National Bank of Moldova

Translation

# **Inflation Report**

# no. 4, November 2011

1 Grigore Vieru Avenue • MD 2005 Chisinau • www.bnm.md • E-mail: official@bnm.md Tel. (37322) 409 006 • Fax (37322) 220 591

# Note

Statistical data were taken from the National Bureau of Statistics,

Ministry of Economy, Ministry of Finance,

EUROSTAT, International Monetary Fund,

National Energy Regulatory Agency,

State Hydrometeorological Service.

Likewise selected were certain statistical data provided by the international community and by the Central Banks of the neighboring states.

The calculation of the statistical data was carried out by the National Bank of Moldova.

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# List of acronyms

CHIBOR	Average interest rate at which the contributors banks are available to lend funds in MDL to other banks, on the interbank monetary market			
CIS	Commonwealth of Independent States			
CPI	Consumer Price Index			
EU	European Union			
EUR	Common European Currency			
FCC	Freely convertible currency			
GDP	Gross Domestic Product			
IMF	International Monetary Fund			
IPPI	Industrial Producer Price Index			
MDL	Moldovan Lei			
NBC	Certificates issued by the National Bank of Moldova			
NBM	National Bank of Moldova			
NBS	National Bureau of Statistics of the Republic of Moldova			
OPEC	Organization of the Petroleum Exporting Countries			
SDR	Special drawing rights			
USA	United States of America			
USD	US Dollar			

VAT Value Added Tax

# Summary

### Inflation developments

The annual rate of inflation measured by CPI was 8.8 percent in the third quarter of 2011, continuing the upward trend started in February 2011. However, the actual amount of inflation corresponds largely to the amount projected in the Inflation Report no. 3, August 2011. The annual rate of core inflation has also seen a dynamic trend in the reporting period, recording a level of 4.4 percent in September 2011, being less pronounced than the overall inflation.

Among the main factors that favored the CPI growth in the third quarter, compared to the previous year, may be mentioned the increases in utilities tariffs and the side effects caused by them on other components, adverse weather conditions for some crops, worldwide increase in prices for food and oil derivatives, increasing demand of the population from disposable income, increasing external demand to some local products. At the same time, the aforementioned pro-inflationary pressures have been partially mitigated by the developments of the national currency against the currencies of the major trading partners.

In the third quarter of 2011, the prices of industrial production and construction prices have registered an upward trend, which will create pressure to increase prices of some components of the CPI in the following periods.

The gross domestic product increased by 6.8 percent during the second quarter of 2011 as compared with the second quarter of 2010. The economic growth continued in the second quarter of 2011, but was more moderate than in the first three months of this year, in accordance with the projection indicated in the Inflation Report no. 3, August 2011. External demand was the determining factor in GDP growth and the quality of the economic growth is higher than in previous periods.

The unemployment rate reduction to 6.2 percent shows, on one hand, an improvement in the labor market situation in the second quarter of 2011. On the other hand, there is a decrease in the number of employed. In August 2011, the nominal average wage of a worker in the national economy has grown by 8.5 percent against the same period last year. However, the annual average real wage in the economy in August recorded a negative dynamic economy driven by the developments recorded in all sectors, except agriculture. Since the first quarter of 2010, consequently, the growth rate of labor productivity gets ahead the real average wage in the industry.

### **Monetary policy**

In order to anchor the inflation expectations in conjunction with counteraction of possible second round effects of adverse shocks, the National Bank of Moldova has maintained during the third quarter of 2011 the prudent conduct of monetary policy. However, the NBM continued to manage firmly the liquidity excess existing in 2011 on the monetary market through sterilization operations.

The National Bank of Moldova has intervened in the foreign exchange market during July - September 2011 as a buyer of foreign currency in order to mitigate the excessive exchange rate fluctuations of the national currency against the U.S. dollar.

During the analyzed period, the volume of transactions conducted by the National Bank of Moldova on domestic foreign exchange market against MDL constituted the equivalent of USD 22.62 million.

Monetary indicators have recorded a modest growth in the third quarter of 2011 compared with the previous quarter, the quarterly average in annual terms constituting 19.7 percent for M2 and 17.9 percent - for M3.

The persistence of a high level of liquidity in the banking system, which slows the transmission of monetary policy decisions, determined the downward position of the interest rates charged by banks on new loans and new deposits attracted in national currency during the third quarter of 2011.

Anticipating the inflationary pressures, the National Bank of Moldova has consequently increased by 1.0 percentage points the interest rates on its instruments of monetary regulation during the third quarter of 2011, so that the base rate was increased up to 10.0 percent and interest rates on overnight deposit and credit facilities up to 7.0 and 13.0 percent, respectively.

### Medium-term inflation forecasting

The world economy continues to recover, but with smaller rates, due to the intensification and spread of sovereign debt crisis among developed economies, which has an impact on international financial market trends and causes rapid deterioration of the indicators in developed economies.

While policy makers in developed countries are trying to support the economic growth rate, large emerging economies try to avoid overheating them. Over the past few months some of the major developing economies have sought to reduce high rates of inflation by tightening the monetary policy. However, lower growth in developed economies is reflected in lower exports. All these have contributed to the stagnation of macroeconomic balance in the world, leading to a downward revision of forecasts for global economic development.

The main risks that could significantly change the global economy in the near future are related to the issues facing the public finances and banking systems in developed economies, the lack of policies to redress the economic crisis and volatility of commodity markets.

Deviation of real GDP in early 2011 showed positive values being over the potential level of economic activity. Compared to the projection of the Inflation Report no. 3, August 2011, where the output gap was positive throughout the forecasting period, the output gap in the current round of forecasting has a more pronounced downward trend, so, towards the end of the forecast (third quarter 2013), it will record slightly negative values.

Current projection, from the baseline scenario, places the annual inflation rate at the level of 9.6 percent at the end of the year, while at the end of the next year - at the level of 6.5 percent. Compared with Inflation Report no. 3, August 2011 the inflation rate at the end of this year is projected at a 1.1 percentage point higher, while at the end of 2012 - at a lower level by 0.9 percentage points. The main cause of negative gap for 2012, between the current projection and from the previous report, represents slightly lower levels of global food prices, natural gas and of the fuel. These developments would be the result of reduced economic activity worldwide.

Global economic developments in the coming quarters will be marked by high risks and uncertainties caused by the major sovereign debt crisis.

# **Chapter 1**

# **Inflation developments**

The annual rate of inflation measured by CPI was 8.8 percent in the third quarter of 2011, continuing the upward trend started in February 2011. However, the actual amount of inflation corresponds largely to the amount projected in the Inflation Report no. 3, August 2011. Annual rate of core inflation has also seen an ascending trend in the reporting period, recording a level of 4.4 percent in September 2011, being less pronounced than the overall inflation. Among the main factors that favored the CPI growth in the third quarter, compared to the previous year, may be mentioned the increases in utilities tariffs and the side effects caused by them on other components, adverse weather conditions for some crops, worldwide increase in prices for food and oil derivatives, increasing demand of the population from disposable income, increasing external demand for some local products. At the same time, the aforementioned pro-inflationary pressures have been partially mitigated by the developments of the national currency against the currencies of the major trading partners. In the third quarter of 2011, the annual rate of industrial producer price index was 7.9 percent and continued the upward trend started at the beginning of this year. As a result of positive developments in the construction sector, the prices in this sector increased by 8.7 percent in the third quarter of 2011 compared with the same period last year. The upward trend in prices of industrial production and construction will generate pressure to increase prices of some components of the CPI in the following periods.

### **1.1 Consumer price index**

In the third quarter of 2011, the annual rate of inflation measured by CPI continued the upward trend started in February 2011, so that the average value during this period (8.8 percent) was by 1.7 percentage points higher than in the previous quarter.

However, the evolution of this indicator shows a monthly cessation of this trend in September, during which the annual rate of inflation was 8.8 percent and by 0.4 percentage points less than the previous month (Chart 1.1).

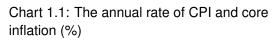
Within the components structure, the highest increase in September 2011 was recorded in prices of food products (by 11.4 percent), as compared to September 2010, followed by the prices of services and non-foodstuff products, which increased by 8.0 and 6.8 percent, respectively. At the same time, the short-term inflation forecast published in the Inflation Report no. 3, August 2011, largely corresponds with the actual average value for the third quarter of 2011, being only by 0.3 percentage points higher than that projected (8.5 percent).

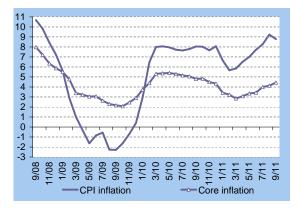
The annual rate of core inflation<sup>1</sup> has experienced an upward dynamic in this period, but was less pronounced than that of overall inflation, increasing from 3.4 percent in June to 4.4 percent in September 2011. Thus, the difference between CPI and the core inflation rate constituted 4.3 percentage points in September. This difference continues to show the increased influence of the non-monetary factors on inflation process in the Republic of Moldova. In this respect, the overall inflation rate increase was determined by the pressure from food and fuel prices, which registered an upward trend during the reference period (Chart 1.2).

This evolution was driven by factors that are outside the influence or can not be anticipated by monetary policy actions, such as weather conditions, prices of petroleum products in foreign markets, food prices etc. However, besides the causes affecting the aggregate supply, price increases were driven by increased demand from population on the background of higher disposable income.

To annual inflation rate formation in September 2011 the most contributed food prices (3.9 percentage points) as a result of regional and global price increase, the propagation of second round effects from higher prices for fuel, gas and electricity tariffs at the beginning of this year, and as a result of more unfavorable weather conditions than last year for fruit and vegetables. At the same time, the increased prices for goods and services related to core inflation had a major contribution (1.9 percentage points), which were caused by second-round effects from higher prices for regulated services, the prices of fuel and food, and increased demand from population.

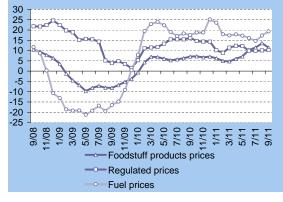
The regulated prices contributed by 1.8 percentage points, following the increasing price of gas, heating and electricity in the





Source: NBS, NBM calculus

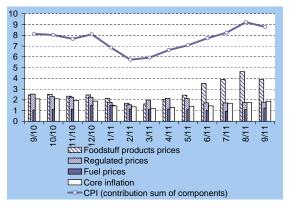
Chart 1.2: Annual rate of inflation subcomponents (%)



Source: NBS, NBM calculus

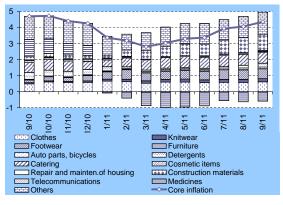
<sup>&</sup>lt;sup>1</sup>Decomposition of CPI inflation in these components is made based on the internal methodology of the NBM. Components of CPI inflation are: (1) core inflation (2) food prices (3) regulated prices (4) fuel prices.

Chart 1.3: The evolution of annual inflation and subcomponents contribution (p.p.)



Source: NBS, NBM calculus

Chart 1.4: Components contribution to the annual growth rate of core inflation (p.p.)



Source: NBS, NBM calculus

first half of this year. Fluctuations in world market oil prices enhanced by the tensions in the Middle East and North Africa at the beginning of the year, together with liquefied gas deficit in the third quarter of 2011, have resulted in increased fuel prices, which have contributed by 1.2 percentage points to the formation of annual inflation (Chart 1.3).

### **Core inflation index**

As mentioned above, the annual development of core inflation index<sup>2</sup> has seen an upward trend since March 2011. In the third quarter of 2011, the average annual rate was 4.2 percent, by 0.9 percentage points higher than in the previous quarter.

Overall, the upward trend of prices for structural components of core inflation is a consequence of the side effects from the increase in utility tariffs and increased demand for some components. The most significant positive contributions from the category of "goods" on the dynamics of core inflation were generated by the prices of building materials, footwear and clothing, which increased by 15.6, 5.9 and 3.6 percent respectively. The "construction materials" price growth was determined by the reviving demand in the construction sector.

Thus, the gross value added and prices in this sector increased by 24.9 and 9.4 percent respectively in the second quarter of 2011 compared to the same period last year. Prices for clothing and footwear can be justified both by the increase of transport costs as a result of rising fuel prices and rising demand due to increasing disposable income of the population. The increase of excise duty on tobacco by about 50.0 percent in April increased the price of tobacco by 9.3 percent as compared to September 2010. At the same time, the pro-inflationary influence of the factors mentioned above was partially offset by the foreign exchange rate developments. In this respect, in September 2011 the nominal effective exchange rate of national currency has appreciated by about 6.3 percent compared with the value recorded in September 2010. It should be mentioned that the only negative contribution to the annual growth rate of prices of core inflation was caused by price developments in medicine. They, following the administrative measures and pressures applied at the beginning of the current year, have declined by 4.6 percent compared with September 2010.

Within the category of "services", the most significant increases were recorded in catering services, education and training. The

<sup>&</sup>lt;sup>2</sup>Index calculated by the method of exclusion (there were excluded food, fuel, products and services with regulated prices), based on the CPI calculated by the National Bureau of Statistics of the Republic of Moldova.

respective components increased by 12.2 and 11.9 percent respectively in September 2011 compared to the same period last year. This development was determined by the second-round effects from increases in electricity and gas tariffs, but also from increases in food prices.

However, as regarding the services rendered in education sector, the price increase may be also explained by the expenses incurred by institutions of higher education as a result of setting up the study buildings and new constructions.

### **Food prices**

The annual growth rate of food prices increased significantly from 7.8 percent in the second quarter of 2011 to 12.1 percent in the third quarter of 2011. However, in September was recorded a halt in this trend, so that the annual rate constituted 11.4 percent compared to 13.6 percent recorded in August 2011.

The increase in annual terms of food prices in September 2011 was mainly determined by the price increase of: "eggs" (27.3 percent), "fresh vegetables" (20.3 percent), "sugar" (17.8 percent), "milk and dairy products" (13.3 percent), "potatoes" (12.2 percent), "milling and bakery" (8.3 percent), and "meat and meat products" (5.0 percent) (Chart 1.5).

The upward trend in the price of fresh vegetables and potatoes was affected by adverse weather conditions. According to the information provided by the State Hydro meteorological Service, the Republic of Moldova recorded predominantly very hot weather and rainfall deficiency in the third quarter of 2011. Thus, the hydrothermal coefficient characterizing the degree of humidity constituted on average 0.1-0.5 in August on 85 percent of territory, which corresponds to a severe drought. The reason for higher prices for meat and meat products lies in the raw material price increase, as a result of the reduction in domestic supply due to local production orientation towards external markets. Thus, the volume of exports of meat and meat products increased by about 2.3 times during January - August 2011 compared to the previous year. Sugar price growth was influenced by the gap between domestic prices and the Ukrainian prices. However, the increase of prices for milk and dairy products was influenced by lower milk production in households of all categories. In this regard, during January-September 2011 its volume was lower by 7.1 percent as compared to the same period last year. It should be mentioned that, the price increase of the aforementioned products was influenced by the impact of second round effects from the increase of the price

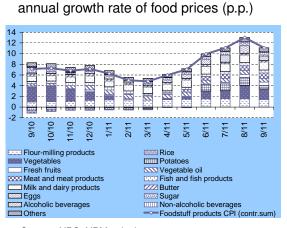


Chart 1.5: Components contribution to the

Source: NBS, NBM calculus

of electricity in the second quarter of 2011, which influenced the production and storage costs. In addition to the internal factors, the increase in food prices was driven by increasing world food prices, which increased with about 16.0 percent in September 2011 compared with the same period last year. At the same time, the increase of food prices was also favored by the increase of their foreign demand during this year. Thus, in the first eight months of this year, the exports of "food and live animals" increased by 43.7 percent.

### **Regulated prices**

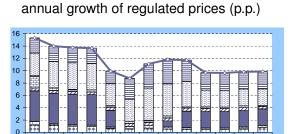
Similar to the previous periods, the annual growth rate of regulated prices recorded a relatively stable trend in the third quarter of 2011, representing 10.1 percent and by 1.4 percentage points lower than in the previous quarter. Regulated prices growth in the third quarter of 2011, compared to the same period last year, was driven mainly by increases in tariffs for gas, central heating and electricity made in the first half of this year.

Thus, in February, the natural gas price increased by about 14.2 percent, the tariff for heating increased by about 12.4 percent for capital residents, while increases in other cities were even more pronounced, decisions reasoned by increased import prices for natural gas that have stimulated further growth in related services prices. At the same time, in April, the price for electricity rose by 10.8 percent. These increases, together with higher prices for water and sewerage services by 5.1 percent, determined the increase of utilities services by 13.1 percent in September 2011 as compared with the same period last year.

However, a positive contribution to the growth of regulated prices was driven by higher prices for passenger transport, being in September 2011 by 0.7 percent higher than in the previous year. This dynamic was determined by the increases occurred in railway transport and international air transport, as a result of higher prices for petroleum products internationally and MDL depreciation against the Swiss franc.

### **Fuel prices**

The downward trend of the annual growth rate of fuel prices, started at the beginning of this year, has ended in the third quarter of 2011. Thus, the annual growth rate of fuel prices increased from 16.0 percent in June to 19.3 percent in September 2011, following the liquefied gas price increase. Thus,



9/10 10/1011/1012/10 1/11 2/11 3/11 4/11 5/11 6/11 7/11 8/11 9/11

Maintenance of housing

ZZZ Health protection

Other services

Central heating

-----Regulated prices

Chart 1.6: Components contribution to the

Source: NBS, NBM calculus

Payment for housing

Electricity supply

Gas supply

Postal services

Transport services

the liquefied gas price increased three times in August and September: from 7.1 to 7.8 MDL / l at the beginning of the month, from 7.8 to 8.2 MDL / l at the end of August and from 8.2 to 8.5 MDL / l in the first decade of September. This increase was driven by domestic liquefied gas deficit as a result of temporary closure of factories producing this type of fuel both in Russia and in other regions, in order to carry out repair works.

Fuel prices increase, recorded during this period, was driven mainly by higher import prices for derivatives, as a result of higher world oil prices following the global economic recovery. Thus, the price of Urals oil reached the average value of USD 111.1 per barrel, by 46.7 percent higher than the level recorded in the same period last year. However, the evolution of the national currency against the U.S. dollar in September 2011 compared to the previous year (appreciation of about 5.3 percent) has partially alleviated the pressure of rising prices of oil derivatives worldwide.

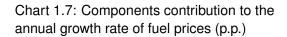
Within the structure, the earth coal prices increase (20.1 percent) had the highest contribution to the fuel prices increase in September 2011, followed by the fuel and liquefied gas prices increase by 17.8 and 18.2 percent respectively, compared to September 2010 (Chart 1.7).

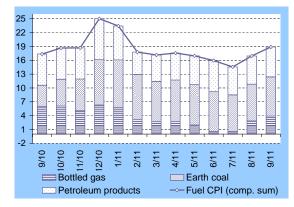
### 1.2 Comparing forecasts of the Inflation Report no. 3, August 2011 with the inflation developments in the third quarter of 2011

Similar to the previous periods, within the process of CPI shortterm forecasting in the third quarter of 2011, there were recorded minor deviations (Chart 1.8).

Rising prices in the third quarter of 2011 exceeded only by 0.3 percentage points the CPI forecast published in the Inflation Report no. 3, August 2011. Within the sub-components of the CPI were recorded deviations in both directions (Table 1.1). The most significant positive contribution to CPI deviation was determined by the behavior of food prices, following the overestimation of the impact caused by the seasonal effects.

Thus, the adverse weather conditions that affected some crops have prevented the achievement of anticipated negative seasonal effect, which resulted in increased food prices by 12.1





Source: NBS, NBM calculus

Table 1.1: Evolution and forecast of CPI and its components

	De facto	Forecasted
		(IR no. 3)
	Q III, 2011	Q III, 2011
	/Q III, 2010	/Q III, 2010
CPI	8.8	8.5
Core inflation	4.2	4.2
Foodstuff products	12.1	10.3
Regulated prices	10.1	13.2
Fuel	17.1	15.2

Source: NBM

Chart 1.8: Evolution and forecast of CPI since the implementation of inflation target-

10 8 6 4 2 0 -2 I/09 II/09 III/09 IV/09 I/10 II/10 III/10 IV/10 I/11 II/11 III/11 

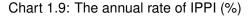
percent compared to the forecast of 10.3 percent. The fuel prices have also registered a positive deviation (1.9 percentage points), following the higher than expected price of liquefied gas as a result of closure of some factories from Russian Federation. Deviation between projected and actual value for core inflation was zero. The aforementioned deviations were partially offset by a negative deviation (minus 3.1 percentage points) recorded in the regulated prices, due to the delay in adoption of the new tariff for natural gas. Thus, natural gas tariff increase became effective from October 01, 2011 and not in the third quarter as projected.

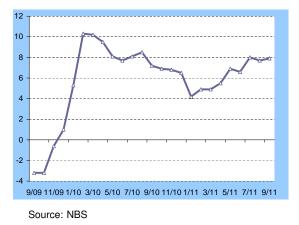
#### Industrial production price index 1.3

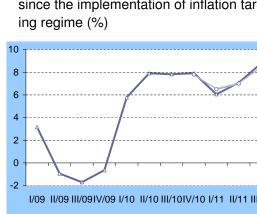
According to the National Bureau of Statistics, the annual rate of industrial production price index was 7.9 percent in September 2011, increasing by 0.2 percentage points compared to the previous month. Within the structure, the highest increases were recorded in prices of the energy industry and manufacturing, which increased by 9.6 percent and 7.7 percent respectively, as compared to September 2010. At the same time, the prices in extractive industry recorded growth rates in annual terms of 3.4 percent. It should be mentioned that since the beginning of the year, the pace of price increases in industry is accelerating (Chart 1.9).

Price increases in annual terms for industrial production was determined by the increase of raw material and food prices in international markets. Compared to August 2011, the prices in industry decreased by 0.1 percent overall. This decrease was influenced by prices reduction in manufacturing by 0.1 percent. The most significant reductions in manufacturing were recorded for the following activities: "manufacturing of machinery and equipment" (1.9 percent), "manufacture of furniture and other industrial activities" (1.2 percent), "chemical industry" (1.1 percent), "publishers, polygraph and informative materials reproduction" (0.7 percent), "manufacturing of leather, leather products and footwear" (0.7 percent), and "production of machinery and electronic apparatus" (0.2 percent).

Simultaneously, prices in mining and energy sector have not significantly changed, maintaining at the level of the previous month.







Source: NBS, NBM calculus

### **1.4 Construction prices**

In the third quarter of 2011, the annual growth rate in construction prices recorded the value of 8.7 percent, decreasing by 0.7 percentage points compared to the same period of the previous quarter. The acceleration of annual growth rate of prices in the construction sector from the beginning of the current year is due to the revival of this sector after the crisis from 2009.

Within the structure of the national economy sectors, the largest price increases in the third quarter of 2011, as compared to the third quarter of 2010, were recorded in "dwelling building" (11.8 percent), "agriculture" (by 11.1 percent), "commerce and catering" (by 8.7 percent), and "manufacturing" (by 8.0 percent).

Chart 1.10: Evolution of construction price index (%, compared to the same period last year)





# **Chapter 2**

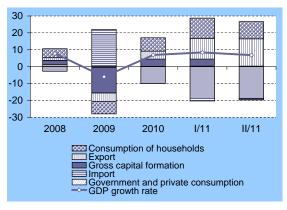
# **Economic developments**

### 2.1 Demand and supply

The economic growth continued in the second quarter of 2011, but was more moderate than in the first three months of this year, in accordance with the projection indicated in the Inflation Report no. 3, August 2011. Thus, the gross domestic product increased by 6.8 percent during the reporting period compared with the second quarter of 2010. External demand was the determining factor in GDP growth and the quality of the economic growth is higher than in previous periods.

Data on foreign trade, industrial and agricultural production, transport of goods for the third quarter of 2011 outlines the prerequisites for registering an economic growth. In this context, in July and August the exports recorded increases of more than 50.0 percent, while the imports of goods recorded were over 30.0 percent compared with the same period last year. However, the annual rate of industrial output in all forms of ownership was 7.8 percent in July and in August it rose to 19.4 percent. At the same time, the agricultural production in households of all categories increased by 3.7 percent during January-September 2011 as compared to the same period last year.

Chart 2.1: Contribution of demand components (p.p.) to GDP growth (%)



### Demand

According to the preliminary data of the National Bureau of Statistics, the gross domestic product increased by 7.5 percent in the first half of the year, as compared to the same period of the last year, as a result of a more moderate growth in the second quarter 2011 (6.8 percent) compared to the first three months of this year (8.4 percent), as anticipated in the Inflation Report no. 3, August 2011. The external demand increase for domestic products and the disposable income of the population increase constituted the primordial factors that favored the growth of GDP in the second quarter, 2011.

Source: NBS, NBM calculus

In terms of uses (Chart 2.1), in the second quarter, 2011 were recorded major changes in domestic economic growth model. Thus, if in the previous periods the economic growth was stimulated mainly by the domestic demand, during the reference period the foreign demand was the engine of the economic growth. In this regard, the export of goods and services increased by 46.2 percent compared to the second quarter of 2010 and has determined the maximum contribution to the GDP growth. Household consumption increased by 10.9 percent in the second quarter of 2011, mainly due to the increase of its financing sources (increases in salary, remittances, social transfers and loans) and generated, thus, a significant positive impact on GDP growth. Government consumption, similar to the previous period, showed a modest economic development and did not cause significant changes. Although the increase in imports (23.7 percent) was surpassed by that of exports of about 2.0 times, due to the considerable share of the imports, they exerted a significant negative contribution, which has diminished the positive contribution of increasing exports and domestic consumption. Unlike previous periods, in the second quarter of 2011 the gross capital formation recorded a negative contribution, decreasing by 4.0 percent during the reporting period, against the background of the developments in the dynamic of the component "variation in inventory", which diminished the positive contribution from the increase in gross fixed capital formation by 27.1 percent compared with the second quarter of 2010.

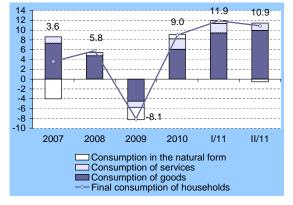
### Household consumer demand

Household consumption continued its upward trend begun in 2010, increasing by 10.9 percent in the second quarter of 2011 compared to the previous year due to increased funding.

The expenditure related to the procurement of goods for final consumption, which increased by 16.2 percent in the second quarter of 2011, had the largest contribution to the increase of household consumption as compared to the same period of the last year. The expenditure related to the procurement of services recorded an increase in real terms of 5.7 percent versus the same period last year, but, given their lower weight, their contribution was significantly reduced compared with the expenditure related to the procurement goods.

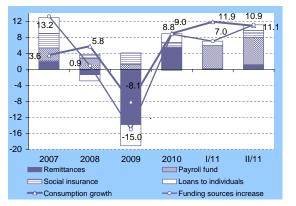
However, the decrease in final consumption of goods and services in kind (by 4.4 percent) has had a minor negative contribution to the final consumption growth.

The persistence of positive dynamics of household consumer demand was mainly due to the rise in disposable income of Chart 2.2: Components contribution (p.p.) to the final consumption of households' growth (%)



Source: NBS, NBM calculus

Chart 2.3: Contribution of funding sources (p.p.) to the real growth of household consumption



Source: NBS, NBM calculus

population in the second quarter of 2011, increases in real terms were recorded in all major segments - income from wages, social transfers and remittances. Thus, in the second quarter of 2011, the main consumption financing sources<sup>3</sup> (Chart 2.3) recording an upward trend, recorded an increase of 11.1 percent in real terms<sup>4</sup> versus the same period of 2010.

In this regard, the main source of funding remains to be the total labor cost (wage bill), which recorded an increase of 16.2 percent in real terms versus the second quarter of 2010, generating this way a maximum positive contribution to the dynamics of funding sources. At the same time, a significant positive contribution, despite the low weight, was generated by the considerable increase in new loans granted to households (by 29.3 percent). Although, during the reference period, the remittances have maintained their position as an important source of income for households, they have increased in real terms by only 3.5 percent, thereby supporting the domestic demand. The volume of social insurance payments has increased by 9.0 percent in real terms, resulting in a more modest positive contribution to the dynamics of funding resources.

#### Government consumption

Similarly to the first quarter of 2011, the final consumption of general government recorded a modest increase (0.8 percent) in the second quarter of 2011, and thus the GDP dynamics has been not significantly modified.

#### Public sector

According to the data of the Ministry of Finance, during January-August 2011, the national public budget has accrued revenues in the amount of 18278.1 million lei, representing an increase of 9.3 percent compared with the same period last year. Tax revenues continue to hold the major share (86.4 percent) in budget revenues, the main sources of income remain to be the taxes on domestic goods and services, which registered a 12.8 percent increase, in particular, income accruing from VAT. Thus, we can notice the increase of VAT on goods imported in January-August 2011 by 23.7 percent.

In addition, there were recorded increases in national insurance contributions of 11.5 percent and state income taxes by 15.1 percent. As a result of changes in these indicators, tax revenues have registered a value greater than during the previous year by 12.3 percent. Grants for budget support from external sources

<sup>&</sup>lt;sup>3</sup>Main funding sources are approximated by the sum of the payroll, social transfers, and transfers in the form of remittances from workers abroad. <sup>4</sup>In 2000 year prices.

fell by 4.9 percent, while the domestic grants have reported an increase of 10.1 percent.

At the expense of the national public budget in January-August 2011, there have been recorded expenditures totaling 20178.7 million lei, by 10.9 percent more compared to the same period last year. The increase in expenditures was caused mainly by increased spending on insurance and social assistance (by 11.6 percent), health (by 5.4 percent) and education (by 4.3 percent).

Thus, execution of the general government deficit resulted in an increase of 28.3 percent from the value recorded in the corresponding period of previous year, negative balance representing minus 1900.6 million lei.

### State debt

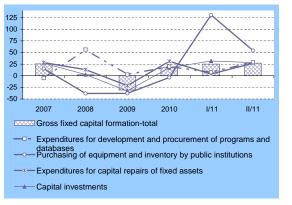
On August 31, 2011 the structure of the state debt of the Republic of Moldova was made-up of domestic state debt (28.8 percent) and external state debt (71.2 percent).

The domestic state debt increased by 104.5 million lei as compared to the beginning of the year, constituting 5409.4 million lei.

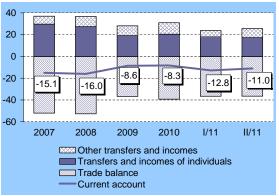
The changes in the domestic state debt occurred at the expense of raising the issue of state securities issued by auction in the amount of 204.5 million lei and of the redemption of state securities placed by subscription in the amount of 100.0 million lei. The evolution of the external state debt was determined by the inflows of foreign loans that have exceeded the repayments of external loans by about USD 18.9 million and by the positive exchange rate fluctuation of U.S. dollar against other currencies amounting to USD 44.2 million, which has lead to the increase of the balance of the external state debt by USD 63.1 million, as compared to the beginning of the year.

### Investment demand

The gross capital formation decreased by 4.0 percent in the second quarter of 2011 compared to the same period last year, the dynamic of subcomponent "variation in inventory" contributed to the negative evolution. However, the dynamics of gross fixed capital formation was higher than the level recorded at the beginning of the current year. Thus, the dynamics of gross fixed capital formation increased by 27.1 percent in the second quarter 2011 compared with the second quarter of 2010 and contributed by 29.9 percentage points to the evolution of investment, thereby alleviating the significant negative contribution of the component "variation in inventory". Chart 2.4: Gross fixed capital formation (%, versus the same period of the previous year)



Source: NBS, NBM calculus



Source: NBM

Chart 2.5: Current account share in GDP

The upward trend in gross fixed capital formation was determined mainly by the positive developments of the component "capital investment" that increased by 28.2 percent as compared to the second quarter of 2010. At the same time, there were recorded significant positive developments in the following components: "expenditure for capital repairs of fixed assets" (26.8 percent), "stocks variation for not installed machines" (46.8 percent), "procurement of equipment by budget institutions" (54.2 percent), "acquisition of programs and databases" (29.2 percent), but, given their minor share, their contributions to the dynamics of gross fixed capital formation had lower intensities (Chart 2.4).

### Net external demand

In the second quarter of 2011, the exports of goods and services increased by 46.2 percent in real terms, compared with the second quarter of 2010, generating a significant contribution to GDP growth, the imports of goods and services - by 23.7 percent, signaling the growth of domestic demand and increased competition for domestic products.

### External sector

The second quarter of 2011 was characterized by an upward trend of exports but also by a slight decrease of the current account deficit compared to the previous period. Thus, the components of the external sector have evolved unevenly, being marked both by increases and insignificant decreases.

With the recovery of exports and imports, following the economic crisis of 2009, the current account<sup>5</sup> deficit widened considerably, constituting 11.0 percent as a share of GDP during the analyzed period (Chart 2.5).

The deficit is smaller compared with the previous period, the change being supported by the increase of the component "other transfers and income", holding share of 8.2 percent of GDP, by about 2.3 percentage points more than in the first quarter of this year. Similar to previous periods, the current account deficit is determined by the balance of trade, which represents 36.5 percent of GDP.

After the economic decline from 2009, there was registered a continuing growth trend in exports as a share of GDP, up to

<sup>&</sup>lt;sup>5</sup>The standard terminology according to the IMF methodology wasn't used at the analysis of the current account. The *Total transfers of individuals* category includes compensation of employees and workers' transfers (current account posts), other posts, except those included in the *Trade balance*, being regrouped in the *Other transfers and other income* category.

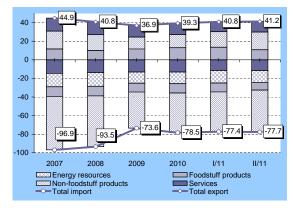
41.2 percent in the second quarter of this year, with about 4.3 percentage points more than the minimum recorded in 2009 (Chart 2.6).

By categories of products, the non-foodstuff products were mostly exported, totaling 19.1 percent in total GDP, increasing by about 2.3 percentage points as compared to the first three months of the year (equivalent to an increase of 13.7 percent). The agri-food products constituted 10.8 percent of GDP, registering a decrease of 20.1 percent compared to the first quarter, and the services to GDP constitute approximately 11.3 percent. According to the NBS, the foreign demand helped the export of the following groups of commodities during the analyzed period: machinery and apparatus, base metals and articles thereof, textile materials and articles thereof, and others. About 72.0 percent of exports were destined for markets in the Russian Federation, Romania, Italy, Ukraine, Germany and Great Britain.

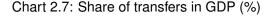
The imports, although they increased slightly compared to the first quarter of this year, still have a considerable share of GDP - about 77.7 percent. Thus, as a share of GDP were imported foodstuff products (45.1 percent), energy (12.7 percent), services (11.6 percent) and agri-food products (8.3 percent). In dynamic, the non-foodstuff products were the only evolving upward on longer-term, increasing by about 2.3 percentage points compared to the previous quarter. Services increased insignificantly as compared to the first quarter, but are decreasing as compared to the previous years. As a share of GDP, the imports of energy resources and agri-food products supplies were also down compared to the first three months. Thus, the products from the following categories of goods have been mainly imported during the analyzed period: machinery and apparatus, chemical products, textile materials and articles thereof, etc. Domestic demand was supplied with products imported from Ukraine, Romania, Russian Federation, Italy, Germany, Turkey, China and Belarus at a rate of 70.9 percent.

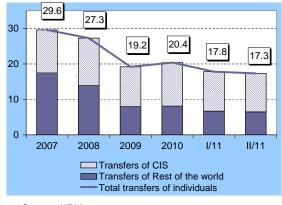
The individuals transfers working abroad is another component of the current account balance with an important contribution to trade balance. In the second quarter of 2011 these transfers had a share in GDP of about 17.3 percent, down compared to the previous periods (Chart 2.7). During the analyzed period, as a share of GDP, both the transfers received from the CIS countries and from the Rest of the world (representing all countries except CIS member countries) have decreased, constituting 10.8 percent and 6.5 percent respectively. The structure of transfers, according to the geographical origin, did not change significantly in the second quarter of 2011. Thus, the transfers from the CIS countries constituted 62.4 percent, while from other countries - 37.6 percent in the total transfers. The

# Chart 2.6: The share of exports and imports in GDP (%)



Source: NBM





Source: NBM

30 16.0 11.0 20 -12.8 15.1 8.6 10 0 -10 -20 2007 I/11 II/11 2008 2009 2010 Errors and omissions Reserve assets
Other investments
Direct investments
Financial flows, errors and omissions

Chart 2.9: Direct investment share in GDP

Chart 2.8: Share in GDP of the movement

of financial flows (%)

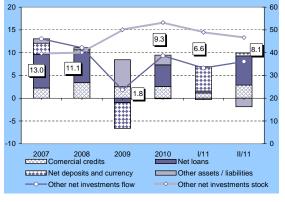


(%)

25 60 46.4 47.7 50 20 40.0 37.7 35.7 33.8 40 15 11.4 30 10 4.2 3.7 3.3 2.6 20 5 0 10 -5 0 2007 2008 2009 2010 I/11 II/11 Other capital Reinvested income Share capital Direct investments stock Direct investments flow

Source: NBM

Chart 2.10: Share of other net investments in GDP (%)



Source: NBM

transfers decrease, as a share of GDP, is largely caused by the financial problems faced by immigrants working in European countries such as Spain, Italy, Ireland, Greece, Portugal, etc.

In the second quarter of 2011, the financial and capital account, reflecting the state's financial flows, constituted 11.0 percent as a share of GDP, decreasing by 1.8 percentage points compared to the previous quarter but increased by 2.7 percentage points compared to 2010 (Chart 2.8). The national economic situation has led to increased external financing in the form of loans during the analyzed period, as well as there have been granted and repaid commercial loans to domestic economic agents from foreign partners. Other investments (8.1 percent) and direct investments (3.7 percent) had a significant share of GDP.

The share of foreign direct investment constituted 3.7 percent in the second quarter of 2011, decreasing by 0.5 percentage points versus the first quarter of 2011. Direct investment flows were aimed mostly as reinvested earnings and share capital of enterprises during the analyzed period, representing 1.7 and 1.3 percent respectively of GDP (Chart 2.9). Most of the investments oriented in the share capital are from European Union countries. According to NBS data, foreign direct investment as share capital accumulated in the national economy is distributed by branches: "financial activities" (29.0 percent), "manufacturing" (21.7 percent) and "trade" (16.8 percent). The income reinvested by non-residents, as a share of GDP, increased by 0.2 percentage points compared with the first quarter of 2011 and by 1.5 percentage points compared with 2010. This was supported by higher profitability of enterprises with foreign capital.

In the second quarter of 2011, in the total financial flows, the component of "other investments" has had the most significant share of GDP (8.1 percent), increasing by 1.5 percentage points from the previous quarter (Chart 2.10). The net loans have the greatest contribution in GDP, with a share of 6.4 percent and the net commercial loans held a share of 2.9 percent in GDP. The net commercial loans volume increased significantly compared to the first quarter of 2011, with about 1.8 percentage points to GDP. This increase is driven by the loans granted to domestic economic agents and by the repayment of these loans by their foreign partners. The subcomponent "net deposits and currency" decreased significantly in the second quarter of 2011 compared to the previous quarter as a result of the withdrawals of deposits from licensed banks both from domestic and foreign commercial banks. Net loans increased considerably in the analyzed period, their share in GDP increasing by 5.9 percentage points compared to the first quarter of 2011 (Chart 2.11).

The reason behind this increase constituted the higher amount of borrowings from the monetary authorities, banking and government sector. The share of the monetary authorities was the most significant in this period, constituting 2.9 percent of GDP. The stock of loans was 30.2 percent of GDP, by 1.5 percentage points lower than in the first quarter of 2011.

In all institutional sectors there were recorded increases in external debt at the end of the second quarter of 2011, but as a share of GDP, the leverage ratio has decreased (Chart 2.12). According to the criteria set by the World Bank, the Republic of Moldova is classified as a country with a moderate level of debt (external debt / GDP - 48-80 percent and external debt / total export - 132-220 percent). The economic agents have the major share in total external debt with 28.8 percent, followed by the government sector and direct investment with a share of 14.8 percent and 11.7 percent respectively. Within the structure of external debt, by type of commitment, the loans (including intra-group loans) have the largest share - 61.5 percent and trade-related loans - 17.8 percent.

#### Foreign trade

According to the information provided by the National Bureau of Statistics, the increasing trend of exports of goods has accentuated in the first eight months of 2011, so that it registered an increase of 54.6 percent in August 2011 as compared to the same period last year. It should be mentioned that the exports of goods increased by 61.9 percent during January-August 2011 compared to the previous year, which proves the recovery of the external demand for domestic products. The key factor that contributed to this increase is the substantial increase in exports oriented towards Russian Federation, Romania and Italy, the share of these countries is the largest one in total exports. However, by groups of countries, the EU countries hold the most significant share (about 50.2 percent), the exports in this area increasing by 67.1 percent, while those oriented towards CIS countries (about 39.9 percent) increased by 65.5 percent compared with January-August 2010.

By groups of goods, the components that have contributed essentially to the growth of goods import during January – August 2011, compared to the period of the last year, are: "inedible crude materials excluding fuels", "transport machinery and equipment", "miscellaneous manufactured articles" and "livestock and foodstuff products", which contributed by 14.5, 13.2, 12.4 and 8.5 percentage points, respectively.

However, during the reference period there were recorded negative influences of the following components: "beverages

#### Chart 2.11: Share of loans in GDP (%)

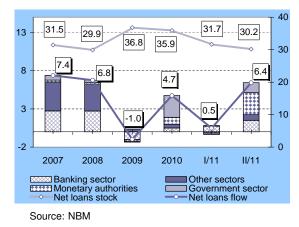


Chart 2.12: The share of external debt in GDP (%)

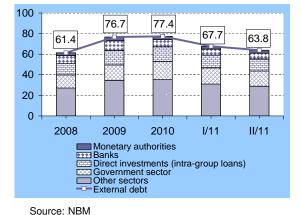
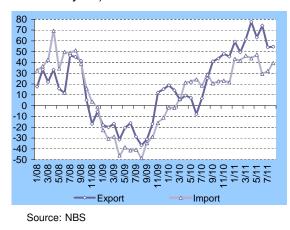


Chart 2.13: Developments in real terms of foreign trade (%, versus the same period of the last year)



and tobacco" and "sugar, sugar and honey products", contributing to the reduction of the analyzed indicator by 0.8 and 0.1 percentage points, respectively.

A similar situation occurred in imports of foreign products, so that in August 2011 increased by 39.5 percent compared to the previous year. Since the beginning of the year, imports of goods increased by 40.1 percent as compared to January -August 2010, due to the substantial increase of imports from the Russian Federation, Romania and Ukraine, these countries holding the largest share in total imports. By groups of goods, the components that influenced the increase of imports of goods in January-August 2011, compared to the previous year, are: "transport machinery and equipment", "mineral fuels, lubricants and derivative materials", "manufactured goods, classified mainly by raw material", and "chemicals and derivatives thereof", contributing with 10.8, 9.8, 7.9 and 4.8 percentage points, respectively.

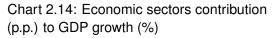
It should be mentioned that, the coverage of imports by exports in January-August 2011 was 42.6 percent, as compared to January-August 2010 when the recorded value constituted 36.9 percent.

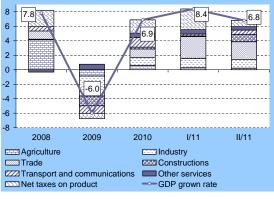
### Supply

By categories of resources, there were recorded significant changes in the evolution of GDP (Chart 2.14). Thus, the contribution of net taxes on products growth (5.2 percent) is significantly lower than during the previous periods. Thus, GDP growth occurred mainly due to the increase in gross value added (7.1 percent) and, to a lesser extent, due to higher taxes.

In other words, the quality of the economic growth is higher than in the previous periods. The increased trade (by 17.2 percent compared to the second quarter, 2010) had the largest contribution to GDP growth. At the same time, a significant positive contribution was determined by the gross value added growth in industry (by 9.8 percent), driven mainly by the developments recorded in manufacturing.

The construction sector recorded an impressive progress during the reporting period, increasing by 24.9 percent compared with second quarter of 2010 and thus had a significant contribution to the GDP growth. Positive contributions, even though of a lower magnitude, were determined by the gross value added in transport and communications, agriculture and other services which rose by 5.3, 2.1 and 1.5 percent, respectively.





Source: NBS

### Goods transport

According to the National Bureau of Statistics data, the annual growth rate of the transported goods has increased significantly in the third quarter of 2011 as compared to the previous quarter. Thus, the value of goods transported constituted 18.1 percent, by 11.8 percentage points higher than in the second quarter, 2011.

In September 2011, the volume of goods transported increased by 16.7 percent compared to the previous year (Chart 2.15). This development was driven by increased volume of goods transported by railway and vehicle by 7.4 and 22.2 percent, respectively. It should be mentioned that the enterprises of railway, road, inland and air transport have transported goods in January-September 2011 by 23.4 percent more than the same period of the previous year.

#### Industrial production

During January - August 2011, according to the National Bureau of Statistics, the industrial production volume in all forms of property has increased in real terms by 10.0 percent compared to the same period last year. It should be mentioned that in August 2011 the volume of industrial production increased by 19.4 percent compared to August 2010 (Chart 2.16).

The increase of industrial production volume, compared with January – August 2010, was determined by the increase in extractive industry by 16.7 percent and the manufacturing production by 12.0 percent. At the same time, the energy sector recorded a decline of 3.5 percent.

It should be mentioned that the most significant increases in manufacturing were recorded in the following activities: "production of medical equipment and instruments, of measuring and optical instruments" (by 45.8 percent), "machinery and equipment manufacturing" (by 39.4 percent), "machinery and appliances manufacturing" (by 33.9 percent), "production of other non-metallic mineral products" (by 20.0 percent), "textiles production" (by 16.3 percent), and "furniture production and other industrial activities" (by 16.0 percent).

During the analyzed period, as compared to the same period of 2010, there have been recorded reductions in the production volume of the following components: "production of vegetable and animal oils and fats" (by 8.7 percent), "processing and preserving of fruits and vegetables" (by 3.6 percent), "electricity production and distribution" (by 3.5 percent), "rubber and plastic articles production" (by 2.3 percent), and "metallurgy" (by 1.6 percent).

Chart 2.15: The volume of transported goods (%, versus the same period of the previous year)

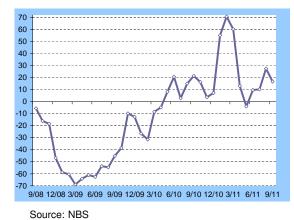


Chart 2.16: Evolution of industrial production in real terms (%, versus the same period of the previous year)



Source: NBS

### Agricultural production

World agricultural production, in all categories of households, increased by 3.7 percent during January-September 2011, as compared to the same period last year. This development was mainly determined by the vegetative and livestock production growth by 4.4 and 2.3 percent, respectively.

During January - September 2011, the livestock sector has recorded an increase in cattle and poultry production with 7.4 percent, driven mainly by the increase of 12.3 percent in the production of pigs in farms. Also, during this period, the production of eggs decreased by 2.0 percent. At the same time, the eggs production in farms increased by 0.5 percent. The following components had a positive influence on the vegetative growth production during the analyzed period: increased yields per hectare of grapes (by 44.0 percent), potatoes (by 34.0 percent), cereal grains (by 18.0 percent), field vegetables (15.0 percent) and corn grain (by 11.0 percent).

### 2.2 Labour market

The unemployment rate reduction to 6.2 percent shows, on one hand, an improvement in the labor market situation in the second quarter of 2011. On the other hand, there is a decrease in the number of employed. The annual average real wage in the economy recorded a negative dynamic, determined by the evolution of all economic sectors except agriculture. Starting with the first quarter of 2010, consecutively, the growth rate of labor productivity growth gets ahead of the real average wage in the industry.

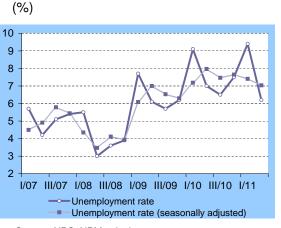


Chart 2.17: Evolution of unemployment rate

Source: NBS, NBM calculus

### Workforce

Evolution of unemployment rate shows an improvement in the labor market situation in the Republic of Moldova in the second quarter of 2011 compared to the second quarter of 2010. Thus, its value constituted 6.2 percent, decreasing by 0.8 percentage points compared to the previous year. The seasonally adjusted data show a better situation compared to the first quarter of 2010. Thus, the seasonally adjusted unemployment rate was 7.0 percent in the reference period, by 0.4 percentage points lower than in the previous quarter (Chart 2.17).

However, the number of employed persons decreased by 0.7 percent in the second quarter of 2011, which, with fewer unemployed, resulted in a decrease of the economically active

population by 1.5 percent. In the second quarter of 2011 the number of vacancies identified by the NEA declined by 7.1 percent compared to the same period of 2010, but the number of redundancies had a favorable evolution in the analyzed period.

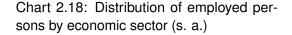
The number of laid off persons fell by 33.8 percent compared to the average of the second quarter of 2010, which means that companies staffing requires less major downsizing of the workforce.

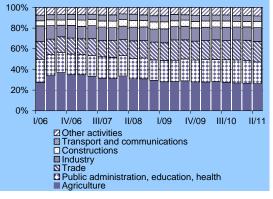
By the distribution on the activities of the national economy, the largest concentration of population employed (seasonally adjusted) is registered in agriculture. Its share was 26.3 percent in the second quarter of 2011, dropping by 0.3 percentage points compared with the first quarter of 2011 (Chart 2.18). The share of persons employed in "industry", "commerce", "constructions" and "other activities" increased insignificantly as compared to the first quarter of 2011, recording values of 13.5, 19.9, 5.7 and 8.3 percent respectively. In the second quarter of 2011, the number of persons employed in "public administration, education, health and social care" constituted 20.9 percent, down compared to the previous quarter. The "transport and communications" sector has the lowest concentration of employment and in the second quarter of 2011 its share constituted 5.4 percent.

### Wages

According to the National Bureau of Statistics, in August 2011, the average wage of a worker in the national economy constituted 3174.8 lei, increasing by 8.5 percent compared to the same period last year, but decreasing by 2.7 percent compared to the previous month. Both in the budgetary sphere and the real sector of the economy, it was recorded an average salary increase of 3.2 and 9.6 percent as compared to August 2010. The real average wage decreased in August 2011, compared to the same period last year, in all sectors of the national economy, excluding agriculture. The annual growth rate of real average wage in the economy has passed on the negative track, standing at the level of minus 0.6 percent in August 2011 and by 3.1 percentage points less than in the previous month (Chart 2.19).

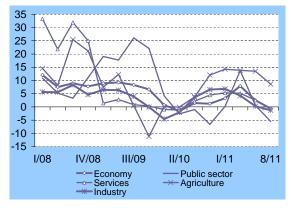
The only positive growth of real wages was recorded in agricul- \*deflated by CPI ture, increasing by 8.6 percent compared to the same period last year, while the annual rate decreased as compared to the previous month (by 4.9 percentage points). The annual growth of public sector wages continued the downward trajectory, passing on a negative level and recording the value of minus 5.5





Source: NBS, NBM calculus

Chart 2.19: Real average wage\* (%, versus the same period last year)



Source: NBS, NBM calculus deflated by CPI

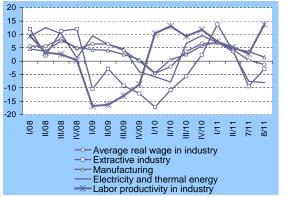
percent. The growth rate decline of the public sector wages is determined by the decrease in real wages in agriculture (minus 21.7 percent) in the hotel industry (minus 13.6 percent) and education (minus 11.0 percent).

In August 2011, the service segment of the real sector of economy recorded a negative growth rate of wages (minus 0.5 percent compared to August 2010, by 3.0 percentage points less than in the previous month), which is determined by the decrease in wages, particularly in the financial activities, leisure, cultural, sporting and transport and communications. The downward trend of the annual rate of the average real wage in industry persists in August 2011, decreasing to minus 1.3 percent (by 1.6 percentage points lower than in the previous month). In August 2011, the labor productivity growth has increased significantly (by 13.7 percent), largely due to accelerating the pace of industrial production. Starting with the first quarter 2010, consecutively, the labor productivity growth rate gets ahead of real average wage in industry, except the labour productivity surge in August 2011 that made this difference to grow considerably.

The largest decrease in wages is registered in the energy sector. The second consecutive month, the growth rate of real average wage is negative, recording in August the value of minus 8.1 percent. This decrease is correlated with the production and distribution of electricity, gas and water. The growth rate of wages in manufacturing has increased by 1.5 percent compared to the same period last year, but has decreased by 2.1 percentage points compared to July 2011.

The growth rate of real average wage in the mining industry has recovered, but also stands on a negative level. As compared with the same period last year, its value constituted minus 2.9 percent. As compared to the previous month it increased by 6.5 percentage points, which is determined by the increase of production in the mining industry: extraction of sand and clay.

Chart 2.20: Real average wage in industry (%, versus the same period last year)



Source: NBS, NBM calculus

# **Chapter 3**

# **Monetary Policy**

### 3.1 Monetary Policy Instruments

### Interest rate policy

During the third quarter of 2011, anticipating the inflationary pressures, the NBM carried out two successive increases in interest rates at its monetary regulation instruments, the base rate reaching the level of 10.0 percent, the interest rates on overnight deposit facility - 7.0 percent, and the interest rates on overnight credit facility – 13.0 percent.

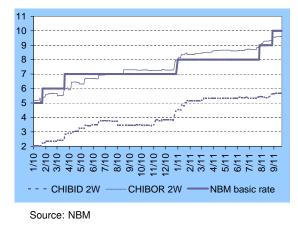
CHIBOR 2W interbank reference rate rose steadily during the third quarter of 2011, its development reflecting changes made to the NBM base rate and recorded 9.60 percent at the end of the quarter.

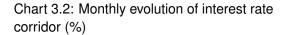
The increase of the monetary policy interest rate recorded an upward trend in the yields on state securities (SS) of 91 days, which monthly average constituted 11.22 percent in the last month of the quarter. At the same time, the average interest rates on credits / deposits interbank market had an upward trend, reaching the level of 8.82 percent annually in September 2011.

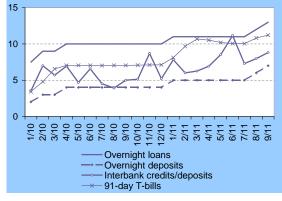
### **Open Market Operations**

#### NBM Certificates-selling operations

During the third quarter of 2011, the excess liquidity in the banking system remained high and was drained exclusively by selling NBM certificates. The operations were carried out according to the schedule published on the official website of the NBM, two weekly auctions, the NBC had a maturity of 14 days, Chart 3.1: Average monthly reference rate in the interbank market and the base rate of the NBM (%)







Source: NBM

with some exceptions due to holidays. The NBM carried out 27 auctions with the announcement of the maximum interest rate equivalent to the NBM base rate. The participants' requests were fully accepted.

Following that, the interest rates asked in the requests were equal to the maximum rate announced at the auctions, the NBC were sold to an interest rate equivalent to the NBM base rate. In the third quarter of 2011, the average weighted rate on sterilization operations constituted 8.87 percent annually.

The gradual restriction of excess liquidity due to the increase in required reserves ratio of funds attracted in MDL and in foreign currency (as applied in early August 2011) from 11.0 to 14.0 percent, resulted in reducing the daily balance of NBC, which dropped at the end of the quarter below the level of 3000.0 million lei, constituting 2684.9 million lei. The average quarterly balance of sterilization constituted 3006.9 million lei, by 438.4 million lei below the level recorded in the second quarter of 2011.

### Lending activity

In the third quarter of 2011, credit agreements in the amount of 88.6 million lei have become due, granted to banks for lending to economic agents in the real sector of economy, which were fully reimbursed by the banks on time.

The total amount of loans repaid during the analyzed period constituted 89.4 million lei, including loans granted to banks for lending to real sector of economy - 88.6 million lei and for lending to the construction of housing cooperatives - 0.8 million lei.

Thus, on September 30, 2011 the credit indebtedness of the licensed banks to the National Bank of Moldova was 457.7 million lei, represented by the loans granted to banks for the protection of the integrity of the banking system - 442.4 million lei and for lending to construction of housing cooperatives – 15.3 million lei. On September 30, 2011, compared with the end of the previous quarter, the balance of loans granted to banks decreased by 89.4 million lei, or about by 16.3 percent.

### **Standing Facilities**

The operating regime of standing facilities (overnight credits and deposits), established by the NBM, has allowed banks to manage efficiently their liquidity and offered the NBM more flexibility in implementing the monetary policy. In the third quarter of 2011, all of the banks have deposited with the National Bank overnight deposits in amounts that ranged from the minimum of 2.0 million lei and maximum of 400.0 million lei. The daily average balance of overnight deposits amounted to 196.1 million lei, decreasing by 2.6 million lei, or 1.3 percent.

The overnight credit facility was not required in the reported quarter.

### **Required Reserves**

In the third quarter of 2011, the required reserves mechanism continued to exercise the monetary control function and to manage the liquidity in the banking system.

Starting with the attracted means tracking period of July 8 -August 7, 2011, the changes made in required reserves regime entered into force, with regard to the increase of required reserves ratio from 11.0 to 14.0 percent of the calculation base and to the application of a required reserves ratio of 0.0 (zero) percent for attracted funds, whose maturity is more than 2 years, approved by the Council of Administration of the National Bank of Moldova within the meeting of May 26, 2011.

For the attracted means tracking period of August 8 - September 7, 2011, the attracted means with a term of more than 2 years, for which a 0.0 (zero) percent required reserves ratio has been applied, constituted: 1172.7 million lei, USD 186.9 million and EUR 92.1 million.

The required reserves ratio increase up to the level of 14.0 percent of calculation base, along with the facility of application of a 0.0 (zero) percent required reserves ratio for the attracted means with the term over 2 years during the tracking period of July 8 - August 7, 2011 led to the increase of required reserves in MDL and EUR and to a decrease of required reserves in USD as compared to the tracking period of May 8 – June 7, 2011.

Required reserves maintained by banks in MDL. The amount of required reserves maintained by banks in MDL, according to the attracted means tracking period of August 8 – September 7, 2011, maintained by banks during September 8 – October 7, 2011 constituted 2350.7 million lei, increasing by 443.3 million lei, or by 23.2 percent compared to the tracking period of May 8 – June 7, 2011, maintained by banks during June 8 – July 7, 2011.

*Required reserves maintained by banks in FCC.* The amount of required reserves maintained by banks in FCC on September

30, 2011 constituted USD 58.9 million (decreasing by USD 6.5 million or by 9.9 percent compared to June 30, 2011) and EUR 87.7 million (increasing by EUR 13.8 million or by 18.7 percent compared to June 30, 2011).

#### Interbank Market for Loans/Deposits

In the third quarter of 2011, the total volume of transactions in interbank market amounted to 283.8 million lei, decreasing by 106.5 million lei or by 27.3 percent compared to the second quarter of 2011. Unlike the previous quarter, the interbank loans / deposits transactions constitute 97.6 percent of interbank market transactions recorded during July – September 2011, while the securities transactions – 2.4 percent of total.

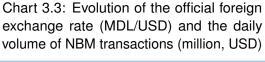
The volume of interbank loans / deposits operations amounted to 276.9 million lei, up by 4.9 percent compared with the second quarter of 2011. The average interest rate on interbank loans / deposits increased in the reference quarter from 8.38 to 8.54 percent annually, up by 0.16 percentage points to the rate recorded in the second quarter of 2011. The average term of interbank loans / deposits decreased compared to the previous quarter up to 8 days, due to the predominance of transactions with a maturity of 1 day (overnight), which is about 77.0 percent of total transactions.

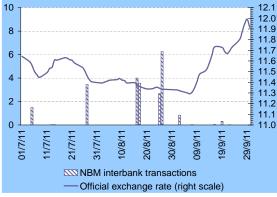
#### Intervention on the Domestic Foreign Exchange Market

The National Bank of Moldova has intervened on the domestic foreign exchange market during July – September 2011 as a buyer of foreign currency, to reduce the excessive fluctuations of the exchange rate of national currency against the U.S. dollar.

During the analyzed period, the volume of transactions of the National Bank of Moldova carried out on the domestic foreign exchange market against MDL constituted the equivalent of USD 22.62 million, of which, USD purchases constituted USD 22.09 million, EUR purchases constituted the equivalent of USD 0.45 million, and the amount of other foreign currency purchases – the equivalent of USD 0.08 million.

It should be mentioned that during the reporting period, the NBM carried out swap operations in the amount of USD 27.2 million, including USD 1.2 million – swap buying operations and USD 26.0 million – swap selling operations. The swap sale operations were carried out in the second half of September 2011 to alleviate the temporary demand on the foreign currency exchange market.







### 3.2 Dynamics of monetary indicators

In the third quarter of 2011, there was recorded a lower increase than in the previous quarter, the quarterly average in annual terms being of 19.7 percent for M2 and 17.9 percent for M3. The growth rate of about 20.0 percent for M2 was characteristic since 2010, with small deviations, and the value of M3 quarterly growth was the highest during the last nine quarters, recording a slight decrease by the end of the third quarter of 2011.

### Money supply

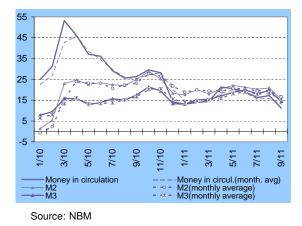
In the third quarter of 2011, the money supply M2 in MDL rose by 17.9 percent compared to the same period of 2010. In annual terms, the growth dynamics of this indicator decreased compared to the second quarter of 2011.

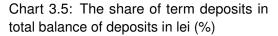
The revival of economic activity, combined with the slowdown of the lending process and consumption increase led to a moderate development of money multiplier, and respectively, the growth of deposits in national currency in the second quarter of 2011, combined with the increased money in circulation, contributed directly to the increase of monetary aggregate M2 (Chart 3.4).

Thus, money in circulation increased by 14.6 percent, while deposits in MDL – by 20.1 percent. During the quarter, the fluctuation of money in circulation and deposits was uniform. It should be mentioned that the volume of money in circulation and deposits in MDL increased essentially in August (by 17.2 percent and 23.5 percent respectively). During the third quarter, the term deposits held a share of 63.0 percent (64.9 percent at the end of June 2011) of total deposits in MDL, going back to the shares recorded at the beginning of 2011. The share of term deposits in MDL of individuals constituted 83.8 percent, unchanging significantly (Chart 3.5).

During July - September 2011, the money supply M2 grew by 2.7 percent, by 3.0 percentage points below the level of M2 aggregate growth in the previous quarter. This growth is due to the increase in balance of deposits in MDL by 4.4 percent as compared to the second quarter of 2011 and in a lower proportion the volume of money in circulation - by 0.2 percent. The money supply M2 structure reflects insignificant changes, the share of deposits in MDL increased by 1.0 percentage points,

Chart 3.4: Monetary aggregates development (%, annual increase)





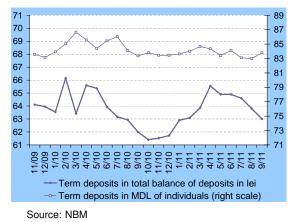
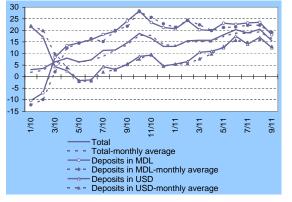


Chart 3.6: Deposits development (%, annual increase)



Source: NBM

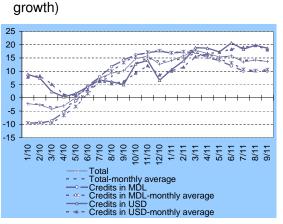


Chart 3.7: Loans development (%, annual

Source: NBM

reaching the level of 61.3 percent, while the money in circulation constitute 38.7 percent.

The dynamics of money supply M3 in annual values was characterized by the growth of this indicator during the third quarter of 2011, the quarterly growth constituting 15.9 percent. However, money supply M3 has increased the growth pace in August to 19.6 percent. It should be mentioned that money supply M3 development during the third quarter of 2011 has been largely affected by the positive dynamic of deposits in MDL.

Total deposits increased significantly in the last 12 months: by 16.4 percent at the end of September 2011, the monthly average recording 15.5 percent (Chart 3.6). At the end of September 2011, the growth of deposits in national currency amounted to 20.1 percent, the monthly average constituting 19.1 percent, while the growth of deposits in foreign currency amounted to 12.5 percent and 13.1 percent in monthly average terms.

During the third quarter of 2011, *money supply*  $(M3)^6$  increased by 2.0 percent compared to the second quarter of 2011, by 2.9 percentage points lower than the increases recorded in the previous quarter. It should be mentioned that in the third quarter of 2010, the M3 monetary aggregate recorded an increase of 5.5 percent.

The components of M3 monetary aggregate recorded a positive dynamic: money in circulation increased by 0.2 percent in the third quarter of 2011, deposits in MDL – by 4.4 percent and deposits in foreign currency – by 0.5 percent. At the same time, the share of deposits in foreign currency in total deposits decreased to 44.2 percent in the third quarter of 2011 from 45.1 percent in the second quarter of 2011, which shows a preference for deposits in national currency.

In terms of counterparties, the credit balance in the economy, which turned back on the positive growth track in June 2010, at the end of September 2011 recorded an increase of 13.7 percent for the last 12 months. However, the average monthly growth constituted 13.7 percent in September 2011. Chart 3.7 shows that the loans in MDL registered a steady increase – by 10.1 percent. Simultaneously, the monthly average also has amounted to 10.1 percent. At the same time, the foreign currency loans growth was not very stable in the reference period, recording a high level at the end of September 2011, reaching the level of 18.7 percent, while the monthly average changed by 18.1 percent.

### **Credit market**

In the third quarter of 2011, the credit growth has reversed the downward trend started earlier this year, recording an annual increase of 23.2 percent (Chart 3.8). However, the growth rate has decreased by 2.1 percent as compared to the previous quarter, reaching the level of 7141.4 million lei.

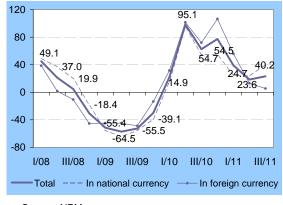
This trend reversal is due to positive developments of the component in national currency. Thus, the volume of new loans in lei increased by 40.2 percent (reaching the level of 4164.4 million lei) as compared to the third quarter of 2010 – the growth being due to an increase of 46.2 percent of loans in MDL granted to legal entities. At the same time, new loans in foreign currency continued their downward trend, maintaining, however, the annual growth on a positive level (5.4 percent), reaching the level of 2976.8 million lei. The dynamics of lending in foreign currency is mainly due to the increase of 11.8 percent of loans granted to households.

The development of new loans in MDL, examined in terms of real dynamics shows a level of increase of 28.9 percent compared to the third quarter of 2010 (Chart 3.9) and continuing the trend of increasing rates of lending started in the first quarter of 2011.

### **Deposits market**

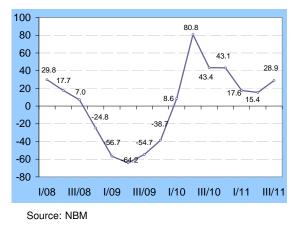
The development of new attracted deposits continues its positive dynamic started at the beginning of this year, setting an annual growth rate of 26.1 percent in the third quarter of 2011, reaching the level of 11331.1 million lei (Chart 3.10). This increase is mainly due to the increase of growth rate of the component in foreign currency. It was by 47.3 percent over the level recorded during the same period last year (up to the level of 6610.2 million lei), being boosted, in particular, by the upward dynamic of deposits of legal entities, and by the dynamics of individuals' deposits.

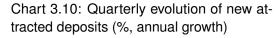
The growth rate of the component in foreign currency is more modest - 5.0 percent, compared with the third quarter of 2010 (up to the level of 4720.9 million lei), which was due to the positive development of individuals' deposits. However, the Chart 3.8: New loans development (%, annual growth)

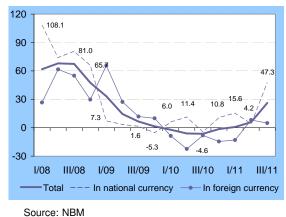


Source: NBM

Chart 3.9: Quarterly evolution of new granted loans in MDL (%, annual growth in real terms)







<sup>&</sup>lt;sup>6</sup>Money supply M3 includes money supply M2 and deposits in foreign currency of residents expressed in MDL.

Chart 3.11: Quarterly evolution of new attracted deposits in MDL (%, annual growth in real terms)

deposits in lei rose in real terms by 35.5 percent in the third quarter of 2011, as compared to the third quarter of 2010, when their growth rate was in decline by 11.5 percent (Chart 3.11).

81.2 52.7 49.5 35.5 2.7 9.0 3.3 0.2 3.3 4.3 0 I/08 III/08 I/09 III/09 I/10 III/10 I/11 III/11 Source: NBM

The increase of deposits placing process, in the context of a more pronounced recovery of the national economy and of the adopted monetary policy measures, is slowed down largely by low interest rates on deposits, as a result of liquidity excess, although decreasing, but still existing in the market.

### Interest rates and monetary policy transmission mechanism

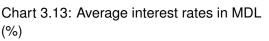
During the third quarter of 2011, the NBM continued to manage the liquidity excess existing on the monetary market. Thus, as a result of monetary policy measures taken, a downward dynamic of the net balance of excess liquidity of the licensed banks has been recorded in the last two months (monthly average - Chart 3.12). However, the volume of funds in the market remains to be an impressive one, which delays the transmission of monetary policy decisions on interest rates. Thus, the new deposits and loans have cheapened.

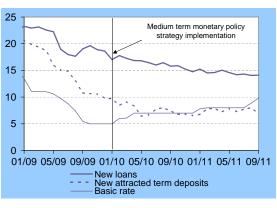
Under these conditions, the evolution of interest rates charged by banks in relation with their clients recorded very low levels, almost continuously decreasing since 2010.

However, the high level of liquidity in the market, lack of active development of real sector able to absorb all the liquidity, combined with the reluctance of banks to grant loans, low rates on loans and deposits, and accelerated growth of consumption, creates additional inflationary pressures, which determines the need to create more restrictive monetary conditions aimed at improving this situation.

During the third quarter of 2011, the interest rate on new loans and deposits in national currency stood on a downward track. Thus, the interest rate on loans decreased by 0.09 percentage points in September as compared to the end of the previous quarter, constituting 14.11 percent, while the interest rate on deposits recorded a more pronounced decrease - by 0.41 percentage points, constituting 6.87 percent (Chart 3.13).

However, the development of yield in foreign currency recorded an opposite direction. Thus, the interest rate of credits decreased as compared to the end of the previous quarter (by 0.04 percentage points), constituting 8.86 percent during the







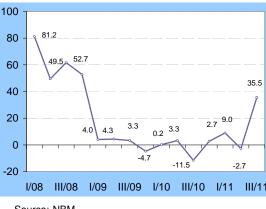


Chart 3.12: Evolution of net liquidity balance (million, MDL)



Source: NBM

reporting period, while the interest rate on deposits increased by 0.36 percentage points, constituting 3.94 percent.

In September 2011, the interest rate on deposits in real terms showed negative values - a factor that discourages the banking investment, given that the inflation exceeded by 1.93 percentage points the interest rate on deposits.

In this context, it can be mentioned that the share of new deposits attracted during the third quarter of 2011 from individuals in total deposits in MDL decreased compared with the second quarter of 2011, constituting 54.1 percent (versus 56.9 percent), while in total deposits in foreign currency increased – 92.0 percent (versus 83.4 percent) (Chart 3.14).

The banking margin (the difference between the average rates on loans and deposits) related to the operations in national currency recorded a quarterly trend marked by a more pronounced reduction of rates on loans (by 0.45 percent) than those on deposits (by 0.03 percent), constituting 6.72 percent. However, in September 2011, as a result of significant reduction in the rate on deposits (up to 6.87 percent), the margin related to the operations in national currency recorded an increase, up to 7.24 percentage points (Chart 3.15).

The margin related to the operations in foreign currency continued its downward trend, up to the level of 4.92 percentage points at the end of the reporting quarter.

In terms of annual progress, it can be seen a more pronounced reduction of the interest margin in the context of a relative stabilization of the economic situation, and the decrease of credit risks.

Based on the national economy trends, the level of liquidity and the evolution of interest rates on loans and deposit, in the third quarter of 2011, it is expected to be created monetary conditions designed to reduce the inflationary pressures and to ensure a favorable climate to the national economic development.

# Foreign exchange market (the nominal exchange rate and real effective rate)

During the third quarter of 2011, *the official nominal exchange rate of the national currency against the U.S. dollar* has depreciated by 2.7 percent, while against the euro has appreciated by 3.1 percent (Chart 3.16). Chart 3.14: Dynamics of the share of new deposits attracted in MDL from individuals (%)

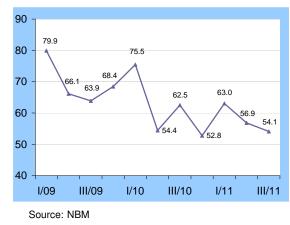
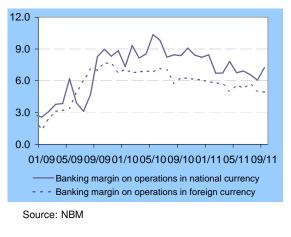


Chart 3.15: Evolution of banking margin (p.p.)

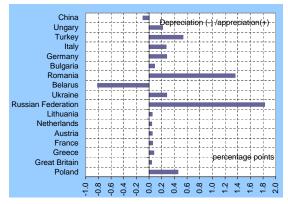




Source: NBM

Chart 3.16: Fluctuations of official exchange rate of MDL against USD and EUR

Chart 3.17: Contribution of major trading partners of Moldova to the real effective exchange rate modification in the third quarter of 2011



Source: NBM

Chart 3.18: Real and nominal effective exchange rate dynamics of the national currency calculated based on the share of the major trading partners

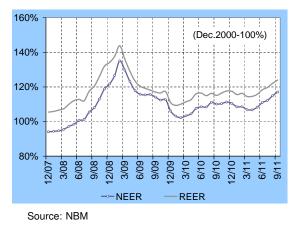
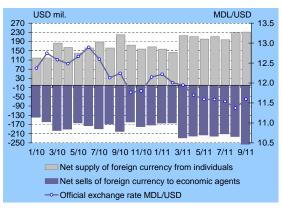


Chart 3.19: Coverage of net sales in foreign currency to legal entities by the net supply in foreign currency of individuals and the dynamics of the average official nominal exchange rate of MDL against USD



The average official nominal exchange rate of the national currency against the U.S. dollar recorded in the third quarter of 2011 has appreciated by 1.0 percent, and against euro - by 2.8 percent compared to the average official nominal exchange rate of the national currency recorded during the previous quarter.

The real effective exchange rate of the national currency<sup>7</sup>, calculated under the weight of the major trading partners, has appreciated by 4.6 percent versus June 2011. This appreciation was mainly determined by the evolution of consumer prices and the impact of strong nominal depreciation against the U.S. dollar of the currencies of the main trading partners (including the significant depreciation of the Polish zloty - by 17.3 percent, the Hungarian forint - by 15.7 percent, Russian ruble - by 14.3 percent, the Turkish lira - by 13.4 percent, the Romanian leu - by 9.1 percent and the EUR - by 6.0 percent). Chart 3.17 shows that the greatest contribution to the appreciation of real effective exchange rate had Russia – by 1.8 percentage points, and Romania - by 1.4 percentage points, except Belarus and During July 2011, the average official nominal China. exchange rate of national currency against the U.S. dollar has appreciated by 0.4 percent as compared to June, and the official nominal exchange rate of national currency against the U.S. dollar has appreciated by 1.7 percent as compared to the end of the previous month.

However, the net supply of foreign currency from individuals recorded in July was USD 197.9 million supplying the demand for foreign currency in a proportion of 94.1 percent from legal entities (USD 210.4 million). In this context, it should be mentioned that during this month the balance of deposits of individuals increased by USD 5.1 million, which contributed to the covering of the shortage of funds necessary for sales to legal entities.

The trend of appreciation of the national currency exchange rate against the U.S. dollar continued in August. Thus, the average nominal exchange rate of the national currency against the U.S. dollar appreciated by 1.4 percent and the official nominal exchange rate of national currency against the U.S. dollar has slightly appreciated at the end of August - by 0.6 percent compared to the end of July. The appreciation of the national currency occurred in the context of an equilibrium on the domestic foreign exchange market, related to the sufficiency of the available volume of liquidity in foreign currency for supplying the demand for foreign currency of legal entities.

Thus, the net supply of foreign currency from individuals, totaling USD 228.7 million, created premises to cover the whole

<sup>&</sup>lt;sup>7</sup>Calculated compared to December 2000.

(102.8 percent) net sales of foreign currency to legal entities (USD 222.4 million). However, the balance of deposits of individuals rose by USD 20.9 million in August. Thus, during this month, the NBM has intervened by purchasing foreign currency in the net amount of USD 17.1 million. It should be mentioned that, the licensed banks were supposed to comply in August with the new requirements regarding the modification in required reserves ratio of funds attracted in foreign currency (from 11.0 percent to 14.0 percent), supplying them from the disposable funds in foreign currency (Chart 3.20).

Although in the first days of September the exchange rate of national currency against the U.S. dollar dropped to the minimum level since January 2010 (MDL / USD 11.2919 on 09.06.2011), its general trend gas gradually depreciated during the month, so that the average nominal exchange rate of the national currency against the U.S. dollar depreciated by 1.9 percent compared to the previous month, while the official exchange rate of the national currency depreciated by 5.1 percent at the end of the month as compared to the end of August. During September 2011, the economic activity of the local economic agents in their settlements with foreign partners has increased, especially for the import of energy resources and cereal products.

Thus, sales of foreign currency of the licensed banks to the legal entities registered a record level of USD 263.3 million, being covered only in proportion of 87.7 percent by the net supply of foreign currency from individuals (USD 231.0 million), conditioning the national currency depreciation. The shortage of foreign currency was mainly complemented by the licensed banks at the expense of disposable funds in foreign currency, which decreased by USD 19.6 million at the end of the month as compared to the end of the previous month, reaching the level of USD 302.0 million. However, disposable funds in foreign currency constituted 19.0 percent of total net balance sheet assets in foreign currency at the end of the month, so the licensed banks having a comfortable level of liquidity. However, the swaps sales operations made by the NBM in the second half of September constituted USD 26.0 million, contributing to the mitigation of the temporary demand of foreign currency on the domestic foreign exchange market.

During the third quarter of 2011, the foreign exchange reserves rose by USD 66.9 million or by 3.5 percent, from USD 1901.5 million on June 30, 2011 to USD 1968.4 million on September 30, 2011, which covers 4.0 months of imports (Chart 3.21). The increase of foreign exchange reserves was due mainly to the receipt by the NBM from the IMF the tranches of SDR 30.0 million (USD 47.7 million) within the Extended Fund Mechanism program, SDR 20.0 million (USD 32.0 million) Chart 3.20: Dynamics of the disposable funds and required reserves (USD mil.)

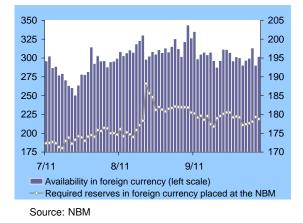
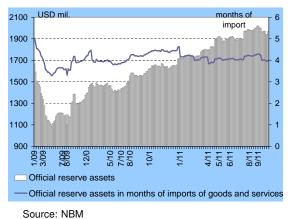


Chart 3.21: Evolution of foreign exchange reserves expressed in months of imports of goods and services



within the Extended Credit Mechanism program and to the receipt by the Ministry of Finance of the second tranche of EUR 20.0 million (USD 27.3 million) from the European Commission within the Grant Agreement between the European Commission and the Government of the Republic of Moldova in the amount of EUR 90.0 million, signed in Brussels on December 16, 2010.

## **Chapter 4**

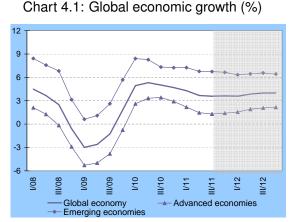
## Medium-term inflation forecasting

## 4.1 External environment

The world economy continues to recover, but maintaining different rates between countries: some economies have returned to the pre-crisis level, others have exceeded this level (especially Asian countries), while others continue to be below this level (USA, Great Britain, economies of Central and Eastern Europe). The global economy is also facing with increasing and spreading of sovereign debt crisis among developed economies, which has an impact on international financial market trends and causes rapid deterioration of macroeconomic indicators in developed economies. All these have contributed to the stagnation of world macroeconomic balancing processes.

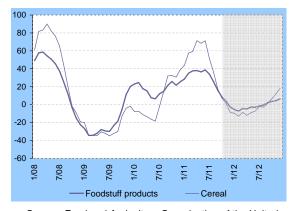
According to recent IMF forecasts, during 2011 and 2012, the world economy is expected to grow by 4.0 percent, respectively, while the Inflation Report no. 3, August 2011, projected increases of 4.3 and 4.5 percent, respectively. It has also been reduced the forecast for growth in advanced economies from 2.2 to 1.6 percent for 2011 and from 2.6 to 1.9 percent for 2012. In 2011 it is projected an increase of 6.4 percent in emerging economies, by 0.2 percentage points less than in the previous forecast, and for 2012 it is expected an increase of 6.1 percent, by 0.3 percentage points less than in the previous forecast.

Forecast decrease is due mostly to the slower pace of growth in advanced economies. The USA faced with more challenging than expected. The tragic events in Japan have also had an impact on growth expectations. At the same time, the euro zone, which has evolved relatively well at the beginning of the year, was subject to sovereign debt challenge in some member countries. This shows that sovereign debt crisis issues are deeper than originally thought and that their resolution could be much more expensive and longer lasting than previously estimated.

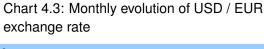


Source: IMF, World Economic Outlook Update - September 2011

Chart 4.2: Annual growth rate of global food prices (%)



Source: Food and Agriculture Organization of the United Nations, Bloomberg



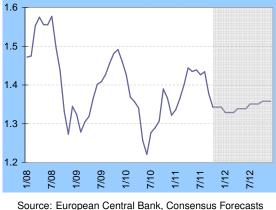
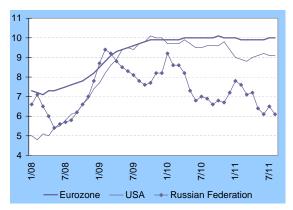


Chart 4.4: Unemployment rate (%)



Source: Eurostat, Federal State Statistics Service of Russia

While policy makers in developed countries are trying to support the economic growth rate, large emerging economies try to avoid overheating them. Over the past few months some of the major developing economies have sought to reduce high rates of inflation by tightening the monetary policy. However, lower growth in developed economies is reflected in lower exports.

According to the World Food and Agriculture Organization, the world food prices rose by 24.8 percent in the third quarter of 2011compared to the same period of the previous year, while compared to the previous quarter, the world food prices fell by 2.0 percent. The decrease in international food products prices is largely due to the reduction in cereal crops prices, which, with the exception of August, followed a downward trend since April, largely due to the recovery in world cereal crops production. The world sugar prices have also reduced significantly, reflecting the positive outlook for production in Europe, India and Thailand. In addition, sugar production from Brazil, the largest sugar producer in the world, in a volume over the expectations, contributed to the decrease of prices in the recent months.

During the quarter, EUR-USD has been moving significantly downward. Debt crisis in the USA and the euro zone and worsening of the latest macroeconomic data from these regions have contributed, on one hand, to the depreciation of these currencies in relation to other currencies of international circulation. On the other hand, the weakening of the global economy is determining the U.S. investors to transfer money back into the country, which helps to support the U.S. dollar. Another important event that contributed to the strengthening of the EUR was the European Central Bank decision to maintain the monetary policy rate. This has led some central banks of countries with advanced economies to intervene strongly in the foreign exchange market to stop the appreciation of the national currencies and to protect their exports. At the same time, the currencies of countries with emerging economies fell significantly as a result of stronger fears regarding state debt crisis in the euro zone and regarding the slow down of the global economic growth. Currently, the U.S. dollar depreciates, following the decision of the U.S. Senate to debate the draft law to increase import tariffs on products of countries with undervalued currency, China being the country that will be the most affected if this draft law will be adopted.

Germany's labor market continued to improve, despite the international financial risks and stock exchange market turmoil. However, the unemployment rate in the euro area reached the level of 10.0 percent in the recent months, due to the precarious situation of the labor markets in countries facing sovereign debt crisis. Thus, the unemployment rate in Spain rose to 21.2 percent, in Greece - up to 16.7 percent, and in Portugal - to 12.3 percent. The U.S. labor market is stagnating, the unemployment rate did not change significantly in the last month, while the Russian Federation unemployment rate declined in the recent months, which is due to seasonal resumption of economic activities.

### United States of America

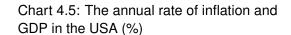
The U.S. economy continues its economic recovery process, much slower than expected, but the deceleration is stable. The latest Bureau of Economic Analysis data shows an increase in GDP in the second quarter of 2011 by 1.6 percent compared to same quarter of previous year. Real GDP growth in the second quarter primarily reflects a deceleration in imports, a recovery in federal government expenditure and an acceleration of foreign investment that were partly offset by the slowdown in consumption and exports.

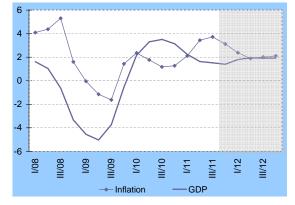
In July, the USA was marked by problems related to almost achieving the maximum leverage, which caused the depreciation of the U.S. dollar in international markets and the country's rating downgrade. On August 2, 2011, the U.S. Government decided to increase the debt limit and to reduce the government expenditure. Even so, the U.S. economy continues to face a precarious situation on the labor market and with a low consumer confidence, which creates pressure on the administration to reduce costs in order to reduce the deficit and forces the Federal Reserve to provide financial support measures. Also, the financial stress caused by the crisis in the euro area could cause the U.S. debt growth and could require the U.S. Congress to implement fiscal measures that could hinder the economic growth. For 2011 and 2012, the economic growth in the USA is expected to be 1.7 and 1.9 percent, respectively.

In the third quarter of 2011, according to Labour Force Statistics Department, the U.S. prices increased on average by 3.7 percent compared to the same period last year. In 2011, the USA inflation is expected to be 3.1 percent and for 2012 is expected an inflation of 2.1 percent.

### Euro zone

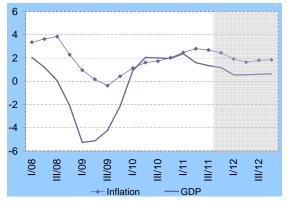
According to Eurostat, in the second quarter of 2011, the annual economic growth recorded in the euro zone was 1.6 percent. Consumer spending has decreased, while the investment has increased and the exports and imports grew, but at a lesser extent than in the previous quarters. Sovereign debt crisis led to a much slower growth in the euro zone in the recent





Source: Bureau of Economic Analysis. U.S. Department of Commerce, U.S. Bureau of Labor Statistics, Consensus Forecasts

Chart 4.6: The annual rate of inflation and GDP in the euro area (%)



Source: Eurostat, Consensus Forecasts

months because the austerity measures stop the expansion. Thus, Greece and Portugal, countries facing sovereign debt crisis, as in the previous quarters, have recorded GDP decreases. Spain has recorded a minor growth of 0.6 percent, while Ireland has recorded a growth of 2.3 percent compared to the same period last year.

Economic development in the euro zone depends heavily on the ability of the authorities to resolve sovereign debt problems. Austerity measures adopted by governments contribute to lower budget revenues following lower taxes collected, which reduces the further expanding of economies. Unemployment tends to increase and the capacity for these economies to grow is still contested. The risks for the euro zone are considerable, given the large volumes of refinancing the financial deficit in weaker euro zone countries. The probability of a new recession in Western Europe has continued to grow, anticipating a modest growth and unevenly distribution in the following five quarters. Estimates of growth for the euro zone were revised to reduction due to high risk of recession. According to the new estimates, the GDP in the euro zone will increase by 1.6 percent in 2011 and by 0.6 percent in 2012.

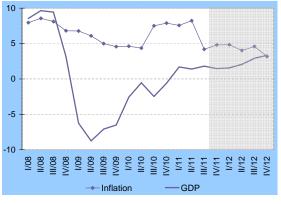
European Central Bank decided in October 2011 to maintain the monetary policy rate at the level of 1.5 percent, while in April and July 2011 the rate was increased by 0.25 percentage points each. These increases have contributed to lower consumption and economic activities, while the inflation counteraction, the purpose of these measures, has not achieved the desired result. In the third quarter of 2011, according to Eurostat, the average inflation in the euro zone was of 2.7 percent as compared to the same period last year. For 2011 and 2012 it is expected an inflation of 2.6 and 1.8 percent, respectively.

### Romania

In the second quarter of 2011, Romania has recorded a 1.4 percent economic growth as compared to the same period last year. The industry recorded the highest increase in workload. Slight increases in the workload were also registered in trade activities, hotels and restaurants, transport, financial activities and telecommunications. Reduction of workload was recorded in construction and other services. As a result of positive developments recorded throughout the economy, the volume of taxes on product collected at the state budget has increased.

Total final consumption has decreased as a result of a decline in the final consumption expenditure volume of households and final consumption expenditure volume of the government. The development of net exports had a negative effect on GDP, due

Chart 4.7: The annual rate of inflation and GDP in Romania (%)



Source: National Institute of Statistics, Consensus Forecasts

to faster increase in imports of goods and services compared to the volume of exports. These developments confirm the strengthening of the domestic economy after the emergence from recession as recorded in the first quarter of 2011. It should also be mentioned that the pace of development slowed significantly compared to the first quarter of 2011.

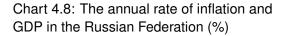
Overall, however, it should be mentioned that the probability of the Romanian economy to enter a contraction phase in the second half of this year has increased significantly in the recent period, especially in terms of international macroeconomic and stock exchange developments. Debt crisis in Europe, the main commercial partner of Romania, directly affected the economy through the exports. With lower exports and the lack of demand in foreign markets, the industrial production had also recorded lower growth rates. In the third quarter of 2011, there has been recorded a moderate increase in retail and a relative stability in manufacturing, construction and services. The NBR kept the monetary policy rate unchanged, although a number of factors could have acted in favor of monetary easing, namely the fragile economic recovery, resumption of disinflation and the relative stability of the currency.

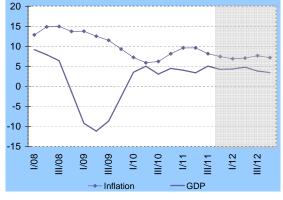
The economic outlook of Romania is deteriorating more and more, amid the global economic crisis, projecting a 1.5 percent growth for 2011. The estimated growth for 2012, approximately 2.6 percent, is based on exports increase and tax incentives in the election year of 2012, which will fuel an increase in public consumption.

According to the National Institute of Statistics, the average inflation in Romania was of 4.2 percent in the third quarter of 2011 as compared to the same period in 2010. It is considered that the disinflation will continue in the subsequent periods, so that the average inflation will constitute 6.2 percent in 2011 and 4.1 percent and in 2012.

### **Russian Federation**

According to the Federal Statistics Service, the Russian Federation has recorded an annual growth of 3.4 percent in the second quarter of 2011, which represents a decrease as compared to the economic growth in the previous quarters. The workload increases were recorded in all activities with mostly private funding, but in an insignificant extent than in the previous quarter. Also, the growth in industrial output fell, amounting to 4.2 percent in the second quarter of 2011 (compared with 5.9 percent in the first quarter of 2011). The current account of the Russian Federation continued to strengthen as a result of high prices for oil and gas.





Source: Federal State Statistics Service of Russia, Consensus Forecasts

The Russian economy continues to be supported by increased production of oil and gas industry, due to the sustainability of domestic demand. In turn, domestic demand is maintained by monetary rates that encourage credit expansion and by rising expectations of devaluation of the ruble, which contributes to the sustainable procurement growth. Also, low unemployment rate and real wage growth in the recent months have encouraged the consumption growth. In the short term perspective, the economic growth in the Russian Federation has resumed, the debt remains low, the budget is balanced and, practically, the inflation rate decreases. For 2011 and 2012, the Russian economy is expected to growth by 4.2 and 4.0 percent respectively, the forecast being reduced on the background of decreased forecasts regarding the global economy development.

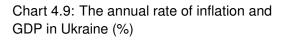
The food prices decrease, due to the high harvest this year, has contributed to the reduction of inflation by 8.2 percent in the third quarter of 2011 as compared to the previous year. It is considered that tighter monetary policy will reduce inflation, so that in 2011 prices should rise on average by 8.7 percent and in 2012 - by 7.2 percent.

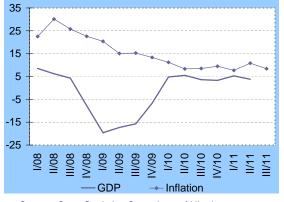
### Ukraine

According to State Statistics Committee of Ukraine, a 3.8 percent growth was recorded in the second quarter of 2011 as compared to the same period last year and a 0.5 percent growth (seasonally adjusted) as compared to the first quarter of 2011. The construction sector has registered a significant increase of 21.7 percent. There also were recorded increases in the following sectors: financial activities, electricity, gas and provision, manufacturing. Volume decreases have continued to be recorded in publicly-funded economic activities such as: education, public administration, health and social care. Exports rose slightly, while imports continued to grow at the same pace.

The Ukrainian economy was characterized in the third quarter of 2011 by the release of a new loan tranche from the IMF in July, following the adoption by the Parliament from Kiev of the reform in the pension system. However, Russian-Ukrainian negotiations on gas supplies have not ended in a positive result, which may have serious consequences for the Ukrainian economy. Also, the volume of foreign currency transactions of the population rose significantly since the beginning of the year, which increased the risk of devaluation of the Ukrainian hryvnia. It is hoped, however, that the aid provided by the external organizations and the flows of the shadow economy will contribute to an increase of 4.5 percent in both 2011 and 2012.

According to the State Statistics Committee, the prices in Ukraine have increased on average by 8.4 percent in the third quarter of







2011 as compared to the same period last year. For 2011 and 2012 the inflation is expected to be on average of 9.6 and 9.1 percent, respectively.

### Evolution of natural gas and oil prices

Persisting uncertainty about the global economy and financial markets during the third quarter of 2011 supported the volatility in oil prices in international markets so that the average price for Urals brand recorded USD 111.2 per barrel, by 2.7 percent down compared to the previous quarter. OPEC reference basket reached the level of 108.1 barrels in the third quarter of 2011, increasing by 1.7 percent compared to the previous quarter.

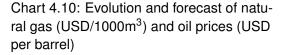
After an upward trend in oil prices of Urals brand at the beginning of the third quarter of 2011, in August it reversed the trend, recording a negative dynamic. During this period, oil futures prices fell on the background of weakening U.S. economic growth rates, overlapping with the euro zone attempt to redress the budget crisis in Greece and Italy. In this context, oil reserves fell in May this year, so that in the last week of September they recorded a level of 336.3 million barrels<sup>8</sup>.

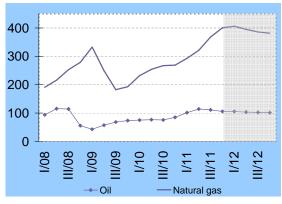
The average oil price increased in September, being generated by the probability of some natural disasters that could affect oil processing plants in the Gulf of Mexico and, accordingly, could cause disruptions in supply. However, a positive impact on oil prices came from speculation on the background of finding a new solution to address the sovereign debt crisis in Greece.

Also, the experts of the International Energy Regulation have reduced their estimates on oil demand growth for this year and next year. Thus, the forecast for 2011 was reduced by 200000 barrels, up to the level of 89.3 million barrels per day and for 2012 it is estimated a level of 90.7 million barrels per day. The forecast for the current year has been revised as a result of global economic growth forecast decline, which is recovering at a rate slower than expected.

However, high unemployment and national debt, the evolution of exchange rates of main international currencies, and the uncertainty regarding the conduct of fiscal and monetary policies of countries still represent a risk factor for further development of oil prices.

It should be mentioned that, on the international oil market there has been seen an increased volatility at the beginning of October. Thus, in the first week of the current month, the price





Source: NBM, Energy Information Administration (U.S. Government Official Statistics), http://tonto.eia.doe.gov/dnav/pet/hist/wepcuralsw.htm

<sup>&</sup>lt;sup>8</sup>www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s= WCESTUS1&f=W

reached the level of about USD 101.4 per barrel, but already in the second decade the price increased to about USD 113.6 per barrel.

It is expected that during 2012, the average price of oil will fall within USD 101.0-106.5 per barrel.

The purchase price of natural gas, announced by JSC "Moldovagaz", constituted USD 400.5 per 1000 m<sup>3</sup> in the fourth quarter of 2011. We anticipate that in the first quarter of 2012 the import price of natural gas will reach the level of USD 403.8 per 1000 cubic meters<sup>9</sup>, representing an increase of about 0.8 percent compared to the previous quarter.

## 4.2 Medium-term forecasting

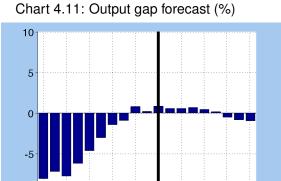
## **Aggregate demand**

During the second quarter of this year, the economic recovery that began in the second half of 2009 continued. According to the NBS data, the real GDP growth in the first half of 2011 was significant and amounted to 7.5 percent, as compared to the same period last year. Real GDP growth is due to positive contribution of final consumption, gross capital formation, and positive developments in exports. This dynamic is determined by the recovery of world economy, especially of the main economic partners.

Deviation of real GDP in early 2011 showed positive values, being over the potential level of economic activity. Compared to the projection of the Inflation Report no. 3, August 2011 where the output gap was positive throughout the forecasting period, the output gap in the current round of forecasting has a more pronounced downward trend, so, towards the end of the forecast, it will record slightly negative values.

As regarding the fiscal policy, it was assumed that in 2012 it will have an incentive impact on the real economy. In the absence of documents related to public finance outlook for 2013, it was accepted the hypothesis of neutrality of fiscal policy on the real sector.

In nominal terms there will be recorded a decrease in interest rates, although it will have an insignificant incentive character in real terms. At the same time, the real effective exchange rate will have a slightly restrictive impact. This could be due to more pronounced disinflationary trends in the partner economies during 2012.



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-10

Source: NBS, NBM calculus

<sup>&</sup>lt;sup>9</sup>NBM calculus

### Inflation

Current projection, from the baseline scenario, places the annual inflation rate at the level of 9.6 percent at the end of the year, while at the end of next year - at the level of 6.5 percent. Compared with Inflation Report no. 3, August 2011 the inflation rate at the end of this year is projected at a 1.1 percentage point higher, while at the end of 2012 - at a lower level by 0.9 percentage points.

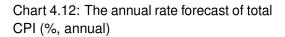
The main cause of negative gap for 2012, between the current projection and from the previous report, represents slightly lower levels of global food prices, natural gas and of the fuel. These developments would be the result of reduced economic activity worldwide. Thus, during the forecasting period, due to the positive output gap, the inflationary pressures will occur from the demand side as well. The biggest inflationary pressures, but with less intensity than projected in Inflation Report no. 3, August 2011, will be generated by supply-side factors.

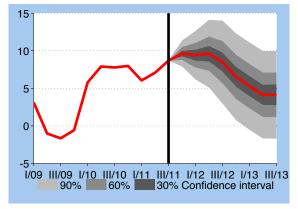
Rising prices of imported natural gas will be reflected in regulated prices increase, which will contribute to the increase of the general level of prices, both directly and indirectly - by increasing costs of products other than energy products from the second round effects. Inflationary pressures from food prices during the forecast period will also be significant, but their development will have a lower intensity than the evolution forecasted in the Inflation Report no. 3, August 2011. This is due to projected lower food prices worldwide.

Core inflation at the end of this year and at the end of the next year will record a lower evolution than the previous forecast. The cause of the difference between the two projections is due to lower second-round effects than the forecast published in the Inflation Report no. 3, August 2011. Also, this difference comes from the fact that the aggregate demand is projected less positive.

## **Risks and uncertainties**

Risk factors in the global economy have intensified lately, following the impact of sovereign debt crisis on international financial market evolution, issues facing the public finances and banking systems in developed economies, lack of economic policies to redress the economic crisis, the vulnerabilities in





Source: NBS, NBM calculus

emerging economies, commodity market volatility and geopolitical tensions.

Exchange rate of USD / EUR remains very volatile. A depreciation of the euro would be possible in the event of sovereign debt crisis worsening in the euro zone. Also, the euro area sovereign debt crisis could reflect badly on the viability of the banking system in the region. Such an eventuality would lead to capital outflow from some developing countries, including those in the region and depreciation of their currencies. In the event of an internal currency relative stability, a real appreciation of domestic currency could occur and, thus, could create additional disinflationary pressures. However, the directions of propagation of such external shocks on the economy are difficult to predict.

Another uncertainty is created by the new contract that will be signed between the Republic of Moldova and the Russian Federation on gas supply. Additional inflationary pressures may occur in case of higher prices than estimated. Another risk may be the possibility of failure to find common ground between Ukraine and the Russian Federation on transit of natural gas.

The current flooding or drought in the southern hemisphere, where a new agricultural season begins, could worsen the recently improved situation on the food market and, via external channel, they could contribute to increase in domestic food prices. At the same time, slowing down of the economic growth will lead to decreasing global demand and, perhaps, to lower raw material prices, including oil.

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## **Appendix A**

## **Statistical tables**

Table A.1: Average monetary policy rates (%)

	Ukraine	Russian Federation	Romania	Hungary	Belarus	Poland	Kazakhstan	Moldova	Turkey	Armenia	Georgia*
2010											
Jan.	10.3	8.8	7.6	6.2	13.5	6.0	7.0	5.0	7.8	5.2	5.0
Feb.	10.3	8.7	7.1	5.9	13.3	6.0	7.0	6.0	7.8	5.7	5.0
Mar.	10.3	8.5	7.0	5.7	13.0	6.0	7.0	6.1	7.8	6.4	5.0
Apr.	10.3	8.2	6.5	5.5	12.8	6.0	7.0	7.0	7.8	6.8	5.0
May	10.3	8.0	6.3	5.3	12.2	6.0	7.0	7.0	7.8	7.2	5.0
Jun.	9.7	7.8	6.3	5.3	12.0	6.0	7.0	7.0	7.8	7.3	6.3
Jul.	8.7	7.8	6.3	5.3	11.7	6.0	7.0	7.0	7.8	7.3	6.5
Aug.	8.0	7.8	6.3	5.3	11.3	6.0	7.0	7.0	7.8	7.3	6.5
Sep.	7.8	7.8	6.3	5.3	10.7	6.0	7.0	7.0	7.6	7.3	7.0
Oct.	7.8	7.8	6.3	5.3	10.5	6.0	7.0	7.0	7.5	7.3	7.5
Nov.	7.8	7.8	6.3	5.3	10.5	6.0	7.0	7.0	5.9	7.3	7.5
Dec.	7.8	7.8	6.3	5.6	10.5	6.0	7.0	7.0	5.3	7.3	7.5
2011											
Jan.	7.8	7.8	6.3	5.8	10.5	6.3	7.0	7.8	5.3	7.3	7.5
Feb.	7.8	7.8	6.3	6.0	10.5	6.3	7.0	8.0	5.3	7.6	8.0
Mar.	7.8	8.0	6.3	6.0	11.3	6.3	7.4	8.0	5.3	8.2	8.0
Apr.	7.8	8.0	6.3	6.0	12.4	6.5	7.5	8.0	5.3	8.4	8.0
May	7.8	8.2	6.3	6.0	13.4	6.8	7.5	8.0	5.3	8.5	8.0
Jun.	7.8	8.3	6.3	6.0	16.6	7.0	7.5	8.0	5.3	8.5	8.0
Jul.	7.8	8.3	6.3	6.0	19.2	7.0	7.5	8.9	5.3	8.5	7.9
Aug.	7.8	8.3	6.3	6.0	21.0	7.0	7.5	8.9	6.8	8.5	7.6
Sep.	7.8	8.3	6.3	6.0	28.7	7.0	7.5	9.8	7.0	8.1	7.5

\*At the end of the period

Source: Official websites of the central banks of the respective countries

	Ukraine	Russian Federation	Romania	Hungary	Belarus	Poland	Kazakhstan	Moldova	Turkey	Armenia	Georgia*
2010											
Jan.	0.0	2.5	15.0	2.0	3.5	3.0	1.5	8.0	5.0	29.1 bill. AMD	4.0
Feb.	0.0	2.5	15.0	2.0	3.5	3.0	1.5	8.0	5.0	27.5 bill. AMD	4.0
Mar.	0.0	2.5	15.0	2.0	3.0	3.0	1.5	8.0	5.0	n/a	3.9
Apr.	0.0	2.5	15.0	2.0	3.0	3.0	1.5	8.0	5.0	n/a	3.9
May	0.0	2.5	15.0	2.0	3.0	3.0	1.5	8.0	5.0	n/a	3.8
Jun.	0.0	2.5	15.0	2.0	3.0	3.0	1.5	8.0	5.0	n/a	3.9
Jul.	0.0	2.5	15.0	2.0	3.0	3.0	1.5	8.0	5.0	n/a	3.5
Aug.	0.0	2.5	15.0	2.0	3.0	3.0	1.5	8.0	5.0	n/a	3.6
Sep.	0.0	2.5	15.0	2.0	3.0	3.0	1.5	8.0	5.0	n/a	5.3
Oct.	0.0	2.5	15.0	2.0	3.0	3.0	1.5	8.0	5.5	n/a	5.2
Nov.	0.0	2.5	15.0	2.0	3.0	3.0	1.5	8.0	5.6	n/a	5.1
Dec.	0.0	2.5	15.0	2.0	3.0	3.0	1.5	8.0	6.0	n/a	5.0
2011											
Jan.	0.0	2.5	15.0	2.0	3.0	3.0	1.5	8.0	6.0	n/a	10.5
Feb.	0.0	3.3	15.0	2.0	3.0	3.0	1.5	10.3	8.9	n/a	15.3
Mar.	0.0	4.0	15.0	2.0	4.5	3.0	1.5	11.0	9.0	n/a	16.0
Apr.	0.0	4.8	15.0	2.0	4.5	3.5	1.5	11.0	13.0	n/a	15.5
May	0.0	4.8	15.0	2.0	4.5	3.5	1.5	11.0	13.0	n/a	16.0
Jun.	0.0	4.7	15.0	2.0	4.5	3.5	1.5	11.0	13.0	n/a	15.6
Jul.	0.0	4.8	15.0	2.0	4.5	3.5	1.5	13.3	13.0	n/a	15.9
Aug.	0.0	4.8	15.0	2.0	4.5	3.5	1.5	14.0	13.0	n/a	15.1
Sep.	0.0	4.8	15.0	2.0	4.5	3.5	1.5	14.0	13.0	n/a	n/a

Table A.2: Required reserve rates of countries in the region (%)

\*At the end of the period

Source: Official websites of the central banks of the respective countries

Table A.3: Annual consumer price index (%)

	Ukraine	Russian Federation	Romania	Hungary	Belarus	Poland	Kazakhstan	Moldova	Turkey	Armenia	Georgia
2010											
Jan.	11.1	8.1	5.2	6.4	6.6	3.5	7.3	2.9	8.2	7.0	2.7
Feb.	11.5	7.2	4.5	5.7	5.9	2.9	7.4	6.5	10.1	9.4	5.6
Mar.	11.0	6.5	4.2	5.9	6.4	2.6	7.2	8.1	9.6	8.8	5.9
Apr.	9.7	6.1	4.3	5.7	6.6	2.4	7.1	8.1	10.2	6.8	5.6
May	8.5	5.9	4.4	5.1	7.1	2.2	7.0	7.9	9.1	6.3	4.0
Jun.	6.9	5.7	4.4	5.3	6.9	2.4	6.8	7.8	8.4	5.8	3.7
Jul.	6.8	5.5	7.1	4.0	6.8	2.0	6.7	7.6	7.6	7.8	7.0
Aug.	8.3	6.2	7.6	3.7	7.7	2.0	6.5	7.8	8.3	9.6	9.5
Sep.	10.5	7.0	7.8	3.8	9.0	2.6	6.7	8.0	9.2	8.6	9.8
Oct.	10.1	7.5	7.9	4.2	9.7	3.0	7.3	8.0	8.6	9.1	9.6
Nov.	9.2	8.1	7.7	4.1	10.3	2.8	7.7	7.7	7.3	9.6	10.5
Dec.	9.1	8.8	8.0	4.7	9.9	3.2	7.8	8.1	6.4	9.4	11.2
2011											
Jan.	8.2	9.7	7.0	4.0	10.6	4.0	8.1	6.7	4.9	10.6	12.3
Feb.	7.2	9.6	7.6	4.1	13.0	4.0	8.8	5.7	4.2	12.4	13.7
Mar.	7.7	9.5	8.0	4.5	13.9	4.4	8.6	5.8	4.0	11.5	13.9
Apr.	9.4	9.6	8.3	4.7	18.1	4.5	8.4	6.5	4.3	8.9	13.5
May	11.0	9.6	8.4	3.9	32.6	4.8	8.3	7.0	7.2	9.0	14.3
Jun.	11.9	9.4	7.9	3.5	43.8	4.0	8.4	7.7	6.2	8.5	10.0
Jul.	10.6	9.0	4.9	3.1	48.4	3.9	8.8	8.3	6.3	6.3	8.5
Aug.	8.9	8.2	4.3	3.6	60.7	4.3	9.0	9.2	6.7	4.8	7.2
Sep.	5.9	7.3	3.5	3.6	79.6	3.9	8.7	8.8	6.2	6.2	4.6

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Table A.4: Monetary policy real rates (%)

	Ukraine	Russian Federation	Romania	Hungary	Belarus	Poland	Kazakhstan	Moldova	Turkey	Armenia	Georgia
2010											
Jan.	-0.8	0.6	2.3	-0.2	6.5	0.0	-0.3	2.0	-0.4	-1.7	2.2
Feb.	-1.1	1.4	2.5	0.2	7.0	0.6	-0.4	-0.5	-2.1	-3.4	-0.6
Mar.	-0.7	1.9	2.7	-0.2	6.2	0.9	-0.2	-1.9	-1.7	-2.2	-0.8
Apr.	0.5	2.1	2.1	-0.2	5.8	1.1	-0.1	-1.0	-2.2	0.0	-0.6
May	1.6	2.0	1.8	0.1	4.8	1.3	0.0	-0.8	-1.2	0.8	1.0
Jun.	3.1	1.9	1.8	0.0	4.8	1.1	0.2	-0.7	-0.6	1.4	2.5
Jul.	3.2	2.1	-0.8	1.2	4.9	1.5	0.3	-0.6	0.2	-0.5	-0.5
Aug.	-0.3	1.5	-1.2	1.5	3.3	1.5	0.5	-0.7	-0.5	-2.1	-2.8
Sep.	-2.5	0.7	-1.4	1.4	1.6	0.9	0.3	-0.9	-1.5	-1.2	-2.5
Oct.	-2.1	0.2	-1.5	1.0	0.7	0.5	-0.3	-0.9	-1.0	-1.7	-1.9
Nov.	-1.3	-0.3	-1.4	1.4	0.2	0.7	-0.6	-0.6	-1.3	-2.1	-2.8
Dec.	-1.2	-1.0	-1.6	0.8	0.5	0.3	-0.7	-1.0	-1.1	-2.0	-3.4
2011											
Jan.	-0.4	-1.8	-0.7	1.7	-0.1	2.2	-1.0	1.0	0.3	-3.0	-4.2
Feb.	0.5	-1.7	-1.3	1.8	-2.2	2.2	-1.7	2.4	1.0	-4.3	-5.1
Mar.	0.0	-1.5	-1.6	1.4	-2.3	1.8	-1.1	2.1	1.2	-3.0	-5.2
Apr.	-1.5	-1.5	-1.8	1.2	-4.8	1.9	-0.8	1.4	1.0	-0.5	-4.8
May	-2.9	-1.3	-1.9	2.0	-14.5	1.9	-0.7	0.9	-1.8	-0.5	-5.5
Jun.	-3.7	-1.1	-1.5	2.4	-18.9	2.9	-0.8	0.3	-0.8	0.0	-1.8
Jul.	-2.6	-0.7	1.3	2.8	-19.7	3.0	-1.2	0.5	-1.0	2.1	-0.6
Aug.	-1.0	0.1	1.9	2.3	-24.7	2.6	-1.4	-0.3	0.1	3.5	0.4
Sep.	1.7	0.9	2.7	2.3	-28.3	3.0	-1.1	1.0	0.8	1.8	2.8

Source: Official websites of the central banks of the respective countries