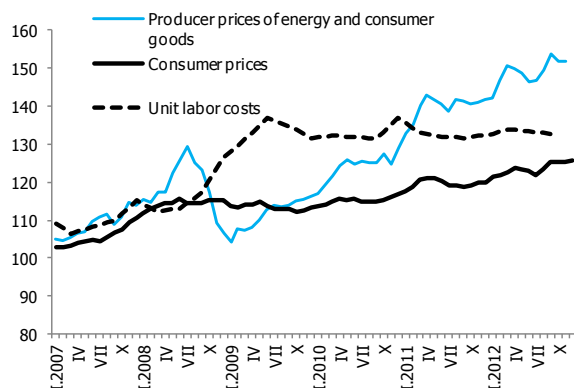
**In the fourth quarter<sup>71</sup>, the rise of producer prices also accelerated.** The quarterly growth of these prices equaled 0.9% (2.7% seasonally adjusted), with the higher cost of electricity making the largest individual contribution to the increase. On an annual basis, producer prices increased by 5.4%, which is a further acceleration of the annual growth dynamics. The upward movement is mainly caused

<sup>70</sup> The NBRM estimates show that domestic production is still below the potential level (negative output gap).

<sup>71</sup> The data refers to the first two months of the analyzed quarter.



**Factors affecting consumer prices**  
(indices, 2005=100)



Source: State statistical office and NBRM calculations.

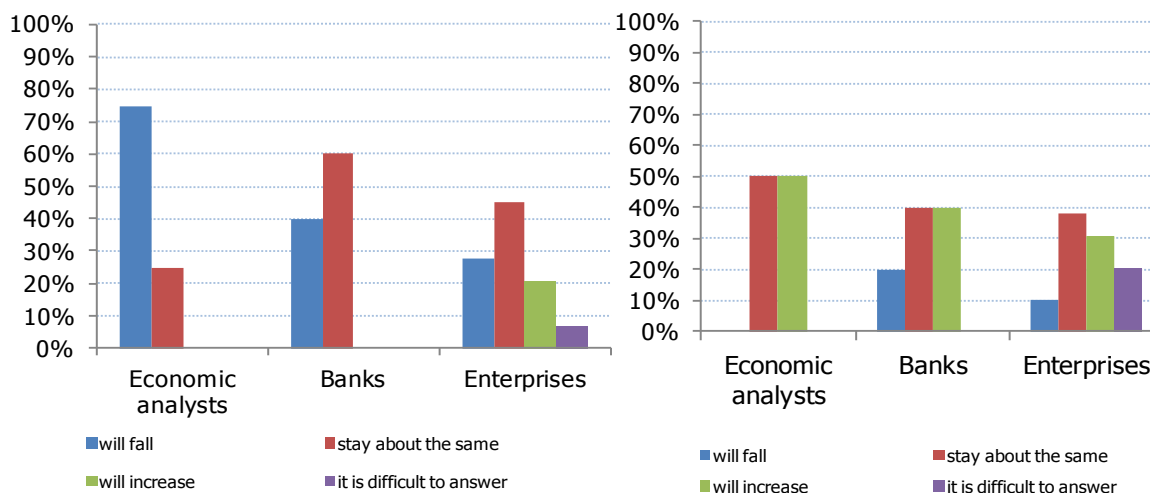
by the increase in prices of energy (oil derivatives and electricity) and food products.

**Production costs that affect the domestic component of inflation<sup>72</sup>** registered a quarterly growth of 3.8%, seasonally adjusted and annual growth of 7.5%. In the third quarter, **unit labor costs** show an annual growth of 0.9%, however without further enhancement of their dynamics. On the other hand, the quarterly comparison indicates their reduction, with pace identical to the previous quarter. Having regard to the further maintenance of the negative output gap, as before, the further period does not expect labor cost-induced inflationary pressures.

#### Appendix 4: Inflation expectations of the economic agents in the Republic of Macedonia

Inflation Expectations Survey conducted in January 2013<sup>73</sup> for the end of the first quarter of 2013 indicates the most common expectations for unchanged and lower inflation (44.7% and 34.2% of respondents, respectively). However, a small proportion (15.8%) of respondents expects it to increase<sup>74</sup>. From the viewpoint of individual groups of respondents, 75% of the surveyed **economic analysts** expect lower inflation, while the rest (25%) have stable inflation expectations. Unlike economic analysts, the majority of surveyed **banks** have stable inflation expectations (60%), while the remaining 40% expressed expectations of lower inflation. The **companies** have similar expectations. Most of them have stable inflation expectations (44.8%), followed by those with expectations for lower inflation (27.6%), while 20.7% believe that inflation will be higher.

Distribution of answers to the expectations for inflation by groups of respondents for the first quarter of 2013



Source: NBRM, Inflation Expectations Survey.

<sup>72</sup> Consumption goods (durables and nondurables) and energy.

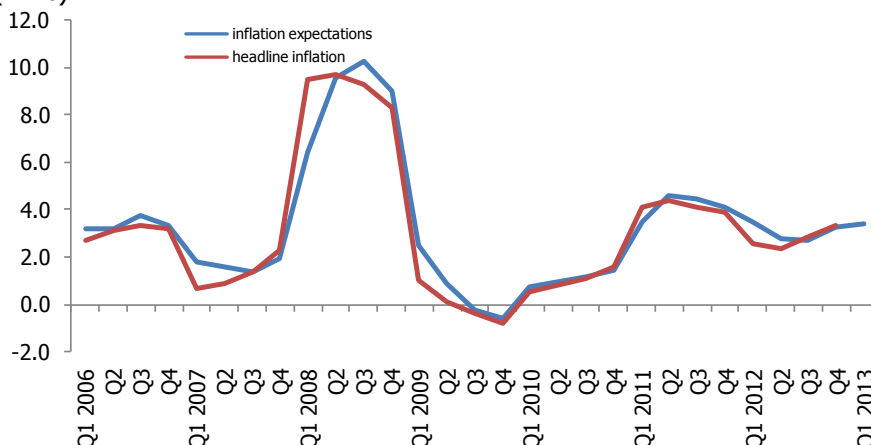
<sup>73</sup> The survey had a 52.1% responsiveness, i.e. the survey was answered by 38 of 73 respondents. Observed by group of respondents, the responsiveness of banks is 71.4%, followed by companies with 54.7% and economic analysts 30.8%.

<sup>74</sup> Percentage that remains up to 100%, in the whole text, refers to the respondents who chose the option "difficult to determine."



The answers of respondents for 2013, indicate similar distribution between the expectations for maintaining the inflation growth pace and expectations for its acceleration. Notably, 39.5% expect the pace of price increase to be the same as in 2012, 34.2% expect higher inflation, while 10.5% expect lower inflation<sup>75</sup>. Among **economic analysts** surveyed, responses are equally distributed between expectations that the inflation rate will remain the same as in the previous year and expectations for its acceleration. The expectations of surveyed **banks** are similar, with equal distribution of expectations between stable inflation and higher inflation (40% each), while 20% expect a decrease in inflation. Analyzing responses of **surveyed companies**, most of them expect the inflation rate to remain the same as in the previous year (37.9%), 31% expect higher inflation, while a small proportion (10.3%) expect it to reduce. *The average expected inflation rate in 2013, based on the responses of economic agents, equals approximately 3%.*

Expectations for the average inflation rate throughout the year and the average cumulative inflation (in %)



Source: NBRM, Inflation Expectations Survey and SSO.

The main factor that contributed to the formation of inflation expectations of economic agents includes the transmission effect of the rise of global food and energy prices on domestic prices, as well as the direct and indirect impact of the increased regulated prices on electricity and heating energy.

## II. Monetary policy

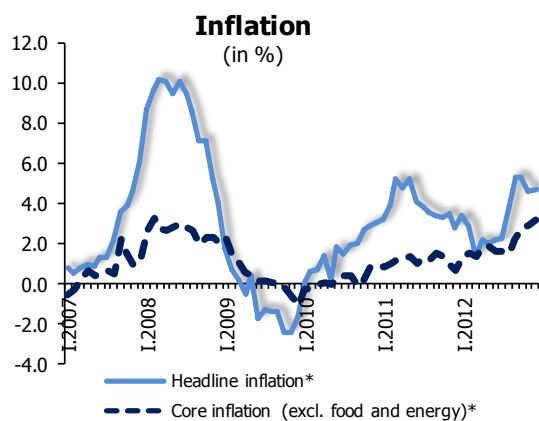
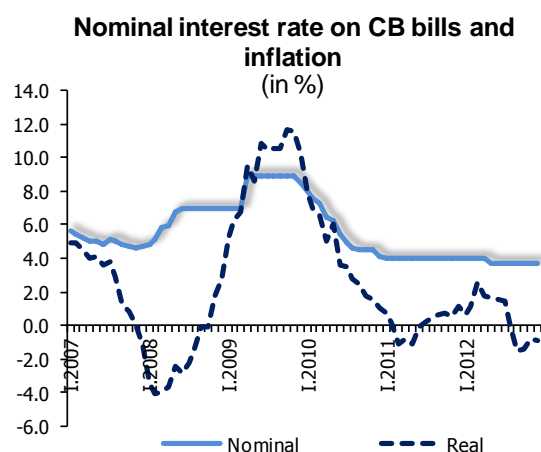
***During the fourth quarter of 2012, the NBRM maintained its key interest rate unchanged at the level of 3.75%. From a monetary point of view, in this period, the domestic economy registered relatively favorable macroeconomic developments. Namely, the last quarter witnessed a slowdown of inflation, indicating a reduction of inflationary pressures caused by the growth of import and regulated prices. Despite expectations for higher seasonal pressures on the demand for foreign currency in the last quarter, the NBRM made a net purchase of foreign currencies on the foreign exchange market, which contributed to the growth of foreign reserves and their further maintenance at an adequate level. On the other hand, the uncertainty and the constant deterioration of the estimates for global growth indicate still present risks associated with future developments in the external sector. In addition, given the high variability and difficult predictability of the dynamics of prices on the global markets, risk remained about the future path of inflation. The presence of such risks created a***

<sup>75</sup> 15.8% of respondents believe that it is difficult to determine the rate of inflation in 2013.





***need for conducting prudent monetary policy, prompting the NBRM to keep the key interest rate unchanged. On the other hand, the NBRM made changes in the setup of monetary instrument - reserve requirements, which are expected to contribute to the support of lending by banks and consequently to the economic growth without compromising the objectives of maintaining price stability and the stability of the exchange rate, and the financial stability of the country. Changes include targeted relaxation of conditions for allocation of reserve requirement by banks for defined sectors and instruments, and are of temporary nature, which includes them in the group of non-standard monetary policy measures. In the next period, the NBRM will continue monitoring the situation closely for timely and appropriate adjustment of monetary policy.***

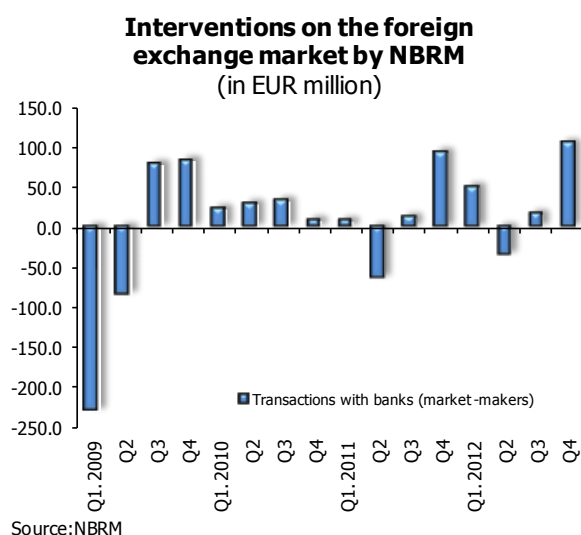


During the last quarter of 2012, the NBRM maintained its key interest rate unchanged at a level of 3.75%. Observing key indicators relevant for monetary policy, relatively favorable developments were registered in the last quarter. Thus, the rise of domestic prices in the last quarter slowed, and in December, the annual inflation rate equaled 4.7%, while the average annual inflation rate for 2012 equals 3.3%. Such achievements meant more favorable trends of inflation than expected. Contrary to expectations for greater seasonal pressures on the demand for foreign currency in the last quarter, the NBRM made a high net purchase of foreign currencies, which contributed to further maintenance of foreign reserves at an adequate level. On the other hand, the still uncertain recovery of the euro area, as well as adverse global impact of the so-called United States Fiscal Cliff indicate the still present risks associated with the future trends in the external sector. At the same time, given the volatility of global market prices, and uncertainty about the strength of their further transmission effects, the risks about the future path of inflation persisted. The presence of these risks imposed the need for conducting prudent monetary policy. In such circumstances, the NBRM maintained its key interest rate unchanged.

**In the last quarter, the NBRM made changes in the setup of the monetary instrument - reserve requirement.** Thus, as of November 29, 2012, the NBRM Council adopted a new Decision on reserve requirement<sup>76</sup> which allows a reduction of the banks' reserve requirement base for the amount of newly approved loans<sup>77</sup> to net exporters and companies

<sup>76</sup> Official Gazette of the Republic of Macedonia no. 153/2012.

<sup>77</sup> Newly approved loan, in terms of this decision, denotes a loan to non-financial companies that enjoy an average classification in "A" or "B" risk category (according to the latest available data from the Credit Registry of the National Bank) in the overall banking system of the Republic of Macedonia, or is

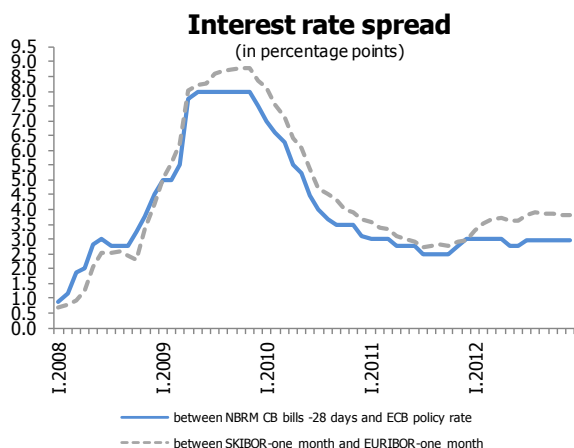


to finance projects for domestic electricity production for own and/or commercial use, as well as for investments in debt securities in domestic currency issued by the aforementioned nonfinancial companies. The decision allows complete exemption of banks' liabilities based on debt securities issued in domestic currency and original maturity of at least two years from the reserve requirement. The decision takes effect on January 1, 2013, and will be effective throughout 2014, when depending on the results achieved, the need for further application will be examined. According to these features - targeted relaxation of conditions for allocating banks' reserve requirement for defined sectors and instruments and defined period of validity of the amendments, on a temporary basis - these measures are included in the group of non-standard monetary policy measures. Such an approach for supplementing the standard monetary instruments with non-standard measures, in order to achieve the desired effects on economic developments after the onset of the global crisis, has become a well-known practice of the central banks of developed countries and developing countries. It is estimated that the changes in the reserve requirement instrument will primarily contribute to easing credit terms of net exporters and companies in the energy sector, and in the best case, encourage lending. Namely, by reducing the base for calculation of the reserve requirement for the amount of these loans, banks' cost based on allocation of reserve requirement also reduces, which opens up a space for easing primarily interest-related terms of lending to these sectors. The measure includes two sectors - net exporters and electricity producing companies, since these are key sectors for sustainable economic growth and balance of payment position, taking into account the characteristics of our economy (small and open economy dependent on energy imports). At the same time, the planned investment incentives / issuing debt securities encourages the development of the domestic capital market. According to this structure, **it is expected that measures will ultimately help to support economic activity, without compromising the goals of maintaining price stability and**

secured by first-rate security instruments, in accordance with the Decision on credit risk management ("Official Gazette of the Republic of Macedonia" no. 17/2008, 31/2009, 91/2011 and 127/2012), which is approved and disbursed after January 1, 2013, and is still has the stock level on the last day of the calendar reporting month or before December 31, 2012 and is still has the stock level on the last day of the calendar reporting month, but after January 1, 2013 the bank did not increase bank fees and reduced the nominal interest rate by at least 0.5 percentage points.



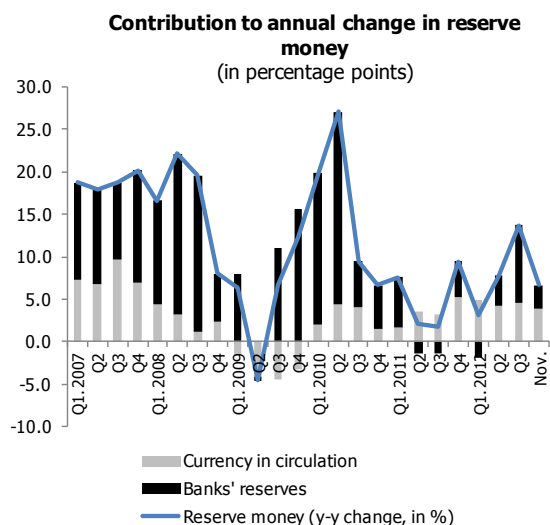
**exchange rate stability, as well as financial stability in the country.**



Source: NBRM, ECB ([www.ecb.int](http://www.ecb.int)) and De Nederlandsche Bank ([www.statistics.dnb.nl](http://www.statistics.dnb.nl)).

**Interest rate spread between the NBRM key interest rate and the ECB policy rate remains at the level of the end of the third quarter and in December equaled 2.98 percentage points.** Namely, after the change of the interest rate on CB bills in May, in the next period the NBRM maintained its key interest rate unchanged at a level of 3.75%. ECB made the last relaxation through the key instrument in July cutting the key interest rate from 1% to 0.75%. On the domestic financial market, SKIBOR<sup>78</sup> registered no major changes, which corresponds to the NBRM unchanged key interest rate. On the European financial market, one-month EURIBOR, after declining in August, stabilized in the next period at around 0.1%. In such conditions, the interest rate spread between one-month SKIBOR and one-month EURIBOR remained stable and equaled 3.8 percentage points in December (3.9 percentage points in September)

## 2.1. Bank liquidity and financial market developments



Source: NBRM

**At the end of December 2012, bank liquidity increased by Denar 1,495 million, compared to the end of the third quarter.** Thus the account balances of banks with the NBRM<sup>79</sup> at the end of December amounted to Denar 18,592 million. According to the latest available data, in November, the annual growth rate of reserve money<sup>80</sup> stood at 6.6%, compared to 13.7% at the end of the third quarter<sup>81</sup>.

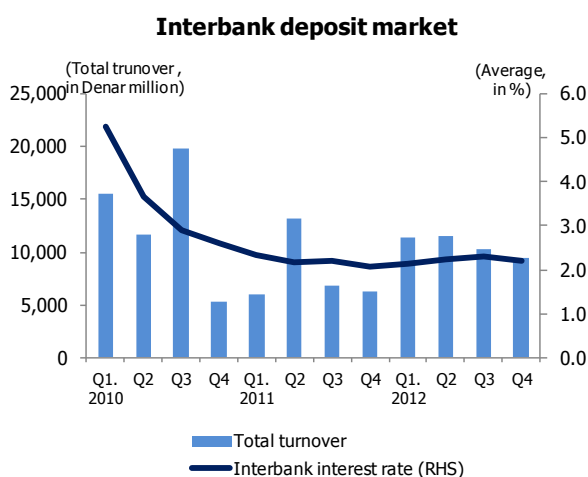
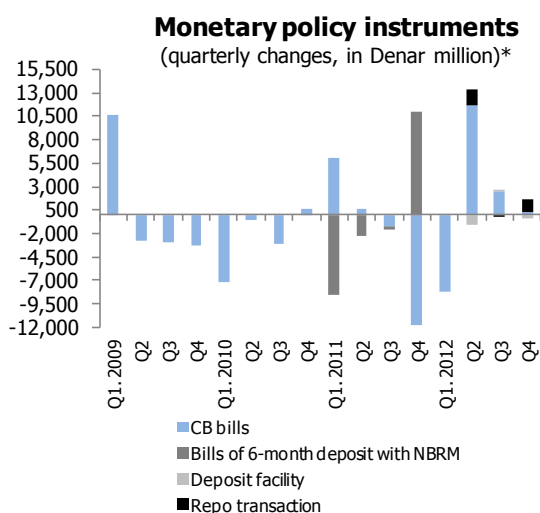
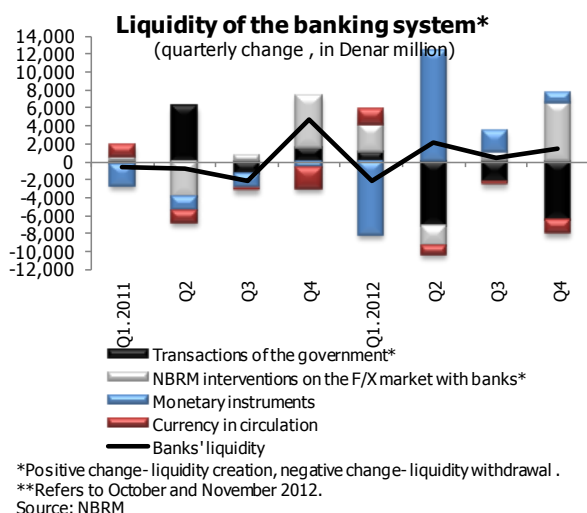
**In the last quarter of 2012, the autonomous factors, on a net basis created liquidity in the total amount of Denar 206 million.** Liquid assets were also created through the NBRM foreign exchange transactions with market makers, by a net purchase on the foreign exchange market (Denar 6,485 million). Government transactions contributed to the withdrawal of liquid assets (totaling Denar 6,574 million), mainly through accumulation of deposits on the government Denar account with the NBRM. Currency in circulation also contributed to liquidity withdrawal from banks (Denar 1,471 million),

<sup>78</sup> Interbank interest rate on Denar deposits, calculated using the quotations of referent banks.

<sup>79</sup> Refers to Denar accounts of banks, obliged to allocate reserve requirement.

<sup>80</sup> Includes the foreign currency reserve requirement.

<sup>81</sup> The high growth rate of reserve money in September 2012 largely reflects the low base effect, taking into account that in September 2011, reserve money decreased by 7.4%, on a monthly basis, which was largely neutralized in the next month.



reflecting the common seasonal increase in demand for cash before the end of the year.

In the last quarter, the NBRM monetary instruments contributed to the creation of liquid assets in the total amount of Denar 1,289 million. CB bills also created liquid assets in the total amount of 317 Denar million. During this period, three CB bill auctions were held. At the auctions, the NBRM determined the supply of CB bills at a level that ensures stability of the weighted interest rate at auctions. Consequently, the interest rate at all three auctions swung around the maximum interest rate set by the NBRM and equaled 3.73%. Liquidity was also created through the NBRM repo transactions (in the amount of Denar 1,300 million, on a net basis). Banks invested Denar 328 million in deposit facility with the NBRM on a net basis, which meant withdrawal of liquidity from the banking system. During the last quarter, the banks continued to maintain a relatively low level of excess liquid assets over the reserve requirement, a trend typical for the period after the introduction of monetary changes in April. Thus the average excess allocated liquid assets over the reserve requirement in the period October-November 2012 stood at 0.4% on average (0.6% on average in the third quarter and 2% on average in the last quarter of 2011).

In the last quarter of 2012, the interbank market reported a total turnover of Denar 9,421 million, which is a decrease of 8.1% compared to the previous quarter. However, the activity on the interbank market in the last quarter, compared with the same period last year, shows a rapid growth of 50.5%. Moreover, the trend of increased interbank activity in longer runs (seven days and one month) remained during this period, with the share of this type of transactions in total transactions equaling 29.1%. In the last quarter, the interbank interest rate (MBKS)<sup>82</sup> averaged 2.21% (2.29% on average in the third quarter). Interbank interest rate on concluded overnight transactions (MKDONIA) equaled 2.10% on average, in the last quarter, compared to 2.14% on average, in the third quarter. In the last quarter, the secondary money market registered two transactions (a repo transaction and an outright transaction with treasury bills) in the amount of Denar 151.6 million.

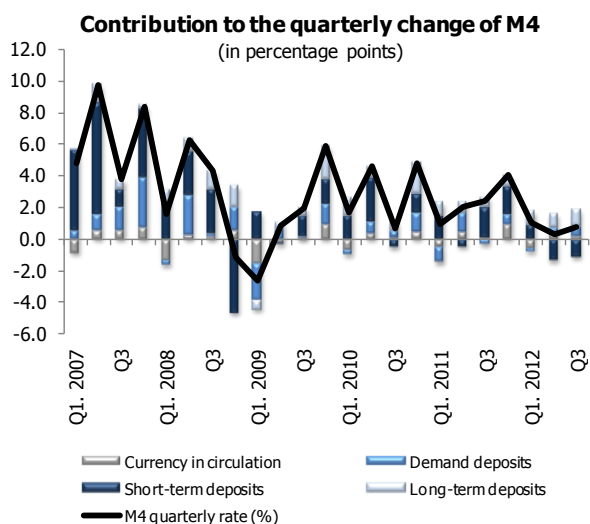
<sup>82</sup> Average interest rate on interbank deposit market.



## 2.2. Monetary and credit aggregates

*During the third quarter, the broad money M4 continued to grow on a quarterly basis, at a faster pace compared to the growth in the previous quarter. Acceleration of monetary growth dynamics corresponds to the improved quarterly real sector performance, as well as with sufficient balance of payments position in the third quarter. Structurally speaking, monetary growth is almost entirely due to the increase of the most liquid assets (cash in circulation and demand deposits), amid quarterly stagnation of total deposits. Moreover, there was a slowdown of the quarterly growth rates of household savings given the stagnant nominal net wages and further rise of consumer prices. On the other hand, in terms of the present outflow of capital out of the economy, corporate deposits decline for two consecutive quarters. In the third quarter, banks continued to provide additional financial support for the domestic economy, but to a lesser extent compared to the previous quarter. Slowdown in credit growth continued during the period October-November. Such developments in the credit market point to a greater risk aversion of banks, in conditions of further deterioration in the global economic environment and increased credit risk. Strategies of parent banks, their attitude towards risk-taking and possible deleverage process also have an effect on domestic banks and their business policies.*

### 2.2.1. Monetary aggregates



In the third quarter of 2012, broad money M4 recorded quarterly growth of **0.8%**, which is acceleration compared to the growth of the previous quarter (**0.3%**). From a structural viewpoint, the quarterly broad money growth is further due to the increase of the most liquid assets (cash in circulation and demand deposits), amid stagnation of the total private sector deposits. Within the total deposits, in this period, long-term deposits of private sector went up, while short-term deposits continued to decline on a quarterly basis, but with a slower pace compared to the previous quarter. In such circumstances, on a quarterly basis, the narrowest monetary aggregate M1 was higher by 3.3% (growth of 3.1% in the previous quarter). On the other hand, **total deposits with banks**<sup>83</sup> on a quarterly basis stagnated, despite the decline of 0.5% in the previous quarter. Stagnation of savings shows that the existing real and financial flows do not create conditions for faster growth of savings.

### Analyzing sector structure, total household deposits (excluding demand

<sup>83</sup> Refers to total deposits without demand deposits. If demand deposits are included, the quarterly growth of total deposits in the third quarter of 2012 equals 0.7%, compared to the decrease of 0.1% in the previous quarter.





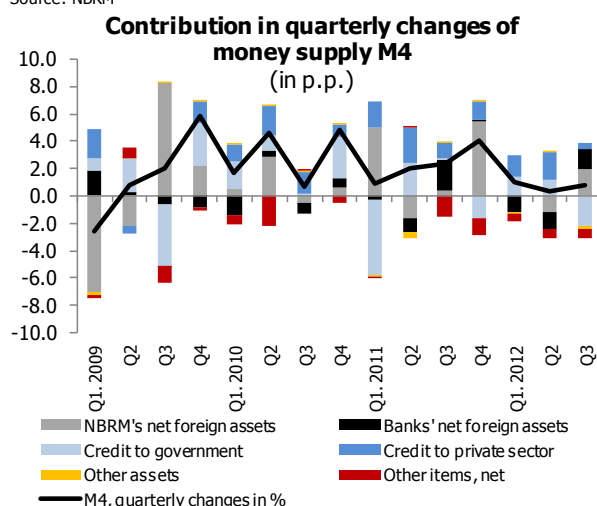
### Basic monetary indicators

(quarterly changes, in %)

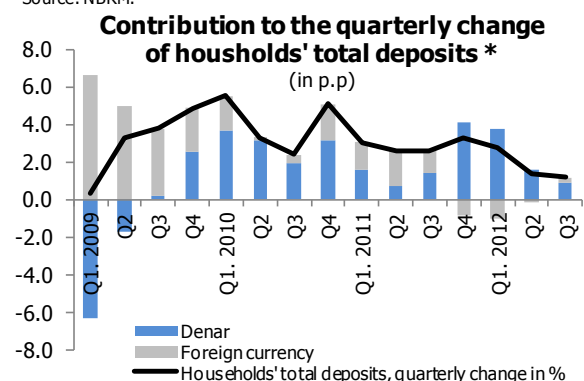
	2012		
	Q1	Q2	Q3
<b>Money supply M4</b>	<b>1.0</b>	<b>0.3</b>	<b>0.8</b>
Monetary aggregate M2	0.2	-0.7	-0.4
Monetary aggregate M1	-3.2	3.1	3.3
<b>Total deposits*</b>	<b>2.3</b>	<b>-0.5</b>	<b>0.0</b>
Denar deposits	7.8	0.1	1.6
Foreign currency deposits	-1.5	-1.0	-1.1
Short-term deposits	1.6	-2.4	-1.6
Long-term deposits	5.3	6.5	5.5
Deposits to enterprises	1.3	-8.9	-6.5
Deposits to households	2.8	1.4	1.2

\* Excluding demand deposits.

Source: NBRM

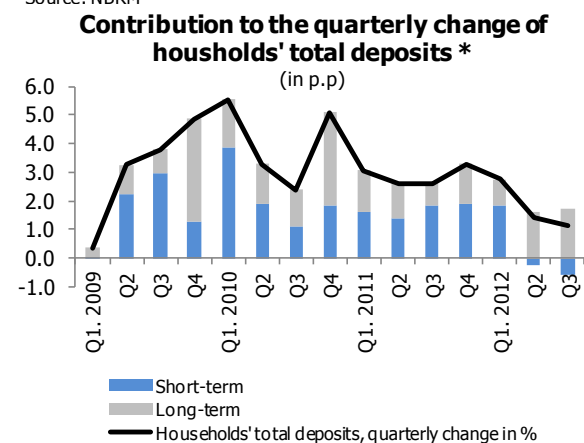


Source: NBRM.



\*Excluding demand deposits.

Source: NBRM



\*Excluding demand deposits.

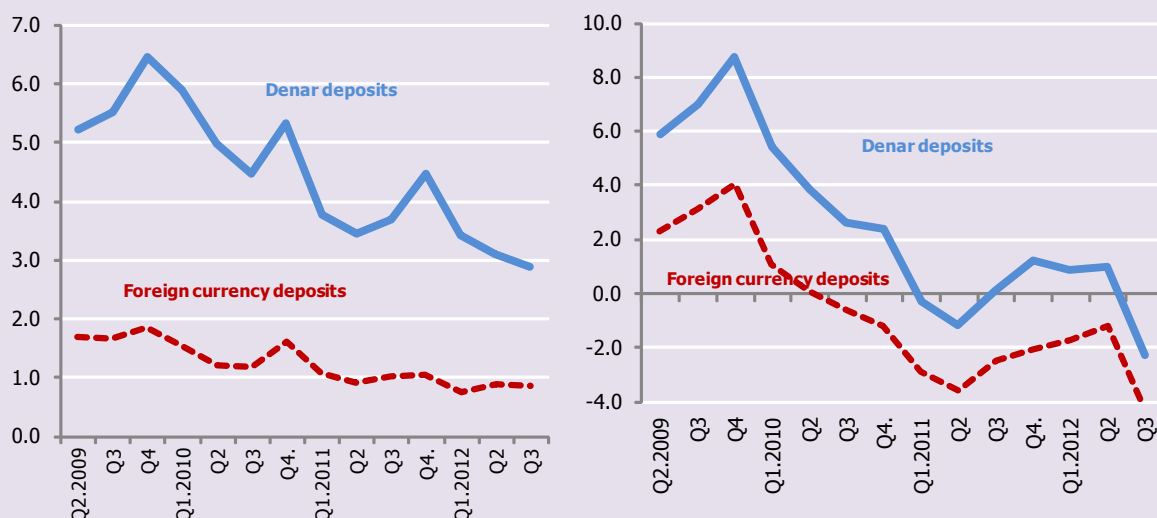
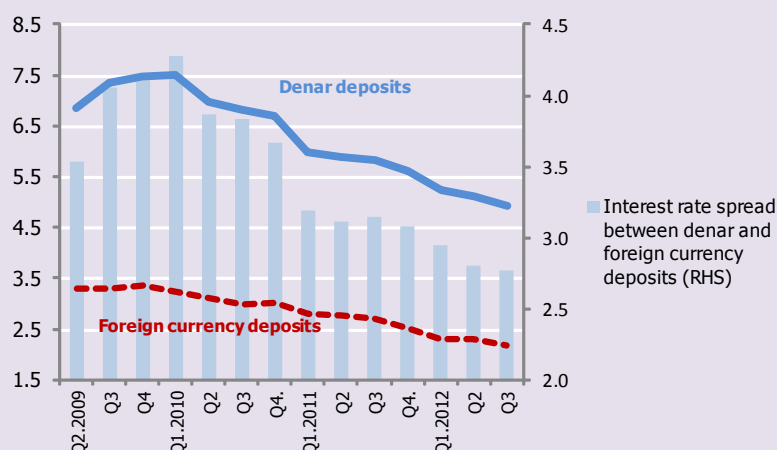
Source: NBRM

deposits)<sup>84</sup> registered a quarterly growth of 1.2% (1.4% in the previous quarter).

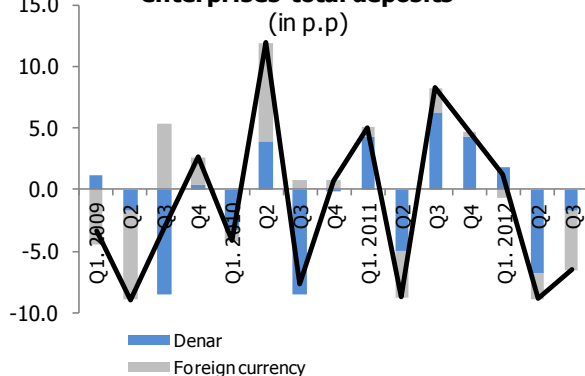
Deceleration in the quarterly growth of household deposits is typical for the beginning of the year. Reduced ability of households to save is expected in conditions of almost unchanged employee net wages. Also, in conditions of higher consumer prices and reduced real financial power, most of the available income is probably directed towards meeting the costs of living. Additional factor for the slower saving of this sector is the slowing credit activity of the banks, especially in consumer credit, which is the most common type of consumer loans. On the other hand, factors which contribute to the support of housing savings include permanent high foreign exchange inflows from abroad (primarily in the form of cash, purchase on the foreign exchange market), that have a stimulating effect on the households' potential for savings. Observing the currency structure, unlike the previous three quarters when the new household savings entirely derived from savings in domestic currency, in the third quarter, foreign exchange savings went up quarterly (share of around 24% in the growth of total household deposits). Analyzing the maturity structure, the overall growth of household deposits in the third quarter is due to the long-term deposits, while the short-term deposits declined for second consecutive quarter. **In terms of interest rates on new Denar deposits, the third quarter witnessed deceleration of yields of Denar saving, on average, versus the minimum yield growth of foreign currency deposits.** However, the downward trend in the interest rate spread between the yields of Denar and foreign exchange savings that started at the beginning of the year, continued. Real yield of Denar and foreign currency deposits is negative, given the higher inflation rate compared to the previous quarter.

<sup>84</sup> Including demand deposits, in the third quarter of 2012, the quarterly growth rate of total household deposits equals 0.5%, compared to 2.2% in the previous quarter.



**Banking conditions - Households deposit market****Interest rates on newly received deposits of households, in %, on annual level****Interest rates on outstanding amount of total deposits, in %, on annual level**

Source: NBRM

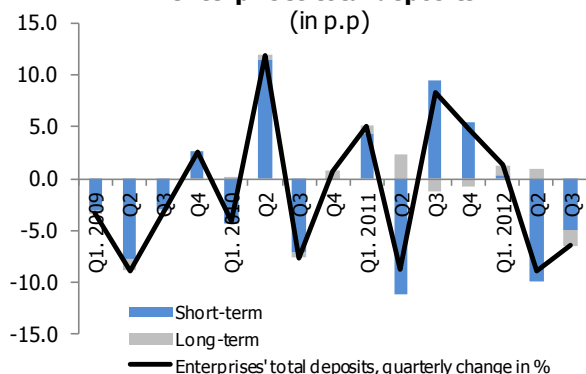
**Contribution to the quarterly change of enterprises' total deposits\***

\*excluding demand money

Source: НБРМ.

Corporate deposits register a negative quarterly growth rate for second consecutive quarter. Thus, in the third quarter, corporate deposits declined by 6.5%, compared to 8.9% decrease in the previous period<sup>85</sup>. Namely, having relatively weak economic activity and weaker power to create more income, the possibility of a new corporate sector saving is reduced. Additional factor for such corporate behavior is the slowing credit bank activity, which reduces multiplication effect of lending on deposits. However, the reduction of corporate deposits was partially due to the major outflow of funds for payment of dividends and for companies' lending to their

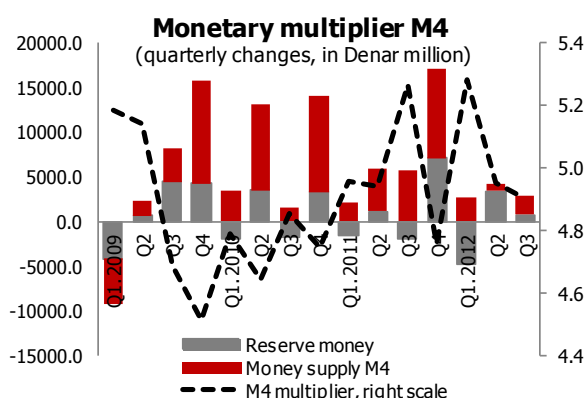
<sup>85</sup> Refers to total deposits without demand deposits. Including demand deposits, the quarterly growth increases by 0.1%, compared to the decrease of 7.4% in the previous quarter.

**Contribution to the quarterly change of enterprises' total deposits\***  
(in p.p)

\*excluding demand money  
Source: NBRM.

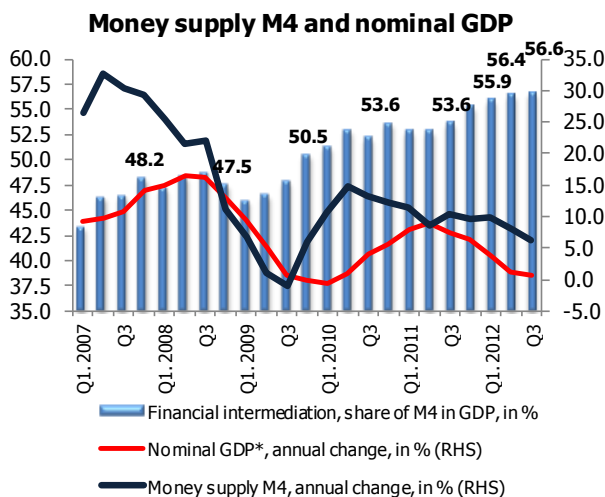
parent companies abroad. From a structural viewpoint, all maturity and currency components of corporate deposits registered quarterly decline. Such movements were observed in the previous quarter, with the exception of long-term deposits, which registered a quarterly growth. Also, unlike the previous quarter when Denar deposits made the greatest contribution to reducing corporate deposits, in the third quarter, the greatest contribution to the reduction of corporate deposits was made by foreign currency deposits.

**In the third quarter, the monetary multiplication process moderately slowed down.** Thus, the monetary multiplier of money supply M4 equals 4.92% (4.95% in the previous quarter). Observing by component, the third quarter witnessed a quarterly increase in the total money supply, with simultaneous further growth of reserve money.



Source: NBRM

**Analyzed on an annual basis, in September the growth of broad money M4 equaled 6.3% (8% in June).** Monetization rate, measured by the share of broad money in GDP<sup>86</sup> moderately increased in the third quarter and amounted to 56.6% (56.4% in the previous quarter). Structural analysis of broad money M4 again shows the largest contribution of Denar deposits (97%) to the annual growth of the broad monetary aggregate, followed by the most liquid monetary aggregate M1 (36.8%), with a further negative contribution made by the foreign currency deposits. In September, total deposits (excluding demand deposits<sup>87</sup>) increased by 5.2% on an annual basis (8.8% in June), with annual growth of household deposits of 8.9% and decline in corporate deposits from 9.6 %, compared to the annual growth of the two sectors of 10.4% and 4.7% in June. **The latest monetary data for the period October-November** indicate a slowdown of monetary growth to 5.7% in November, amid slower annual growth of total deposits in the banking sector, while the growth of the monetary aggregate M1 accelerated on annual basis.



\* Annualized nominal GDP calculated as moving sum of 4 consequent quarters.  
Source: NBRM and SSO

### 2.2.2. Lending activity

**In the third quarter of 2012, quarterly growth rate of total bank loans slowed down to 0.6% from 2.5% in the**

<sup>86</sup> Annualized nominal GDP, calculated as a moving sum of the last four quarters.

<sup>87</sup> Including demand deposits, in September, the annual growth rate of total deposits equals 5.7%, compared to 7.6% in June 2012.



### Credit indicators

(quarterly changes, in %)

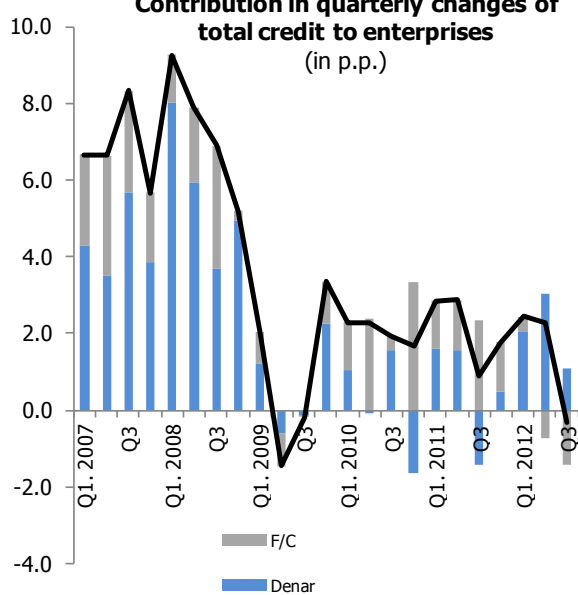
	2012		
	Q1	Q2	Q3
<b>Total credit</b>	<b>1.8</b>	<b>2.5</b>	<b>0.6</b>
Denar credit	2.2	4.0	2.1
Foreign currency credit	1.0	-1.3	-3.5
Short-term credit	0.0	3.0	2.9
Long-term credit	2.1	2.6	-1.8
Regular credit*	1.5	2.7	-0.4
Doubtful and contested claims	4.5	0.3	10.2
Credit to enterprises	2.5	2.3	-0.3
Credit to households	0.8	2.7	1.9

\*Total credit minus doubtful and contested claims and accrued interest.

Source: NBRM.

**previous quarter.** Despite the slowdown of credit activity of banks, this quarter reported deterioration in their credit portfolio (increasing share of non-performing loans in gross loans from 9.7% to 10.6%, on a quarterly basis). These developments show that the still unfavorable situation in the domestic economy (despite the moderate improvement in the third quarter) affects the credit market. Banks show greater caution when granting credits, giving greater priority to maintaining stability and solvency vis-à-vis profitability. The deleverage process in parent banks might have some transmission effect on the lending activity of some banks. Changes are noted in the demand for loans. Namely, according to the Lending Survey, growth in demand for loans by households slowed down in the third quarter, while some banks indicated that the credit demand by corporate sector reduced. Analyzing the **primary sources of funding banks**, the deposit base registered stagnation of quarterly growth, a moderate increase in net foreign assets of banks and reduced bank lending to the government, compared with the previous quarter.

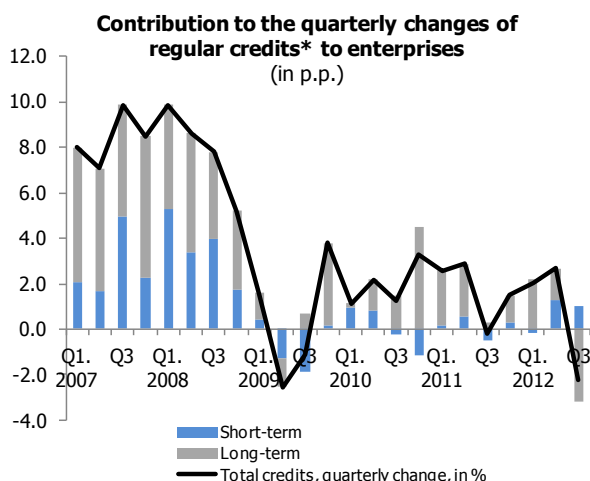
**Contribution in quarterly changes of total credit to enterprises**  
(in p.p.)



Source: NBRM

— Quarterly changes of total credits, in %

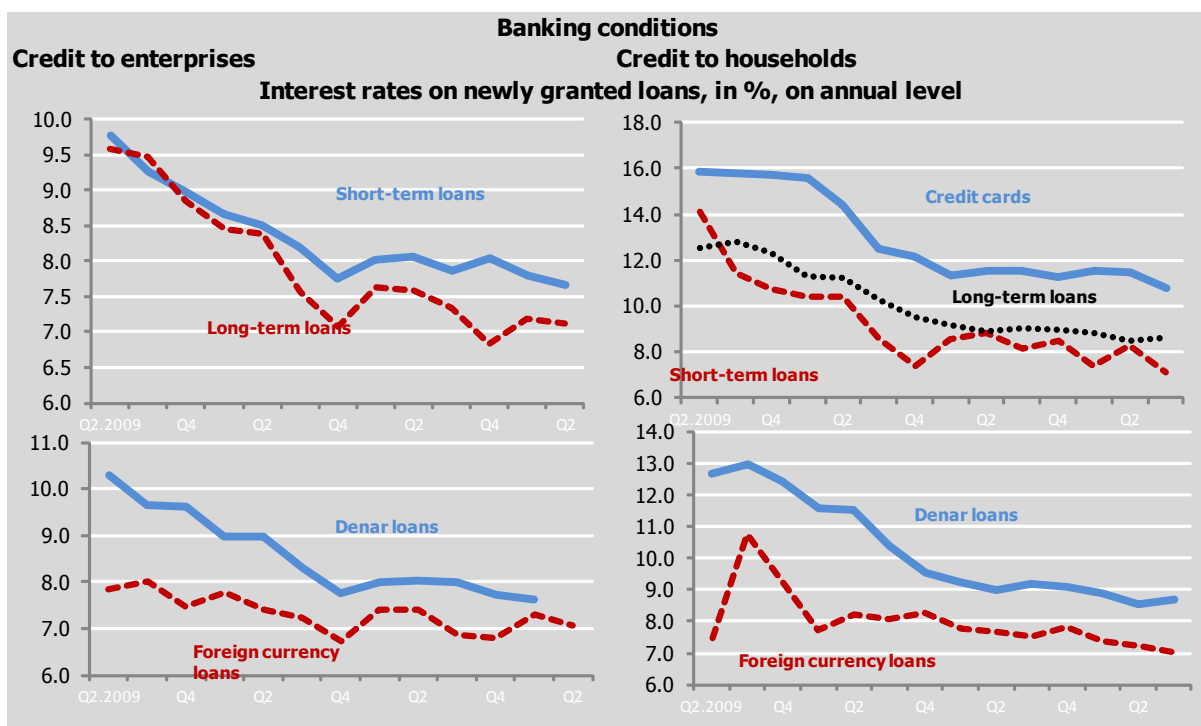
**In the third quarter, corporate loans registered a quarterly decline of 0.3%, compared to growth of 2.3% in the previous period.** According to the Lending Survey, the third quarter experienced net tightening of lending terms for companies, but with slower pace compared with the previous quarter. Main factors that influence this behavior of banks include deteriorated risk perceptions about current and future developments in the economy. Moreover, there was a moderate deterioration of banks' risk perceptions for the trends of the country's economic activity, showed by the increased number of banks that suggest that the factors of this group contribute to the tightening of lending terms. Observing specific lending terms, tightening was observed only in the securities, while other terms remain unchanged. In terms of credit demand, banks are mainly divided in their assessment of the trends of demand for corporate loans, where 46% of the banks indicate unchanged credit demand, versus 44%, which indicate partially increased credit demand. Also, after an interruption of almost a year, a number of banks (10%) indicate reduced demand for this type of loans, for the first time in this quarter. Banks continue to emphasize the need of companies for investment in stocks and working capital, as a factor that contributes to the increase in credit demand. At the same time, the need for debt restructuring and investment in fixed assets, further contributed to the growing interest for

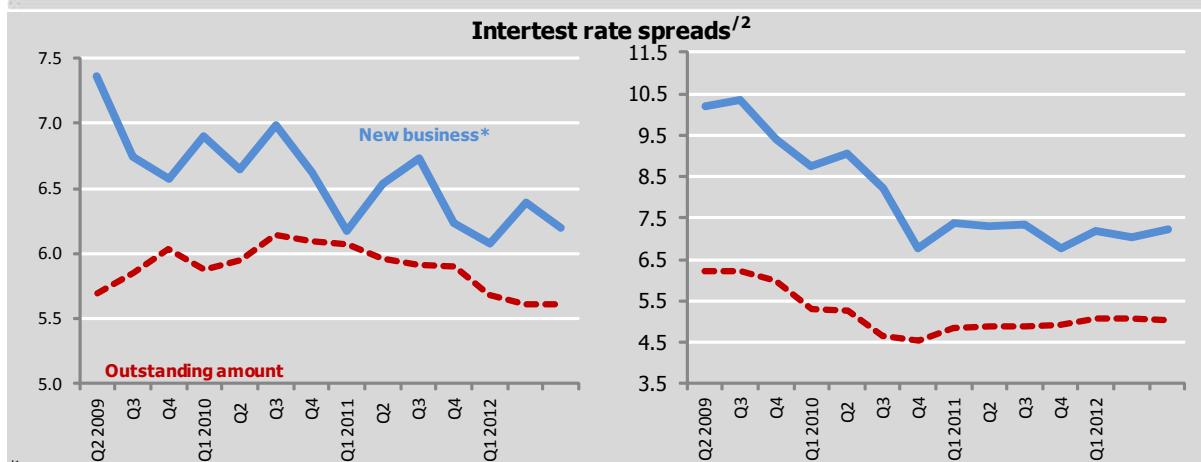
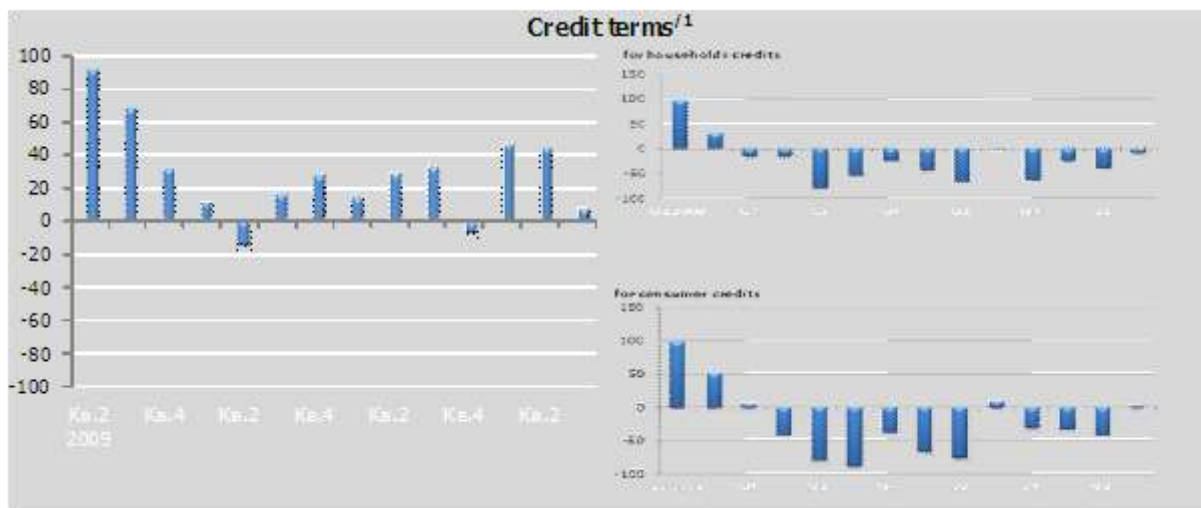


\* Total credit to enterprises minus doubtful and contested claims and accrued interest.

Source: NBRM

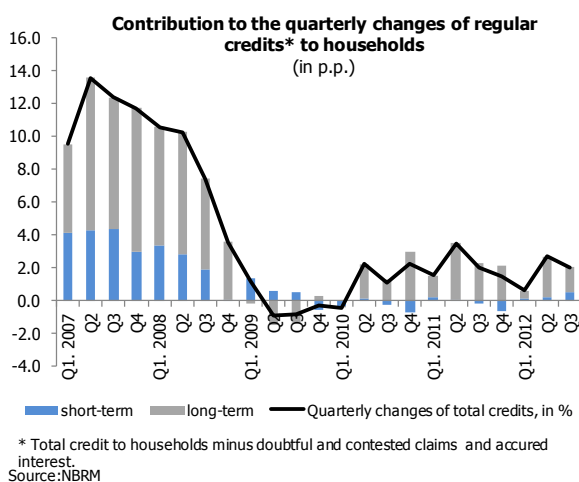
loans by companies. However, a few banks suggest that investment in fixed assets is a factor that contributes to decrease demand. Analyzing maturity, the decline of total corporate loans in the third quarter is solely due to the reduction of long-term loans, unlike the previous quarter, when they accounted for about 54% of the increase in corporate loans. The quarterly growth of short-term loans continued, but at a slower pace compared to the previous quarter. The analysis of currency structure shows that foreign currency lending fully contributes to the quarterly decline in corporate loans, in conditions of slower quarterly growth of Denar credits. Typical for this quarter is the significant quarterly increase of doubtful and contested claims of 14.8% (decline of 1% in the previous quarter), which probably reflects the deteriorating liquidity position of companies. With respect to the cost of credits, **in the third quarter the interest rate on new corporate loans on average experienced a minimal decline, compared to the previous quarter.**



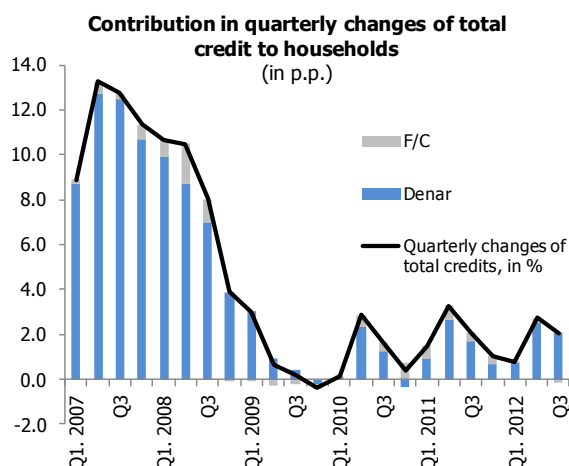


<sup>/1</sup> Graphs show net-percent. Net percent is the difference between the sum of percents of "considerably tightened" and "moderately tight" and the sum of "considerably eased" and "moderately eased" (Source: Bank Lending Survey).

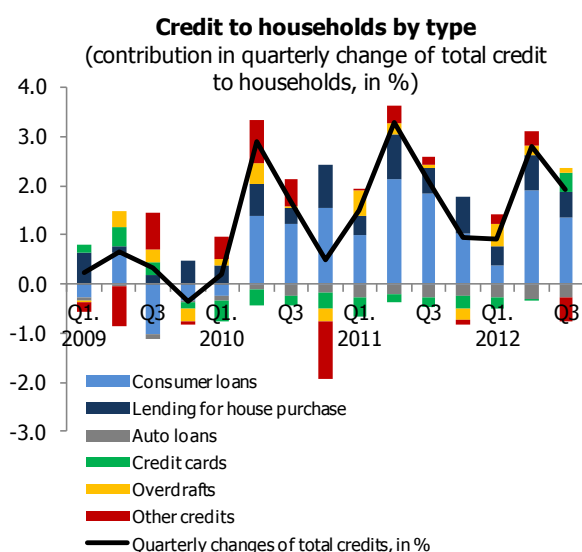
<sup>/2</sup> New business- spread between interest rates on new loans and deposits. Outstanding amount - spread between the interest rates on total outstanding amount of loans and deposits  
Source: NBRM.



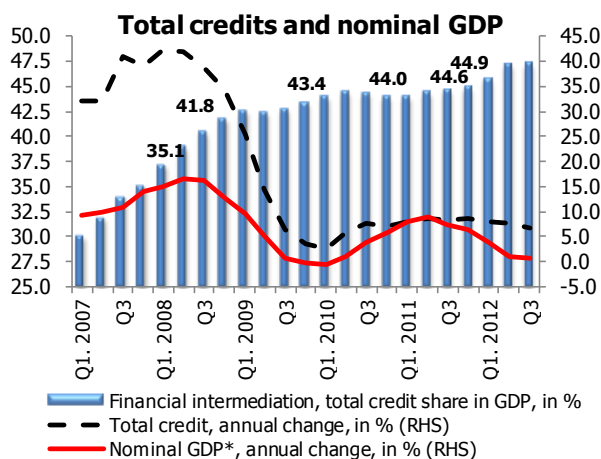
**A slowdown was registered in the household lending. In the third quarter of 2012, the credit growth in this segment equaled 1.9% (2.7% in the previous quarter).** According to the Lending Survey, in the third quarter, the lending terms remained largely unchanged. However, a closer look at the lending terms shows that a part of the banks expect interest rate on housing and consumer loans to reduce, with greater intensity in the second type loans. With respect to the factors that influence the lending terms, there is a greater risk perception by banks. Notably, though the inability to foreclose collateral, same as in previous surveys, is a factor, which according to the banks, causes tightening of lending terms, in the third quarter, there is a larger number of banks that suggest that other factors in this group (expectations for overall economic activity and consumer creditworthiness) have such an impact. In terms of credit demand, almost all banks estimated that demand for housing loans remain



Source: NBRM



Source: NBRM.



Source: NBRM and SSO

unchanged in the third quarter, while concerning consumer credits, banks are divided between those that expect the demand for this type of loans to remain unchanged or to increase. Compared with the previous quarter, there is significantly lower number of banks that estimated that demand for housing and consumer loans increased. In terms of factors that affect the demand for household loans, most of the banks assessed that they contributed the credit demand to remain unchanged. However, some of the banks indicated that the pressures of competition, i.e. loans from other banks led to reduction in demand for housing and consumer loans, while consumer confidence contributes to the increasing demand for this type of loans.

The third quarter witnessed a slowdown of the quarterly growth of consumer and housing loans, while car loans in this quarter continued the downtrend on a quarterly basis. The quarterly growth rates of overdrafts and doubtful and contested claims also slowed down. Observing maturity, the slowdown of household loans is fully due to the slower quarterly growth of long-term loans, with rapid quarterly growth of short-term loans. However, long-term loans continue to have the largest contribution to the growth of total household loans (a share of around 70%). Currency structure analysis shows that the growth of household loans was solely due to Denar loans, despite the fact that their growth slowed down on a quarterly basis. On the other hand, foreign currency loans registered a negative quarterly growth rate, with these trends being last recorded in the fourth quarter of 2009. Observing the cost of loans to households, **in the third quarter, interest rates on new loans on average experienced a minimal decline compared to the previous quarter.**

**Analyzing on an annual basis, the growth of total loans equaled 6.7% in September 2012 (7.5% in June).** The total loans to GDP<sup>88</sup> ratio equaled 47.3%, versus 47.2% in the previous quarter. Loans-deposits coverage ratio in the second quarter held steady at around 91%. **Annual credit growth continued to decelerate in the period October-November, and equaled 5.6% in November.** Further deceleration of growth was registered in both corporate and household loans.

<sup>88</sup> Annualized nominal GDP, calculated as a moving sum of the respective four quarters.



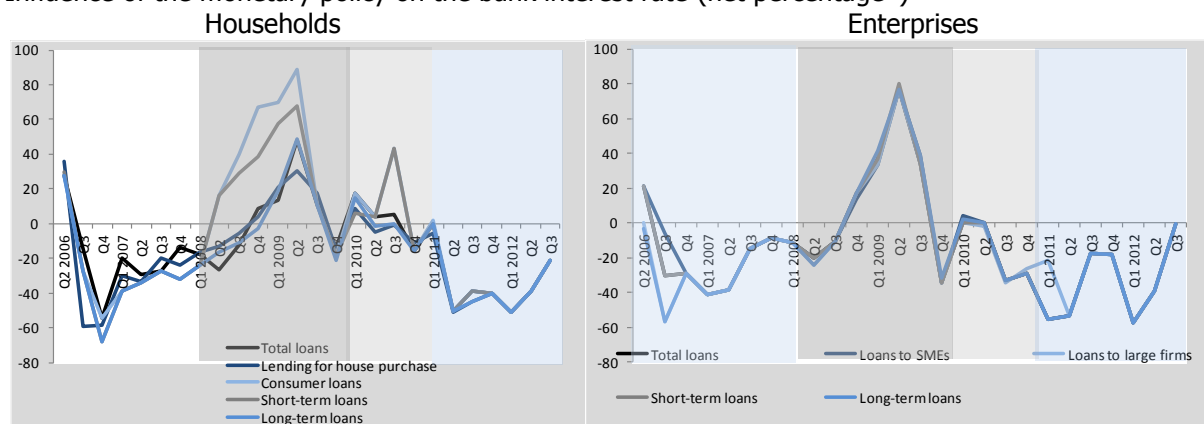


## Appendix 5: The influence of the monetary policy on the bank credit policy - Lending Survey analysis

Having in mind the monetary policy potential to influence the real sector, it is of huge importance for the central banks to understand exactly the velocity and the degree of monetary changes transmission, through banks, to the real sector. The literature diversifies several monetary transmission channels, such as the interest rate channel, the foreign exchange rate channel and the property price channel, the credit channel, the expectations channel. In addition, the risk-taking channel is getting more and more important, through which it is tried to show whether and how much the monetary measures (primarily the change in the interest rate) alters the banks' risk appetite. The interest in the monetary transmission contributed for development of broad theoretical literature, as well as for variety of empirical researches, which are trying, in quantitative way, to find a connection between the theory and reality. It should be had in mind that it can not always be made a clear distinction between the influence of the monetary policy and the influence of other factors, which are not connected with the monetary policy, but influence both the supply and the demand on the credit and deposit market. For example, the transmission degree largely depends on the elasticity of the supply and demand, which in conditions of imperfect competitiveness and asymmetric information, is directly dependant on factors, such as the competitiveness in the banking and non-banking sector, the size of individual banks, the long-term bank relations with its clients. On the demand side, the transmission degree is largely conditioned by the specific factors related to individual economic agents (such as the sources of funding of individual enterprises, variations in the disposable household income, etc.), which directly reflect on the sensitiveness of the private sector to changes in the depositing and crediting terms. The macroeconomic conditions in this context, as well as the regulatory rules and standards referring to banks, also have large influence. Hence, as an important supplement to the monetary effects assessment tools are also the qualitative estimates of the banks themselves, i.e. their perceptions.

One of the sources for obtaining qualitative information that show the banks' perceptions is the Lending Survey. Such a type of survey is conducted by NBRM on a regular quarterly basis. The main feature of the surveys is that the questions refer to both the credit supply and demand, isolating thereto the monetary policy effect, the way the banks perceived it. The focus of this analysis is exactly the banks perception of the monetary policy in individual periods and in environment of different monetary changes. It should be taken into consideration, however, that the Survey measures only the effect the change in monetary conditions has on the bank interest policy, as one of the vast crediting terms the banks manage with. In order to determine the intensity of the transmission of the various monetary measures on the bank interest policy, the analyzed period is divided in four sub-periods from the second quarter of 2006 to the last quarter of 2007, 2008 - 2009, 2010 and from the first quarter of 2011 to the third quarter of 2012.

### Influence of the monetary policy on the bank interest rate (net percentage\*)

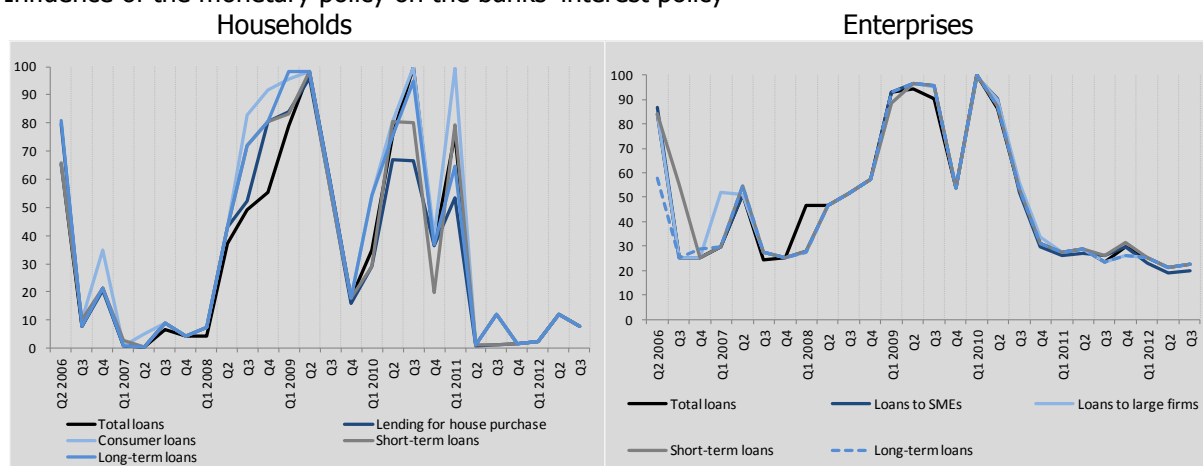


\* The net percentage denotes the difference between the percentages of "influenced considerably" and "did not influence".

Source: Lending Survey.



## Influence of the monetary policy on the banks' interest policy\*



\* The figure shows the sum of the percentage of the banks that replied with substantial and partial influence of the monetary policy on the banks' interest rate

Source: Lending Survey.

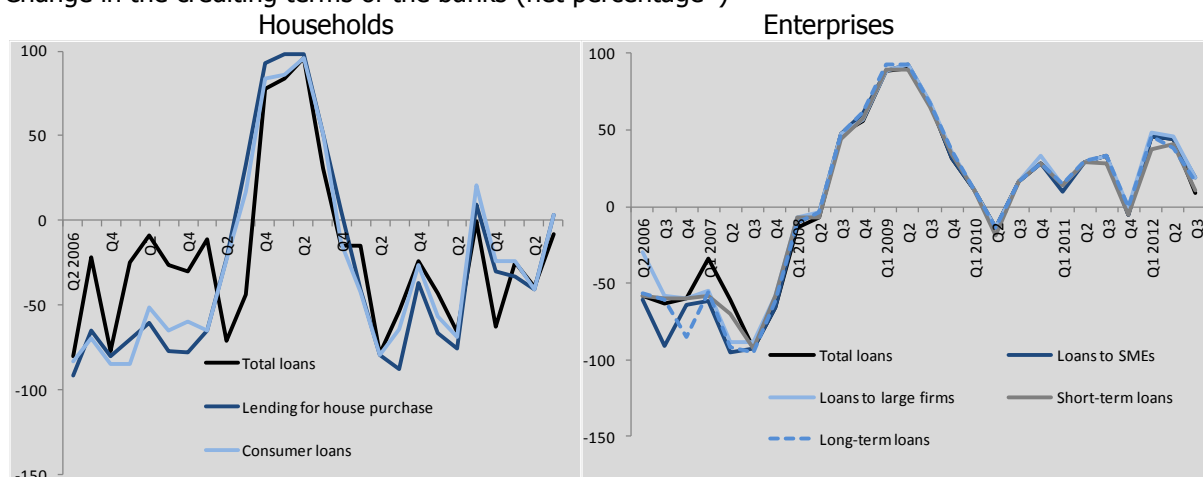
***During the first analyzed period, the banks mainly did not indicate larger effect of the monetary policy on their lending decisions. This arises from the fact that in this period, the NBRM made no larger monetary changes, and as a result, it is expected that the banks indicate absence of monetary policy influence<sup>89</sup>.*** Exception is the initial point (the second quarter of 2006), where most of the banks (over 80%, Figure 2) pointed to considerable or partial influence of the monetary policy. Such a reaction most probably shows the cumulative effect of the changes in the pre-Survey period, primarily the changes in the monetary instruments setup in 2005 and the first quarter of 2006. Thus, for example, part of the changes in 2005 refers to the increase in the reserve requirement rate from 7.5% to 10% and cancelation of the possibility for using the cash in vault for meeting the reserve requirement, as well as the change in the tender, the frequency of CB bills issue and maturity<sup>90</sup>. Also, at the beginning of 2006, NBRM changed the frequency of the CB bills auctions (from twice to once a week) and in cooperation with the Ministry of Finance, initiated an issuance of Treasury bills for monetary purposes. On the other hand, if analyze the lending terms (Figure 3), the bank perceptions in the entire period are directed towards net relaxation with both the households and the enterprises, corresponding to larger credit activity (Figure 5). Accordingly, it can be concluded that **the bank credit policy in this period was guided mainly from the improvement of the real economy fundamentals**, which is indicated not only by the actual economic data (large capital inflow, deposit growth with the banks), but also by the banks' perceptions about the supply factors given in that period surveys (Figure 4). Also, in this period, the domestic and the world economy were in stage of expansion, in which the constant assets price growth and the expectations for further growth in future usually make economic agents feel wealthier and consequently, more capable to spend and invest (the so-called wealth effect). In such conditions, credit market availability is also larger, while the banks are more ready to lend in environment of positive prospects for the future.

<sup>89</sup> In the Survey, the banks answer to the question: "What is the influence of the changes in the monetary policy on your interest rate (interest on the newly extended credits) in the last three months?"

<sup>90</sup> More details for these and other changes are given in the Annual Report of the National Bank of the Republic of Macedonia for 2005, [www.nbrm.mk](http://www.nbrm.mk).



Change in the crediting terms of the banks (net percentage\*)



\* The net percentage denotes the difference between the percentages of "tightened considerably" and "partially tightened" and the sum of the percentages are "partially relaxed" and "substantially relaxed".

Source: Lending Survey.

**It is the second analyzed period when NBRM made larger changes in the monetary policy setup (towards tightening), which reflected directly on the banks lending decisions.**

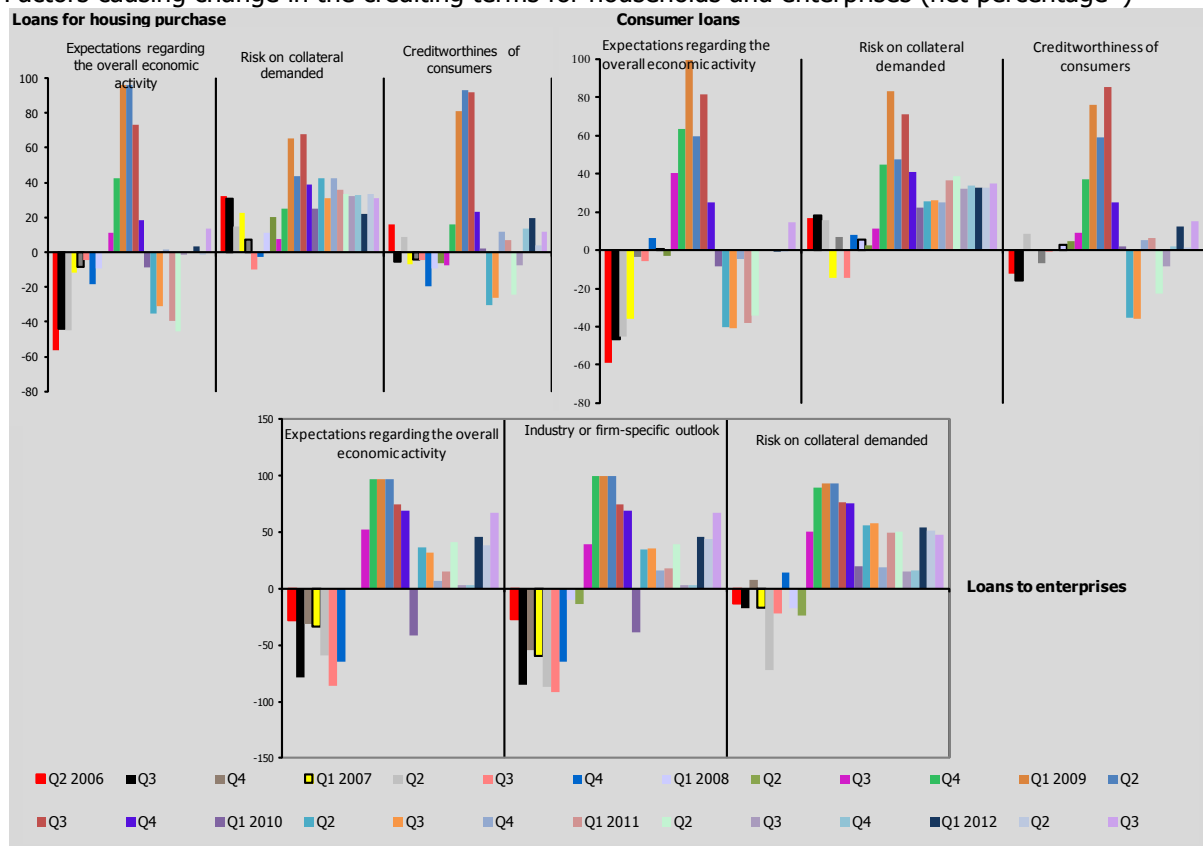
Namely, parallel to the domestic economy growth, the investments growth, and especially the consumption growth, a economy overheating risk occurred, having in mind that the household credits were mounting with high two-digit growth rates, given high demand for credits and facilitated lending standards. In such conditions, the NBRM has been increasing the interest rates on the CB bills consecutively within the period (except the last quarter of 2009), while simultaneously adopting several prudent changes. Thus in the first quarter of 2008, Amendments to the Decision on the Capital Adequacy were adopted, which envisaged higher weight for the current account overdraft risk and credit cards, and in the second quarter, the Decision on compulsory deposit with NBRM was adopted, imposing a need for placement of compulsory deposit by the banks with the NBRM, in case the household credit growth exceeds certain level. Such monetary changes reflected directly on the banks which reported in the surveys for that period a substantial influence on the monetary policy, especially with the "households" segment. During the fourth quarter of 2008, NBRM adopted additional measures (that became effective on January 1, 2009), which once again effected the credit market, among which was also the Decision on liquidity risk management, which obliges the banks to maintain certain minimal level of assets for covering the liabilities that mature in the following 30 and 180 days, in both Denars and foreign exchange. Measures adopted in this period are as follows: the Decision on foreign currency deposit with NBRM, enabling the banks to deposit foreign assets with NBRM, thus avoiding the credit risk from placing of foreign assets abroad; Decision on managing interest rate risk in the banking book, prescribing the minimal necessary elements for interest rate management in the banking book, as well as the method of measuring the banks exposure to this risk; Amendments to the Decision on exposure limits, envisaging inclusion of the exposure of the domestic banks to foreign first-class banks to be included in the calculation of the exposure limits in full amount, instead of 20% of the amount, as practiced previously.<sup>91</sup> The actual data on the monetary sector indicate that in this period the interest rates on the newly extended credit began to mount, while simultaneously, the amount of the newly extended credits was getting lower. It is interesting to mention that the banks began to announce tightening of the crediting terms to *enterprises* even in the third quarter of 2008 (despite the fact that the decision adopted in this period primarily effected the "households" segment), which was proven also with the registered increase in the interest rates and the decrease in the amount of the newly extended corporate credits in this period. However, such behavior is largely a reaction of the intensification of the global financial crisis. Actually, in the analysis of the monetary data referring to the last months of 2008 and 2009, the fact that the macroeconomic environment and the intensified risk in the economy were factors with the largest impact on the banks credit policy should also be taken into consideration.

<sup>91</sup> More details about these measures are provided in the Annual Report of the National Bank for 2008, [www.nbrm.mk](http://www.nbrm.mk).



With respect to the intensity of the monetary policy impact on the both segments within the entire sub-period, the largest effect was registered in the first half of 2009, when the NBRM increased the interest rate from 7% to 9%, and when the decisions adopted at the end of 2008 became effective. In addition, in this period, NBRM introduced changes in the manner of calculation and allocation of the reserve requirement. The changes resulted in increase in the reserve requirement allocation rate for the banks' liabilities with currency component, which became effective in July 2009 (increase in the foreign currency liabilities rate from 10% to 11.5% and the rate of liabilities in Denars with currency clause from 10% to 20%), i.e. in August 2009 (increase in the foreign currency liabilities from 11.5% to 13%). In addition, part of the amount obtained by applying the reserve requirement rate for foreign currency liabilities was allowed to be met in Denars. Also the Decision enabled the banks to use the reserve requirement rate allocated in Denars for their daily liquidity needs. The Decision on amending the Decision on managing banks' liquidity risk was additionally adopted, enabling the banks to include their placements in National Bank instruments, except the reserve requirement in Euro, regardless whether the placements are in Denars or in foreign currency, in the calculation of the rates for determining the required minimum of Denar of foreign exchange liquidity. In such conditions, the most evident increase in the interest rate was registered with the interest rate on the newly extended credits, with both, the households and the enterprises.

#### Factors causing change in the crediting terms for households and enterprises (net percentage\*)



\* The net percentage denotes a difference between the sum of percentages "substantially contribute for tightening of the crediting terms" and "partially contribute for tightening of the crediting terms" and the sum of the "partially contribute for relaxation of the crediting terms" and "substantially contribute for relaxation of the crediting terms".

Source: Lending Survey.

***The third sub-period characterizes with changes in the monetary policy toward its relaxation, which according to the survey results, had impact on the banks, as well.*** With the deepening of the world crisis, the fall in the economic activity and the worsened perceptions for the domestic economy future, since the end 2009, the NBRM has begun lowering the key interest rate on the CB bills, which was performed consequently during the entire 2010 (with aggregate effect of 5



percentage points). The first decrease in the interest rate had no larger effect on the banks, having in mind that it occurred at the end of the year and the fall was minor. The most intensive effect has been registered in the second and the third quarter of 2010. The effect of the "households" segment in the third quarter is especially significant, when the monetary changes, together with the changes in the Law on Obligations<sup>92</sup>, resulted in a larger decrease in the interest rates, especially on the consumer loans. However, if analyze the bank answers regarding the crediting terms, it can be noticed that contrary to the relaxation of the terms for households, on net basis, the corporate crediting terms began to tighten. Considering the bank indications that the monetary policy effected both segments in this period, one reason for such developments is probably the need of the banks to neutralize the large adjustment of the crediting terms with the households with relatively more stable (or tightened) conditions with the enterprises. However, it should be taken into account that the endurance of the world crisis and the further high uncertainty level and poor realization of the real sector contributed for more evident increase in the share of the non-performing credits in the total credits and hence, for larger conservativeness of the banks relative to the credit exposure to the private sector.

***Within the fourth sub-period, in the third quarter of 2011, the NBRM introduced changes within the liquidity management domain by the banks, which meant a certain relaxation of the monetary conditions. Also, in April 2012, the NBRM made changes in the operational framework for the monetary policy conduct.*** With the changes in the banks' liquidity management, the need for liquidity allocation separately in Denars and in foreign exchange was revoked, thus contributing for certain relaxation of the conditions for meeting the prescribed minimal level of the bank liquidity. The amendment to the Decision enabled the banks an integrated liquidity follow-up, regardless of the currency, through maintenance of single liquidity rate, instead of the monitoring of the liquidity rates separately for Denar and FX positions. This amendment was aimed at enabling easier liquidity management by the banks, simultaneously giving positive impulse for the larger credit support of the domestic economy. The changes from April 2012 envisaged reduced frequency of the CB bills auctions to once within the reserve requirement period and transfer from tender with unrestricted to a tender with restricted amount and set maximal interest rate. Except that, the NBRM introduced also regular weekly repo operations for ensuring liquidity in the banking sector, available deposits (overnight seven days) and lowered the interest rate on the available overnight credit. In the beginning of May, the key interest rate of NBRM was reduced by 0.25 p.p.. However, this change was quite moderate, while the monetary changes were channeled through other type of measures. Such changes, according to the answers in the surveys for this period, influenced the banks' interest policy, although the changes in the net percentages indicated moderate intensity of the effect (Figure 2). In this context, the other specific factors outside the monetary policy domain should be taken into consideration, such as the deleverage process and more conservative business strategies of the European banks and the transmission effect with part of the domestic connected banks and the still high risk perceptions in the real sector, which partly limits the potential effect of the introduced monetary changes.

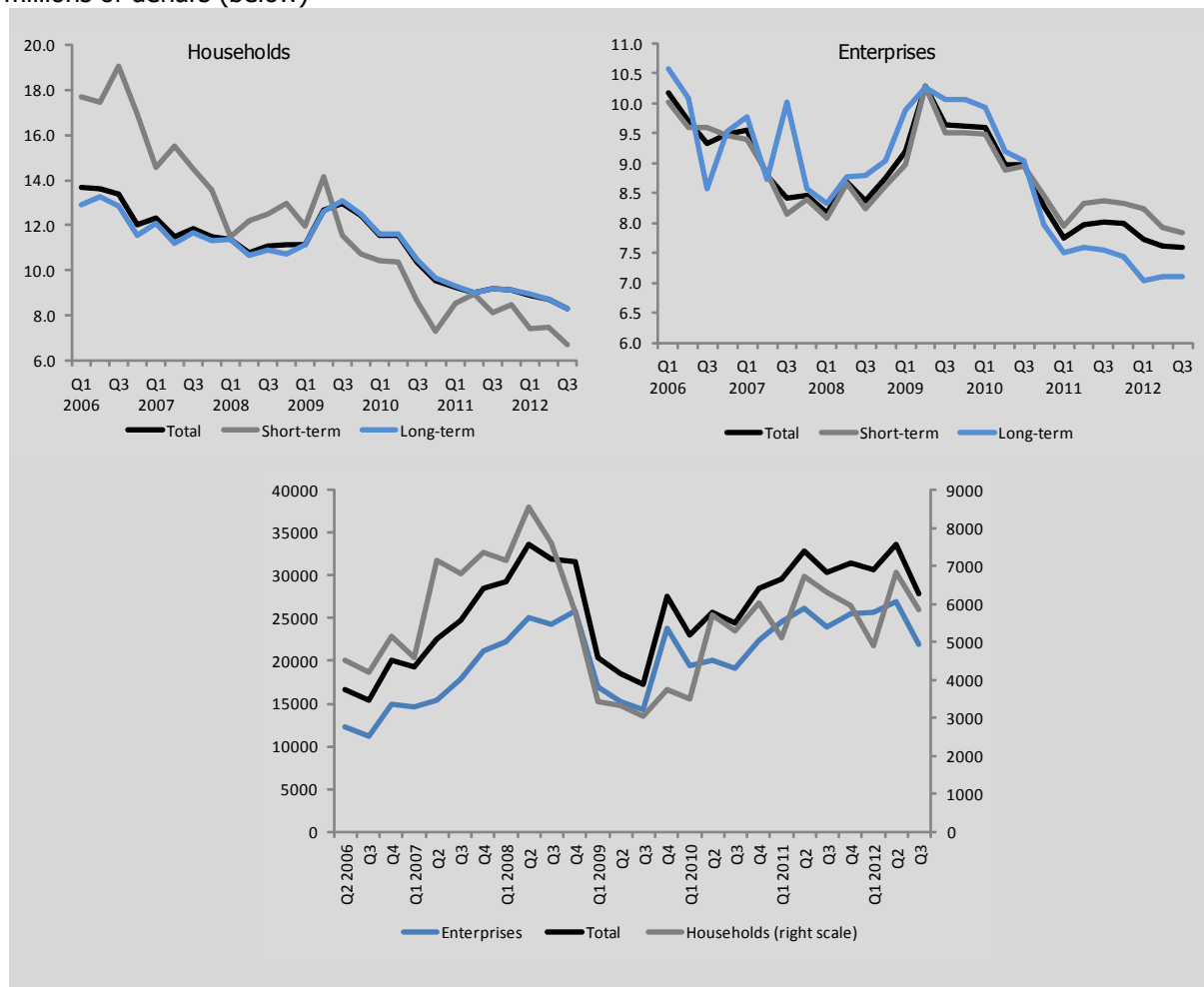
The first quarter of 2011 is also worth mentioning, when all banks indicated certain influence of the monetary policy to the "households" segment. In this quarter, NBRM introduced new

<sup>92</sup> The Law on Amending the Law on Obligations, which became effective from February 1, 2010 introduced change in the method of determining the penalty interest rate, prescribing also a requirement envisaging the agreed interest rates on the bank loans not to exceed the penalty interest rate. The penalty interest rate is determined six months, in the amount of the interest rate on the CB bills valid on the last day of the year-half that preceded the current half, amplified by 10 percentage points in the trade agreements and agreements between traders and persons from public law, i.e. amplified by 8 percentage points in the agreements in which unless one person is not a trader (previously, thus interest rate has been determined according to the discount interest rate of NBRM). NBRM is obliged to publish the reference interest rate each first January and each first July on its web site and it is named for the current six months (until the end of the year-half).



instrument - bill for six month deposit, which was prudent and directed towards financial stability support in the country. However, having in mind that the banks indicated that the monetary policy specifically influenced the household consumer loans, for which the new instrument could not influence directly, the banks would probably contain the effect of adjustment of the interest rates on these credits for the purpose of compliance with the Law on Obligations<sup>93</sup>.

Interest rate on the newly extended loans, in % (above) and amount of newly extended loans, in millions of denars (below)



Source: NBRM.

**The analysis of the Lending Surveys shows that the monetary policy effect, measured through changes in the banks perceptions, is much more evident in conditions of larger changes in the key interest rate of NBRM and larger macro prudent measures, while in conditions of more moderate changes of NBRM, the bank perceptions show no larger adjustment.** All of this is somewhat expected, having in mind that larger part of the period the analysis refers to is a period of evident macroeconomic shocks that cause drastic changes in the banks operating environment. Hence, it would be expected that the main driving force of the bank credit decisions would be changes in their perceptions and risk expectations, as well as in their readiness to take risks. In such conditions, it is not surprising that only stronger and more direct changes in the monetary conditions have larger effect on the banks behavior. However, these statements should be interpreted carefully. Namely, the analysis represents a nonconventional manner of monetary transmission estimation, which does not include empirical research and the conclusions

<sup>93</sup> In the second half of 2010, NBRM continued to reduce the interest rate on the CB bills, which was included in the calculation of the penalty interest, pursuant to the Law on Obligations, on February 1, 2011.

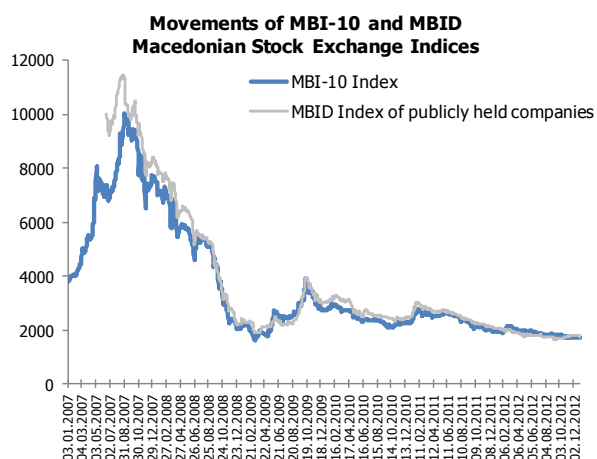




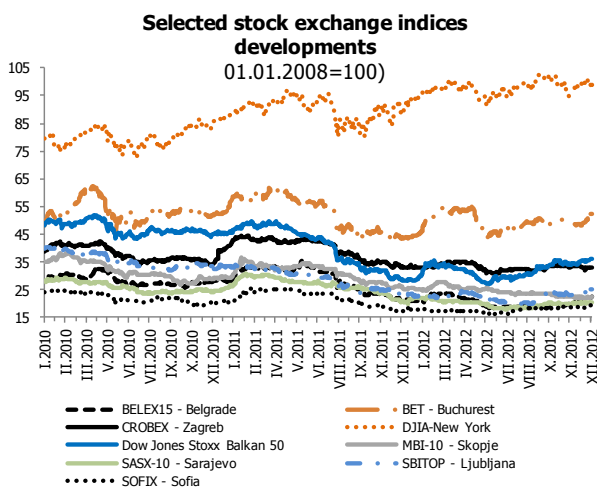
are based on questionnaire which can give possibility for subjective and different interpretation of the questions raised by the banks. The analysis refers to the assessment of the effect of the monetary changes only on the interest policy of the banks, and not the other crediting terms. Therefore, the role of this analysis, as a supplement to the existing monetary transmission assessment tools, that

### III. Stock exchange indices and real estate prices

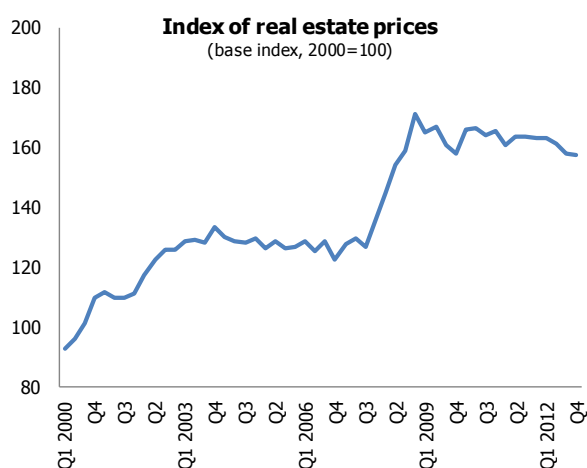
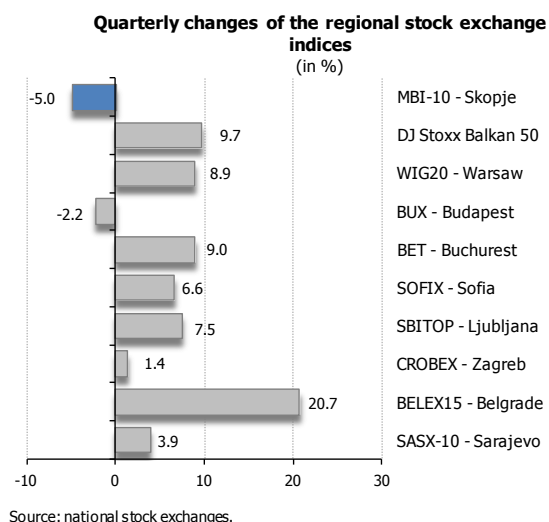
***In environment of still fragile economic activity and uncertainty, the propensity for investing of the economic agents on the domestic financial markets remained low. In such conditions, no signs of activity revival on the Macedonian capital market also in the last quarter of 2012 were registered, with the Macedonian stock exchange index MBI-10 further moving downwards. Unlike the index on the domestic capital market, the regional stock exchange indices mainly registered an increase in the last quarter of the year. Such achievements of the regional stock indices are related primarily to the positive signals of the industrial activity of China and USA and stabilization of their economies. The negative trend of the prices continued also on the domestic real estate market, but still with slower pace compared to the preceding period. These movements on the real estate market can be explained with the constantly high real estate supply.***



**The Macedonian stock exchange index (MBI-10) continued to decline also in the last quarter of 2012.** Consequently, at the end of 2012, MBI-10 is by 5% below the level registered at the end of the previous quarter. MBI-10 characterized with its more dynamic decrease at the beginning of the fourth quarter of the year, while at the end of the quarter, larger volatility was registered, although on average the index in this period stagnated. In this period, MBI-10 the index registered its lowest value, reducing to 1704.8 index points on December 18. On the other hand, the index of publically owned companies (MBID) follows the upward movement path during the fourth quarter. At the end of December, this index increased by 2.8% relative to the end of September 2012. The bonds index (OMB) almost stagnated on a quarterly basis, i.e. its value registers minimal decrease of 0.1%, relative to the level registered in September 28, 2012.



**Unlike the domestic capital market, the values of the regional stock exchange indices registered positive trends during the fourth quarter of 2012.** At the beginning of the first month of the quarter, the value of the indices mainly registered an increase due to the better performances on the US stock exchanges and better US employment data. Decline in the indices at the end of the month followed, as a reaction of the poorer global macroeconomic performances, the debt crisis in the Euro area and the turmoil on



the Middle East. In the mid-quarter, the regional stock exchanges registered different movement paths. Namely, part of these indices were influenced by the risks coming from the Euro area and the US fiscal problems, with part of them being under larger effect of the positive signals of the industrial activity of China and USA and the stabilization of these economies. In the last month of the quarter, the indices mainly registered an increase, as a result of the higher optimism of the markets for overcoming the US "fiscal cliff". In the fourth quarter, the strongest upward trend of the Belgrade stock exchange index was registered, while the trend of the other indices was less positive. Exception from this movement is the movement of the Zagreb index, which registered a decline in this period.

**Negative trend of the real estate prices continued also in the last quarter, although with slower dynamics.** Thus, the index of the apartment prices<sup>94</sup> registers a decrease of 0.5% on a quarterly basis, which is third consecutive fall (in the first and the second quarter, the decrease equaled 1.3% and 1.8%, respectively), with a continuous decrease being also registered on annual basis (from -1.5% in the second to -3.5% in the fourth quarter). The continuation of the downward trend in the apartment prices can be explained with the growth tendency of the completed construction works, i.e. the completed buildings in the last several year period. On the other hand, in the third quarter, the construction of the residential buildings registered a decrease on both, quarterly and annual basis. The downward price movements can be related also to the current adjustments on the real estate market, i.e. the upward trend with the number of apartments for the construction of which an approval was obtained<sup>95</sup> (in October, the number of issued approvals for construction of apartments increased by 13.0% compared to September). On the demand side, there are signals for its slowdown. Namely, analyzed on a quarterly basis, the approval of the housing credits in the second quarter registered intensified growth, which decelerated in the third quarter and continued to

<sup>94</sup> Hedonic index of the apartment prices, prepared by NBRM on the basis of the advertisements for sale in Skopje, published by the real estate agencies. The apartment price is a function comprised of the size, the settlement it is located in, the floor, whether the flat has central heating and whether the flat is new.

<sup>95</sup> The connection can be located in the fact that the partly built apartments, as well as blueprint apartments are put on sale, with their price being directly competitive to the apartments of the older housing fund. The data refer to the approvals for construction of apartments in the Skopje region.



grow with the same rate in the following quarter<sup>96</sup> of the year.

## IV. Macroeconomic projections

*The economic prospects in the Euro area have deteriorated in the period between the two projections. On the other hand, the data on the activity in the domestic economy in the third quarter are in line with the projection, with the new estimates further showing stagnation of the economy for 2012, while for 2013 and 2014 moderate downward corrections of the growth compared to October projections were made (2.2% in 2013 compared to 2.6%, and 3% in 2014 compared to 3.4%). In accordance with these changes and the performances at the end of 2012, moderate downward revision of the credit growth for 2013 and 2014 was made. However, the main factors that explain the economic growth are the same as in the previous projection, i.e. the growth in the projection period is mostly explained with the high export activity and investments. In 2014, private consumption growth acceleration is expected, which will have additional positive contribution to the GDP growth. **The projection for the movements in the external sector did not undergo changes of larger significance.** The current account deficit was projected on 3.8% of GDP in 2013 and 5.4% of GDP in 2014. The deterioration of the of the current account deficit, as in the previous projection, is a result of the assessment of higher import in 2014, the substantial part of which is due to the announced investment flows, which should create new export-based foreign exchange inflows and result in improved balance in the following period. The higher capital inflows in 2014, primarily in form of foreign direct investments, as well as government borrowing, would be sufficient for covering the higher deficit and for additional increase in the foreign reserves. During the entire projection period, the foreign reserves will be maintained at the adequate level. **Regarding the inflation projection, the latest available data indicate faster stabilization of the domestic prices relative to the previous expectations.** The lower initial inflation, as well as the expectations for smaller increase in the import prices conditioned downward revision of the inflation rate in 2013 and 2014. Adequately, the inflation forecast has been revised to 3.2% in 2013 (as compared to 3.5% in the previous projections) and to 2.3% in 2014 (as compared to 2.6% in the previous projections).*

### 4.1. Assumptions in the external environment projections

**At the end of 2012, the global economic activity registered moderate improvement, in environment of intensified economic activity in the emerging countries and unfavorable performances of the developed economies.** However, the dynamics of the future global growth remains uncertain in conditions of Euro area debt crisis related risks and the negotiations about the restrictions on the budget expenditures side and the US public debt ceiling. Consequently, the assumptions for the external economic environment in the current projection encompass the expectations for fragile global recovery and further negative effects of the fiscal consolidation and low market

<sup>96</sup> It refers to November compared to September 2012.



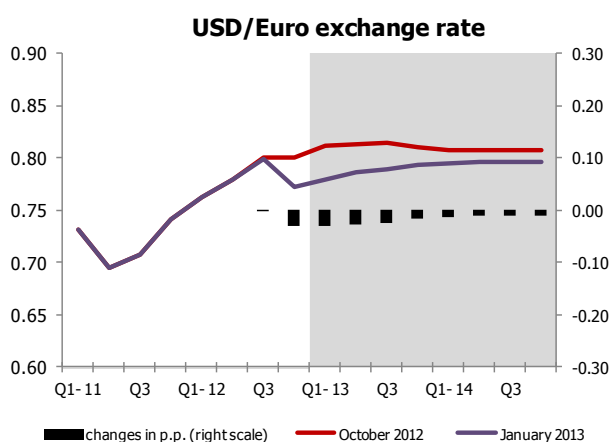
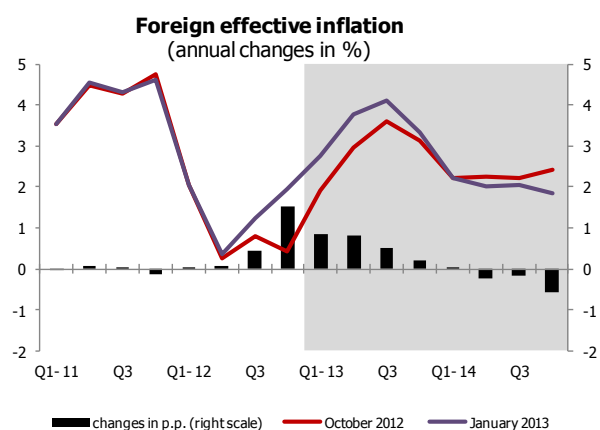
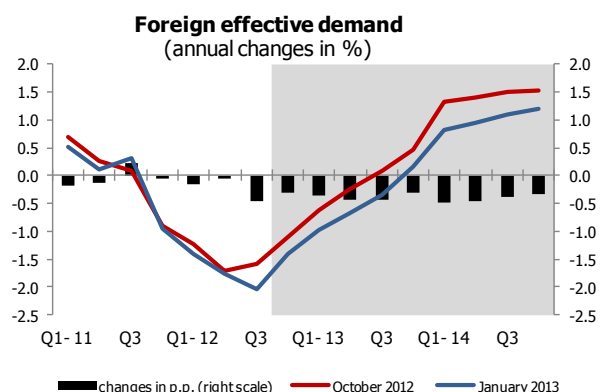
confidence on the European economy in 2013 and estimates for intensified global growth in 2014.

**The current estimates indicate deeper fall in the foreign effective demand in 2012, which is expected to equal -1.7%, instead of -1.4% in October projection.** The higher drop in the foreign demand is a result of more negative annual changes of GDP in Germany, Greece and Serbia in the second half of the year, as well as the downward revisions of the growth in the latter two countries in the first half of the year. New corrections to the foreign demand projections were made for both 2013 and 2014. Thus, in 2013 the demand from our trading partners is expected to be lower by 0.5%, instead the estimation for a decrease of 0.1% in October. Similar to the October projection, gradual foreign demand intensification for 2014 is expected, when increase of 1% is envisaged. However the expected growth in 2014 will be lower than the previous growth assessment of 1.4 because of the smaller contribution of the German and Greek economy.

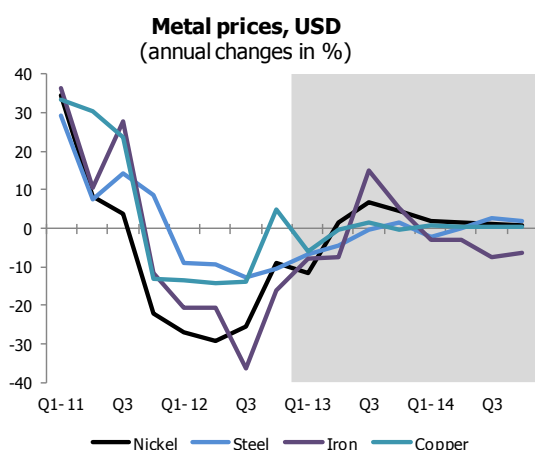
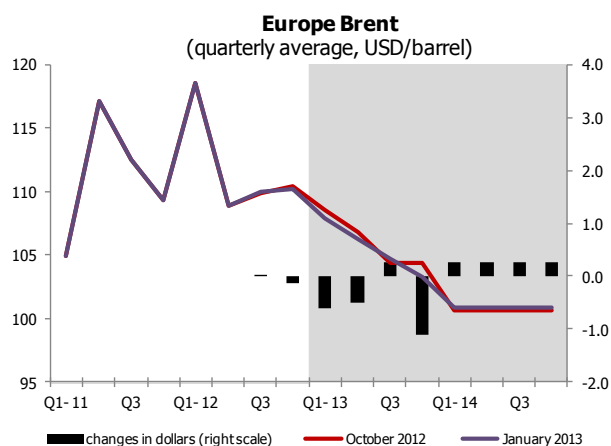
**In the fourth quarter, the annual foreign effective inflation equals 1.9%, which is substantial deviation of 1.5 p.p. in comparison with the October projection of 0.4%<sup>97</sup>.** As a result of this improved realization, in 2012 the foreign inflation equals 1.4%, instead of 0.9% as projected in October. As for the projections for the current year, upward revision of the foreign inflation rate was made (inflation rate of 3.5% as compared to 2.9% in October projection), which almost fully arises from the upward corrections to the estimations for the prices in Serbia. In 2014 substantial slowdown in the foreign effective inflation is expected - the foreign effective inflation will be reduced to 2%, which is slightly below the level 2.3% as projected previously.

**In 2012, the US dollar appreciated less than expected** in the October projection. The current projection includes lower appreciation of the US Dollar in 2013 (of 1.2% compared to 3% in the previous projection) and its appreciation of 1.1% in 2014, instead of the previous expectations for its unchangeability.

**In the last quarter of 2012, the world oil price increased by 0.8% on annual**



<sup>97</sup> Such a realization arises from the upward deviation with the inflation in Greece and Serbia, as countries having significant weight in the calculation.



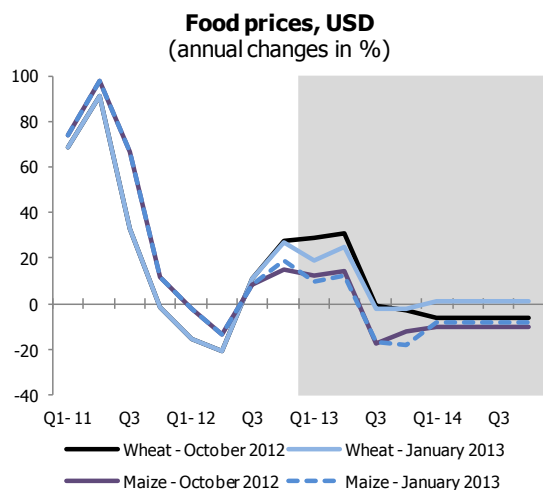
basis<sup>98</sup>, which differs slightly compared to the October projection (1%). Hence, in 2012, average annual oil price growth of 0.9% was registered, as envisaged in the previous projection. Also, the current projection does not include substantial revisions relative to the oil price and its movement neither for 2013 nor 2014. Thus there are no changes in the expectations for the gradual decrease in the oil prices in the following period - the oil prices are expected to fall from US Dollar 111.9 per barrel in 2012 to US Dollar 100.9 in 2014. From the aspect of the annual changes, in comparison with the October projections, the price drop is expected to be slightly larger in 2013 (-5.7% compared to -5.3%) and moderately lower in 2014 (-4.4% compared to -5.1%). The main risk for the oil price growth remains to be connected with the supply of oil and the impact of the political Middle East turmoil.

In the fourth quarter, the unfavorable movements with the **metal prices** began to deplete, which was mainly due to the strengthening of the China economy in this period. In comparison with the previous projection, certain divergence of the price changes with certain metals can be noticed. Thus the prices of nickel and steel registered severe decrease, while the prices of iron and copper registered smaller decrease, i.e. increase relative to the previous estimations. However, observed from the aspect of the entire 2012, such a divergence failed to result in larger differences in the growth rates between October and January projection. The current projections indicate changes in the perceptions for the movement of nickel and copper prices in 2013. Thus instead of increase as expected previously, a decrease in the prices of these metals is now envisaged, which in the case of nickel, is explained with the high supply of this metal on global level. On the other hand, more favorable perceptions with the demand are expected to reflect on the steel price, which will register smaller decrease and consequently, on the iron price, which will register smaller increase instead of a decrease. In

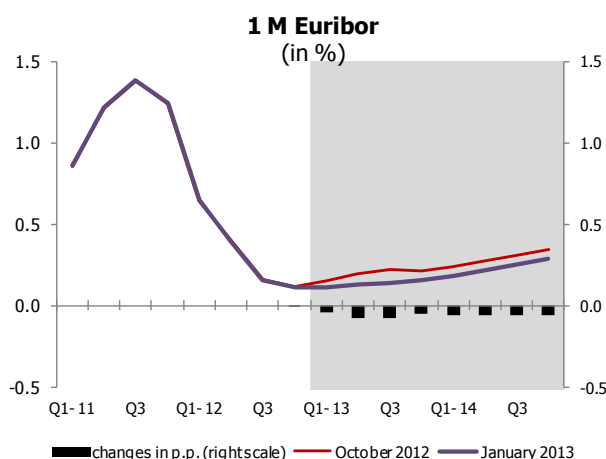
<sup>98</sup> The analysis of the prices of oil, metals and food is made on the basis of the prices of the respective products in US Dollars. Their effect on the domestic prices depends on the change of the US Dollar/Euro exchange rate. In the Euro-based analysis, the prices of nickel, copper, steel and iron registered deeper decrease in 2012 than expected in October. In 2013 lower rise in the price of nickel is expected, as well as small decrease, instead of increase in the prices of iron. The projections for 2014 indicate higher rise in the price of nickel, increase instead of decrease, in the price of copper and steel, and smaller fall in the price of iron.



line with the expectations for intensified global economy growth, in 2014 positive movements with the prices of most of the metals are expected, which will be evident in the higher growth rates than expected in October projection. Having in mind the largest role of China in the consumption of industrial metals, the main risk for their prices is dominantly connected with the developments and the perceptions of the Chinese economy.



In the fourth quarter, **the food prices** continued to increase on annual basis, which was partly due also to the low comparison base in the previous year. The realized growth rate of the wheat price was lower, while the corn price was higher relative to the October estimations. Now, as well as in the previous projection, the prices of cereals are expected to increase in the first half of 2013, with their fall being expected in the second half with the new harvest. In comparison with the October projection, on average, 2013 will characterize with smaller increase in the wheat prices due to the expectations for sufficient supply from South America and the Black Sea region and the severer fall in the corn price because of the slower recovery of the demand relative to the supply on the market. In 2014, significant upper revision was made with the wheat price projection, which is now envisaged to register moderate rise, instead of decrease, while the corn price is further expected to decline, although with just slower intensity than previously projected. The weather conditions in the countries that are the main producers of corn are the main risk factor for the upward movements with the world prices in the projected period.



In the fourth quarter, **the one-month EURIBOR** registered a record low level of 0.11%, which is minor divergence compared to the October projection of 0.12%. Having in mind that ECB failed to neither do nor announce decrease in the key interest rate in January, in the first quarter preserving of the Euribor rate at the same level of the preceding quarter is expected. Furthermore, gradual increase in the foreign short-term interest rate is envisaged, with the estimations for the growth pace once again being moderately revised downwards, compared to the previous projection.

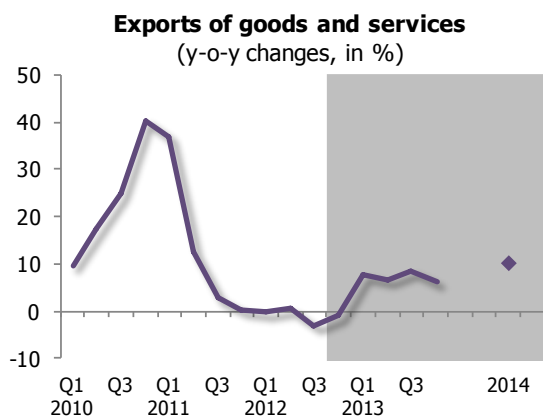
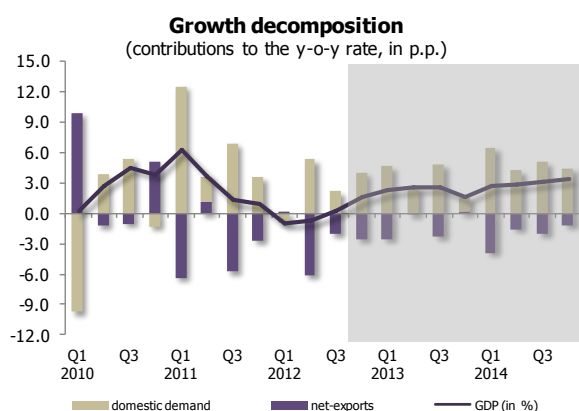
## 4.2. Projection and effects on the monetary policy

**The consecutive macroeconomic scenario assumes improvement in the foreign reserves adequacy indicators in the monetary policy relevant period, in**





**conditions of better performances and absence of more substantial imbalances in the external sector.** Namely, although larger import pressures for the following two years are expected, they will be a result of the investment flows, which should create new foreign exchange inflows through the export activity in the future period. In addition, unlike the previous projection, when inflationary risks were underlined, the latest data on the inflation and the new projections for the movement of the imported inflation point to stabilization of the domestic price growth in the period to come. In conditions of improved estimates for the foreign reserves and more favorable inflation prospects, **the risk premium of the country has declined slightly in comparison to the previous projection.** In environment of still unfavorable projections for the future movements in the Euro area, the Euribor rate remains lower and unchanged in comparison with the expectations for the fourth quarter. **In conditions of more favorable risk premium of the country and unchanged foreign interest, at the beginning of January, NBRM lowered the key interest rate by 0.25 percentage points.**

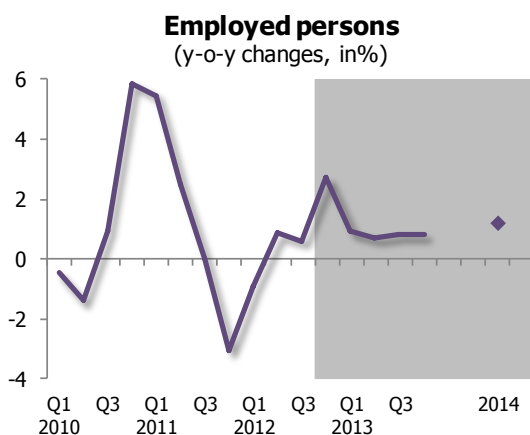
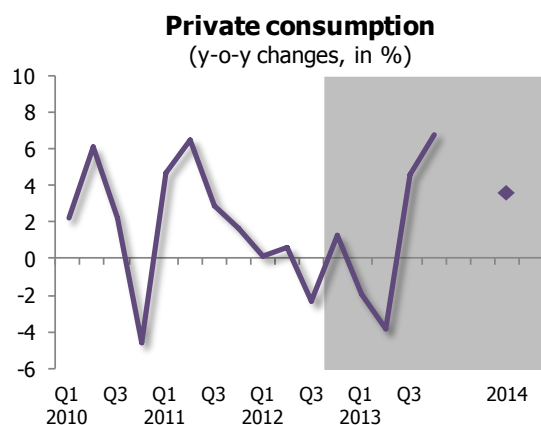
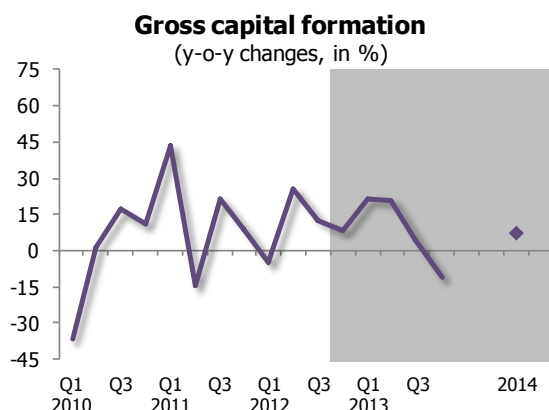


**The uncertainty related to the future movements in the world economy remains high.** The poor prospects for growth intensification in the developed economies, the growth deceleration in the developing countries and the inefficient financial markets influence unfavorably the investor perceptions. Such a situation in the external environment contributes for further risk regarding the external borrowing, domestic export activity and the estimated capital inflows. **In conditions of relatively stable domestic environment, on one hand and still present risks and monetary policy loosening at the beginning of the year, on the other hand, the current monetary setup is assessed as adequate.**

After the negative growth rates in the first half of 2012, the data on the third quarter indicates slight recovery of the economic activity, which is mainly explained with the higher investment activity. Small GDP growth is also expected for the following quarter of the year, according to the available highly frequency data on October and November. **In such conditions, GDP in 2012 is estimated to remain unchanged. In 2013, GDP growth of 2.2% is expected, given improvement of the export activity and high investment demand. In 2014, the growth rate will accelerate to 3%, when**



besides the investments and export, intensification of the private consumption is also expected.



The announced expansion of the production capacity of part of the domestic export-oriented enterprises is the main factor for explaining the **expected intensification of the export activity in 2013 and 2014**. The gradual improvement of the export demand and more favorable export prices are expected to give additional positive impulse.

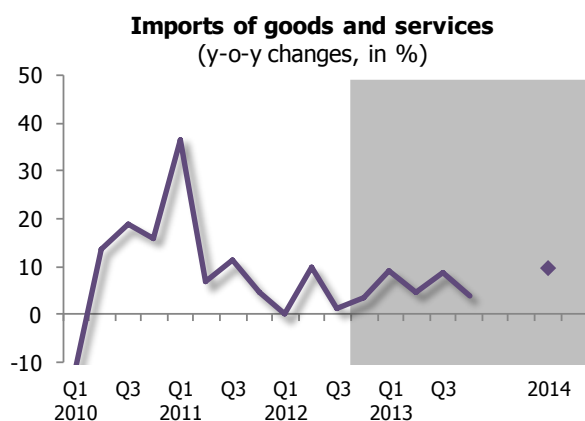
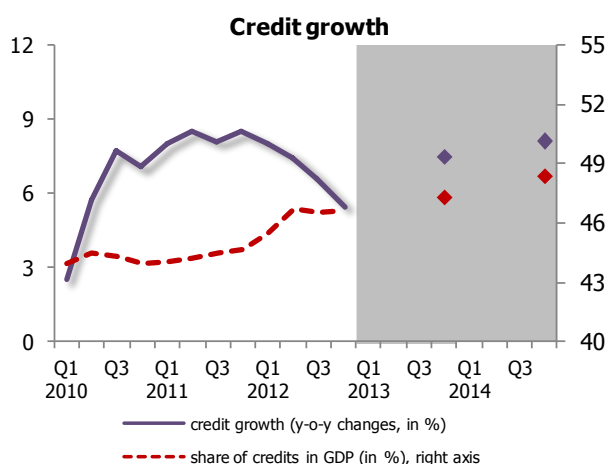
**The gradual stabilization of the global economic ambient and the domestic economic conditions will influence positively the private sector expectations in 2013 and will lead to intensified increase in the domestic demand, in comparison with 2012.**

The investment demand is expected to be the main driving force of the domestic demand growth in 2013. Unlike 2012, when the increase in the investments is most probably explained with the higher construction activity, in 2013 increase in the equipment and machinery investment is expected, in line with the expected improvements in the domestic investment environment and intensification of the export demand. Also, larger foreign direct investments are anticipated, with the planned public investments being expected to contribute additionally to the increase in the total investments. However, in comparison with 2012, in 2013 the investment growth will slowdown. This partially arises from the high comparison base in the previous year, when part of the increase was explained by larger inventories - a process that is not expected to pursue in 2013. After the decrease in 2012, in 2013 gradual recovery of the household consumption is expected. Such movement is in line with the expectations for small rise in the household disposable income and moderate increase in the employment. However, the increase in the private consumption in 2013 will be relatively low. **In 2014 growth acceleration in the domestic demand growth is expected**, with the higher private consumption being the main driving force of the increase. Such expectations are explained with the assessments for higher increase in the disposable income of the households compared to 2013, as well as higher demand for labor force corresponding to the improved domestic economic conditions. In addition, the lower uncertainty would contribute towards more favorable expectations, which would contribute to additional rise in the propensity to consume. Regarding the investment demand no significant changes are expected in 2014, i.e. in



2014 investment growth dynamics will be similar to the one in 2013.

**The domestic demand in 2013 and 2014 will be additionally financed through the bank lending.** Namely, it is expected that the stabilized environment, the deposit growth, as well as the monetary policy changes at the beginning of January will ensure moderate credit growth acceleration in the projection period. However, having in mind that the performances are weaker relative to the expected credit growth in 2012, the increase in the total credits has been revised downwards compared to the previous projection. Thus the total credit growth in 2013 is projected at 7.5%, while at the end of 2014 it is expected to accelerate and reach 8.1%. Such movements on the supply side are expected to be accompanied with **larger credit demand in 2013, and especially in 2014**, in environment of better economic conditions in domestic economy and expected increase in the private consumption and investments. **The credit growth projection risks are still downwards.** First, the possible deterioration of the bank perceptions about the developments in the real sector could result in smaller credit supply. Second, the process of deleveraging of the foreign banks could effect more negatively the domestic banks in their ownership. Third, the possible further deterioration of the quality of the banks credit portfolio would act as limiting factor for the projected credit growth. After the deposit growth of 5% in 2012, **in 2013 a rise of 7.4% is expected, while in 2014, the total deposits would increase by 7.7%.** The increase in the savings reflects, to great extent, the anticipated improvement in the financial position of the private sector in line with the expected growth in the real economy.



The increase in the export and the domestic demand will result in **higher import of goods and services in 2013**. The main factors for the import growth in 2013 are the expected increase in the export and the higher investment activity. In 2014 further increase in the import of investment goods and raw materials is expected, in line with the launching of new production facilities. This, accompanied with the anticipated moderate increase in the import of goods for private consumption will lead to additional **acceleration in the import growth in 2014**. The simultaneous increase in both the exports and the imports conditions negative contribution of the net export demand to the GDP growth in 2013 and 2014.



**Balance of Payment Forecast**  
(% of GDP)

	2009	2010	2011	2012	2013	2014
<b>Current account</b>	<b>-6.8</b>	<b>-2.0</b>	<b>-3.0</b>	<b>-3.2</b>	<b>-3.8</b>	<b>-5.4</b>
Balance of goods & services	-23.0	-20.0	-21.1	-22.6	-22.2	-22.8
Goods, net	-23.3	-20.5	-22.4	-23.3	-23.4	-24.5
Services, net	0.2	0.5	1.3	0.7	1.2	1.7
Income, net	-0.7	-1.4	-1.6	-1.6	-1.7	-2.4
Current transfers, net	16.9	19.4	19.7	21.0	20.0	19.8
Private transfers, net	16.4	18.9	18.7	20.5	19.4	19.2
<b>Capital account</b>	<b>0.3</b>	<b>0.2</b>	<b>0.3</b>	<b>0.2</b>	<b>0.0</b>	<b>0.0</b>
<b>Financial account</b>	<b>5.9</b>	<b>1.9</b>	<b>6.5</b>	<b>4.6</b>	<b>4.7</b>	<b>6.9</b>
FDI, net	2.0	2.2	4.5	1.0	3.0	4.5
Portfolio Investment, net	1.6	-0.8	-0.6	1.1	-2.0	0.1
Other Investment, net	2.4	0.4	2.6	2.5	3.7	2.3

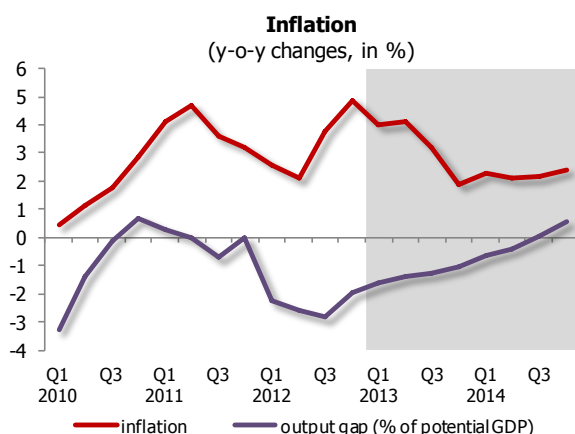
The movements at the end of the previous year, when relatively high increase in the real import given reduced exports was registered, resulted in expected decrease in the nominal export of goods and services of 1.1% in 2012, compared to the increase in the imports of 1.7%. Having in mind this, it is estimated that in 2012 **the deficit in the trade of goods and services deteriorated to 22.6% of GDP** (nominally). On the other hand, the high increase in the private transfers continued, which reached the historically highest level of 20.5% of GDP. Having in mind these movements, **in 2012 moderate deepening of the current account deficit of 3.2% of GDP is estimated.** However, the anticipated higher exports from the new production facilities together with the anticipated gradual recovery of the global economic activity at the end of 2013, will lead to an increase in the nominal export of 7.5% in 2013 and 10.4% in the following year. On the other hand, it is estimated that the enlarged import at the end of the previous year is partially a reflection of single factors. Hence, it is expected that the import will increase at a slower pace than export, i.e. by 6.4% of this and 9.9% in the following year. The faster export growth in 2013 will result in **contraction of the deficit in the trade of goods and services to 22.2% of GDP.** On the other hand, the high import growth in 2014, as a result of the recovery of the household consumption and constantly high investment, will result in **moderate deterioration of the deficit in the trade of goods and services to 22.8% of GDP in 2014.** Concerning the private transfers, it is estimated that the effects related to the uncertainty about the Euro area are gradually depleting, which will cause their unchanged level in 2013, while the recovery of the global economy will contribute towards their increase in 2014. This means decrease in private transfers' share to GDP to nearly 19%. Hence, despite the smaller deficit in the trade of goods and services, moderate widening of the **current account deficit of about 3.8% of GDP** is expected in 2013. On the other hand, the intensification of the import and the deterioration of the trade deficit **in 2014 will result in deeper current account deficit up to 5.4% of GDP.**

**Capital and financial inflows in 2012 were lower as compared to 2011,** as a reflection of the continuous negative economic developments and the uncertainty in the global environment. This resulted in low foreign direct investments level of 1% of GDP in 2012, given realization of the previously identified risk of



capital outflow on the basis of intercompany debt. In addition, in 2012 substantially lower borrowing of the public sector was registered. However, the investor confidence is expected to improve in the following period, as well as the financing conditions on the international market. In 2013, most of the inflows are expected to be generated through borrowing of the public sector and realization of the previously announced investments of about 3% of GDP. In addition, the gradual recovery of the global and domestic economy, as well as the lower uncertainty, will result in increase in the capital inflows, mostly under the influence of the private inflows in 2014, when the foreign direct investments are expected to equal 4.5% of GDP.

*The movements in the current and the capital and financial account in 2012 enabled further solid increase in the foreign reserves. The absence of more significant changes in the main components of the balance of payments will contribute for moderate increase in the foreign reserves also in 2013. In 2014, the intensification of the capital inflows will be larger than the deepening of the current deficit, which will contribute for further increase in the foreign reserves. The estimated relative indicators show maintenance of the foreign reserves around the adequate level.*



**The average annual inflation in 2012 equals 3.3%, mostly as a result of the increase in energy prices. In 2013, the inflation rate is expected to slowdown moderately, and to reduce to 3.2%,** in environment of slightly different structure compared to the previous year. Namely, it is expected that the main driving force of the price changes will be the moderate intensification of the food price growth. On the other hand, despite the assumed rise in the regulated prices of electricity<sup>99</sup>, it is expected that this year the slowdown in the growth of energy prices will continue, primarily as a reflection of the transmission effects and the oil price movements. Additionally, no domestic demand pressures of higher significance are registered, having in mind the retaining of the negative output gap. **The inflation rate in 2014 is expected to be reduced additionally to 2.3%,** given no larger pressures from the imported prices and gradual recovery of the demand. The inflation risks are downwards and mainly related to the possibly lower transmission from the movements in the world commodity

<sup>99</sup> Assumed growth in electricity prices in June 2013 of 10%.



prices on the domestic inflation, as well as to the developments in the supply of food production on the domestic market.

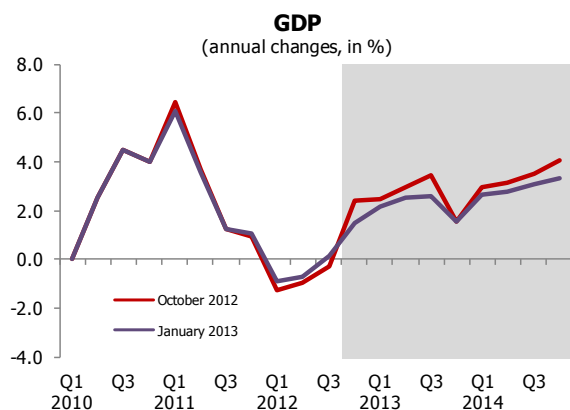
### Comparison with the previous projection

#### Forecast of selected macroeconomic variables

annual rates of change (in %)	2012 forecast		2013 forecast		2014 forecast	
	Oct.	Jan.	Oct.	Jan.	Oct.	Jan.
<b>GDP</b>	<b>0.0</b>	<b>0.0</b>	<b>2.6</b>	<b>2.2</b>	<b>3.4</b>	<b>3.0</b>
Personal consumption	0.6	-0.1	1.3	1.3	4.1	3.6
Gross capital formation	0.9	9.7	11.4	8.0	10.6	7.4
Public consumption	0.5	1.7	1.9	0.5	1.6	0.3
Export of goods and services	-2.2	-0.8	11.1	7.4	13.8	10.3
Import of goods and services	-0.4	3.3	10.2	6.5	13.7	9.8
<b>Inflation</b>	<b>3.4</b>	<b>3.3</b>	<b>3.5</b>	<b>3.2</b>	<b>2.6</b>	<b>2.3</b>
<b>Current account deficit (% of GDP)</b>	<b>-2.8</b>	<b>-3.2</b>	<b>-3.8</b>	<b>-3.8</b>	<b>-5.9</b>	<b>-5.4</b>

*The performances and the estimates indicate unchanged expectations for the economic growth in 2012 and moderate downward revisions of the growth during this and the following year in comparison with the October projections. Also, downward revisions of the anticipated inflation were made. In 2012 moderately deeper deficit on the current account was registered, conditioned primarily by the more negative net export, while the expectations indicate of unchanged current deficit in this and lower deficit in the following year. On the other hand, the estimates show higher capital and financial inflows in both the previous and this year, and moderately lower inflows for 2014 relative to October projections. Given the direction of these revisions, relatively stronger increase in the foreign reserves in 2013 and 2014 is expected.*

The projections in January indicate that the previous assessment for **GDP stagnation in 2012** was preserved. However, having in mind the performances in the third quarter and the estimations for the last quarter, certain corrections of the growth structure were made, i.e. larger positive contribution of the domestic demand and larger negative contribution of the net export is expected. The intensive investment activity in the second half of the year indicate that this domestic demand component is the main driving force of the growth in 2012, as opposed to the previous expectations when investment were anticipated to have neutral effect. On the other hand, absence of the expected larger downward adjustment of the real export, as well as the import was registered, which resulted in much more negative influence of the net export compared to the expectations in 2012.

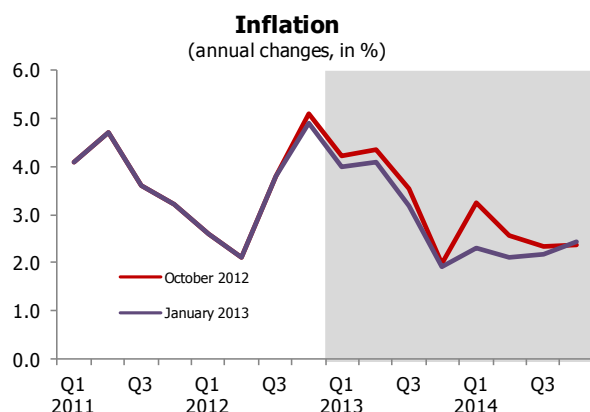


The movements in the second half of 2012, as well as certain revisions of the determinants of the GDP components lead to moderate **revision of the expected increase in the following two years, from 2.6% to 2.2% for 2013 and from 3.4% to 3% for 2014.** Similar to the previous projections, it is expected that also in 2013 the domestic demand will remain the main growth factor, although with relatively lower positive contribution. The contribution of the net export will continue to be negative, although

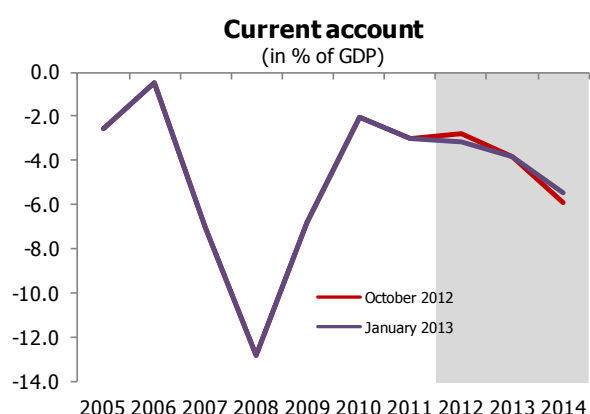




smaller than previously, in conditions of lower increase in both the export and the import, than the October expectations. Despite the deteriorated global environment, it is again expected that the investments will be the main driving force of the domestic demand growth, primarily because of the mounting export, Government and the foreign investments. However, their growth rate in this and in the following year is moderately lower, as a result of the relatively high level registered at the end of 2012. On the other hand, in the second half of 2012, substantial downward adjustment of the private consumption was registered. The forecast for 2013 and 2014 for the private consumption is in line with the previous expectations i.e. relatively slow increase in 2013 and intensification of the private consumption growth in 2014, which will be the main driving force of the growth.



In the last quarter of the previous year, lower inflation than previously expected was registered, mostly as a result of the movements in vegetable prices. This resulted in **inflation of 3.3% in 2012, which is in line with the October expectations for inflation of 3.4%**. Relatively lower price level from the end of the previous year, as well as expectations for lower growth of food and energy prices compared to the previous projections caused downward revisions of the inflation in the following period. Namely, it is expected that the inflation rate in 2013 will equal 3.2%, compared to the previous expectations for a rate of 3.5%. The anticipated inflation in 2014 is revised from 2.6% to 2.3%.



The movements in the external sector in the second half of the previous year indicated significantly higher deficit in the trade of goods and services in comparison with the October projections. In environment of more favorable movements of the nominal export, the main factor of this revision is the substantially higher import of goods and services at the end of the year, partially conditioned by individual one-time factors, such as import of equipment and vehicles. Despite the favorable movements with the private transfers, the realization with the net export resulted in **upward revision of the current account deficit for 2012 from 2.8% to 3.2%**. On the other hand, the movements with the capital and financial account improved compared to October expectations, despite the moderately lower foreign direct investments as a result of the outflows from the intercompany crediting. As a result, at the end of 2012, increase in the foreign reserves was registered, differing from the October expectations for their maintenance on 2011 level.



Furthermore, it is estimated that the current account deficit in 2013 will remain unchanged relative to October projections, while in 2014, it will be lower. Namely, **the deficit for this year remained 3.8% of GDP, while for the following year, it is revised from 5.9% to 5.4% of GDP.** This is mostly due to the expectations for faster growth of the private transfers during both, this and the following year, in accordance with the expectations for lower domestic inflation. Similar to the October projections, higher nominal growth in export as compared to the import growth is expected. However, because of the higher import level in 2012, these movements in the external trade result in deeper deficit in the trade of goods and services in this and in the following year, in comparison with the October projections. On the other hand, it is expected that the capital inflows in 2013 will be higher than the previous projections, mainly because of the higher external borrowing of the public sector, while in 2014 they are moderately revised downwards. According to these expectations, it is expected that **in 2013 and 2014 higher increase in the foreign reserves compared to the October projections will be attained.** The revisions for 2013 are mostly due to the more favorable expectations for the capital and financial inflows, with the main factor for 2014 being the lower current account deficit.

**Comparison of GDP and inflation forecasts for Macedonia from various organisations**

Organisation	Month of publication	Real GDP growth, %			Inflation (average rate, %)		
		2012	2013	2014	2012	2013	2014
IMF	October 2012	1.0	2.0	3.5	2.0	2.0	2.0
World Bank	January 2013	0.0	1.0	2.5	-	-	-
European Commission	January 2013	0.8	1.7	2.2	3.3	2.0	2.3
EBRD	January 2013	-0.5	1.8	-	-	-	-
Consensus Forecasts	January 2013	0.5	1.7	2.6	3.1	2.5	2.7
National Bank of Greece	January 2013	0.0	2.0	3.2	3.3	3.8	3.2
Ministry of Finance of the R. of Macedonia	December 2012	-	2.0	-	2.8	3.5	-
National Bank of the R. of Macedonia	January 2013	0.0	2.2	3.0	3.3	3.2	2.3

Source: IMF World Economic Outlook, October 2012; World Bank Global Economic Prospects, January 2013; European Commission EU Candidate and Pre-Accession Countries, January 2013; EBRD Regional Economic Prospects, January 2013; Consensus Economics Forecasts, January 2013; NBG Macroeconomic and Financial Indicators, January 2013; Ministry of Finance of the Republic of Macedonia, Budget of the Republic of Macedonia for 2013, December 2012; and the National Bank of the Republic of Macedonia.